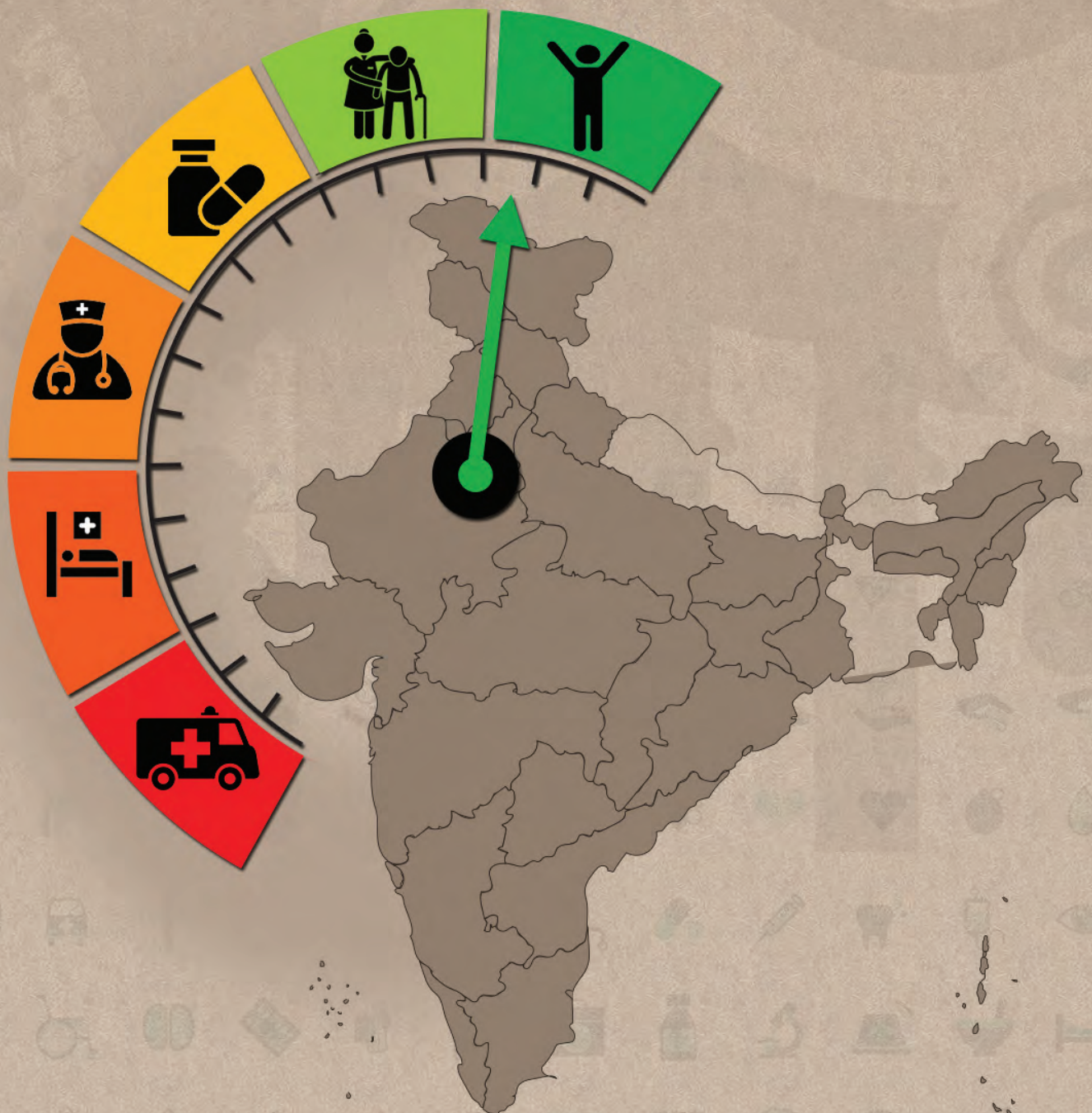




HEALTH DOSSIER 2021

Reflections on Key Health Indicators





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ANDAMAN & NICOBAR ISLANDS

IN 3RD COMMON REVIEW MISSION (2009)
Nicobar, Middle and North Nicobar, and South Andaman
districts were visited in Andaman & Nicobar Islands

ANDAMAN & NICOBAR ISLANDS

1. BACKGROUND

1.1 State Profile

Andaman and Nicobar Islands has a geographical spread of 8,249 km^{2a}. The UT is estimated to have a population of over 0.0038 crores^b and is projected to reach around 0.004 crores by 2021^c. The UT is divided into 3 districts. As per Census 2011, the Scheduled Tribe (ST) population is 0.28 lakh (7.50%). In the UT, 62.30% of the population reside in rural areas and the rest in urban areas. The total length of roads^d in the UT is 1,617 km (0.06%^e), in which the length of national highways is 330 km and state highways is 266 km.

A detail report on the key indicators has been attached as Annexure 1.

1.2 Demography

The UT's Sex ratio at birth is 914 females for every 1000 males (NFHS 5). The crude birth rate has declined from 15.7 in 2005 to 11 in 2019 whereas the crude death rate has increased from 4.7 in 2005 to 5.3 in 2019 (Annexure 2; Figure 2). The literacy rate increased from 81.3% in 2001 to 86.6% in 2011, with male & female literacy rates being 90.3% and 82.4%, respectively (Annexure 1.1). As per ESAG 2018 report, the Gross Enrolment Rate (GER)^f is 88.93% for higher education, 87.08% for senior secondary education, 86.69% for secondary education, 74.62% for elementary education, and 23.5% for primary education.

1.3 Elderly

Population ageing has profound social, economic, and political implications. In A&N Islands, 17% of elderly females and 15% elderly males living in rural areas and 41% of elderly females and 2% elderly males in urban areas are economically fully dependent on others. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 32% for men and 19% for women as opposed to the national average of 31% for both.

^a RHS 2020

^b Census 2011

^c Census Population Projection 2019

^d Basic Road Statistics 2019, MoRTH

^e Percentage of total length of roads in Lakshadweep

^f Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The UT has been able to provide RMNCHA+N⁹ services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^h, institutional deliveries, C sections, distribution of IFAⁱ tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined^j from 160 (2007-09) to 85 (2016-18). In A&N Islands, 67.2% of women received 4 ANC check-ups (Annexure 1.4). As reported in HMIS 2019-20, around 73.9% of the deliveries took place in institutions, out of which 100.0% took place in public health facilities. Total percentage of C-sections (29.1%) is higher than the WHO's standard (10-15%). Around 77% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years decreased from 65.7% (NFHS-4) to 57.5% (NFHS-5). Anaemia in females of reproductive age group is almost four times more than in men of similar age group (Annexure 2, figure 3).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the UT has shown a significant decline in IMR from 27 (2005) to 7 (2019), which is lower than the national average of 30 (Annexure 2, Figure 1). Full vaccination^k coverage for children between 12 – 23 months of age improved from 84.8% (NFHS 4) to 96.0% (NFHS 5). A decrease in childhood anaemia from 49% to 40% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 3). The proportion of exclusively breastfed children under 6 months improved from 66.8% (NFHS 4) to 73.3% (NFHS 5). The burden of under-5 years stunting decreased from 23.3% (NFHS 4) to 22.5% (NFHS 5). For under-5 years wasting- the burden decreased from 18.9% (NFHS 4) to 16.0% (NFHS 5).

2.3 Family Planning

As per NFHS 5 report, the total unmet need in the UT is 13.5% and unmet need for spacing is 6.1%. Approximately 57.7% of married women reported to avail any modern method of family planning in the UT; with sterilization acceptance among females being 39.2% and 0.2% among males (NFHS 5).

2.4 Communicable Diseases

The UT has 3 functional IDSP unit in place^l. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 19.67%^m of total disease burden (Annexure 1.4). As per QPR reports, for TB, the annualized total case notification rate is 147% and NSPⁿ success rate is 75% as

⁹ Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^h Antenatal Check up

ⁱ Iron Folic Acid Tablets

^j SRS MMR Bulletin; Other smaller states & UTs, inclusive of A&N Islands

^k NFHS 5 State/UT Factsheet, based on information from vaccination card only

^l QPR NHM MIS Reports (Status as on 01.03.2020)

^m Includes all UTs except Delhi

ⁿ New Smear Positive

opposed to the national averages of 163% and 79%, respectively. For NLEP^o, the reported prevalence rate of 0.42 per 10,000 population is less than the national average of 0.61. In FY 2019-20, no deaths due to Dengue, Malaria, and Kala Azar are reported in the UT.

2.5 Non-Communicable Diseases (NCDs) and Injuries

NCDs contribute to 67.90% of DALYs and injuries contribute to 12.42% of DALYs in the UT^p. The UT is positioned second to last in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 31.3% of women and 58.7% of men used any kind of tobacco, while 5% of women and 39.1% of men consumed alcohol.

2.6 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 4). Currently there are 124 SCs, 22 PHCs and 4 CHC against the required 49 SCs, 8 PHCs, and 2 CHCs in rural areas. There are 5 PHCs in urban and 37 SCs, 4 PHCs and 1 CHCs in tribal areas. The UT has 3 DHs and 1 government medical college. Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), 129 HWCs (102 SCs, 22 PHCs and 5 UPHCs) are operationalized in A&N Island as of 22nd December 2021^q.

The doctor to staff nurse ratio in place is 1:1, with 5 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1.5). The UT has 100% of ASHA in position under NRHM. Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 6238.98 availed (events) OPD services and 126.38 availed (events) IPD services.

^o National Leprosy Eradication Programme

^p Includes all UTs except Delhi

^q AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^r

Indicator	A&N Island 2011 ¹	India
Total Population (In Crore)	0.038	121.08
Rural (%)	62.30	68.85
Urban (%)	37.70	31.14
Scheduled Caste population (SC) (in crore)	0	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.0028 (7.50%)	10.45 (8.63%)
Total Literacy Rate (%)	86.6	72.99
Male Literacy Rate (%)	90.3	80.89
Female Literacy Rate (%)	82.4	64.64
Number of Districts in the A&N Islands ²	3	
Number of districts per lakh population in A&N Island (Census 2011)	Population¹	Districts¹ (Numbers)
	<5 Lakhs	3
ST share (%)		
Nicobar (64.27%)		
North & Middle Andaman (0.71%)		
South Andaman (1.71%)		

1.2 Key Health Status & Impact Indicators

Indicators	A&N Island	India
Infant Mortality Rate (IMR) ³	7	30
Crude Death Rate (CDR) ³	5.3	6
Crude Birth Rate (CBR) ³	11	19.7
Maternal Mortality Ratio (MMR) ³	N/A	113
Neo Natal Mortality Rate (NNMR) ⁴	N/A	23
Under Five Mortality Rate (U5MR) ⁴	N/A	36
Still Birth Rate ⁴	N/A	4

^r Sources are mentioned at the end of Annexure 1

Total Fertility Rate (TFR) ⁴	N/A	2.2
Life expectancy at birth ⁵	N/A	69.4
Sex Ratio at Birth ⁴	N/A	899

1.3 Key Health Infrastructure Indicators^s

Indicators	Numbers (Total)			
Number of District Hospitals ²	3			
Number of Sub District Hospital ²	0			
Number of Government (Central + State) Medical College ⁶	1			
Number of Private (Society + Trust) Medical Colleges ⁶	0			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	102	33	68	91
PHC-HWC	22	22	22	22
UPHC-HWC	5	5	5	5
Total-HWC	129	60	95	118
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	2	4	-100.00	
Number of Primary Health Centres (PHC)	8	22	-175.00	
Number of Sub Centres (SC)	49	124	-153.06	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	1	0	0	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	3	5	-66.67	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC ^t	0	1	-1	
Number of PHC	1	4	-3	
Number of SC	8	37	-29	
Patient Service ⁹	A&N Island		India	
IPD per 1000 population	126.38		62.6	
OPD per 1000 population	6238.98		1337.1	
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	90.10		36.4	

^s Sources are mentioned at the end of Annexure 1

^t Total population is less than the norm (CHC) of 80,000

1.4 Major Health Indicator^u

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	A&N Island^v	India
% DALY ^w accountable for CMNNDs ^x	19.67	27.46
% DALY accountable for NCDs	67.9	61.43
% DALY accountable for Injuries	12.42	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	A&N Island	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	60.1	20.7
RMNCHA+N		
Maternal Health⁹	A&N Island	India
% 1st Trimester registration to Total ANC Registrations	72.2	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	67.2	79.4
Total Reported Deliveries	3602	21410780
% Institutional deliveries to Total Reported Deliveries	73.9	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	100	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	0	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	29.1	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	29.1	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	N/A	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	77	53.4
Neonatal⁹	A&N Island	India
% live birth to Reported Birth	98.3	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	16.2	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	82.6	89.9
New Born Care Units Established^{11y}	A&N Island	India
Sick New Born Care Unit (SNCU)	1	895
New Born Stabilization Unit (NBSU)	6	2418
New Born Care Corner (NBCC)	20	20337

^y Sources are mentioned at the end of Annexure 1

Child Health & Nutrition¹⁰	A&N Island (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	5.6	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	65	60.6
Children under 5 years who are underweight (weight-for-age) (%)	23.7	32.1
Child Immunization¹⁰	A&N Island (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	96	83.8
Children age 12-23 months who have received BCG (%)	98.2	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	82.1	87.9
Family Planning¹⁰	A&N Island (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	6.1	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	A&N Island	India
Number of districts with functional IDSP unit	3	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	A&N Island	India
Annualized total case notification rate (%)	147	163
New Smear Positive (NSP) Success rate (in %)	75	79
National Leprosy Eradication Programme (NLEP)¹¹	A&N Island	India
Prevalence Rate/10,000 population	0.42	0.61
Number of new cases detected	14	1,14,359
Malaria, Kala Azar, Dengue¹¹	A&N Island	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	A&N Island (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	14.9	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	34.7	30.7

Non-Communicable Disease		
Diabeties and Hypertension ¹⁰	A&N Island (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	15.3	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	20.6	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	7.4	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	9.3	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above) ¹⁰	A&N Island (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	31.3	8.9
Men who use any kind of tobacco (%)	58.7	38
Women who consume alcohol (%)	5	1.3
Men who consume alcohol (%)	39.1	18.8
Injuries		
Road Traffic Accident ¹²	A&N Island	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	35	N/A
Total number of fatal Road Accidents	20	137,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	8.7	33.7
Number of persons killed in Road Accidents	20	115113

1.5 Access to Care^z

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU) ¹¹	A&N Island	India
Number of Districts equipped with MMU under NRHM	0	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	A&N Island	India
102 Type	1	9955
104 Type	0	605
108 Type	0	10993

^z Sources are mentioned at the end of Annexure 1

Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	52	11070
Key Domain Indicators ^{aa}		
ASHA ¹³	A&N Island	India
Total number of ASHA targeted under NRHM	412	946563
Total number of ASHA in position under NRHM	412	904211
% of ASHA in position under NRHM	100	96
Total number of ASHA targeted under NUHM	10	75597
Total number of ASHA in position under NUHM	0	64272
% of ASHA in position under NUHM	0	85
Community Process ¹¹	A&N Island	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	275	554847
Number of Mahila Arogya Samitis (MAS) formed	25	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total) ¹¹	A&N Island	India
DH	3	796
CHC	4	6036
PHC	22	20273
UCHC	0	126
UPHC	4	3229
Human Resource for Health ¹⁴		
HRH Governance	A&N Island	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	56
	Dentists (%)	9
	Nurse (%)	2
	ANM (%)	5

^{aa} Sources are mentioned at the end of Annexure 1

HRH Distribution	Sanctioned	In Place				
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:1				
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	6 per 10,000	5 per 10,000				
Regular to contractual service delivery staff ratio ¹⁴	1:1	1:1				
Ranking: Human Resource Index of A&N Island ¹⁵						
Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{bb}	299	262	248	14	51	66.19
Staff Nurse	670	377	376	1	294	
Lab Technician	99	55	49	6	50	
Pharmacists	56	63	46	17	10	
MO MBBS ^{cc}	103	148	124	24	0	
Specialist ^{dd}	129	50	36	14	93	

1.6 Healthcare Financing^{ee}

National Health Accounts (NHA) (2017-18)	A&N Island		India	
Per Capita Government Health Expenditure (in ₹)	N/A		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	N/A		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	N/A		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	N/A		48.8	
National Sample Survey Office (NSSO) (2017-2018)	A&N Island		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	N/A		33	26
IPD - % of hospitalized cases using public facility	N/A		46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	N/A		472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	N/A		845	915

^{bb} MPW – Multi Purpose Health Worker (Female + Male)

^{cc} MO MBBS (Full Time)

^{dd} Specialist (All Specialist)

^{ee} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

IPD - Per hospitalized case (in INR) - Public	N/A	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	N/A	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	N/A	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	N/A	53	43
Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	N/A	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	N/A	20,692	26,701
State Health Expenditure	A&N Island	All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	N/A	5 ^{ff}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{ff} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

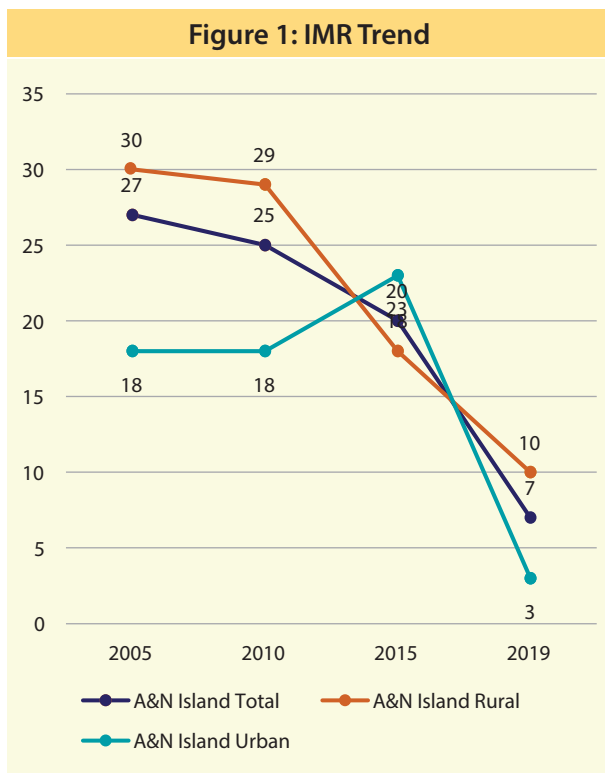


Figure 2: CBR & CDR Trend

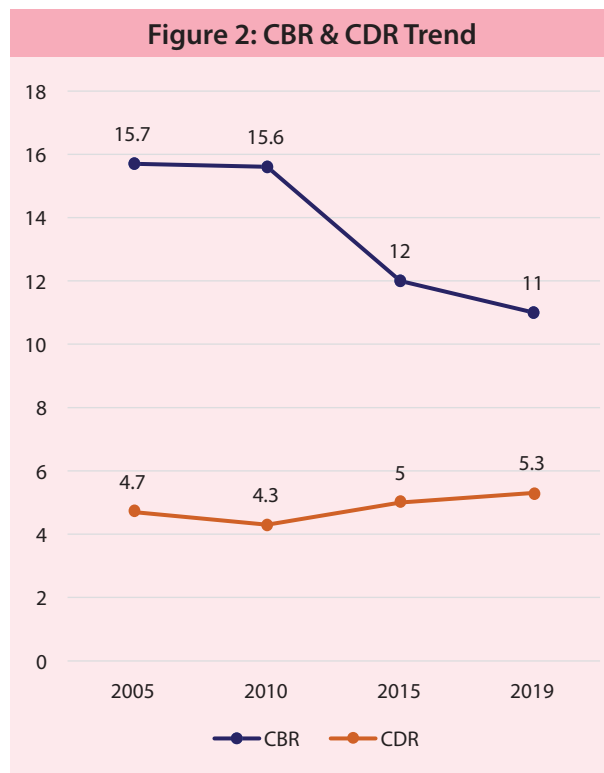


Figure 3: Comparison of Key NFHS 5 & 4 Indicators

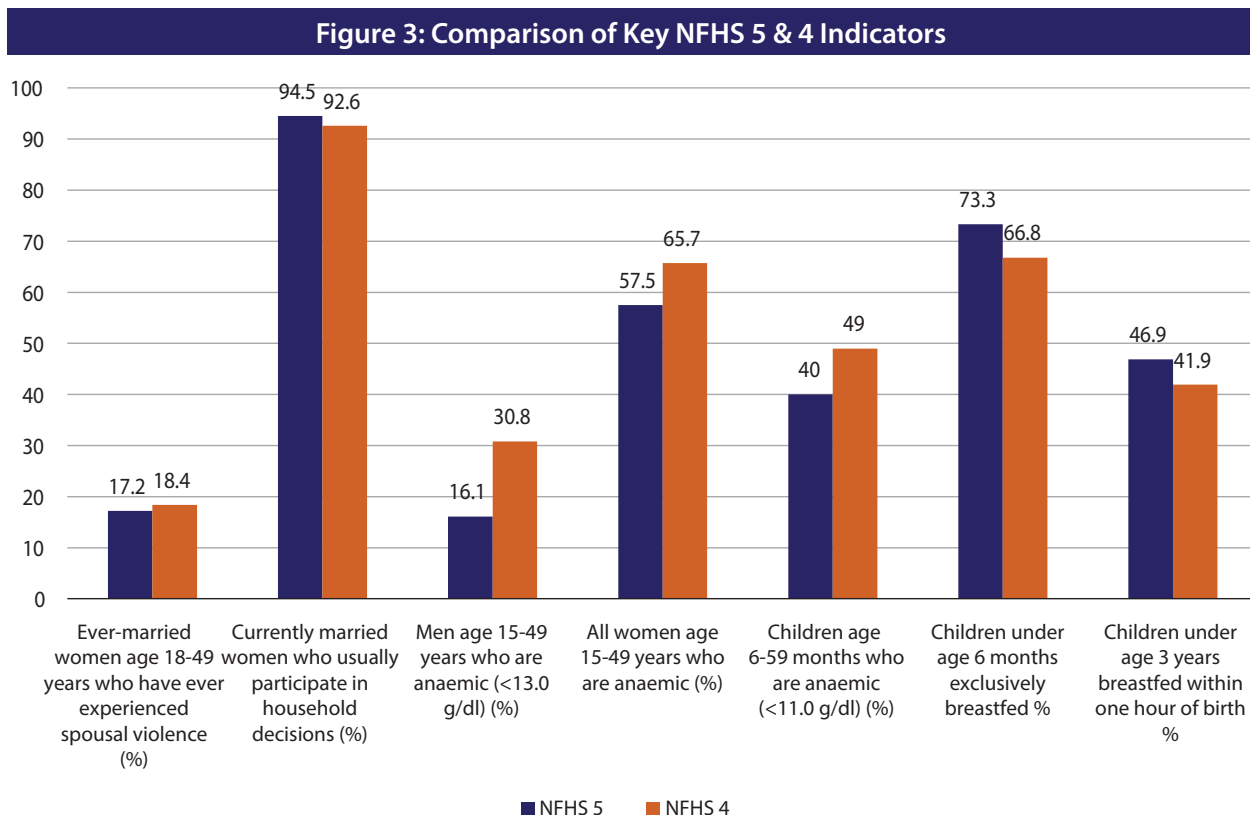


Figure 4: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

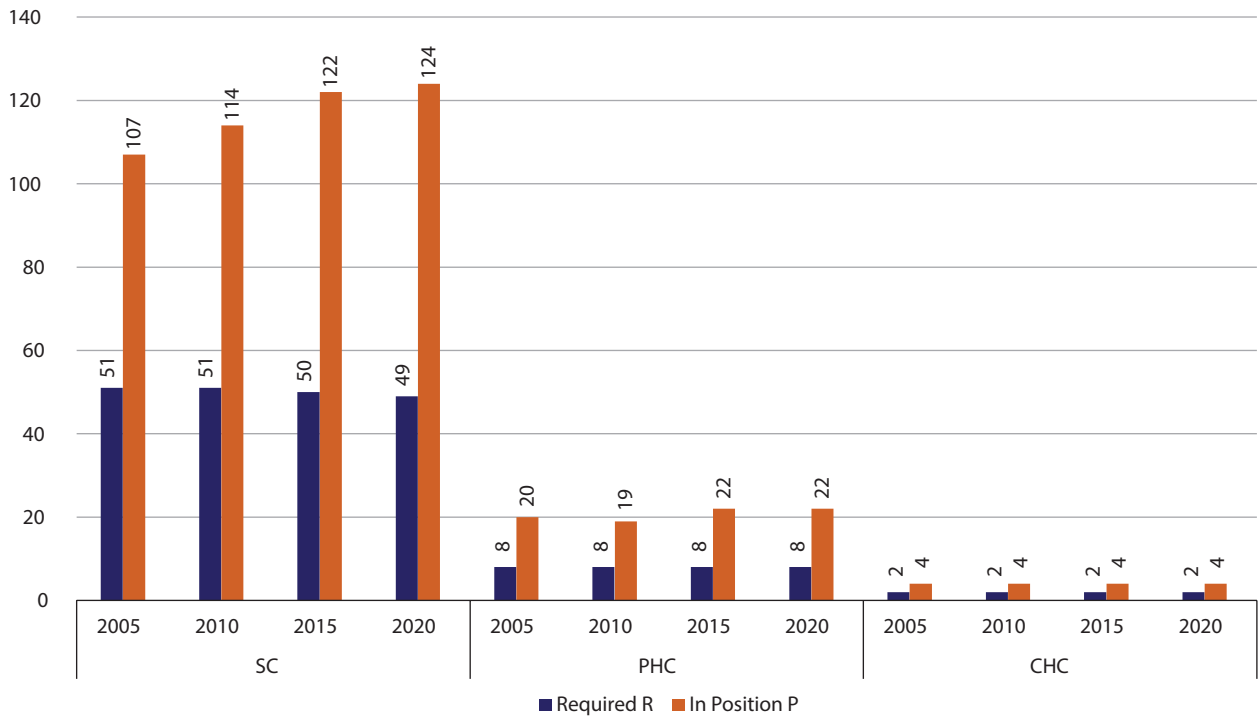


Figure 5: Year Wise Health Infrastructure Shortfall (%)

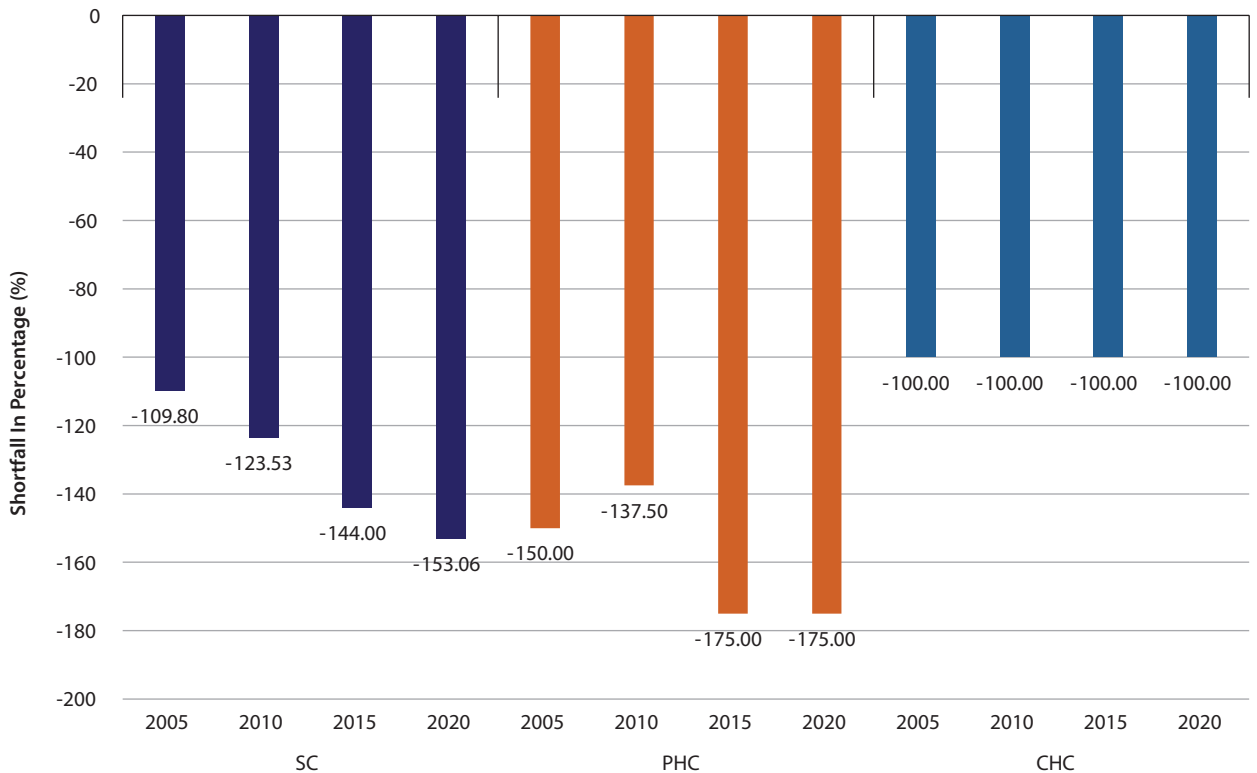
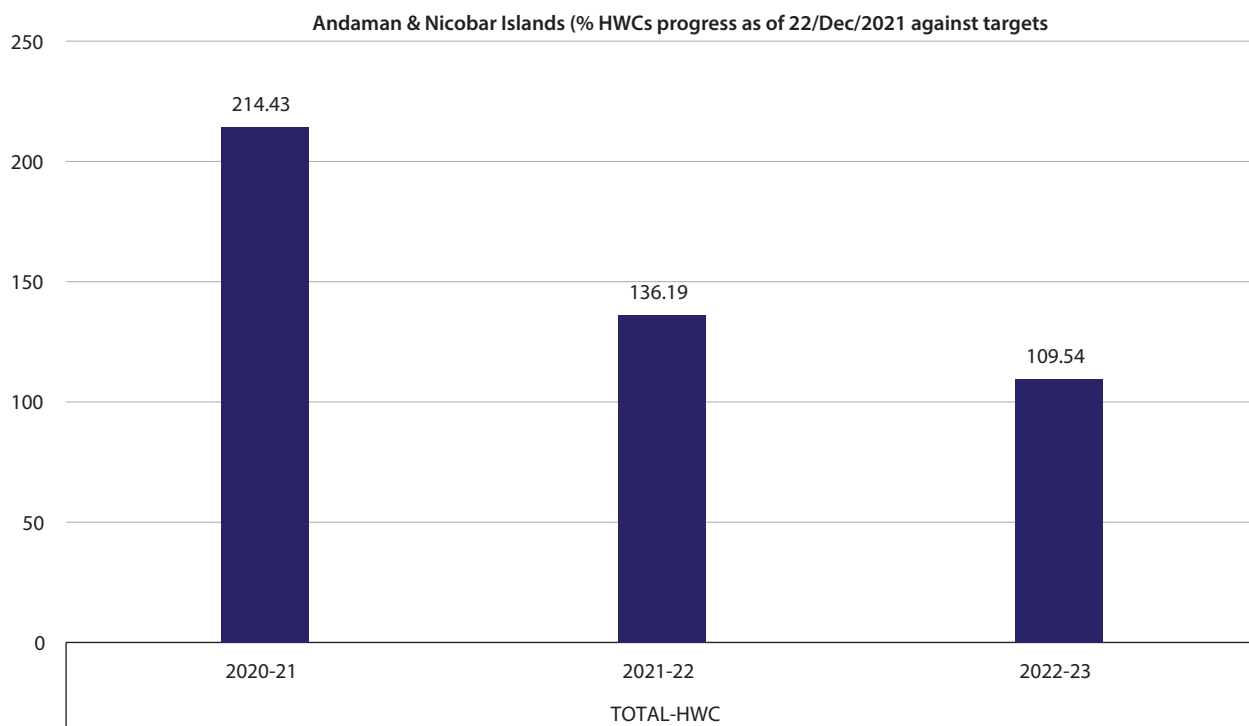


Figure 6: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

Serial No.	States/Districts	Data Source	Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)			
													Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted ^Δ (Height For Age) (%)	Children Under 5 Years - Wasted ^Δ (Weight For Height) (%)
1	Andaman & Nicobar Islands	NFHS 4 Total	859	5.7	N/A	16.4	50.8	2.1	4.2	15.5	92.1	96.4	84.8	14.2	23.3	18.9
2	Andaman & Nicobar Islands	NFHS 5 Urban	941	1.4	86.6	17.4	54.4	2.2	12.1	18.3	86	99.2		27.7	18.2	12.8
3	Andaman & Nicobar Islands	NFHS 5 Rural	891	1.6	85.6	15.3	73.4	5	8.2	10.3	81	98.7	96.8	10.6	26.4	19
4	Andaman & Nicobar Islands	NFHS 5 Total	914	1.6	86	16.2	65.8	3.9	9.8	13.5	83.4	99	96	19.5	22.5	16
5	Nicobar	NFHS 5 Total	927	2.7	87.5	11.4	65.3	2.7	4.9	9.5	71.7	97.8	94.1	18.7	21.6	15.7
6	North & Middle Andaman	NFHS 5 Total	844	2.1	84	15.4	84.1	6.4	9.3	5.8	79.2	97.7	N/A	5.9	27	27
7	South Andaman	NFHS 5 Total	935	1.2	86.7	17.1	57.1	2.8	10.6	17.6	85.9	99.5	96.6	23.5	21.1	12.6

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'. Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

Δ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best performing districts within the districts for a particular indicator

B. Red – Worst performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. Δ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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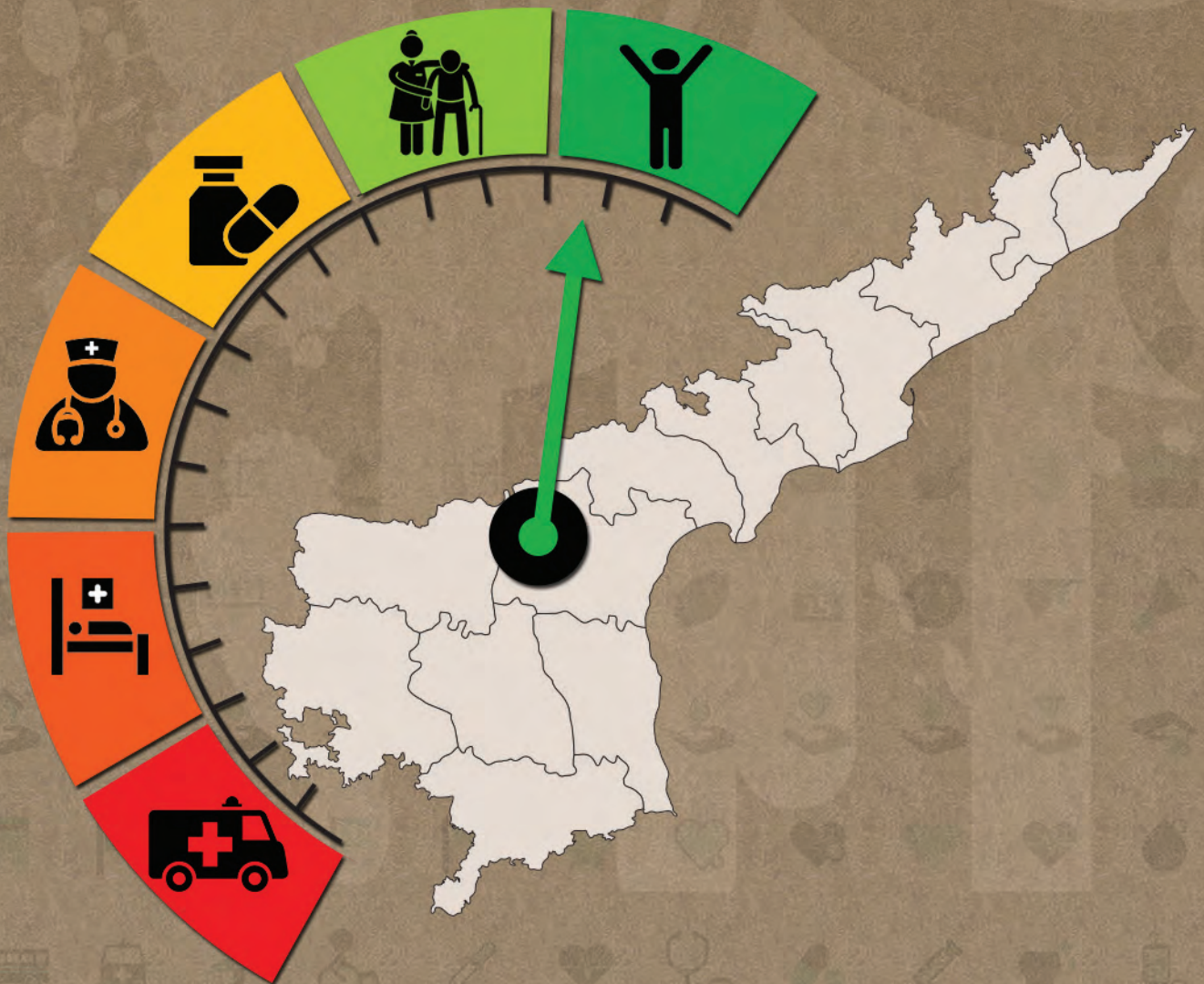
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



ANDHRA PRADESH

DISTRICTS VISITED IN
COMMON REVIEW MISSIONS

CRM	Districts Visited	
3rd	Vizianagaram	Vishakhapatnam
5th	Guntur	Warangal
7th	Mahboobnagar	Chittoor
9th	Visakhapatnam	Anantapur
10th	Krishna	Kadapa
12th	Ananthapuram	East Godavari
13th	Kadapa	Vishakhapatnam

ANDHRA PRADESH

1. BACKGROUND

1.1 State Profile

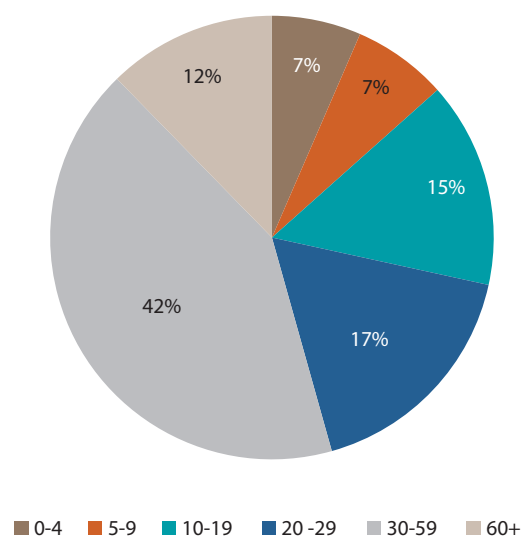
Andhra Pradesh is divided into 13 districts and estimated to have a population of over 8.45 crores^a, accounting for approximately 6.98% of India's total population (RHS 2019-20). It is projected that the population would reach around 5.27 crores by 2021^b (Census Population Projection 2019 Report). As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 1.38 crores (16.41%) and 0.59 crores (7%), respectively. Out of the 13 districts, top five ST dominant districts account for 47.39% of ST population, and top five SC dominant districts account for 29.50% of SC population in the State (Census 2011, Andhra Pradesh including Telangana^c). According to Census 2011, 66.64% constitute the rural population, while 33.36% constitute the urban population. The total length of roads^d in the State is 1,76,474 km (3.53%^e), in which, the length of the national highways is 6,467 km (5.7%^f) and state highways is 6,485 km (3.70%^g). Around 60% of the main worker population workers in the State participate in agricultural activities^h.

A detail report on the key indicators has been attached as Annexure 1.

1.2 Demography

As per Census 2011, 16 districtsⁱ have population of 30 lakhs and above; and 7 districts have population of between 20-30 lakhs^j (Annexure 1.1 State profile). The

Figure 1: Andhra Pradesh - distribution of estimated population 2021 (%)



^a Census 2011 (inclusive of Telangana)

^b Projection excluding Telangana

^c Andhra Pradesh was divided into Telangana & Andhra Pradesh in 2014 and SC/ST calculation is based on census 2011 data, so the SC ST dominant districts are not plotted

^d Basic Road Statistics 2019, MoRTH

^e Percentage of total length of roads in Andhra Pradesh

^f Percentage of total length of National Highways in the country

^g Percentage of total length of State Highways in the country

^h https://ficci.in/state/1008/Project_docs/ficci-Andhra-Pradesh-Profile.pdf

ⁱ Including Telangana

^j Census 2011 includes Telangana

State's Sex ratio at birth of 920 females for every 1000 males is higher than the national average of 899 (Annexure 1.2). It is estimated that there are 15% of the total population in the age group of 10-19 years, 59% within 20 to 59 years; while 12% is 60 years and above^k (figure 1). The crude birth rate and the crude death rate have declined from 19.1 & 7.3 in 2005 to 15.9 & 6.4 in 2019, respectively (Annexure 2; figure 2). The literacy rate improved from 60.5% in 2001 to 67.0% in 2011, with male & female literacy rates being 74.9 % and 59.1%, respectively (Annexure 1.1). As per the ESAG 2018 report, the Gross Enrollment Rate (GER)^l is 30.8% for higher education, 60.16% for senior secondary education, 75.51% for secondary education, 83.29% for elementary education, and 84.48% for primary education.

1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 12% (figure 1) of the State's total population. The life expectancy at 60 years of age is 17.9 years and 18.8 years for males and females, respectively (2014-2018). The old age dependency ratio is 15.4 in 2011; which is 14.5 for males and 16.3 for females, 17.4 in rural & 11.6 in urban areas. In Andhra Pradesh, 59.0% of elderly females and 28.0% elderly males living in rural areas are economically fully dependent on others. Whereas in urban areas, 60.0% of elderly females and 26.0% elderly males are economically fully dependent on others. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 39% for men and 42% for women, which are above the national average of 31% for both man and woman (Elderly in India 2016 Report).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+N^m services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)ⁿ, institutional deliveries, C sections, distribution of IFA^o tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined from 134 (SRS MMR Bulletin 2007-09) to 65 (SRS MMR Bulletin 2018) per 1,00,000 live births. In Andhra Pradesh, 98.7% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 report- Krishna, Prakasam, Kurnool, Srikakulam and Y.S.R districts reported relatively high ANC coverage, ranging between 73.3% - 82.8%. Whereas, East Godavari, Visakhapatnam, Guntur, West Godavari and Chittoor districts reported poor ANC coverage ranging between 51% - 65.3%. As reported in HMIS 2019-20, around 99.7% of the deliveries took place in institutions, out of which 41.6% took place in public health facilities. Total percentage of C-sections (35.3%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, around 37.8% was conducted at private facilities in the State. Around 75.9% of women were tracked for the first postpartum check-up between 48 hours

^k Census Population Projection 2019 Report

^l Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

^m Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

ⁿ Antenatal Check up

^o Iron Folic Acid Tablets

and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years decreased from 60.0% (NFHS-4) to 58.8% (NFHS-5). Anaemia in females of reproductive age group is almost thrice than that in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 57 (2005) to 25 (2019) which is lower than the national average of 30 (Annexure 2, Figure 1). Similarly, NNMR^p and Still Birth (per 1,000 live births) rates have also significantly decreased from 34.8 and 10.9 (2005) to 21 and 3 (2018) respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 65.8 (2006-10) to 70 (2014-18), which is above the national average of 69.4 years (Annexure 2, Figure 3). As per NFHS 5 report, Y.S.R, West Godavari, Prakasam, Anantapur and East Godavari districts reported low SRBs^q ranging between 779 - 882; while Visakhapatnam, Sri Potti Sriramulu Nellore, Chittoor, Krishna, and Srikakulam districts reported high SRBs ranging between 974 – 1163.

Full vaccination^r coverage for children between 12 – 23 months of age has improved from 79.9% (NFHS4) to 88.0% (NFHS5). The proportion of under 6-months children exclusively breastfed has, however, decreased from 70.2% (NFHS 4) to 68.0% (NFHS 5). An increase in childhood anaemia from 58.6% (NFHS 4) to 63.2% (NFHS 5) in children aged 6-59 months has been reported (Annexure 2, Figure 5). Though the burden of malnutrition declined over time (GBD 2019), there is a wide variation in the nutritional status within the State. As per NFHS 5 report, Srikakulam, Prakasam, East Godavari, Guntur, and Chittoor districts reported relatively low burden of stunting which ranged from 19.7 to 27.1; while West Godavari, Y.S.R, Anantapur, Vizianagaram and Kurnool districts reported high burden which ranged from 31.4 to 50.5. For under-5 wasting – Prakasam, West Godavari, Y.S.R, East Godavari and Krishna districts reported relatively low burden which ranged from 8.7 to 14.3; while Guntur, Vizianagaram, Anantapur, Srikakulam and Visakhapatnam districts reported high burden, which ranged from 17.8 to 21.5.

2.3 Family Planning

The TFR^s has reduced from 2 in 2005 to 1.6 in 2018 (Annexure 2, Figure 4). As per NFHS 5 report, the total unmet need in the State is reported as 4.7%, while the unmet need for spacing is 2.6% (NFHS 5). East Godavari district reported the highest total unmet need (8%), while Kurnool reported the lowest (2.1%). Approximately 70.8% of married women reported to avail any modern method of family planning in the State (NFHS 5); with sterilization acceptance being 69.6% in females, and 0.4% in males.

2.4 Communicable Diseases

The State has 13 functional IDSP units in place. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 25.30% of total disease burden (Annexure 1.4). Diarrheal diseases, neonatal preterm birth and dietary iron deficiency are the leading causes of deaths

^p Neonatal Mortality Rate

^q Sex Ratio at Birth

^r NFHS 5 State/UT Factsheet, based on information from vaccination card only

^s Total Fertility Rate

due to CMNND in the State (Annexure 2, Figure 6^t). For TB, the annualized total case notification rate is 172% and NSP^u success rate is 91% as opposed to the national averages of 163% and 79%, respectively. For NLEP^v, the reported prevalence rate of 0.55 per 10,000 population is less than the national average of 0.61. In FY 2019-20, the State has no reported deaths due to Dengue, Malaria, or Kala Azar.^w

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that as high as 64.4% of all deaths are premature in the State, while disability or morbidity accounts for 35.6%. Ischaemic heart disease, COPD, and Diabetes type 2 are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 63.34% of DALYs; whereas, injuries contribute to 11.36% of DALYs in the State (GBD 2019). The State is positioned 7th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in recent NFHS 5 report that 3.8% of women and 22.6% of men used any kind of tobacco, while 0.5% of women and 23.3% of men consumed alcohol. Overall, metabolic factors (high systolic blood pressure, high fasting plasma glucose), behavioural factor (smoking) and environmental factors (ambient particulate matter pollution, household air pollution from solid fuels and unsafe water source) are the major risk factors for all DALYs and YLLs (Annexure 2, figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 7,76,140 crores. The State is positioned 16th out of 32 states in terms of per capita^x of ₹ 1,51,173. According to NHA 2017-18, the per capita Government Health Expenditure in the State is estimated as ₹ 1,381, which is less than the national average of ₹ 1,753. On the other hand, the OOPE^y as a share of Total Health Expenditure is 67%, which is more than the national average of 48.8%. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 3,532 in public facilities, ₹ 21,748 in private facilities; whereas for urban areas, it is around ₹ 2,195 in public facilities and ₹ 30,855 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 2,178 in public facilities & ₹ 24,175 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 2,735 in public facilities and ₹ 22,310 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated to be 54% in rural and urban areas; whereas for diagnostics, it is 18% in rural and 24% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Though public health facilities have increased over time, there remains a shortfall of 3.14% PHCs and 52.04% CHCs (Annexure 2, Figure 9). Currently, there are 7437 SCs, 1142 PHCs and 141 CHCs are in place, against the required 7152 SCs, 1179 PHCs and 294 CHCs in rural areas. Similarly, in urban settings, there are 243 PHCs in place against the required 367, which accounts to a shortfall of

^t <https://vizhub.healthdata.org/gbd-compare/india>

^u New Smear Positive

^v National Leprosy Eradication Programme

^w QPR NHM MIS Report (status as on 01.03.2020 & 31.12.2020)

^x Directorate of Economics & Statistics

^y Out of Pocket Expenditure

33.79%. The State has 13 DHs, 28 SDHs and 13 government medical colleges. In the State, 107.7% of DHs (14), 100% of SDHs (28), and 100 % of CHCs (198) serve as functional FRUs. In tribal catchments, there are 816 SCs, 158 PHCs and 21 CHCs in place, against the required 752 SCs, 112 PHCs and 28 CHCs.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 6049 HWCs (4662 SHCs, 1145 PHCs & 242 UPHCs) are operationalized in the State as of 22nd December 2021^z.

In the State, 13 districts are equipped with MMUs under the NRHM, while none under the NUHM. The State has almost 100% of required ASHAs in position under the NRHM and around 82% under the NUHM. The doctor to staff nurse ratio in place is 1:2 with 3 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1, Table 1.5).

As per the NSSO data (2017-18), 19% of all OPD cases in rural areas and 27% in urban areas; and 26% of all IPD cases in rural areas & 32% in urban areas utilized public health facilities. In general, public health facility utilization in the State is below the national averages for both (Annexure 1.6).

^z AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^{aa}

Indicator	Andhra Pradesh 2011 ¹	India
Total Population (In Crore)	8.45	121.08
Rural (%)	66.64	68.85
Urban (%)	33.36	31.14
Scheduled Caste population (SC) (in crore)	1.38 (16.41%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.59 (7%)	10.45 (8.63%)
Total Literacy Rate (%)	67	72.99
Male Literacy Rate (%)	74.9	80.89
Female Literacy Rate (%)	59.1	64.64
Number of Districts in the Andhra Pradesh ²	13	
Number of districts per lakh population in Andhra Pradesh (Census 2011)	Population¹	Districts¹ (Numbers)
	<10 Lakhs	0
	≥ 10 Lakhs - <20 Lakhs	0
	≥20 Lakhs - <30 lakhs	7
	≥30 Lakhs	16
ST SC Dominant (Top 5) Districts of Andhra Pradesh¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Khammam - 27.36%	Prakasam - 23.18%	
Adilabad - 18.08%	Nellore - 22.49%	
Warangal - 15.10%	West Godavari - 20.61%	
Visakhapatnam - 14.41%	Guntur - 19.58%	
Nalgonda - 11.30%	Krishna - 19.28%	
Top 5 ST dominant district accounts for - 47.39%	Top 5 SC dominant district accounts for - 29.50%	

1.2 Key Health Status & Impact Indicators

Indicators	Andhra Pradesh	India
Infant Mortality Rate (IMR) ³	25	30
Crude Death Rate (CDR) ³	6.4	6

^{aa} Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	15.9	19.7
Maternal Mortality Ratio (MMR) ³	65	113
Neo Natal Mortality Rate (NNMR) ⁴	21	23
Under Five Mortality Rate (U5MR) ⁴	33	36
Still Birth Rate ⁴	3	4
Total Fertility Rate (TFR) ⁴	1.6	2.2
Life expectancy at birth ⁵	70	69.4
Sex Ratio at Birth ⁴	920	899

1.3 Key Health Infrastructure Indicators^{bb}

Indicators	Numbers (Total)			
Number of District Hospitals ²	13			
Number of Sub District Hospital ²	28			
Number of Government (Central + State) Medical College ⁶	13			
Number of Private (Society + Trust) Medical Colleges ⁶	18			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	4662	2229	4308	5695
PHC-HWC	1145	1147	1147	1147
UPHC-HWC	242	244	244	244
Total-HWC	6049	3620	5699	7086
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	294	141	52.04	
Number of Primary Health Centres (PHC)	1,179	1,142	3.14	
Number of Sub Centres (SC)	7,152	7,437	-3.98	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	14	28	198	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	367	243	33.79	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	28	21	25.00	
Number of PHC	112	158	-41.07	
Number of SC	752	816	-8.51	

^{bb} Sources are mentioned at the end of Annexure 1

Patient Service⁹	Andhra Pradesh	India
IPD per 1000 population	N/App. ^{cc}	62.60
OPD per 1000 population	N/App.	1337.12
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	N/App.	36.40

1.4 Major Health Indicator^{dd}

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Andhra Pradesh	India
% DALY ^{ee} accountable for CMNNDs ^{ff}	25.3	27.46
% DALY accountable for NCDs	63.34	61.43
% DALY accountable for Injuries	11.36	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Andhra Pradesh	India
Level of Birth Registration (%)	90.2	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	12.9	20.7
RMNCHA+N		
Maternal Health⁹	Andhra Pradesh	India
% 1st Trimester registration to Total ANC Registrations	81.4	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	98.7	79.4
Total Reported Deliveries	734645	21410780
% Institutional deliveries to Total Reported Deliveries	99.7	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	41.6	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	58.4	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	35.3	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	31.8	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	37.8	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	75.9	53.4
Neonatal⁹	Andhra Pradesh	India
% live birth to Reported Birth	99	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	4.9	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	97.4	89.9

^{cc} Denominator for computation is not available

^{dd} Sources are mentioned at the end of Annexure 1

^{ee} Disability Adjusted Life Years

^{ff} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Andhra Pradesh	India
Sick New Born Care Unit (SNCU)	47	895
New Born Stabilization Unit (NBSU)	95	2418
New Born Care Corner (NBCC)	1306	20337
Child Health & Nutrition¹⁰	Andhra Pradesh (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	7.2	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	62.5	60.6
Children under 5 years who are underweight (weight-for-age) (%)	29.6	32.1
Child Immunization¹⁰	Andhra Pradesh (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	88	83.8
Children age 12-23 months who have received BCG (%)	94.6	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	87.1	87.9
Family Planning¹⁰	Andhra Pradesh (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	2.6	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Andhra Pradesh	India
Number of districts with functional IDSP unit	13	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Andhra Pradesh	India
Annualized total case notification rate (%)	172	163
New Smear Positive (NSP) Success rate (in %)	91	79
National Leprosy Eradication Programme (NLEP)¹¹	Andhra Pradesh	India
Prevalence Rate/10,000 population	0.55	0.61
Number of new cases detected	4,685	1,14,359
Malaria, Kala Azar, Dengue¹¹	Andhra Pradesh	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Andhra Pradesh (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	24.6	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	38.6	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Andhra Pradesh (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	13.6	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	17.6	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	7.3	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	8.4	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Andhra Pradesh (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	3.8	8.9
Men who use any kind of tobacco (%)	22.6	38
Women who consume alcohol (%)	0.5	1.3
Men who consume alcohol (%)	23.3	18.8
Injuries		
Road Traffic Accident¹²	Andhra Pradesh	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	7	N/A
Total number of fatal Road Accidents	7,389	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	36.3	33.7
Number of persons killed in Road Accidents	7984	115113

1.5 Access to Care⁹⁹

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Andhra Pradesh	India
Number of Districts equipped with MMU under NRHM	13	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Andhra Pradesh	India
102 Type	0	9955
104 Type	0	605
108 Type	628	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	0	11070

⁹⁹ Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Andhra Pradesh	India
Total number of ASHA targeted under NRHM	39552	946563
Total number of ASHA in position under NRHM	39451	904211
% of ASHA in position under NRHM	99.74	96
Total number of ASHA targeted under NUHM	3200	75597
Total number of ASHA in position under NUHM	2609	64272
% of ASHA in position under NUHM	81.53	85
Community Process¹¹	Andhra Pradesh	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	12940	554847
Number of Mahila Arogya Samitis (MAS) formed	10440	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Andhra Pradesh	India
DH	14	796
CHC	195	6036
PHC	1142	20273
UHC	0	126
UPHC	0	3229
Human Resource for Health ¹⁴		
HRH Governance	Andhra Pradesh	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	Yes	
Implementation of HRIS (Y/N)	In Progress	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	28
	Dentists (%)	20
	MO MBBS (%)	57
	Nurse (%)	32
	LT (%)	49
	ANM (%)	24
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:2	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	4 per 10,000	3 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	3:1	2:1

Ranking: Human Resource Index of Andhra Pradesh¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{hh}	17984	27999	20210	7789	0	72.67
Staff Nurse	12750	11258	9287	1971	3463	
Lab Technician	3499	1871	1668	203	1831	
Pharmacists	2126	1861	1512	349	614	
MO MBBS ⁱⁱ	4155	2978	2575	403	1580	
Specialist ^{jj}	2150	2687	1777	910	373	

1.6 Healthcare Financing^{kk}

National Health Accounts (NHA) (2017-18)	Andhra Pradesh		India	
Per Capita Government Health Expenditure (in ₹)	1,381		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	0.9		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	5.3		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	67		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Andhra Pradesh		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	19	27	33	26
IPD - % of hospitalized cases using public facility	26	32	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	247	692	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	608	797	845	915
IPD - Per hospitalized case (in INR) - Public	3,532	2,195	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	21,748	30,855	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	18	24	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	54	54	53	43

^{hh} MPW – Multi Purpose Health Worker (Female + Male)

ⁱⁱ MO MBBS (Full Time)

^{jj} Specialist (All Specialist)

^{kk} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	2,178	2,735	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	24,175	22,310	20,692	26,701
State Health Expenditure	Andhra Pradesh		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	4.3		5	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{||} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

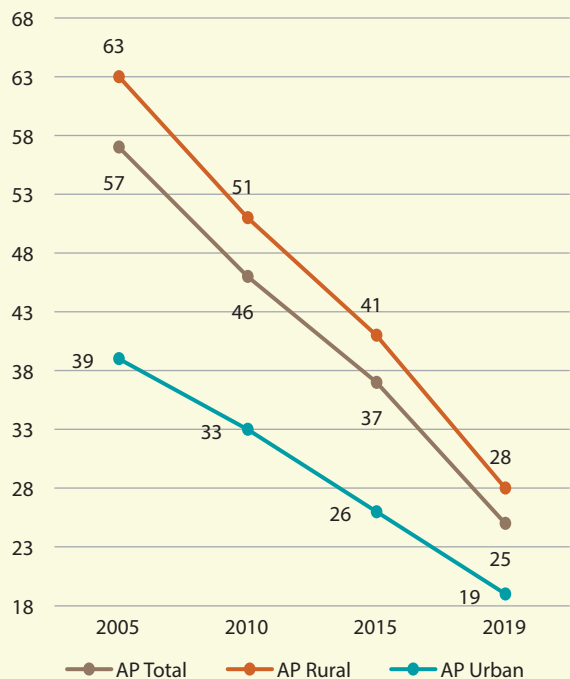


Figure 2: CBR & CDR Trend

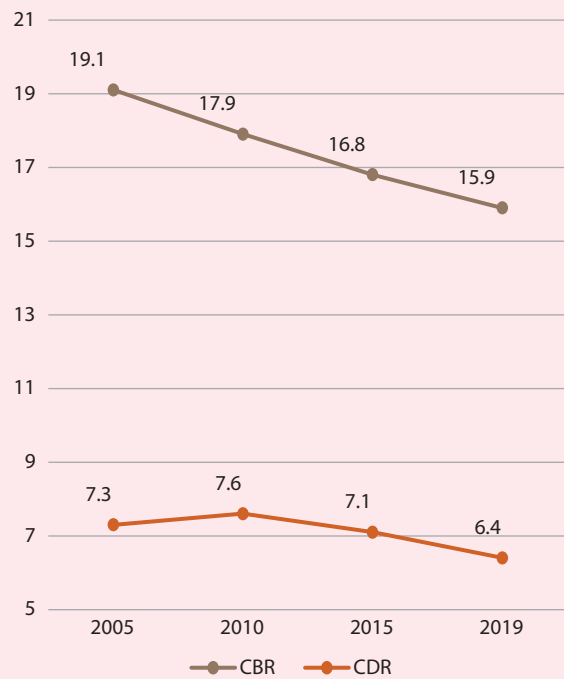


Figure 3: Life Expectancy At Birth Trend

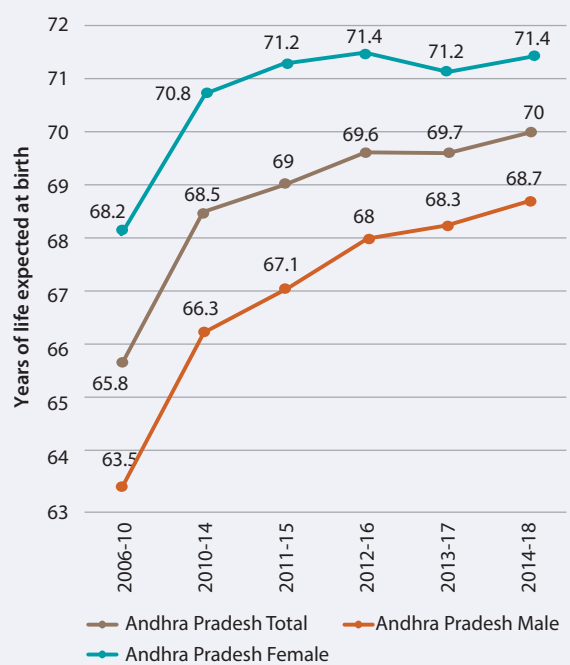


Figure 4: NNMR, TFR & Still Birth Trend

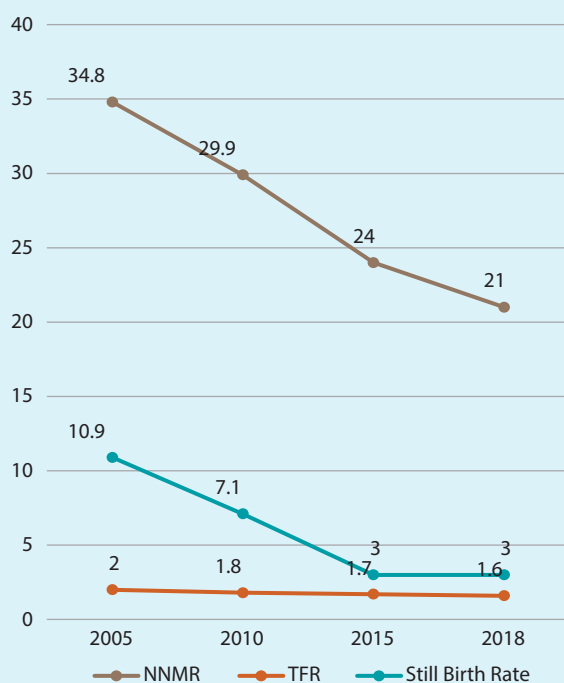


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

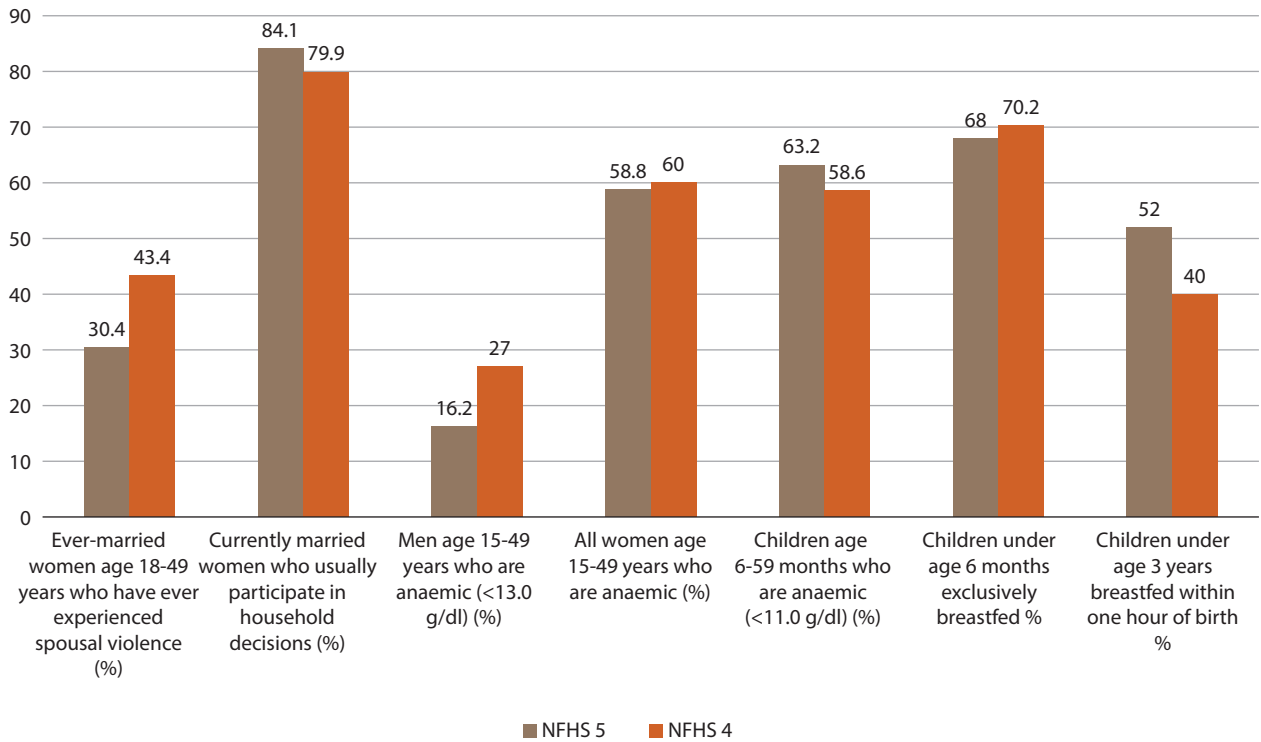


Figure 6: Top 15 causes of DALYs, 1990-2019

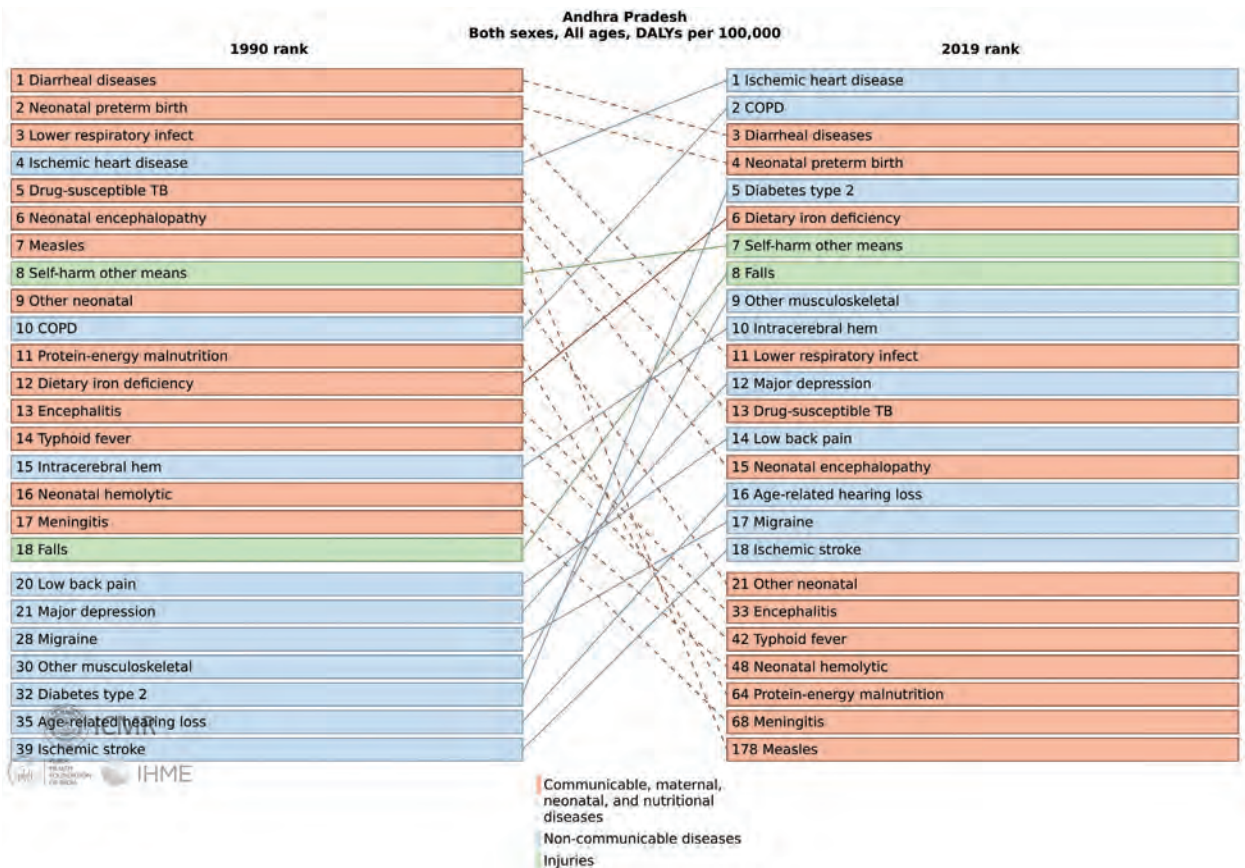


Figure 7: Top 15 risk of DALYs, 1990-2019

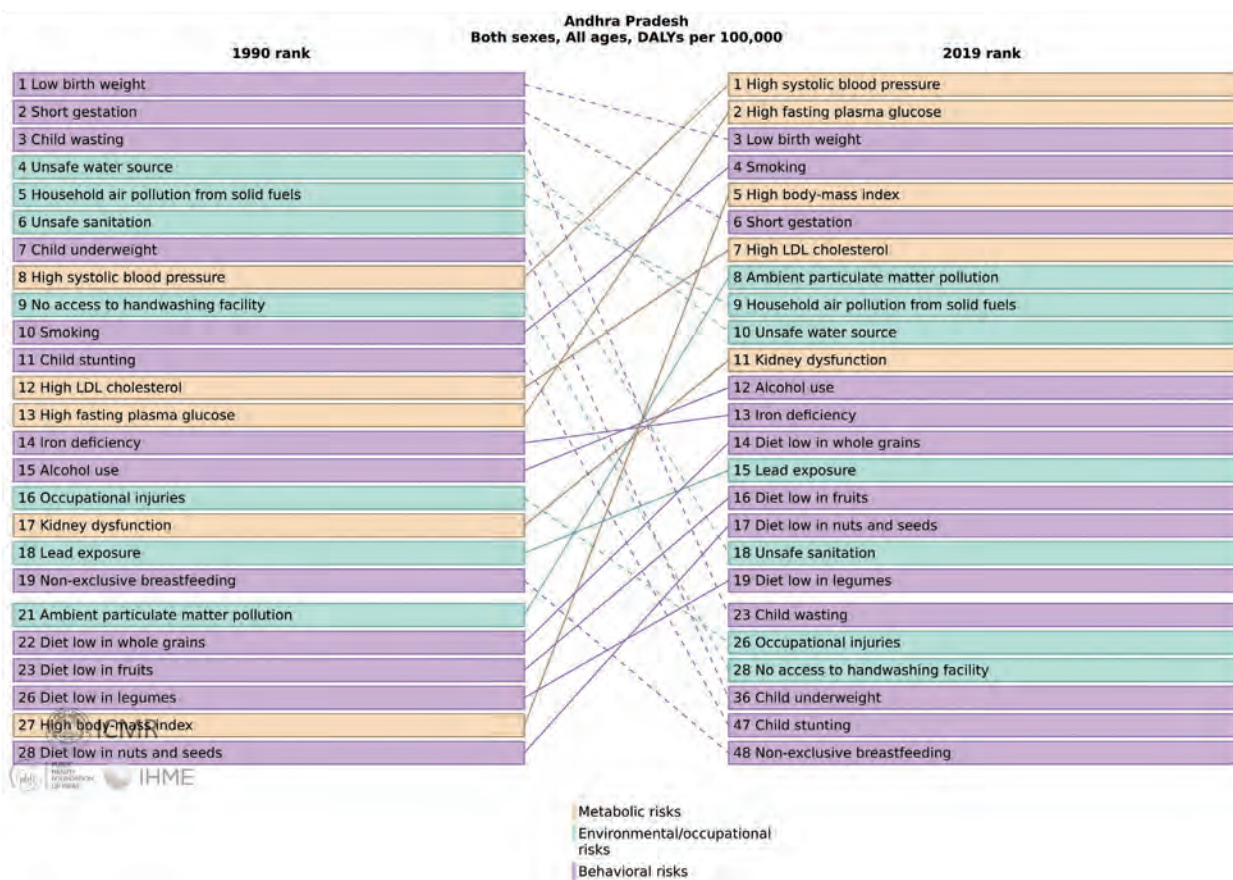


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

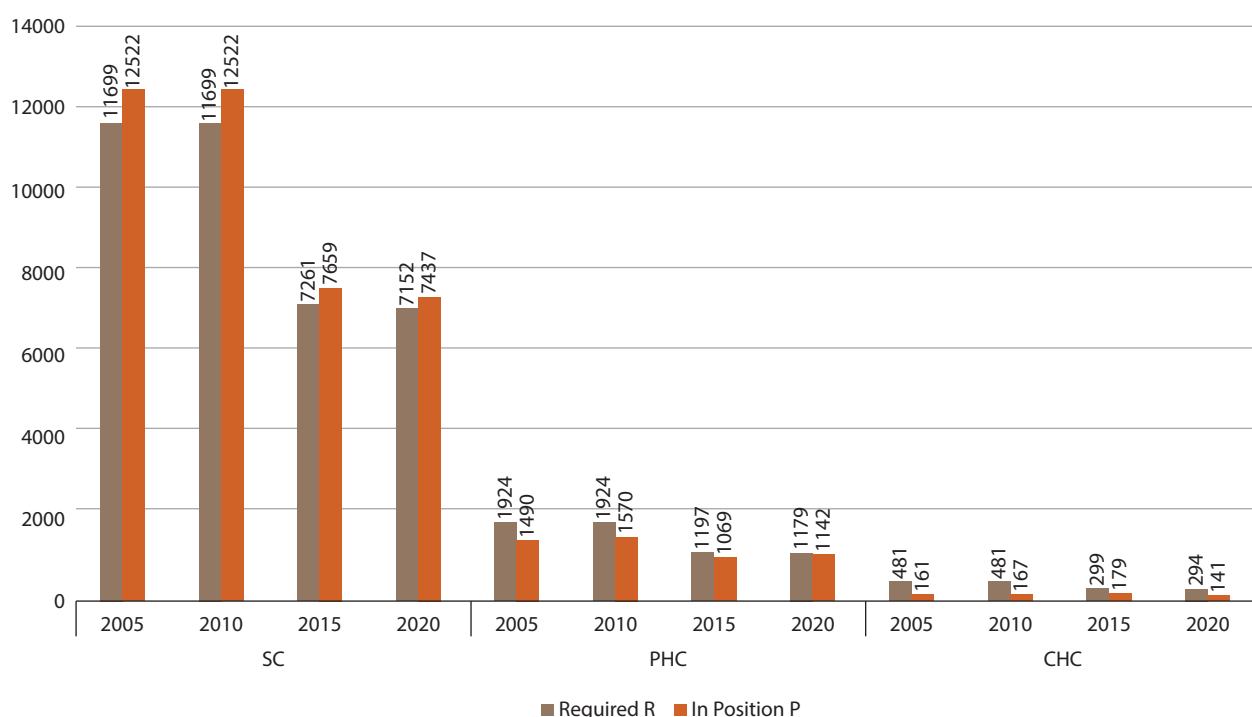


Figure 9: Year Wise Health Infrastructure Shortfall (%)

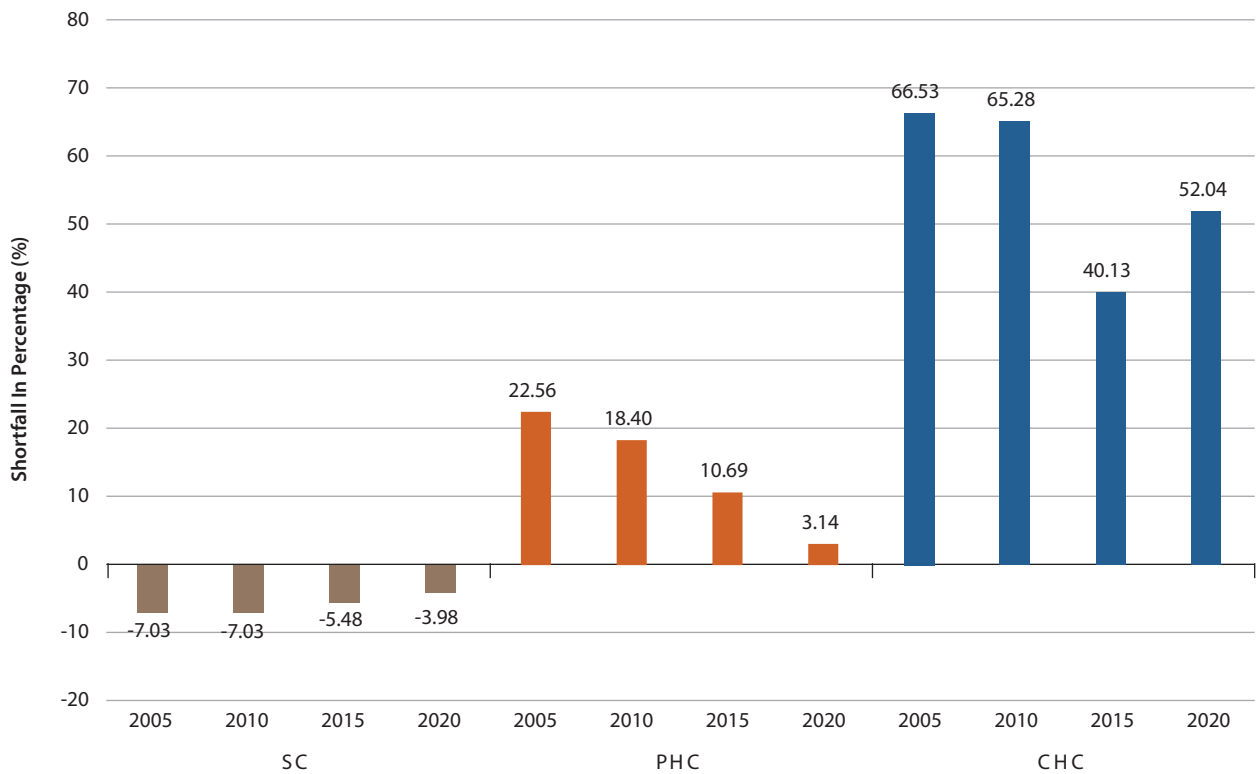
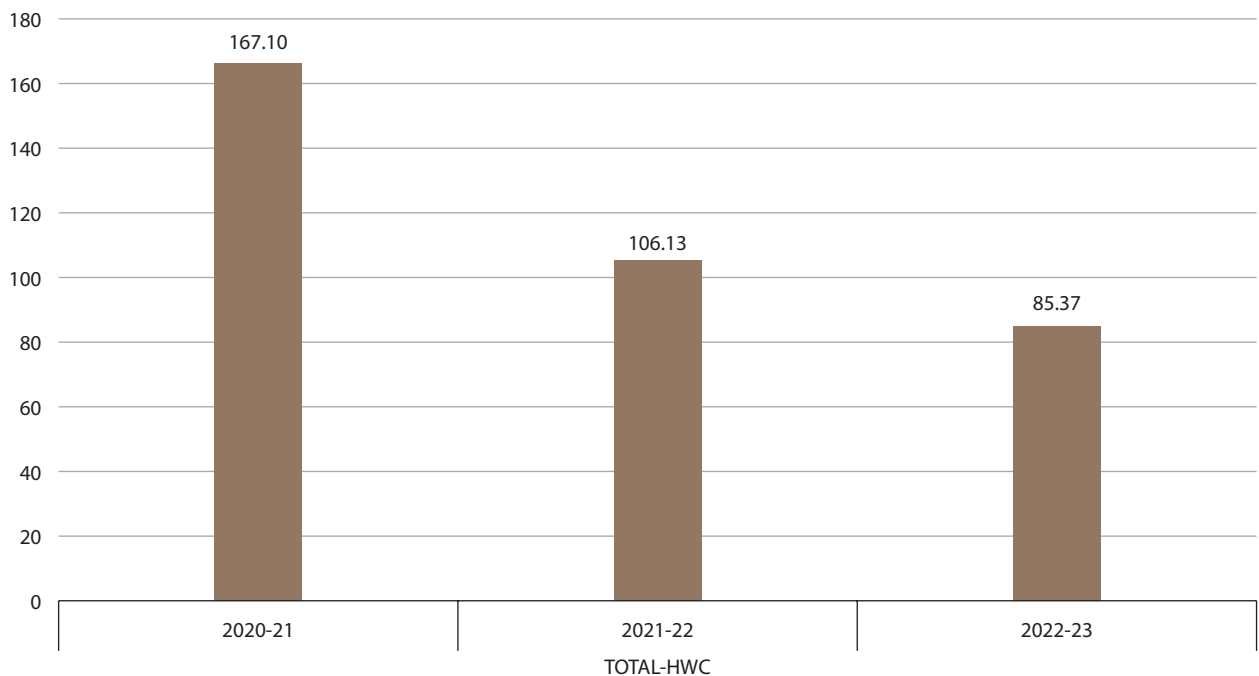


Figure 10: Percentage HWCs progress against target - FY wise (%)

Andhra Pradesh (% HWCs progress as of 22/Dec/2021 against targets-FY wise)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural/Urban Stats Not Available)															
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted^ (Height For Age) (%)	Children Under 5 Years - Wasted^ (Weight For Height) (%)		
1	Andhra Pradesh	NFHS 4 Total	914	74.6	62.9	33	69.5	0.2	0.2	0.2	4.7	76.3	91.5	79.9	7.6	31.4	17.2	
2	Andhra Pradesh	NFHS 5 Urban	877	62.2	79	21.7	70.8	0.2	0.9	5.2	67.2	98.6	89.1	16.7	23.1	17.6		
3	Andhra Pradesh	NFHS 5 Rural	957	73.7	63.8	32.9	71.2	0.1	0.3	4.4	67.6	95.7	87.5	6.3	34.2	15.5		
4	Andhra Pradesh	NFHS 5 Total	934	70.2	68.6	29.3	71.1	0.2	0.5	4.7	67.5	96.5	88	9.3	31.2	16.1		
5	Anantapur	NFHS 5 Total	881	73.2	63.6	37.3	67.6	0	0.1	6.4	66.6	94.7	96.6	2.9	36	19.3		
6	Chittoor	NFHS 5 Total	1019	70.7	69.3	28.1	69	0	0.8	6	65.3	97.1	87.5	6	27.1	14.8		
7	East Godavari	NFHS 5 Total	882	66.4	77.9	26	66.3	0.1	1.1	8	51	96.6	67.3	10.2	23.1	14.3		
8	Guntur	NFHS 5 Total	941	71.1	68.5	35.4	73.3	0.2	0.1	3.2	62.5	98.6	100	11.2	23.8	17.8		
9	Krishna	NFHS 5 Total	1139	68.1	76.9	25.3	79.1	0	0.4	2.5	73.3	98.9	97.2	23.4	29.8	14.3		
10	Kurnool	NFHS 5 Total	918	73.3	57	36.9	70	0	0.4	2.1	74.3	88.5	80.4	9.6	50.5	16.7		
11	Prakasam	NFHS 5 Total	837	67.6	62.8	37.3	69	0	0	4.8	73.4	97.4	NA	13.4	22.6	8.7		
12	Sri Potti Sriramulu Nellore	NFHS 5 Total	1011	72.3	70.5	23.8	71.9	0	0.3	3.1	73	97	80.1	6.9	29.2	17.2		
13	Srikkulam	NFHS 5 Total	1163	75.6	64.3	25.4	72.3	0.6	0.3	5.7	78.4	97.9	100	16.1	19.7	19.5		
14	Visakhapatnam	NFHS 5 Total	974	64.9	69.5	25.4	68	0.3	0.8	4.8	58.6	95.3	93.5	11.8	31	21.5		
15	Vizianagaram	NFHS 5 Total	898	76.7	58.3	33.7	71.2	0	0.6	6.7	71.4	99	NA	1.8	36.4	19.2		
16	West Godavari	NFHS 5 Total	833	67.6	77	22.1	77.8	0.6	0.6	3	62.7	98.7	87	3.5	31.4	11.7		
17	Y.S.R.	NFHS 5 Total	779	73.3	63.8	25.6	69.1	0.3	0	5.5	82.8	99.4	89.7	5.5	34.4	14.1		

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'. Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months, and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best five performing districts within the districts for a particular indicator

B. Red – Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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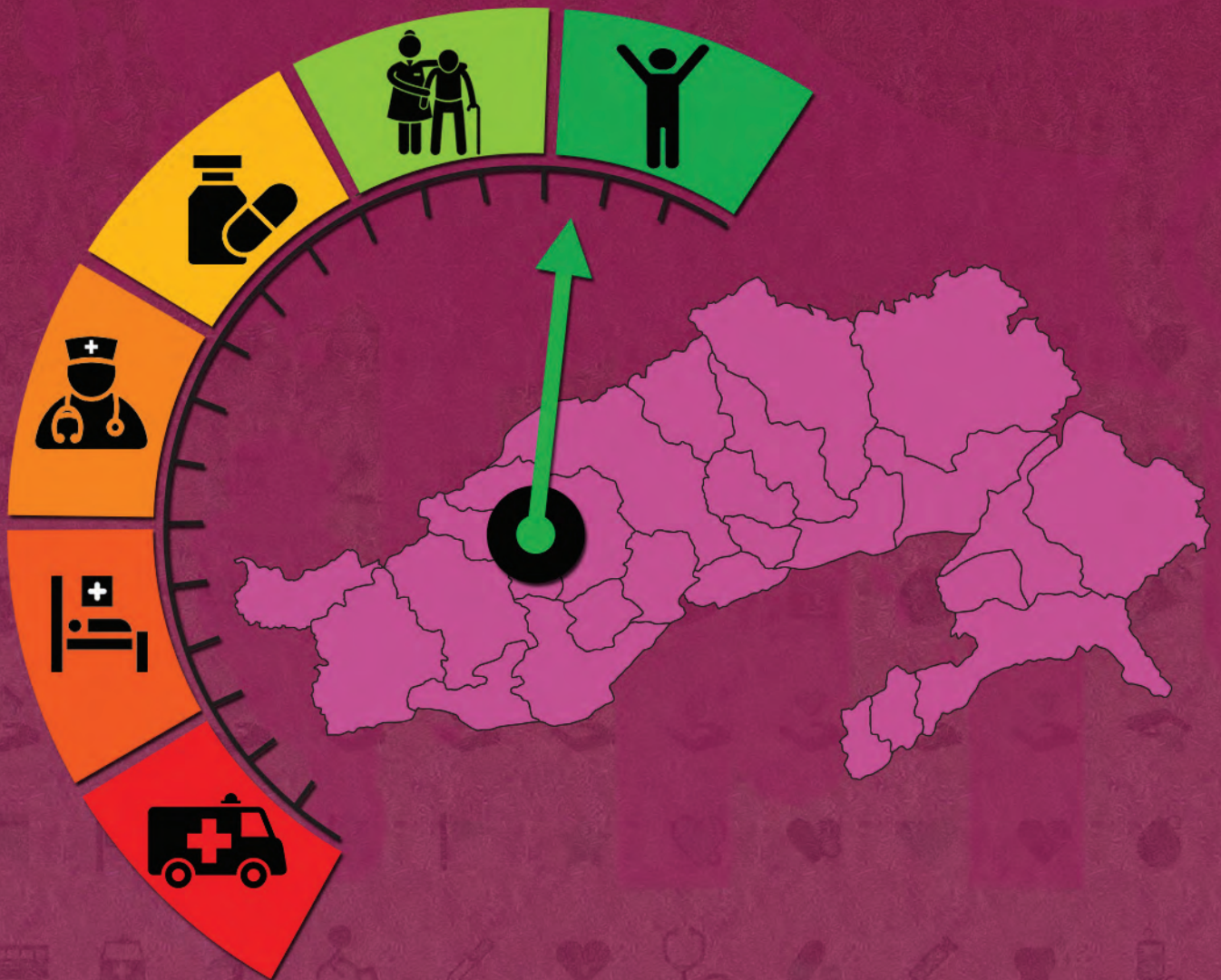
Dr. Diksha Dhupar, Consultant



NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



ARUNACHAL PRADESH

**DISTRICTS VISITED IN
COMMON REVIEW MISSIONS**

CRM	Districts Visited	
4 th	Tawang	Changlang
7 th	West Kameng	Upper Subansiri
10 th	East Siang	Upper Siang
12 th	Papumpare	East Siang
14 th	Namsai	Lower Subansiri

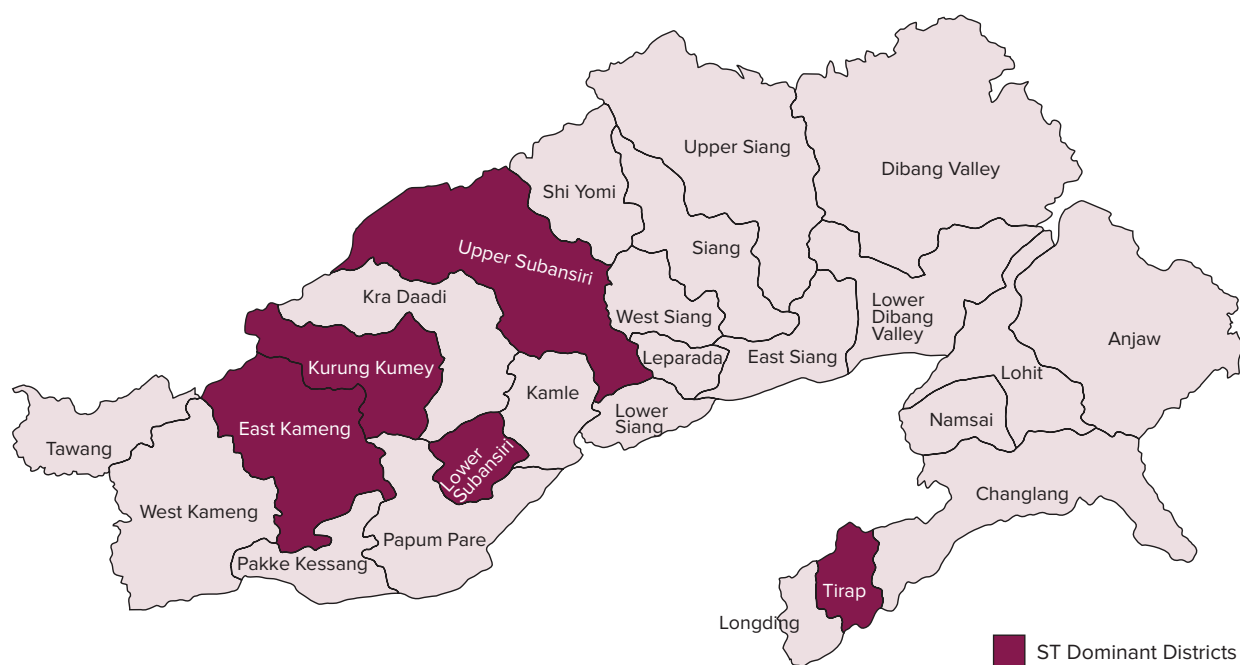
ARUNACHAL PRADESH

1. BACKGROUND

1.1 State Profile

Arunachal Pradesh is positioned 22nd in India for a geographical spread of 83,743 km² and is divided into 22 districts (RHS 2019-20). As per Census 2011, the State is estimated to have a population of over 13.83 lakh with an expected increase to 15.33 lakh by 2021 (Census Population Projection 2019 Report). As per Census 2011, the Scheduled Tribe (ST) population was 9.51 lakh (68.79%). Out of the total 22 districts, top

Figure 1: Top 5 ST Dominant Districts



five ST dominant districts account for 43.37% of the total ST population in the state (Figure 1 & Annexure 1, State Profile). Around 77.06% of the population reside in rural areas, while the rest constitute the urban population. Agriculture contributes to a major share to the State Domestic Product, where around 70% of the workers in Arunachal Pradesh are engaged as cultivators and Agricultural laborers^a. At present, 2 cities^b are covered under National Urban Health Mission, with a total catchment of 3.17 lakh urban

^a Department of Agriculture, Govt. of Arunachal Pradesh; <https://agri.arunachal.gov.in/>

^b QPR NHM MIS Report as on 31 Dec 2020

population. The total length of roads^c in Arunachal Pradesh is 37,025 kms (0.74%^d), in which the length of the national highways is 2513 kms (2.2%^e) and state highways is 8123 kms (4.64%^f).

A detail report on the key indicators is attached as Annexure 1

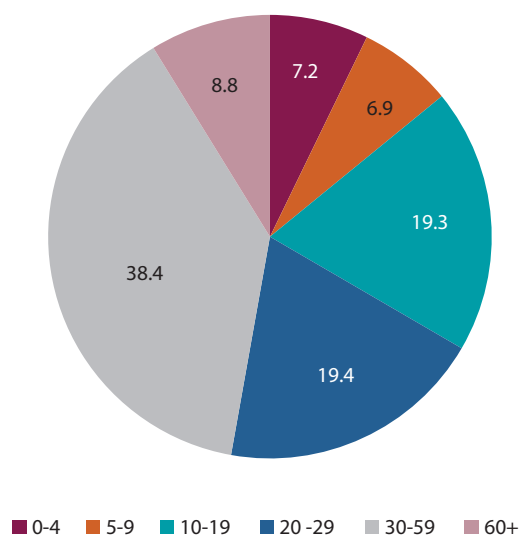
1.2 Demography

Overall^g, in North-Eastern States (excluding Assam), 19.3% of the total population is in 10-19 years' age group. 57.8% of the total population is between 20 to 59 years; while 8.8% are above 60 years of age (Figure 2). As per ESAG 2018 report, the Gross Enrollment Rate^h (GER) is 28.7% for higher education, 61.81% for senior secondary education (XI-XII), 89.63% for secondary education (IX-X), 127.80% for elementary education (I-VIII); and 126.76% for primary education (I-V).

1.3 Elderly

Population aging has profound social, economic, and political implications. Elderly people aged (60+) share 8.8% of the states' total population. In Arunachal Pradesh, 46.0% of elderly females and 31.0% elderly males living in rural areas are economically fully dependent on others, while 16% of the elderly males & females are economically totally dependent on others in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly men and women is 25% & 22% respectively, which are less than the national average of 31% for both men and women (Elderly in India 2016 Report).

Figure 2: North-East States (Excluding Assam) Distribution of estimated Population 2021 (%)



2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

Arunachal Pradesh has been able to provide RMNCHA+Nⁱ services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^j, institutional deliveries, C sections, distribution of IFA^k tablets, follow up of high-risk pregnancies, provision of postnatal and

^c Basic Road Statistics 2019, MoRTH

^d Percentage of total length of roads in State

^e Percentage of total length of National Highways in the country

^f Percentage of total length of State Highways in the country

^g Population projection 2021 for Manipur is not available

^h Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

ⁱ Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^j Antenatal Check up

^k Iron Folic Acid Tablets

newborn care have shown improvement since 2005 (NFHS 4 & 5). In Arunachal Pradesh, 36% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 (Annexure 3) East Kameng, Kra Daadi, Siang, West Kameng and West Siang districts reported poor ANC coverage, ranging between 18.3% - 31.1%. Whereas, Changlang, Dibang Valley, Kurung Kumey, Lohit, Longding, and Lower Dibang Valley reported relatively better ANC coverage in the State ranging between 39.6% - 46.9%. As reported in HMIS 2019-20 around 89.9% of the deliveries took place in institutions, out of which 85.8% took place in public health facilities. Total percentage of C-sections (19.8%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections about 42.7% is conducted at private facilities in the State. Around 20.7% of women were tracked for their first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anemia in women aged 15-49 years decreased from 43.2% (NFHS 4) to 40.3% (NFHS 5). Anemia in females of reproductive age group is more than twice when compared with men of similar age group (Annexure 2, figure 3).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Since the inception of NHM in 2005, Arunachal Pradesh has shown a significant decline in IMR from 37 (2005) to 29 (2019). As per NFHS 5, Kra Daadi, Lohit, Namsai, Tawang, Tirap and West Kameng districts reported low SRB¹ ranging between 766 to 867, while East Siang, Lower Subansiri, Papum Pare, Upper Subansiri and West Siang districts reported high SRB ranging between 1060 to 1370.

Full vaccination^m coverage for children between 12 – 23 months of age has improved from 71.4% (NFHS 4) to 76.4% (NFHS 5). The percentage of under 6-months children exclusively breastfed has increased from 57% (NFHS 4) to 63.4% (NFHS 5). The prevalence of childhood anemia increased from 54.2% (NFHS 4) to 56.6% in children aged 6-59 months (Annexure 2, Figure 3). As per NFHS 5 report, Anjaw, Dibang Valley, Longding, Lower Dibang valley and Siang districts reported relatively low burden of stunting ranging from 14.3% to 23.6%; while East Kameng, Lower Subansiri, Tawang, Tirap, Upper Siang and Upper Subansiri districts reported high burden ranging from 30.4% to 38.6%. For under-5 wasting – East Siang, Kra Daadi, Lower Dibang Valley, Papum Pare and Tawang districts reported relatively low burden ranging from 7.1% to 9.4%; while Changlang, Dibang Valley, East Kameng, Longding and West Kameng districts reported high burden ranging from 15.8% to 23.2%.

2.3 Family Planning

As per NFHS 5 report, the total unmet need in Arunachal Pradesh is reported as 12.5%, while the unmet need for spacing is 7%. Dibang valley district reported the lowest total unmet need of 4.6%, while Papum Pare reported the highest (20.3%) in the State. Approximately 47.2% of married women reported to avail any modern method of family planning in the State (NFHS 4). The sterilization acceptance among females was 18.2%, while nil among males.

¹ Sex Ratio at Birth

^m NFHS 5 State Factsheet, based on information from vaccination card only

2.4 Communicable Diseases

Arunachal Pradesh has 25 IDSP units functional (QPR Reportⁿ). The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 31.05% of total disease burden (Annexure 1.4). Neonatal preterm birth, Lower respiratory tract infections, Diarrheal diseases, and Drug susceptible TB are the leading causes of deaths in Arunachal Pradesh (Annexure 2, Figure 4^o). As per QPR report, for TB, the annualized total case notification rate is 171% and NSP^p success rate is 71%, as opposed to the national average of 163% and 79%, respectively. For NLEP^q, the reported prevalence rate of 0.19 per 10,000 population is less than the national average of 0.61. In FY 2019-20, no deaths due to Malaria, Dengue, or Kala Azar are reported.

2.5 Non-Communicable Diseases (NCDs) & Injuries

It is reported that 63.7% of the total disease burden in the State is due to premature deaths, and 36.3% due to disability or morbidity. COPD, Ischaemic heart disease, other musculoskeletal conditions, Diabetes type 2 and Migraine are the major causes of DALYs (Annexure 2, Figure 4). NCDs contribute to 58.55% of DALYs; while injuries contribute to 10.4% of DALYs. Arunachal Pradesh is positioned 28th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). In NFHS 5, it was reported that as high as 18.8% of women and 50.3% of men used any kind of tobacco, while 24.2% of women and 52.7% of men consumed alcohol. Overall, smoking, alcohol use, high systolic pressure, high fasting plasma glucose, and household air pollution from solid fuels are the top five major risk factors for all DALYs (Annexure 2, figure 5).

2.6 Health Care Financing

Arunachal Pradesh's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 22,488 crores. The State is positioned 18th out of 32 states in terms of per capita^r of ₹ 1,39,588. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 5,591 in public facilities, ₹ 6,438 in private facilities; whereas for urban areas, it is around ₹ 15,026 in public facilities and ₹ 25,457 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 3,259 in public facilities & ₹ 11,130 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 5,926 in public facilities and ₹ 27,265 in private facilities. In public health facilities, the share of expenditure on drugs as a proportion of inpatient medical expenditure is estimated as 54% in rural and 60% in urban areas; whereas for diagnostics, it is 19% in rural and 17% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 6). There is no shortfall in SCs, PHCs or CHCs (Annexure 2, Figure 7). Currently, there are 376 SCs, 78 PHCs, and 31 CHCs in place, against the required 254 SCs, 39 PHCs and 9 CHCs in rural areas. The State has 17 DHs, and 1 government medical college. In tribal catchments, there are 363 SCs, 124 PHCs and 60 CHCs in place, against the required 281 SCs, 42 PHCs and 10 CHCs.

ⁿ QPR NHM MIS Report as on 01.03.2020

^o <https://vizhub.healthdata.org/gbd-compare/india>

^p New Smear Positive

^q National Leprosy Eradication Programme

^r Directorate of Economics & Statistics

Under Government of India flagship program of Ayushman Bharat, a total of 203 primary care facilities (133 SHCs, 66 PHC & 4 UPHC) have been upgraded and are currently operational as Health & Wellness Centres (HWCs) to deliver Comprehensive Primary Health Care (as on 22nd Dec 2021, Annexure 1.3).

In Arunachal Pradesh, 16 districts are equipped with MMUs under the NRHM, while none under the NUHM. Arunachal Pradesh has 99.38% of required ASHAs in position under both NRHM & 100% under the NUHM. The doctor to staff nurse ratio in place is 1:1, with 17 public health providers (MO, specialists, staff nurse & ANM) per 10,0000 populations (Annexure, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 1125.5 availed (events) OPD services and 48.9 availed (events) IPD services. As per the NSSO data (2017-18), 92% of all OPD cases in rural areas and 87% in urban areas; and 92% of all IPD cases in rural areas & 91% in urban areas utilized public health facilities. The public health facility utilization in Arunachal Pradesh is above the national average for rural & urban areas (Annexure 1.6).

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^s

Indicator	Arunachal Pradesh 2011 ¹	India
Total Population (In Crore)	13.83	121.08
Rural (%)	77.06	68.85
Urban (%)	22.93	31.14
Scheduled Caste population (SC) (in crore)	0	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	9.51 (68.79%)	10.45 (8.63%)
Total Literacy Rate (%)	65.4	72.99
Male Literacy Rate (%)	72.6	80.89
Female Literacy Rate (%)	65.4	64.64
Number of Districts in the Arunachal Pradesh ²	20	
Number of districts per lakh population in Arunachal Pradesh (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<1 Lakhs	11
	≥ 1 Lakhs - <2 Lakhs	5
ST Dominant (Top 5) Districts of Arunachal Pradesh ¹		
Kurung Kumey - 98.57%		
Upper Subansiri - 93.83%		
East Kameng - 92%		
Tirap - 87.85%		
Lower Subansiri - 87.81%		
Top 5 ST dominant district accounts for - 43.37%		

1.2 Key Health Status & Impact Indicators

Indicators	Arunachal Pradesh	India
Infant Mortality Rate (IMR) ³	29	30
Crude Death Rate (CDR) ³	5.8	6.0
Crude Birth Rate (CBR) ³	17.6	19.7
Maternal Mortality Ratio (MMR) ³	N/A	113
Neo Natal Mortality Rate (NNMR) ⁴	N/A	23

^s Sources are mentioned at the end of Annexure 1

Under Five Mortality Rate (U5MR) ⁴	N/A	36
Still Birth Rate ⁴	N/A	4
Total Fertility Rate (TFR) ⁴	N/A	2.2
Life expectancy at birth ⁵	N/A	69.4
Sex Ratio at Birth ⁴	N/A	899

1.3 Key Health Infrastructure Indicators[†]

Indicators	Numbers (Total)			
Number of District Hospitals ²	17			
Number of Sub District Hospital ²	0			
Number of Government (Central + State) Medical College ⁶	1			
Number of Private (Society + Trust) Medical Colleges ⁶	0			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	133	2	87	144
PHC-HWC	66	143	143	143
UPHC-HWC	4	4	4	4
Total-HWC	203	149	234	291
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	9	31	-244.44	
Number of Primary Health Centres (PHC)	39	78	-100	
Number of Sub Centres (SC)	254	376	-48.03	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	11	0	1	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	8	5	37.5	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	10	60	-500	
Number of PHC	42	124	-195.24	
Number of SC	281	363	-29.18	
Patient Service ⁹	Arunachal Pradesh		India	
IPD per 1000 population	48.9		62.6	
OPD per 1000 population	1125.5		1337.1	
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	62.0		36.4	

[†] Sources are mentioned at the end of Annexure 1

1.4 Major Health Indicator^u

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Arunachal Pradesh	India
% DALY [#] accountable for CMNND ^{##}	31.05	27.46
% DALY accountable for NCDs	58.55	61.43
% DALY accountable for Injuries	10.4	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Arunachal Pradesh	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	38.6	92
Percentage of medically certified deaths to total registered deaths (%)	33.4	20.7
RMNCHA+N		
Maternal Health⁹	Arunachal Pradesh	India
% 1st Trimester registration to Total ANC Registrations	36.7	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	36	79.4
Total Reported Deliveries	20,832	21,410,780
% Institutional deliveries to Total Reported Deliveries	89.9	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	85.8	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	14.2	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	19.8	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	16	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	42.7	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	20.7	53.4
Neonatal⁹	Arunachal Pradesh	India
% live birth to Reported Birth	98.8	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	5.6	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	84.3	89.9
New Born Care Units Established¹¹	Arunachal Pradesh	India
Sick New Born Care Unit (SNCU)	5	895

^u Sources are mentioned at the end of Annexure 1

New Born Stabilization Unit (NBSU)	4	2418
New Born Care Corner (NBCC)	112	20337
Child Health & Nutrition¹⁰	Arunachal Pradesh (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	5.1	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	62.7	60.6
Children under 5 years who are underweight (weight-for-age) (%)	15.4	32.1
Child Immunization¹⁰	Arunachal Pradesh (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	76.4	83.8
Children age 12-23 months who have received BCG (%)	87.9	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	80.7	87.9
Family Planning¹⁰	Arunachal Pradesh (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	7.0	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Arunachal Pradesh	India
Number of districts with functional IDSP unit	25	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Arunachal Pradesh	India
Annualized total case notification rate (%)	171	163
New Smear Positive (NSP) Success rate (in %)	71	79
National Leprosy Eradication Programme (NLEP)¹¹	Arunachal Pradesh	India
Prevalence Rate/10,000 population	0.19	0.61
Number of new cases detected	30	114,359
Malaria, Kala Azar, Dengue¹¹	Arunachal Pradesh	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	N/A	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706

HIV¹⁰	Arunachal Pradesh (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	12.3	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	33.4	30.7
Non-Communicable Disease		
Diabeties and Hypertension¹⁰	Arunachal Pradesh (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	16.4	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	22.8	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	4.6	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	6.7	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Arunachal Pradesh (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	18.8	8.9
Men who use any kind of tobacco (%)	50.3	38
Women who consume alcohol (%)	24.2	1.3
Men who consume alcohol (%)	52.7	18.8
Injuries		
Road Traffic Accident¹²	Arunachal Pradesh	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	28	N/A
Total number of fatal Road Accidents	108	137,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	53.6	33.7
Number of persons killed in Road Accidents	127	115113

1.5 Access to Care^v

Health Systems Strengthening

Ambulances & Mobile Medical Units (MMU)¹¹	Arunachal Pradesh	India
Number of Districts equipped with MMU under NRHM	16	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31

^v Sources are mentioned at the end of Annexure 1

Number of ERS vehicles operational in the States/UTs Under NHM	Arunachal Pradesh	India
102 Type	149	9955
104 Type	0	605
108 Type	0	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	113	11070
Key Domain Indicators		
ASHA¹³	Arunachal Pradesh	India
Total number of ASHA targeted under NRHM	3862	946563
Total number of ASHA in position under NRHM	3838	904211
% of ASHA in position under NRHM	99.38	96
Total number of ASHA targeted under NUHM	42	75597
Total number of ASHA in position under NUHM	42	64272
% of ASHA in position under NUHM	100	85
Community Process¹¹	Arunachal Pradesh	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	3772	554847
Number of Mahila Arogya Samitis (MAS) formed	90	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Arunachal Pradesh	India
DH	18	796
CHC	63	6036
PHC	143	20273
UHC	0	126
UPHC	4	3229
Human Resource for Health¹⁴		
HRH Governance	Arunachal Pradesh	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	

Overall Vacancies (Regular + contractual)	Specialists (%)	46
	Dentists (%)	60
	MO MBBS (%)	18
	Nurse (%)	51
	LT (%)	75
	ANM (%)	8

HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	24 per 10,000	17 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	2:1	2:1.

Ranking: Human Resource Index of Arunachal Pradesh ¹⁵						
Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^w	987	1556	1524	32	0	66.28
Staff Nurse	2658	1002	884	118	1774	
Lab Technician	487	343	254	89	233	
Pharmacists	298	244	244	0	54	
MO MBBS ^x	631	582	578	4	53	
Specialist ^y	793	373	312	61	481	

1.6 Healthcare Financing ^z		
National Health Accounts (NHA) (2017-18)	Arunachal Pradesh ^{aa}	India
Per Capita Government Health Expenditure (in ₹)	N/A	1753
Government Health expenditure as % of Gross Domestic Product (GSDP)	N/A	1.35
Government Health Expenditure as % of General Government Expenditure (GGE)	N/A	5.12
OOPE as a Share of Total Health Expenditure (THE) %	N/A	48.8

^w MPW – Multi Purpose Health Worker (Female + Male)

^x MO MBBS (Full Time)

^y Specialist (All Specialist)

^z Sources are mentioned at the end of Annexure 1

^{aa} Not available

National Sample Survey Office (NSSO) (2017-2018)	Arunachal Pradesh		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	92	87	33	26
IPD - % of hospitalized cases using public facility	92	91	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	2,008	2,994	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	2,530	2,700	845	915
IPD - Per hospitalized case (in INR) - Public	5,591	6,438	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	15,026	25,457	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	19	17	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	54	60	53	43
Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	3,259	5,926	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	11,130	27,265	20,692	26,701
State Health Expenditure	Arunachal Pradesh		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	6.4		5 ^{bb}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{bb} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

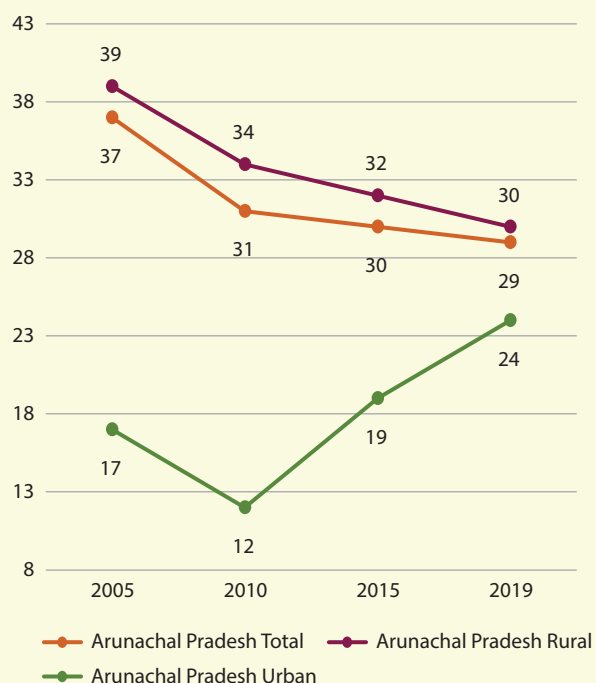


Figure 2: CBR & CDR Trend

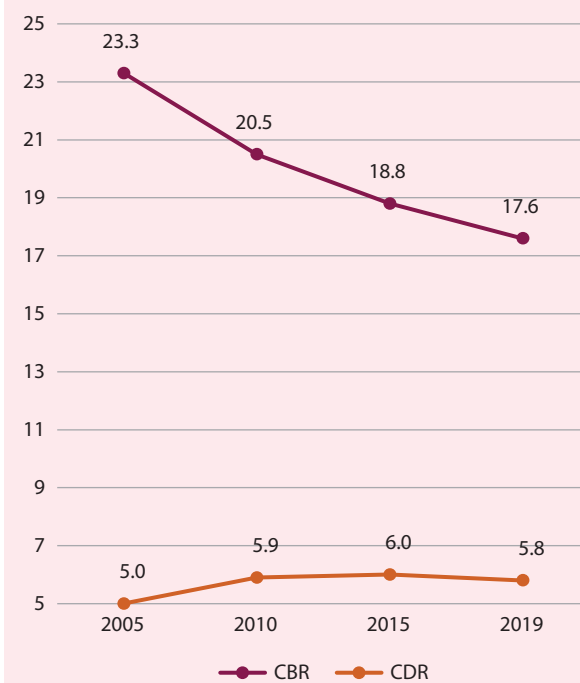


Figure 3: Comparison of Key NFHS 5 & 4 Indicators

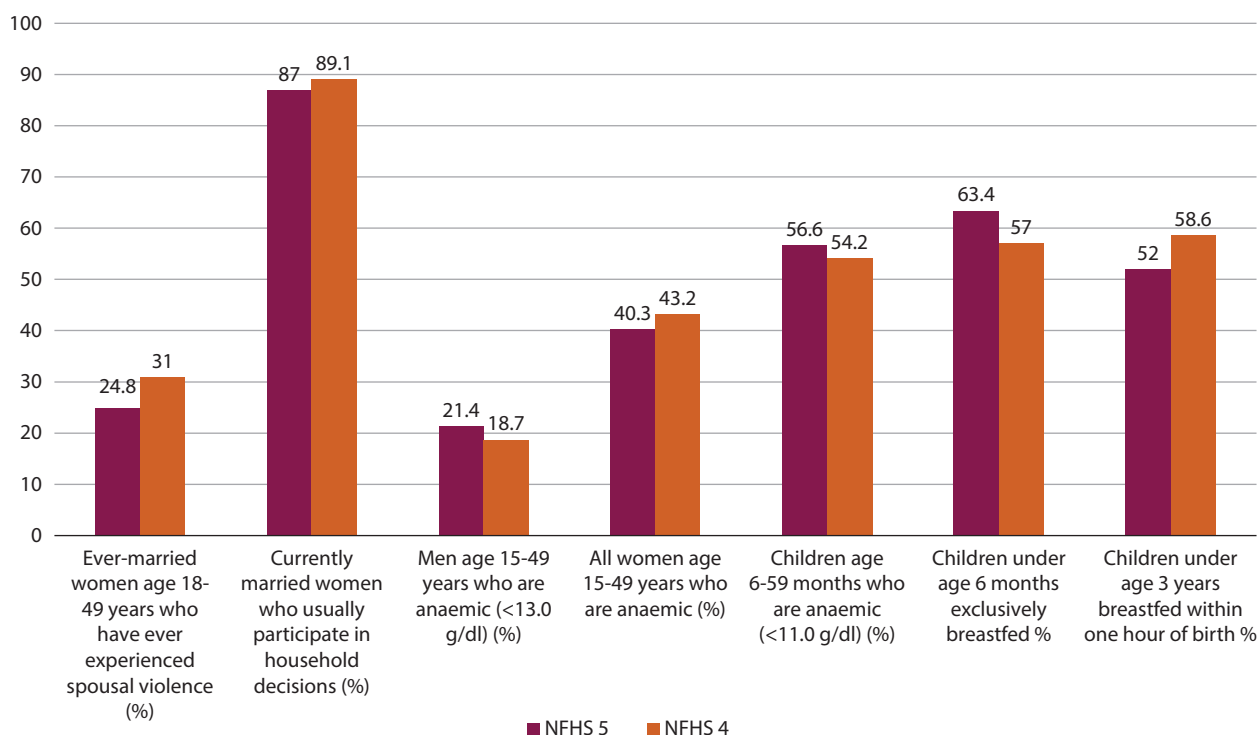


Figure 4: Top 15 causes of DALYs, 1990-2019

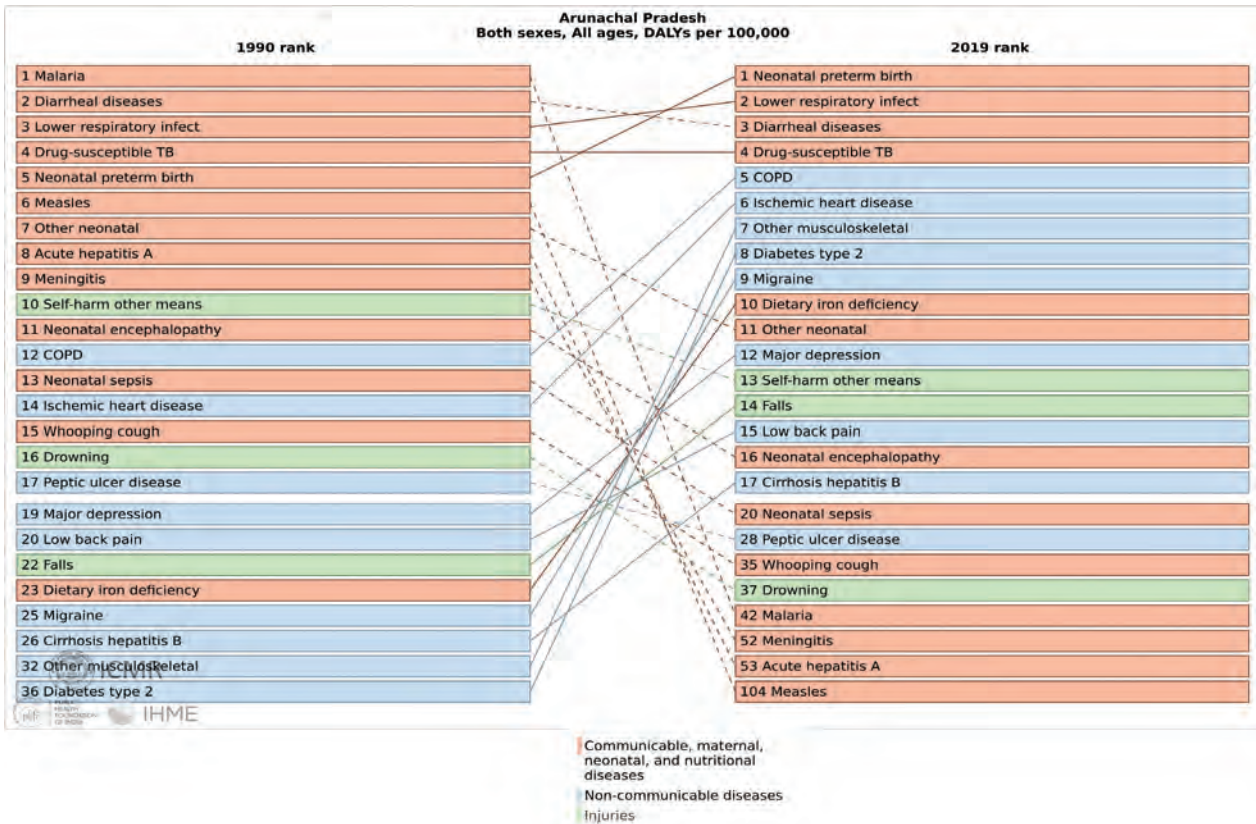


Figure 5: Top 15 risk of DALYs, 1990-2019

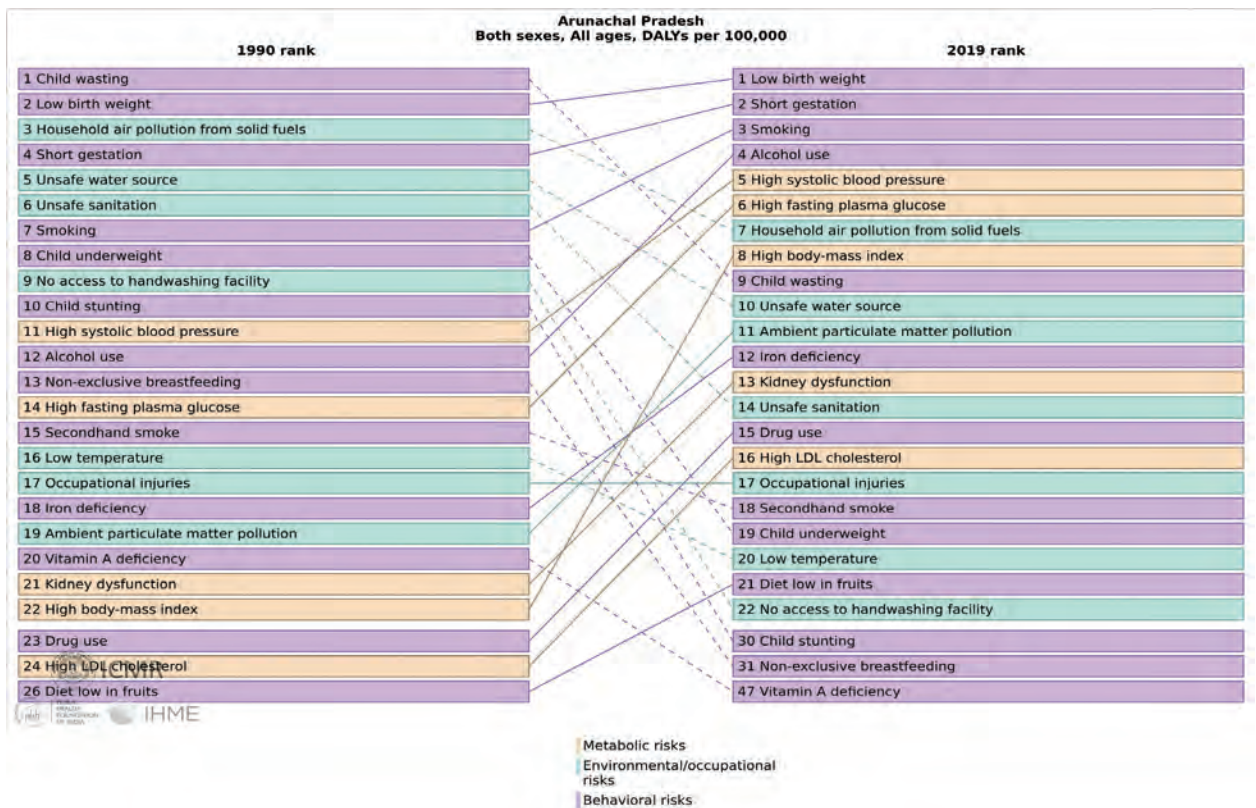


Figure 6: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

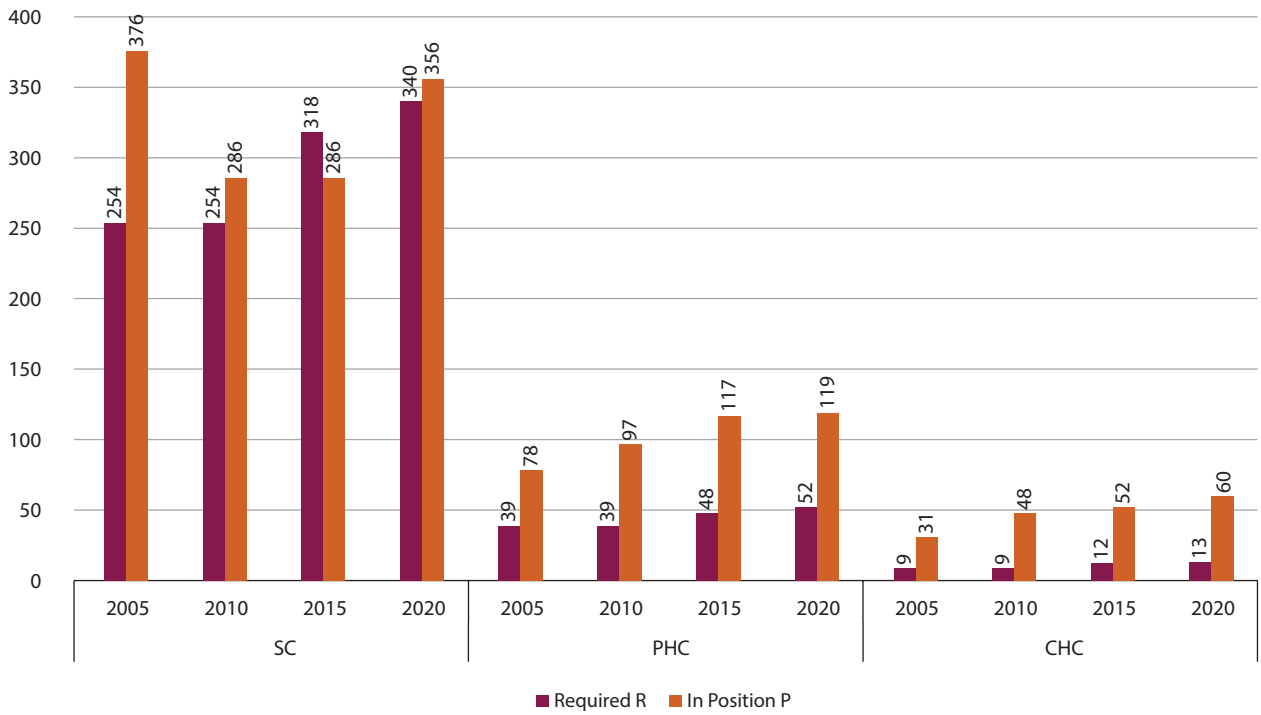


Figure 7: Year Wise Health Infrastructure Shortfall (%)

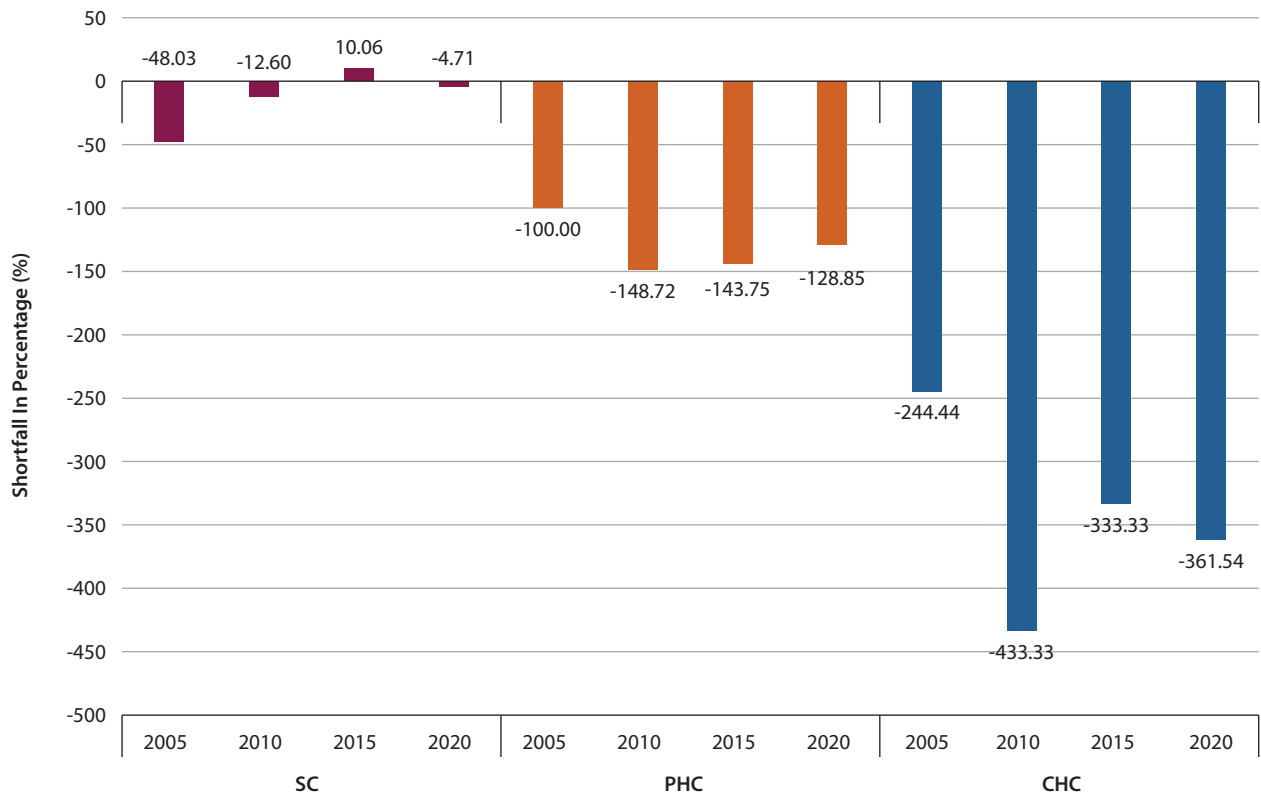
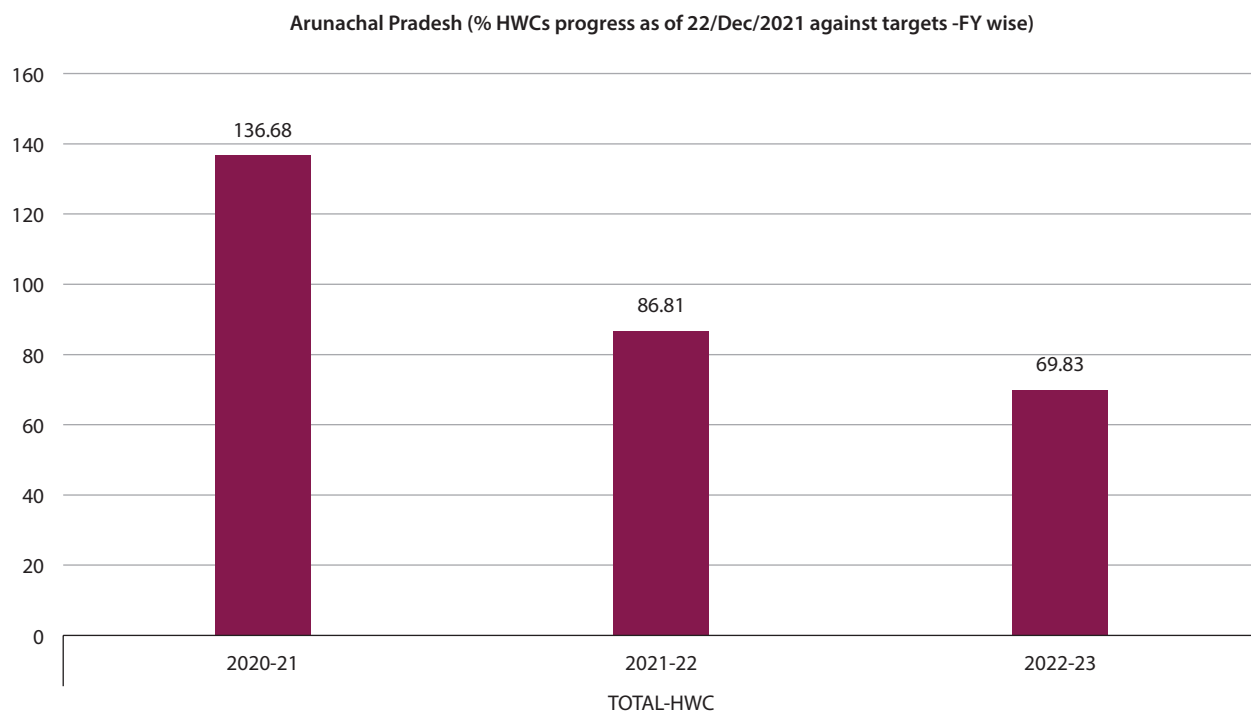


Figure 8: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

Serial No.	States/Districts	Data Source	Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted* (Height For Age) (%)	Children Under 5 Years - Wasted* (Weight For Height) (%)
1	Arunachal Pradesh	NFHS 4 Total	926	58.3	NA	23.5	31.7	3.4	1.4	21.5	26.7	52.2	71.4	14	29.4	17.3
2	Arunachal Pradesh	NFHS 5 Urban	912	33.6	82.9	16.7	57	6.3	7.5	13.4	47.8	90.6	73.4	25.7	28.4	10.1
3	Arunachal Pradesh	NFHS 5 Rural	990	28.5	69	19.3	59.5	6.2	4.2	12.3	34.6	77.3	76.9	21.4	27.9	13.6
4	Arunachal Pradesh	NFHS 5 Total	979	29.3	71.3	18.9	59.1	6.2	4.7	12.5	36.5	79.2	76.4	22	28	13.1
5	Anjaw	NFHS 5 Total	957	17.5	66.4	21.8	64.7	8.6	2.9	6.8	32.3	78	90.5	25.4	23.6	14.3
6	Changlang	NFHS 5 Total	1019	40.5	74	16.8	71.4	1.6	1.8	6.7	46.9	75.1	86.1	28.9	26.3	16.3
7	Dibang Valley	NFHS 5 Total	1054	28.7	76.6	20.7	69.1	9.5	5.6	4.6	40.4	85.5	91.2	11	16.9	18.1
8	East Kameng	NFHS 5 Total	995	25.1	59.1	26.5	64.9	10.6	6.2	9.7	29.1	76	78.3	26.4	35.7	15.8
9	East Siang	NFHS 5 Total	1162	30.5	81.9	14.9	40	5.2	6.7	17.6	34.3	90.8	65.6	24	24.6	8.6
10	Kra Daadi	NFHS 5 Total	867	24	53.5	24.8	46.1	5.7	1.4	16.5	18.3	73.5	70.3	14.6	28.8	9.4
11	Kurung Kumey	NFHS 5 Total	869	13.4	76	19.8	54.1	5.6	4.1	16.4	44.1	69.2	76.7	18.7	29.2	15.1
12	Lohit	NFHS 5 Total	839	31.9	70.9	20	57	3.7	3.3	14.6	39.6	90.2	77	20.8	24.5	12.7
13	Longding	NFHS 5 Total	961	23.8	70.2	7.9	68.6	7.1	3.9	7.3	39.6	64.5	75.2	20	15.8	20.6
14	Lower Dibang Valley	NFHS 5 Total	884	36.8	80	13.8	75.3	12.2	8.3	4.9	48.6	90.1	81	23.9	14.3	7.6
15	Lower Subansiri	NFHS 5 Total	1370	24.5	73.4	16	65.9	8.9	9.8	8.5	39.1	89.8	88.7	29.8	30.7	11.5
16	Namsai	NFHS 5 Total	867	30.9	62.6	26.7	69.5	2.2	4.4	8.7	35.4	63.6	83.4	21.2	28.7	12.4
17	Papum Pare	NFHS 5 Total	1065	26.9	77	25.4	47.7	5.6	4.8	20.3	39.3	88	74.3	24.9	29.7	9
18	Siang	NFHS 5 Total	1011	26.1	85.3	10	73.7	10.8	8.4	5	31.1	81.1	NA	17.3	21.3	12.1

19	Tawang	NFHS 5 Total	834	33.5	56.6	11.9	62.1	10.4	1.7	14.6	37.6	84.2	76.8	18.8	30.4	7.1
20	Tirap	NFHS 5 Total	865	30.8	72.8	12	56.1	2.9	1	10.6	35.7	70.2	71.2	16.8	38.6	13.8
21	Upper Siang	NFHS 5 Total	983	34.6	70.9	17.1	62	7.4	7.6	11.9	34	76	67.2	25.2	30.4	12.5
22	Upper Subansiri	NFHS 5 Total	1135	21.5	62.3	26.7	53.2	6.8	3.1	17.3	32.1	77	76.3	15.4	36.8	12.2
23	West Kameng	NFHS 5 Total	766	38.3	71.1	12.5	53.8	7.3	3.4	17	27.6	93.6	61	19.7	24.2	23.2
24	West Siang	NFHS 5 Total	1060	26.6	76.1	18.9	46.6	8.1	6.8	15.5	30.4	84.6	60	20.7	24.5	15.1

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'; Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MM/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best five performing districts within the districts for a particular indicator

B. Red – Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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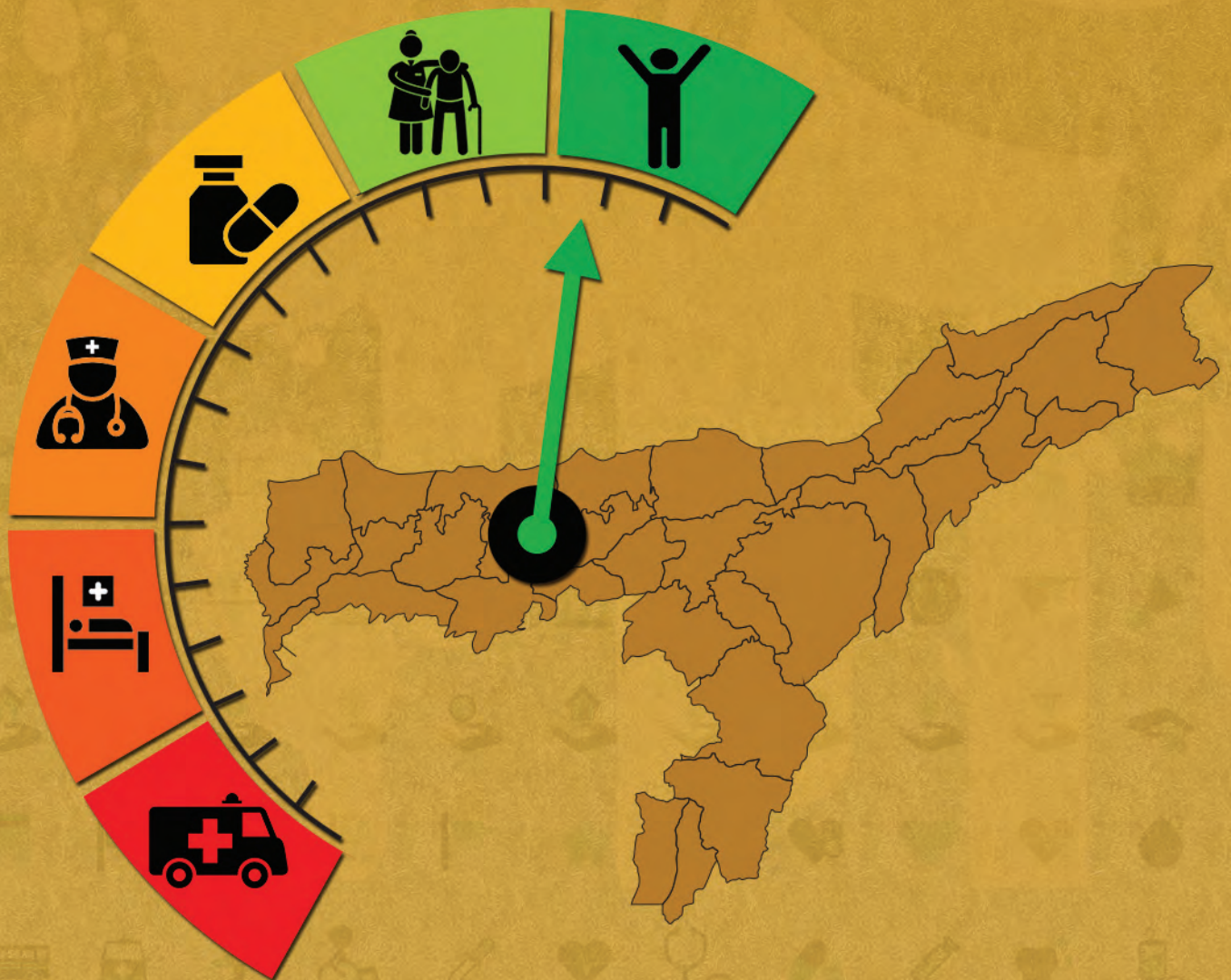
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



ASSAM

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
1 st	Kamrup Rural	Darrang
2 nd	Sivasagar	Bongaigaon
4 th	Lakhimpur	Dhemaji
5 th	Dhubri	Nagaon
6 th	Jorhat	Sonitpur
8 th	Karimganj	Tinsukia
9 th	Dibrugarh	Golaghat
11 th	Goalpara	Nalbari
12 th	Barpeta	Kamrup Rural
14 th	Cachar	Hailakandi

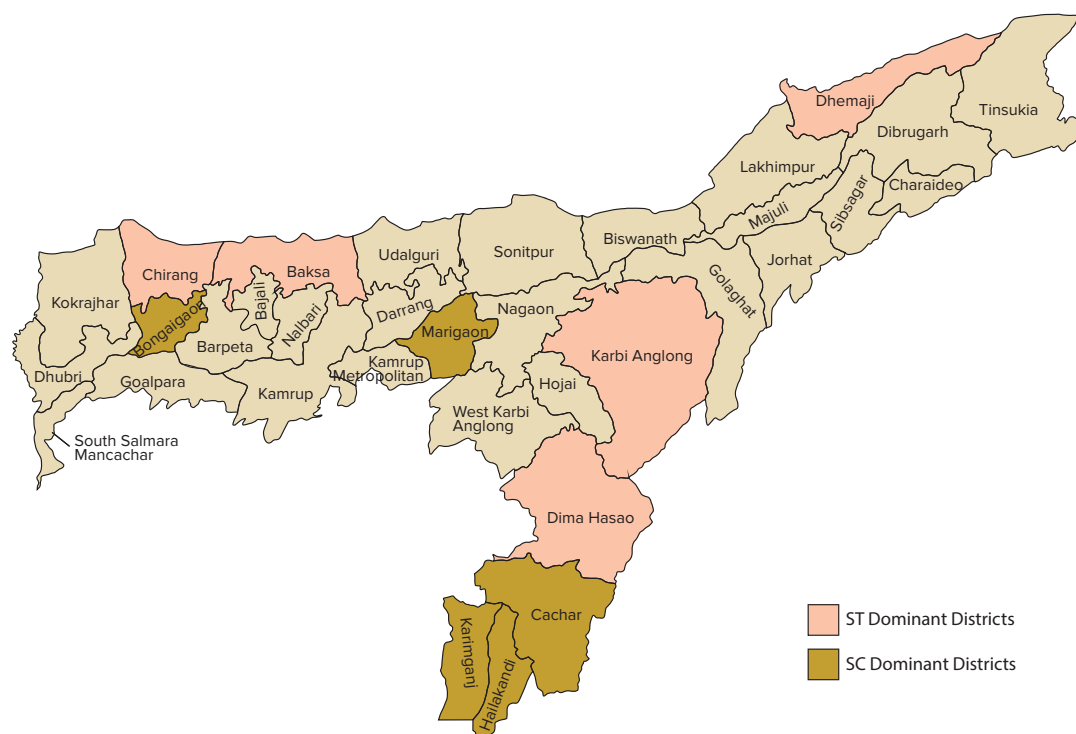
ASSAM

1. BACKGROUND

1.1 State Profile

Assam is positioned^a 20th in India for a geographical spread of 45,294.26 km². The State is divided into 27 districts and estimated to have a population of over 3.12 crores^b, which accounts for approximately 2.58% of India's total population (RHS 2019-20). It is projected that the population would reach around 3.50 crores by 2021 (Census Population Projection 2019 Report). As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 0.22 crores (7.15%) and 0.39 crores (12.45%), respectively. Out of the 27 districts, top five ST dominant districts account for 39.28% of ST population, and top five SC dominant districts account for 31.11% of SC population in the State (Annexure 1.1; fig 1). As of 2021, 14 cities^c are covered under NUHM, with a total catchment of 43.8 lakh urban population. In the State,

Figure 1: Top 5 ST & SC Dominant Districts



^a Including all States & UTs

^b Census 2011

^c QPR NHM MIS Report as on 31 Dec 2020

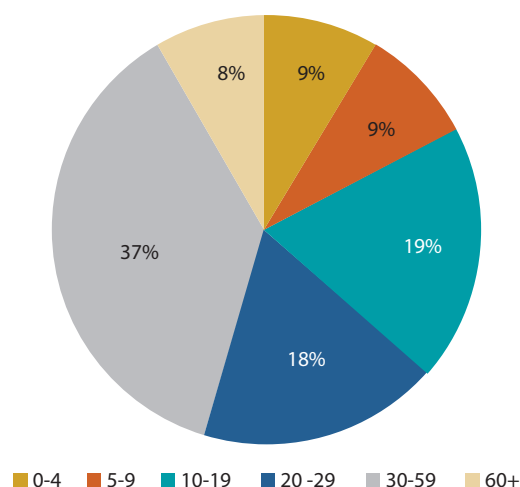
85.90% of the population reside in rural areas, while only 14.10% constitute the urban population. The total length of roads^d in the State is 3,37,777 km (6.75%^e), in which, the length of the national highways is 3844 km (3.4%^f) and state highways is 2530 km (1.45%^g).

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

In Assam, out of the 27 districts, only 1 district has a population between 20-30 lakhs, 14 districts have a population between 10-20 lakhs, and 12 districts have a population less than 10 lakhs (Annexure 1.1 State profile). The State's Sex ratio at birth of 925 females for every 1000 males is higher than the national average of 899 (Annexure 1.2). It is estimated that there are 19% of the total population in the age group of 10-19 years, 55% within 20 to 59 years; while 8% is 60 years and above (Census Population Projection 2019 Report) (Figure 2). The crude birth rate and the crude death rate have declined from 25.0 & 8.7 in 2005 to 21 & 6.3 in 2019, respectively (Annexure 2; figure 2). The literacy rate increased from 63.3% in 2001 to 72.2% in 2011, with male & female literacy rates being 77.8% and 66.3%, respectively (Annexure 1.1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)^h was 15.4% for higher education, 38.81% for senior secondary education, 77.59% for secondary education, 101.62% for elementary education, and 106.11% for primary education.

Figure 2: Assam – Distribution of estimated Population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 8% of the State's total population. The life expectancy at 60 years of age is 16.5 and 17.6 for males and females, respectively (2014-2018). In Assam, 77.0% of elderly females and 42.0% elderly males living in rural areas are economically fully dependent on others. Whereas in urban areas, 65% of elderly females and 24% elderly males are economically fully dependent on others. The old age dependency ratio is 11.0 in 2011; which is 10.9 for males and 11.1 for females, 11.0 in rural & 11.0 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 38% for men and 41% for women, which are above the national average of 31% for bothⁱ.

^d Basic Road Statistics 2019, MoRTH

^e Percentage of total length of roads in Assam

^f Percentage of total length of National Highways in the country

^g Percentage of total length of State Highways in the country

^h Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

ⁱ Elderly in India 2016 Report

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+N^j services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^k, institutional deliveries, C sections, distribution of IFA^l tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined from 390 (SRS MMR Bulletin 2007-09) to 215 (SRS MMR Bulletin 2018) per 1,00,000 live births. In Assam, 85.3% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 report-Johart, Kamrup Metropolitan, Dibrugarh, Majuli, and Sivasagar districts reported high ANC coverage, ranging between 67% - 80.9%. Whereas, Cachar, Bongaigaon, South Salmara Mancachar, Kokrajhar, and Darrang districts reported low ANC coverage, ranging between 32.7% - 37.5%. As reported in HMIS 2019-20, around 91.2% of the deliveries took place in institutions, out of which 83.6% took place in public health facilities. Total percentage of C-sections is (23.5%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 15.3% was conducted at private facilities in the State. Around 87.2% of women were tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years increased from 46% (NFHS-4) to 65.9% (NFHS-5). Anaemia in females of reproductive age group is almost twice than that in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 68 (2005) to 40 (2019), which is exceptionally lower than the national average of 30 (Annexure 2, Figure 1). Similarly, NNMR^m and Still Birth (per 1,000 live births) rates have also significantly decreased from 33.4 and 8.6 (2005) to 21 and 2 (2018) respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCsⁿ (Annexure 1.4). The life expectancy at birth has also improved from 61.9 (2006-10) to 66.9 (2014-18), though it is below the national average of 69.4 years (Annexure 2, Figure 3). As per NFHS 5, Majuli, Darrang, Jorhat, and Bongaigaon districts reported low SRB^o ranging between 701 – 881, while Baksa, West Karbi Anglong, Golaghat, Udalgiri, and Sonitpur districts reported high SRB, ranging between 1097 - 1325.

Full vaccination^p coverage for children between 12 – 23 months of age has improved from 67.8% (NFHS 4) to 71.8% (NFHS 5). The proportion of under 6-months children exclusively breastfed has remained a constant of 63.5% since it was last reported in NFHS-4. An increase in childhood anaemia from 35.7% to 68.4% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 5). Though the burden of malnutrition declined over a span of 29 years (GBD 2019), there is a wide variation in the nutritional status

^j Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^k Antenatal Check up

^l Iron Folic Acid Tablets

^m Neonatal Mortality Rate

ⁿ QPR NHM MIS Report (Status as on 1.03.2020)

^o Sex Ratio at Birth

^p NFHS 5 Assam Factsheet, based on information from vaccination card only

within the State. As per NFHS 5 report, Kamrup, Kamrup Metropolitan, Sivasagar, Golaghat, and Dibrugarh districts reported relatively low burden of stunting, ranging from 22.6% to 27.3%; while Biswanath, Chirang, Hailakandi, Morigaon, Bongaigaon, and Dhubri districts reported high burden ranging from 42.7% to 48.5%, were reported from. For under-5 wasting – Hojai, Sonitpur, Majuli, Kamrup and Nalbari districts reported relatively low burden ranging from 12.7% to 15.4%; while Goalpara, Darrang, Biswanath, Cachar, and Karimganj districts reported relatively high burden ranging from 24.3% to 48%.

2.3 Family Planning

The TFR^a has reduced from 2.9 in 2005 to 2.2 in 2018 (Annexure 2, Figure 4). As per NFHS 5 report, the total unmet need in the State is reported as 11%, while the unmet need for spacing is 4.1% (NFHS 5). Kamrup district reported the highest total unmet need (17.6%), while Biswanath reported the lowest (5.3%). Approximately 60.8% of married women reported to avail any modern method of family planning in the State (NFHS 5); with sterilization acceptance being 9% among females and 0.1% among males.

2.4 Communicable Diseases

The State has 27 functional IDSP units in place. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 34.06% of total disease burden (Annexure 1.4). Diarrheal diseases, lower respiratory tract infections, neonatal preterm birth and tuberculosis are the leading causes of deaths due to CMNND in the State (Annexure 2, Figure 6^r). For TB, the annualized total case notification rate is 123 % and NSP^s success rate is 84% as opposed to the national averages of 163% and 79%, respectively. For NLEP^t, the reported prevalence rate of 0.25 per 10,000 population is less than the national average of 0.61. In FY 2019-20, 4 deaths due to Malaria were reported, while none by Dengue or Kala Azar.^u

2.5 Non-Communicable Diseases (NCDs) & Injuries

It is reported that 71.3% of the total disease burden in the State is due to premature deaths and 28.7% due to disability or morbidity. CVDs like Ischaemic heart diseases, Intra cerebral hemorrhage and COPD are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 55.96% of DALYs; whereas, injuries contribute to 9.98% of DALYs in the State (GBD 2019). The State is positioned 18th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 22.1% of women and 51.8% of men used any kind of tobacco, while 7.3% of women and 25.1% of men consumed alcohol. Overall, metabolic factors (high systolic blood pressure, high fasting plasma glucose), and behavioral factors (smoking, alcohol use) are the major risk factors for all DALYs and YLLs (Annexure 2, figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is 2,82,782 crores. The State is positioned 28th out of 32 states in terms of per capita^v of ₹ 82,837. According to NHA 2017-18, the per capita

^a Total Fertility Rate

^r <https://vizhub.healthdata.org/gbd-compare/india>

^s New Smear Positive

^t National Leprosy Eradication Programme

^u QPR NHM MIS Report (Status as on 1.03.2020)

^v Directorate of Economics & Statistics

Government Health Expenditure in the State is estimated as ₹ 1,392, which is less than the national average of ₹ 1,753. On the other hand, the OOPE^w as a share of Total Health Expenditure is estimated as 35.9%, which is less than the national average of 48.8%. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 5,883 in public facilities & ₹ 29,392 in private facilities; whereas for urban areas, it is around ₹ 10,155 in public facilities and ₹ 63,346 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 3,596 in public facilities & ₹ 26,114 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 4,671 in public facilities and ₹ 33,218 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated to be 22% in rural and 21% in urban areas; whereas for diagnostics, it is 44% in rural and 42% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Though public health facilities have increased over time, there remains a shortfall of 27.61% SCs, 9.90% PHCs and 27.48% CHCs (Annexure 2, Figure 9). Currently, there are 4,659 SCs, 946 PHCs and 190 CHCs in place, against the required 6,436 SCs, 1,050 PHCs and 262 CHCs. Similarly, in urban settings, there are 56 PHCs in place against the required 106, which accounts to a shortfall of 47.17%. The State has 24 DHs, 14 SDHs and 7 government medical colleges. In the State, 100% of DHs (25), 45.8% of SDHs (11), and 16.8% of CHCs (32) serve as functional FRUs. In tribal catchments, there are 786 SCs, 185 PHCs and 32 CHCs in place, against the required 1,344 SCs, 201 PHCs and 50 CHCs. This accounts to a shortfall of 41.52%, 7.96% and 36.0% of the required SCs, PHCs and CHCs, respectively, in the tribal areas.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 2301 HWCs (1620 SHCs & 681 PHCs) are operationalized in the State as of 22nd December 2021^x.

The State has 100% of required ASHAs in position under both NRHM and NUHM. The doctor to staff nurse ratio in place is 1:1, with 6 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 1085.82 availed (events) OPD services and 48.23 availed (events) IPD services. As per the NSSO data (2017-18), 51% of all OPD cases in rural areas and 23% in urban areas; and 77% of all IPD cases in rural areas & 48% in urban areas utilized public facilities. (Annexure 1.6).

^w Out of Pocket Expenditure

^x AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 Assam Profile^y

Indicator	Assam 2011 ¹	India
Total Population (In Crore)	3.12	121.08
Rural (%)	85.90	68.86
Urban (%)	14.10	31.14
Scheduled Caste population (SC) (in crore)	0.22 (7.15%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.39 (12.45%)	10.45 (8.63%)
Total Literacy Rate (%)	72.2	74.0
Male Literacy Rate (%)	77.8	82.1
Female Literacy Rate (%)	66.3	65.5
Number of Districts in the Assam ²	27	
Number of districts per lakh population in Assam (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	12
	≥ 10 Lakhs - <20 Lakhs	14
	≥20 Lakhs - <30 lakhs	1
	≥30 Lakhs	0
ST SC Dominant (Top 5) Districts of Assam 1		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Dima Hasao - 70.92%	Cachar - 15.25%	
Karbi Anglong - 56.33%	Karimganj - 12.85%	
Dhemaji - 47.45%	Morigaon - 12.30%	
Chirang - 37.06%	Bongaigaon - 11.20%	
Baksa - 34.84%	Hailakandi - 10.71%	
Top 5 ST dominant district accounts for - 39.28%	Top 5 SC dominant district accounts for - 31.11%	

1.2 Key Health Status & Impact Indicators

Indicators	Assam	India
Infant Mortality Rate (IMR) ³	40	30
Crude Death Rate (CDR) ³	6.3	6.0

^y Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	21	19.7
Maternal Mortality Ratio (MMR) ³	215	113
Neo Natal Mortality Rate (NNMR) ⁴	21	23
Under Five Mortality Rate (U5MR) ⁴	47	36
Still Birth Rate ⁴	2	4
Total Fertility Rate (TFR) ⁴	2.2	2.2
Life expectancy at birth ⁵	66.9	69.4
Sex Ratio at Birth ⁴	925	899

1.3 Key Health Infrastructure Indicators^{aa}

Indicators	Numbers (Total)			
Number of District Hospitals ²	24			
Number of Sub District Hospital ²	14			
Number of Government (Central + State) Medical College ⁶	7			
Number of Private (Society + Trust) Medical Colleges ⁶	0			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	1620	1208	2476	3322
PHC-HWC	681	946	946	946
UPHC-HWC	N/A ^{bb}	55	55	55
Total-HWC	2301	2209	3477	4323
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	262	190	27.48	
Number of Primary Health Centres (PHC)	1,050	946	9.90	
Number of Sub Centres (SC)	6,436	4,659	27.61	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	25	11	32	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	106	56	47.17	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	50	32	36.00	
Number of PHC	201	185	7.96	
Number of SC	1,344	786	41.52	

^{aa} Sources are mentioned at the end of Annexure 1

^{bb} Not available as per HWC Portal (as of 22nd Dec 2021)

Patient Service⁹	Assam	India
IPD per 1000 population	48.23	62.60
OPD per 1000 population	1085.82	1337.12
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	18.55	36.40

1.4 Major Health Indicator^{cc}

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Assam	India
% DALY [#] accountable for CMNNDs	34.06	27.46
% DALY accountable for NCDs	55.96	61.43
% DALY accountable for Injuries	9.98	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Assam	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	74	92
Percentage of medically certified deaths to total registered deaths (%)	17.2	20.7
RMNCHA+N		
Maternal Health⁹	Assam	India
% 1st Trimester registration to Total ANC Registrations	88	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	85.3	79.4
Total Reported Deliveries	608156	21410780
% Institutional deliveries to Total Reported Deliveries	91.2	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	83.6	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	16.4	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	23.5	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	15.3	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	65.9	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	87.2	53.4
Neonatal⁹	Assam	India
% live birth to Reported Birth	97.9	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	14.1	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	96.6	89.9

^{cc} Sources are mentioned at the end of Annexure 1

New Born Care Units Established¹¹	Assam	India
Sick New Born Care Unit (SNCU)	28	895
New Born Stabilization Unit (NBSU)	146	2418
New Born Care Corner (NBCC)	922	20337
Child Health & Nutrition¹⁰	Assam (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	5.5	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	69.1	60.6
Children under 5 years who are underweight (weight-for-age) (%)	32.8	32.1
Child Immunization¹⁰	Assam (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	71.8	83.8
Children age 12-23 months who have received BCG (%)	92.5	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	82.8	87.9
Family Planning¹⁰	Assam (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	4.1	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Assam	India
Number of districts with functional IDSP unit	27	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Assam	India
Annualized total case notification rate (%)	123	163
New Smear Positive (NSP) Success rate (in %)	84	79
National Leprosy Eradication Programme (NLEP)¹¹	Assam	India
Prevalence Rate/10,000 population	0.25	0.61
Number of new cases detected	851	1,14,359
Malaria, Kala Azar, Dengue¹¹	Assam	India
Deaths due to Malaria ¹¹	4	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Assam (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	19.2	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	25.3	30.7

Non-Communicable Disease		
Diabeties and Hypertension¹⁰	Assam (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	11	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	12.9	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	6.9	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	8.4	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Assam (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	22.1	8.9
Men who use any kind of tobacco (%)	51.8	38
Women who consume alcohol (%)	7.3	1.3
Men who consume alcohol (%)	25.1	18.8
Injuries		
Road Traffic Accident¹²	Assam	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	18	NA
Total number of fatal Road Accidents	3,019	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	38.4	33.7
Number of persons killed in Road Accidents	3,208	115113

1.5 Access to Care^{dd}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Assam	India
Number of Districts equipped with MMU under NRHM	33	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Assam	India
102 Type	316	9955
104 Type	0	605
108 Type	387	10993
Others	235	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	0	11070

^{dd} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Assam	India
Total number of ASHA targeted under NRHM	30920	946563
Total number of ASHA in position under NRHM	30920	904211
% of ASHA in position under NRHM	100	96
Total number of ASHA targeted under NUHM	1212	75597
Total number of ASHA in position under NUHM	1212	64272
% of ASHA in position under NUHM	100	85
Community Process¹¹	Assam	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	27673	554847
Number of Mahila Arogya Samitis (MAS) formed	658	81134
RKS¹¹ - Number of Rogi Kalyan Samitis (RKS) registered (Total)	Assam	India
DH	24	796
CHC	197	6036
PHC	947	20273
UHC	2	126
UPHC	55	3229
Human Resource for Health ¹⁴		
HRH Governance	Assam	
Specialist Cadre Available in the state (Y/N)	No	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	Yes	
HR Integration initiated (Y/N)	Yes	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists + MO MBBS (%)	28
	Dentists (%)	5
	Nurse (%)	12
	LT (%)	3
	ANM (%)	2
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	7 per 10,000	6 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	1:1	1:1

Ranking: Human Resource Index of Assam¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{ee}	14251	13907	13362	545	889	78.04
Staff Nurse	11500	7182	5659	1523	5841	
Lab Technician	2506	1845	1841	4	665	
Pharmacists	1628	1906	1786	120	0	
MO MBBS ^{ff}	2733	3683	3074	609	0	
Specialist ^{gg}	2157	1170	1141	29	1016	

1.6 Healthcare Financing

National Health Accounts (NHA) (2017-18)	Assam		India	
Per Capita Government Health Expenditure (in ₹)	1392		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	1.6		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	7.5		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	35.9		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Assam		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	51	23	33	26
IPD - % of hospitalized cases using public facility	77	48	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	1362	1318	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	1454	1002	845	915
IPD - Per hospitalized case (in INR) - Public	5,883	10,155	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	29,392	63,346	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	22	21	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	44	42	53	43

^{ee} MPW – Multi Purpose Health Worker (Female + Male)

^{ff} MO MBBS (Full Time)

^{gg} Specialist (All Specialist)

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	3,596	4,671	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	26,114	33,218	20,692	26,701
State Health Expenditure	Assam		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	6.8		5 ^{hh}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{hh} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

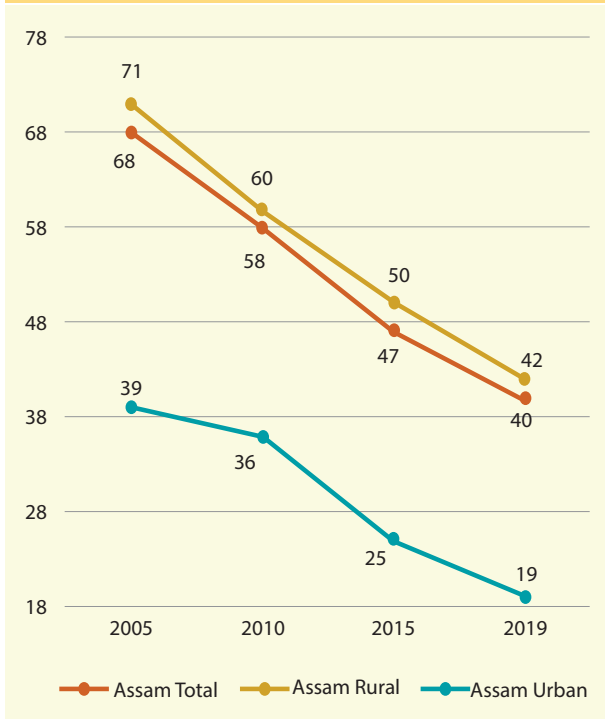


Figure 2: CBR & CDR Trend

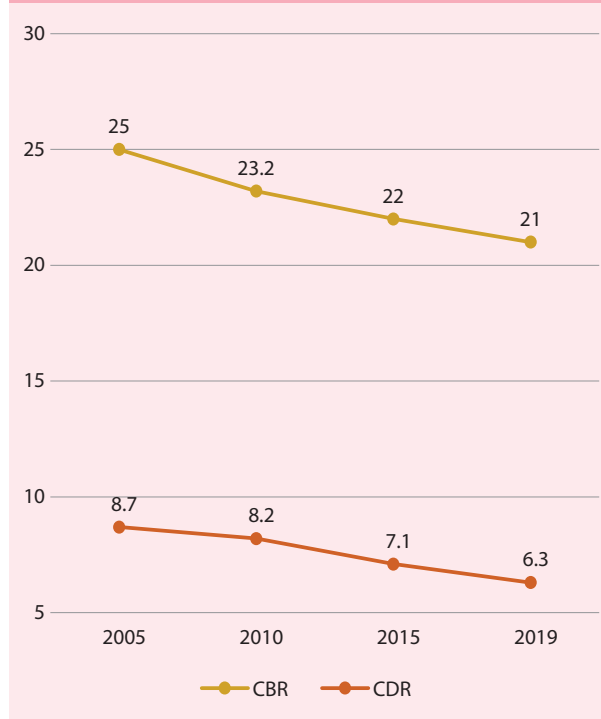


Figure 3: Life Expectancy At Birth Trend

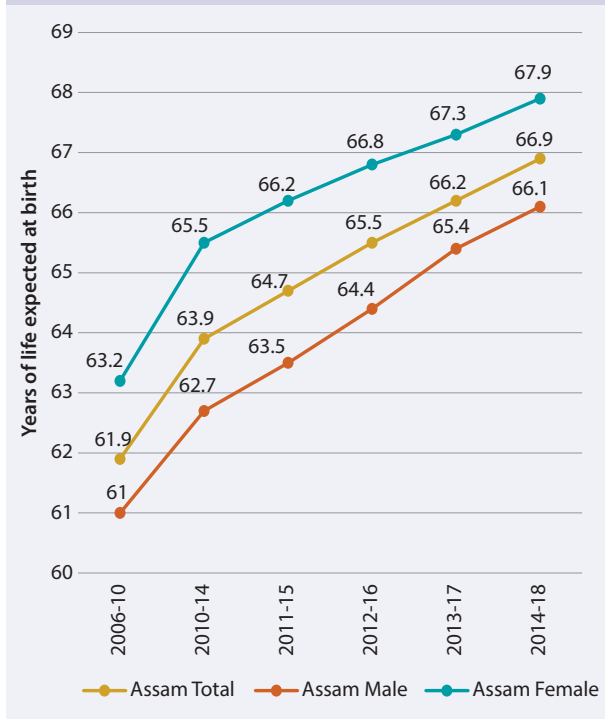


Figure 4: NNMR, TFR & Still Birth Trend

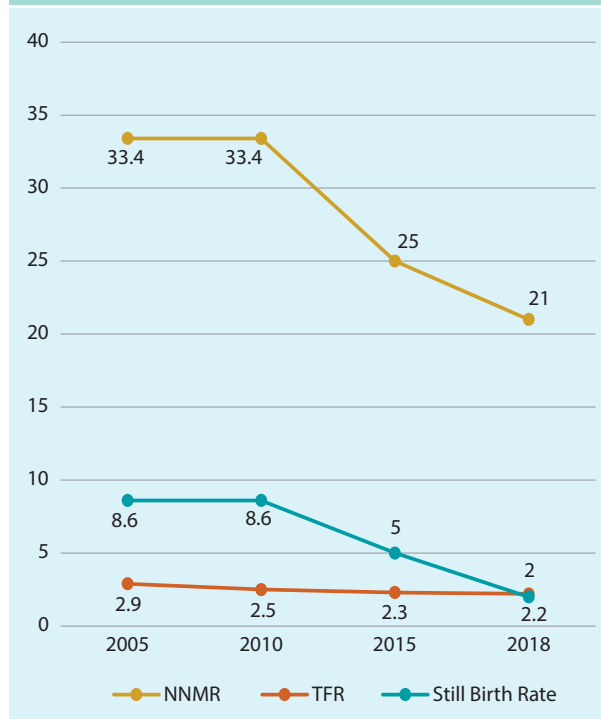


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

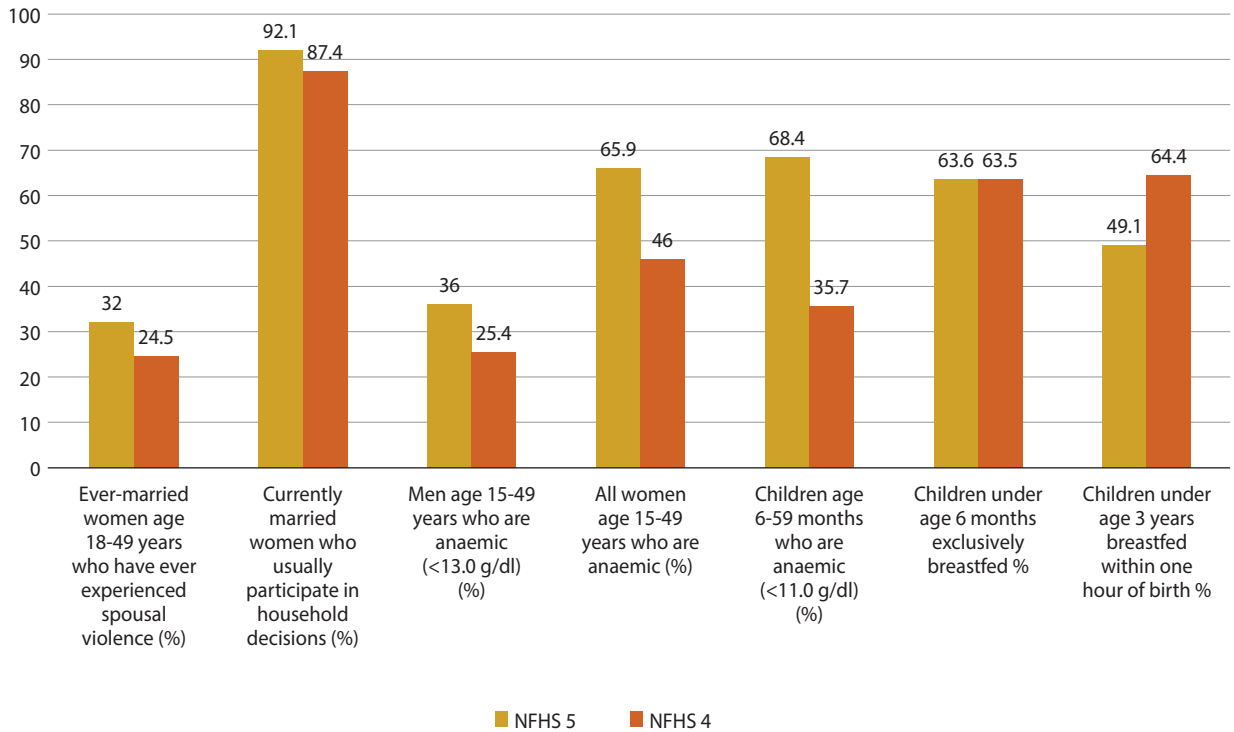


Figure 6: Top 15 causes of DALYs, 1990-2019

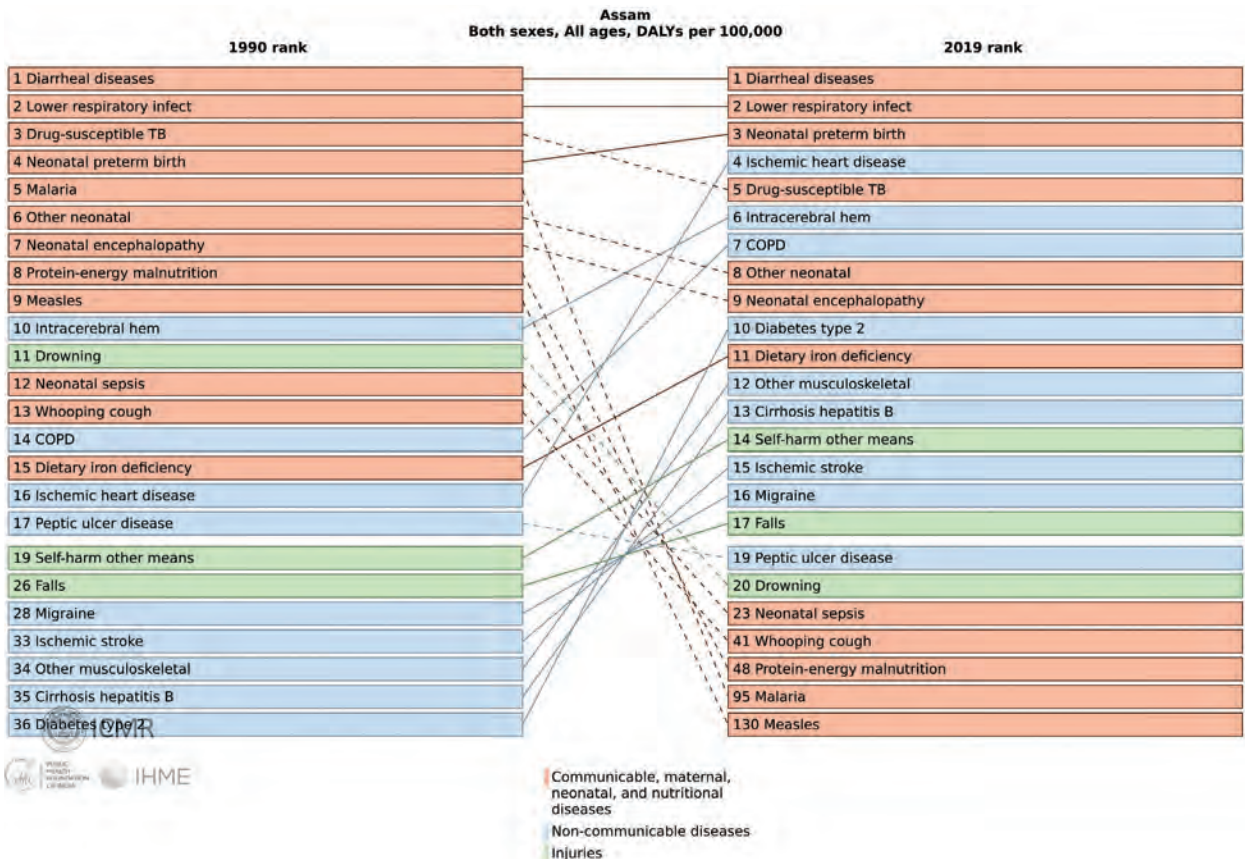


Figure 7: Top 15 risk of DALYs, 1990-2019

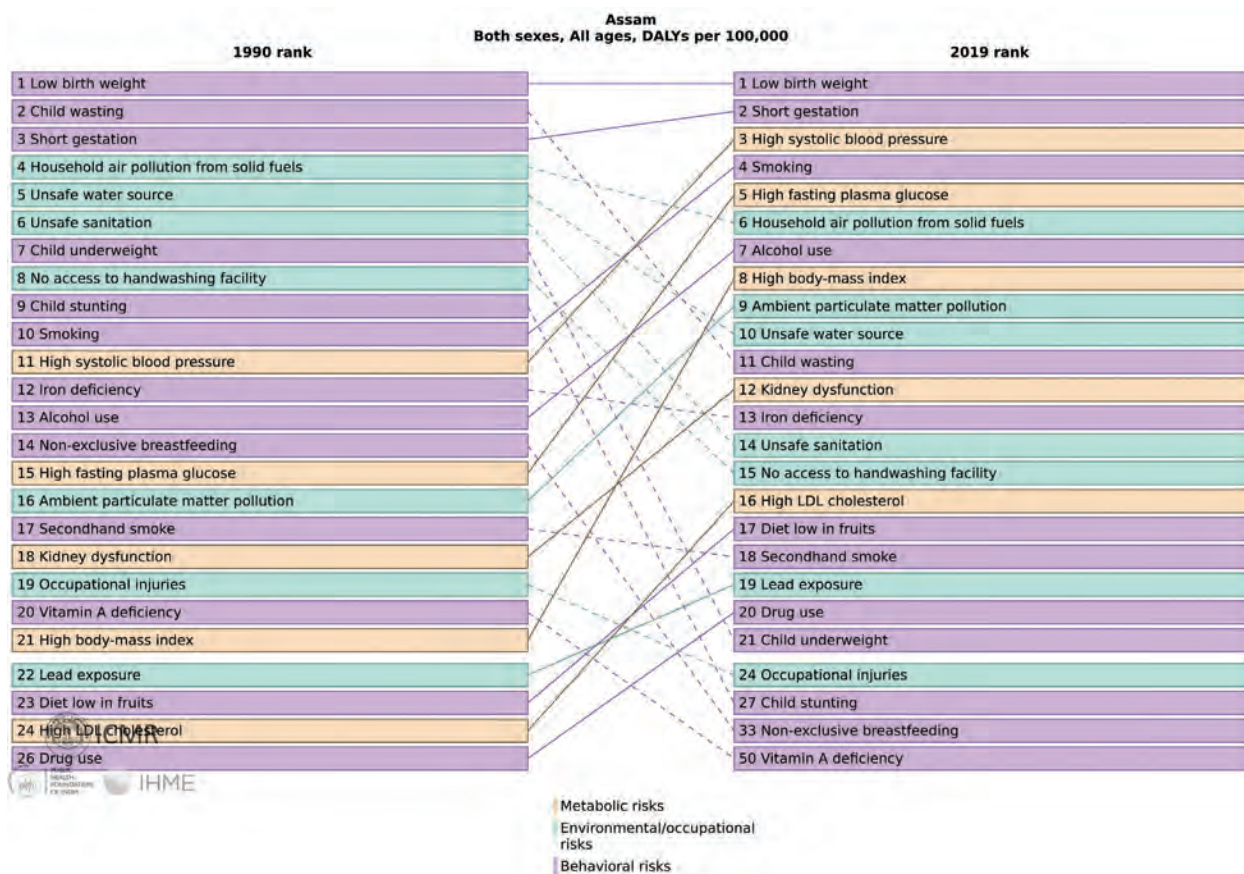


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

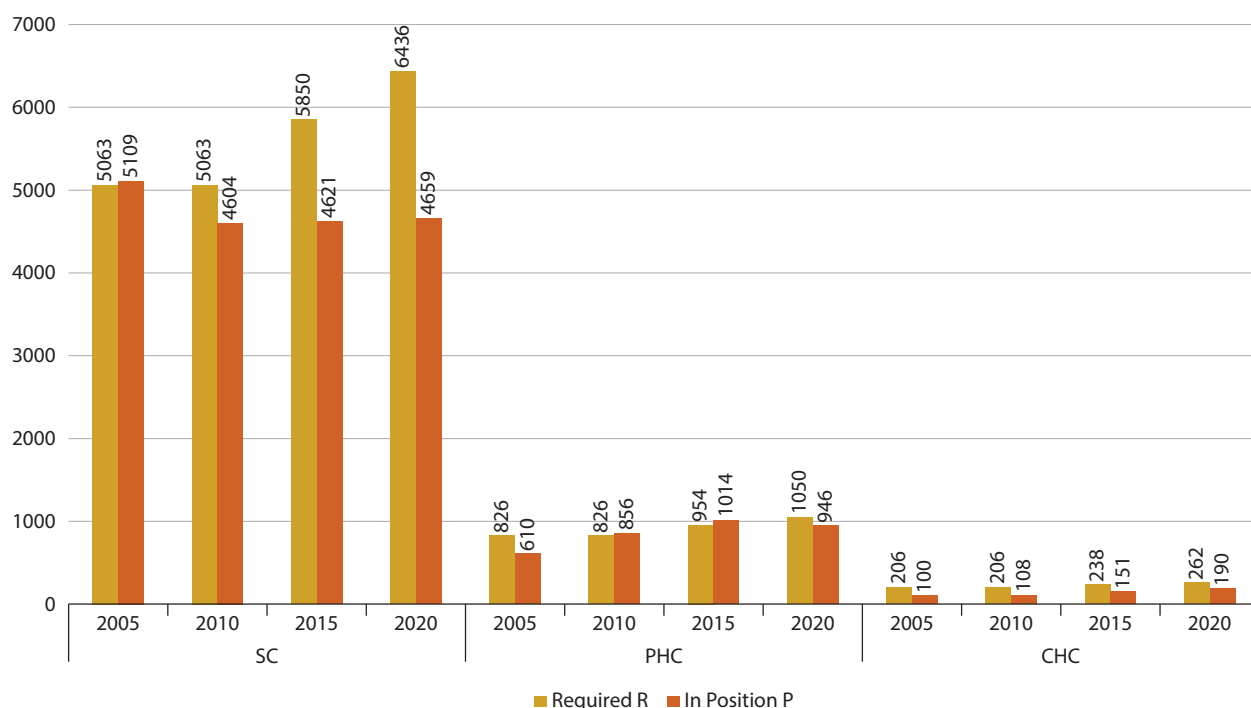


Figure 9: Year Wise Health Infrastructure Shortfall (%)

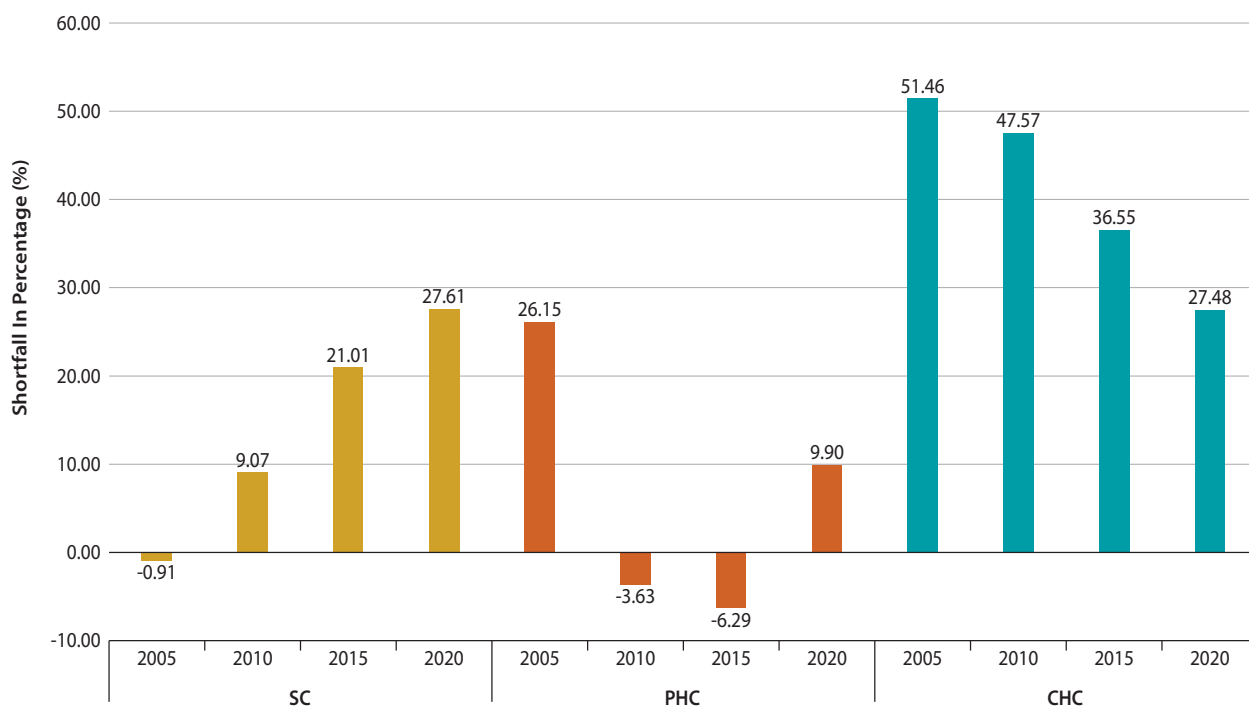
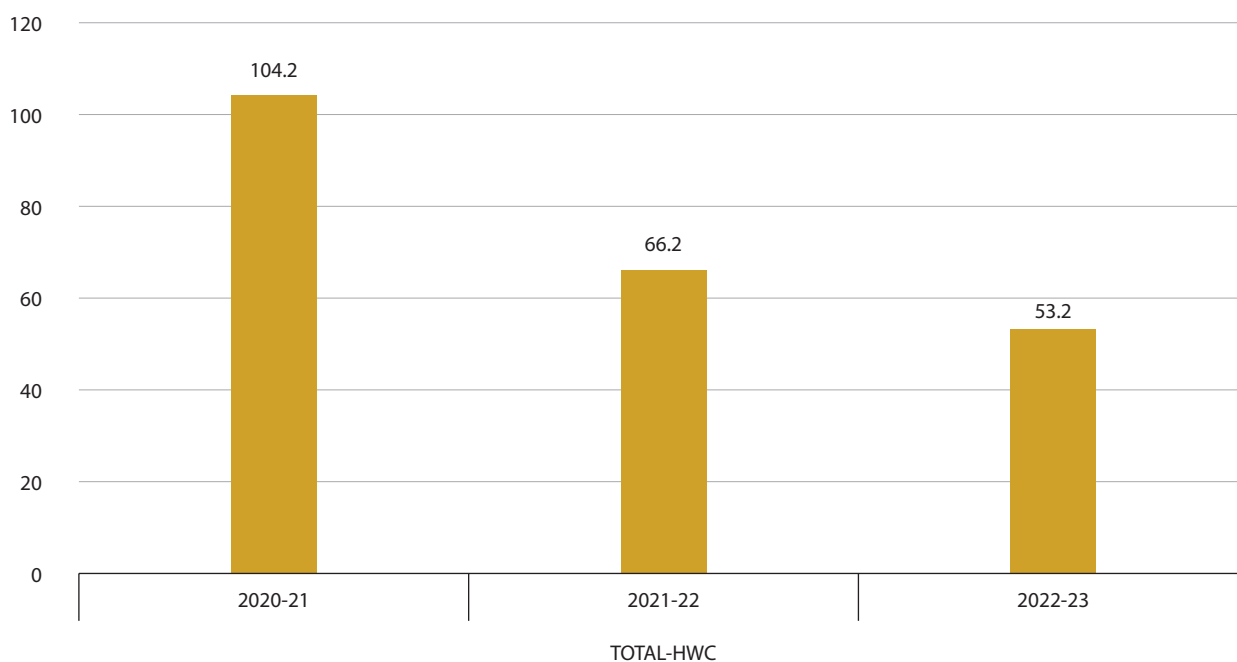


Figure 10: Percentage HWCs progress against target - FY wise (%)

Assam (% HWCs progress as of 22/Dec/2021 against targets-FY wise)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural/Urban Stats Not Available)															
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted^ (Height For Age) (%)	Children Under 5 Years - Wasted^ (Weight For Height) (%)		
1	Assam	NFHS 4 Total	929	10.4	N/A	30.8	52.4	2.2	2.7	14.2	46.4	70.6	67.8	8.9	36.4	17		
2	Assam	NFHS 5 Urban	916	50.1	87.5	22.3	61.4	3.4	7.6	9.9	62.6	93.5	70.6	7.9	29.8	19.1		
3	Assam	NFHS 5 Rural	970	61.9	75.4	33.4	60.7	2.9	4.4	11.1	49.2	82.9	72	8	36	22.1		
4	Assam	NFHS 5 Total	964	60	77.2	31.8	60.8	2.9	4.9	11	50.7	84.1	71.8	8	35.3	21.7		
5	Baksa	NFHS 5 Total	1097	69	74.8	24.9	59.2	3.3	2.7	12.5	56	89.9	67.3	14	41.2	17		
6	Barpeta	NFHS 5 Total	1007	58.9	74.8	40.1	57.3	2	3.6	12.3	43.6	87.6	59.6	5.5	29.8	19.5		
7	Biswanath	NFHS 5 Total	1014	68.4	69.2	25.3	72.4	2.1	4.5	5.3	46.5	84.3	74.3	14.5	42.7	27.1		
8	Bongaigaon	NFHS 5 Total	881	57.6	75.8	41.7	57.6	2.6	4.8	16.1	33.9	84.5	73.2	16.5	46.2	20.2		
9	Cachar	NFHS 5 Total	991	57.9	77.2	29.9	48	1	6.1	15.6	32.7	79.2	82.1	2.7	28.7	30.7		
10	Charaideo	NFHS 5 Total	1040	64.9	71.9	22.6	67	4	4.4	8.3	64.5	88.2	81.5	9.9	39	23.5		
11	Chirang	NFHS 5 Total	906	61.5	71.5	30.9	65.8	5.2	6.1	9.8	56.5	83.7	68.2	9.7	42.7	19.5		
12	Darrang	NFHS 5 Total	757	53.7	75.6	42.8	46.8	2.8	3.1	14.8	37.5	84.4	58.1	9.1	42	27		
13	Dhemaji	NFHS 5 Total	1022	66.8	81.5	32	72.6	3.8	1.6	7.1	62.2	87.3	90.8	6.8	37.2	18.3		
14	Dhubri	NFHS 5 Total	914	59.4	69.5	50.8	64.1	1.3	5.1	11.5	37.6	64.2	69.5	7.4	48.5	21.5		
15	Dibrugarh	NFHS 5 Total	979	58.8	76.6	23	64.6	3	4.5	8.7	75.6	93.1	85.5	5.6	27.3	20.6		
16	Dima Hasao	NFHS 5 Total	908	61.9	87.7	16.5	65.5	4	3.1	9.7	46.9	89.5	63.8	8.7	30.6	23.6		
17	Goalpara	NFHS 5 Total	1027	71.1	74.1	41.8	66.8	3.2	3.6	7.4	44.1	92.3	72.7	7.5	38.9	24.3		
18	Golaghat	NFHS 5 Total	1145	69.3	75.1	20.7	61.6	3.1	5.6	10.9	65.7	90.4	75.9	4.4	26.3	19.2		
19	Hailakandi	NFHS 5 Total	951	53.6	82.2	32.9	66.8	4.3	12.8	8.6	43.1	83	76.9	1.6	42.9	22.2		
20	Hojai	NFHS 5 Total	1017	67.4	83.2	30.9	61.1	1.2	4.9	13.2	51.3	82.1	63.6	2.7	39.3	12.7		
21	Jorhat	NFHS 5 Total	833	60.1	85.1	24.9	63.8	3.6	6	10.4	67	96.5	70.4	11.5	38.7	15.5		
22	Kamrup	NFHS 5 Total	701	47	79.6	21.9	38.7	3.4	4.8	17.6	46.9	85	73	6.5	22.6	14.8		

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)															
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 1-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Stunted [^] (Height For Age) - Children Under 5 Years (%)	Wasted [^] (Weight For Height) - Children Under 5 Years (%)		
23	Kamrup Metropolitan	NFHS 5 Total	986	45.5	86	21.9	56.8	4.5	6.6	8.8	68.9	89.1	69	1	25.4	18.2		
24	Karbi Anglong	NFHS 5 Total	882	54.1	78.8	26.1	66.3	6.2	1.8	9.3	63.9	74.9	74.3	18.1	31.6	17.2		
25	Karimganj	NFHS 5 Total	885	64.4	80.7	27.7	64.3	2.3	9.5	8.6	42.8	76.4	75.9	5.3	29.1	48		
26	Kokrajhar	NFHS 5 Total	1003	50.2	73.7	36.2	72.3	4.1	3.2	10	36.9	81.9	52.6	10	34.6	20.5		
27	Lakhipur	NFHS 5 Total	985	67	83.9	36.3	67.1	3	5.9	9.8	51.7	96.2	72.4	7.9	38.5	18.2		
28	Majuli	NFHS 5 Total	754	60.8	83.4	25.5	63.7	3.4	1.2	11.6	72.2	90.3	83.9	14.2	35.4	14.1		
29	Morigaon	NFHS 5 Total	1070	62.5	78.7	39.1	70.6	3.8	5.5	6.5	42	88.3	82.9	8.6	43.2	16.1		
30	Nagaon	NFHS 5 Total	969	59.4	78.4	42.6	58.6	2.8	5.4	12.3	59.4	83.7	68	8.6	38.9	19.4		
31	Nalbari	NFHS 5 Total	994	52.5	83.9	28.1	53.3	2.6	2.9	13.2	55.9	91.8	79.8	8.8	27.5	15.4		
32	Sivasagar	NFHS 5 Total	915	60.7	86.6	27.9	67.3	4.4	5.1	8.3	80.9	95.3	76.7	24.4	26.1	21.1		
33	Sonitpur	NFHS 5 Total	1325	66.9	76.9	24	74.4	1.7	5.3	5.8	45.5	83.5	76.8	4.3	36.7	13.1		
34	South Salmara Mancachar	NFHS 5 Total	911	68.2	63.5	44.7	71.5	2.9	2.5	8	35.3	71.7	66	7.1	38.9	18.2		
35	Tinsukia	NFHS 5 Total	884	60	70.5	19.8	59.2	3	2.1	11	63.1	82.6	78.8	16.3	32.8	21.5		
36	Udalguri	NFHS 5 Total	1255	70.6	70	32	50.2	2	3	14.6	49.8	86.2	52	2.5	33.8	21.3		
37	West Karbi Anglong	NFHS 5 Total	1105	63.1	73.9	21.3	69.9	3.9	4.4	7.1	46.7	72.5	54.5	12.8	40.9	23.2		

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'. Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCMV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother
Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency) that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 1.3 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best five performing districts within the districts for a particular indicator

B. Red – Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency) that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 1.3 Below -3 standard deviations, based on the WHO standard

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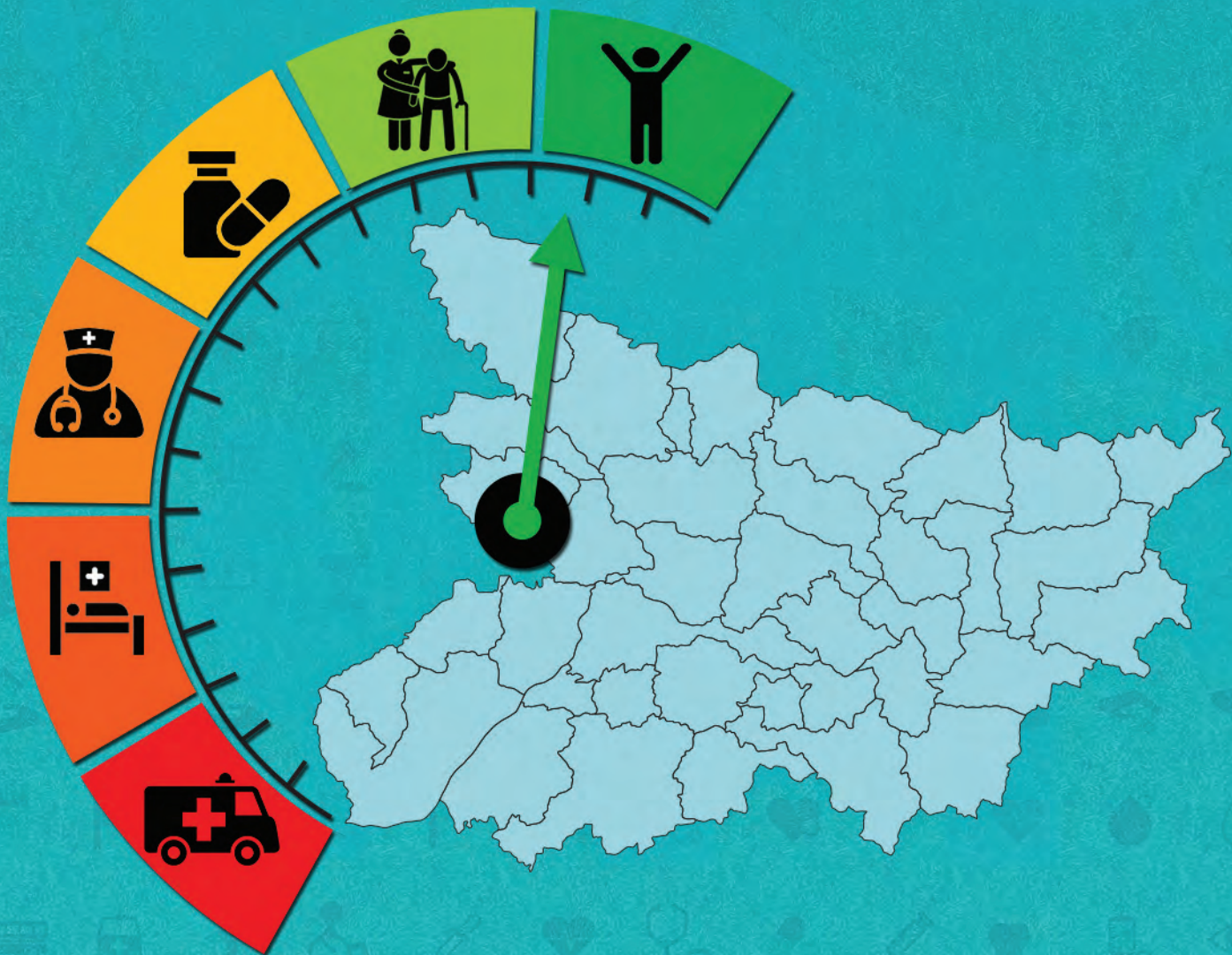
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



BIHAR

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
1 st	Patna	Vaishali
2 nd	Muzaffarpur	Vaishali
3 rd	Nalanda	Khagariya
5 th	Begusarai	Kishangarh
6 th	Banka	Gopalganj
7 th	Purnea	Vaishali
8 th	Patna	Madhubani
10 th	Siwan	West Champaran
11 th	Bhojpur	Madhepur
12 th	Rohtas	Muzaffarpur
13 th	Bhagalpur	Begusarai
14 th	Jamui	Lakhisarai

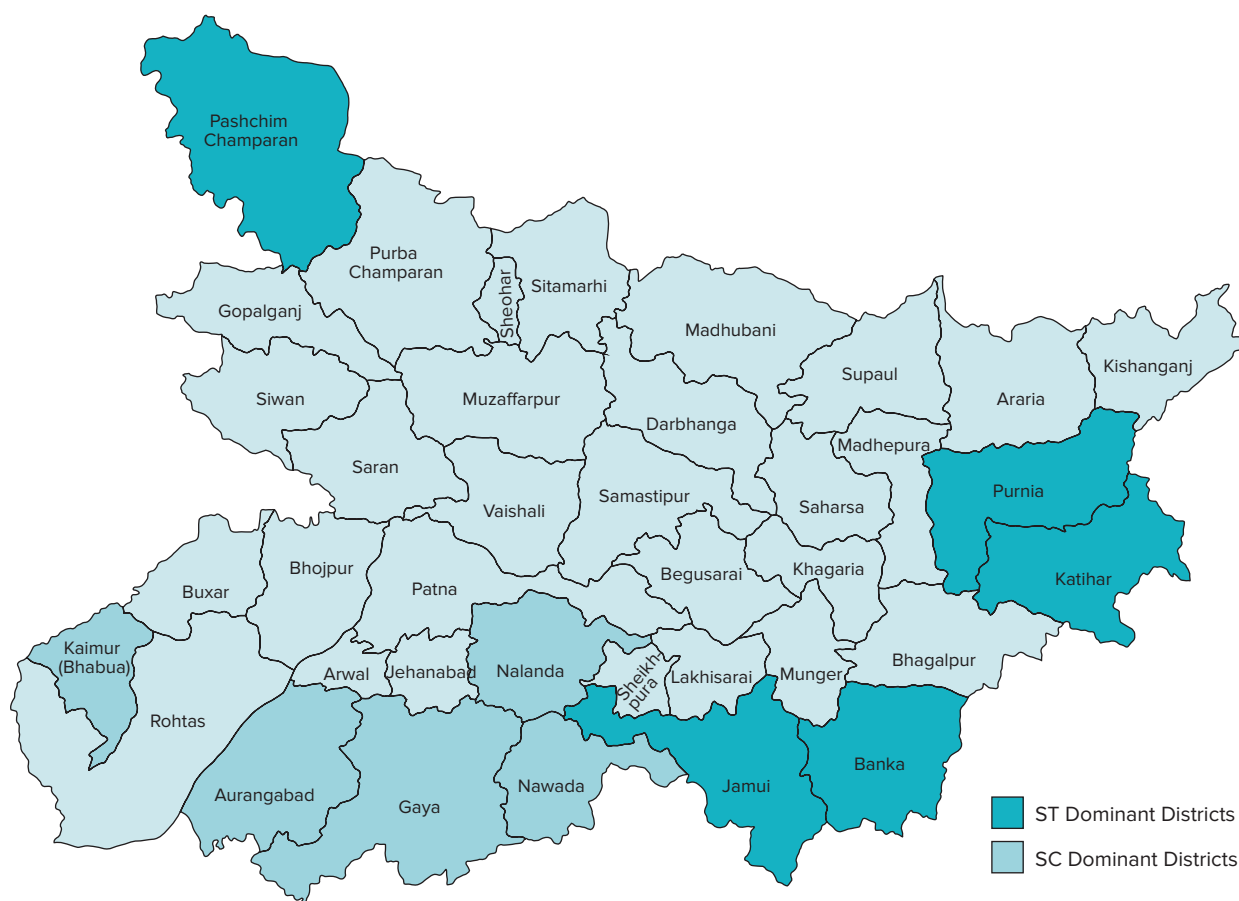
BIHAR

1. BACKGROUND

1.1 State Profile

Bihar is the thirteenth^a largest State by area in India, with a geographical spread of 94,163 km², accounting for 2.89% of the country's area (RHS 2019-20). The State is divided into 38 districts. It is the third most populous State in the country, with a population of over 10.4 crores, accounting for 8.6% of the country's total population^b, and is projected to increase to 12.3 crores by 2021 (Census

Figure 1: Top 5 ST & SC Dominant Districts



^a Including all States & UTs, as per RHS 2019-20

^b Census 2011

Population Projection 2019 Report). As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 1.6 crores (15.91%) and 0.13 crores (1.28%), respectively. Out of the 38 districts, top five SC & ST dominant districts account for 21.06% of SC & 55.27% of ST population in the State (Figure 1 & Annexure 1.1, State Profile). As reported, Bihar has the second lowest urbanization rate in India, with 88.7% of the population residing in rural areas, while only 11.3% in urban areas.

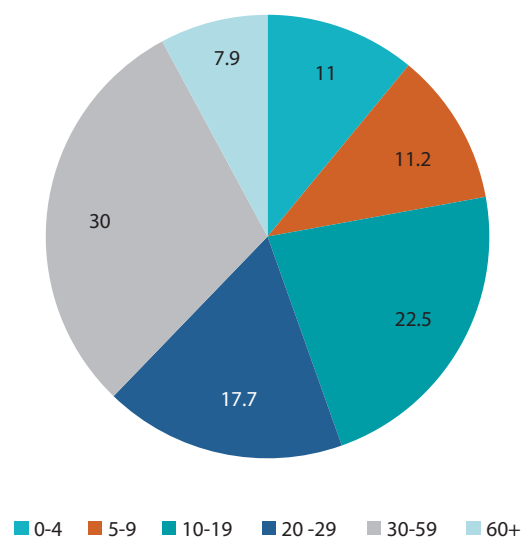
The total length of roads^c in the State is 2,09,549 kms (4.19%^d), in which, the length of national highways is 4,839 kms (4.2%^e) and state highways is 4,006 kms (2.2%^f). Agriculture remains the mainstay of the Bihar's economy.

A detailed report on the Key indicators has been attached as Annexure 1.

1.2 Demography

In Bihar, 15 districts have a population over 30 lakhs, 11 districts have around 20-30 lakhs population, 9 districts have around 10-20 lakhs population and only 3 districts have less than 10 lakhs population (Annexure 1.1). The State's sex ratio of 895 females for every 1000 males is only slightly higher than the national average of 889 females for every 1000 males (Annexure 1.2). As estimated, there are 22.5% of the total population in the age group of 10-19 years, 47.7% within 20 to 59 years, and 7.9% are in the age group of 60 years and above (Figure 2). The crude birth and death rates have declined from 30.4 and 8.1 (2005) to 25.8 and 5.5 (2019) respectively (Annexure 2, Figure 2). The literacy rate has increased from 47% in 2001 to 61.8% in 2011, with male literacy reported as 71.2%, while female literacy being only 51.5% (Annexure 1.1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)^g is 107.67% for primary education, 107.74% for elementary education, 78.37% for secondary education, 35.62% for senior secondary education, and 14.3 % for higher education.

Figure 2: Bihar - distribution of estimated population 2021 (%)



1.3 Elderly

Elderly people aged 60 years and above share 7.9% of the State's total population (Figure 2). The life expectancy at 60 years of age is 16.3 years for males and 16.8 years for females (SRS Based Life Abridged Table, 2014-18). It is reported^h that in rural areas, around 73% of elderly females and 23% elderly males are economically fully dependent. As per Elderly in India 2016 report, the old age dependency ratio of

^c Basic Road Statistics 2019, MoRTH

^d Percentage of total length of roads in the State/UT

^e Percentage of total length of National Highways in the country

^f Percentage of total length of State Highways in the country

^g Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

^h NSSO report number 586

14.2 (2011) is at par with the national average, with regional variations of 14.5 in rural areas & 12.3 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is low. Only 19% of men and 17% of women reported illness, which is less than the national average of 31% for both.

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The RMNCHA+Nⁱ services have improved with the launch of NHM in the State. Indicators for Antenatal care (ANC)^j, institutional deliveries, C sections, distribution of IFA^k tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care have shown improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has declined from 261^l (SRS MMR Bulletin 2007-09) to 149 (SRS MMR Bulletin 2018) per 1,00,000 live births. In Bihar, out of the total ANC registration, 69.8% of pregnant women received 4 ANC check-ups (Annexure 1.4). As reported in HMIS 2019-20, around 85% of all reported deliveries took place in institutions out of which 88.3% deliveries took place in public health facilities. Total percentage of C-section deliveries out of the reported institutional deliveries in the State (2.6%) is less than the national average of 20.5%, out of which 8.5% of them are conducted in private facilities (Annexure 1.4). Around 38% of women were tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). The prevalence of anaemia in women increased from 61% to 65.7%. Anemia in females of reproductive age group (65.7%) is more than thrice than in men (29.5%) of similar age group (Annexure 2, Figure 5).

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a decline in IMR from 61 (2005) to 29 (2019), which is below the national average of 30 (Annexure 2, Figure 1). Though the NNMR^m has significantly decreased from 32.4 (2005) to 25 (2018), the Still Birth (per 1,000 live births) Rate, however, shows a rising trend from 1.7 (2005) to 2 (2018) (Annexure 2, Figure 4). The life expectancy at birthⁿ has improved from 65.8 years in 2006-10 to 69.1 years in 2014-18, varying marginally between females (68.7 years) and males (69.4 years) (Annexure 2, Figure 3), yet is slightly less than the national average of 69.4 years. In NFHS 5, Vaishali, Jehanabad, Siwan, Begusarai & Madhepura districts reported high SRBs ranging between 1118-1058, while Muzaffarpur, Saran, Madhubani, Darbhanga & Arwal districts reported low SRBs ranging between 685-815 (Annexure 3, NFHS 5).

Full vaccination^o for children between 12–23 months has improved from 77.1% (2015-16) to 82.7% (2019-20; NFHS 5). The percentage of under 6-months children exclusively breastfed also increased from 53.4% to 58.9% (NFHS 5). Though the burden of malnutrition declined over time^p, there is a wide variation in the nutritional status across the state. A considerable increase in childhood anaemia from 63.5% to 69.4% in children aged 6-59 months has been reported (Annexure 2, figure 5). For under-5 stunting,

ⁱ Reproductive, Maternal, Newborn, Child Health, Adolescent Health & Nutrition

^j Antenatal Check up

^k Iron Folic Acid Tablets

^l Including Jharkhand

^m Neonatal Mortality Rate

ⁿ SRS Based Abridged Life Tables

^o NFHS 5 State/UT Factsheet, based on information from vaccination card only

^p Disease Burden Trends in the States of India 1990 to 2016

Gopalganj, Sheohar, Patna, Khagaria & Munger districts reported relatively low burden, ranging from 34.2% to 35.5%; and Sitamarhi, Sheikhpura, Araria, Nawada & Purba Champaran districts reported high burden ranging from 49.1% to 54.2%. Similarly, for under-5 wasting, Pashchim Champaran, Sitamarhi, Sheikhpura, Purba Champaran & Madhubani districts reported relatively low burden, ranging from 13.2% to 17.1%, while Arwal, Jehanabad, Sheohar, Buxar & Aurangabad districts reported high burden ranging from 32.9% to 36.8% (Annexure 3, NFHS 5).

2.3 Family Planning

The TFR^a has reduced from 4.3 (2005) to need 3.2 (2018) which is more than the national average of 2.2 (SRS Statistical Reports). The total unmet is 13.6%, while unmet need for spacing is 6.1 (NFHS 5). In the State, Sheikhpura reported the lowest unmet need (3.2%) and Nawada reported the highest (6.5). Around 44.4% of married women reported to avail any modern method of family planning in Bihar, with sterilization acceptance among females being 34.8% and nil among males (NFHS 5).

2.4 Communicable Diseases

The State has 38 functional IDSP units in place^r. The proportion of Communicable, Maternal, Neonatal, and Nutritional Diseases [CMNND] contribute to 40.24% of total disease burden while Diarrheal diseases, Lower Respiratory Infection and neonatal disorders remain the major causes of death in the State (Annexure 2, Figure 6). As per QPR report, for TB, the annualized total case notification rate is 92% and NSP^s success-rate is 75%, as opposed to the national averages of 163% and 79% respectively. For NLEP^t, the reported prevalence rate of 0.77% per 10,000 population is higher than the national average of 0.61. No death(s) from vector borne diseases (Dengue, Malaria, Kala Azar) are reported.

2.5 Non-Communicable Diseases (NCDs) & Injuries

It is reported that 69.9% of the total disease burden is due to premature deaths and 30.1% is due to disability or morbidity(2016)^[1]. As per GBD^u 2019, the leading causes of DALY include Ischemic Heart Disease, Chronic Obstructive Pulmonary Disease, and Diabetes Mellitus Type 2. NCDs contribute to 50.34% of DALYs, while injuries contribute to around 9.42% of DALYs in the State (Annexure 1.4). It is found in recent NFHS 5 report that 5% of women and 48.8% of men used any kind of tobacco, while 0.4% of women and 15.5% of men consumed alcohol. In general, the major risk factors for DALYs includes child & maternal malnutrition, air pollution, WASH^v, dietary risk factors and high blood pressure (Annexure 2, Figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 4,86,775.84 crores. In terms of per capita of ₹ 40,982, Bihar is positioned last among the 32 states^w. According to NHA 2017-18, the per capita Government Health Expenditure in the State is ₹ 556, which is less than the national average of

^a Total Fertility Rate

^r QPR NHM MIS Report as on 01.03.2020 & 31.12.2020

^s New Smear Positive

^t National Leprosy Eradication Programme

^u Global Burden of Disease, <https://vizhub.healthdata.org/gbd-compare/india>

^v Water, Sanitation and Hygiene

^w Directorate of Economics & Statistics

₹ 1,753. On the other hand, the OOPE^x as a share of Total Health Expenditure (THE) is 58.2%, as opposed to the national average of 48.8%. As per the NSSO 2017-18, the OOPE for inpatient care per hospitalization in rural areas is around ₹ 5,390 in public hospitals and ₹ 18,189 in private hospitals, in urban areas it is around ₹ 5,220 in public hospitals and ₹ 26,217 in private hospitals (Annexure 1.6). For childbirth, OOPE in public health facilities is around ₹ 2,422 in rural areas and ₹ 2,966 in urban areas, whereas in private health facilities, it is ₹ 15,729 in rural areas and ₹ 17,866 in urban areas. In public health facilities, the share of expenditure on medicine is 48% for inpatient care in rural and in urban areas; whereas for diagnostics it is 16 % and 17% in rural and urban areas respectively^y.

2.7 Health Infrastructure

As per the recent RHS data, the number of public health facilities have been increasing since 2005 (Annexure 1, Figure 8). Yet, a shortfall amounting to 57.88%, 52.68% and 93.66% of the required SCs, PHCs and CHCs, respectively still exist (Annexure 1, Figure 8 & 9). Currently, there are 9,112 SCs, 1,702 PHCs and 57 CHCs in place against the required 21,634 SCs, 3,597 PHCs and 899 CHCs. Similarly, in tribal areas there are only 232 SCs, 33 PHCs and no CHCs in place against the required 491 SCs, 73 PHCs and 80 CHCs. This accounts for a shortfall of 52.75% SCs, 54.79% PHCs and 100% CHCs in the tribal areas. However, in urban areas there are 325 PHCs in place against the required 294, thereby amounting to an excess of 10.54%. The State has 36 DHs, 35 SDHs and 10 Government medical colleges. In Bihar, 100% DHs & SDHs serve as functional FRUs (Annexure 1.3).

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 2341 HWCs (1194 SHCs, 1049 PHCs & 98 UPHCs) are operationalized in the State as of 22nd December 2021^z.

In the State, none of the districts are equipped with MMUs under NHM. The State has 95% of ASHA in position under NRHM and 54% under NUHM. The doctors to staff nurse ratio is 1:1, with 3 public health providers available for every 10,000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 642 availed (events) OPD services and 33 availed (events) IPD services. However, as per the NSSO data (2017-18), only 18% of all OPD cases in rural and 23% in urban areas used public health facilities, which is less than the national average of 33% and 26% respectively. Whereas, 70% of all IPD cases in rural and 72% in urban areas utilized public health facilities, which is more than the national average of 46% and 35% respectively.

^x Out of Pocket Expenditure

^y National Sample Survey Office NSSO Figures

^z AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^{aa}

Indicator	Bihar 2011 ¹	India
Total Population (In Crore)	10.4	121.08
Rural (%)	88.7	68.85
Urban (%)	11.92	31.14
Scheduled Caste population (SC) (in crore)	1.6 (15.91%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.13 (1.28%)	10.45 (8.63%)
Total Literacy Rate (%)	61.8	72.99
Male Literacy Rate (%)	71.2	80.89
Female Literacy Rate (%)	51.5	64.64
Number of Districts in the Bihar ²	38	
Number of districts per lakh population in Bihar (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	3
	≥ 10 Lakhs - <20 Lakhs	9
	≥20 Lakhs - <30 lakhs	11
	≥30 Lakhs	15
ST SC Dominant (Top 5) Districts of Bihar ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Paschim Champaran - 6.35%	Gaya - 30.38%	
Katihar - 5.86%	Nawada - 25.46	
Jamui - 4.47%	Aurangabad - 24.09%	
Banka - 4.44%	Kaimur (Bhabua) - 22.69%	
Purina - 4.27%	Nalanda - 21.11%	
Top 5 ST dominant district accounts for - 55.27%	Top 5 SC dominant district accounts for - 21.06%	

1.2 Key Health Status & Impact Indicators

Indicators	Bihar	India
Infant Mortality Rate (IMR) ³	29	30
Crude Death Rate (CDR) ³	5.5	6.0

^{aa} Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	25.8	19.7
Maternal Mortality Ratio (MMR) ³	149	113
Neo Natal Mortality Rate (NNMR) ⁴	25	23
Under Five Mortality Rate (U5MR) ⁴	37	36
Still Birth Rate ⁴	2	4
Total Fertility Rate (TFR) ⁴	3.2	2.2
Life expectancy at birth ⁵	69.1	69.4
Sex Ratio at Birth ⁴	895	899

1.3 Key Health Infrastructure Indicators^{bb}

Indicators	Numbers (Total)			
Number of District Hospitals ²	36			
Number of Sub District Hospital ²	35			
Number of Government (Central + State) Medical College ⁶	10			
Number of Private (Society + Trust) Medical Colleges ⁶	6			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	1194	2724	5437	7246
PHC-HWC	1049	1899	1899	1899
UPHC-HWC	98	100	100	100
Total-HWC	2341	4723	7436	9245
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	899	57	93.66	
Number of Primary Health Centres (PHC)	3,597	1,702	52.68	
Number of Sub Centres (SC)	21,634	9,112	57.88	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	36	35	64	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	294	325	-10.54	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	80	0	100.00	
Number of PHC	73	33	54.79	
Number of SC	491	232	52.75	

^{bb} Sources are mentioned at the end of Annexure 1

Patient Service⁹	Bihar	India
IPD per 1000 population	33.3	62.6
OPD per 1000 population	641.8	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	21.7	36.4

1.4 Major Health Indicator^{cc}

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Bihar	India
% DALY accountable for CMNNDs ^{##}	40.24	27.46
% DALY accountable for NCDs	50.34	61.43
% DALY accountable for Injuries	9.42	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Bihar	India
Level of Birth Registration (%)	89.3	92.7
Level of Death Registration (%)	51.6	92
Percentage of medically certified deaths to total registered deaths (%)	5.1	20.7
RMNCHA+N		
Maternal Health⁹	Bihar	India
% 1st Trimester registration to Total ANC Registrations	69.1	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	69.8	79.4
Total Reported Deliveries	2,207,610	21410780
% Institutional deliveries to Total Reported Deliveries	84.8	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	88.3	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	11.7	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	2.6	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	1.8	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	8.5	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	38	53.4
Neonatal⁹	Bihar	India
% live birth to Reported Birth	98.9	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	10.3	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	92.7	89.9

^{cc} Sources are mentioned at the end of Annexure 1

New Born Care Units Established¹¹	Bihar	India
Sick New Born Care Unit (SNCU)	43	895
New Born Stabilization Unit (NBSU)	41	2418
New Born Care Corner (NBCC)	708	20337
Child Health & Nutrition¹⁰	Bihar (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	13.7	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	58.2	60.6
Children under 5 years who are underweight (weight-for-age) (%)	41	32.1
Child Immunization¹⁰	Bihar (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	77.1	83.8
Children age 12-23 months who have received BCG (%)	91.6	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	NA	87.9
Family Planning¹⁰	Bihar (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	6.1	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Bihar	India
Number of districts with functional IDSP unit	38	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Bihar	India
Annualized total case notification rate (%)	92	163
New Smear Positive (NSP) Success rate (in %)	75	79
National Leprosy Eradication Programme (NLEP)¹¹	Bihar	India
Prevalence Rate/10,000 population	0.77	0.61
Number of new cases detected	16,595	114,359
Malaria, Kala Azar, Dengue¹¹	Bihar	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	2,846	3,706
HIV¹⁰	Bihar (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	10.3	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	25.2	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Bihar (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	8.7	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	11.2	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	6.4	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	8.3	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Bihar (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	5	8.9
Men who use any kind of tobacco (%)	48.8	38
Women who consume alcohol (%)	0.4	1.3
Men who consume alcohol (%)	15.5	18.8
Injuries		
Road Traffic Accident¹²	Bihar	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	8	N/A
Total number of fatal Road Accidents	6,731	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	72	33.7
Number of persons killed in Road Accidents	7205	115113

1.5 Access to Care^{dd}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Bihar	India
Number of Districts equipped with MMU under NRHM	0	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Bihar	India
102 Type	1158	9955
104 Type	0	605
108 Type	0	10993
Others	86	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	164	11070

^{dd} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Bihar	India
Total number of ASHA targeted under NRHM	93687	946563
Total number of ASHA in position under NRHM	88837	904211
% of ASHA in position under NRHM	95	96
Total number of ASHA targeted under NUHM	977	75597
Total number of ASHA in position under NUHM	527	64272
% of ASHA in position under NUHM	54	85
Community Process¹¹	Bihar	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	8406	554847
Number of Mahila Arogya Samitis (MAS) formed	731	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Bihar	India
DH	36	796
CHC	230	6036
PHC	235	20273
UHC	0	126
UPHC	80	3229
Human Resource for Health ¹⁴		
HRH Governance	Bihar	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	Yes	
Implementation of HRIS (Y/N)	In Process	
HR Integration initiated (Y/N)	Yes	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	72
	Dentists (%)	97
	MO MBBS (%)	37
	Nurse (%)	52
	LT (%)	68
	ANM (%)	60
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	7 per 10,000	3 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	4:1	3:1

Ranking: Human Resource Index of Bihar¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{ee}	45222	37591	19474	18117	25748	46.79
Staff Nurse	17996	19434	10737	8697	7259	
Lab Technician	4146	3653	921	2732	3225	
Pharmacists	2705	2359	766	1593	1939	
MO MBBS ^{ff}	6131	7164	4258	2906	1873	
Specialist ^{gg}	3214	5749	1593	4156	1621	

1.6 Healthcare Financing^{hh}

National Health Accounts (NHA) (2017-18)	Bihar		India	
Per Capita Government Health Expenditure (in ₹)	556		1,753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	1.4		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	5		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	58.2		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Bihar		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	18	23	33	26
IPD - % of hospitalized cases using public facility	39	32	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	420	973	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	1196	1484	845	915
IPD - Per hospitalized case (in INR) - Public	5,390	5,220	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	18,189	26,217	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	16	17	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	48	48	53	43

^{ee} MPW – Multi Purpose Health Worker (Female + Male)

^{ff} MO MBBS (Full Time)

^{gg} Specialist (All Specialist)

^{hh} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	2,422	2,966	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	15,729	17,866	20,692	26,701
State Health Expenditure	Bihar		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	4.5		5 ⁱⁱ	

Sources used for Annexure 1

- ¹ 1 Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

ⁱⁱ Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

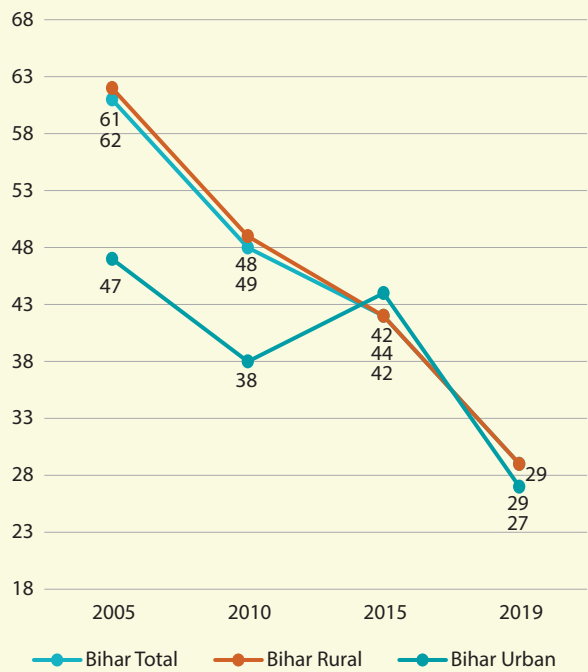


Figure 2: CBR & CDR Trend

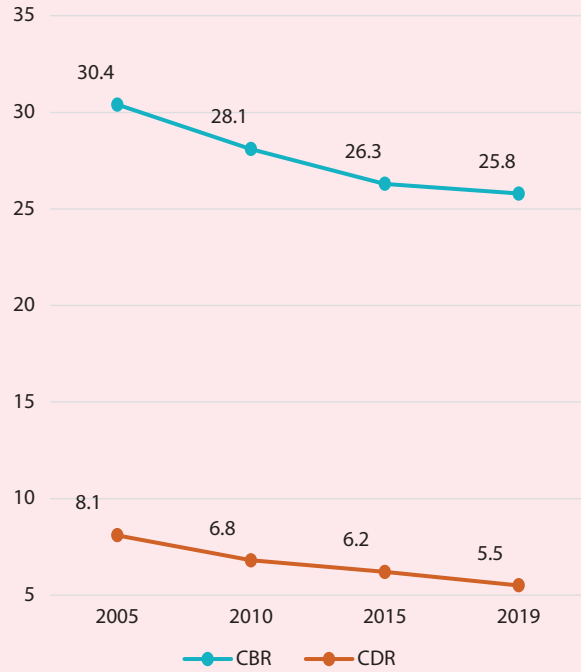


Figure 3: Life Expectancy At Birth Trend

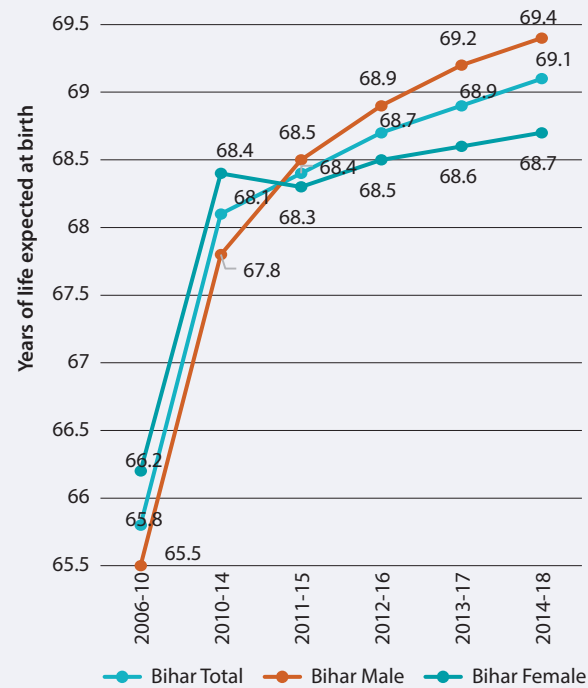


Figure 4: NNMR, TFR & Still Birth Trend

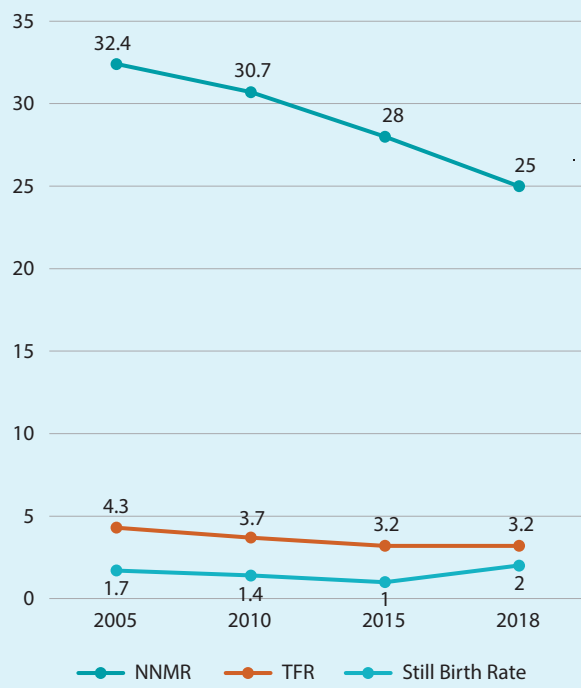


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

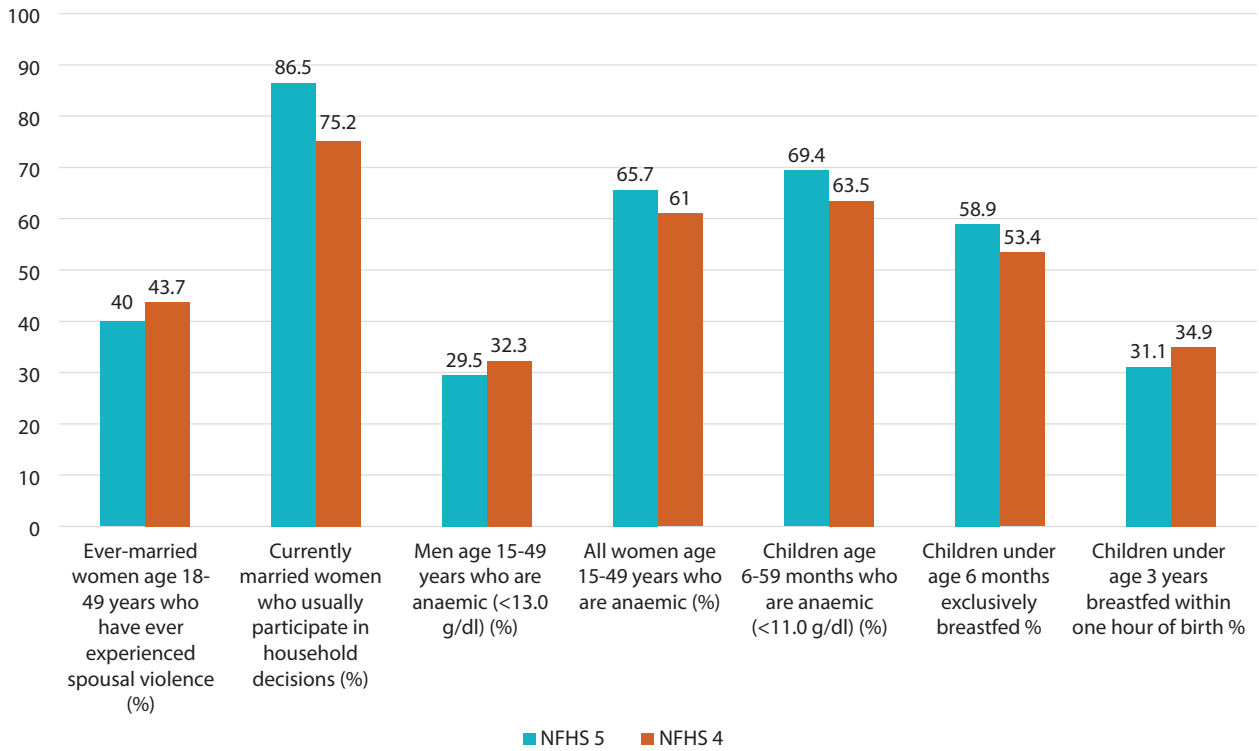


Figure 6: Top 15 causes of DALYs, 1990-2019

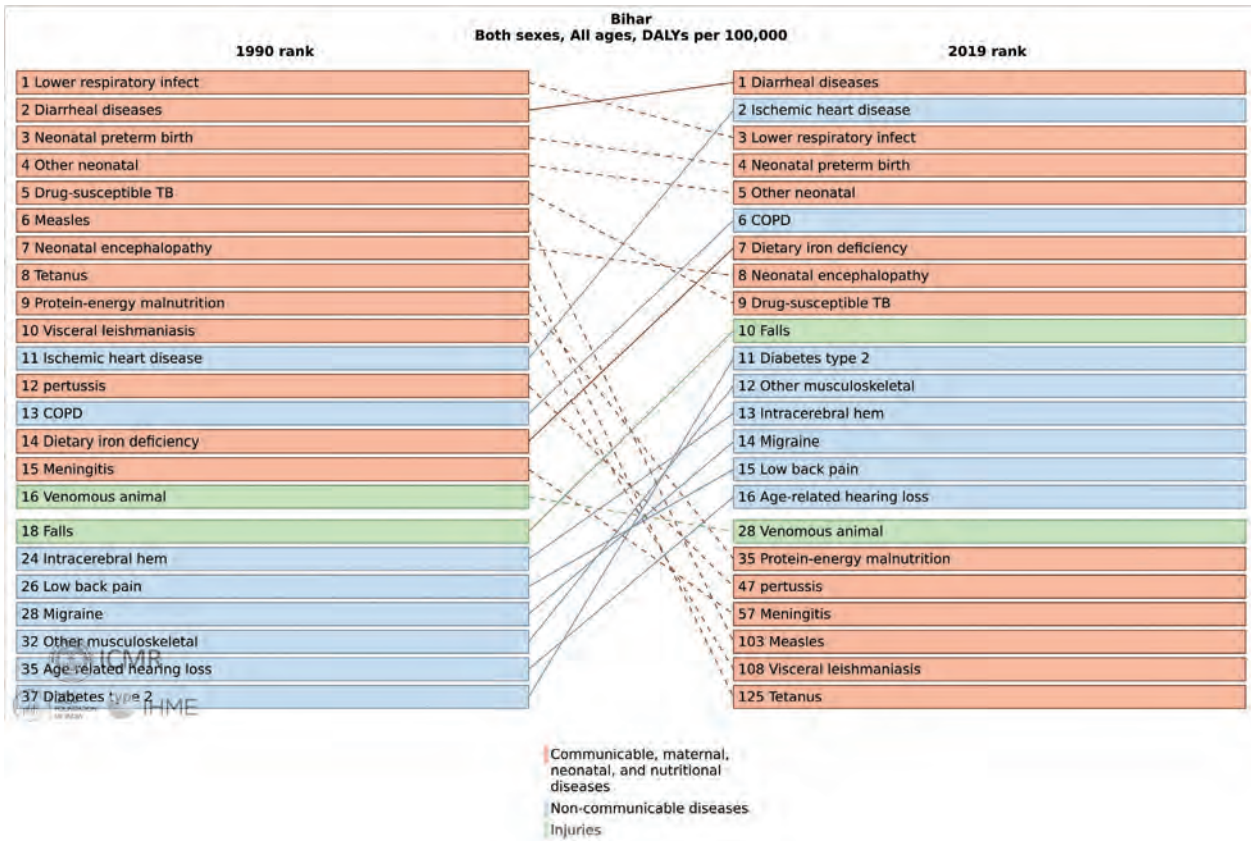


Figure 7: Top 15 risk of DALYs, 1990-2019

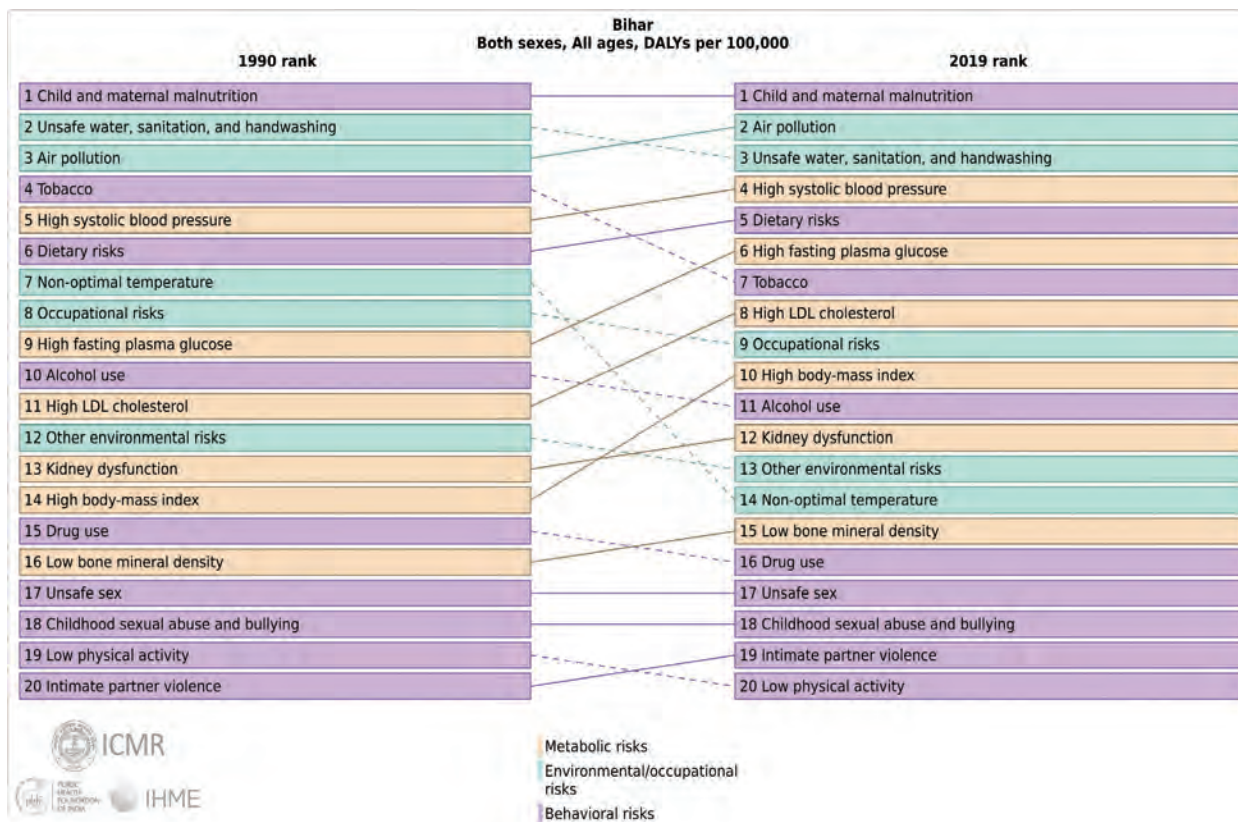


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

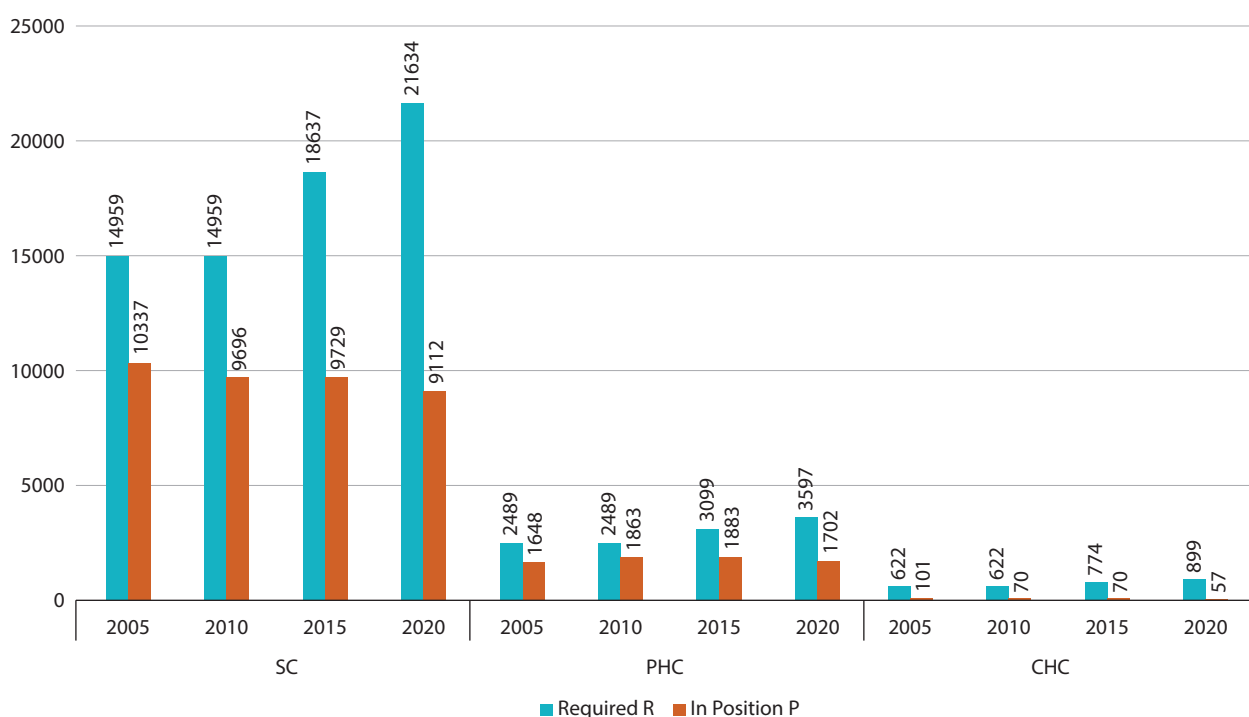


Figure 9: Year Wise Health Infrastructure Shortfall (%)

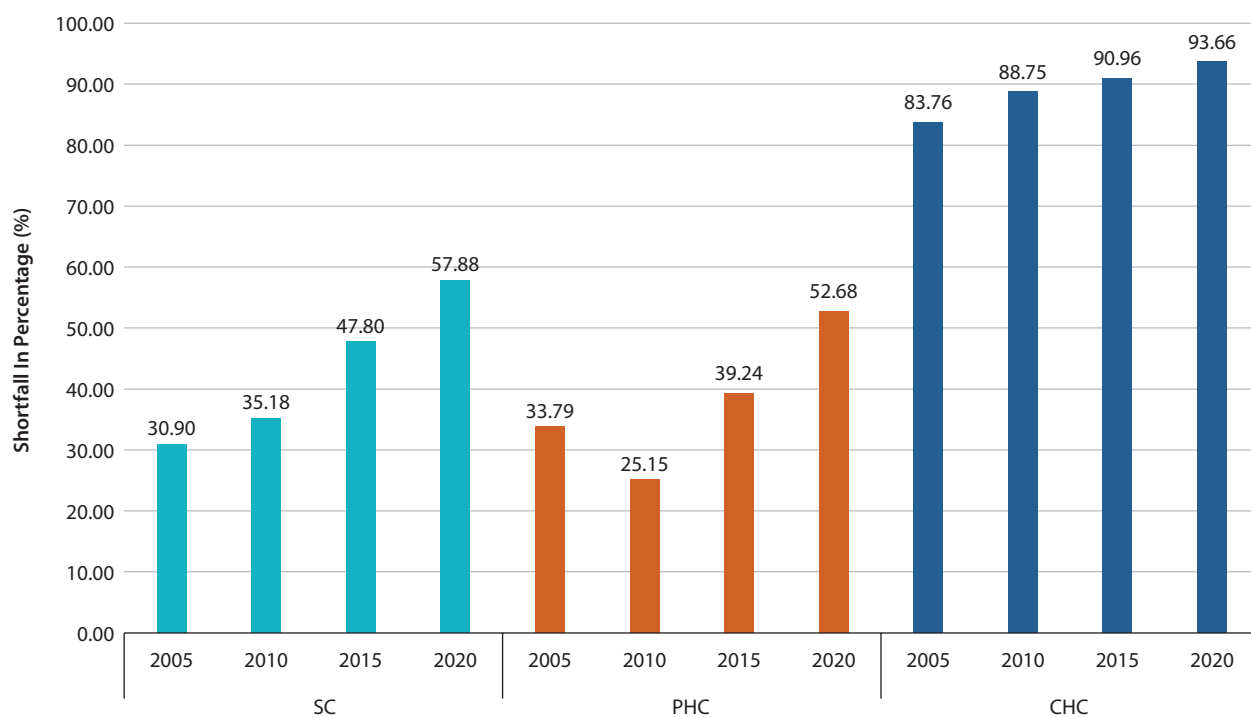
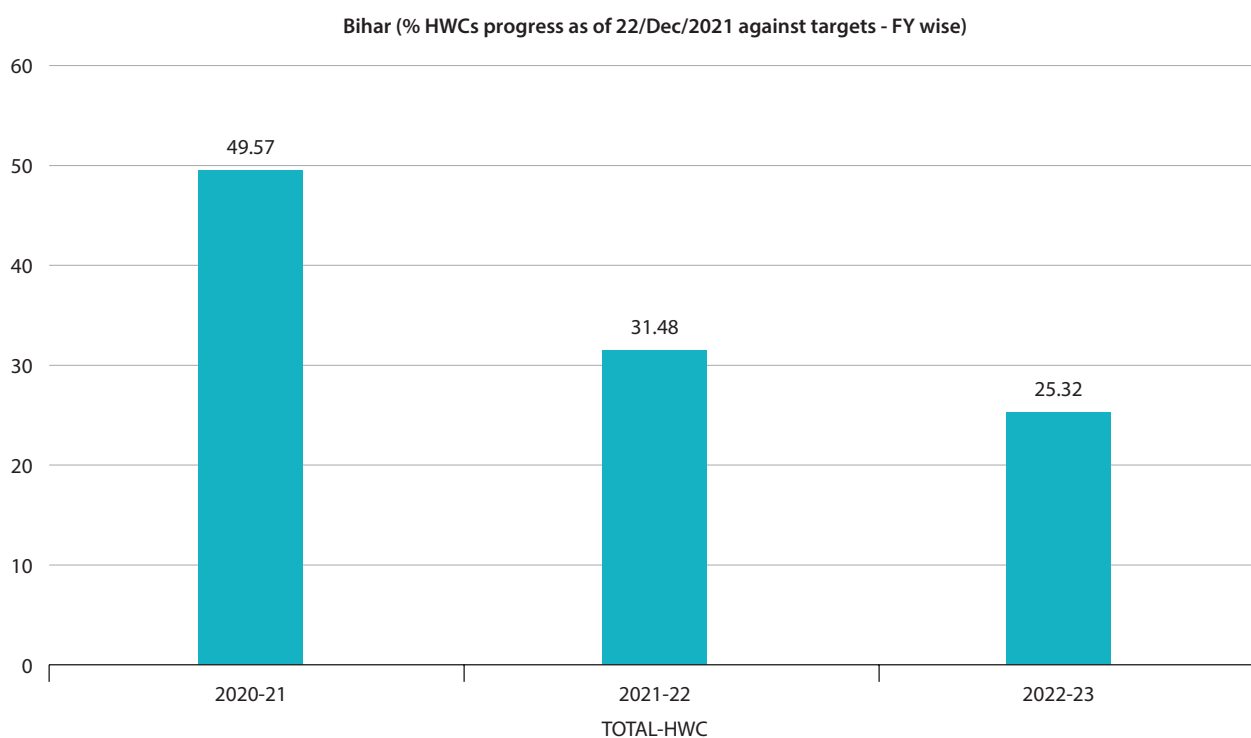


Figure 10: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)																
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted^ (Height For Age) (%)	Children Under 5 Years - Wasted^ (Weight For Height) (%)			
1.	Bihar	NFHS 4 Total	934	12.3	N/A	42.5	24.1	0.5	1	21.2	14.4	63.8	77.1	7.5	48.3	20.8			
2.	Bihar	NFHS 5 Urban	940	11.6	74.9	27.9	62.3	1.3	7.3	11.5	32.4	84.1	77.4	9.2	36.8	21.6			
3.	Bihar	NFHS 5 Rural	903	15.1	54.5	43.4	54.6	0.7	3.4	13.9	24	75	83.4	11.2	43.9	23.1			
4.	Bihar	NFHS 5 Total	908	14.6	57.8	40.8	55.8	0.8	4	13.6	25.2	76.2	82.7	10.9	42.9	22.9			
5.	Araria	NFHS 5 Total	885	19.5	43.7	52	46	0.1	1.7	15.9	25.8	66.2	71.1	12.8	49.9	23.9			
6.	Arwal	NFHS 5 Total	815	15.6	62.5	37.5	60.5	0.5	3.4	12.2	34.5	79.2	89	11.5	45.6	36.8			
7.	Aurangabad	NFHS 5 Total	886	15.4	67.6	27.3	69.4	0.9	4.3	7.2	29.3	77.5	90.6	5.8	41.2	32.9			
8.	Banka	NFHS 5 Total	991	13.6	55.7	49.4	71.5	0.7	4.7	9.7	31.7	79.8	89.5	2.8	46.7	26.9			
9.	Begusarai	NFHS 5 Total	1058	13.2	62.3	49.5	55.8	1	2.9	16	21.6	86	80.8	4.6	37.8	21			
10.	Bhagalpur	NFHS 5 Total	879	16.3	65.6	42.4	57.4	0	9.1	12.8	27.6	77.2	81	8.1	40	21.2			
11.	Bhojpur	NFHS 5 Total	872	9.6	64.1	31.2	63.9	2.2	4.1	11.8	33.5	86.9	80.6	7.7	40.7	31.3			
12.	Buxar	NFHS 5 Total	886	11.4	68.1	30.8	60.5	1	3.8	9.1	27.4	89.5	81.7	8.3	39.6	33.2			
13.	Darbhanga	NFHS 5 Total	812	25.3	49.4	45.1	61.3	0.4	4.9	12.7	24.9	69.9	80.7	14	45.4	19.3			
14.	Gaya	NFHS 5 Total	863	9.7	59.4	42.8	73.3	1.4	4.4	5.9	25.1	76.6	84.2	12.5	47.4	24.3			
15.	Gopalganj	NFHS 5 Total	943	12.7	63.3	28	57.3	0.2	3.3	19.4	27.9	85.9	97.9	13.8	34.2	21.5			
16.	Jamui	NFHS 5 Total	986	14.3	48.7	51.9	69.6	0.9	5.3	9.5	37.9	73.4	80.2	3.3	43	19.4			
17.	Jehanabad	NFHS 5 Total	1066	13.2	63.2	41.6	52.5	1.5	4.2	13	17.4	89.1	79.1	6.6	41.3	36.6			
18.	Kaimur (Bhabua)	NFHS 5 Total	944	18.1	66	27.1	78.6	0.4	7.3	3.7	25.6	83.3	90.4	13.4	44.1	27.3			
19.	Katihar	NFHS 5 Total	888	8.4	49.7	49.4	33.8	0.5	1.7	22.4	15.3	66.9	82.6	13.8	43.9	23.5			
20.	Khagaria	NFHS 5 Total	918	15.6	51.8	44.9	40.9	0.2	2.8	15.4	17.4	74.2	84.3	16.3	34.8	25.3			
21.	Kishanganj	NFHS 5 Total	1016	8.1	48	36.6	25.3	0.5	2.5	21.7	17.1	54.6	80.9	13.1	38.8	23.9			

22.	Lakhisarai	NFHS 5 Total	886	15.1	57.9	56.1	67	1.2	5.2	11.7	28	75.8	76.8	42.7	25.6	
23.	Madhepura	NFHS 5 Total	1058	9.5	47.6	52	55.8	0.3	4.3	11.1	20.9	75	87.7	6.9	46.3	20.6
24.	Madhubani	NFHS 5 Total	805	19.2	53.2	39.2	47.4	0.7	2.2	17.7	34.9	73.7	85.6	12	43.3	17.1
25.	Munger	NFHS 5 Total	966	15.2	69.5	34.7	68.6	0.6	8.6	10.3	36.8	93.2	84.8	5.1	35.5	26.7
26.	Muzaffarpur	NFHS 5 Total	685	13.2	63	32.9	66.1	0.9	4.7	12.1	28.2	72.5	83.7	17.2	42.6	19.9
27.	Nalanda	NFHS 5 Total	959	12.8	56.1	42	72.3	0.6	6	7.5	29.3	80.3	83.8	9.6	42.6	27.8
28.	Nawada	NFHS 5 Total	865	8.1	62.1	43.3	69.8	0.9	7.3	6.5	31.6	79.9	85.2	5.1	49.4	18.2
29.	Pashchim Champaran	NFHS 5 Total	904	20	52.5	39.1	50.7	0.2	2.7	12.1	25.4	79.5	82.7	13.6	43.5	13.2
30.	Patna	NFHS 5 Total	1002	10.2	67.6	26.6	49.3	1.9	4.9	15	17.9	89.1	72.5	8.3	34.5	27.5
31.	Purba Champaran	NFHS 5 Total	841	19.4	50.2	49.2	49.9	1.1	2.5	17.2	21.7	61.5	73.8	15.4	49.1	16.8
32.	Purnia	NFHS 5 Total	938	10.2	47.5	51.2	25.7	0.3	0.9	20.2	11.1	68.9	81.8	5.5	43.5	25.8
33.	Rohtas	NFHS 5 Total	924	17.2	76.5	30.3	73.9	1.2	6.1	5.9	34.2	89.1	93.6	2.6	40	31.8
34.	Saharsa	NFHS 5 Total	1034	12.8	43.1	51	44.7	0.8	0.9	16.7	11.7	70.4	88.5	10.3	47.8	20.5
35.	Samastipur	NFHS 5 Total	890	19	54.3	49.8	63.7	0.6	4.4	11.1	23.5	83.4	85.5	17.7	44	21.3
36.	Saran	NFHS 5 Total	779	9.4	65.6	26.2	41.1	0.4	4.9	17.3	30.7	73	85.7	7.1	39.7	28.8
37.	Sheikhpura	NFHS 5 Total	888	9.7	55	46.1	78.8	0.6	4.8	3.2	28.4	89.2	86.6	5.5	53.6	16.3
38.	Sheohar	NFHS 5 Total	1017	18.1	52.5	34.6	65.6	1.1	4.3	10.4	25.3	74.3	73.5	3.5	34.4	35.4
39.	Sitamarhi	NFHS 5 Total	1009	20.7	51.7	46.8	52.8	1.2	2.1	17	20.3	64.4	76.1	16.3	54.2	16.2
40.	Siwan	NFHS 5 Total	1060	8.2	70.9	21.3	53.5	0	7	15.4	30.3	86.4	83.2	10.8	36.7	18.2
41.	Supaul	NFHS 5 Total	884	14.2	42.1	55.9	63.7	0.6	1.5	12.1	30.9	80.4	80.5	14.5	42.3	25.8
42.	Vaishali	NFHS 5 Total	1118	13.5	62.4	44.9	45.8	0.9	1.9	16.7	24.5	81.6	84.2	11.7	38.3	19.6

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'; Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or pentavalent vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups) including the milk or milk products food group

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color - Best five performing districts within the districts for a particular indicator

B. Red - Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups) not including the milk or milk products food group

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE



HEALTH DOSSIER 2021

Reflections on Key Health Indicators



CHANDIGARH

**Till date three visits have been undertaken to Chandigarh under
4TH, 8TH and 10TH COMMON REVIEW MISSION**

CHANDIGARH

1. BACKGROUND

1.1 State Profile

Chandigarh has a geographical spread^a of 114 km² and is estimated to have a population of over 0.1 crores^b. It is projected that the population would reach around 0.12 crores by 2021^c. As per Census 2011, the Scheduled Caste (SC) population is 1.99 lakh (18.86%). In Chandigarh, only 2.70% of the population reside in rural areas, while 97.30% constitute the urban population. The total length of roads^d in the UT is 2,821 km (0.06%^e) in which the length of the national highways is 15 km.

A detail report on the key indicators has been attached as Annexure 1.

1.2 Demography

The UT's Sex ratio at birth is 838 females for every 1000 males (NFHS 5). The crude birth rate and the crude death rate have declined from 17.3 & 4.5 in 2005 to 13 & 4 in 2019, respectively (Annexure 2; figure 2). The literacy rate increased from 81.9% in 2001 to 86.0% in 2011, with male & female literacy rates being 90.0% and 81.2%, respectively (Annexure 1.1). As per ESAG 2018 report, the Gross Enrolment Rate (GER)^f is 57.6% for higher education, 83.28% for senior secondary education, 87.19% for secondary education, 86.68% for elementary education, and 81.44% for primary education.

1.3 Elderly

Population ageing has profound social, economic, and political implications. In Chandigarh, 23.0% of elderly females and 88.0% elderly males living in rural areas and 71.0% of elderly females and 23.0% elderly males in urban areas are economically fully dependent on others. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 19% for men and 36% for women, as opposed to the national average of 31% for both (Elderly in India 2016).

^a RHS 2020

^b Census 2011

^c Census Population Projection Report 2019

^d Basic Road Statistics 2019, MoRTH

^e Percentage of total length of roads in Chandigarh

^f Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The UT has been able to provide RMNCHA+N^g services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^h, institutional deliveries, C sections, distribution of IFAⁱ tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined^j from 160 (2007-09) to 85 (2016-18). In Chandigarh, 105.6% of women received 4 ANC check-ups (Annexure 1.4). As reported in HMIS 2019-20, around 99.9% of the deliveries took place in institutions, out of which 100.0% took place in public health facilities. Total percentage of C-sections (33.8%) is higher than the WHO's standard (10-15%). Around 15.1% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years decreased from 75.9% (NFHS-4) to 60.3% (NFHS-5). Anaemia in females of reproductive age group is seven times more than in men of similar age group (Annexure 2, figure 3).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the UT has shown a significant decline in IMR from 19 (2005) to 13 (2019), which is lower than the national average of 30 (Annexure 2, Figure 1). Full vaccination^k coverage for children between 12 – 23 months of age declined from 93.2% (NFHS 4) to 82.8% (NFHS 5). An increase in childhood anaemia from 73.1% to 54.6% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 3). The burden of under-5 years stunting declined from 28.7% (NFHS 4) to 25.3% (NFHS 5). For under-5 years wasting, the burden declined from 10.9% (NFHS 4) to 8.4% (NFHS 5).

2.3 Family Planning

As per NFHS 5 report, the total unmet need in the UT is 6.9% and unmet need for spacing is 2.5%. Approximately 55.6% of married women reported to avail any modern method of family planning in the UT; with sterilization acceptance among females being 19.0% and 0.3% for males (NFHS 5).

2.4 Communicable Diseases

The UT has 1 functional IDSP unit in place^l. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 19.67%^m of total disease burden (Annexure 1.4). For TB, the annualized total case notification rate is 511% and NSPⁿ success rate is 84%, as opposed to the national averages of 163% and 79%, respectively. For NLEP^o, the reported prevalence rate of 1.03 per 10,000

^g Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^h Antenatal Check up

ⁱ Iron Folic Acid Tablets

^j SRS MMR Bulletins; for the smaller states & UTs, inclusive of Delhi

^k NFHS 5 State/UT Factsheet, based on information from vaccination card only

^l QPR NHM MIS Reports (status as on 01.03.2020)

^m Includes all UTs except Delhi

ⁿ New Smear Positive

^o National Leprosy Eradication Programme

population is more than the national average of 0.61. In FY 2019-20, no deaths due to Dengue, Malaria, and Kala Azar are reported in the UT.

2.5 Non-Communicable Diseases (NCDs) and Injuries

NCDs contribute to 67.90% of DALYs and injuries contribute to 12.42% of DALYs in the UT^{[12]p}. The UT is positioned 29th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 0.6% of women and 12.1% of men used any kind of tobacco, while 0.3% of women and 18.6% of men consumed alcohol.

2.6 Health Care Financing

The UT's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 37,571 crores. The UT is positioned 4th out of 32 states in terms of per capita^q of ₹ 3,20,300.

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 4). Currently there are 48 UPHCs in place against the required 24. The UT has 2 DHs, 1 SDHs and 1 government medical college. Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), 29 HWCs (2 PHCs and 27 UPHCs) are operationalized in Chandigarh as of 22nd December 2021^r.

The doctor to staff nurse ratio in place is 1:1, with 4 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1.5). Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 6051.95 availed (events) OPD services and 199.06 availed (events) IPD services.

^p Includes all UTs except Delhi

^q Directorate of Economics & Statistics

^r AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^s

Indicator	Chandigarh 2011 ¹	India
Total Population (In Crore)	0.1	121.08
Rural (%)	2.75	68.85
Urban (%)	97.25	31.14
Scheduled Caste population (SC) (in crore)	0.019 (18.86%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0	10.45 (8.63%)
Total Literacy Rate (%)	86	72.99
Male Literacy Rate (%)	90	80.89
Female Literacy Rate (%)	81.2	64.64
Number of Districts in the Chandigarh ²	1	
Number of districts per lakh population in Chandigarh (Census 2011)	Population ¹	Districts ¹ (Numbers)
	≥ 10 Lakhs - <15 Lakhs	1

1.2 Key Health Status & Impact Indicators

Indicators	Chandigarh	India
Infant Mortality Rate (IMR) ³	13	30
Crude Death Rate (CDR) ³	4	6
Crude Birth Rate (CBR) ³	13	19.7
Maternal Mortality Ratio (MMR) ³	N/A	113
Neo Natal Mortality Rate (NNMR) ⁴	N/A	23
Under Five Mortality Rate (U5MR) ⁴	N/A	36
Still Birth Rate ⁴	N/A	4
Total Fertility Rate (TFR) ⁴	N/A	2.2
Life expectancy at birth ⁵	N/A	69.4
Sex Ratio at Birth ⁴	N/A	899

^s Sources are mentioned at the end of Annexure 1.

1.3 Key Health Infrastructure Indicators[†]

Indicators				Numbers (Total)
Number of District Hospitals ²				2
Number of Sub District Hospital ²				1
Number of Government (Central + State) Medical College ⁶				1
Number of Private (Society + Trust) Medical Colleges ⁶				0
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	N/A	6	12	15
PHC-HWC	2	0	0	0
UPHC-HWC	27	3	3	3
Total-HWC	29	9	15	18
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	N/A	N/A	N/A	
Number of Primary Health Centres (PHC)	N/A	N/A	N/A	
Number of Sub Centres (SC)	N/A	N/A	N/A	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	2	1	2	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	24	48	-100.00	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	N/A	N/A	N/A	
Number of PHC	N/A	N/A	N/A	
Number of SC	N/A	N/A	N/A	
Patient Service ⁹		Chandigarh	India	
IPD per 1000 population		199.06	62.6	
OPD per 1000 population		6051.95	1337.1	
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population		630.07	36.4	

[†] Sources are mentioned at the end of Annexure 1

1.4 Major Health Indicator^u

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Chandigarh^v	India
% DALY ^w accountable for CMNNDs ^x	19.67	27.46
% DALY accountable for NCDs	67.90	61.43
% DALY accountable for Injuries	12.42	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Chandigarh	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	74.4	20.7
RMNCHA+N		
Maternal Health⁹	Chandigarh	India
% 1st Trimester registration to Total ANC Registrations	73.2	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	105.6	79.4
Total Reported Deliveries	28143	21410780
% Institutional deliveries to Total Reported Deliveries	99.9	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	100	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	0	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	33.8	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	33.8	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	N/A	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	15.1	53.4
Neonatal⁹	Chandigarh	India
% live birth to Reported Birth	97.8	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	24	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	86.8	89.9

^u Sources are mentioned at the end of Annexure 1

^v For other UTs including Chandigarh except Delhi

^w Disability Adjusted Life Years

^x Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established^{11y}	Chandigarh	India
Sick New Born Care Unit (SNCU)	3	895
New Born Stabilization Unit (NBSU)	3	2418
New Born Care Corner (NBCC)	7	20337
Child Health & Nutrition¹⁰	Chandigarh (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	4.3	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	N/A	60.6
Children under 5 years who are underweight (weight-for-age) (%)	20.6	32.1
Child Immunization¹⁰	Chandigarh (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	82.8	83.8
Children age 12-23 months who have received BCG (%)	96.8	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	87.9	87.9
Family Planning¹⁰	Chandigarh (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	2.5	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Chandigarh	India
Number of districts with functional IDSP unit	1	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Chandigarh	India
Annualized total case notification rate (%)	511	163
New Smear Positive (NSP) Success rate (in %)	84	79
National Leprosy Eradication Programme (NLEP)¹¹	Chandigarh	India
Prevalence Rate/10,000 population	1.03	0.61
Number of new cases detected	134	1,14,359
Malaria, Kala Azar, Dengue¹¹	Chandigarh	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706

HIV¹⁰	Chandigarh (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	20.3	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	53.6	30.7
Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Chandigarh (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	14.5	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	18.7	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	6	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	7.1	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Chandigarh (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	0.6	8.9
Men who use any kind of tobacco (%)	12.1	38
Women who consume alcohol (%)	0.3	1.3
Men who consume alcohol (%)	18.6	18.8
Injuries		
Road Traffic Accident¹²	Chandigarh	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	29	N/A
Total number of fatal Road Accidents	100	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	34.1	33.7
Number of persons killed in Road Accidents	104	115113

1.5 Access to Care

Health Systems Strengthening

Ambulances & Mobile Medical Units (MMU)¹¹	Chandigarh	India
Number of Districts equipped with MMU under NRHM	0	506
Number of Districts equipped with MMU/Health Units under NUHM	1	31

Number of ERS vehicles operational in the States/UTs Under NHM	Chandigarh	India
102 Type	0	9955
104 Type	0	605
108 Type	6	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	0	11070
Key Domain Indicators^{aa}		
ASHA¹³	Chandigarh	India
Total number of ASHA targeted under NRHM	N/A	946563
Total number of ASHA in position under NRHM	N/A	904211
% of ASHA in position under NRHM	N/A	96
Total number of ASHA targeted under NUHM	N/A	75597
Total number of ASHA in position under NUHM	N/A	64272
% of ASHA in position under NUHM	N/A	85
Community Process¹¹	Chandigarh	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	0	554847
Number of Mahila Arogya Samitis (MAS) formed	0	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Chandigarh	India
DH	1	796
CHC	0	6036
PHC	0	20273
UHC	2	126
UPHC	0	3229
Human Resource for Health¹⁴		
HRH Governance	Chandigarh	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	

Overall Vacancies (Regular + contractual)	Specialists + MO MBBS (%)	8				
	Dentists (%)	28				
	Nurse (%)	14				
	LT (%)	3				
	ANM (%)	10				
HRH Distribution		Sanctioned	In Place			
Doctors (MO & specialists) to staff nurse ¹⁴		1:1	1:1			
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴		4 per 10,000	4 per 10,000			
Regular to contractual service delivery staff ratio ¹⁴		1:1	1:1			
Ranking: Human Resource Index of Chandigarh¹⁵						
Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^y	46	208	192	16	0	92.7
Staff Nurse	553	239	335	-96	218	
Lab Technician	108	70	98	-28	10	
Pharmacists	66	92	111	-19	0	
MO MBBS ^z	103	230	167	63	0	
Specialist ^{aa}	104	119	111	8	0	

1.6 Healthcare Financing^{bb}

National Health Accounts (NHA) (2017-18)	Chandigarh	India
Per Capita Government Health Expenditure (in ₹)	N/A	1753
Government Health expenditure as % of Gross Domestic Product (GSDP)	N/A	1.35
Government Health Expenditure as % of General Government Expenditure (GGE)	N/A	5.12
OOPE as a Share of Total Health Expenditure (THE) %	N/A	48.8

^y MPW – Multi Purpose Health Worker (Female + Male)

^z MO MBBS (Full Time)

^{aa} Specialist (All Specialist)

^{bb} Sources are mentioned at the end of Annexure 1

National Sample Survey Office (NSSO) (2017-2018)	Chandigarh		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	N/A		33	26
IPD - % of hospitalized cases using public facility	N/A		46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	N/A		472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	N/A		845	915
IPD - Per hospitalized case (in INR) - Public	N/A		5,729	5,939
IPD - Per hospitalized case (in INR) - Private	N/A		28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	N/A		18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	N/A		53	43
Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	N/A		2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	N/A		20,692	26,701
State Health Expenditure	Chandigarh		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	N/A		5 ^{cc}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{cc} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

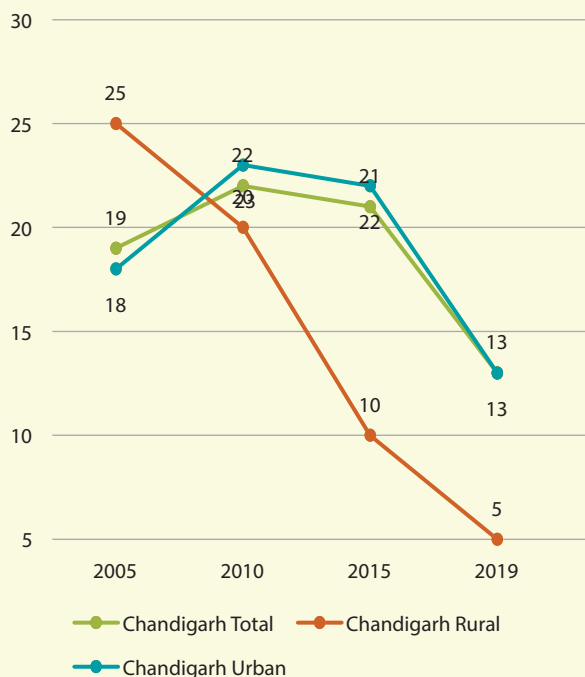


Figure 2: CBR & CDR Trend

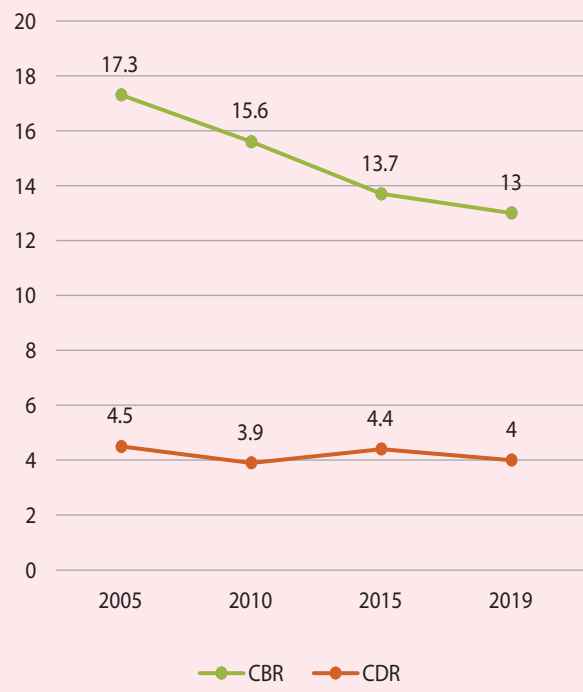


Figure 3: Comparison of Key NFHS 5 & 4 Indicators

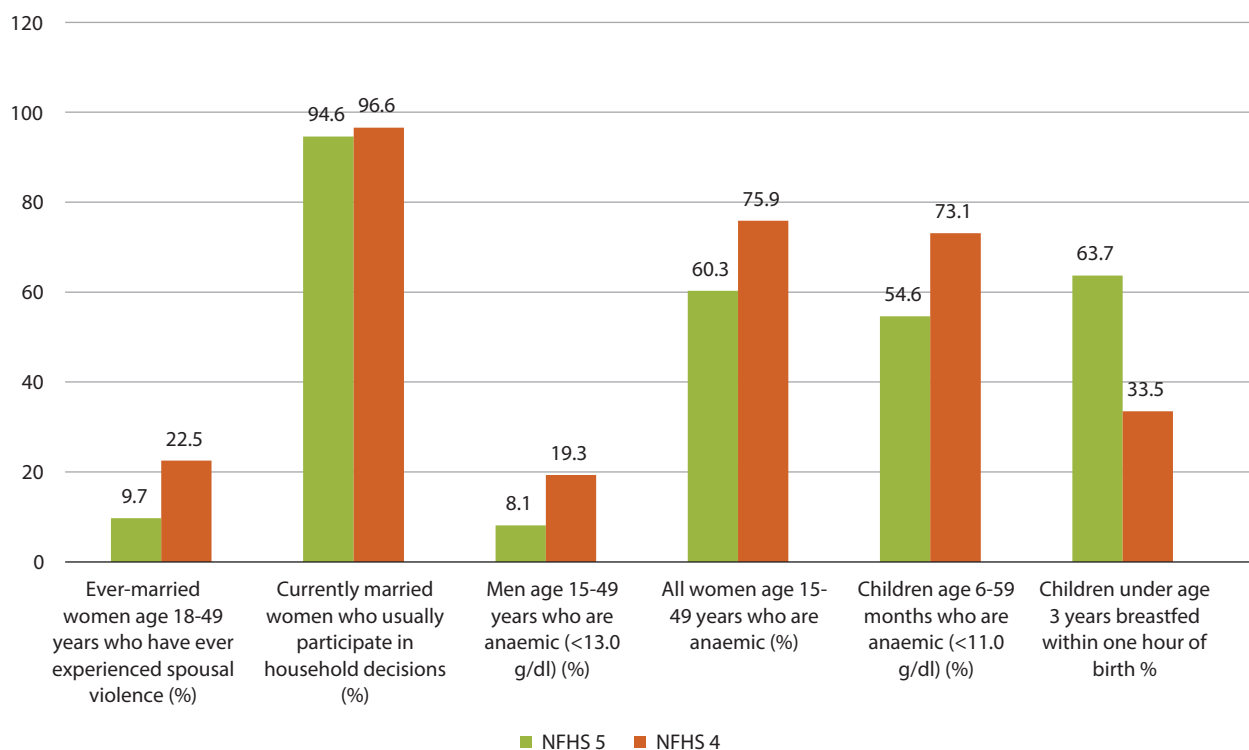


Figure 4: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

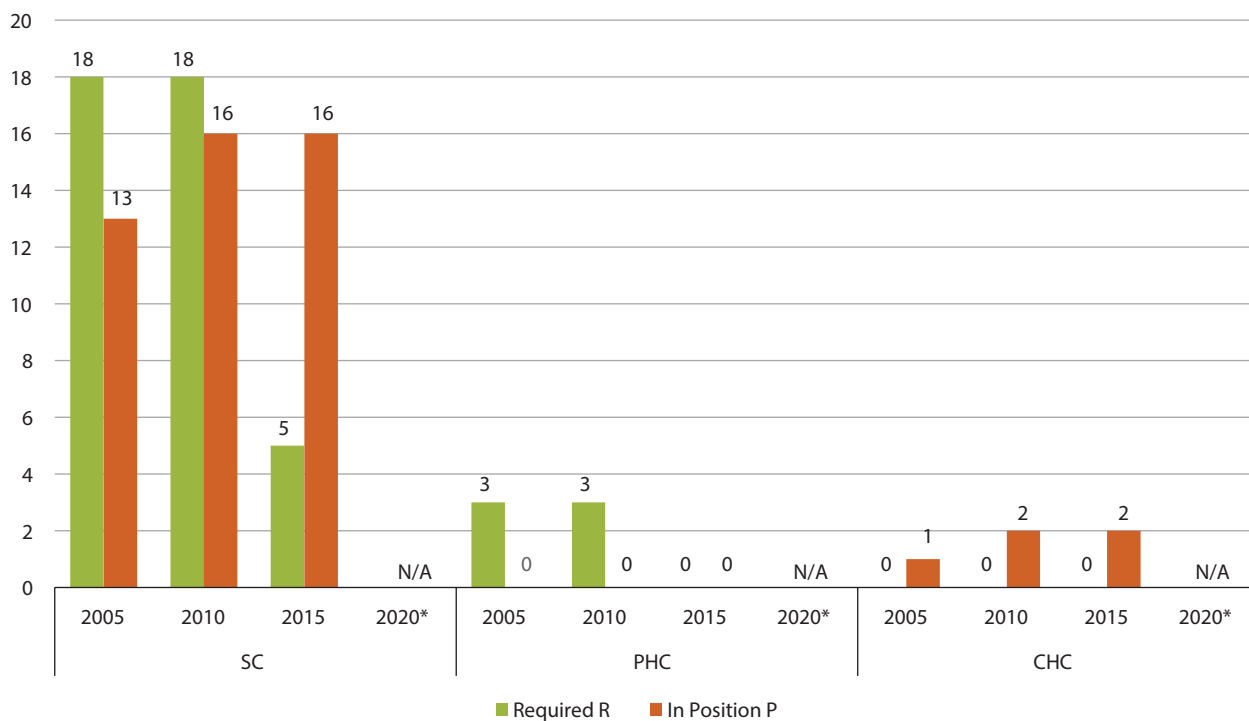
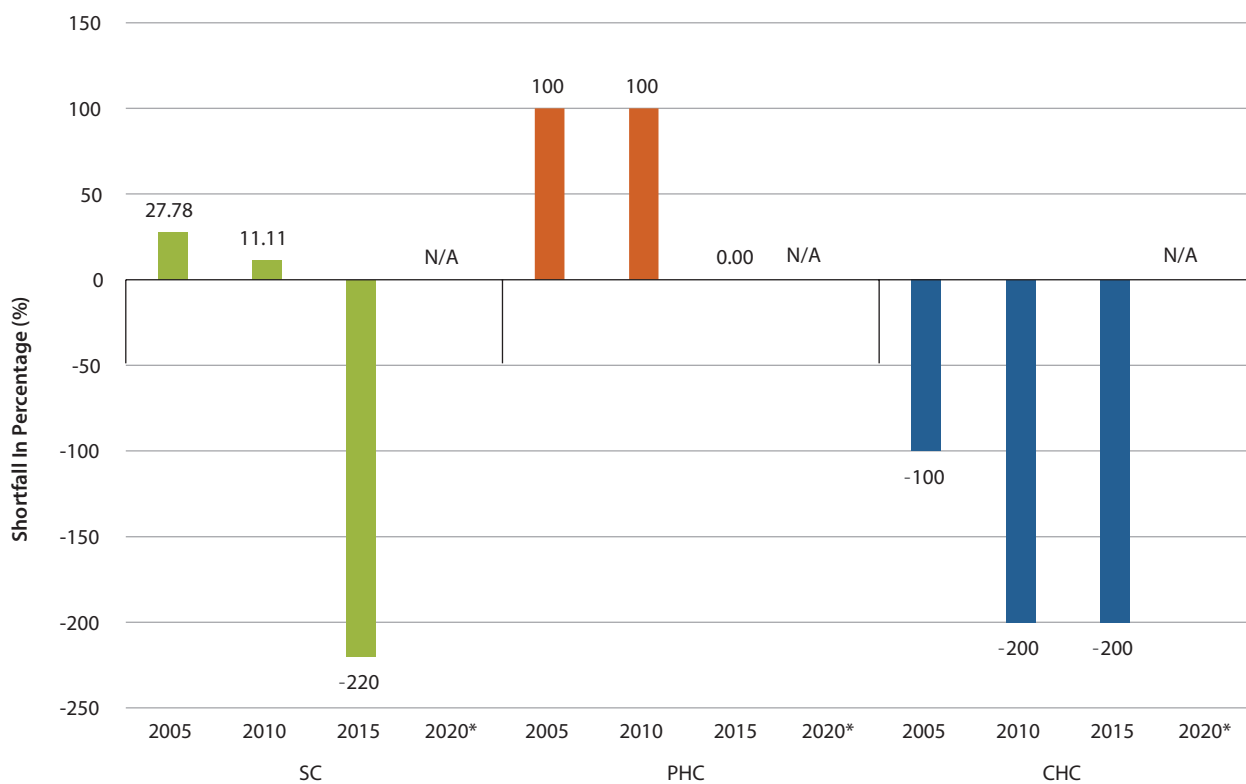
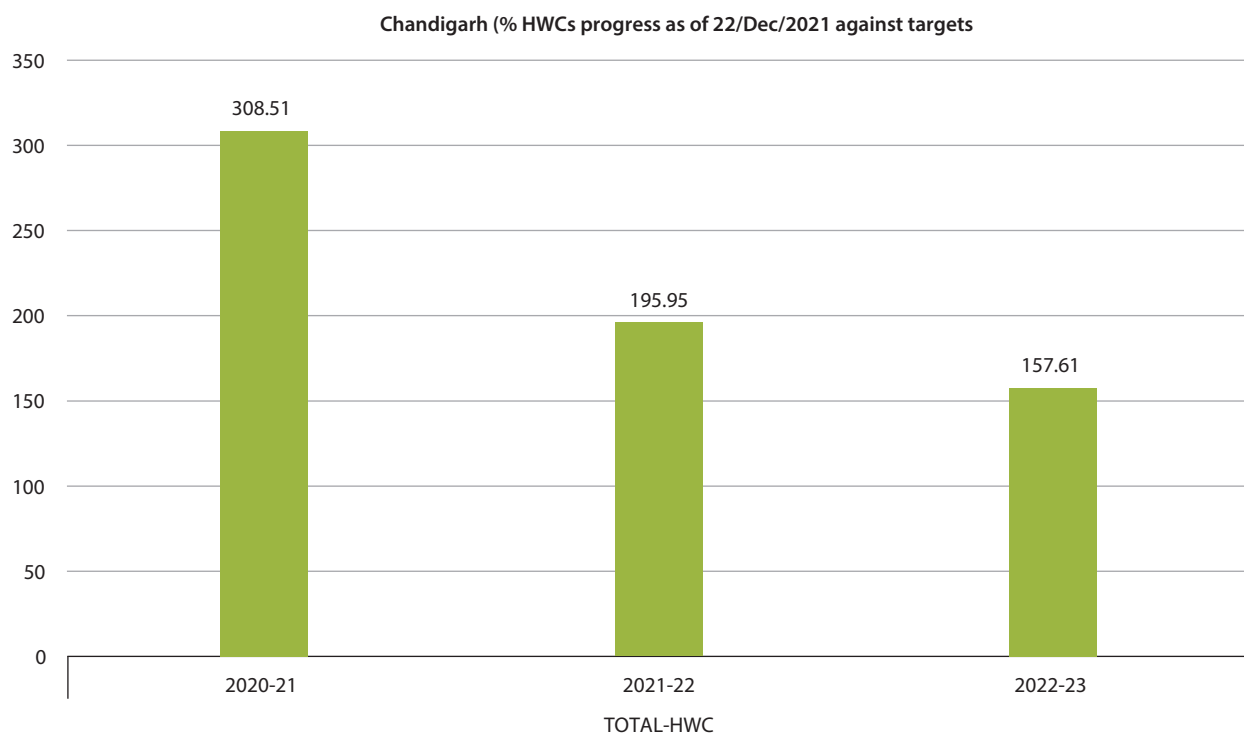


Figure 5: Year Wise Health Infrastructure Shortfall (%)



* Not Applicable as per RHS (Rural) 2020

Figure 6: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)													
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted ^Δ (Height For Age) (%)	Children Under 5 Years - Wasted ^Δ (Weight For Height) (%)
1	Chandigarh	NFHS 4 Total	981	21.3	NA	12.7	74	5.4	27.3	6.3	64.5	91.6	93.2	0	28.7	10.9
2	Chandigarh	NFHS 5 Total	838	32.2	78.7	9.7	77.4	4.2	31.1	6.9	78.7	96.9	82.8	19	25.3	8.4
3	Chandigarh	NFHS 5 Rural	NA	NA	57.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Chandigarh	NFHS 5 Urban	820	32.3	78.9	9.8	77.5	4.3	31.2	7	79.1	97	83.6	19.1	25.2	8.3

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'. Out of two indicators with 'either vaccination card or mother's recall & vaccination card only', indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer; percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

Δ Below - 2 standard deviations, based on the WHO standard. 13 Below - 3 standard deviations, based on the WHO standard

A. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

B. ** Based on the youngest child living with the mother

C. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

D. Δ Below - 2 standard deviations, based on the WHO standard. 13 Below - 3 standard deviations, based on the WHO standard

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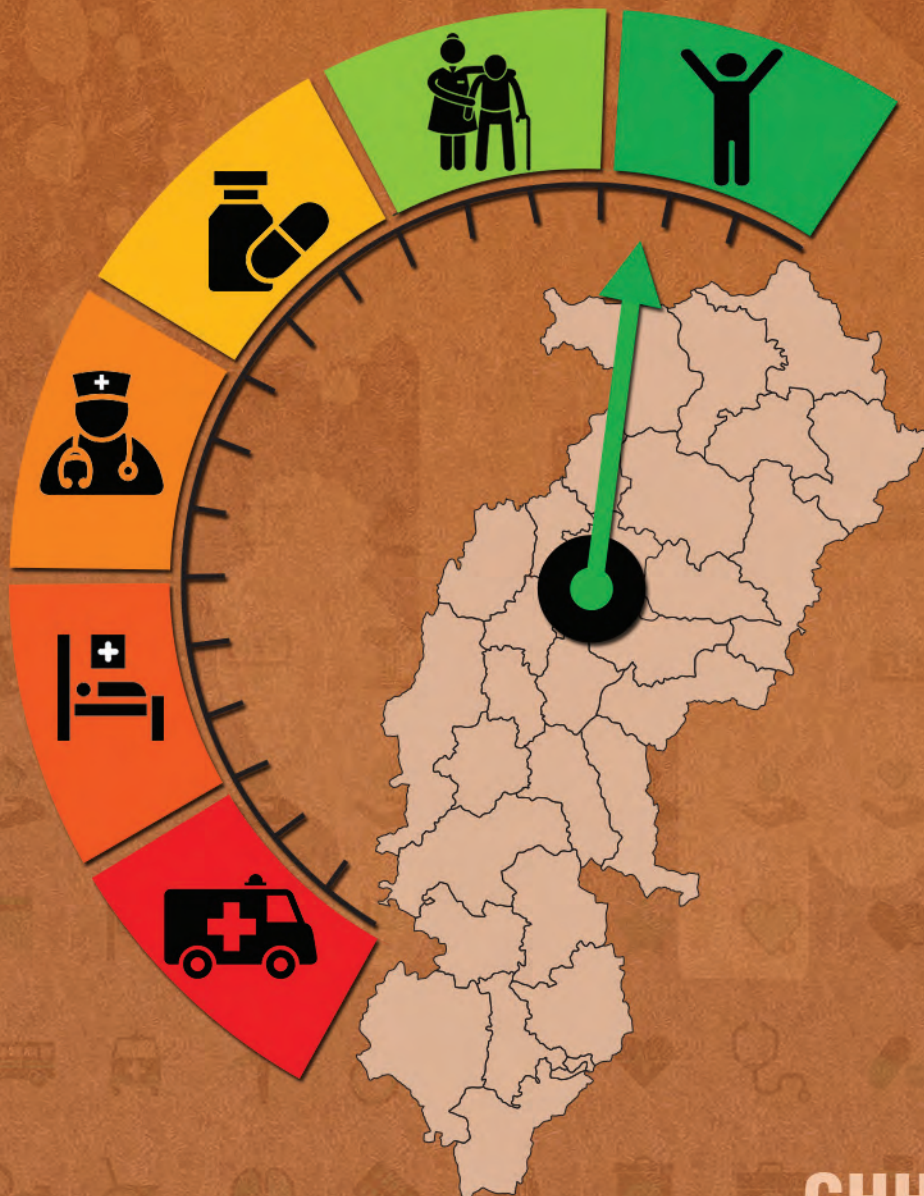
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



CHHATTISGARH

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
1 st	Kanker, Durg & Rajnandgaon	
2 nd	Bilaspur, Dhamtari & Raipur	
3 rd	Raigarh	Bastar
4 th	Raipur	Surguja
5 th	Kanker	(Kawardha) Kabirdham
6 th	Dantewada	Mahasamund
8 th	Jashpur	Korba
9 th	Balrampur	Rajnandgaon
11 th	Dhamtari	Bijapur
12 th	Raipur	Korba
13 th	Rajnandgaon	Korba

CHHATTISGARH

1. BACKGROUND

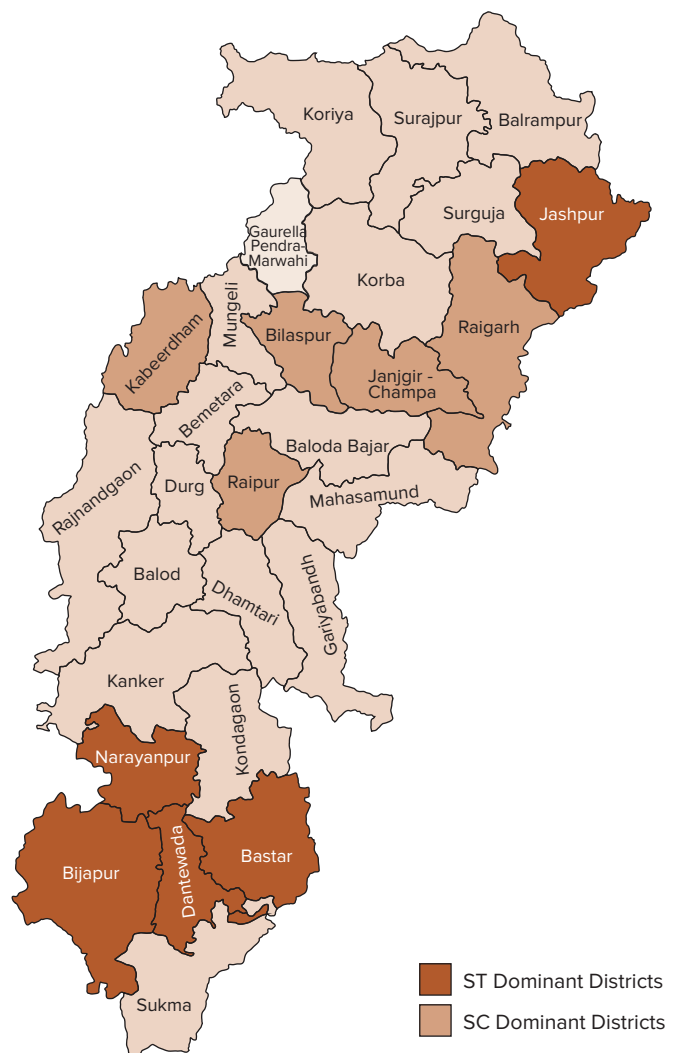
1.1 State Profile

Chhattisgarh is the 10th largest state in India for a geographical spread of 1,35,192 km² with an estimated population of 2.55 crore^a (RHS 2019). The State is divided into 27 districts, with a projected population increase to 2.94 crores by 2021 (Census Population Projection 2011 Report). As per census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 0.32 crores (12.82%) and 0.78 crores (30.62%), respectively. Out of the 27 districts, top five ST & SC dominant districts account for 27.93% of ST & 61.69% of SC population in the State (Annexure 1.1; Figure 1). As per Census 2011, 76.76% reside in rural areas, while the rest constitute the urban population.

The total length of roads^b in the State is 97,845 km (1.95%^c), in which the national highways constitute 3,232 km (2.8%^d) and state highways constitute 4,438 km (2.53%^e). Agriculture and allied activities account for nearly 80 per cent of the work force in the State^f.

A detail report on the key indicators has been attached as Annexure 1

Figure 1: Top 5 ST & SC Dominant Districts



^a Census 2011

^b Basic Road Statistics 2019, MoRTH

^c Percentage of total length of roads in State

^d Percentage of total length of National Highways in the country

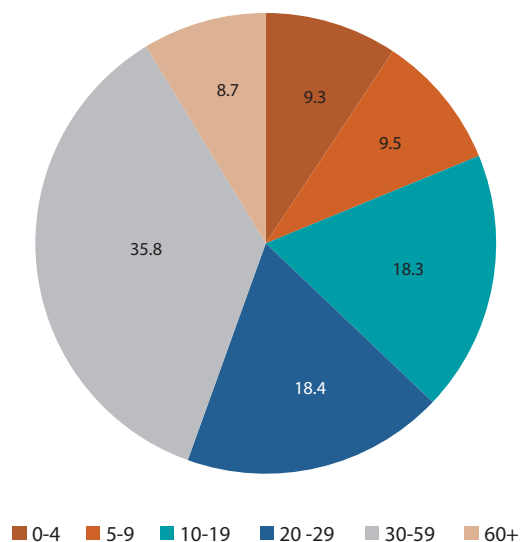
^e Percentage of total length of State Highways in the country

^f <https://knowindia.gov.in/states-uts/chhattisgarh.php>

1.2 Demography

In Chhattisgarh, out of the 27 districts, 2 districts have a population of over 30 lakhs, 2 districts have a population of 20-30 lakhs, 6 districts have a population between 10-20 lakhs and 8 districts have a population less than 10 lakhs (Annexure 1.1, State Profile). The State's sex ratio at birth of 958 females for every 1000 males is higher than the national average of 899 females for every 1000 males (Annexure 1.2). Around 18.3% of the total population is in 10-19 years' age group, 54.2% between 20 to 59 years; and 8.7% above 60 years of age (Figure 2). The crude birth and death rates have declined from 27.2 and 8.1 in 2005 to 22.2 and 7.3 in 2019 respectively (Annexure 2, Figure 2). The literacy rate increased from 64.7% in 2001 to 70.28% in 2011, with male and female literacy rates being 80.3% and 60.24%, respectively (Annexure 1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)⁹ is 15.1% for higher education, 54% for senior secondary education, 91.93% for secondary education, 100.87% for elementary education, and 100.02% for primary education.

Figure 2: Chhattisgarh - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people over 60 years constitute 8.7% of the State's total population. The life expectancy at 60 years of age is 14.4 years for males, and 16.3 years for females (2014-2018). The old age dependency ratio is 13.1 in 2011; 12 for males, 14.2 for females; 13.9 in rural and 10.5 in urban areas. As per Elderly in India 2016 report, the illness (any deviation from the state of physical and mental well-being) perception among the elderly men and women is 18% & 16% respectively, which is lower than the national average of 31% for both.

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+N^h services with major focus on primary and secondary care services under NHM. Indicators for Antenatal care (ANC)ⁱ, institutional deliveries, C sections, distribution of IFA^j tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care, have shown substantial improvement since 2005 (NFHS 4 & 5 report). The maternal mortality

⁹ Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

^h Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

ⁱ Antenatal Check up

^j Iron Folic Acid Tablets

ratio has significantly declined from 269^k (SRS MMR Bulletin 2007-09) to 159 (SRS MMR Bulletin 2018) per 1,00,000 live births. In Chhattisgarh, 93.8% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 report, Baloda Bazar, Bilaspur, Jashpur, Korba and Surjpur districts reported poor ANC coverage ranging from 46.9% to 49.5%. As reported in HMIS 2019-20, around 98.3% of the deliveries took place in institutions, out of which 76.4% took place in public health facilities. Total percentage of C-sections (15.3%) is slightly above the recommended range by the WHO (10-15%); out of which 45.5% are conducted at private facilities in the State. It is reported that around 61.6% women are given their first postpartum checkup between 48 hours and 14 days (Annexure 1.4). Prevalence of Anaemia in women aged 15-49 years has increased from 47% (NFHS 4) to 60.8% (NFHS 5). Anaemia in females of reproductive age group is more than twice than in men of similar age group (Annexure 2, Figure 5).

Refer Annexure 3 for detailed district wise comparison of NFHS 5 key indicators.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 63 (2005) to 40 (2019); yet is higher than the national average of 30 (Annexure 2, Figure 1 & Annexure 1.2). Though NNMR^l and Still Birth (per 1,000 live births) Rates have significantly declined from 33.7 and 11.9 (2005) to 29 and 9 (2018), respectively, an increasing trend from 2015 is reported (Annexure 2, Figure 4). In general, improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs^m. The life expectancy at birth has also improved from 62.4 (2006-10) to 65.2 (2014-18) (Annexure 2, Figure 3). As per NFHS 5 report, Durg, Janjgir-Champa, Kabeertham, Koriya and Rajgarh districts reported low SRBsⁿ ranging from 795 to 864; whereas Dantewada, Dhamtari, Kodagaon, Surguja and Uttar Bastar Kanker districts reported high SRB ranging from 1111 to 1296.

Full immunization coverage for children between 12 – 23 months has improved from 81.8% (NFHS 4) to 84.8% (NFHS 5). Though the burden of malnutrition declined over time^o, a wide intra-state variation in the nutritional status exists. The proportion of under 6-months children exclusively breastfed improved from 77.2% (NFHS 4) to 80.3% (NFHS 5). Prevalence of childhood anaemia, however, increased from 41.3% to 67.2% (Annexure 2, Figure 5). As per NFHS 5, Bilaspur, Gariyaband, Rajnandgaon, Surajpur and Uttar Bastar Kanker districts reported comparatively low burden of stunting, ranging from 24.8% to 28.9%; whereas Bastar, Bijapur, Dantewada, Narayanpur and Sukma districts reported high burden of stunting, ranging from 41.8% to 53.8%. For under-5 wasting, Balod, Kabeertham, Korba, Mahasamund and Rajgarh districts reported relatively low burden, ranging from 12% to 15.1%; whereas Balrampur, Bilaspur, Janjgir-Champa, Kodagaon and Uttar Bastar Kanker districts reported high burden ranging from 23% to 24.6%.

^k MMR of Madhya Pradesh/Chhattisgarh as per SRS 2007-09

^l Neonatal Mortality Rate

^m QPR NHM MIS Report (Status as on 01.03.2022)

ⁿ Sex Ratio at Birth

^o Disease Burden Trends in the States of India 1990 to 2016

2.3 Family Planning

The TFR^p has reduced from 3.4 in 2005 to 2.4 in 2018, which is higher than the national average of 2.2 (Annexure 2 Figure 4). The total unmet need in the State is reported as 8.3%, while unmet need for spacing is 3.4% (NFHS 5). Balrampur reported highest unmet need (16%), while Balod reported the lowest (2.6%). Around 61.7% of married women reported to avail any modern method of family planning in the State (NFHS 5), with sterilization acceptance being 47.5% among females and 0.8% among males.

2.4 Communicable Diseases

The State has 27 functional IDSP units in place^q. The proportion of Communicable, Maternal, Neonatal, and Nutritional Diseases [CMNND] contribute to 34.78% of total disease burden (GBD 2019) while diarrheal diseases, lower respiratory tract infection, & drug-susceptible TB being the major causes of DALY in the State (Annexure 2, Figure 6)^r. As per QPR report, for TB, the annualized total case notification rate is 136% and NSP^s success rate is 82% as opposed to the national averages of 163% and 79%, respectively. For NLEP^t, the reported prevalence rate of 2.08 per 10,000 population is higher than the national average of 0.61. In FY 2019-20, deaths from vector borne diseases include 31 from malaria, 5 from JE^u, while none from Dengue & Kala azar.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that premature deaths account for 70.1% of the total disease burden, while disability or morbidity account for 29.9%. Ischaemic heart disease, COPD & Diabetes Mellitus Type 2 remain the major causes for DALYs (Annexure 2, Figure 6). NCDs contribute 53.82% of total DALYs, while injuries contribute to 11.4% of total DALYs. The State ranks 14th in the country for the total number of fatal road accidents (Annexure 1.4). It is reported that 17.3% of women and 43.1% of men used any kind of tobacco, while 5% of women and 34.8% of men consumed alcohol. In general, low birth weight, short gestation period, high systolic blood pressure, high fasting plasma glucose, household air pollution from solid fuels, & ambient particulate matter pollution are the major risk factors for all DALYs (Annexure 2, Figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 2,66,537 crores. The State is positioned 24th out of 32 States in terms of per capita expenditure of ₹ 92,413^v. According to NHA (2017-18), the per capita Government Health Expenditure in the State is estimated as ₹ 1,516, which is less than the national average of ₹ 1,753. On the other hand, the OOPE^w as a share of Total Health Expenditure is estimated as 38.8%, which is less than the national average of 48.8%. As per NSSO 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated as ₹ 61,900 in private hospitals and ₹ 4,314 in public hospitals, while the same in urban areas is around ₹ 28,435 in private hospitals and ₹ 4,155 in

^p Total Fertility Rate

^q QPR NHM MIS Report

^r <https://vizhub.healthdata.org/gbd-compare/india>

^s New Smear Positive

^t National Leprosy Eradication Programme

^u Japanese Encephalitis

^v Directorate of Economics and Statistics of State Government

^w Out of Pocket Expenditure

public hospitals. For childbirth, OOPE in public facilities is estimated to be around ₹ 1,497 in rural areas & ₹ 2,414 in urban areas, whereas in private health facilities, it is ₹ 18,308 in rural areas and ₹ 21,936 in urban areas. In public health facilities, the share of expenditure on drugs is estimated as 37% and 41% for inpatient care; and 8% and 11% for diagnostics in rural and urban areas respectively (Annexure 1.6, Healthcare Financing).

2.7 Health Infrastructure

As per the RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Though public health facilities have increased over time, 3.09% shortfall in SCs, 6.93% shortfall in PHCs and 19.81% shortfall in CHCs still remain in Chhattisgarh (Annexure 2, Figure 9). Currently, there are 5,205 SCs, 792 PHCs & 170 CHCs in place, against the required 5,371 SCs, 851 PHCs and 212 CHCs. Similarly, in urban settings, there are 45 PHCs in place against the required 154, accounting to a shortfall of 70.78%. The State has 26 DHs, 20 SDHs and 7 Government medical colleges. In the State, 23 DHs, 3 SDH & 31 CHCs serve as functional FRUs. In tribal catchments, there are 2,817 SCs (6.34% excess), 399 PHCs (0.5% excess) and 89 CHCs in place against the required 2,649 SCs, 397 PHCs and 202 CHCs.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 3248 HWCs (2556 SHCs, 645 PHCs & 47 UPHCs) are operationalized in the State as of 22nd December 2021^x.

In Chhattisgarh, 16 districts are equipped with MMUs under NHRM, while none under the NUHM. The State has 97% of ASHAs in position under both NRHM & NUHM. In the State, doctors to staff nurse ratio is 1:2, with 5 public healthcare providers available for every 10,000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 899 availed (events) OPD services and 56 availed (events) IPD services. However, as per the NSSO data (2017-18), 48% of all OPD cases in rural and 25% of all OPD cases in urban; 60% of all IPD cases in rural and 38% of all IPD cases in urban utilized public health facilities. Public health facilities utilization in the State is higher than the national average (Annexure 1.6).

^x AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^y

Indicator	Chhattisgarh 2011 ¹	India
Total Population (In Crore)	2.55	121.08
Rural (%)	76.76	68.85
Urban (%)	23.24	31.14
Scheduled Caste population (SC) (in crore)	0.32 (12.82%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.78 (30.62%)	10.45 (8.63%)
Total Literacy Rate (%)	70.28	72.99
Male Literacy Rate (%)	80.27	80.89
Female Literacy Rate (%)	60.24	64.64
Number of Districts in the Chhattisgarh ²	27	
Number of districts per lakh population in Chhattisgarh (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	8
	≥ 10 Lakhs - <20 Lakhs	6
	≥20 Lakhs - <30 lakhs	2
	≥30 Lakhs	2
ST SC Dominant (Top 5) Districts of Chhattisgarh ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Bijapur - 80.01%	Janjgir Champa - 24.56%	
Narayanpur - 77.35%	Bilaspur - 20.76%	
Dakshin Bastar Dantewada - 76.87%	Raipur - 17.82%	
Bastar - 65.93%	Raigarh - 15.05%	
Jashpur - 62.27%	Kabirdham - 14.56%	
Top 5 ST dominant district accounts for - 27.93%	Top 5 SC dominant district accounts for - 61.69%	

1.2 Key Health Status & Impact Indicators

Indicators	Chhattisgarh	India
Infant Mortality Rate (IMR) ³	40	30
Crude Death Rate (CDR) ³	7.3	6

^y Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	22.2	19.7
Maternal Mortality Ratio (MMR) ³	159	113
Neo Natal Mortality Rate (NNMR) ⁴	29	23
Under Five Mortality Rate (U5MR) ⁴	45	36
Still Birth Rate ⁴	9	4
Total Fertility Rate (TFR) ⁴	2.4	2.2
Life expectancy at birth ⁵	65.2	69.4
Sex Ratio at Birth ⁴	958	899

1.3 Key Health Infrastructure Indicators²

Indicators	Numbers (Total)			
Number of District Hospitals ²	26			
Number of Sub District Hospital ²	20			
Number of Government (Central + State) Medical College ⁶	7			
Number of Private (Society + Trust) Medical Colleges ⁶	3			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	2556	1627	3043	3987
PHC-HWC	645	793	793	793
UPHC-HWC	47	45	45	45
Total-HWC	3248	2465	3881	4825
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	212	170	19.81	
Number of Primary Health Centres (PHC)	851	792	6.93	
Number of Sub Centres (SC)	5,371	5,205	3.09	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	23	3	31	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	154	45	70.78	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	99	89	10.10	
Number of PHC	397	399	-0.50	
Number of SC	2,649	2,817	-6.34	

² Sources are mentioned at the end of Annexure 1

Patient Service⁹	Chhattisgarh	India
IPD per 1000 population	56.3	62.6
OPD per 1000 population	899.4	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	12.0	36.4

1.4 Major Health Indicator^{aa}

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Chhattisgarh	India
% DALY ^{bb} accountable for CMNNDs ^{cc}	34.78	27.46
% DALY accountable for NCDs	53.82	61.43
% DALY accountable for Injuries	11.4	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Chhattisgarh	India
Level of Birth Registration (%)	85.9	92.7
Level of Death Registration (%)	81.5	92
Percentage of medically certified deaths to total registered deaths (%)	21.4	20.7
RMNCHA+N		
Maternal Health⁹	Chhattisgarh	India
% 1st Trimester registration to Total ANC Registrations	90.1	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	93.8	79.4
Total Reported Deliveries	485292	21410780
% Institutional deliveries to Total Reported Deliveries	98.3	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	76.4	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	23.6	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	15.3	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	5.9	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	45.5	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	61.6	53.4
Neonatal⁹	Chhattisgarh	India
% live birth to Reported Birth	98	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	11.4	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	97.5	89.9

^{aa} Sources are mentioned at the end of Annexure 1

^{bb} Disability Adjusted Life Years

^{cc} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Chhattisgarh	India
Sick New Born Care Unit (SNCU)	23	895
New Born Stabilization Unit (NBSU)	157	2418
New Born Care Corner (NBCC)	1249	20337
Child Health & Nutrition¹⁰	Chhattisgarh (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	3.6	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	67.3	60.6
Children under 5 years who are underweight (weight-for-age) (%)	31.3	32.1
Child Immunization¹⁰	Chhattisgarh (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	84.8	83.8
Children age 12-23 months who have received BCG (%)	96.4	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	90.2	87.9
Family Planning¹⁰	Chhattisgarh (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	3.4	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Chhattisgarh	India
Number of districts with functional IDSP unit	27	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Chhattisgarh	India
Annualized total case notification rate (%)	136	163
New Smear Positive (NSP) Success rate (in %)	82	79
National Leprosy Eradication Programme (NLEP)¹¹	Chhattisgarh	India
Prevalence Rate/10,000 population	2.08	0.61
Number of new cases detected	8,905	114,359
Malaria, Kala Azar, Dengue¹¹	Chhattisgarh	India
Deaths due to Malaria ¹¹	31	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Chhattisgarh (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	23.1	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	30.7	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Chhattisgarh (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	14.8	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	19	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	4.5	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	5.4	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Chhattisgarh (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	17.3	8.9
Men who use any kind of tobacco (%)	43.1	38
Women who consume alcohol (%)	5	1.3
Men who consume alcohol (%)	34.8	18.8
Injuries		
Road Traffic Accident¹²	Chhattisgarh	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	14	N/A
Total number of fatal Road Accidents	4,603	137,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	36	33.7
Number of persons killed in Road Accidents	5003	115113

1.5 Access to Care^{dd}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Chhattisgarh	India
Number of Districts equipped with MMU under NRHM	16	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Chhattisgarh	India
102 Type	324	9955
104 Type	1	605
108 Type	300	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	400	11070

^{dd} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Chhattisgarh	India
Total number of ASHA targeted under NRHM	68277	946563
Total number of ASHA in position under NRHM	66220	904211
% of ASHA in position under NRHM	97	96
Total number of ASHA targeted under NUHM	3883	75597
Total number of ASHA in position under NUHM	3771	64272
% of ASHA in position under NUHM	97	85
Community Process¹¹	Chhattisgarh	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	19180	554847
Number of Mahila Arogya Samitis (MAS) formed	3245	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Chhattisgarh	India
DH	26	796
CHC	154	6036
PHC	774	20273
UCHC	3	126
UPHC	45	3229
Human Resource for Health ¹⁴		
HRH Governance	Chhattisgarh	
Specialist Cadre Available in the state (Y/N)	No	
HR Policy available (Y/N)	Yes	
Implementation of HRIS (Y/N)	Yes	
HR Integration initiated (Y/N)	Yes	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	55
	Dentists (%)	40
	MO MBBS (%)	37
	Nurse (%)	41
	LT (%)	24
	ANM (%)	10
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	6 per 10,000	5 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	5:1	5:1

Ranking: Human Resource Index of Chhattisgarh¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{ee}	12048	13910	11258	2652	790	58.8
Staff Nurse	10387	7917	4885	3032	5502	
Lab Technician	2554	1649	1322	327	1232	
Pharmacists	1461	1329	1051	278	410	
MO MBBS ^{ff}	2588	2473	1975	498	613	
Specialist ^{gg}	2064	1807	404	1403	1660	

1.6 Healthcare Financing^{hh}

National Health Accounts (NHA) (2017-18)	Chhattisgarh		India	
Per Capita Government Health Expenditure (in ₹)	1516		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	1.5		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	6.4		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	38.8		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Chhattisgarh		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	48	25	33	26
IPD - % of hospitalized cases using public facility	60	38	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	267	332	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	553	784	845	915
IPD - Per hospitalized case (in INR) - Public	4,314	4,155	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	61,900	28,435	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	8	11	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	37	41	53	43

^{ee} MPW – Multi Purpose Health Worker (Female + Male)

^{ff} MO MBBS (Full Time)

^{gg} Specialist (All Specialist)

^{hh} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	1,497	2,414	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	18,308	21,936	20,692	26,701
State Health Expenditure	Chhattisgarh		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	5.9		5 ⁱⁱ	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

ⁱⁱ Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

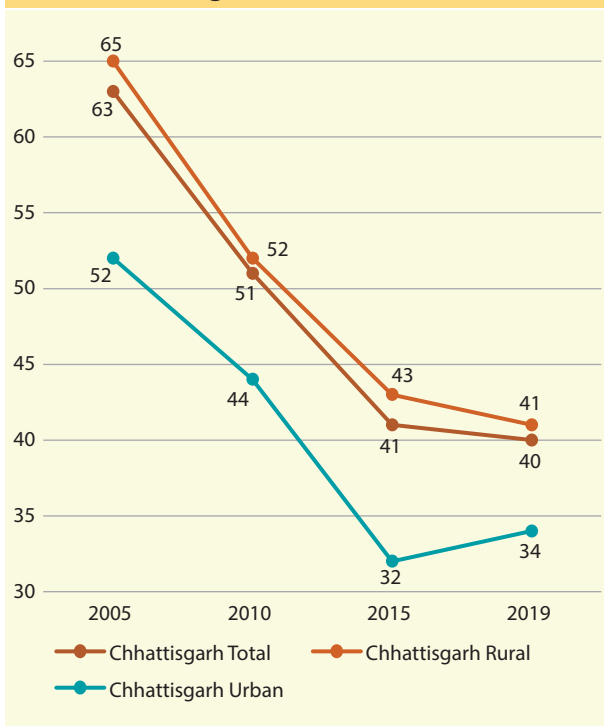


Figure 2: CBR & CDR Trend

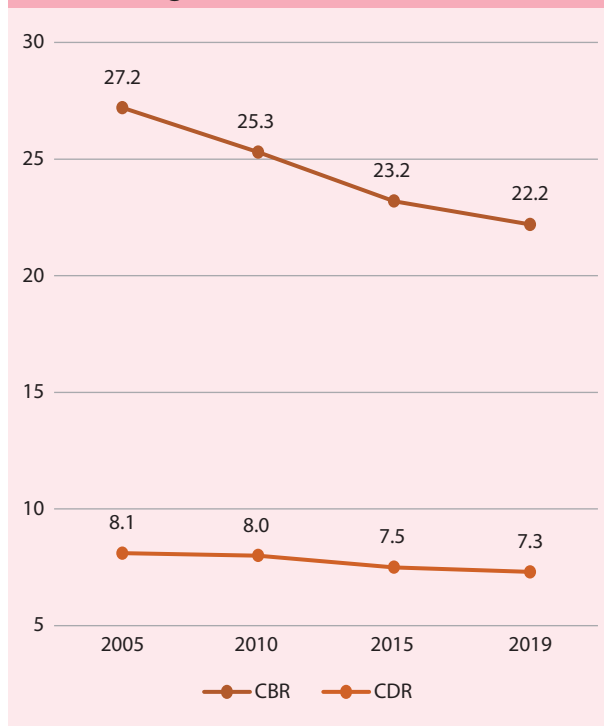


Figure 3: Life Expectancy At Birth Trend

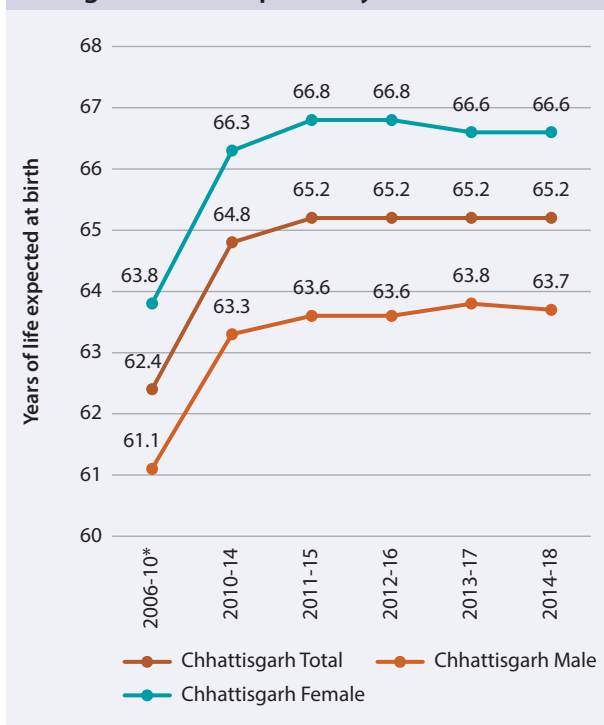
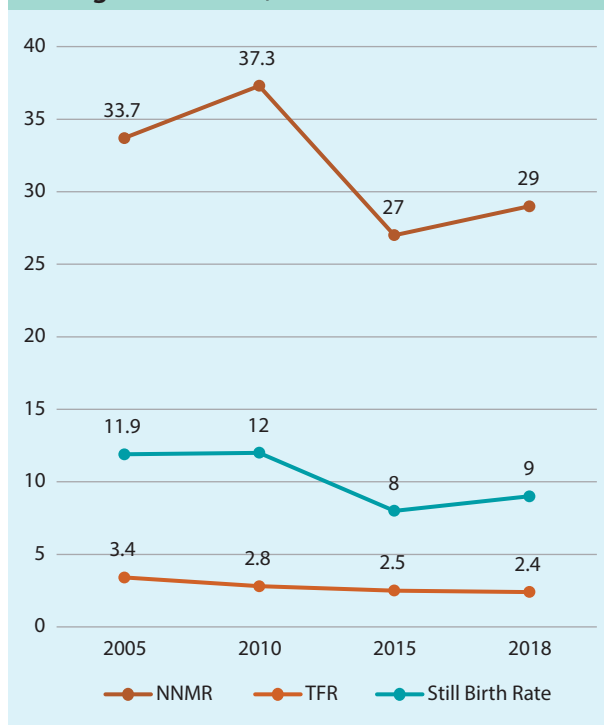


Figure 4: NNMR, TFR & Still Birth Trend



* Including Madhya Pradesh

Figure 5: Comparison of Key NFHS 5 & 4 Indicators

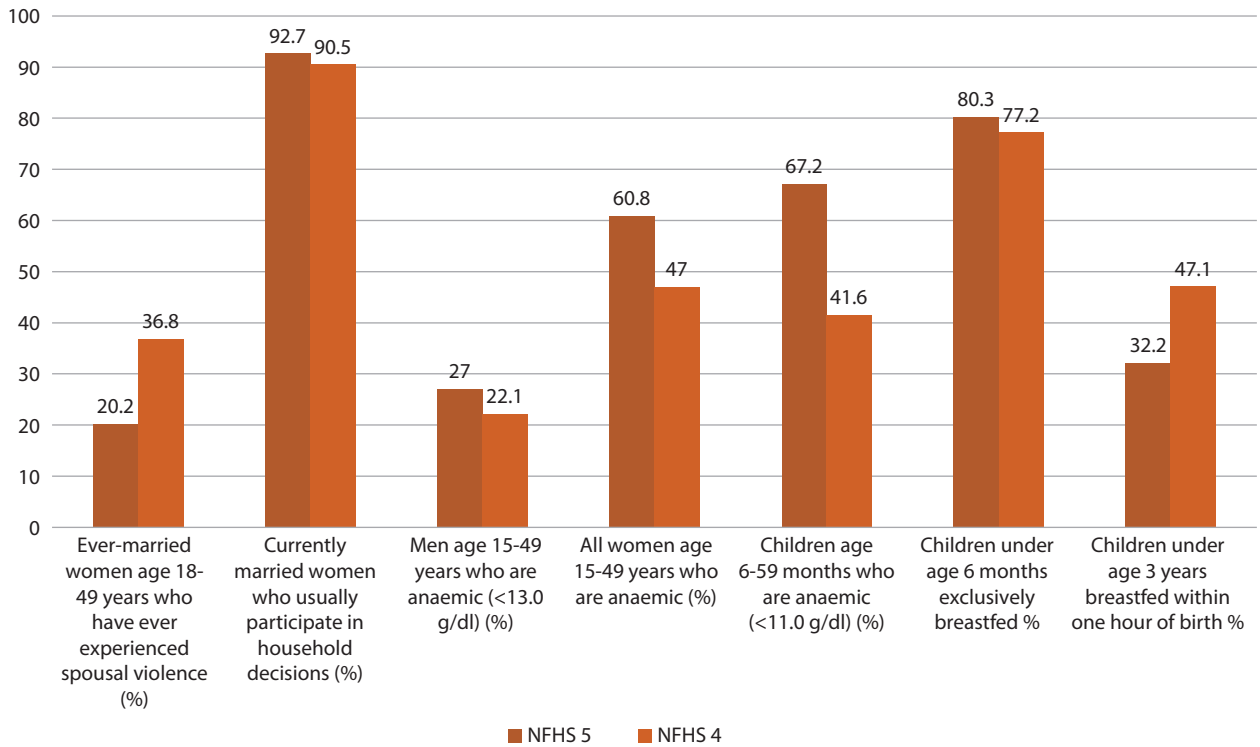


Figure 6: Top 15 causes of DALYs, 1990-2019

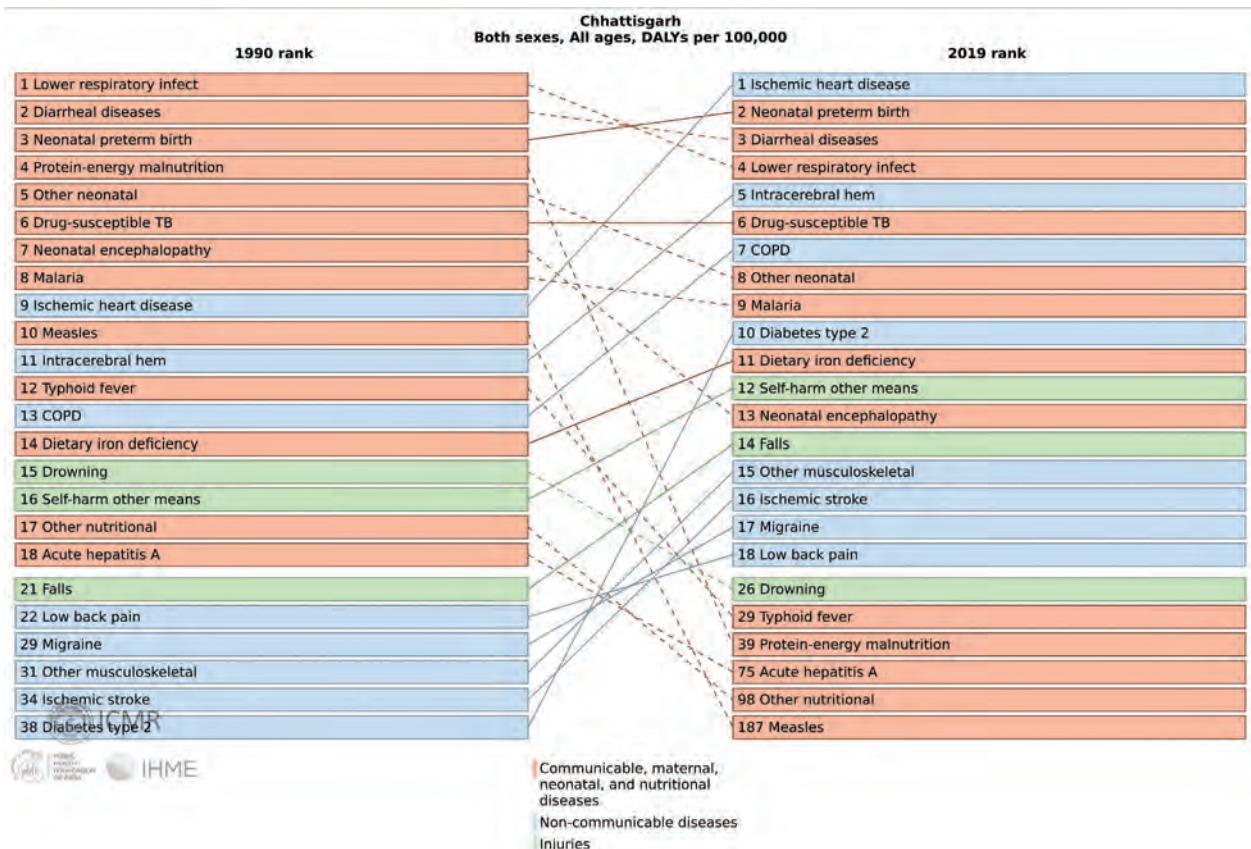


Figure 7: Top 15 risk of DALYs, 1990-2019

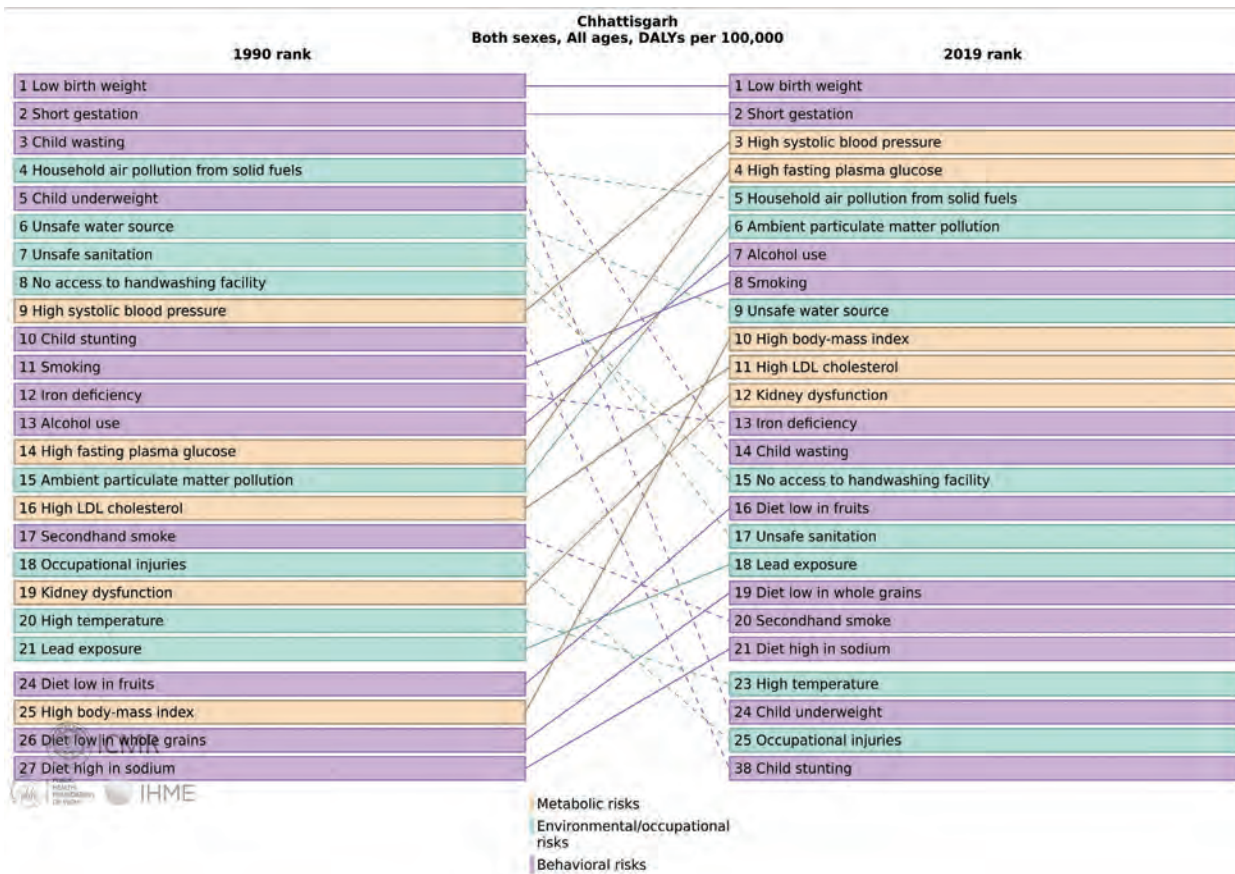


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

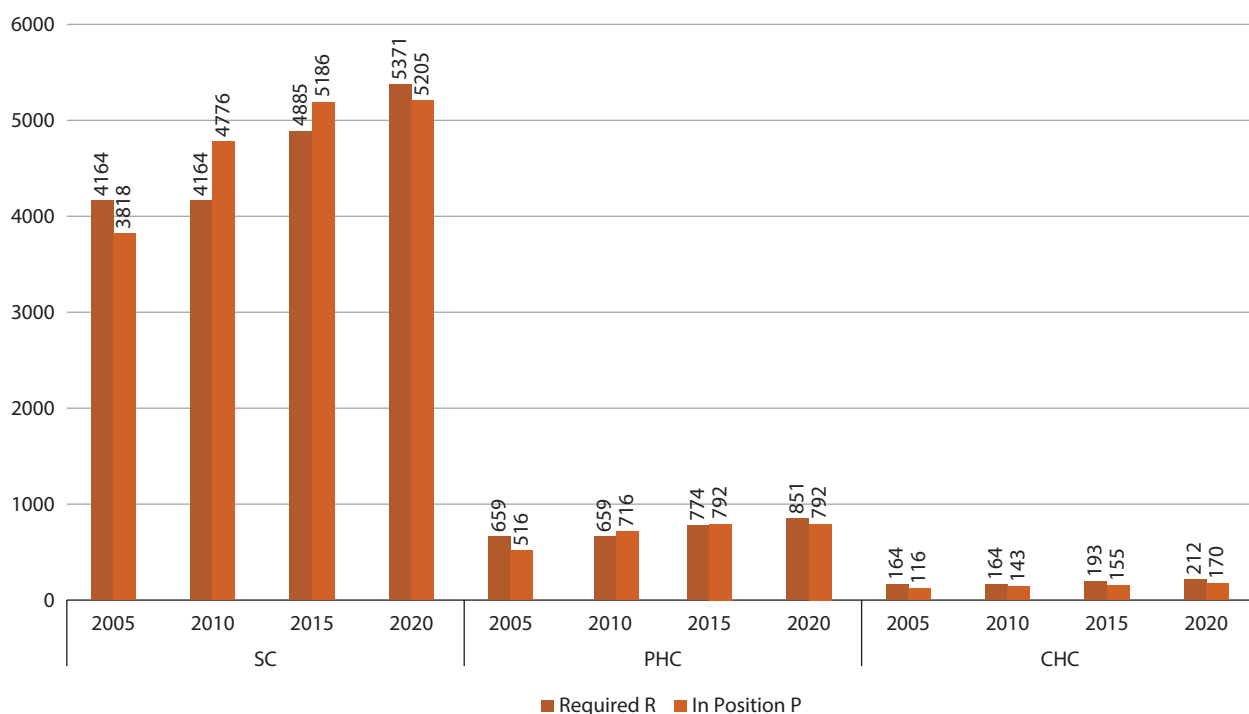


Figure 9: Year Wise Health Infrastructure Shortfall (%)

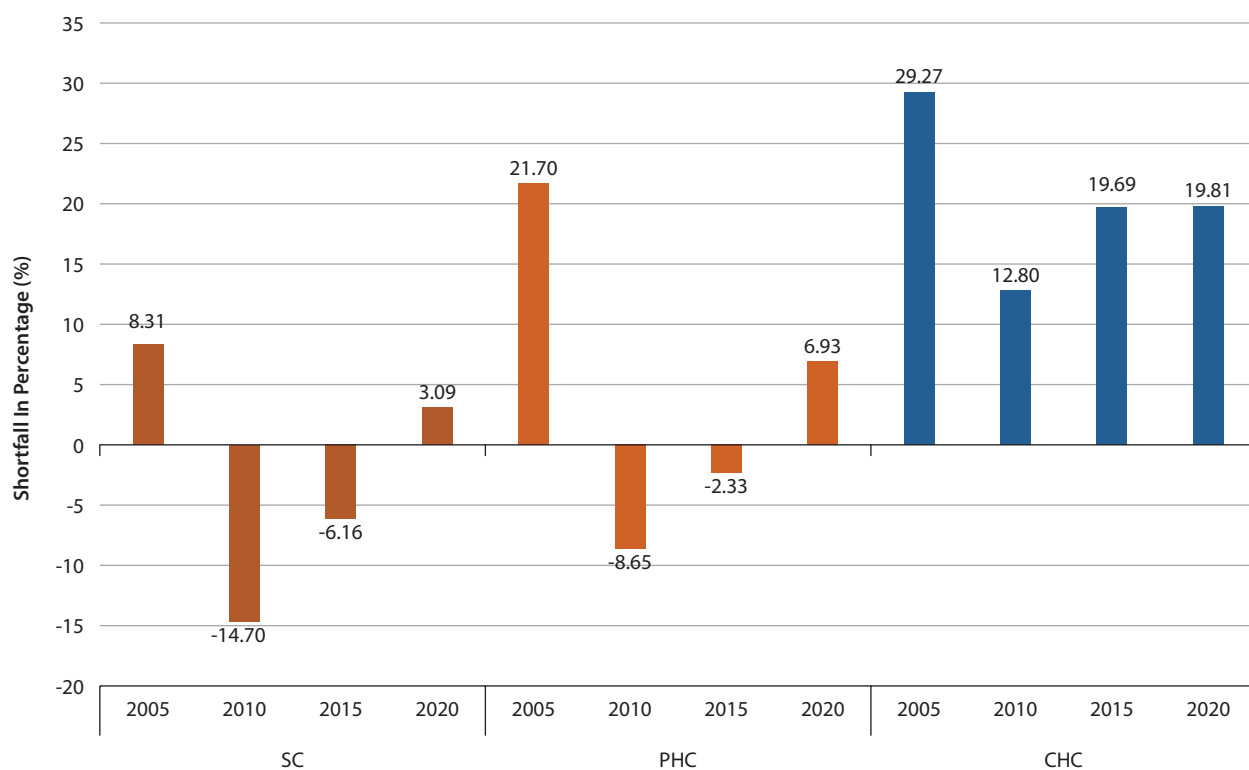
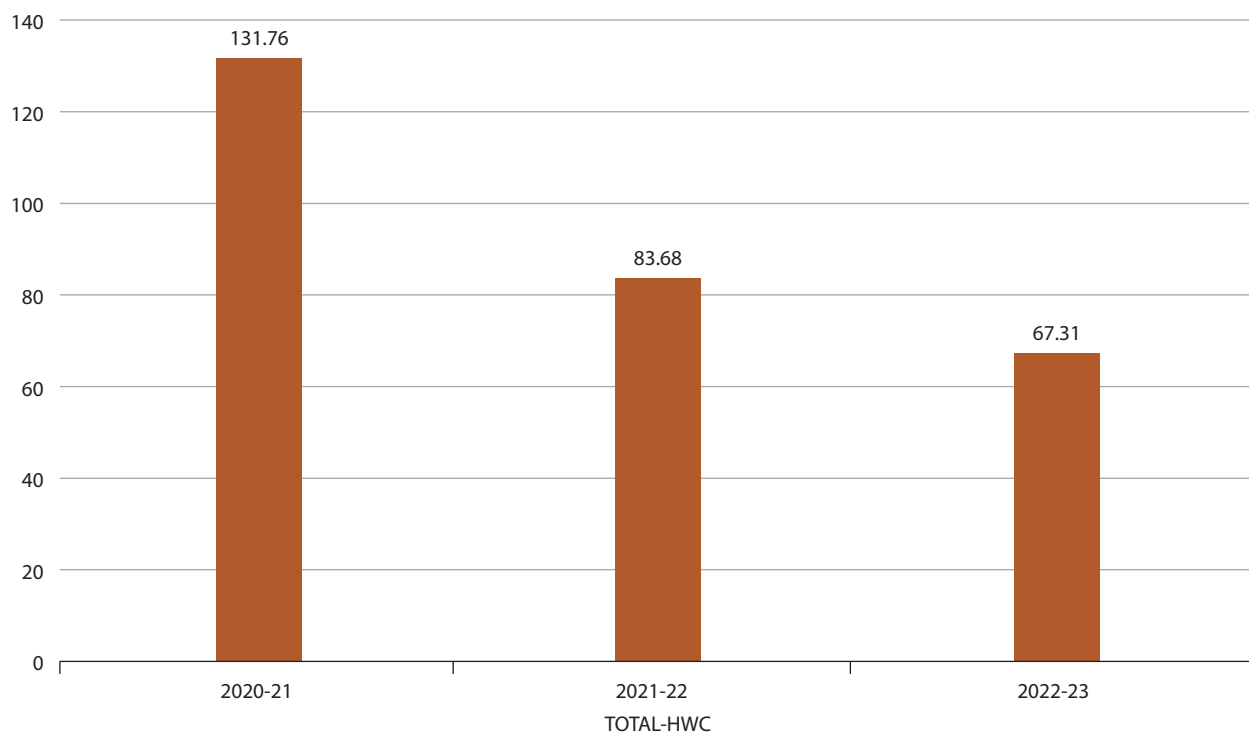


Figure 10: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural/Urban Stats Not Available)															
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PPIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet** # (%)	Children Under 5 Years - Stunted (Height For Age) (%)	Children Under 5 Years - Wasted (Weight For Height) (%)		
1	Chhattisgarh	NFHS 4 Total	977	68.5	NA	21.3	57.7	1.6	3.9	11.1	59.1	70.2	81.8	10.9	37.6	23.1		
2	Chhattisgarh	NFHS 5 Urban	933	68.8	83.4	8.1	71.3	3.7	7.9	8	62.2	93.1	81.8	9	30	18.9		
3	Chhattisgarh	NFHS 5 Rural	967	72.1	69.1	13.2	66.8	2.6	3	8.3	59.6	83.9	85.6	9.4	35.7	18.9		
4	Chhattisgarh	NFHS 5 Total	960	71.4	72.5	12.1	67.8	2.8	4.1	8.3	60.1	85.7	84.8	9.3	34.6	18.9		
5	Balod	NFHS 5 Total	1068	79.5	78.6	3.3	83.5	2.3	3.4	2.6	81.5	97.4	92.4	2.9	33.6	15.1		
6	Baloda Bazar	NFHS 5 Total	1021	66.1	73.4	11.4	71.5	4.7	3.9	5.3	49.5	78.1	84.7	11.5	40.9	19.4		
7	Bairampur	NFHS 5 Total	887	62.3	65.4	24.6	52	2.9	3.2	1.6	52.1	78.9	86.2	13.4	35.1	23		
8	Bastar	NFHS 5 Total	1042	69.3	52.9	17.3	54.2	2.2	4.9	12.1	55.1	63.5	61.1	10.6	48.1	20.4		
9	Bemetara	NFHS 5 Total	987	63.4	71.1	15.1	75.6	1.9	2.8	5	54.6	95	93.4	14.7	38.4	16.4		
10	Bijapur	NFHS 5 Total	1045	73.5	44.7	18.3	35.7	4.1	3.1	15.5	56.9	63.6	79	16.4	53.8	20		
11	Bilaspur	NFHS 5 Total	1070	60.4	72.8	11.2	58.5	3	5.5	10.4	46.9	79.4	69.5	15.2	25.7	24		
12	Dantewada	NFHS 5 Total	1296	82.2	49.3	16.3	58.8	6.8	6.3	7.1	68.2	90.5	73.7	19.6	45.6	19.4		
13	Dhamtari	NFHS 5 Total	1120	86.8	82.7	5.8	81.1	1.5	5.5	4.5	70.4	94.3	82.3	8.9	30.5	17.9		
14	Durg	NFHS 5 Total	812	67	80.3	4.3	80.6	3.8	6.5	4.9	69.9	96.7	87	8.3	38.9	16.9		
15	Gariyaband	NFHS 5 Total	1011	79.8	68.9	9.7	76.2	2.5	5.6	3.5	57.8	87.6	81.1	9.4	28.9	21.9		

16	Janjgir - Champa	NFHS 5 Total	795	74	74.9	10.2	74.8	2.1	7.8	6.3	62.8	86.2	86.8	4.8	32.5	24.6
17	Jashpur	NFHS 5 Total	951	80.6	73.1	21.9	56	6.6	2.4	12.9	48.6	85.6	94.1	5.8	35.8	17
18	Kabeerdham	NFHS 5 Total	826	72.1	66.2	15.3	75.2	2.8	1.7	6.2	58.9	91.7	96.9	6.8	37.9	12
19	Kodagaon	NFHS 5 Total	1111	80.6	54.7	11.8	68.2	1.9	4.8	3.7	64.1	78.7	64.4	9.3	37.6	22.8
20	Korba	NFHS 5 Total	989	60.6	73.2	7.2	53.6	1.4	5.7	13.4	49.3	75.4	89.3	4	34.7	14.7
21	Koriya	NFHS 5 Total	864	62.8	74.8	22.9	56.4	3.8	4.6	12.6	70	80.8	87	8	32.1	18.1
22	Mahasamund	NFHS 5 Total	1077	76.2	70.6	9.5	71.4	2.5	2.6	5.5	65.8	92.9	86.3	15.7	36.8	14
23	Mungeli	NFHS 5 Total	1017	68	66.5	20.5	64	0.8	1.9	11.4	67.3	69.8	85.7	3	30.1	17.7
24	Narayanpur	NFHS 5 Total	1102	83.1	52	11.1	57.7	3	4.3	9.2	59.1	74.2	82.7	14.8	43.7	21.5
25	Raigarh	NFHS 5 Total	812	66.3	74.9	11.5	64.1	1.9	2.8	10.3	55.4	87.7	91.9	4.5	39.1	14.9
26	Raipur	NFHS 5 Total	1000	76.9	79.6	8.8	76.8	3.4	5	6.1	65.6	90.7	75.4	7.9	32.2	21.7
27	Rajnandgaon	NFHS 5 Total	988	80.8	80.6	3.8	73.3	2.5	1.8	6.3	76.1	95.5	91	10.6	27.6	19.4
28	Sukma	NFHS 5 Total	925	78.1	39.8	18.9	53.7	6.6	8.2	7.6	74	81.2	76.8	20.9	41.8	21.2
29	Surajpur	NFHS 5 Total	916	75.7	66.9	34.3	59.8	2.8	2.6	14.1	48.9	85.9	85	11.4	27.6	19.3
30	Surguja	NFHS 5 Total	1139	65.1	71	18.1	55.2	2.2	2.4	15	57.7	85.3	89	9.9	29.4	17.5
31	Uttar Bastar Kanker	NFHS 5 Total	1131	84.8	77.2	5.4	74.7	2.5	0.9	3	77.9	94.1	97	8	24.8	24.5

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'Vaccinated'; Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or pentavalent vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color - Best five performing districts within the districts for a particular indicator

B. Red - Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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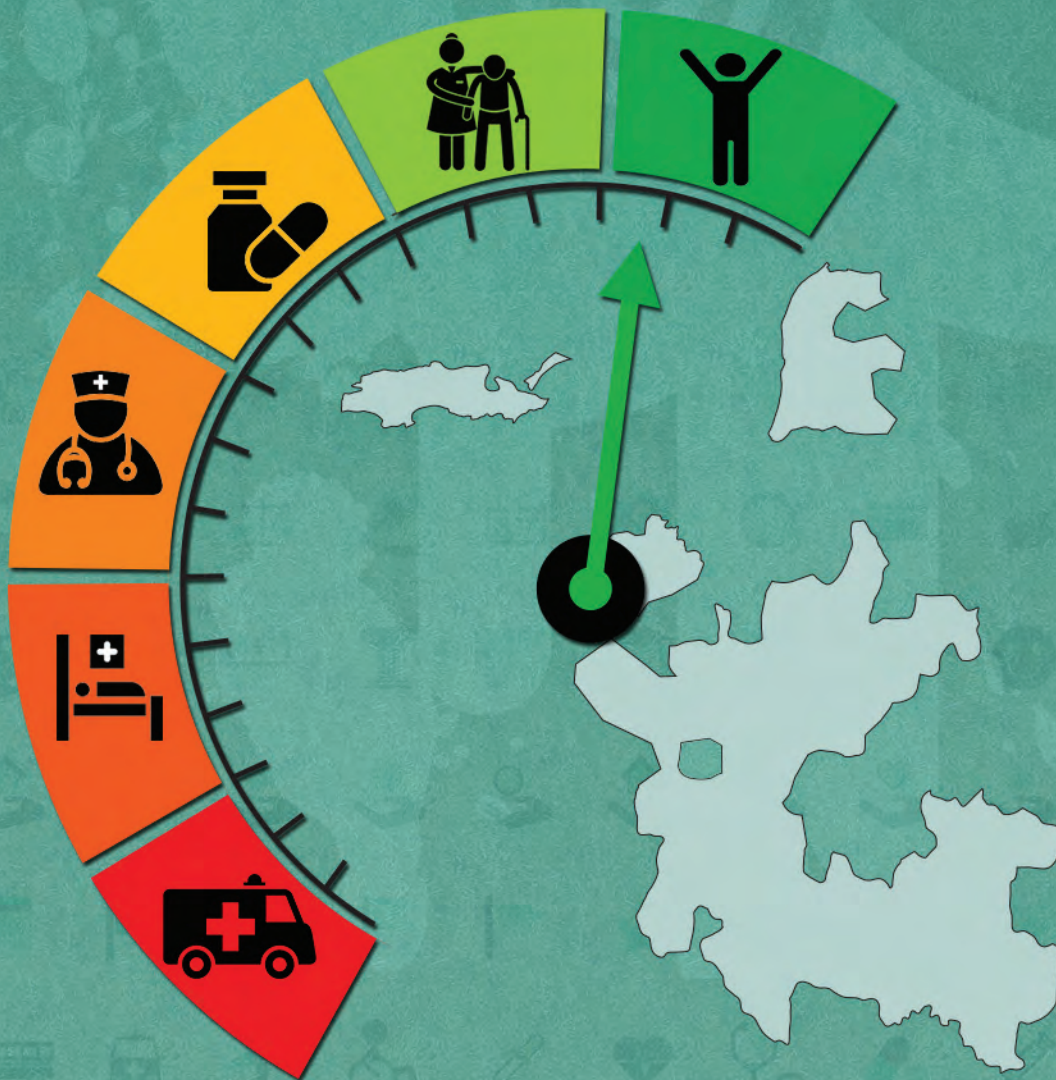
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



**DADRA & NAGAR HAVELI
AND DAMAN & DIU**

**DISTRICTS VISITED IN
COMMON REVIEW MISSIONS**

CRM	Districts Visited	
3 rd	Dadra & Nagar Haveli	Daman & Diu

DADRA & NAGAR HAVELI AND DAMAN & DIU

1. BACKGROUND

1.1 State Profile

The union territories of Dadra and Nagar Haveli (DNH) and Daman and Diu (DD) have been merged with effect from 26th January 2020. Dadra and Nagar Haveli are estimated^a to have a population of over 0.03 crores whereas Daman and Diu are estimated to have 0.02 crores. It is projected that the population would reach around 0.06 crores and 0.046 crores, respectively by 2021^b. As per census 2011, in Dadra & Nagar Haveli, the Scheduled Caste (SC) population is 0.06 lakh (1.79%) and Scheduled Tribe (ST) population is 1.78 lakh (51.95%) and in Daman & Diu, SC population and ST population is 0.06 lakh (2.52%) and 0.15 lakh (6.32%). Around 53.28% of the population in Dadra & Nagar Haveli and 24.83% of the population in Daman & Diu reside in rural areas, while the rest constitute the urban population. The total length of roads^c is 1,187 km (0.02%^d) in Dadra and Nagar Haveli and 426 km in Daman and Diu.

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

The UT's sex ratio at birth is 817 females for every 1000 males (NFHS 5). The crude birth rate and the crude death rate for DNH have declined from 29.4 & 5.1 in 2005 to 21.9 & 3.7 in 2019, respectively; whereas for DD they have declined from 19.1 and 5.6 (2005) to 18.6 and 4.1(2019), respectively (Annexure 2; figures 3, 4). The literacy rate in DNH increased from 60.0% in 2001 to 76.2% in 2011, with male & female literacy rates being 85.2% and 64.3%, respectively. For Daman and Diu, the literacy rate increased from 81.1 (2001) to 87.1 (2011), with male and female literacy rates being 91.5% and 79.5% (Annexure 1.1). As per ESAG 2018 report, the Gross Enrolment Rate (GER)^e is 9.1% and 5.7% for higher education, 48.49% and 21.54% for senior secondary education, 88.57% and 72.97% for secondary education, 85.59% and 80.99% for elementary education, and 82.53% and 82.03% for primary education in Dadra and Nagar Haveli and Daman and Diu, respectively.

^a Census 2011

^b Census Population Projection 2019 Report

^c Basic Road Statistics 2019, MoRTH

^d Percentage of total length of roads in DNH

^e Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

1.3 Elderly

Population ageing has profound social, economic, and political implications. In Dadra and Nagar Haveli, 7.0% of elderly females living in rural areas and 41% of elderly females and 10% elderly males in urban areas are economically fully dependent on others. In Daman and Diu, 99.0% of elderly females and 97.0% of elderly males in rural areas and 100% of elderly females and 37% of elderly males in urban areas are economically fully dependent on others. The illness (any deviation from the state of physical and mental well-being) perception among elderly is reported as 1% and 14% for men and 9% and 10% women in DNH and DD, respectively as opposed to the national average of 31% for both (Elderly in India 2016).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The UT has been able to provide RMNCHA+N^f services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^g, institutional deliveries, C sections, distribution of IFA^h tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined from 160ⁱ (SRS MMR Bulletin 2007-09) to 85^j (SRS MMR Bulletin 2016-18). In DNH, 82.5% of women received 4 ANC check-ups and 125.9% in DD (Annexure 1.4). As reported in HMIS 2019-20, around 99.6% and 100% of the deliveries took place in institutions, out of which 88.8% and 85.5% took place in public health facilities in DNH and DD, respectively. Total percentage of C-sections in DNH (31.7%) and DD (32.8%) are higher than the WHO's standard (10-15%), out of which 54.7% and 34.1% took place in private facilities in the respective UTs. Around 59.3% and 54.3% of women are tracked for the first postpartum check-up between 48 hours and 14 days in DNH and DD respectively (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years decreased from 72.9% (NFHS-4) to 62.5% (NFHS-5). Anaemia in females of reproductive age group is more than twice than in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, a significant decline in IMR from 42 (2005) to 11 (2019) is seen in DNH, and from 28 (2005) to 17 (2019) in DD (Annexure 2, figures 1,2). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4).

Full vaccination^k coverage for children between 12 – 23 months of age improved from 66.4% (NFHS 4) to 93.4% (NFHS 5). A decrease in childhood anaemia from 82.0% to 75.8% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 5). The proportion of exclusively breastfed under 6

^f Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^g Antenatal Check up

^h Iron Folic Acid Tablets

ⁱ Other smaller states & UTs, inclusive of Delhi

^j Other smaller states & UTs, inclusive of Delhi

^k NFHS 5 State/UT Factsheet, based on information from vaccination card only

months children improved from 67.9% (NFHS 4) to 79.4% (NFHS 5). As per NFHS 5 report, the burden of under-5 years stunting increased from 37.2% (NFHS 4) to 39.4% (NFHS 5) while the burden of under-5 years wasting declined from 26.7% (NFHS 4) to 21.6% (NFHS 5) in the UT¹.

2.3 Family Planning

As per NFHS 5 report, the total unmet need in the UT is reported as 11.9%, and the unmet need for spacing is 5.3%. Approximately 59.8 % of married women reported to avail any modern method of family planning in the UT (NFHS 5); with sterilization acceptance among females being 41.6% and 0.2% for males.

2.4 Communicable Diseases

DNH has 1 and DD has 2 functional IDSP units in place^m. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 19.67%ⁿ of total disease burden (Annexure 1.4). As per QPR reports, for TB, the annual total case notification rate is 174% in DNH; and NSP^o success rate is 92% in DNH and 79% in DD. For NLEP^p, the reported prevalence rate is 2.61 per 10,000 population in DNH and 0.43 in DD. In FY 2019-20, 2 deaths due to Dengue, and none due to Malaria, and Kala Azar are reported in the UT.

2.5 Non-Communicable Diseases (NCDs) and Injuries

NCDs contribute to 67.90% of DALYs; whereas injuries contribute to 12.42% of DALYs in the UT¹. DNH and DD are individually positioned 31st and 34th in the country for the total number of fatal road accidents with respect to other States/UTs (Annexure 1.4). It is found in the recent NFHS 5 report that 2.9% of women and 38.6% of men used any kind of tobacco, while 1.1% of women and 27.8% of men consumed alcohol.

2.6 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figures 6,7). Currently, there are 94 SCs, 10 PHCs and 4 CHCs in place against the required 65 SCs, 10 PHCs and 2 CHCs in rural areas. In urban settings, there are 3 PHCs in place against the required 16 PHCs accounting to a shortfall of 81.25%. The UT has 3 DHs, 1 SDHs and 1 government medical college.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), 60 HWCs (52 SCs and 8 PHC) are operationalized in DNH and 30 HWCs (26 SCs and 4 PHCs) are operationalized as of 22nd December 2021^r.

¹ Dadra and Nagar Haveli and Daman and Diu

^m QPR NHM MIS Report (Status as on 01.03.2020)

ⁿ Includes all UTs except Delhi; <https://vizhub.healthdata.org/gbd-compare/india>

^o New Smear Positive

^p National Leprosy Eradication Programme

^q Includes all UTs except Delhi; <https://vizhub.healthdata.org/gbd-compare/india>

^r AB-HWC Portal

The doctor to staff nurse ratio in place is 1:2 in both the UTs with 8 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population in DNH and 5 per 10,000 population in DD (Annexure 1.5). Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 3662.60 and 2268 availed (events) OPD services; and 152.13 and 52 availed (events) IPD services in DNH and DD, respectively.

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^s

Indicator	Dadra and Nagar Haveli	Daman & Diu	India
Total Population (In Crore)	0.034	0.024	121.08
Rural (%)	53.28	24.83	68.85
Urban (%)	46.72	75.17	31.14
Scheduled Caste population (SC) (in crore)	0.00062 (1.79%)	0.0006124 (2.52%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.01786 (51.95%)	0.0015363 (6.32%)	10.45 (8.63%)
Total Literacy Rate (%)	76.2	87.1	72.99
Male Literacy Rate (%)	85.2	91.5	80.89
Female Literacy Rate (%)	64.3	79.5	64.64
Number of Districts in the State/UT ²	1	2	739 ^t
Number of districts per lakh population in DNH & DD (Census 2011)	Population¹	Dadra and Nagar Haveli	Daman & Diu
	<5 Lakhs	1	1
ST Dominant Districts (%)	SC Dominant Districts (%)		
Diu (0.24%)	Diu (3.58%)		
Daman (7.97%)	Daman (2.23%)		
Dadra & Nagar Haveli (51.95%)	Dadra & Nagar Haveli (1.79%)		

1.2 Key Health Status & Impact Indicators

Indicators	Dadra and Nagar Haveli	Daman & Diu	India
Infant Mortality Rate (IMR) ³	11	17	30
Crude Death Rate (CDR) ³	3.7	4.1	6.0
Crude Birth Rate (CBR) ³	21.9	18.6	19.7
Maternal Mortality Ratio (MMR) ³	N/A		113
Neo Natal Mortality Rate (NNMR) ⁴	N/A		23
Under Five Mortality Rate (U5MR) ⁴	N/A		36

^s Sources are mentioned at the end of Annexure 1

^t https://lgedirectory.gov.in/welcome.do?OWASP_CSRFTOKEN=37A9-J2CE-GIC7-WVWF-LT1B-M9G3-DTV5-3J3N

Still Birth Rate ⁴	N/A	4
Total Fertility Rate (TFR) ⁴	N/A	2.2
Life expectancy at birth ⁵	N/A	69.4
Sex Ratio at Birth ⁴	N/A	899

1.3 Key Health Infrastructure Indicators^u

Indicators	Dadra and Nagar Haveli		Daman & Diu			
Number of District Hospitals ²	1		2			
Number of Sub District Hospital ²	1		0			
Number of Government (Central + State) Medical College ⁶	1		0			
Number of Private (Society + Trust) Medical Colleges ⁶	0		0			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Dadra and Nagar Haveli					
	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)		
SHC-HWC	52	23	43	56		
PHC-HWC	8	9	9	9		
UPHC-HWC	N/A	2	2	2		
Total-HWC	60	34	54	67		
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Daman & Diu					
	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)		
SHC-HWC	26	8	15	20		
PHC-HWC	4	4	4	4		
UPHC-HWC	N/A	1	1	1		
Total-HWC	30	13	20	25		
Rural ²	Dadra & Nagar Haveli & Daman & Diu					
	Required (R)	In place (P)	Shortfall (S) (%)			
Number of Community Health Centres (CHC)	2	4	-100.00			
Number of Primary Health Centres (PHC)	10	10	0.00			
Number of Sub Centres (SC)	65	94	-44.62			
Number of functional First Referral Units (FRUs)	Dadra & Nagar Haveli			Daman & Diu		
	DH	SDH	CHC	DH	SDH	CHC
	1	1	0	2	0	2

^u Sources are mentioned at the end of Annexure 1

Urban ²	Dadra & Nagar Haveli & Daman & Diu		
	Required (R)	In place (P)	Shortfall (S) (%)
Number of PHC	16	3	81.25
Tribal ²	Dadra & Nagar Haveli & Daman & Diu		
	Required (R)	In place (P)	Shortfall (S) (%)
Number of CHC	1	2	-100.00
Number of PHC	7	9	-28.57
Number of SC	49	76	-55.10
Patient Service ⁹	Dadra & Nagar Haveli	Daman & Diu	India
IPD per 1000 population	152.13	52	62.6
OPD per 1000 population	3662.60	2,268	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	121.85	57	36.4

1.4 Major Health Indicator^v

% Share of DALYs to Total Disease Burden (GBD 2019) ⁷	Dadra & Nagar Haveli & Daman & Diu	India	
% DALY ^w accountable for CMNNDs ^x	19.67	27.46	
% DALY accountable for NCDs	67.90	61.43	
% DALY accountable for Injuries	12.42	11.11	
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator ⁸	Dadra & Nagar Haveli	Daman & Diu	India
Level of Birth Registration (%)	76.4	50.7	92.7
Level of Death Registration (%)	100	61	92
Percentage of medically certified deaths to total registered deaths (%)	46.4	54.1	20.7
RMNCHA+N			
Maternal Health ⁹	Dadra & Nagar Haveli	Daman & Diu	India
% 1st Trimester registration to Total ANC Registrations	96.6	83.9	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	82.5	125.9	79.4

^v Sources are mentioned at the end of Annexure 1

^w Disability Adjusted Life Years

^x Communicable, Maternal, Neonatal, and Nutritional Diseases

Total Reported Deliveries	9577	4,048	21410780
% Institutional deliveries to Total Reported Deliveries	99.6	100	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	88.8	85.5	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	11.2	14.5	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	31.7	32.8	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	28.8	32.5	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	54.7	34.1	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	59.3	54.3	53.4
Neonatal⁹	Dadra & Nagar Haveli	Daman & Diu	India
% live birth to Reported Birth	98.1	99.1	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	35.2	20.3	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	92.9	84.3	89.9
New Born Care Units Established¹¹	Dadra & Nagar Haveli	Daman & Diu	India
Sick New Born Care Unit (SNCU)	1	1	895
New Born Stabilization Unit (NBSU)	4	0	2418
New Born Care Corner (NBCC)	7	2	20337
Child Health & Nutrition¹⁰		DNH & DD (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)		2.6	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)		N/A	60.6
Children under 5 years who are underweight (weight-for-age) (%)		38.7	32.1
Child Immunization¹⁰		DNH & DD (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)		93.4	83.8
Children age 12-23 months who have received BCG (%)		98.1	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)		96.2	87.9

Family Planning¹⁰	DNH & DD (NFHS 5)	India (NFHS 5)	
Unmet need for spacing (%)	5.3	4	
Communicable Diseases^y			
Integrated Disease Surveillance Programme (IDSP)¹¹	Dadra & Nagar Haveli	Daman & Diu	India
Number of districts with functional IDSP unit	1	2	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Dadra & Nagar Haveli	Daman & Diu	India
Annualized total case notification rate (%)	174	N/A	163
New Smear Positive (NSP) Success rate (in %)	92	79	79
National Leprosy Eradication Programme (NLEP)¹¹	Dadra & Nagar Haveli	Daman & Diu	India
Prevalence Rate/10,000 population	2.61	0.43	0.61
Number of new cases detected	200	29	114,359
Malaria, Kala Azar, Dengue¹¹	Dadra & Nagar Haveli	Daman & Diu	India
Deaths due to Malaria ¹¹	0	0	79
Deaths due to Kala azar reported ¹¹	0	0	0
Deaths due to Dengue reported ¹¹	2	2	168
Number of Kala Azar Cases reported ¹¹	0	0	3,706
HIV¹⁰	DNH & DD (NFHS 5)	India (NFHS 5)	
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	25.3	21.6	
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	28.1	30.7	
Non-Communicable Disease			
Diabeties and Hypertension¹⁰	DNH & DD (NFHS 5)	India (NFHS 5)	
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	7.7	12.4	
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	9.8	15.7	
Women - Blood sugar level - high (141-160 mg/dl) (%)	6.6	6.1	
Men - Blood sugar level - high (141-160 mg/dl) (%)	8	7.3	

^y QPR NHM MIS Report (Status as on 01.03.2020)

Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	DNH & DD (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	2.9	8.9
Men who use any kind of tobacco (%)	38.6	38
Women who consume alcohol (%)	1.1	1.3
Men who consume alcohol (%)	27.8	18.8

Injuries			
Road Traffic Accident¹²	Dadra & Nagar Haveli	Daman & Diu	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	31	34	N/A
Total number of fatal Road Accidents	48	23	137,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	72.1	40.6	33.7
Number of persons killed in Road Accidents	49	28	115113

1.5 Access to Care

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	DNH & DD^z	India
Number of Districts equipped with MMU under NRHM	1	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	DNH & DD	India
102 Type	4	9955
104 Type	0	605
108 Type	7	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	27	11070

Key Domain Indicators			
ASHA¹³	Dadra & Nagar Haveli	Daman & Diu	India
Total number of ASHA targeted under NRHM	372	98	946563
Total number of ASHA in position under NRHM	262	89	904211
% of ASHA in position under NRHM	70.43	90.81	96

^z QPR NHM MIS Report (Status as on 31.12.2020)

Total number of ASHA targeted under NUHM	70	10	75597		
Total number of ASHA in position under NUHM	65	10	64272		
% of ASHA in position under NUHM	92.85	100	85		
Community Process¹¹		DNH & DD^{aa}	India		
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted		89	554847		
Number of Mahila Arogya Samitis (MAS) formed		0	81134		
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹		DNH & DD^{bb}	India		
DH		3	796		
CHC		4	6036		
PHC		4	20273		
UCHC		0	126		
UPHC		0	3229		
Human Resource for Health¹⁴					
HRH Governance		Dadra & Nagar Haveli	Daman & Diu		
Specialist Cadre Available in the state (Y/N)		Yes	Yes		
HR Policy available (Y/N)		No	No		
Implementation of HRIS (Y/N)		No	No		
HR Integration initiated (Y/N)		Yes	Yes		
Public Health Cadre available (Y/N)		No	No		
Overall Vacancies (Regular + contractual)	Specialists (%)	3	66		
	Dentists (%)	25	17		
	MO MBBS (%)	32	46		
	Nurse (%)	4	36		
	LT (%)	9	5		
	ANM (%)	16	10		
HRH Distribution¹⁴		Dadra & Nagar Haveli		Daman & Diu	
		Sanctioned	In Place	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴		1:1	1:2	1:1	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴		10 per 10,000	8 per 10,000	9 per 10,000	5 per 10,000
Regular to contractual service delivery staff ratio ¹⁴		1:1	1:1	1:1	1:1

^{aa} QPR NHM MIS Report (Status as on 31.12.2020)

^{bb} QPR NHM MIS Report (Status as on 31.12.2020)

Ranking: Human Resource Index of Dadra & Nagar Haveli and Daman & Diu¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{cc}	218	222	211	11	7	70.21
Staff Nurse	676	305	261	44	415	
Lab Technician	90	59	61	-2	29	
Pharmacists	46	46	45	1	1	
MO MBBS ^{dd}	121	114	93	21	28	
Specialist ^{ee}	159	109	77	32	82	

1.6 Healthcare Financing

National Health Accounts (NHA) (2017-18)	DNH & DD		India	
Per Capita Government Health Expenditure (in ₹)	N/A		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	N/A		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	N/A		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	N/A		48.8	
National Sample Survey Office (NSSO) (2017-2018)	DNH & DD		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	N/A		33	26
IPD - % of hospitalized cases using public facility	N/A		46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	N/A		472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	N/A		845	915
IPD - Per hospitalized case (in INR) - Public	N/A		5,729	5,939
IPD - Per hospitalized case (in INR) - Private	N/A		28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	N/A		18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	N/A		53	43

^{cc} MPW – Multi Purpose Health Worker (Female + Male)

^{dd} MO MBBS (Full Time)

^{ee} Specialist (All Specialist)

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	N/A	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	N/A	20,692	26,701
State Health Expenditure	Daman & Diu	All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	N/A	5 ^{ff}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{ff} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: Dadra & Nagar Haveli - IMR Trend

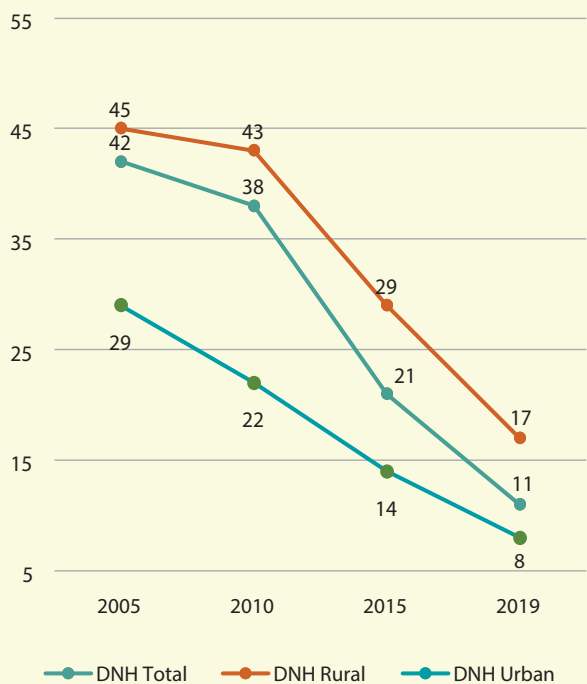


Figure 2: Daman & Diu - IMR Trend

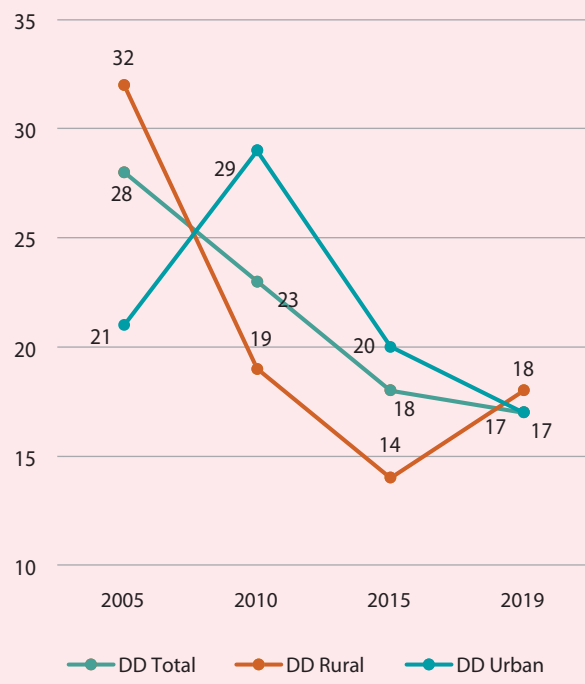


Figure 3: Dadra & Nagar Haveli - CBR & CDR Trend

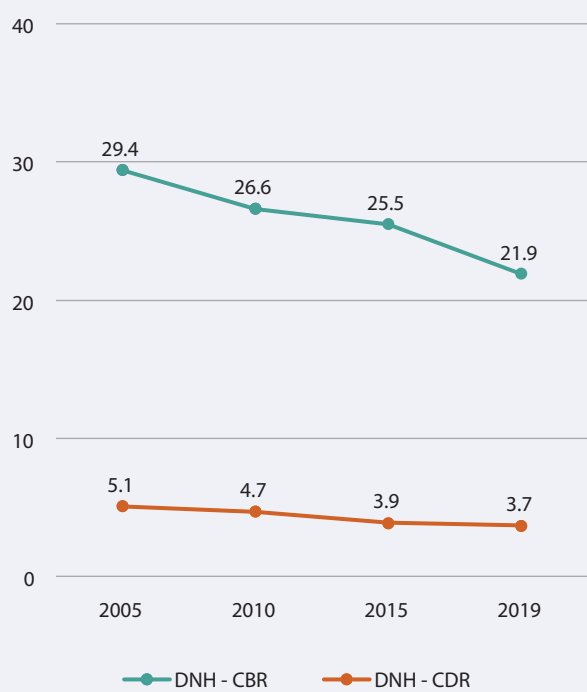


Figure 4: Daman & Diu - CBR & CDR Trend

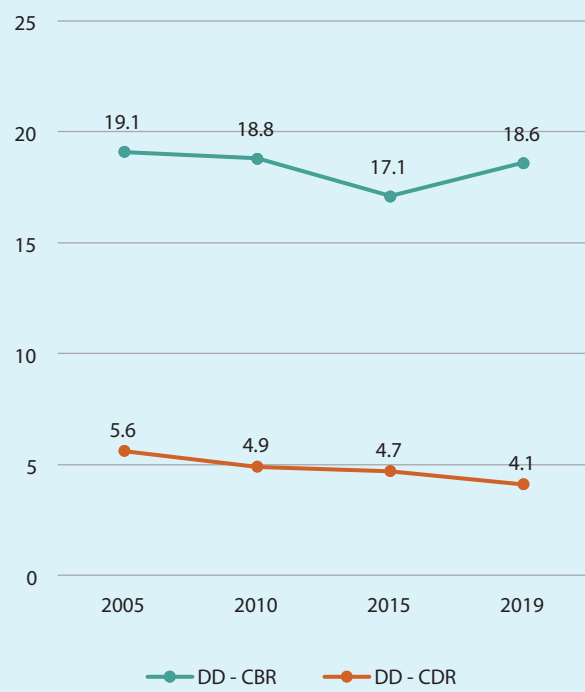


Figure 5: Dadra & Nagar Haveli and Daman & Diu Comparison of Key NFHS 5 & 4 Indicators

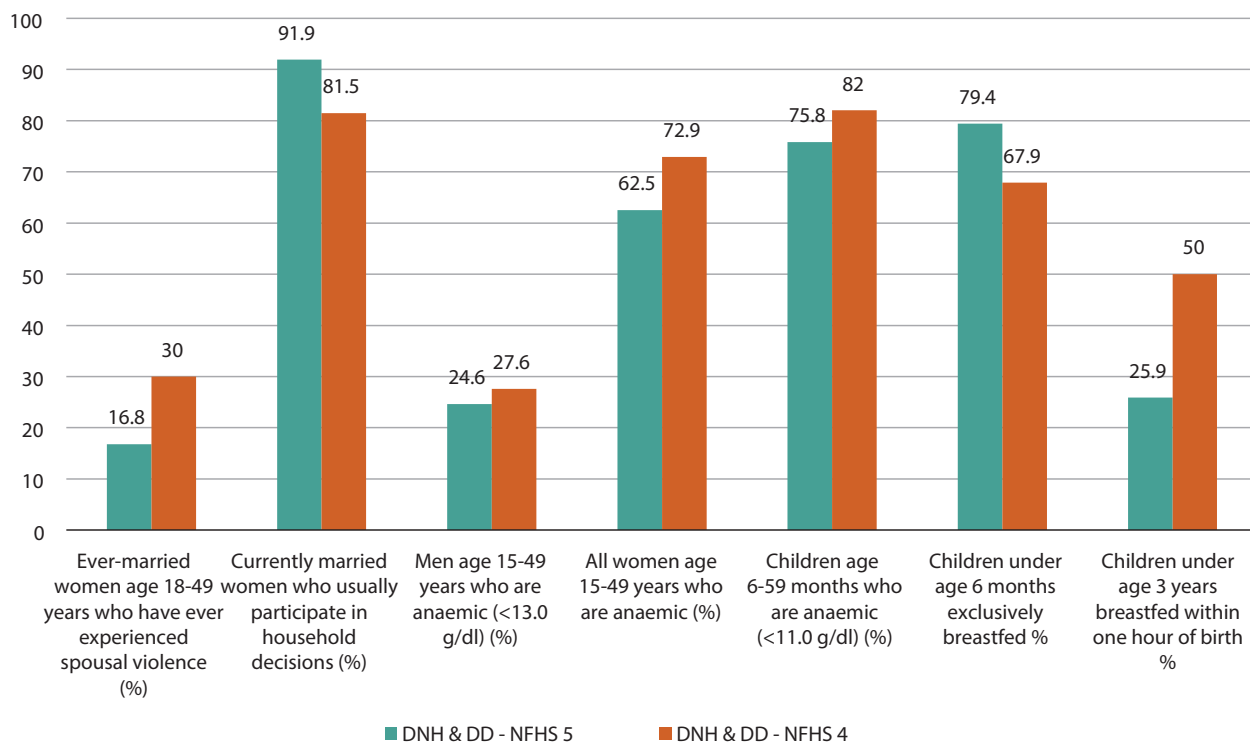
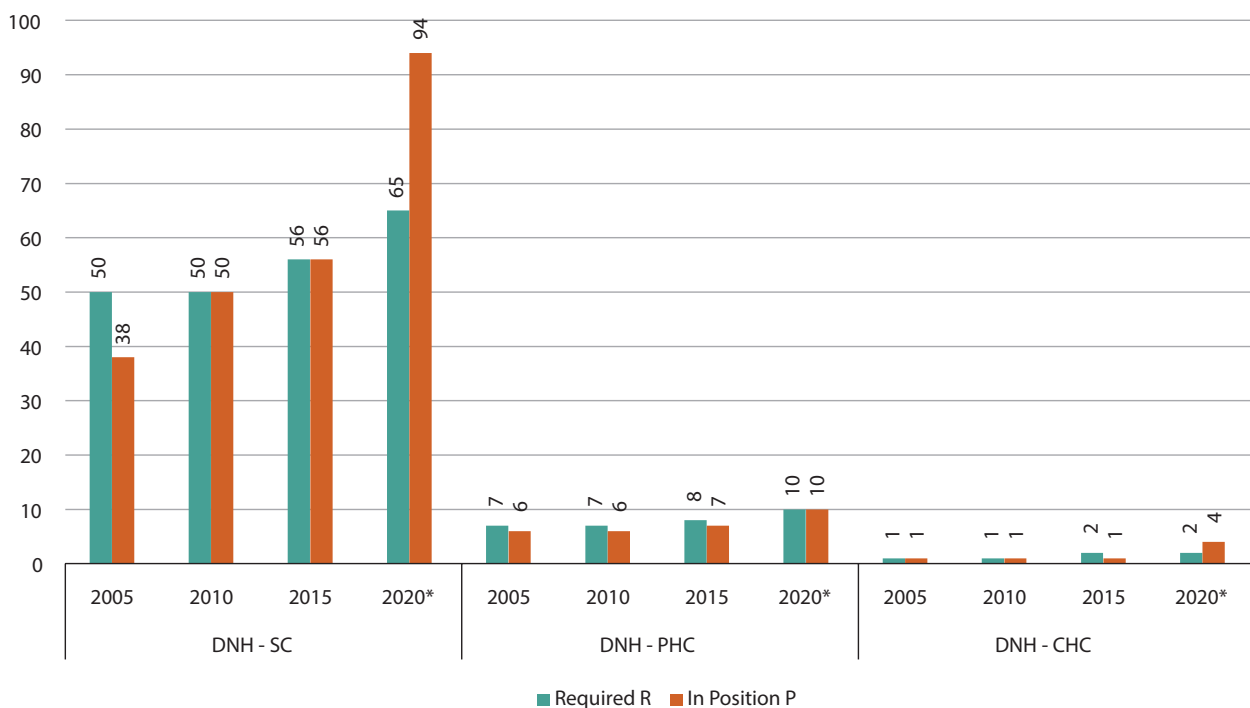


Figure 6: Dadra & Nagar Haveli - Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)ⁱⁱ



ⁱⁱ RHS 2020 - includes cumulative figures for Dadra & Nagar Haveli and Daman & Diu

Figure 7: Daman & Diu - Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)^{jj}

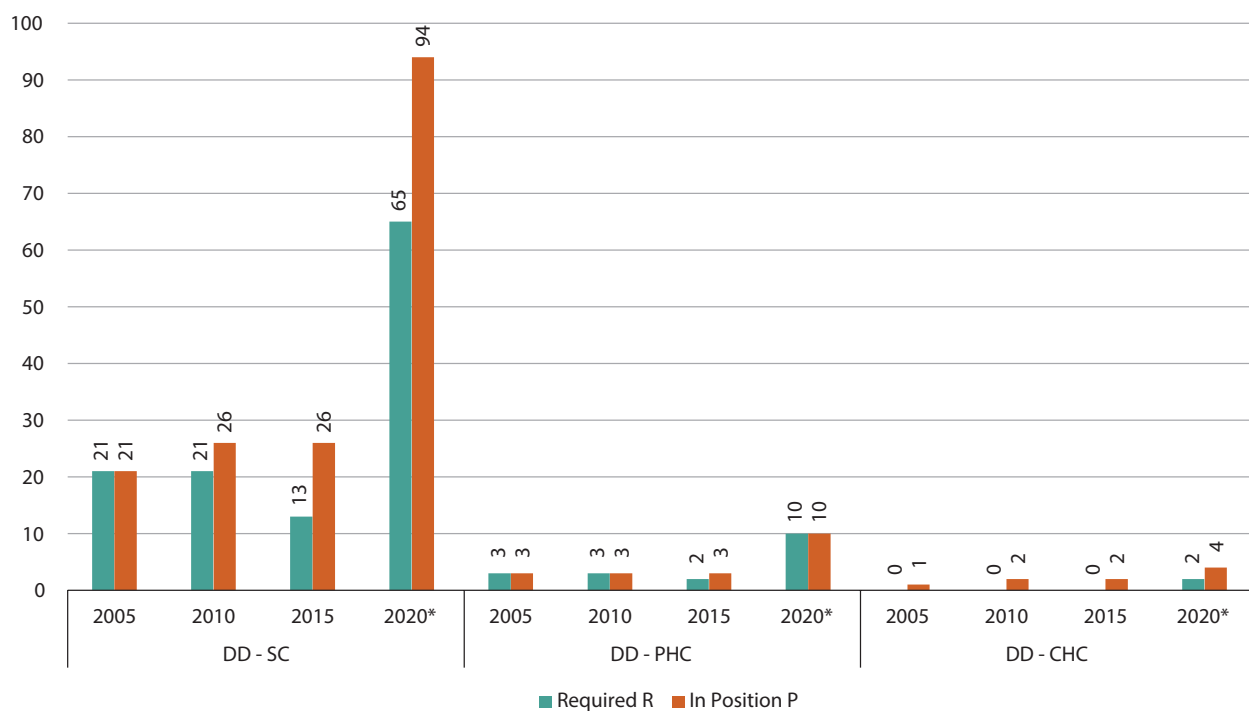
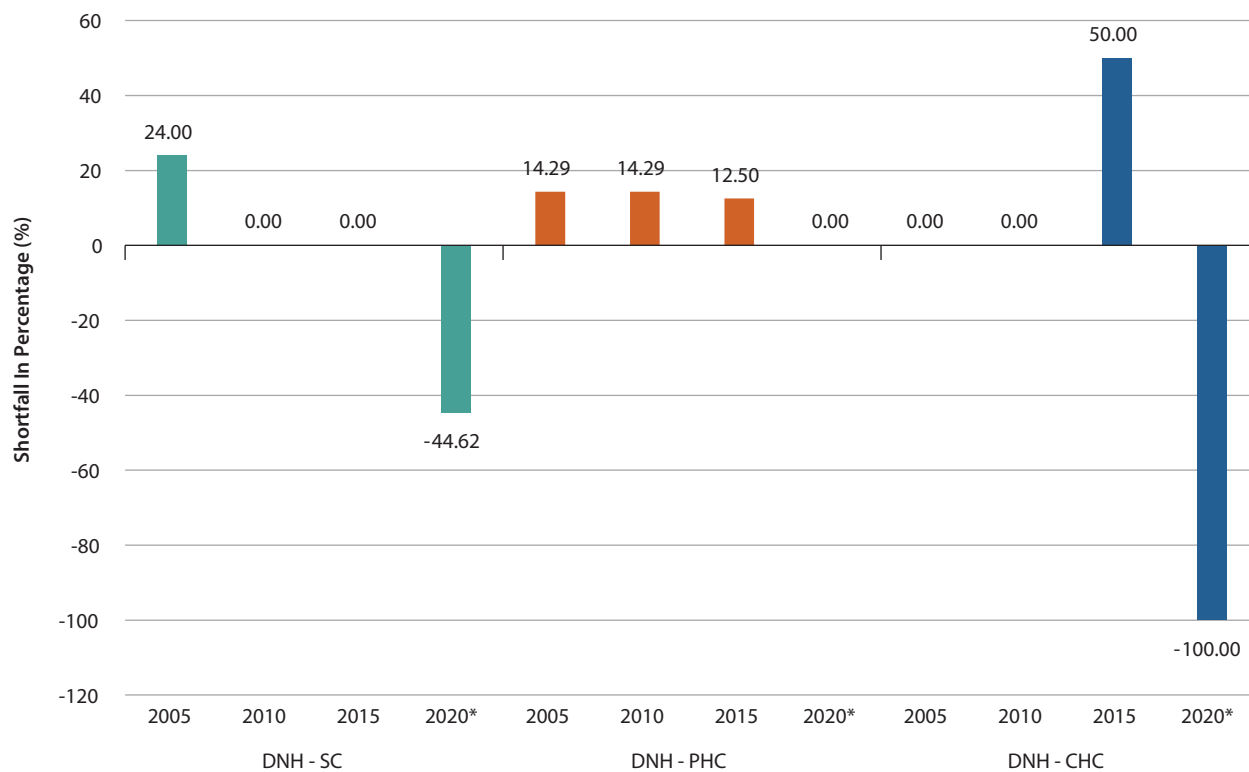


Figure 8: Dadra & Nagar Haveli - Year Wise Health Infrastructure Shortfall (%)^{kk}



^{jj} RHS 2020 - includes cumulative figures for Dadra & Nagar Haveli and Daman & Diu

^{kk} RHS 2020 - includes cumulative figures for Dadra & Nagar Haveli and Daman & Diu

Figure 9 Daman & Diu - Year Wise Health Infrastructure Shortfall (%)ⁱⁱ

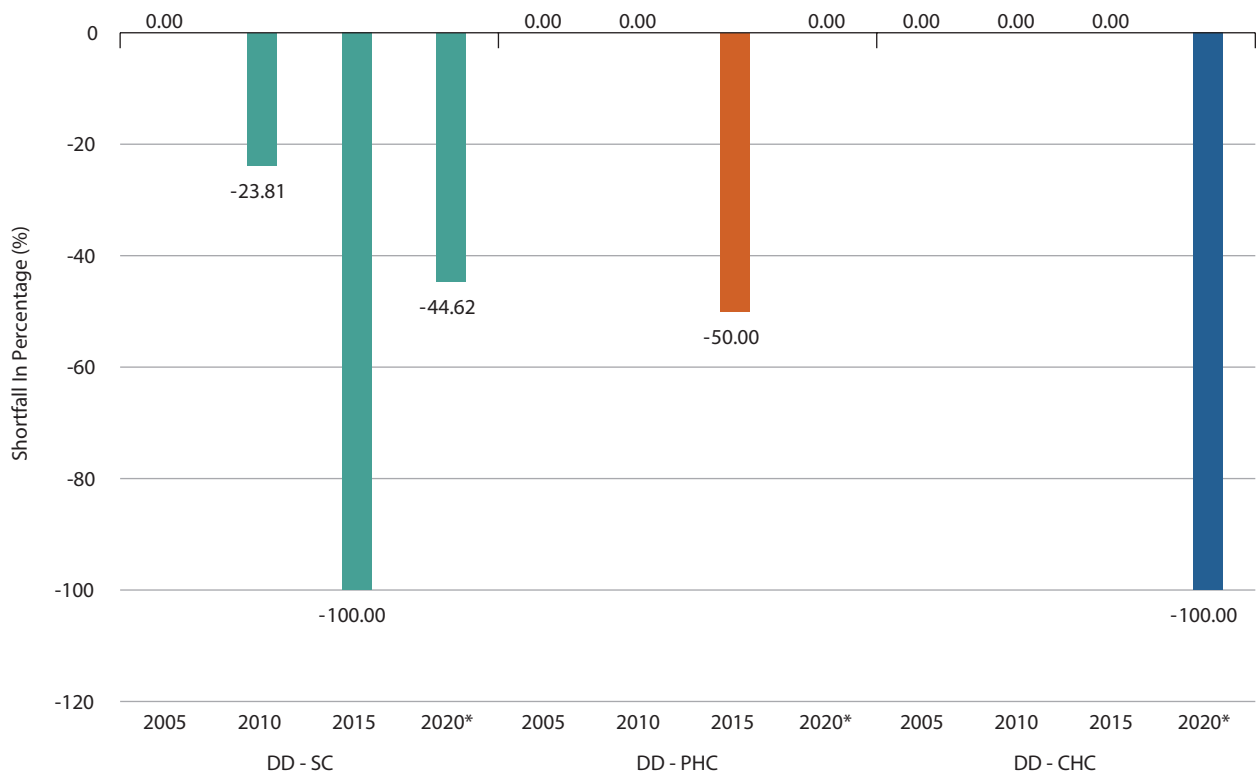
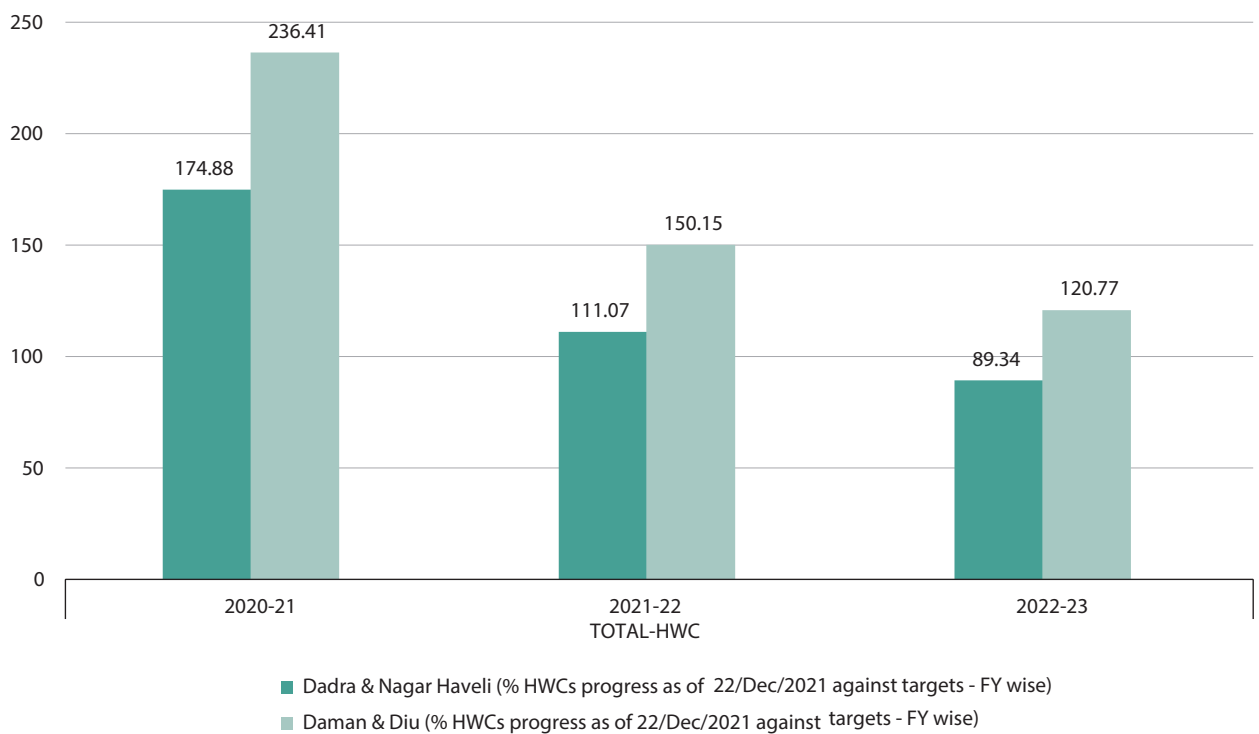


Figure 10: Percentage HWCs progress against target - FY wise (%)



ⁱⁱ RHS 2020 - includes cumulative figures for Dadra & Nagar Haveli and Daman & Diu

ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)													
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted (Height For Age) (%)	Children Under 5 Years - Wasted (Weight For Height) (%)
1	DNH & DD	NFHS 4 Total	983	25.3	N/A	26.8	36.2	1.7	3.2	19.5	71.9	88.5	66.4	2.1	37.2	26.7
2	DNH & DD	NFHS 5 Urban	705	39.5	87.7	26.7	63.5	3	15.6	15.4	77.9	96.4	91.9	9	32.9	22.1
3	DNH & DD	NFHS 5 Rural	940	66.3	67.9	26.2	72.4	1.5	7.8	8.5	94.8	96.7	94.8	11.3	45.7	21.1
4	DNH & DD	NFHS 5 Total	817	52	77.3	26.4	68	2.2	11.7	11.9	86.2	96.5	93.4	10.2	39.4	21.6
5	Dadra & Nagar Haveli	NFHS 5 Total	822	58.8	72.8	30	72.8	2.6	12.4	9	90.9	96.3	98.5	9.2	42.4	20.9
6	Daman	NFHS 5 Total	767	32.9	85.9	22.8	52.5	1.3	8.8	21.1	70.5	97.4	73.6	11.8	30	25.2
7	Diu	NFHS 5 Total	983	64	90.8	2.3	77.8	1.2	15.9	7.7	90.7	95.7	100	17.9	33.9	17.4

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'. Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best performing districts within the districts for a particular indicator

B. Red – Worst performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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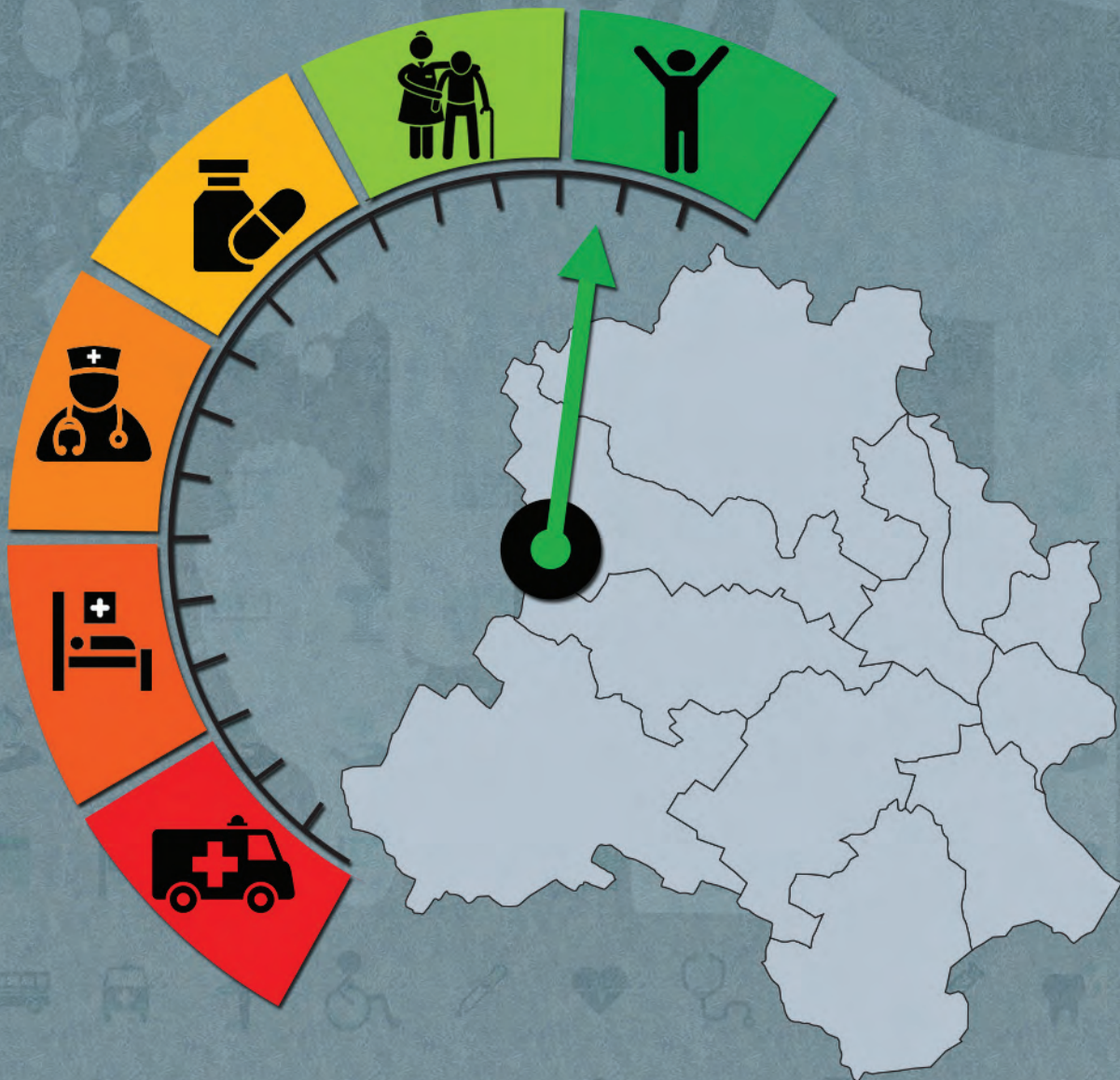
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



DELHI

**DISTRICTS VISITED IN
COMMON REVIEW MISSIONS**

CRM	Districts Visited	
6 th	South West	North East
9 th	West	North
10 th	Shahadra	Central
13 th	New Delhi	East

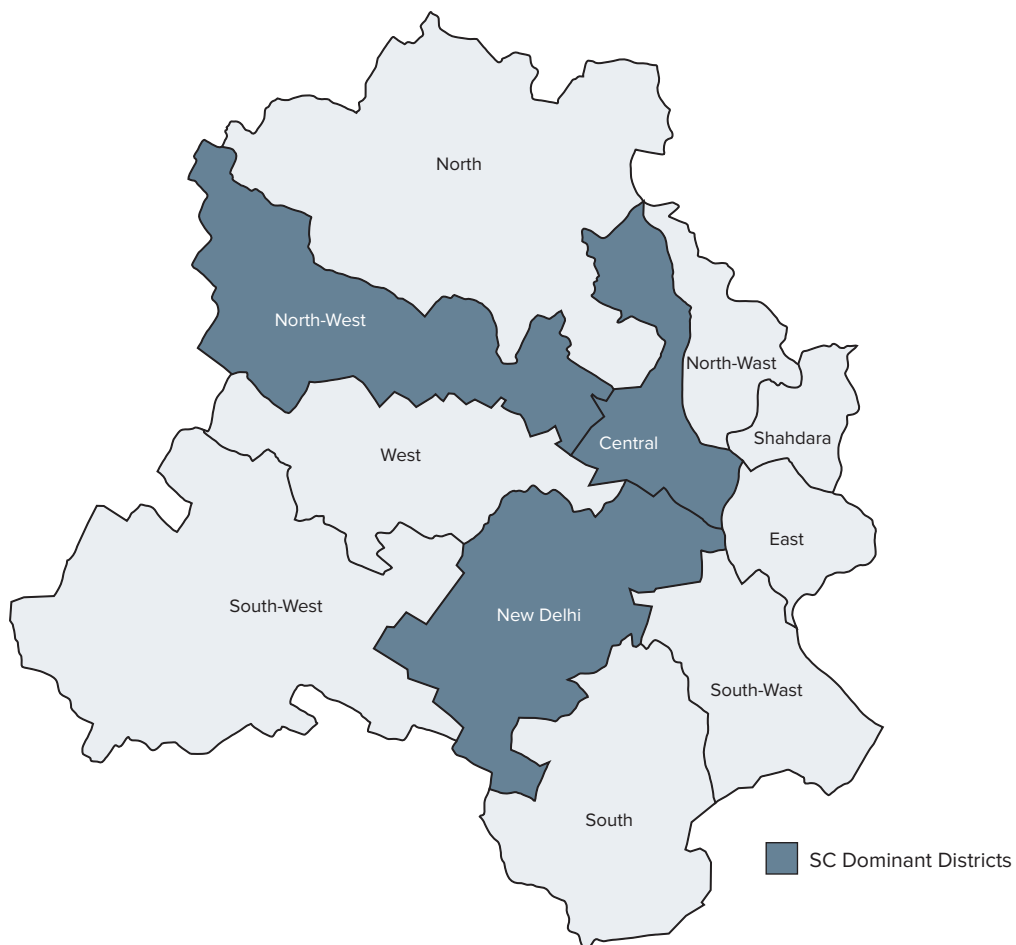
DELHI

1. BACKGROUND

1.1 State Profile

Delhi has a geographical spread of 1483 km². The UT is divided into 11 districts and is estimated to have a population of over 1.67 crores^a, which accounts for approximately 1.38% of India's total population (RHS 2019). It is projected that the population would reach around 2.05 crores by 2021 (Census Population Projection Report 2019). As per Census 2011, the Scheduled Caste (SC) population is 0.28 crores

Figure 1: Top 3 SC Dominant Districts



^a Census 2011

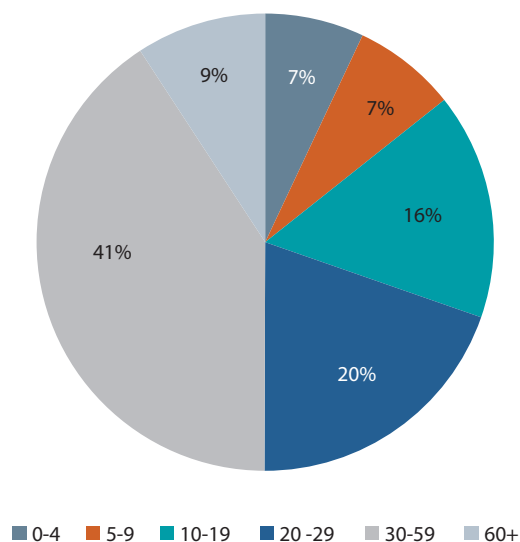
(16.75%). Out of the 11 districts, top three SC dominant districts account for 31.07% of SC population. (Annexure 1.1; fig 1). In Delhi, only 2.50% of the population reside in rural areas, while 97.50% constitute the urban population. The total length of roads^b in the UT is 17,882 km (0.35%^c), in which, the length of the national highways is 69 km (0.1%^d).

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

Out of the 11 districts, 1 district has population of 30 lakhs and above, 4 districts have a population between 20-30 lakhs, 1 district has a population between 10-20 lakhs, and 3 districts have a population less than 10 lakhs (Annexure 1.1 State profile). The UT's Sex ratio at birth of 844 females for every 1000 males is less than the national average of 899 (Annexure 1.2). It is estimated that there are 16% of the total population in the age group of 10-19 years, 61% within 20 to 59 years; while 9% are 60 years and above (Figure 2). The crude birth rate and the crude death rate have declined from 18.6 & 4.6 in 2005 to 14.4 & 3.2 in 2019, respectively (Annexure 2; figure2). The literacy rate increased from 81.7% in 2001 to 86.2% in 2011, with male & female literacy rates being 90.9% and 80.8%, respectively (Annexure 1.1). As per the ESAG 2018 report, the Gross Enrollment Rate (GER)^e is 45.4% for higher education, 77.90% for senior secondary education, 106.81% for secondary education, 116.61% for elementary education, and 110.71% for primary education.

Figure 2: Delhi - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 9% of the UT's total population. The life expectancy at 60 years of age is 19.9 and 22.2 for males and females, respectively (2014-2018). In Delhi, 100% of elderly females and 5% elderly males living in rural areas are economically fully dependent on others. Whereas in rural areas, 66% of elderly females and 14% elderly males are economically fully dependent on others. The old age dependency ratio is 10.4 in 2011; which is 9.7 for males and 11.2 for females, 10.3 in rural & 10.4 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 12% for men and 13% for women, as opposed to the national average of 31% for both (Elderly in India 2016).

^b Basic Road Statistics 2019, MoRTH

^c Percentage of total length of roads in Delhi

^d Percentage of total length of National Highways in the country

^e Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The UT has been able to provide RMNCHA+N^f services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^g, institutional deliveries, C sections, distribution of IFA^h tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined from 160ⁱ (SRS MMR Bulletin 2007-09) to 85^j (SRS MMR Bulletin 2016-2018) per 1,00,000 live births. In Delhi, 56.5% of women received 4 ANC check-ups (Annexure 1.4). As per the NFHS 5 report- East, North, Shahdara, South and South East Delhi reported comparatively better ANC coverage, ranging from 86.2% to 91%. Whereas, Central, New Delhi, North East, North West and West Delhi reported low ANC coverage, ranging from 50.6% to 80.1%. As reported in HMIS 2019-20, around 96.1% of the deliveries took place in institutions, out of which 80.9% took place in public health facilities. Total percentage of C-sections (32.1%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 59.4% is conducted at private facilities in the UT. Around 49.9% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years decreased from 54.3% (NFHS-4) to 49.9% (NFHS-5). Anaemia in females of reproductive age group is almost four times than that in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the UT has shown a significant decline in IMR from 35 (2005) to 11 (2019), which is lower than the national average of 30 (Annexure 2, Figure 1). Similarly, NNMR^k and Still Birth (per 1,000 live births) rates have also significantly decreased from 20 and 7 (2005) to 10 and 5 (2018) respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 73.2 (2006-10) to 75.3 (2014-18), which is above the national average of 69.4 years (Annexure 2, Figure 3). As per the NFHS 5 report, low SRBs^l ranging between 701 - 932 are reported in East, New Delhi, North East, South East and West Delhi; while high SRBs, ranging between 951 - 1084 are reported in Central, North West, Shahdara, South and South West Delhi.

Full vaccination^m coverage for children between 12 – 23 months of age has slightly declined from 79.6% (NFHS 4) to 79.4% (NFHS 5). The proportion of under 6-months children exclusively breastfed has increased from 49.6% (NFHS 4) to 64.3% (NFHS 5). An increase in childhood anaemia from 59.7% to 69.2% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 5). Though the

^f Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^g Antenatal Check up

^h Iron Folic Acid Tablets

ⁱ Other smaller states & UTs, inclusive of Delhi

^j Other smaller states & UTs, inclusive of Delhi

^k Neonatal Mortality Rate

^l Sex Ratio at Birth

^m NFHS 5 Delhi Factsheet, based on information from vaccination card only

burden of malnutrition significantly declined over time, there is a wide variation in the nutritional status within the UT. As per the NFHS 5 report, comparatively low stunting rates, which ranged from 21.7 to 27.4, are reported from New Delhi, North East, North West, South, and South East Delhi. While higher stunting rates, which ranged from 33.4 to 38.7, are reported from Central, East, North, South West and West Delhi. For under-5 wasting – New Delhi, North, North West, South West and West Delhi reported comparatively low burden, which ranged from 6.8 to 9.4; while Central, East, North East, Shahdara and South Delhi reported higher burden, which ranged from 10.9 to 15.7.

2.3 Family Planning

The TFRⁿ has reduced from 2.1 in 2005 to 1.5 in 2018 (Annexure 2, Figure 4). As per the NFHS 5 report, the total unmet need in the UT is reported as 6.1%, while the unmet need for spacing is 2.0% with North West Delhi reporting the highest total unmet need (15.7%). Approximately 57.7% of married women reported to avail any modern method of family planning in the UT (NFHS 5); with sterilization acceptance among females being 18.0% and 0.2% for males.

2.4 Communicable Diseases

The UT has 11 functional IDSP units in place^o. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 24.1% of total disease burden (Annexure 1.4). Neonatal preterm birth, dietary iron deficiency, drug susceptible TB, Diarrheal diseases and lower respiratory tract infections are the leading causes of deaths due to CMNND in the UT (Annexure 2, Figure 6^p). As per QPR report, for TB, the annualized total case notification rate is 563% and NSP^q success rate is 62%, as opposed to the national averages of 163% and 79%, respectively. For NLEP^r, the reported prevalence rate of 0.99 per 10,000 population is more than the national average of 0.61. In FY 2019-20, no deaths due to Dengue, Malaria, and Kala Azar are reported in the UT.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that as high as 59.2% of all deaths are premature in the UT, while disability or morbidity accounts for 40.8%. Ischaemic heart diseases, COPD, Diabetes type 2, and other musculoskeletal disorders are the major causes of DALYs in the UT (Annexure 2, Figure 6). NCDs contribute to 66.27% of DALYs; whereas, injuries contribute to 9.63% of DALYs in the UT. The UT is positioned 19th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 2.2% of women and 26.3% of men used any kind of tobacco, while 0.5% of women and 21.6% of men consumed alcohol. Overall, ambient particulate matter pollution, metabolic factors (high fasting plasma glucose, high systolic blood pressure, high body mass index) and behavioural risk like smoking are the major risk factors for all DALYs and YLLs (Annexure 2, figure 7).

ⁿ Total Fertility Rate

^o QPR Report (states as on 01.03.2020)

^p <https://vizhub.healthdata.org/gbd-compare/india>

^q New Smear Positive

^r National Leprosy Eradication Programme

2.6 Health Care Financing

The UT's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 7,04,529 crores. The UT is positioned 3rd out of 32 states in terms of per capita^s of ₹ 3,58,430. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 5,839 in public health facilities, ₹ 25,013 in private health facilities; whereas for urban areas, it is around ₹ 3,402 in public health facilities and ₹ 44,609 in private health facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 3,166 in public health facilities & ₹ 17,334 in private health facilities; whereas in urban areas - OOPE is estimated to be around ₹ 3,882 in public health facilities and ₹ 33,817 in private health facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated to be 69% in rural and 27% in urban areas; whereas for diagnostics, it is 3% in rural and 10% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Public health facilities have increased over time (Annexure 2, Figure 9) with 12 SCs, 5 PHCs and no CHCs are in place, against the required 29 SCs, 4 PHCs and 1 CHCs. In urban settings, there are 541 PHCs in place against the required 403 PHCs, which accounts to an excess of 34.24%. The UT has 38 DHs, 9 SDHs and 8 government medical colleges.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), no HWCs are operationalized in Delhi as of 22nd December 2021^t.

In the UT, 1 district is equipped with MMUs under the NRHM, and 1 under the NUHM. The UT has 92.95% of required ASHAs in position under the NUHM. The doctor to staff nurse ratio in place is 1:2, with 4 public health providers (MO, specialists, staff nurse & ANM) per 10,0000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 3949.61 availed (events) OPD services and 104.69 availed (events) IPD services. As per the NSSO data (2017-18), 89% of all OPD cases in rural areas and 44% in urban areas; and 86% of all IPD cases in rural areas & 41% in urban areas utilized public facilities. The public facility utilization in the UT is above the national averages for both (Annexure 1.6).

^s Directorate of Economics and Statistics

^t AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile

Indicator	Delhi 2011 ¹	India
Total Population (In Crore)	1.67	121.08
Rural (%)	2.50	68.85
Urban (%)	97.50	31.14
Scheduled Caste population (SC) (in crore)	0.28 (16.75%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0	10.45 (8.63%)
Total Literacy Rate (%)	86.2	72.99
Male Literacy Rate (%)	90.9	80.89
Female Literacy Rate (%)	80.8	64.64
Number of Districts in the Delhi ²	11	
Number of districts per lakh population in Delhi (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	3
	≥ 10 Lakhs - <20 Lakhs	1
	≥20 Lakhs - <30 lakhs	4
	≥30 Lakhs	1
SC Dominant (Top 3) Districts of Delhi ¹		
Central - 24.58%		
New Delhi - 23.41%		
North West - 19.06%		
Top 3 SC dominant district accounts for - 31.07%		

1.2 Key Health Status & Impact Indicators^u

Indicators	Delhi	India
Infant Mortality Rate (IMR) ³	11	30
Crude Death Rate (CDR) ³	3.2	6
Crude Birth Rate (CBR) ³	14.4	19.7
Maternal Mortality Ratio (MMR) ³ (other State/UT including Delhi)	85	113

^u Sources are mentioned at the end of Annexure 1

Neo Natal Mortality Rate (NNMR) ⁴	10	23
Under Five Mortality Rate (U5MR) ⁴	19	36
Still Birth Rate ⁴	5	4
Total Fertility Rate (TFR) ⁴	1.5	2.2
Life expectancy at birth ⁵	75.3	69.4
Sex Ratio at Birth ⁴	844	899

1.3 Key Health Infrastructure Indicators^v

Indicators	Numbers (Total)			
Number of District Hospitals ²	38			
Number of Sub District Hospital ²	9			
Number of Government (Central + State) Medical College ⁶	8			
Number of Private (Society + Trust) Medical Colleges ⁶	2			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status ^w (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	N/A	0	0	0
PHC-HWC	0	5	5	5
UPHC-HWC	N/A	251	251	251
Total-HWC	0	256	256	256
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	7	0	100.00	
Number of Primary Health Centres (PHC)	31	8	74.19	
Number of Sub Centres (SC)	188	42	77.66	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	23	3	0	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	403	541	-34.24	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	N/A	N/A	N/A	
Number of PHC	N/A	N/A	N/A	
Number of SC	N/A	N/A	N/A	

^v Sources are mentioned at the end of Annexure 1

^w Not available as per HWC Portal (as of 22nd Dec 2021)

Patient Service⁹	Delhi	India
IPD per 1000 population	104.69	62.6
OPD per 1000 population	3949.61	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	191.67	36.4

1.4 Major Health Indicator^x

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Delhi	India
% DALY ^y accountable for CMNNDs ^z	24.1	27.46
% DALY accountable for NCDs	66.27	61.43
% DALY accountable for Injuries	9.63	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Delhi	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	61.7	20.7
RMNCHA+N		
Maternal Health⁹	Delhi	India
% 1st Trimester registration to Total ANC Registrations	45.4	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	56.5	79.4
Total Reported Deliveries	286281	21410780
% Institutional deliveries to Total Reported Deliveries	96.1	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	80.9	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	19.1	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	32.1	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	25.6	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	59.4	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	49.9	53.4
Neonatal⁹	Delhi	India
% live birth to Reported Birth	98.3	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	21.8	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	73.4	89.9

^x Sources are mentioned at the end of Annexure 1

^y Disability Adjusted Life Years

^z Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Delhi	India
Sick New Born Care Unit (SNCU)	20	895
New Born Stabilization Unit (NBSU)	0	2418
New Born Care Corner (NBCC)	61	20337
Child Health & Nutrition¹⁰	Delhi (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	10.6	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	64.5	60.6
Children under 5 years who are underweight (weight-for-age) (%)	21.8	32.1
Child Immunization¹⁰	Delhi (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	79.4	83.8
Children age 12-23 months who have received BCG (%)	96.8	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	90.1	87.9
Family Planning¹⁰	Delhi (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	2	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Delhi	India
Number of districts with functional IDSP unit	11	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Delhi	India
Annualized total case notification rate (%)	563	163
New Smear Positive (NSP) Success rate (in %)	62	79
National Leprosy Eradication Programme (NLEP)¹¹	Delhi	India
Prevalence Rate/10,000 population	0.99	0.61
Number of new cases detected	1,824	1,14,359
Malaria, Kala Azar, Dengue¹¹	Delhi	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Delhi (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	29.5	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	43.9	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Delhi (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	14.7	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	21.8	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	4.2	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	5.3	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Delhi (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	2.2	8.9
Men who use any kind of tobacco (%)	26.3	38
Women who consume alcohol (%)	0.5	1.3
Men who consume alcohol (%)	21.6	18.8
Injuries		
Road Traffic Accident¹²	Delhi	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	19	N/A
Total number of fatal Road Accidents	1,433	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	26	33.7
Number of persons killed in Road Accidents	1463	115113

1.5 Access to Care^{aa}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Delhi	India
Number of Districts equipped with MMU under NRHM	1	506
Number of Districts equipped with MMU/Health Units under NUHM	1	31
Number of ERS vehicles operational in the States/UTs Under NHM	Delhi	India
102 Type	220	9955
104 Type	0	605
108 Type	0	10993
Others	9	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	0	11070

^{aa} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Delhi	India
Total number of ASHA targeted under NRHM	N/A	946563
Total number of ASHA in position under NRHM	0	904211
% of ASHA in position under NRHM	N/A	96
Total number of ASHA targeted under NUHM	6258	75597
Total number of ASHA in position under NUHM	5817	64272
% of ASHA in position under NUHM	92.95	85
Community Process¹¹	Delhi	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	0	554847
Number of Mahila Arogya Samitis (MAS) formed	98	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Delhi	India
DH	23	796
CHC	0	6036
PHC	0	20273
UHC	7	126
UPHC	0	3229
Human Resource for Health ¹⁴		
HRH Governance	Delhi	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	37
	MO MBBS (%)	31
	Nurse (%)	24
	LT (%)	68
	ANM (%)	2
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:2	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	5 per 10,000	4 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	6:1	6:1

Ranking: Human Resource Index of Delhi¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{bb}	3089	1828	1804	24	1285	66.27
Staff Nurse	9276	5788	4317	1471	4959	
Lab Technician	1549	4065	1308	2757	241	
Pharmacists	1030	1182	886	296	144	
MO MBBS ^{cc}	1509	1615	1200	415	309	
Specialist ^{dd}	1622	1312	734	578	888	

1.6 Healthcare Financing^{ee}

National Health Accounts (NHA) (2017-18)	Delhi		India	
Per Capita Government Health Expenditure (in ₹)	N/A		1,753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	N/A		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	N/A		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	N/A		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Delhi		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	89	44	33	26
IPD - % of hospitalized cases using public facility	86	61	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	441	617	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	2598	1225	845	915
IPD - Per hospitalized case (in INR) - Public	5,839	3,402	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	25,013	44,609	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	3	10	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	69	27	53	43

^{bb} MPW – Multi Purpose Health Worker (Female + Male)

^{cc} MO MBBS (Full Time)

^{dd} Specialist (All Specialist)

^{ee} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	3,166	3,882	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	17,334	33,817	20,692	26,701
State Health Expenditure	Delhi		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	11.6		5 ^{ff}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{ff} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

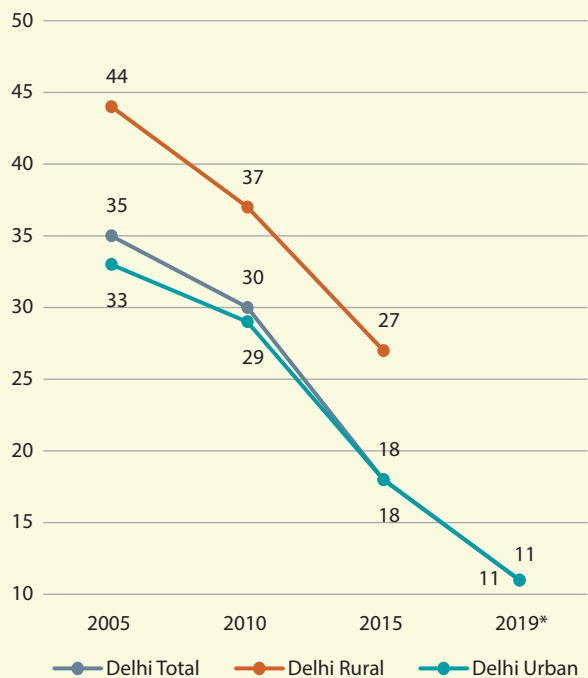


Figure 2: CBR & CDR Trend

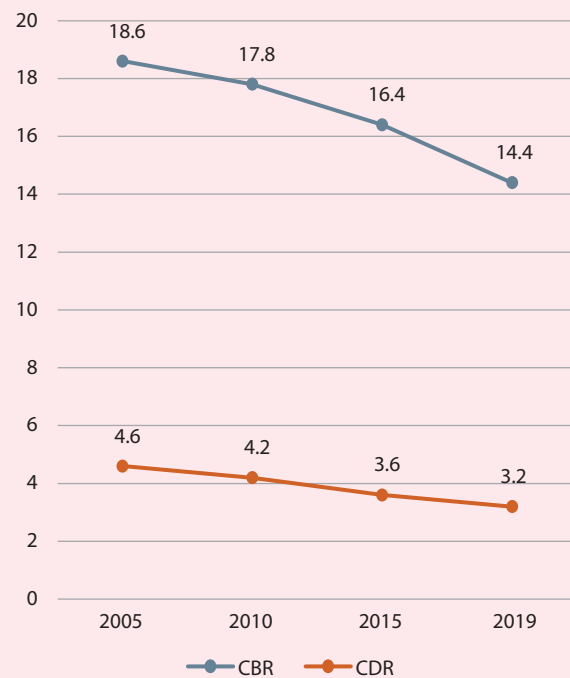


Figure 3: Life Expectancy At Birth Trend

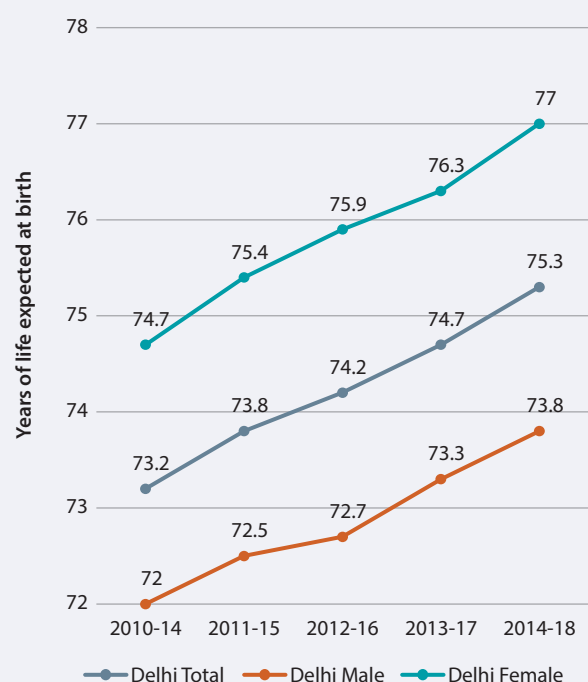
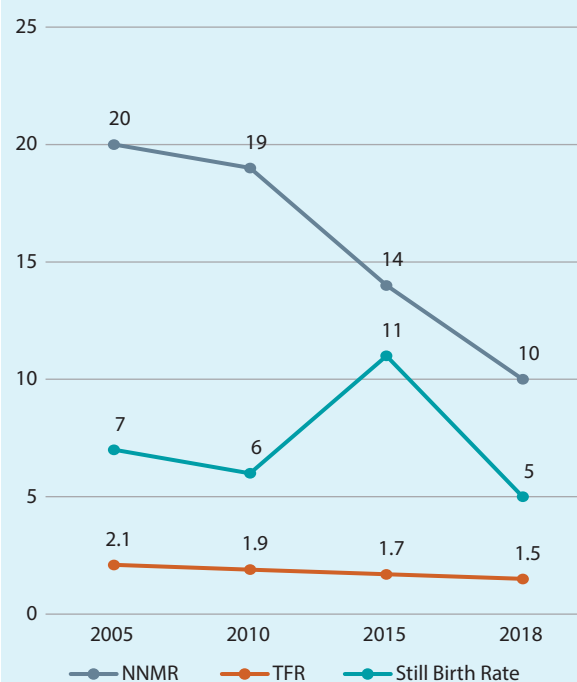


Figure 4: NNMR, TFR & Still Birth Trend



* IMR figure for rural area is not available as no infant death was recorded in the respective sample units for the year 2019.

Figure 5: Comparison of Key NFHS 5 & 4 Indicators

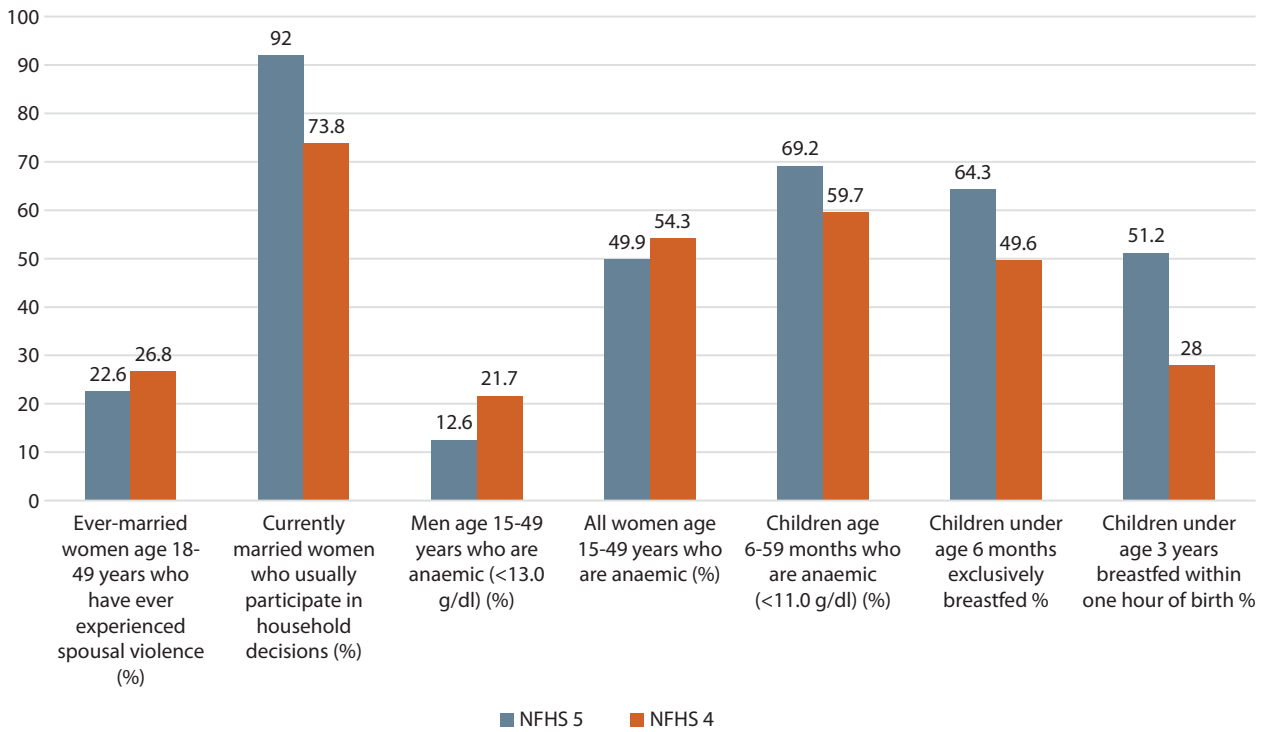


Figure 6: Top 15 causes of DALYs, 1990-2019

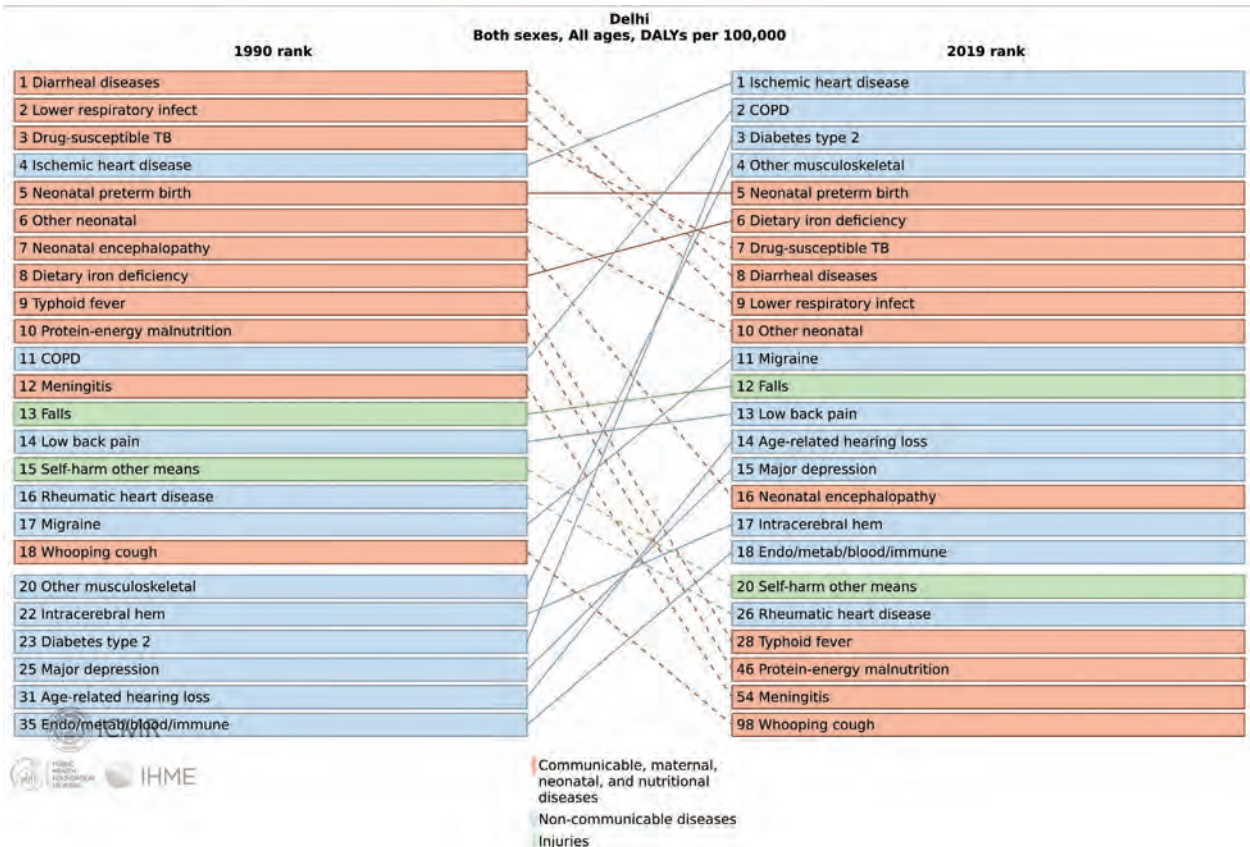


Figure 7: Top 15 risk of DALYs, 1990-2019

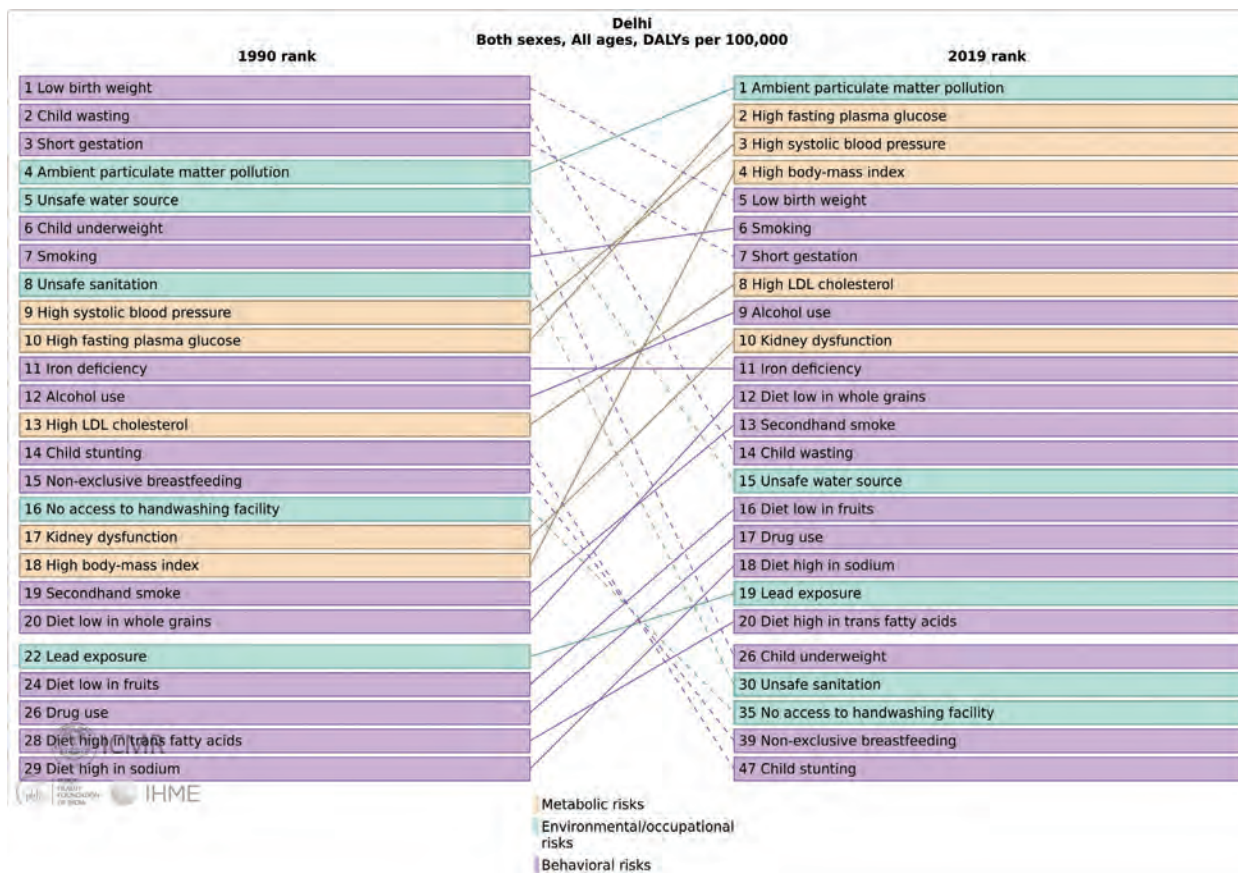


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

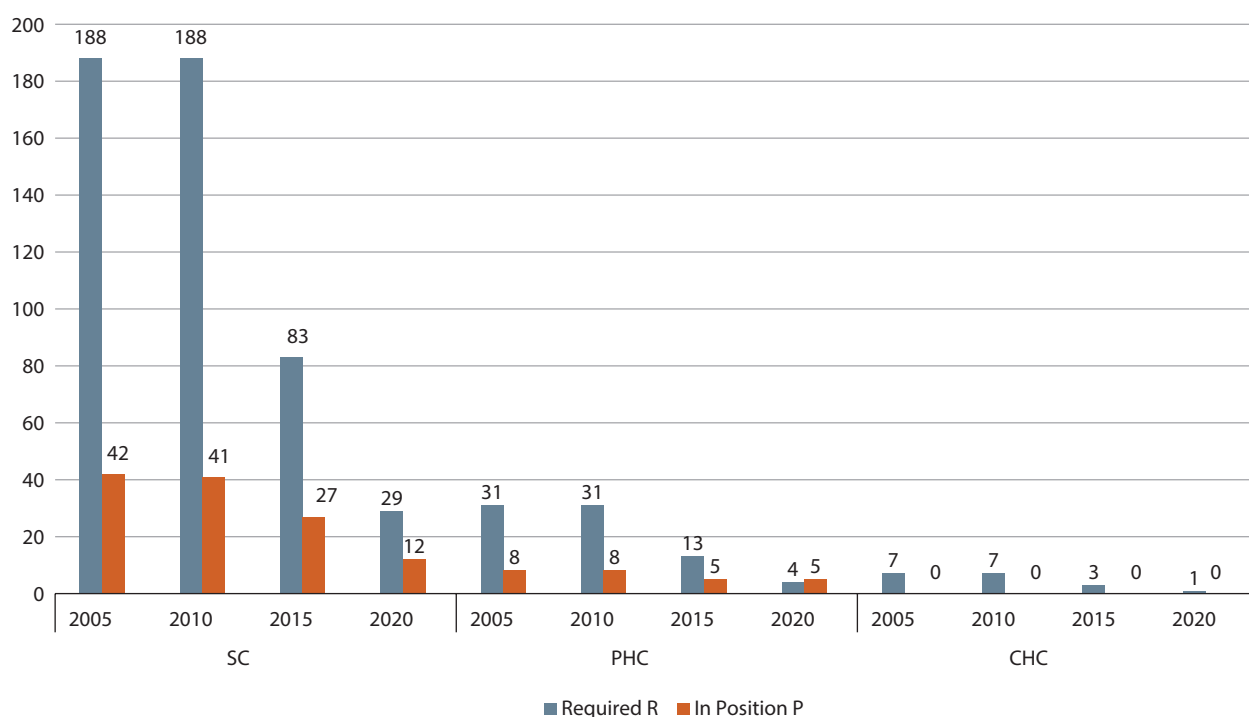
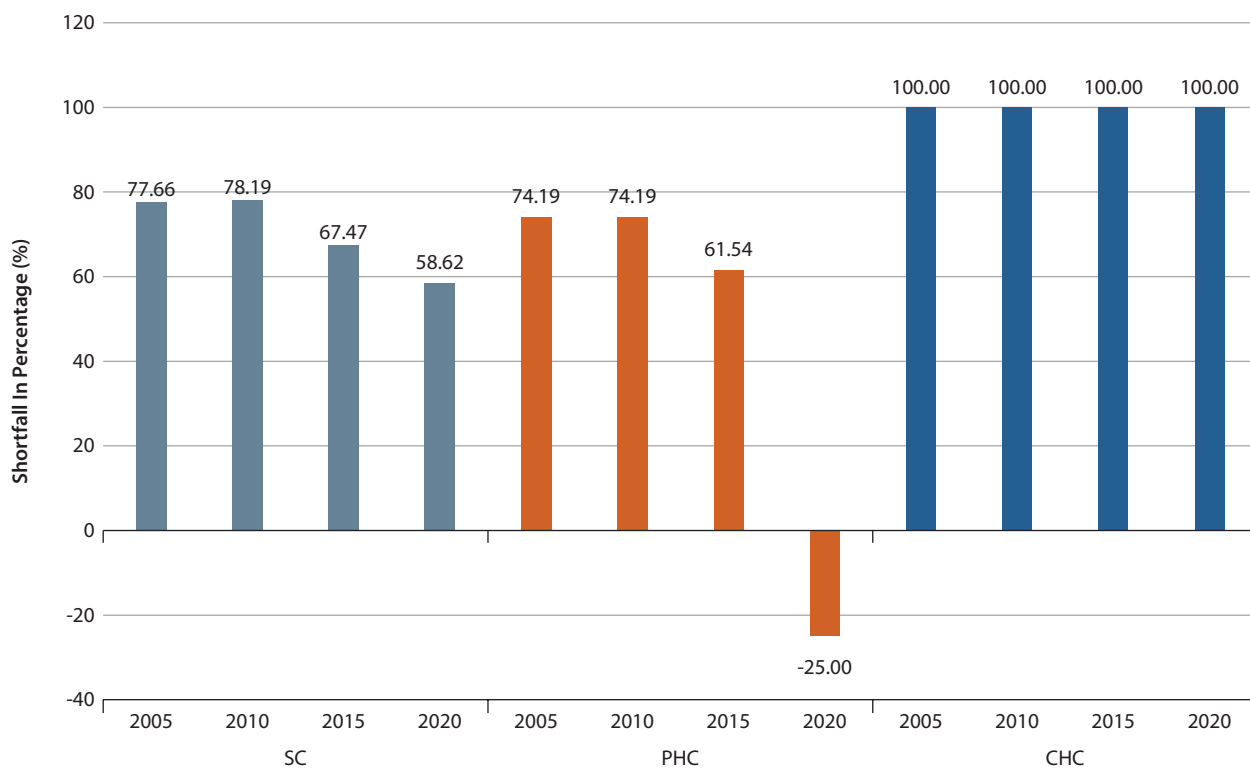


Figure 9: Year Wise Health Infrastructure Shortfall (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)													
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted ¹ (Height For Age) (%)	Children Under 5 Years - Wasted ² (Weight For Height) (%)
1	Delhi	NFHS 4 Total	812	15.7	NA	14.3	54.9	5.4	20	1555	67.9	84.4	79.6	5.2	31.9	15.9
2	Delhi	NFHS 5 Urban	927	25	83.6	9.8	76.5	6.6	28.4	6.1	77.1	91.8	79.4	16.4	31	11.4
3	Delhi	NFHS 5 Rural	792	27.1	87.8	11.4	71.3	11	23.3	8	83.1	90.4	79.9	28.4	26.3	7.6
4	Delhi	NFHS 5 Total	923	25	83.7	9.9	76.4	6.7	28.3	6.1	77.2	91.8	79.4	16.8	30.9	11.2
5	Central	NFHS 5 Total	994	22.6	83.5	11.2	68.5	5.7	22.9	9.4	73.1	92.2	94.1	18.2	33.5	13.5
6	East	NFHS 5 Total	820	30.7	83	12.8	81.9	5.8	32.8	2.6	89.7	92.6	80.9	23	35.2	15.7
7	New Delhi	NFHS 5 Total	898	25.2	81.8	10.2	77	7.3	30.8	5.3	80.1	91.8	87.5	15.6	27.4	6.8
8	North	NFHS 5 Total	936	19.4	83.8	5	79	6.8	34.2	5.1	86.2	89.2	83.2	29.5	38.7	8.8
9	North East	NFHS 5 Total	878	28.2	85	10.1	80	7.7	28.8	5.3	77.9	94	78	10.2	26.9	10.9
10	North West	NFHS 5 Total	1084	18.1	80	17	57.4	6.6	17.8	15.7	50.6	89.7	76.2	16.8	25	8.9
11	Shahdara	NFHS 5 Total	976	21.5	83.9	7.3	78	5.6	30.2	4.6	88.9	95.8	75.5	8.3	32.9	21.2
12	South	NFHS 5 Total	951	24.5	84.9	7.5	84.1	6.9	34.3	2.6	83.2	96.1	62.3	17	21.7	14.7
13	South East	NFHS 5 Total	701	37.7	87.5	7.5	78.5	6.4	29.4	4.6	91	92.5	74.2	15.2	27.1	10.6

14	South West	NFHS 5 Total	985	28.7	86.1	6.6	83.2	6.1	31.5	2.6	85.6	82	85.1	17.8	33.4	9.4
15	West	NFHS 5 Total	932	21	82.3	10.5	75.4	7.5	24.6	7	67.1	91.8	78.4	12.9	36.1	8.4

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'Vaccinated'. Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best five performing districts within the districts for a particular indicator

B. Red – Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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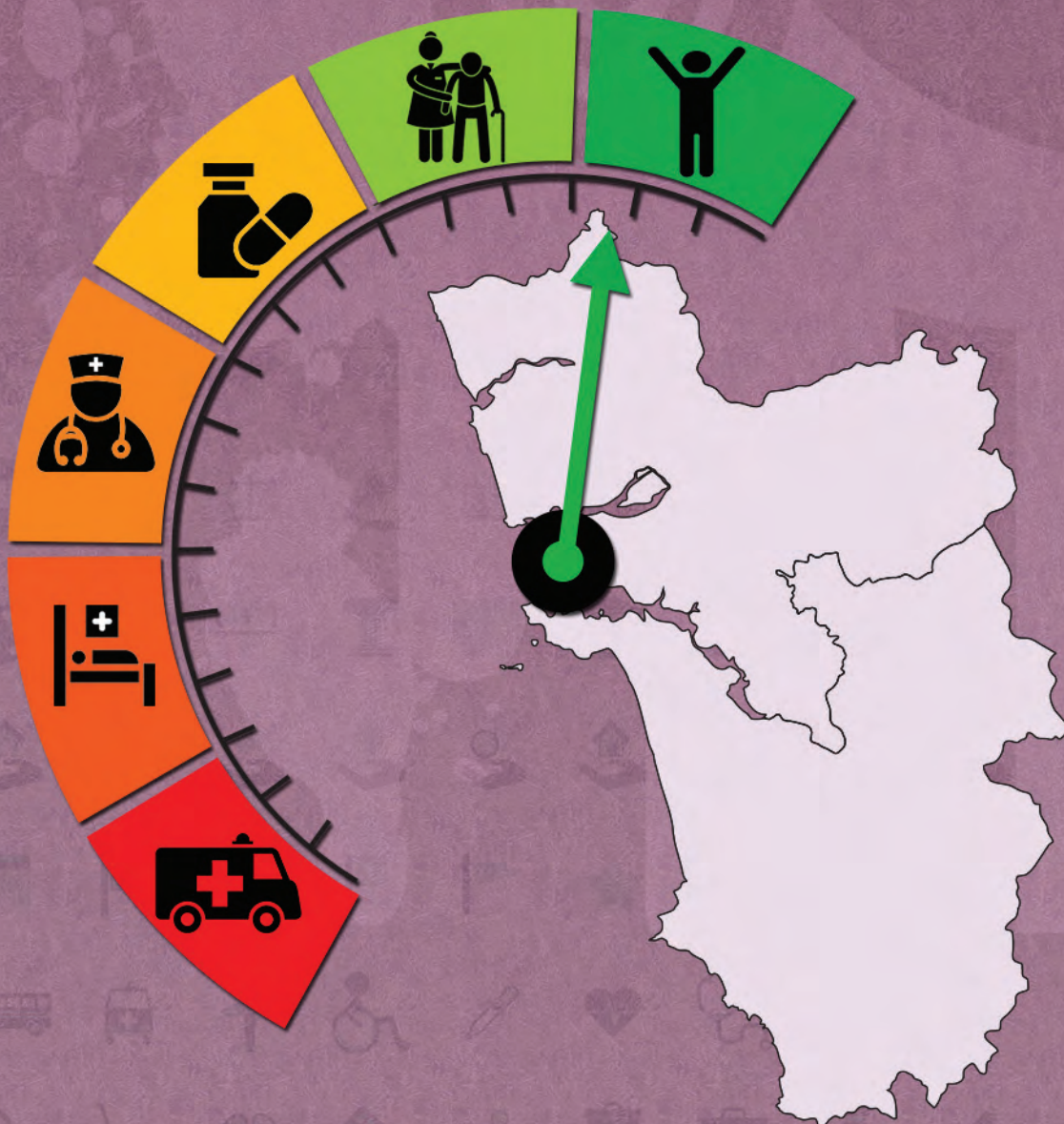
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



GOA

IN 5TH COMMON REVIEW MISSION (2011)
North and South districts are visited in Goa

GOA

1. BACKGROUND

1.1 State Profile

Goa has a geographical spread^a of 3,702 km². It is divided into 2 districts^b and estimated to have a population of over 0.14 crores^c, which accounts for approximately 0.12 % of India's total population. It is projected that the population would reach around 0.15 crores by 2021^d. As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 0.25 lakhs (1.74%) and 1.49 lakh (10.23%), respectively. In the State, 37.8% of the population constitute the rural population, and the rest constitute the urban population. The total length of roads^e in the State is 16,659 km (0.33 %^f), the length of national highways is 263 km (0.2%^g) and state highways is 279 km (0.16%^h).

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

2 districts in the State have a population less than 10 lakhs (Annexure 1.1 State profile). The crude birth rate and the crude death rate have declined from 14.8 & 7.1 in 2005 to 12.3 & 5.9 in 2019, respectively (Annexure 2; figure2). The sex ratio at birth in Goa is 838 females per 1000 males (NFHS 5). The literacy rate increased from 81.9% in 2001 to 86.0% in 2011, with male & female literacy rates being 92.6% and 84.7%, respectively (Annexure 1.1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)ⁱ is 27.6% for higher education, 75.84% for senior secondary education, 104.16% for secondary education, 101.12% for elementary education, and 102.57% for primary education.

^a RHS 2020

^b RHS 2020

^c Census 2011

^d Census Population Projection Report 2019

^e Basic Road Statistics 2019, MoRTH

^f Percentage of total length of roads in Goa

^g Percentage of total length of National Highways in the country

^h Percentage of total length of State Highways in the country

ⁱ Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

1.3 Elderly

Population ageing has profound social, economic, and political implications. In Goa, 47% of elderly females and 20% elderly males living in rural areas; and 56% of elderly females and 43% elderly males in urban areas are economically fully dependent on others. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 50% for men and 57% for women, as opposed to the national average of 31% for both (Elderly in India 2016).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+N^j services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^k, institutional deliveries, C sections, distribution of IFA^l tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). In Goa, 76.8% of women received 4 ANC check-ups (Annexure 1.4). As reported in HMIS 2019-20, around 99.9% of the deliveries took place in institutions, out of which 58.1% took place in public health facilities. Total percentage of C-sections (43.3%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections about 59.8% is conducted at private facilities in the State. Around 81.8% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years increased from 31.3% (NFHS-4) to 39.0% (NFHS-5). Anaemia in females of reproductive age group is almost thrice than in men of similar age group (Annexure 2, figure 3).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 16 (2005) to 8 (2019), which is exceptionally lower than the national average of 30 (Annexure 2, Figure 1). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4).

Full vaccination^m coverage for children between 12 – 23 months of age declined from 95.8% (NFHS 4) to 91.0% (NFHS 5). The proportion of under 6-months children exclusively breastfed has also decreased from 60.9% (NFHS 4) to 61.4% (NFHS 5). An increase in childhood anaemia from 48.3% to 53.2% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 3). There is an increase in under-5 years stunting from 20.1% (NFHS 4) to 25.8% (NFHS 5); but a decline in under-5 years wasting from 21.9% (NFHS 4) and 19.1% (NFHS 5).

2.3 Family Planning

As per NFHS 5 report, the total unmet need in the State is 8.4% and unmet need for spacing is 4.0%. Approximately 60.1% of married women reported to avail any modern method of family planning in the State (NFHS 5); with sterilization acceptance among females being 29.0% and nil among males.

^j Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^k Antenatal Check up

^l Iron Folic Acid Tablets

^m NFHS 5 State/UT Factsheet, based on information from vaccination card only

2.4 Communicable Diseases

The State has 2 functional IDSP units in placeⁿ. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 15.01% of total disease burden (Annexure 1.4). Lower respiratory tract infection is one of the leading causes of deaths due to CMNND in the State (Annexure 2, Figure 4). The annualized total case notification rate for TB is 131% and NSP^o success rate is 63% as opposed to the national averages of 163% and 79%, respectively. For NLEP^p, the reported prevalence rate of 0.56 per 10,000 population is less than the national average of 0.61. In FY 2019-20, no deaths due to Dengue, Malaria, or Kala Azar are reported in the State.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that 56.1% of total disease burden is due to premature deaths and 43.9% due disability or morbidity. Ischaemic heart disease, diabetes type 2, COPD, other musculoskeletal conditions and falls are the major causes of DALYs in the State (Annexure 2, Figure 4). NCDs contribute to 74.71% of DALYs; whereas injuries contribute to 10.28% of DALYs in the State^q. Goa is positioned 23rd in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 2.6% of women and 18.2% of men used any kind of tobacco, while 5.5% of women and 36.9% of men consumed alcohol. Overall, metabolic factors (high fasting plasma glucose, high systolic blood pressure, high body mass index, high LDL cholesterol) and ambient particulate matter pollution are the major risk factors for all DALYs and YLLs (Annexure 2, figure 5).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 66,060 crores. The State is positioned 1st out of 32 states in terms of per capita^r of ₹ 4,30,081. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 3,039 in public facilities, ₹ 38,097 in private facilities; whereas for urban areas- it is around ₹ 5,666 in public facilities and ₹ 30,662 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 4,278 in public facilities & ₹ 41,041 in private facilities; and in urban areas - OOPE is estimated to be around ₹ 4,558 in public facilities and ₹ 34,583 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated to be 74% in rural and 57% in urban areas; whereas for diagnostics, it is 9% in rural and 4% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 6). Public health facilities have increased over time with no shortfall in the required SCs, PHCs and CHCs (Annexure 2, Figure 7). Currently, there are 218 SCs, 55 PHCs and 6 CHCs are in place, against the required 93 SCs, 15 PHCs and 3 CHCs. However, in urban settings there are 4 PHCs in place against the required 23, which accounts to a shortfall of 82%. Goa has 2 DHs, 2 SDHs and 1 government medical college. In the State, only the DHs serve as functional FRUs. Under the recently introduced

ⁿ QPR NHM MIS Report (Status as on 01.03.2020)

^o New Smear Positive

^p National Leprosy Eradication Programme

^q <https://vizhub.healthdata.org/gbd-compare/india>

^r Directorate of Economics & Statistics

Ayushman Bharat – Health and Wellness Centres (AB-HWCs), 161 HWCs (100SCs, 56 PHCs and 5 UPHCs) are operationalized in the State as of 22nd December 2021⁵.

The doctor to staff nurse ratio in place is 1:2, with 6 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population.

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 1645.33 availed (events) OPD services and 71.67 availed (events) IPD services. As per the NSSO data (2017-18), 56% of all OPD cases in rural areas and 61% in urban areas; and 85% of all IPD cases in rural areas & 59% in urban areas utilized public health facilities. The public health facility utilization in the State is above the national averages for both (Annexure 1.6).

⁵ AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^t

Indicator	Goa 2011 ¹	India
Total Population (In Crore)	0.14	121.08
Rural (%)	37.83	68.85
Urban (%)	62.17	31.14
Scheduled Caste population (SC) (in crore)	0.0025 (1.74%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.0149 (10.23%)	10.45 (8.63%)
Total Literacy Rate (%)	88.7	72.99
Male Literacy Rate (%)	92.6	80.89
Female Literacy Rate (%)	84.7	64.64
Number of Districts in the Goa ²	2	
Number of districts per lakh population in Goa (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	2
	≥10 Lakhs	0
District wise ST Share (%)	District wise SC Share (%)	
North Goa - 6.91%	North Goa - 2.15%	
South Goa - 14.46%	South Goa - 1.22%	

1.2 Key Health Status & Impact Indicators

Indicators	Goa	India
Infant Mortality Rate (IMR) ³	8	30
Crude Death Rate (CDR) ³	5.9	6.0
Crude Birth Rate (CBR) ³	12.3	19.7
Maternal Mortality Ratio (MMR) ³	N/A	113
Neo Natal Mortality Rate (NNMR) ⁴	N/A	23
Under Five Mortality Rate (U5MR) ⁴	N/A	36
Still Birth Rate ⁴	N/A	4
Total Fertility Rate (TFR) ⁴	N/A	2.2
Life expectancy at birth ⁵	N/A	69.4
Sex Ratio at Birth ⁴	N/A	899

^t Sources are mentioned at the end of Annexure 1

1.3 Key Health Infrastructure Indicators^u

Indicators				Numbers (Total)
Number of District Hospitals ²				2
Number of Sub District Hospital ²				2
Number of Government (Central + State) Medical College ⁶				1
Number of Private (Society + Trust) Medical Colleges ⁶				0
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	100	73	132	172
PHC-HWC	56	25	25	25
UPHC-HWC	5	4	4	4
Total-HWC	161	102	161	201
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	3	6	-100.00	
Number of Primary Health Centres (PHC)	15	55	-266.67	
Number of Sub Centres (SC)	93	218	-134.41	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	2	0	0	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	23	4	82.61	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC ^v	0	N/A	N/A	
Number of PHC	3	N/A	N/A	
Number of SC	22	N/A	N/A	
Patient Service ⁹		Goa	India	
IPD per 1000 population		71.67	62.6	
OPD per 1000 population		1645.33	1337.1	
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population		53.14	36.4	

^u Sources are mentioned at the end of Annexure 1

^v Total population is less than (CHC) norms of 80,000

1.4 Major Health Indicator^w

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Goa	India
% DALY ^x accountable for CMNNDs ^y	15.01	27.46
% DALY accountable for NCDs	74.71	61.43
% DALY accountable for Injuries	10.28	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Goa	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	100	20.7
RMNCHA+N		
Maternal Health⁹	Goa	India
% 1st Trimester registration to Total ANC Registrations	57.6	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	76.8	79.4
Total Reported Deliveries	18434	21,410,780
% Institutional deliveries to Total Reported Deliveries	99.9	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	58.1	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	41.9	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	43.3	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	31.3	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	59.8	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	81.8	53.4
Neonatal⁹	Goa	India
% live birth to Reported Birth	99.1	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	17.4	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	78	89.9
New Born Care Units Established¹¹	Goa	India
Sick New Born Care Unit (SNCU)	3	895
New Born Stabilization Unit (NBSU)	1	2418
New Born Care Corner (NBCC)	10	20337

^w Sources are mentioned at the end of Annexure 1

^x Disability Adjusted Life Years

^y Communicable, Maternal, Neonatal, and Nutritional Diseases

Child Health & Nutrition¹⁰	Goa (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	3.2	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	N/A	60.6
Children under 5 years who are underweight (weight-for-age) (%)	24	32.1
Child Immunization¹⁰	Goa (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	91	83.8
Children age 12-23 months who have received BCG (%)	97.9	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	92.9	87.9
Family Planning¹⁰	Goa (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	4	4
Communicable Diseases²		
Integrated Disease Surveillance Programme (IDSP)¹¹	Goa	India
Number of districts with functional IDSP unit	2	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Goa	India
Annualized total case notification rate (%)	131	163
New Smear Positive (NSP) Success rate (in %)	63	79
National Leprosy Eradication Programme (NLEP)¹¹	Goa	India
Prevalence Rate/10,000 population	0.56	0.61
Number of new cases detected	80	114,359
Malaria, Kala Azar, Dengue¹¹	Goa	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Goa (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	49	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	67.2	30.7

^v Sources are mentioned at the end of Annexure 1

Non-Communicable Disease^{aa}		
Diabeties and Hypertension¹⁰	Goa (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	12.1	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	14.8	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	8.6	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	10.3	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Goa (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	2.6	8.9
Men who use any kind of tobacco (%)	18.2	38
Women who consume alcohol (%)	5.5	1.3
Men who consume alcohol (%)	36.9	18.8
Injuries		
Road Traffic Accident¹²	Goa	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	23	N/A
Total number of fatal Road Accidents	283	137,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	8.6	33.7
Number of persons killed in Road Accidents	297	115113

1.5 Access to Care

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Goa	India
Number of Districts equipped with MMU under NRHM	0	506
Number of Districts equipped with MMU/Health Units under NUHM	N/A	31
Number of ERS vehicles operational in the States/UTs Under NHM	Goa	India
102 Type	0	9955
104 Type	0	605
108 Type	51	10993
Others	4	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	72	11070

^{aa} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Goa	India
Total number of ASHA targeted under NRHM	N/A	946563
Total number of ASHA in position under NRHM	N/A	904211
% of ASHA in position under NRHM	N/A	96
Total number of ASHA targeted under NUHM	N/A	75597
Total number of ASHA in position under NUHM	N/A	64272
% of ASHA in position under NUHM	N/A	85
Community Process¹¹	Goa	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	247	554847
Number of Mahila Arogya Samitis (MAS) formed	12	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Goa	India
DH	2	796
CHC	6	6036
PHC	23	20273
UHC	N/A	126
UPHC	4	3229
Human Resource for Health ¹⁴		
HRH Governance	Goa	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	55
	Dentists (%)	9
	MO MBBS (%)	17
	Nurse (%)	18
	LT (%)	17
	ANM (%)	18
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	8 per 10,000	6 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	5:1	5:1

Ranking: Human Resource Index of Goa¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{bb}	481	585	454	131	27	92.91
Staff Nurse	586	698	654	44	0	
Lab Technician	115	157	133	24	0	
Pharmacists	59	100	77	23	0	
MO MBBS ^{cc}	103	241	221	20	0	
Specialist ^{dd}	160	199	110	89	50	

1.6 Healthcare Financing

National Health Accounts (NHA) (2017-18)	Goa		India	
Per Capita Government Health Expenditure (in ₹)	N/A		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	N/A		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	N/A		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	N/A		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Goa		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	56	61	33	26
IPD - % of hospitalized cases using public facility	85	59	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	356	454	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	675	598	845	915
IPD - Per hospitalized case (in INR) - Public	3,039	5,666	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	38,097	30,662	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	9	4	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	74	57	53	43

^{bb} Sources are mentioned at the end of Annexure 1

^{cc} MO MBBS (Full Time)

^{dd} Specialist (All Specialist)

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	4,278	4,558	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	41,041	34,583	20,692	26,701
State Health Expenditure	Goa		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	6.9		5 ^{ee}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{ee} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

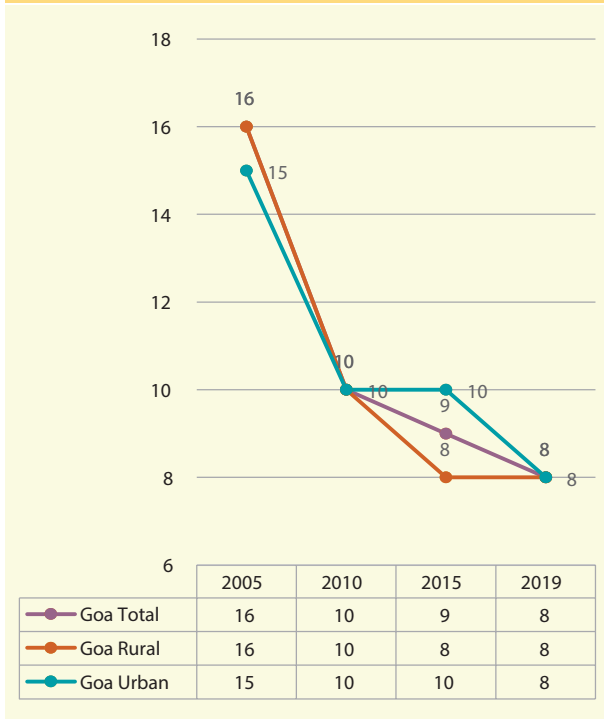


Figure 2: CBR & CDR Trend

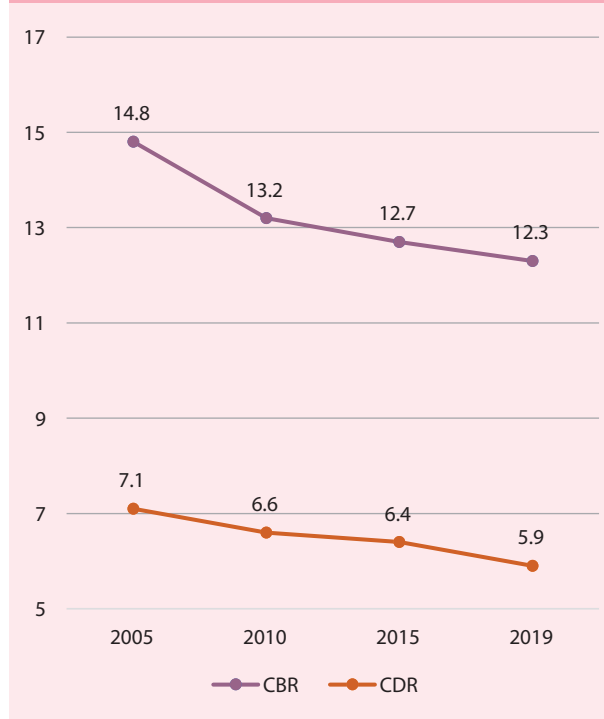


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

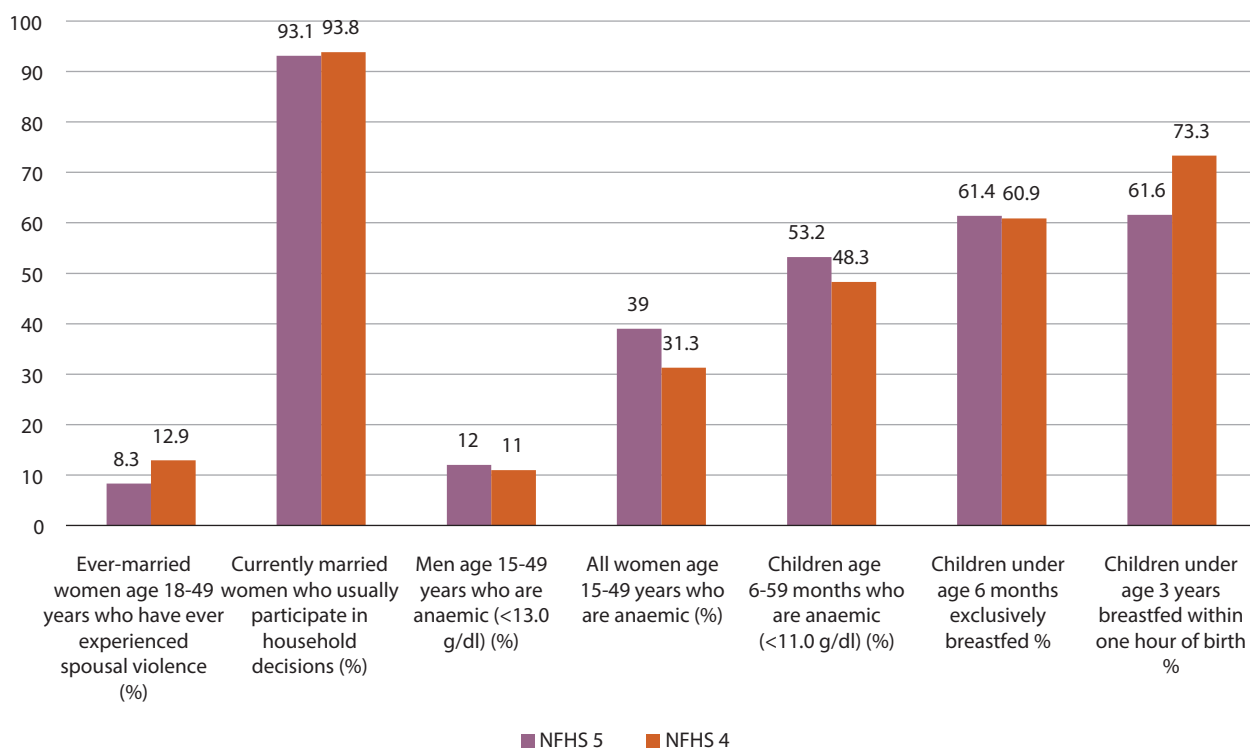


Figure 6: Top 15 causes of DALYs, 1990-2019

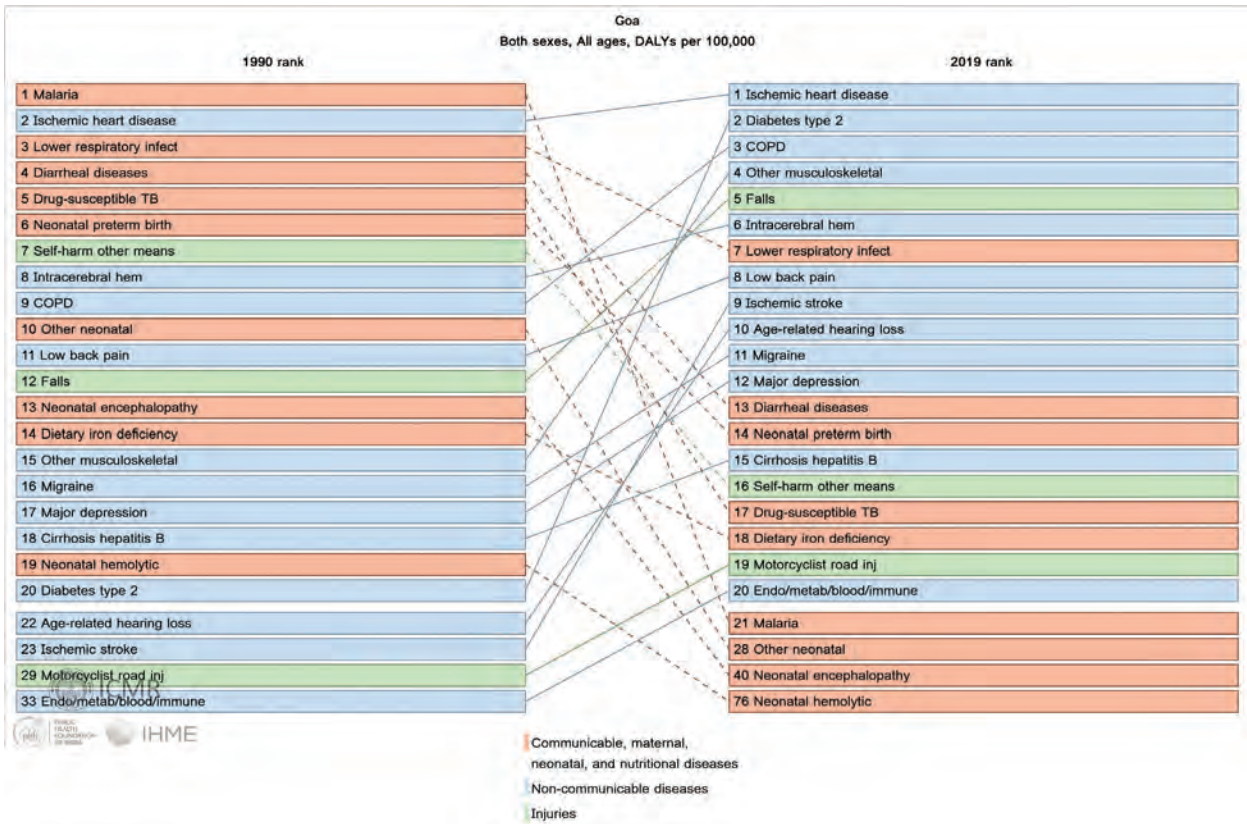


Figure 7: Top 15 risk of DALYs, 1990-2019

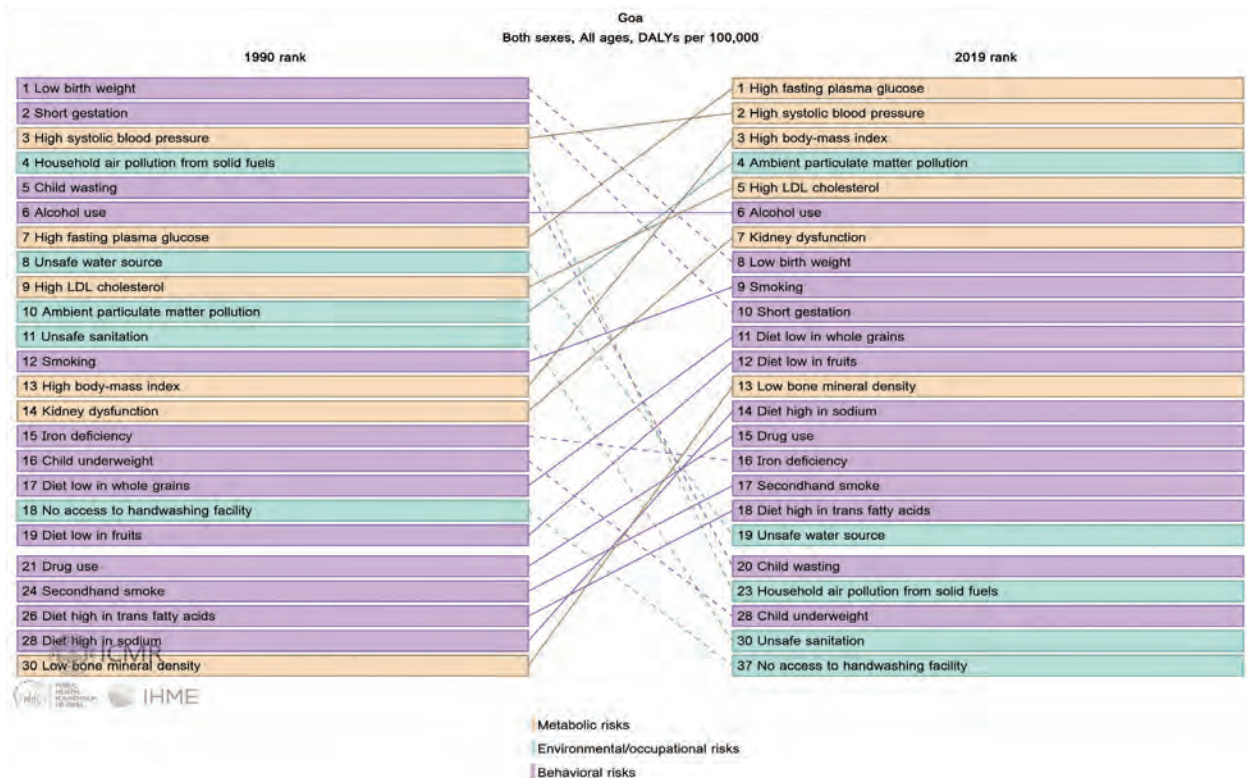


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

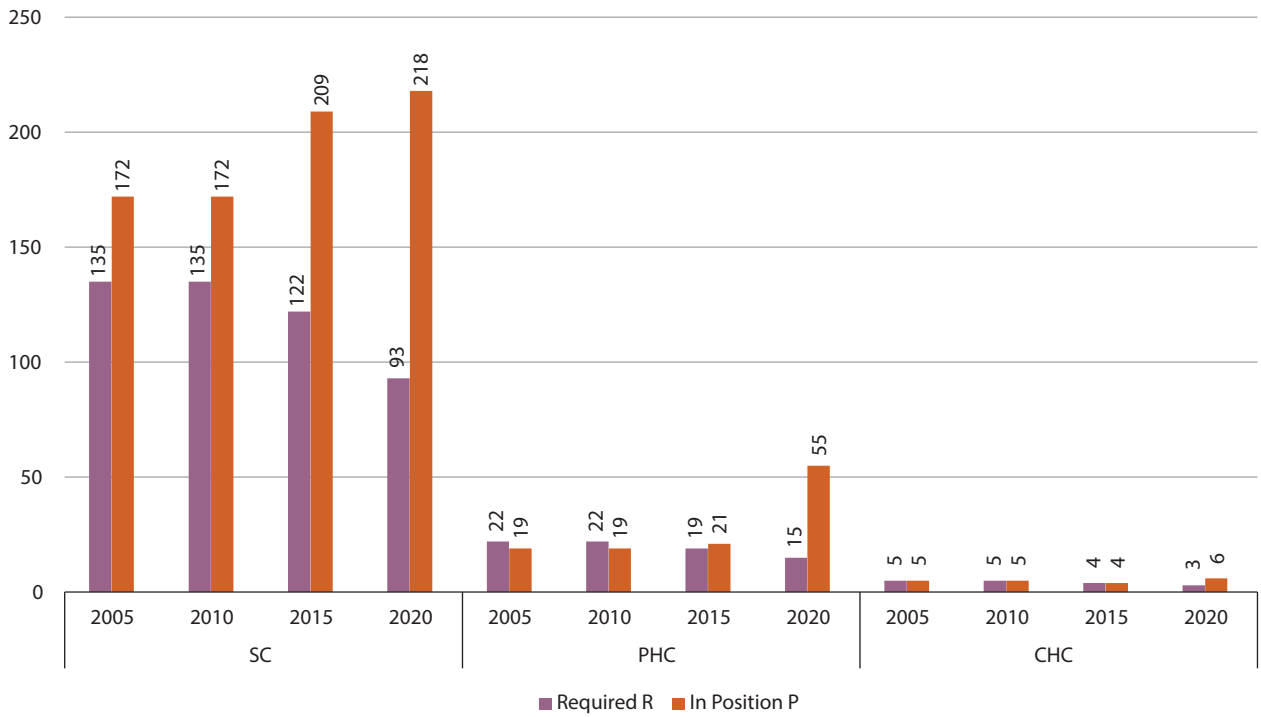


Figure 9: Year Wise Health Infrastructure Shortfall (%)

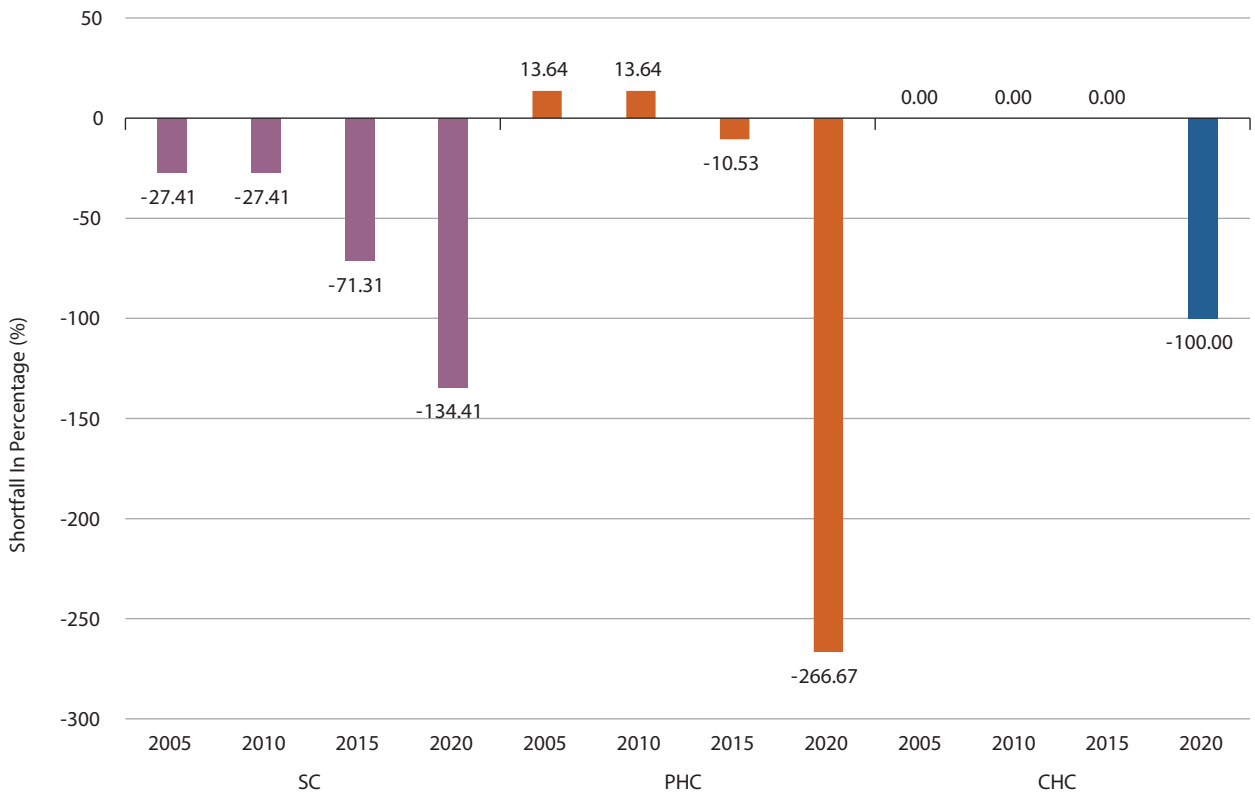
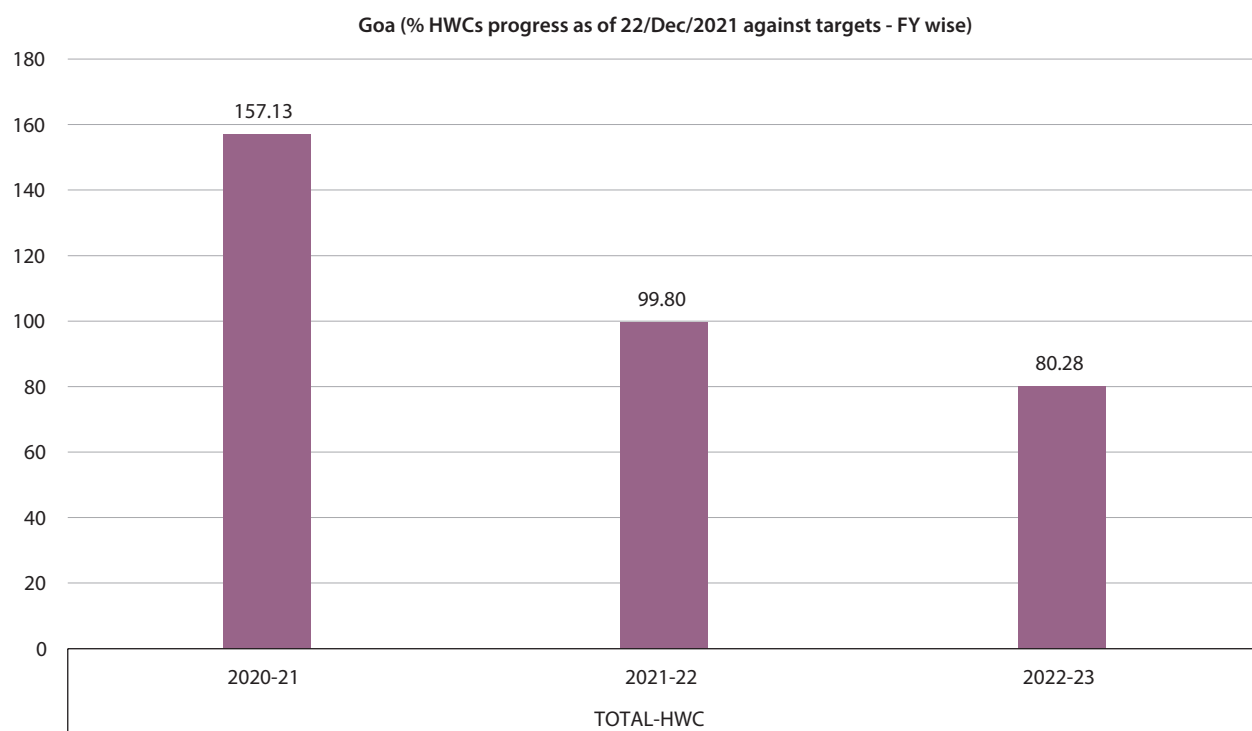


Figure 10: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

Serial No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)																
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted [^] (Height For Age) (%)	Children Under 5 Years - Wasted [^] (Weight For Height) (%)			
1	Goa	NFHS 4 Total	966	15.9	N/A	9.8	26.3	0.9	7.1	17.5	89	96.9	95.8	10.4	20.1	21.9			
2	Goa	NFHS 5 Urban	822	65.1	92.6	7.7	72.3	2.5	24.6	7.3	92.9	99.6	87.7	21.1	24.3	17.7			
3	Goa	NFHS 5 Rural	864	67.5	93.4	3.2	61.1	2.2	21.1	10.1	93.1	100	N/A	22.2	28.2	21.5			
4	Goa	NFHS 5 Total	838	66	93	5.8	67.9	2.4	23.2	8.4	93	99.7	91	21.5	25.8	19.1			
5	North Goa	NFHS 5 Total	849	64.8	92.4	7.5	63.1	2.3	23.1	9.2	91.3	99.6	87.5	25.8	24.2	17.7			
6	South Goa	NFHS 5 Total	819	67.7	93.8	3.9	75	2.5	23.5	7.2	96	100	N/A	13.4	28.3	21.4			

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'; Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/MMRV/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below - 2, standard deviations, based on the WHO standard. 13 Below - 3, standard deviations, based on the WHO standard

A. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

B. ** Based on the youngest child living with the mother

C. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

D. ^ Below - 2, standard deviations, based on the WHO standard. 13 Below - 3, standard deviations, based on the WHO standard

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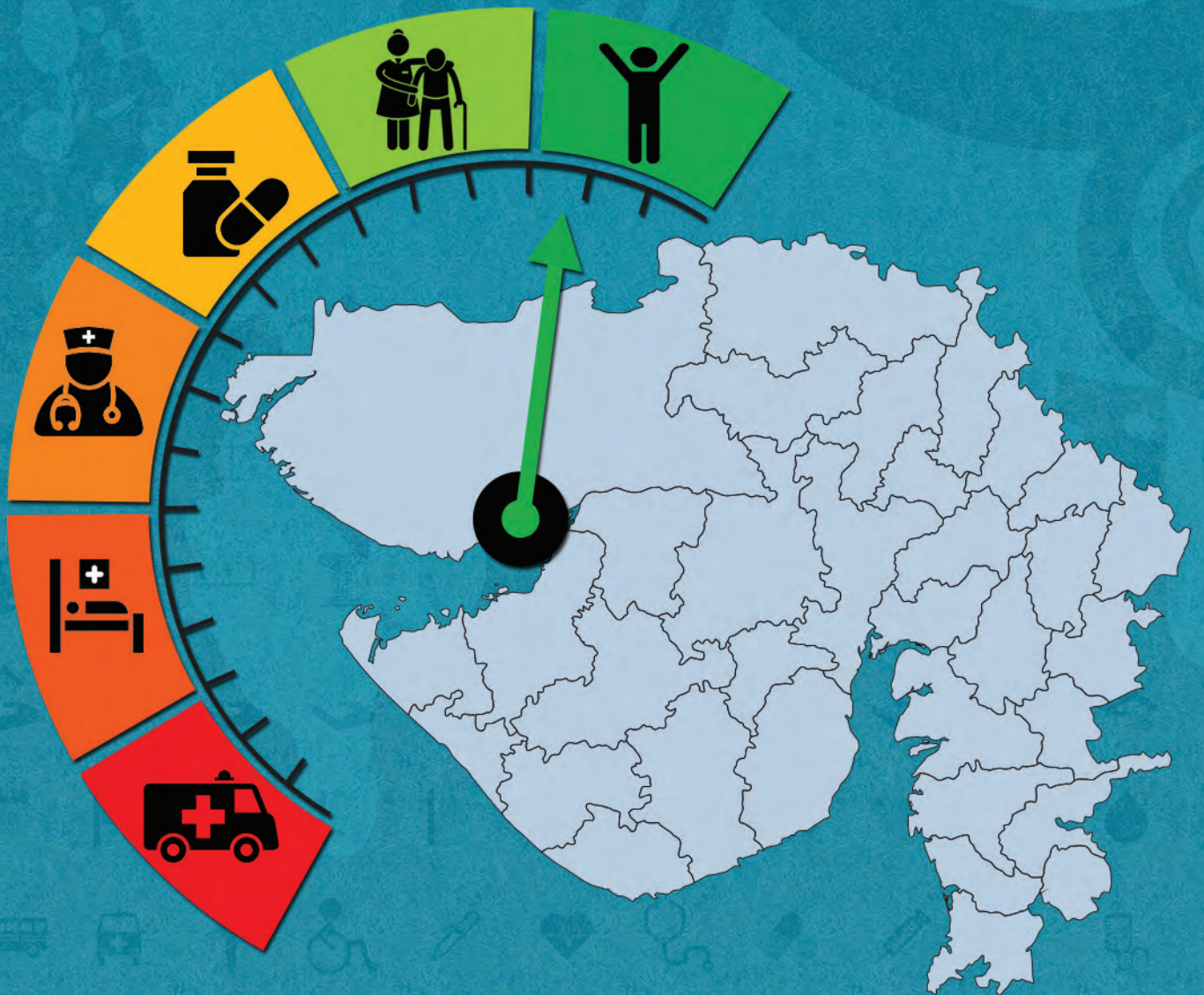
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



GUJARAT

DISTRICTS VISITED IN
COMMON REVIEW MISSIONS

CRM	Districts Visited	
1 st	Sabarkantha	Panchmahal
3 rd	Patan	Banaskantha
5 th	Rajkot	Dahod
7 th	Valsad	Dang
10 th	Gandhinagar	Navasari
12 th	Narmada	Porbandar
13 th	Dahod	Surat

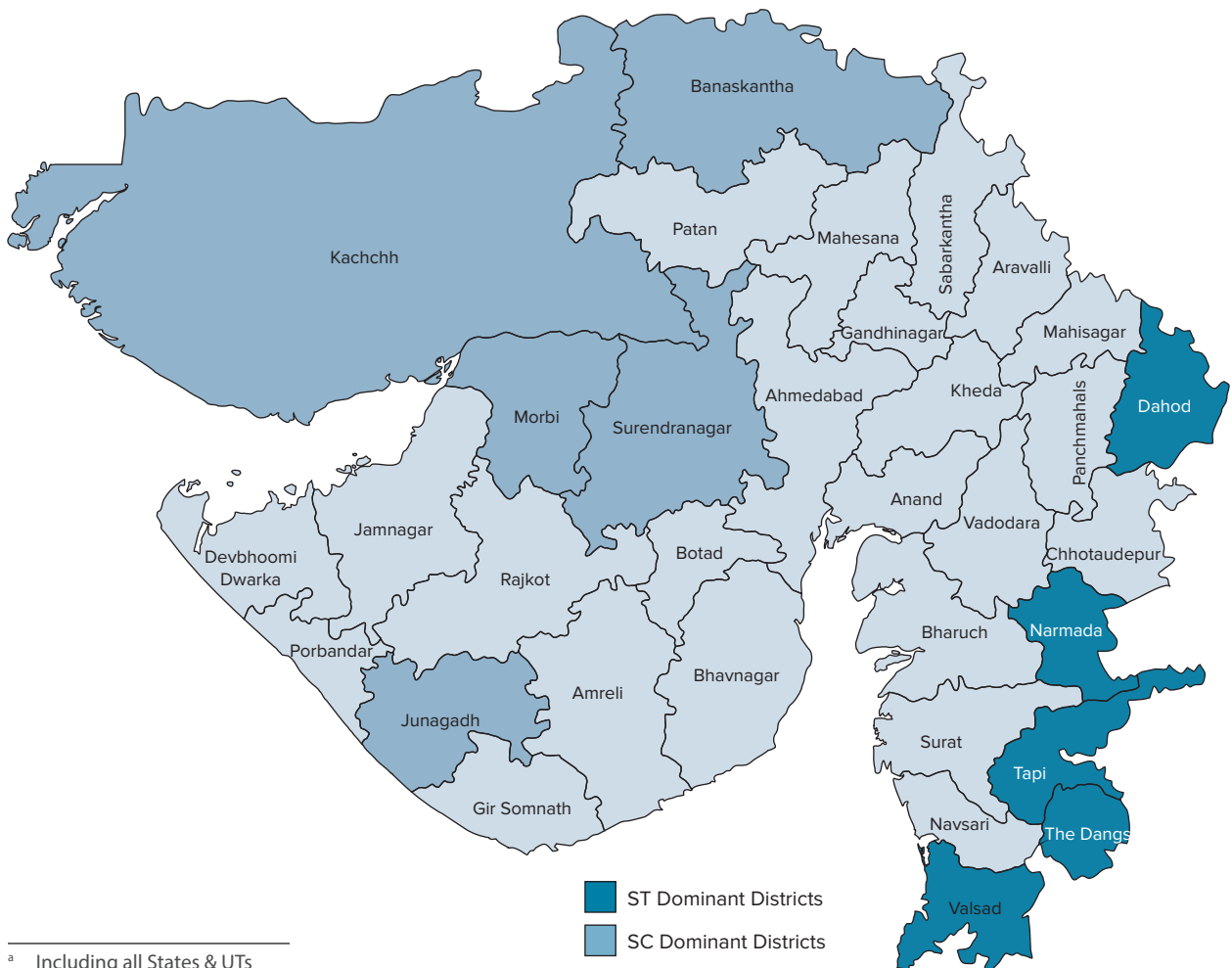
GUJARAT

1. BACKGROUND

1.1 State Profile

Gujarat is positioned^a 6th in India for a geographical spread of 1,96,024 km². It is divided into 33 districts and is estimated to have a population of over 6.04 crores^b, which accounts for approximately 5% of India's total population (RHS 2019). It is projected that the population would reach around 6.97 crores by

Figure 1: Top 5 ST & SC Dominant Districts



^a Including all States & UTs
^b Census 2011

2021 (Census Population Projection 2019). As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 0.40 crores (6.74%) and 0.89 crores (14.75%), respectively. Out of the 33 districts, top five ST & SC dominant districts account for 43.29% of ST & 43.96% of SC population in the State (Figure 1 & Annexure 1, State Profile). Around 57.4% of the population reside in rural areas, while the rest constitute the urban population.

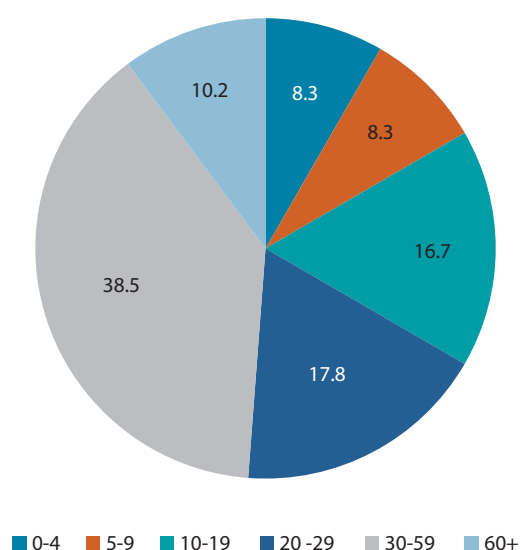
The total length of roads^c in the State is 1,80,927 km (3.62%^d), in which, length of the national highways is 5,017 km (4.4%^e) and state highways is 17,201 km (9.82%^f).

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

Out of the 33 districts, 5 districts have a population of 30 lakhs and above, 10 districts have a population between 20-30 lakhs, 7 districts have a population between 10-20 lakhs, and 4 districts have a population less than 10 lakhs (Annexure 1.1 State profile). The State's Sex ratio at birth of 866 females for every 1000 males is less than the national average of 899 (Annexure 1.2). It is estimated that 16.7% of the total population are in the age group of 10-19 years, 56.3% within 20 to 59 years; while 10.2% is 60 years and above (Figure 2). The crude birth rate and the crude death rate have declined from 23.7 & 7.1 in 2005 to 19.5 & 5.6 in 2019, respectively (Annexure 2; figure2). The literacy rate increased from 70.0% in 2001 to 78.0% in 2011, with male & female literacy rates being 85.8% and 69.7%, respectively (Annexure 1.1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)^g is 20.7% for higher education, 43.43% for senior secondary education, 74.13% for secondary education, 96.66% for elementary education, and 97.24% for primary education.

Figure 2: Gujarat - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 10.2% of the State's total population. The life expectancy at 60 years of age is 17.5 and 20.3 for males and females, respectively (2014-2018). In Gujarat, 78% of elderly females and 30% elderly males living in urban areas; 67% of elderly females and 38% elderly males in rural areas are economically fully dependent on others. The old age dependency ratio is 12.6 in 2011; which is 11.3 for males and 14 for females, 13.8 in rural & 11.1 in urban areas. The illness (any deviation from the state of

^c Basic Road Statistics 2019, MoRTH

^d Percentage of total length of roads in Gujarat

^e Percentage of total length of National Highways in the country

^f Percentage of total length of State Highways in the country

^g Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

physical and mental well-being) perception among the elderly is reported as 38% for men and 26% for women as opposed to the national average of 31% for both (Elderly in India 2016 report).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+N^h services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)ⁱ, institutional deliveries, C sections, distribution of IFA^j tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined from 148 (SRS MMR Bulletin 2007-09) to 75 (SRS MMR Bulletin 2016-18) per 1,00,000 live births. In Gujarat, 86.5% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 data, Navasari, Rajkot, Surat, Amreli and Valsad districts reported good ANC coverage ranging from 94.7% to 92.5%; while Banaskantha, Mahesana, Surendranagar, Kheda & Anand districts reported relatively poor ANC coverage ranging from 56.1% to 64.2%. As reported in HMIS 2019-20, around 99.5% of the deliveries took place in institutions, out of which 38.3% took place in public health facilities. Total percentage of C-sections is (18.1%) higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 20.8% are conducted at private facilities in Gujarat. Around 95.5% of women are tracked for their first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years increased from 56.5% (NFHS 4) to 69% (NFHS 5). Anaemia in females of reproductive age group is more than twice than in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, Gujarat has shown a significant decline in IMR from 54 (2005) to 25 (2019), which is lower than the national average of 30 (Annexure 2, Figure 1). Similarly, NNMR^k and Still Birth (per 1,000 live births) rates have also significantly decreased from 35.5 and 8.4 (2005) to 19 and 4 (2018) respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 66.8 (2006-10) to 69.9 (2014-18) (Annexure 2, Figure 3). As per NFHS 5, Anand, Mahesana, Gandhinagar, Narmada & Morbi districts reported low SRB^l ranging from 726 to 858, while Bhavnagar, Vadodara, Tapi, The Dangs and Bharuch districts reported high SRBs ranging from 1192 to 1112.

Full vaccination^m coverage for children between 12 – 23 months of age has improved from 78.9% (NFHS 4) to 85% (NFHS 5). The proportion of under 6-months children exclusively breastfed has also increased from 55.8% (NFHS 4) to 65% (NFHS 5). An increase in childhood anaemia from 62.6% (NFHS 4) to 79.7% in children aged 6-59 months is reported in NFHS 5 (Annexure 2, Figure 5). As per NFHS 5

^h Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

ⁱ Antenatal Check up

^j Iron Folic Acid Tablets

^k Neonatal Mortality Rate

^l Sex Ratio at Birth

^m NFHS 5 State/UT Factsheet, based on information from vaccination card only

report, Porbandar, Jamnagar, Devbhumi Dwarka, Mahesana & Botad districts reported relatively low burden of stunting, ranging from 18.2% to 32.2%, while Dahod, Patan, Chhota Udaipur, Narmada, Aravali & Panchmahal districts reported considerably higher burden of stunting, ranging from 55.3% to 47.1%. For under-5 wasting – Junagadh, Ahmedabad, Rajkot, Gir Somnath & Vadodara districts reported relatively low burden, ranging from 17.3% to 20.1%; while The Dangs, Tapi, Panchmahal, Sabarkantha & Kheda districts reported high burden, ranging from 40.9% to 30.9%.

2.3 Family Planning

The TFRⁿ has reduced from 2.8 in 2005 to 2.1 in 2018 (Annexure 2, Figure 4). As per NFHS 5 report, the total unmet need in Gujarat is reported as 10.3%, while the unmet need for spacing is 4.5% (NFHS 5). Bharuch district reported the highest total unmet need of 20.3% while Jamnagar reported the lowest (2%). Approximately 53.6% of married women reported to avail any modern method of family planning in the State (NFHS 5); with the sterilization acceptance being 35.9% among females, and 0.2% among males.

2.4 Communicable Diseases

Gujarat has 33 districts having functional IDSP units^o. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 28.29% of total disease burden (Annexure 1.4). Drug Susceptible TB, Lower respiratory infection & diarrheal diseases are the leading causes of deaths due to CMNND in Gujarat (Annexure 2, Figure 6^p). As per QPR report, for TB, the annual total case notification rate is 233% and NSP^q success rate is 85%, as opposed to the national averages of 163% and 79%, respectively. For NLEP^r, the reported prevalence rate of 0.36 per 10,000 population is less than the national average of 0.61. In FY 2019-20, 17 deaths due to Dengue, 1 death due to Malaria, and nil due to Kala Azar are reported in the State.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that premature deaths account for 66.2% of the total disease burden in the State, while disability or morbidity account for 33.8%. Ischaemic heart diseases, COPD & Diabetes Mellitus Type 2 are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 59.77% of DALYs, whereas injuries contribute to 11.94% of DALYs in the State. The State is positioned 9th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 8.7% of women and 41.1% of men used any kind of tobacco, while 0.6% of women and 5.8% of men consumed alcohol. Overall, high blood pressure, air pollution, low birth weight, high fasting blood sugar and short gestation period are the top five major risk factors for all DALYs (Annexure 2, figure 7).

ⁿ Total Fertility Rate

^o QPR NHM MIS Report

^p <https://vizhub.healthdata.org/gbd-compare/india>

^q New Smear Positive

^r National Leprosy Eradication Programme

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 1,322,936 crores. The State is positioned 11th out of 32 states in terms of per capita^s of ₹ 1,95,845. According to NHA 2017-18, the per capita Government Health Expenditure in the Gujarat is ₹ 1,502 which is less than the national average of ₹ 1,753. On the other hand, the OOPE^t as a share of Total Health Expenditure was 43.9%, which is less than the national average of 48.8%. As per NSSO 2017-18, the OOPE for IPD care per hospitalized case in rural areas is to be around ₹ 6,844 in public facilities, ₹ 25,843 in private facilities; whereas for urban areas, it is around ₹ 8,369 in public facilities and ₹ 37,057 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 2,424 in public facilities & ₹ 18,207 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 3,403 in public facilities and ₹ 26,493 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated as 29% in rural and 19% in urban areas; whereas for diagnostics, it is 22% in rural and 11% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). There are more than adequate public health facilities in 2020 in Gujarat, with an excess of 9.11% SCs, 9.25% PHCs and 2.96% CHCs (Annexure 2, Figure 9). Currently, there are 9,162 SCs, 1,477 PHCs, and 348 CHCs in place, against the required 8,397 SCs, 1,352 PHCs and 338 CHCs in rural areas. In urban settings, there are 318 PHCs in place against the required 656, amounting to a shortfall of 52%. The State has 22 DHs, 37 SDHs and 17 government medical colleges. In tribal catchments, there are 2,757 SCs, 424 PHCs and 94 CHCs in place, against the required 2,803 SCs, 420 PHCs and 105 CHCs. This accounts to a shortfall of 1.64% of the required SCs and 10.48% of the required CHCs in the tribal areas.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 6878 HWCs (5098 SHCs, 1464 PHCs & 316 UPHCs) are operationalized in the State as of 22nd December 2021^u.

In Gujarat, 17 districts are equipped with MMUs under the NRHM while none under the NUHM. Gujarat has 97% of required ASHAs in position under the NRHM and 99% under the NUHM. The doctor to staff nurse ratio in place is 1:1, with 4 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 923 availed (events) OPD services and 73 availed (events) IPD services. As per the NSSO data (2017-18), 29% of all OPD cases in rural areas and 22% in urban areas; and 26% of all IPD cases in rural areas & 18% in urban areas utilized public health facilities. The public health facility utilization in Gujarat is less than the national averages for OPD & IPD (Annexure 1.6).

^s Directorate of Economics & Statistics

^t Out of Pocket Expenditure

^u AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 Gujarat Profile^v

Indicator	Gujarat 2011 ¹	India
Total Population (In Crore)	6.04	121.08
Rural (%)	57.40	68.85
Urban (%)	42.60	31.14
Scheduled Caste population (SC) (in crore)	0.40 (6.74%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.89 (14.75%)	10.45 (8.63%)
Total Literacy Rate (%)	78	72.99
Male Literacy Rate (%)	85.8	80.89
Female Literacy Rate (%)	69.7	64.64
Number of Districts in the Gujarat ²	33	
Number of districts per lakh population in Gujarat (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	4
	≥ 10 Lakhs - <20 Lakhs	7
	≥20 Lakhs - <30 lakhs	10
	≥30 Lakhs	5
ST SC Dominant (Top 5) Districts of Gujarat ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
The Dangs - 94.64%	Kachch - 12.37%	
Tapi - 84.17%	Ahmedabad - 10.52%	
Narmada - 81.55%	Banas Kantha - 10.49%	
Dohad - 74.31%	Surendranagar - 10.21%	
Valsad - 52.92%	Junagadh - 9.68%	
Top 5 ST dominant district accounts for - 43.29%	Top 5 SC dominant district accounts for - 43.96%	

1.2 Key Health Status & Impact Indicators

Indicators	Gujarat	India
Infant Mortality Rate (IMR) ³	25	30
Crude Death Rate (CDR) ³	5.6	6.0

^v Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	19.5	19.7
Maternal Mortality Ratio (MMR) ³	75	113
Neo Natal Mortality Rate (NNMR) ⁴	19	23
Under Five Mortality Rate (U5MR) ⁴	31	36
Still Birth Rate ⁴	4	4
Total Fertility Rate (TFR) ⁴	2.1	2.2
Life expectancy at birth ⁵	69.9	69.4
Sex Ratio at Birth ⁴	866	899

1.3 Key Health Infrastructure Indicators^w

Indicators	Numbers (Total)			
Number of District Hospitals ²	22			
Number of Sub District Hospital ²	37			
Number of Government (Central + State) Medical College ⁶	17			
Number of Private (Society + Trust) Medical Colleges ⁶	12			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	5098	2661	5218	6922
PHC-HWC	1464	1474	1474	1474
UPHC-HWC	316	314	314	314
Total-HWC	6878	4449	7006	8710
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	338	348	-2.96	
Number of Primary Health Centres (PHC)	1,352	1,477	-9.25	
Number of Sub Centres (SC)	8,397	9,162	-9.11	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	22	41	67	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	656	318	51.52	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	105	94	10.48	
Number of PHC	420	424	-0.95	
Number of SC	2,803	2,757	1.64	

^w Sources are mentioned at the end of Annexure 1

Patient Service⁹	Gujarat	India
IPD per 1000 population	72.70	62.6
OPD per 1000 population	922.63	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	24.71	36.4

1.4 Major Health Indicator^x

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Gujarat	India
% DALY ^y accountable for CMNNDs ^z	28.29	27.46
% DALY accountable for NCDs	59.77	61.43
% DALY accountable for Injuries	11.94	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Gujarat	India
Level of Birth Registration (%)	87.3	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	21.3	20.7
RMNCHA+N		
Maternal Health⁹	Gujarat	India
% 1st Trimester registration to Total ANC Registrations	84.3	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	86.5	79.4
Total Reported Deliveries	1151437	21410780
% Institutional deliveries to Total Reported Deliveries	99.5	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	38.3	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	61.7	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	18.1	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	13.8	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	20.8	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	95.5	53.4
Neonatal⁹	Gujarat	India
% live birth to Reported Birth	98.9	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	12.9	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	90.9	89.9

^{cc} Sources are mentioned at the end of Annexure 1

New Born Care Units Established¹¹	Gujarat	India
Sick New Born Care Unit (SNCU)	47	895
New Born Stabilization Unit (NBSU)	150	2418
New Born Care Corner (NBCC)	1641	20337
Child Health & Nutrition¹⁰	Gujarat (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	8.2	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	66.5	60.6
Children under 5 years who are underweight (weight-for-age) (%)	39.7	32.1
Child Immunization¹⁰	Gujarat (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	85	83.8
Children age 12-23 months who have received BCG (%)	94.7	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	86.8	87.9
Family Planning¹⁰	Gujarat (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	4.5	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Gujarat	India
Number of districts with functional IDSP unit	33	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Gujarat	India
Annualized total case notification rate (%)	233	163
New Smear Positive (NSP) Success rate (in %)	85	79
National Leprosy Eradication Programme (NLEP)¹¹	Gujarat	India
Prevalence Rate/10,000 population	0.36	0.61
Number of new cases detected	4,081	114,359
Malaria, Kala Azar, Dengue¹¹	Gujarat	India
Deaths due to Malaria ¹¹	1	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	17	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Gujarat (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	28.5	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	35.7	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Gujarat (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	11.7	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	13.1	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	8.1	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	9	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Gujarat (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	8.7	8.9
Men who use any kind of tobacco (%)	41.1	38
Women who consume alcohol (%)	0.6	1.3
Men who consume alcohol (%)	5.8	18.8
Injuries		
Road Traffic Accident¹²	Gujarat	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	9	N/A
Total number of fatal Road Accidents	6,726	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	43.4	33.7
Number of persons killed in Road Accidents	7390	115113

1.5 Access to Care^{aa}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Gujarat	India
Number of Districts equipped with MMU under NRHM	17	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Gujarat	India
102 Type	0	9955
104 Type	0	605
108 Type	634	10993
Others	2	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	1510	11070

^{aa} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Gujarat	India
Total number of ASHA targeted under NRHM	39355	946563
Total number of ASHA in position under NRHM	38102	904211
% of ASHA in position under NRHM	96.82	96
Total number of ASHA targeted under NUHM	4114	75597
Total number of ASHA in position under NUHM	4058	64272
% of ASHA in position under NUHM	98.64	85
Community Process¹¹	Gujarat	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	17672	554847
Number of Mahila Arogya Samitis (MAS) formed	6878	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Gujarat	India
DH	20	796
CHC	347	6036
PHC	1475	20273
UHC	7	126
UPHC	310	3229
Human Resource for Health ¹⁴		
HRH Governance	Gujarat	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	54
	Dentists (%)	27
	MO MBBS (%)	28
	Nurse (%)	9
	LT (%)	24
	ANM (%)	27
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:2	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	5 per 10,000	4 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	4:1	4:1

Ranking: Human Resource Index of Gujarat¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{bb}	21774	26982	19421	7561	2353	56.61
Staff Nurse	16792	14039	10853	3186	5939	
Lab Technician	5255	2348	1342	1006	3913	
Pharmacists	2545	2123	1082	1041	1463	
MO MBBS ^{cc}	4071	5273	3855	1418	216	
Specialist ^{dd}	3343	2039	733	1306	2610	

1.6 Healthcare Financing

National Health Accounts (NHA) (2017-18)	Gujarat		India	
Per Capita Government Health Expenditure (in ₹)	1502		1,753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	0.8		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	7		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	43.9		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Gujarat		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	33	17	33	26
IPD - % of hospitalized cases using public facility	40	21	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	223	327	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	794	837	845	915
IPD - Per hospitalized case (in INR) - Public	6,844	8,369	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	25,843	37,057	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	22	11	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	29	19	53	43

^{bb} MPW – Multi Purpose Health Worker (Female + Male)

^{cc} MO MBBS (Full Time)

^{dd} Specialist (All Specialist)

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	2,424	3,403	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	18,207	26,493	20,692	26,701
State Health Expenditure	Gujarat		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	5.4		5 ^{ee}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{ee} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

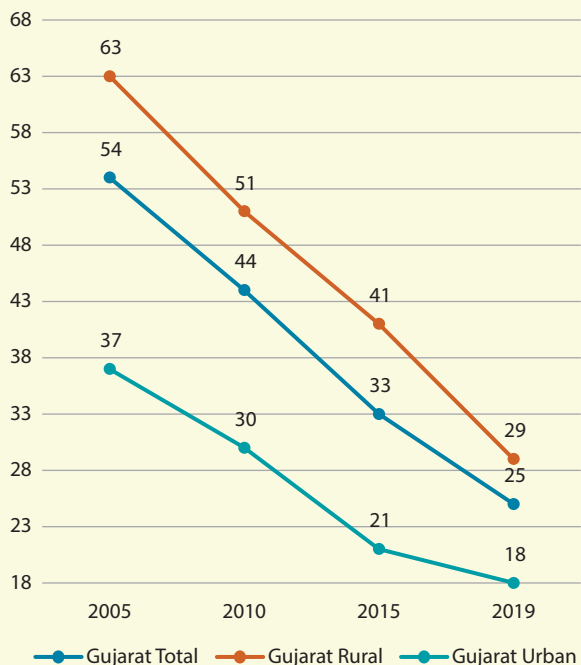


Figure 2: CBR & CDR Trend

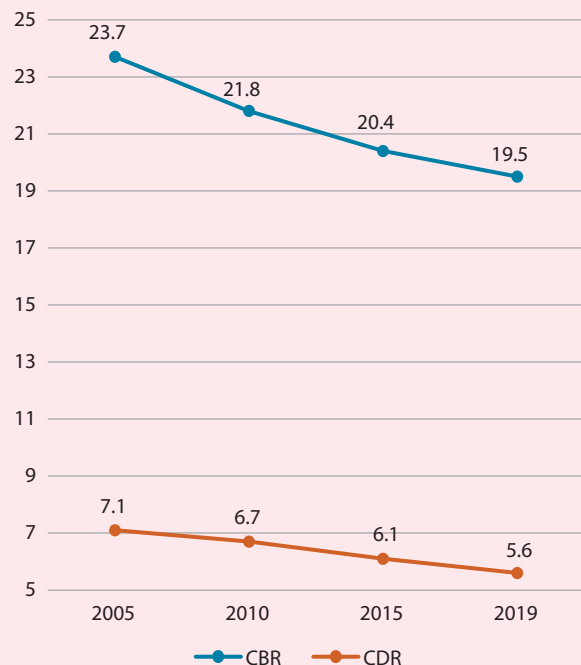


Figure 3: Life Expectancy At Birth Trend

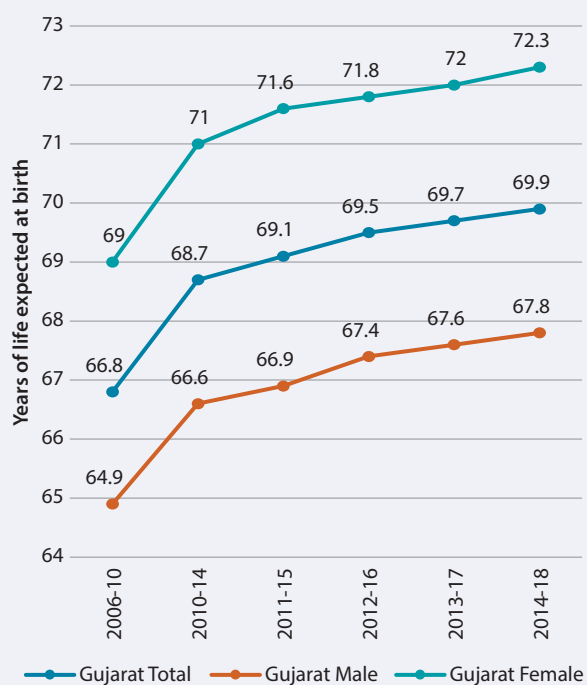


Figure 4: NNMR, TFR & Still Birth Trend

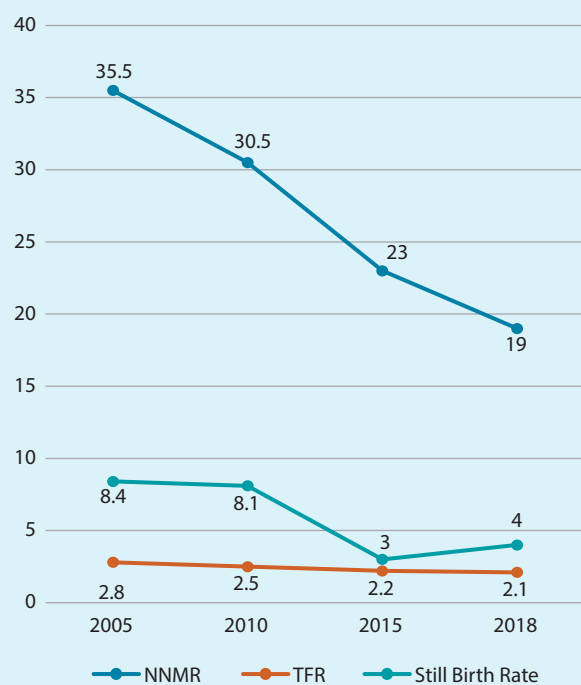


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

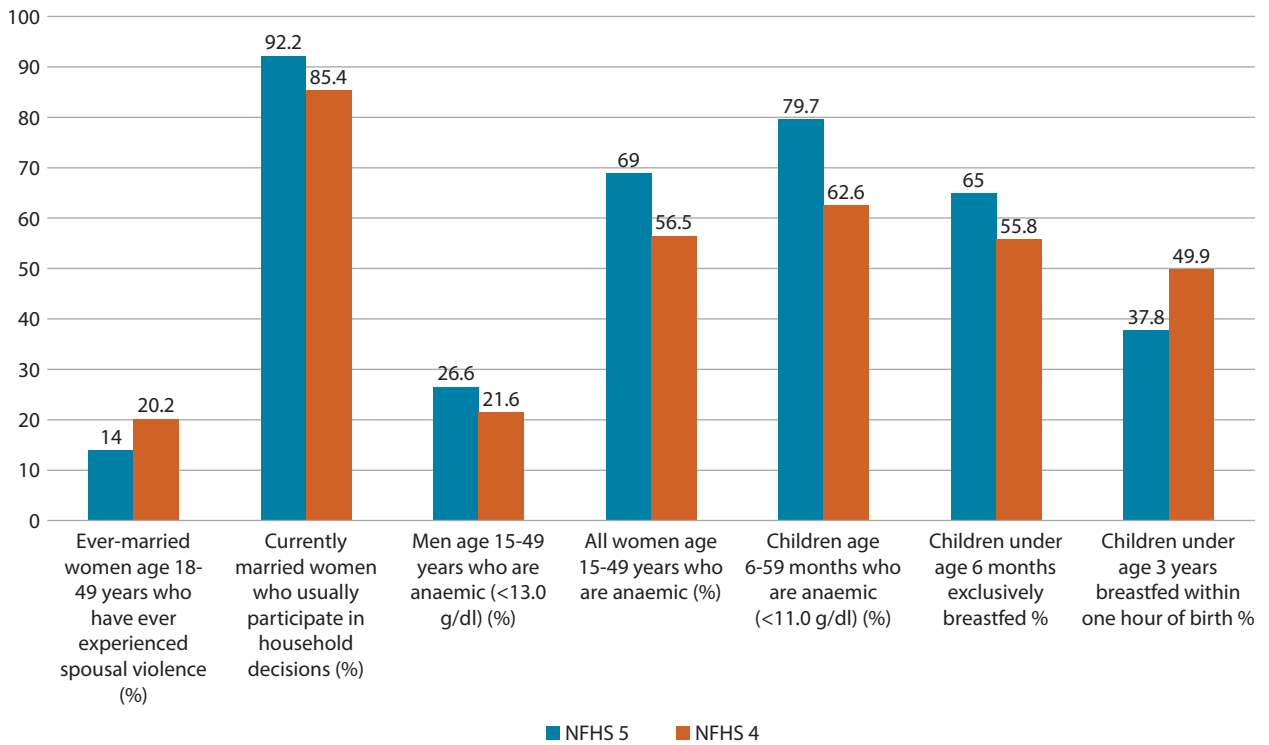


Figure 6: Top 15 causes of DALYs, 1990-2019

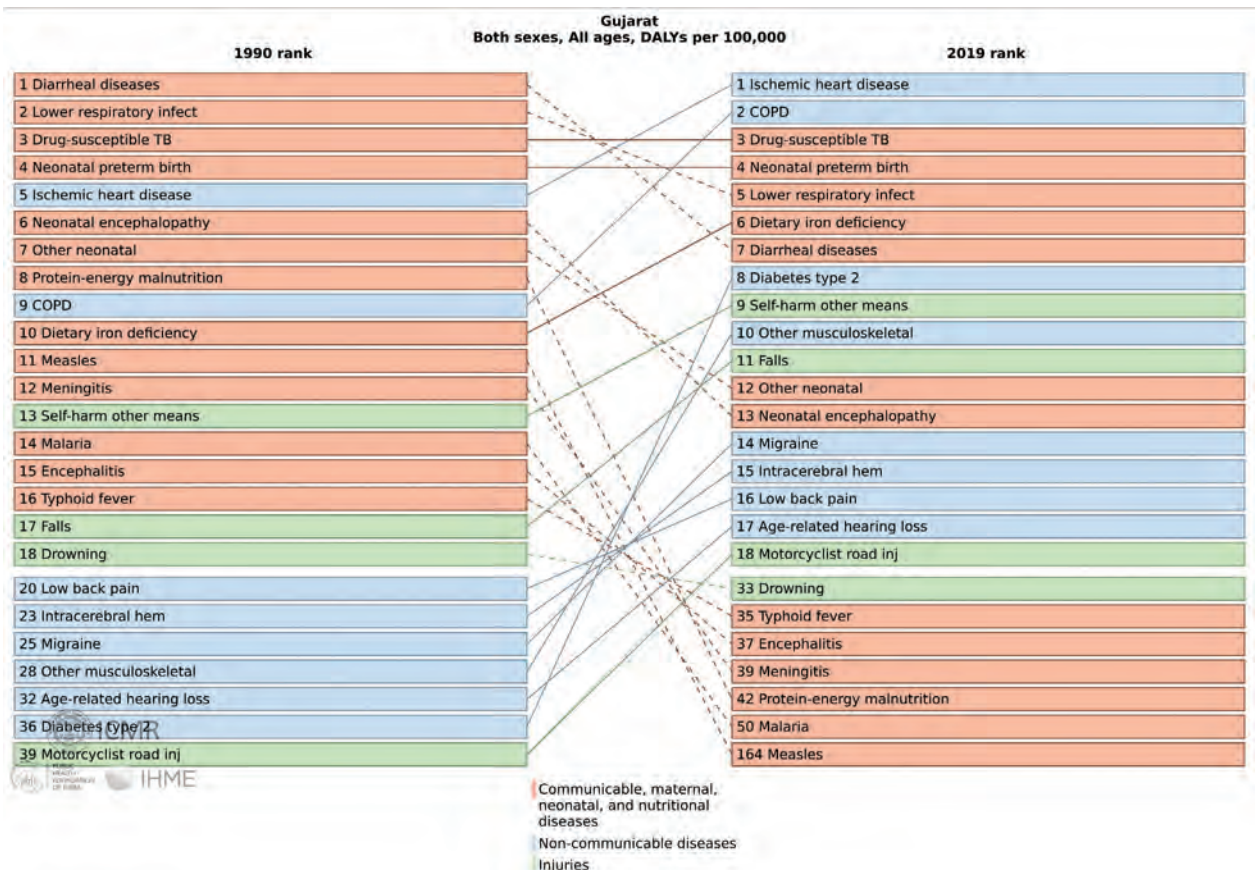


Figure 7: Top 15 risk of DALYs, 1990-2019

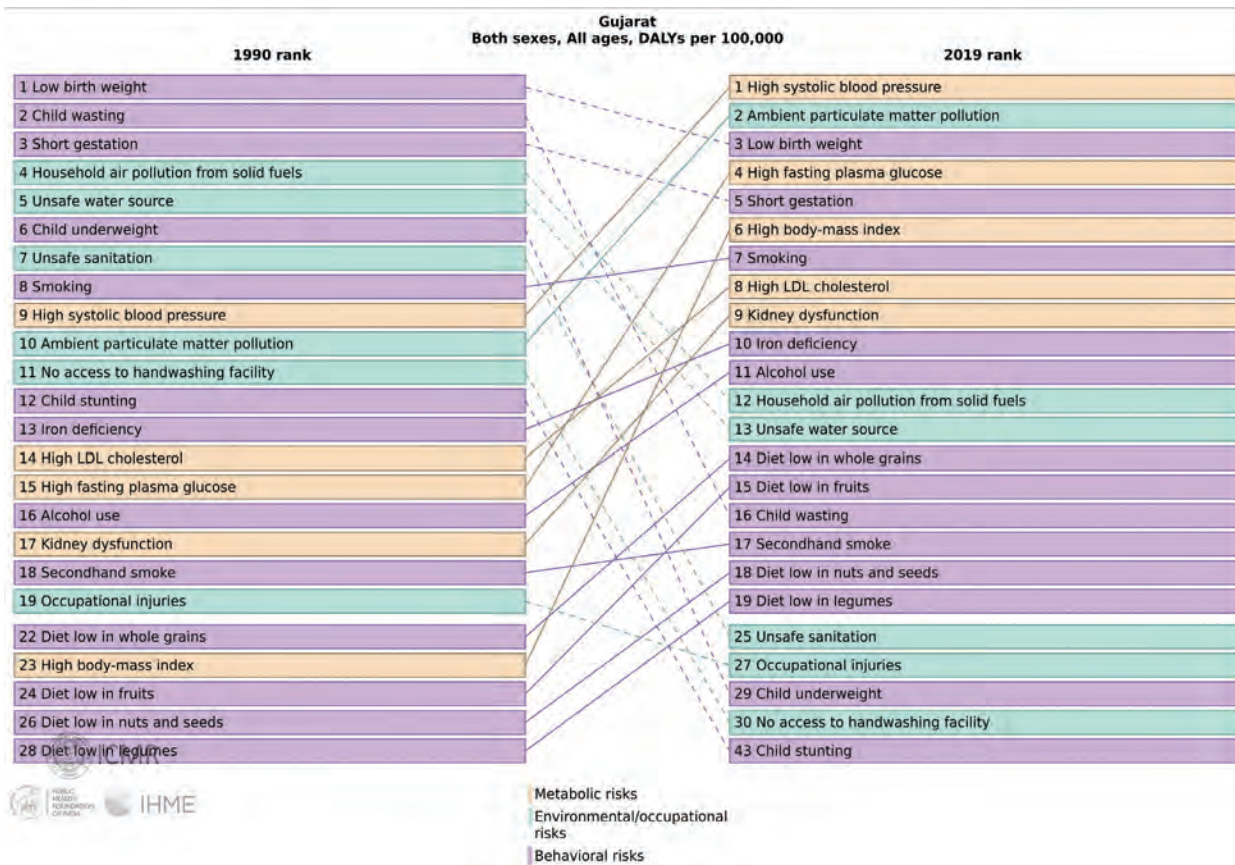


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

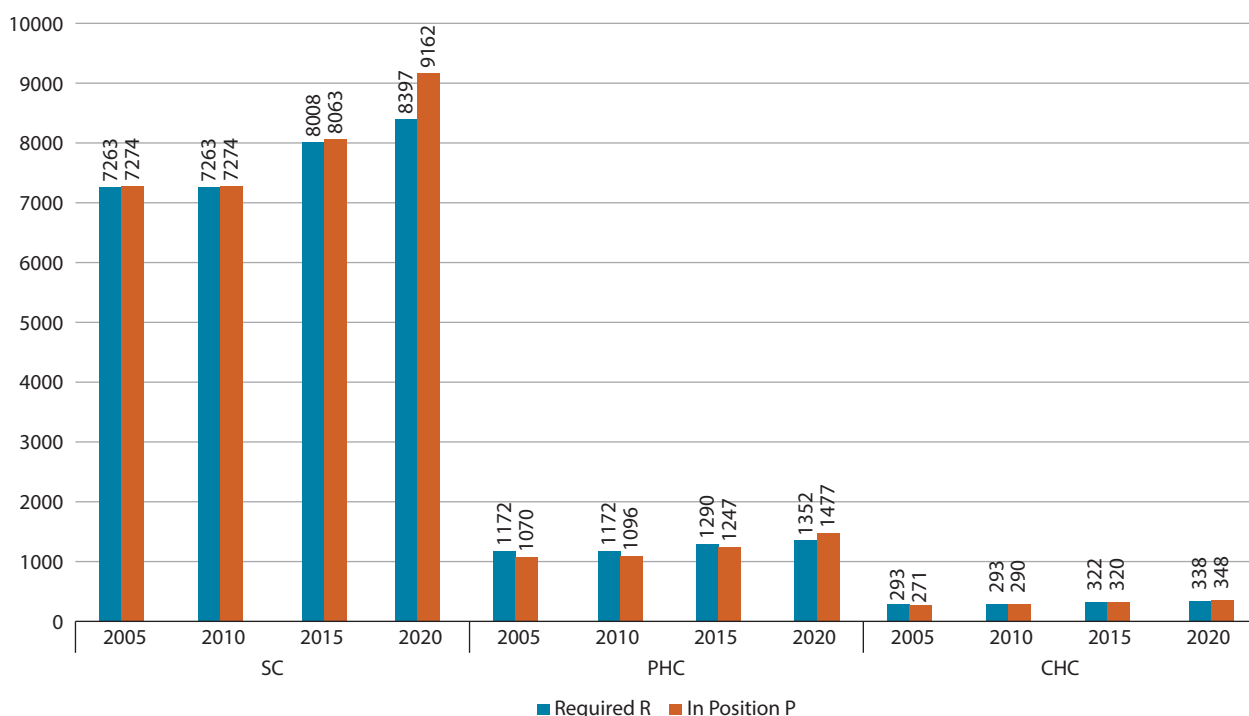


Figure 9: Year Wise Health Infrastructure Shortfall (%)

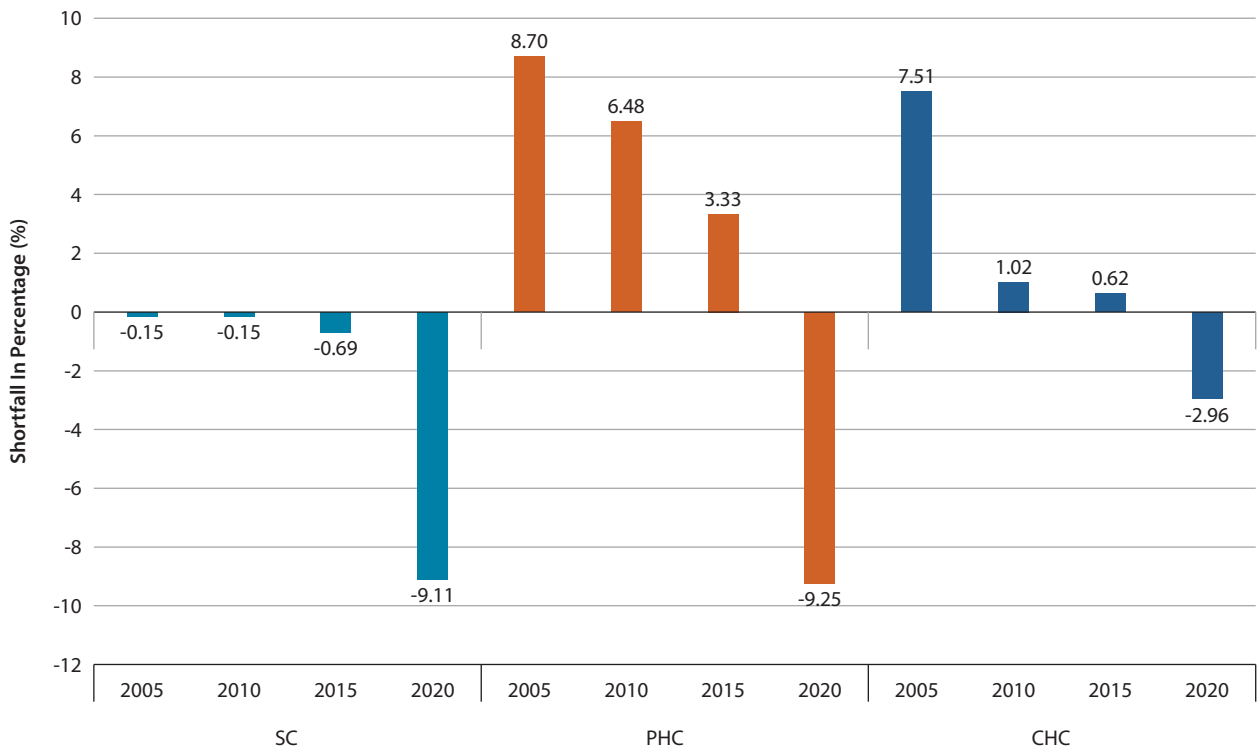
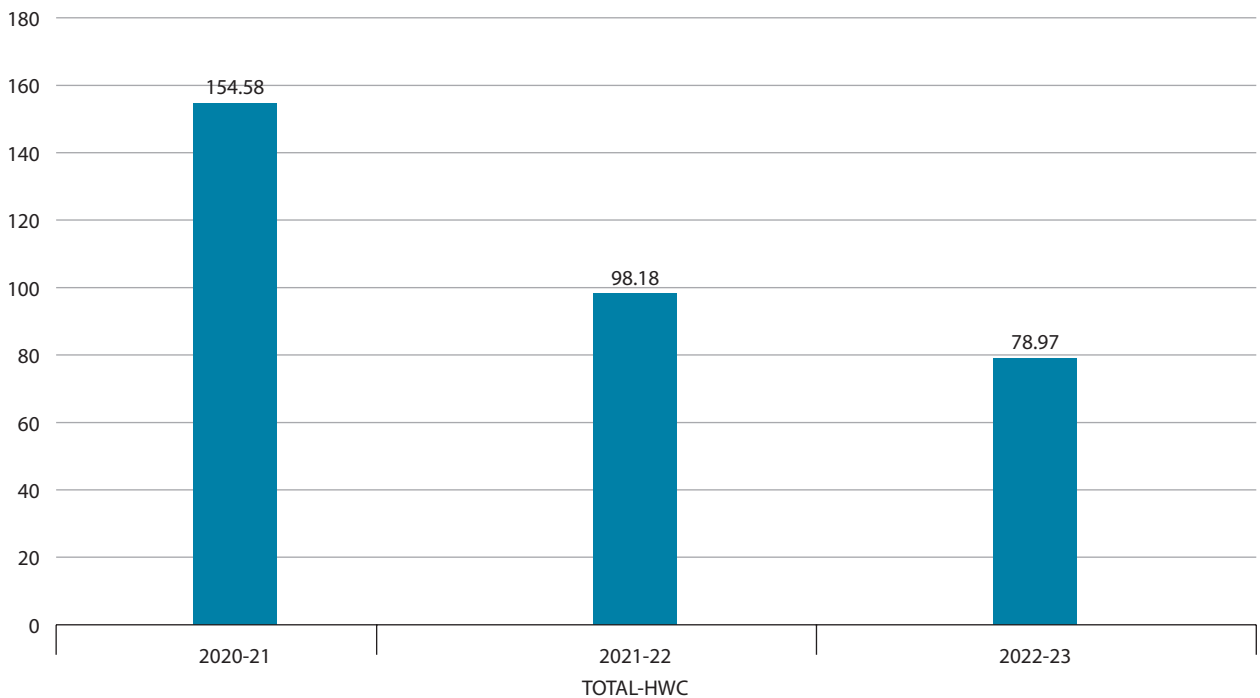


Figure 10: Percentage HWCs progress against target - FY wise (%)

Gujarat (% HWCs progress as of 22/Dec/2021 against targets - FY wise)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural/Urban Stats Not Available)																
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted [^] (Height For Age) (%)	Children Under 5 Years - Wasted [^] (Weight For Height) (%)			
1.	Gujarat	NFHS 4 Total	906	23.1	N/A	24.9	46.9	3	4.9	17	70.5	88.5	78.9	5.2	38.5	26.4			
2.	Gujarat	NFHS 5 Urban	931	36.3	86.8	14.2	69.5	4.2	16.8	9.7	82.4	97.8	82.9	6.6	32.4	22.4			
3.	Gujarat	NFHS 5 Rural	969	41.1	69	26.9	62.2	2.4	7.5	10.8	73.3	92.2	86.2	5.5	43	26.7			
4.	Gujarat	NFHS 5 Total	955	39	76.5	21.8	65.3	3.1	11.4	10.3	76.9	94.3	85	5.9	39	25.1			
5.	Ahmedabad	NFHS 5 Total	994	36.2	81.5	17.5	79	3.3	19.7	6.5	77.8	94.5	76.5	3	35.5	17.5			
6.	Amreli	NFHS 5 Total	977	47.7	77.2	10.5	62.2	3.4	6.9	9.5	92.6	90.1	68.1	3.8	35.3	23.7			
7.	Anand	NFHS 5 Total	726	36.2	75.9	28	53.7	1.5	9.2	16.5	64.2	96	85.4	11.5	38.4	28.6			
8.	Aravali	NFHS 5 Total	965	43.9	71.9	27	68.7	1.5	8.1	11.2	73.8	92.2	86.9	9.4	47.1	29			
9.	Banaskantha	NFHS 5 Total	967	41	63.7	37.3	42.6	1.7	4.3	18.5	56.1	92.9	66.5	3.8	39	25.5			
10.	Bharuch	NFHS 5 Total	1112	37.4	74	16.8	36.2	0.7	4.8	20.3	65.7	91.1	92.1	7.7	40.9	24.5			
11.	Bhavnagar	NFHS 5 Total	1192	32.2	74.2	18	45.7	3	6.5	15.5	70.9	94.2	94	11.2	32.6	29.6			
12.	Botad	NFHS 5 Total	992	38	71.8	13	49.3	2	7.7	13.2	82.7	93.5	77.6	8.1	32.2	26			
13.	Chhota Udaipur	NFHS 5 Total	937	40	53.2	27.5	77.5	1.7	5.5	5.1	81.2	85.7	80.1	2.4	48.6	28.4			
14.	Dahod	NFHS 5 Total	1013	40.3	56.1	29.9	70.8	1.2	6.3	7.7	70.9	92.5	74.8	7.5	55.3	27.8			
15.	Devbhumi Dwaraka	NFHS 5 Total	955	33.5	66.1	11.6	47.7	4.5	11.1	15.9	76.6	94.8	77	5.8	30.2	26.1			
16.	Gandhinagar	NFHS 5 Total	766	29.7	81.8	32.6	49.3	2.1	13.2	18.5	71	97.8	95.2	4.9	38.1	30.6			
17.	Gir Somnath	NFHS 5 Total	921	46.6	73.1	9.9	57.8	1.2	9.5	12.4	80.7	87.1	93.5	14.6	44.4	18.5			
18.	Jamnagar	NFHS 5 Total	912	38.6	83.1	6.8	85.2	11.4	18.1	2	73.8	96.5	80	10.7	28.4	23.8			
19.	Junagadh	NFHS 5 Total	876	47.3	82.8	11.2	48	2.9	11.1	13.8	72.5	97.4	93.4	5.2	37.3	17.3			

20.	Kachchh	NFHS 5 Total	994	34.3	75.6	19	76.5	3.9	19.5	7.8	84.2	97.4	75.3	5.1	37.5	20.2
21.	Kheda	NFHS 5 Total	868	32.2	70.9	49.2	29.8	1	5.3	16.5	61.2	95.2	84.9	1.2	37.3	30.9
22.	Mahesana	NFHS 5 Total	742	40.7	75.1	32.3	46.3	2.8	9.5	18.4	56.6	97.3	91.1	0	31	28.2
23.	Mahisagar	NFHS 5 Total	963	46	70.9	30.7	73.3	1.2	8.7	6.8	76.6	93	83.4	3	43.4	26.2
24.	Morbi	NFHS 5 Total	858	34.4	82.4	8.9	73.3	9.7	16.9	10.2	75.1	94.8	73.5	10.2	32.9	25.2
25.	Narmada	NFHS 5 Total	853	51.1	67.3	29.5	80.2	1.4	7	5.3	83.4	81.7	93.8	4.1	47.2	23
26.	Navsari	NFHS 5 Total	1006	42	84.1	15.7	78.2	1.3	9.3	6.5	94.7	99.3	95.5	0	36.8	29
27.	Panchmahal	NFHS 5 Total	879	34	71.7	34.1	71.4	2.1	6	7	88.7	88.4	95.4	3	47.1	35.7
28.	Patan	NFHS 5 Total	976	50.2	71.1	35.4	65.6	5.2	8.4	11.2	79.8	98.6	91.9	3.2	50.5	20.9
29.	Porbandar	NFHS 5 Total	1045	42.1	84.3	10	75.5	11.3	17.1	7.7	92.1	100	82.2	14.5	18.2	21.8
30.	Rajkot	NFHS 5 Total	1049	45.1	84.7	12.1	78.8	8	16.5	6.2	93.5	99.3	85.6	14.2	38.9	17.6
31.	Sabarkantha	NFHS 5 Total	871	49.3	74.5	27	66.4	4.3	11	9.2	73.2	89.4	89.7	5.1	37	33.1
32.	Surat	NFHS 5 Total	890	31.6	84.2	13.1	78.7	2.7	14.3	5.7	93.4	97.7	92.8	3.2	36.1	26
33.	Surendranagar	NFHS 5 Total	992	50.4	75.1	19.5	76	3.4	10.3	8.3	57.5	85.6	68.4	0.9	39.2	27.1
34.	Tapi	NFHS 5 Total	1185	42.3	72	25.3	83.1	2.4	5.5	3.2	91	92.9	95	6.7	41.7	36.6
35.	The Dangs	NFHS 5 Total	1143	44.3	68.9	30.2	79.8	0.5	5	5.1	90.2	74.5	96.2	16.5	37.6	40.9
36.	Vadodara	NFHS 5 Total	1186	41.7	84.6	22.8	58.5	2.8	12	11.4	65.9	95.9	90.8	5.1	42.3	20.1
37.	Valsad	NFHS 5 Total	1020	40.6	82.9	19.4	76.1	2	11.9	9.3	92.5	96.5	92.5	16	37.8	23.2

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'Vaccinated'; Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MM/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or pentavaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color - Best five performing districts within the districts for a particular indicator

B. Red - Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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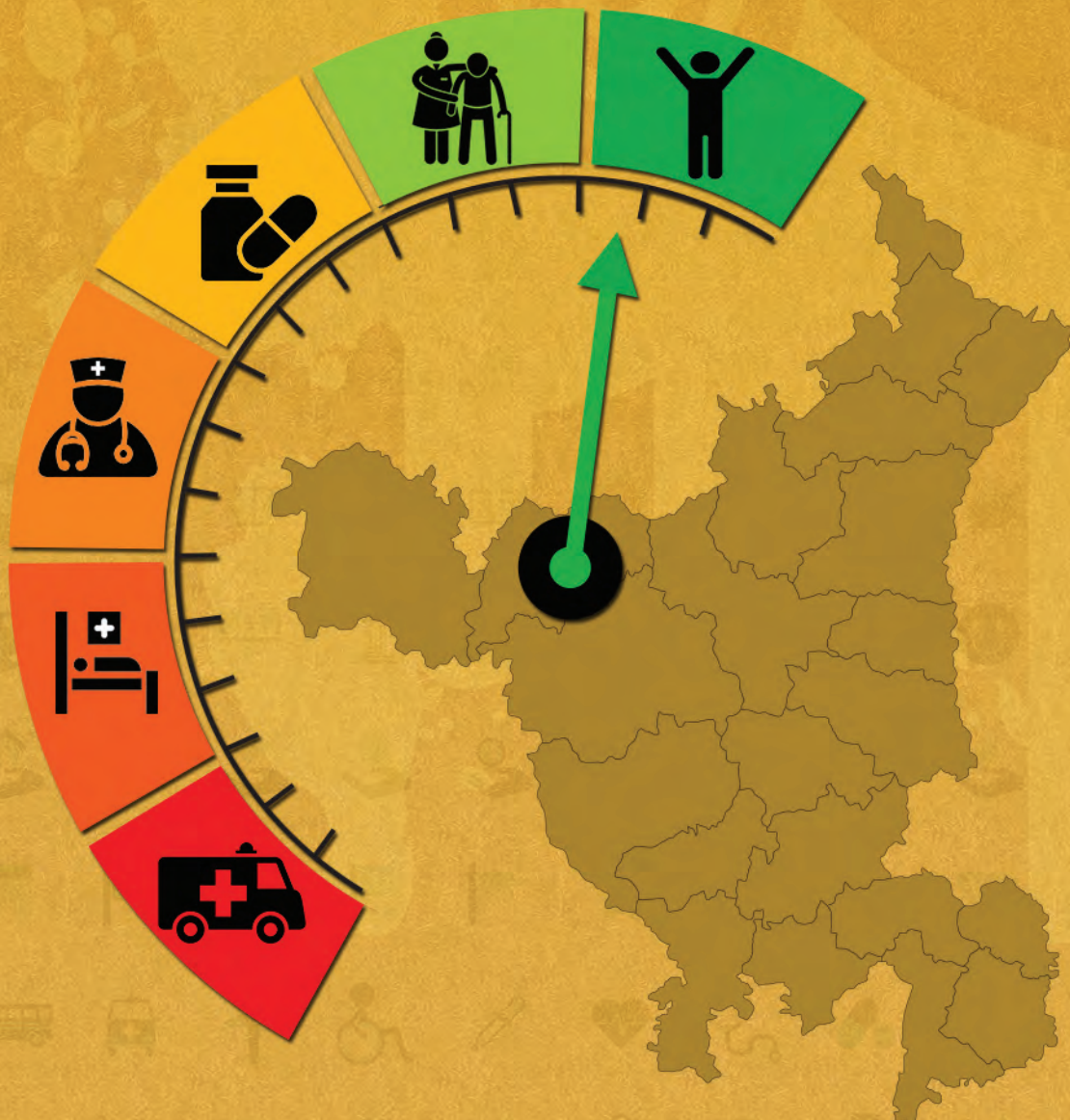
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



HARYANA

**DISTRICTS VISITED IN
COMMON REVIEW MISSIONS**

CRM	Districts Visited	
3 rd	Rewari	Panchkula
5 th	Hissar	Mewat
7 th	Palwal	Ambala
9 th	Sonipat	Yamunanagar
11 th	Bhiwani	Gurugram
14 th	Mewat	Fatehabad

HARYANA

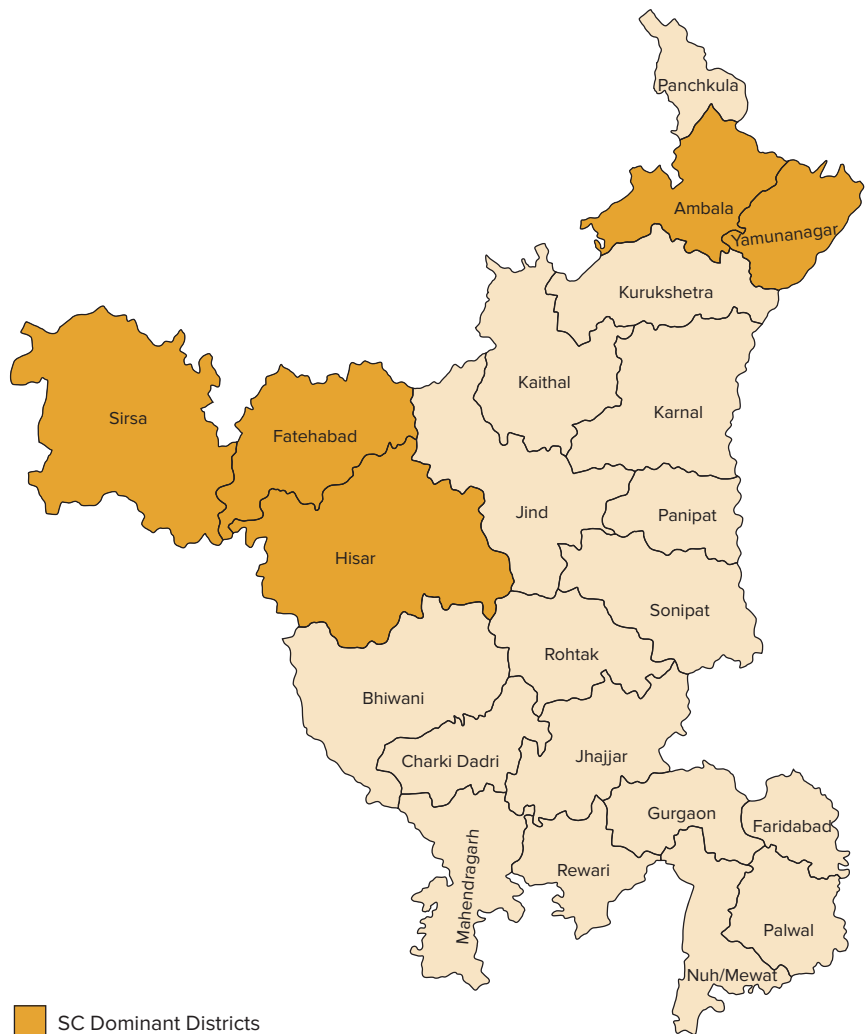
1. BACKGROUND

1.1 Haryana Profile

Haryana is positioned^a 21st in India for a geographical spread of 44,212 km² (RHS 2019). It is divided into 22 districts and is estimated to have a population of over 2.53 crores, which accounts for approximately 2.09 percent of India's total population^b. It is projected that the population would reach around 2.94 crores by 2021 (Census Population Report 2019). As per Census 2011, the Scheduled Caste (SC) population is 0.51 crores (20.17%). Out of the 22 districts, top five SC dominant districts account for 32.92% of SC population in Haryana (Figure 1 & Annexure 1, Haryana Profile). Around 65.12% of the population reside in rural areas, while the rest constitute the urban population.

At present, 28 cities^c are covered under National Urban Health Mission, with a

Figure 1: Top 5 ST & SC Dominant Districts



^a Including all States & UTs

^b Census 2011

^c QPR NHM MIS Report as on 31 Dec 2020

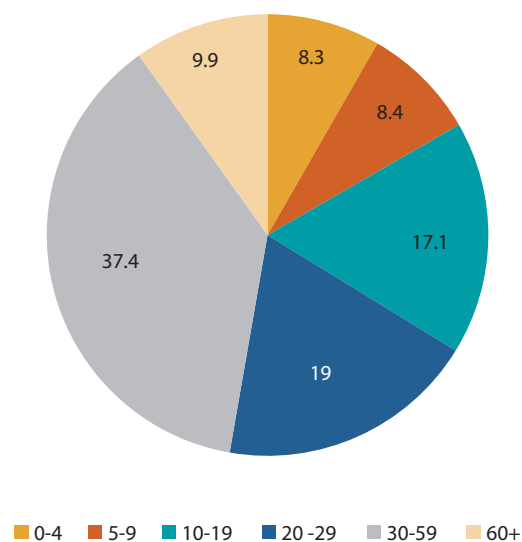
catchment of 88.21 lakh urban population. There are no metropolitan cities, but has 2 Million- plus cities in the state. The total length of roads^d in Haryana is 81,386 km (1.63%^e), in which, the length of the national highways is 2623 km (2.3%^f) and state highways is 1801 km (1.02%^g). About 46.8% of the main worker population are self -employed in the State, followed by wage earners and casual workers (43.2%)^h.

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

Out of the 22 districts, 15 districts have a population between 10-20 lakhs, and 6 districts have a population less than 10 lakhs (Annexure 1.1 Haryana profile). The Haryana's Sex ratio at birth (843 females for every 1000 males) is less than the national average of 899 (Annexure 1.2). It is estimated that 17.1% of the total population are in the age group of 10-19 years, 46.4% within 20 to 59 years; while 9.9% are 60 years and above (Figure 2). The crude birth rate and the crude death rate have declined from 24.3 & 6.7 in 2005 to 20.1 & 5.9 in 2019, respectively (Annexure 2; figure 2). The literacy rate increased from 67.9% in 2001 to 75.6% in 2011, with male & female literacy rates being 84.1% and 65.9%, respectively (Annexure 1.1). As per the ESAG 2018 report, the Gross Enrollment Rate (GER)ⁱ is 26.1% for higher education, 59.59% for senior secondary education, 84.22% for secondary education, 91.77% for elementary education, and 91.41% for primary education.

Figure 2: Haryana - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 9.9% of the Haryana's total population. The life expectancy at 60 years of age is 17.8 and 20.2 for males and females, respectively (2014-2018). In Haryana, 42% of the elderly females and 22% elderly males living in rural areas are economically fully dependent on others. Whereas in urban areas, 41% of the elderly females and 23% elderly males are economically fully dependent on others. The old age dependency ratio is 14.1 in 2011; which is 13.2 for males and 15.1 for females; 15.3 in rural & 11.9 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 27% for men and 23% for women, both of which are below the national average of 31% (Elderly in India 2016 report).

^d Basic Road Statistics 2019, MoRTH

^e Percentage of total length of roads in Haryana

^f Percentage of total length of National Highways in the country

^g Percentage of total length of State Highways in the country

^h Annual Report PLFS 2018-19, http://mospi.nic.in/sites/default/files/publication_reports/Annual_Report_PLFS_2018_19_HL.pdf

ⁱ Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

Haryana has been able to provide RMNCHA+N^j services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^k, institutional deliveries, C sections, distribution of IFA^l tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined from 153 (SRS MMR Bulletin 2007-09) to 91 (SRS MMR Bulletin 2016-18) per 1,00,000 live births. In Haryana, 77% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 (Annexure 3), Hisar, Kaithal, Karnal, Panchkula and Rohtak districts reported relatively better ANC coverage ranging from 68.8% to 84.7%; and Faridabad, Gurgaon, Jind, Mewat and Panipat districts reported poor ANC coverage ranging from 45.9% to 51.2%. As reported in HMIS 2019-20, around 95.9% of the deliveries took place in institutions, out of which 58.5% took place in public health facilities. Total percentage of C-sections is (18.9%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 26.8% are conducted at private facilities in Haryana. Around 60.9% of women received their first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years decreased from 62.7% (NFHS-4) to 60.4% (NFHS 5). Anaemia in females of reproductive age group is more than thrice than that in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, Haryana has shown a significant decline in IMR from 60 (2005) to 27 (2019), which is lower than the national average of 30 (Annexure 2, Figure 1). Similarly, NNMR^m and Still Birth (per 1,000 live births) rates have also significantly decreased from 34.9 and 6.7 (2005) to 22 and 6 (2019) respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 67 (2006-10) to 69.8 (2014-18), which is above the national average of 69.4 years (Annexure 2, Figure 3). As per NFHS 5 report, the low SRBsⁿ ranging between 764 – 821 are reported in Ambala, Kaithal, Karnal, Rewari and Sirsa districts, while the comparatively high SRBs ranging between 955 – 1282 are reported in Charkhi Dadri, Faridabad, Jhajjar, and Mahendragarh districts.

Full vaccination^o coverage for children between 12 – 23 months of age has increased from 79.4% (NFHS4) to 81.1% (NFHS 5). The percentage of under 6-months children exclusively breastfed has increased from 50.3% (NFHS 4) to 69.5% (NFHS 5). The prevalence of childhood anaemia decreased from 71.7% (NFHS 4) to 70.4% (NFHS 5) in children aged 6-59 (Annexure 2, Figure 5). As per NFHS 5 report, Charkhi Dadri, Gurgaon, Jhajjar, Panchkula and Sonapat districts reported relatively low burden of stunting ranging from 15.6% to 23.9%; and Bhiwani, Kaithal, Karnal, Mewat and Palwal districts reported considerably

^j Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^k Antenatal Check up

^l Iron Folic Acid Tablets

^m Neonatal Mortality Rate

ⁿ Sex Ratio at Birth

^o NFHS 5 Haryana Factsheet, based on information from vaccination card only

high burden, ranging from 29% to 44.4%. For under-5 wasting- Bhiwani, Faridabad, Jhajjar, Jind and Mahendragarh districts reported a low burden ranging from 6% to 8.8%; and Fatehabad, Gurgaon, Hisar, Kaithal and Mewat districts reported relatively high burden ranging from 14.2% to 20.7%.

2.3 Family Planning

The TFR^p has reduced from 2.8 in 2005 to 2.2 in 2018 (Annexure 2, Figure 4). As per NFHS 5 report, the total unmet need in Haryana is reported as 7.6% and unmet need for spacing as 3.3%. Mewat district reported the highest total unmet need of 19.6%; Fatehabad and Jhajjar reported the lowest (4.6%). Approximately 60.5% of married women reported to avail any modern method of family planning in the State (NFHS 5); with the sterilization acceptance among females being 32.3%, and 0.9% among males.

2.4 Communicable Diseases

Haryana has 22 districts having functional IDSP units^q. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 26.88% of total disease burden (Annexure 1.4). Lower respiratory tract infection, neonatal preterm birth, diarrheal diseases, dietary iron deficiency and drug susceptible TB are the leading causes of deaths due to CMNND in Haryana (Annexure 2, Figure 6^r). As per QPR report, for TB, the annualized total case notification rate is 245% and NSP^s success rate is 79% as opposed to the national averages of 163% and 79%, respectively. For NLEP^t, the reported prevalence rate of 0.13 per 10,000 population is less than the national average of 0.61. In FY 2019-20, no deaths due to Malaria, Kala Azar and Dengue are reported in Haryana.

2.5 Non-Communicable Diseases (NCDs) & Injuries

It is reported that as high as 67.3% deaths are premature in the State, while disability or morbidity accounts for 32.7%. Ischaemic heart diseases, COPD & Diabetes Mellitus Type 2 are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 60.99% of DALYs, whereas, injuries contribute to 12.13% of DALYs in the State. Haryana is positioned 13th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). As per NFHS 5 report, it is reported that 2.5% of women and 29.1% of men used any kind of tobacco, while 0.3% of women and 16.1% of men consumed alcohol. Overall, ambient particulate matter pollution, high systolic blood pressure, smoking, high fasting plasma glucose and high body mass index are the top five major risk factors for all DALYs (Annexure 2, figure 7).

2.6 Health Care Financing

Haryana's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 6,66,075 crores. The State is positioned 5th out of 32 states in terms of per capita^u of ₹ 2,36,147. According to NHA 2017-18, the per capita Government Health Expenditure in the Haryana is ₹ 1,428 which is below the national average of ₹ 1,753. On the other hand, the OOPE^v as a share of Total Health Expenditure is 50.4%, which is more than

^p Total Fertility Rate

^q QPR NHM MIS Report (status as on 01.03.2020)

^r <https://vizhub.healthdata.org/gbd-compare/india>

^s New Smear Positive

^t National Leprosy Eradication Programme

^u Directorate of Economics & Statistics

^v Out of Pocket Expenditure

the national average of 48.8%. As per NSSO 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 9,170 in public facilities, ₹ 26,652 in private facilities; whereas for urban areas, it is around ₹ 8,671 in public facilities and ₹ 27,287 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 1,767 in public facilities & ₹ 15,618 in private facilities; whereas in urban areas - OOPE was estimated to be around ₹ 2,713 in public facilities and ₹ 51,287 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated as 49% in rural and 36% in urban areas; whereas for diagnostics, it is 14% in rural and 13% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). There is shortfall in the required SCs, PHCs & CHCs (Annexure 2, Figure 9). Currently, there are 2617 SCs, 385 PHCs, and 118 CHCs in place against the required 3474 SCs, 579 PHCs and 144 CHCs in rural areas, thereby amounting to a shortfall of 25%, 34% and 18% respectively. In urban settings, there are 100 PHCs in place against the required 237, thereby amounting to a shortfall of 58%. The State has 22 DHs, 21 SDHs and 5 government medical colleges.

Under Government of India flagship program of Ayushman Bharat, a total of 1122 (659 SHCs, 362 PHCs & 101 UPHCs) primary care facilities have been upgraded and are currently operational as Health & Wellness Centres (HWCs) to deliver Comprehensive Primary Health Care (as on 22nd Dec 2021, Annexure 1.3).

In Haryana, 7 districts are equipped with MMUs under the NRHM while none under NUHM districts. Haryana has 97.81% of required ASHAs in position under the NRHM and 94.47% under the NUHM. The doctor to staff nurse ratio in place is 1:1, with 5 public health providers (MO, specialists, staff nurse & ANM) per 10,0000 populations (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 1230.0 availed (events) OPD services and 40.3 availed (events) IPD services. As per the NSSO data (2017-18), 25% of all OPD cases in rural areas and 10% in urban areas; and 37% of all IPD cases in rural areas & 20% in urban areas utilized public health facilities. The public health facility utilization in Haryana is below the national averages for both rural and urban areas (Annexure 1.6).

ANNEXURE 1: KEY INDICATORS

1.1 Haryana Profile^w

Indicator	Haryana 2011 ¹	India
Total Population (In Crore)	2.54	121.08
Rural (%)	65.12	68.85
Urban (%)	34.88	31.14
Scheduled Caste population (SC) (in crore)	0.51 (20.17%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0	10.45 (8.63%)
Total Literacy Rate (%)	75.6	72.99
Male Literacy Rate (%)	84.1	80.89
Female Literacy Rate (%)	65.9	64.64
Number of Districts in the Haryana ²	22	
Number of districts per lakh population in Haryana (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	6
	≥ 10 Lakhs - <20 Lakhs	15
	≥20 Lakhs - <30 lakhs	0
	≥30 Lakhs	0

ST SC Dominant (Top 5) Districts of Haryana¹

Fatehabad - 30.18%

Sirsa - 29.90%

Ambala - 26.25%

Yamunanagar - 25.26%

Hisar - 23.44%

Top 5 SC dominant district accounts for - 32.92%

1.2 Key Health Status & Impact Indicators

Indicators	Haryana	India
Infant Mortality Rate (IMR) ³	27	30
Crude Death Rate (CDR) ³	5.9	6.0

^w Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	20.1	19.7
Maternal Mortality Ratio (MMR) ³	91	113
Neo Natal Mortality Rate (NNMR) ⁴	22	23
Under Five Mortality Rate (U5MR) ⁴	36	36
Still Birth Rate ⁴	6	4
Total Fertility Rate (TFR) ⁴	2.2	2.2
Life expectancy at birth ⁵	69.8	69.4
Sex Ratio at Birth ⁴	843	899

1.3 Key Health Infrastructure Indicators^x

Indicators	Numbers (Total)			
Number of District Hospitals ²	22			
Number of Sub District Hospital ²	21			
Number of Government (Central + State) Medical College ⁶	5			
Number of Private (Society + Trust) Medical Colleges ⁶	7			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	659	796	1522	2006
PHC-HWC	362	368	368	368
UPHC-HWC	101	100	100	100
Total-HWC	1122	1264	1990	2474
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	144	118	18.06	
Number of Primary Health Centres (PHC)	579	385	33.51	
Number of Sub Centres (SC)	3,474	2,617	24.67	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	22	15	12	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	237	100	57.81	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	N/A	N/A	N/A	
Number of PHC	N/A	N/A	N/A	
Number of SC	N/A	N/A	N/A	

^x Sources are mentioned at the end of Annexure 1

Patient Service⁹	Haryana	India
IPD per 1000 population	40.3	62.6
OPD per 1000 population	1230.3	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	21.4	36.4

1.4 Major Health Indicator^y

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Haryana	India
% DALY ^z accountable for CMNNDs ^{aa}	26.88	27.46
% DALY accountable for NCDs	60.99	61.43
% DALY accountable for Injuries	12.13	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Haryana	India
Level of Birth Registration (%)	90.6	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	19.4	20.7
RMNCHA+N		
Maternal Health⁹	Haryana	India
% 1st Trimester registration to Total ANC Registrations	75.6	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	77	79.4
Total Reported Deliveries	5,14,301	21410780
% Institutional deliveries to Total Reported Deliveries	95.9	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	58.5	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	41.5	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	18.9	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	13.3	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	26.8	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	60.9	53.4
Neonatal⁹	Haryana	India
% live birth to Reported Birth	98.7	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	11.8	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	92.2	89.9

^y Sources are mentioned at the end of Annexure 1

^z Disability Adjusted Life Years

^{aa} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Haryana	India
Sick New Born Care Unit (SNCU)	30	895
New Born Stabilization Unit (NBSU)	66	2418
New Born Care Corner (NBCC)	318	20337
Child Health & Nutrition¹⁰	Haryana (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	4.9	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	46.6	60.6
Children under 5 years who are underweight (weight-for-age) (%)	21.5	32.1
Child Immunization¹⁰	Haryana (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	81.1	83.8
Children age 12-23 months who have received BCG (%)	95	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	89.4	87.9
Family Planning¹⁰	Haryana (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	3.3	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Haryana	India
Number of districts with functional IDSP unit	22	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Haryana	India
Annualized total case notification rate (%)	245	163
New Smear Positive (NSP) Success rate (in %)	79	79
National Leprosy Eradication Programme (NLEP)¹¹	Haryana	India
Prevalence Rate/10,000 population	0.13	0.61
Number of new cases detected	398	114,359
Malaria, Kala Azar, Dengue¹¹	Haryana	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Haryana (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	19.7	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	36.4	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Haryana (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	12.3	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	16.6	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	5.4	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	6.4	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Haryana (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	2.5	8.9
Men who use any kind of tobacco (%)	29.1	38
Women who consume alcohol (%)	0.3	1.3
Men who consume alcohol (%)	16.1	18.8
Injuries		
Road Traffic Accident¹²	Haryana	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	13	N/A
Total number of fatal Road Accidents	4,684	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	46.2	33.7
Number of persons killed in Road Accidents	5057	115113

1.5 Access to Care^{bb}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Haryana	India
Number of Districts equipped with MMU under NRHM	7	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Haryana	India
102 Type	0	9955
104 Type	0	605
108 Type	428	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	0	11070

^{bb} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Haryana	India
Total number of ASHA targeted under NRHM	18000	946563
Total number of ASHA in position under NRHM	17606	904211
% of ASHA in position under NRHM	97.81	96
Total number of ASHA targeted under NUHM	2676	75597
Total number of ASHA in position under NUHM	2528	64272
% of ASHA in position under NUHM	94.47	85
Community Process¹¹	Haryana	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	6049	554847
Number of Mahila Arogya Samitis (MAS) formed	48	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Haryana	India
DH	22	796
CHC	124	6036
PHC	381	20273
UHC	2	126
UPHC	100	3229
Human Resource for Health ¹⁴		
HRH Governance	Haryana	
Specialist Cadre Available in the state (Y/N)	No	
HR Policy available (Y/N)	Yes	
Implementation of HRIS (Y/N)	Yes	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	8
	Dentists (%)	13
	MO MBBS (%)	16
	Nurse (%)	34
	LT (%)	49
	ANM (%)	14
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	6 per 10,000	5 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	2:1	2:1

Ranking: Human Resource Index of Haryana¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{cc}	8623	8768	7663	1105	960	74.36
Staff Nurse	7349	6951	4387	2564	2962	
Lab Technician	1486	1288	594	694	892	
Pharmacists	833	1190	813	377	20	
MO MBBS ^{dd}	1963	2811	2203	608	0	
Specialist ^{ee}	1652	1069	945	124	707	

1.6 Healthcare Financing^{ff}

National Health Accounts (NHA) (2017-18)	Haryana		India	
Per Capita Government Health Expenditure (in ₹)	1,428		1,753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	0.6		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	4.6		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	50.4		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Haryana		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	25	10	33	26
IPD - % of hospitalized cases using public facility	37	20	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	569	829	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	818	980	845	915
IPD - Per hospitalized case (in INR) - Public	9,170	8,671	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	26,652	27,287	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	14	13	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	49	36	53	43

^{bb} MPW – Multi Purpose Health Worker (Female + Male)

^{cc} MO MBBS (Full Time)

^{dd} Specialist (All Specialist)

^{ff} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	1,767	2,713	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	15,618	51,287	20,692	26,701
State Health Expenditure	Haryana		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	3.7		5 ⁹⁹	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

⁹⁹ Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

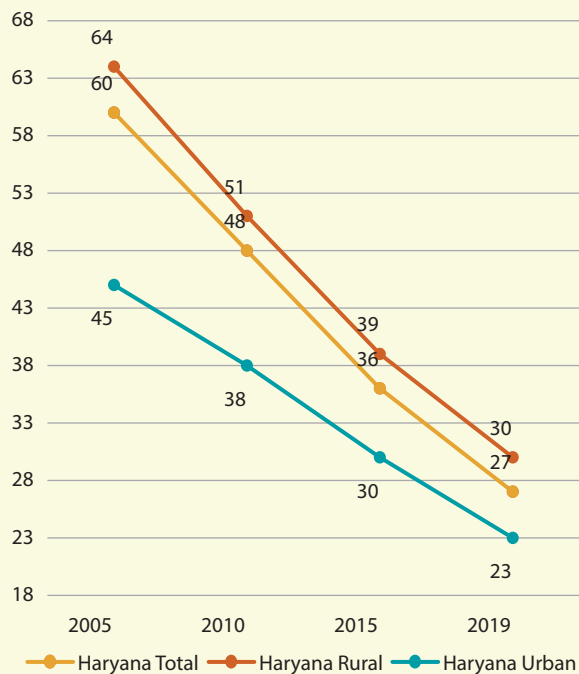


Figure 2: CBR & CDR Trend

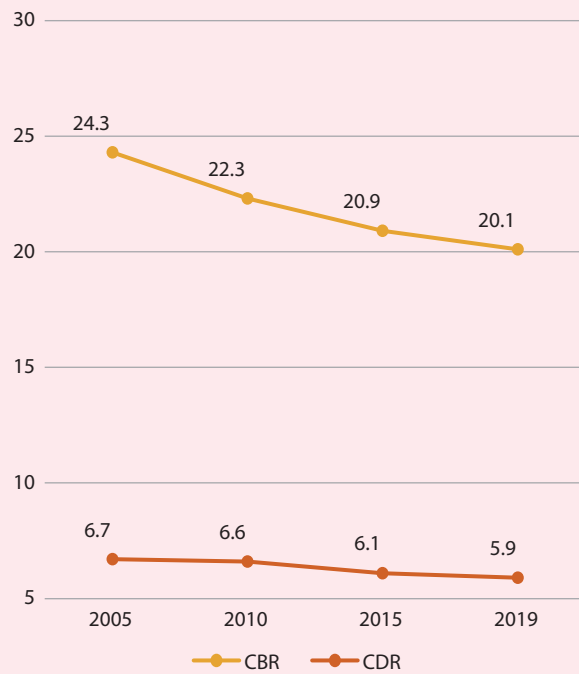


Figure 3: Life Expectancy At Birth Trend

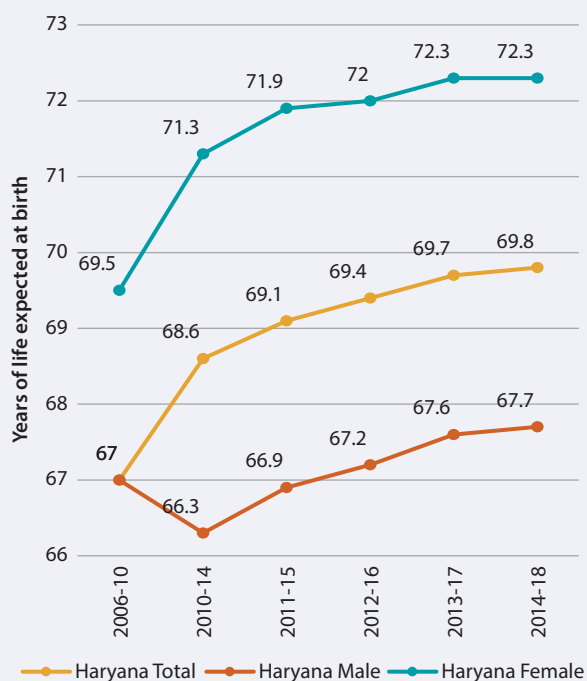


Figure 4: NNMR, TFR & Still Birth Trend

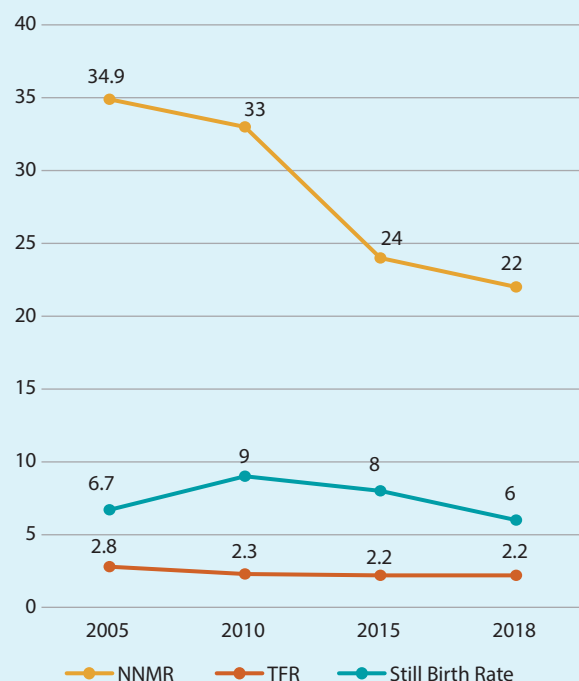


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

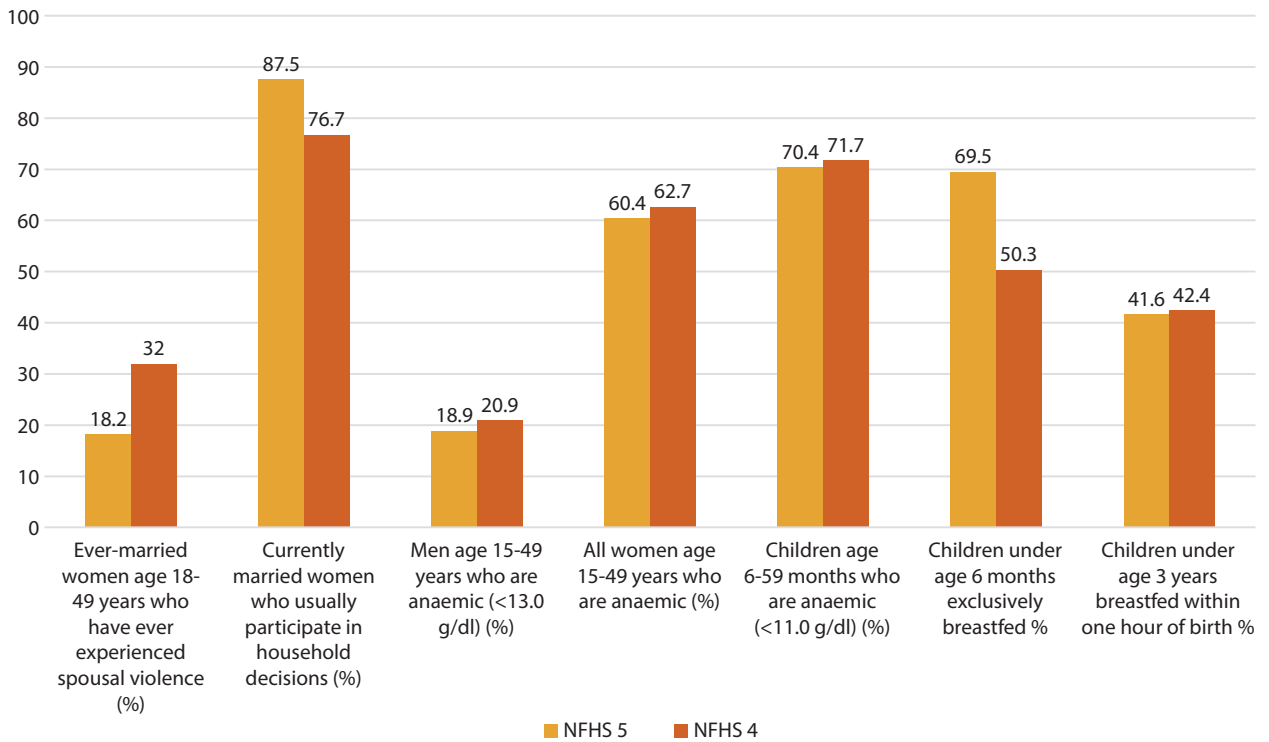


Figure 6: Top 15 causes of DALYs, 1990-2019

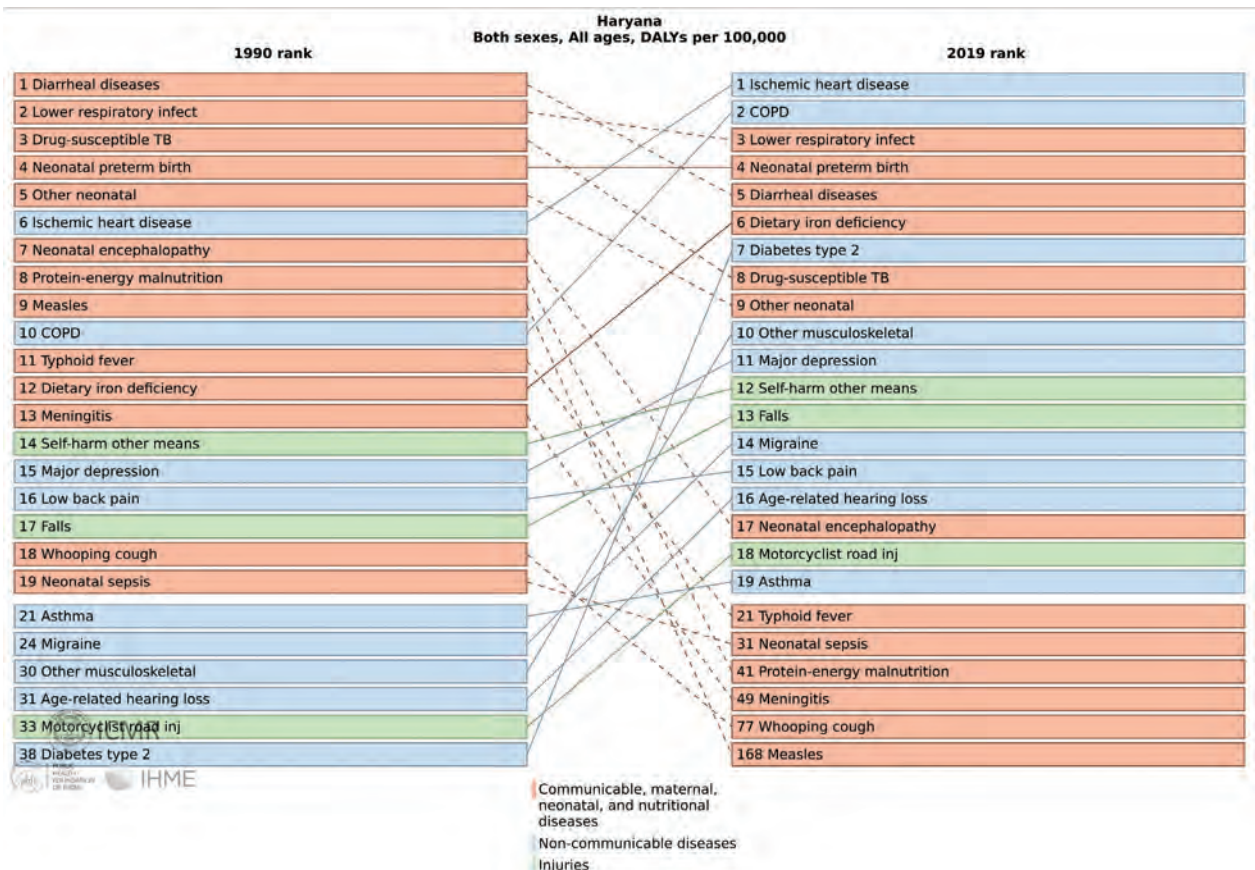


Figure 7: Top 15 risk of DALYs, 1990-2019

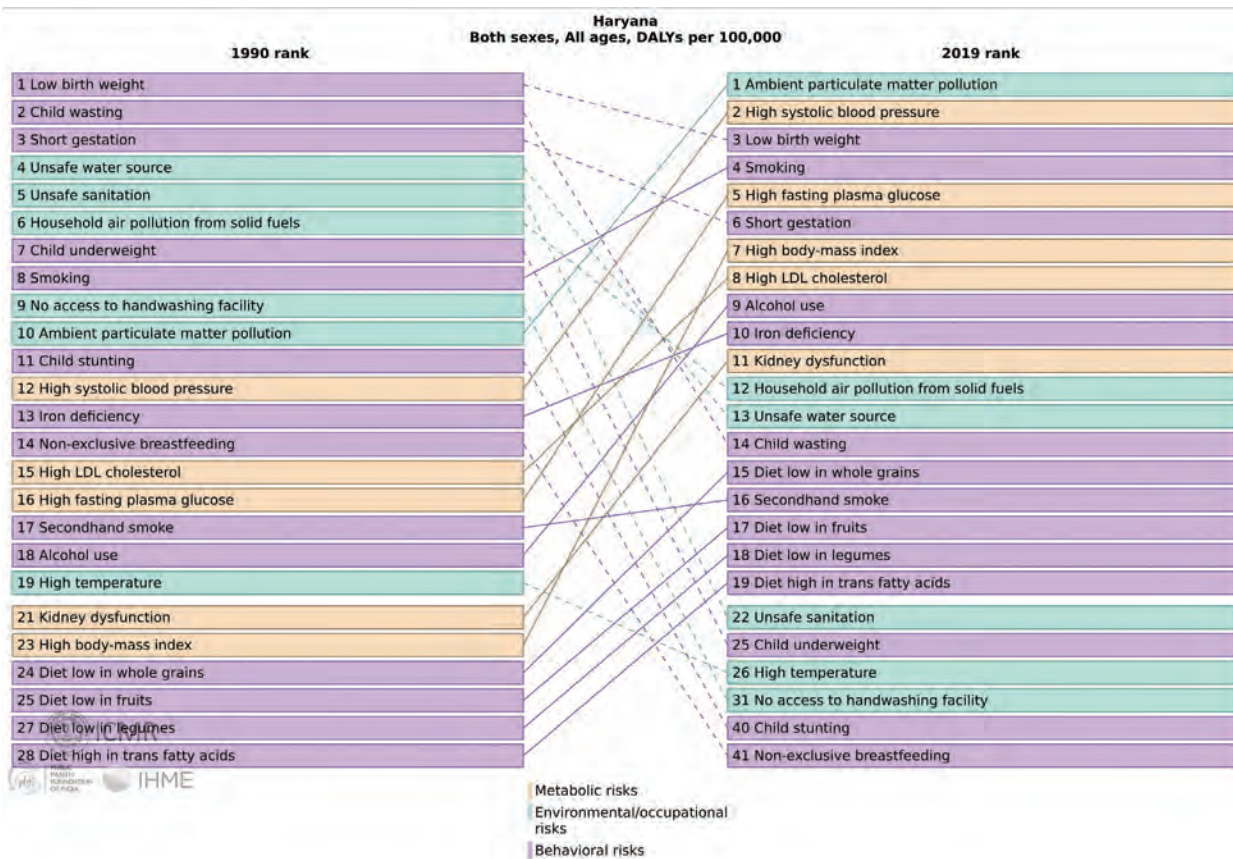


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

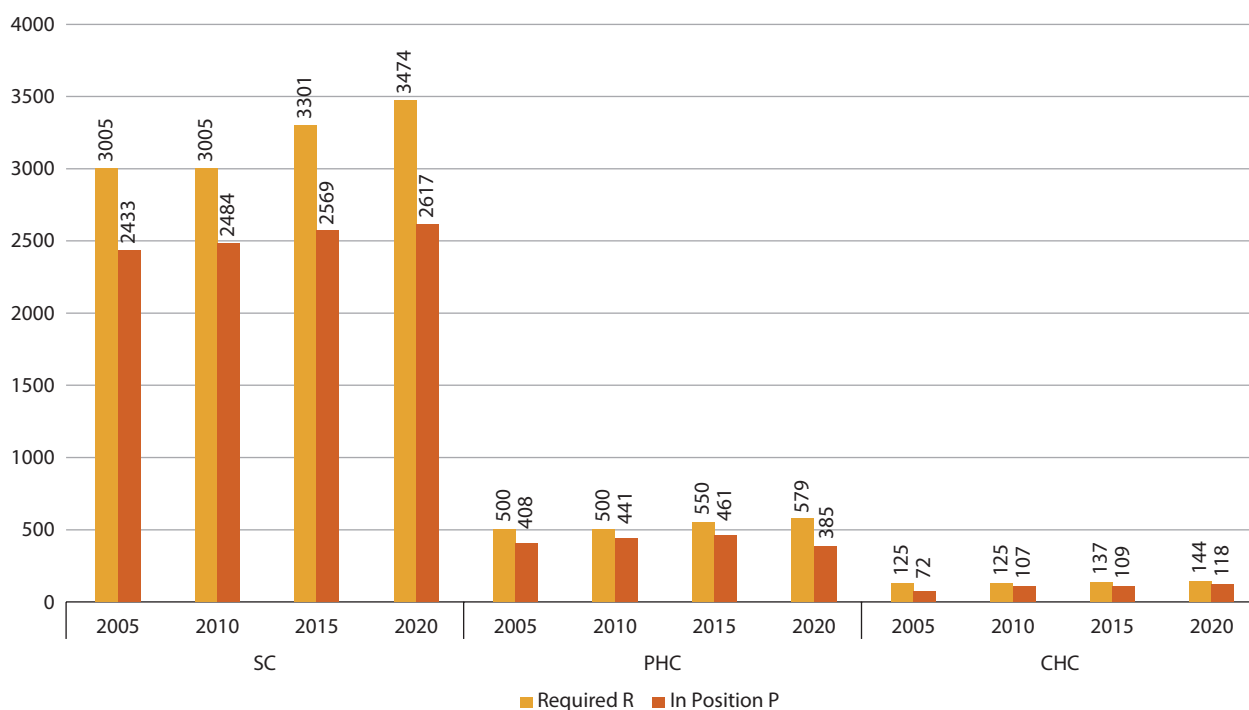


Figure 9: Year Wise Health Infrastructure Shortfall (%)

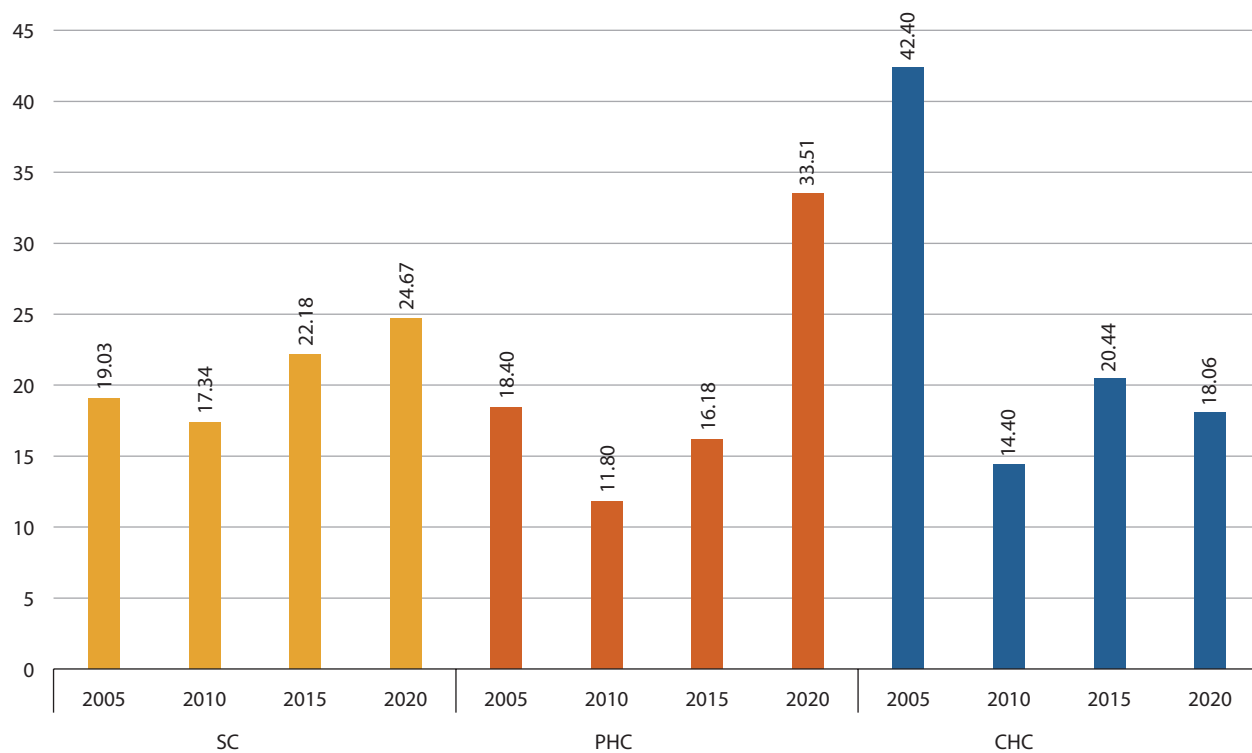
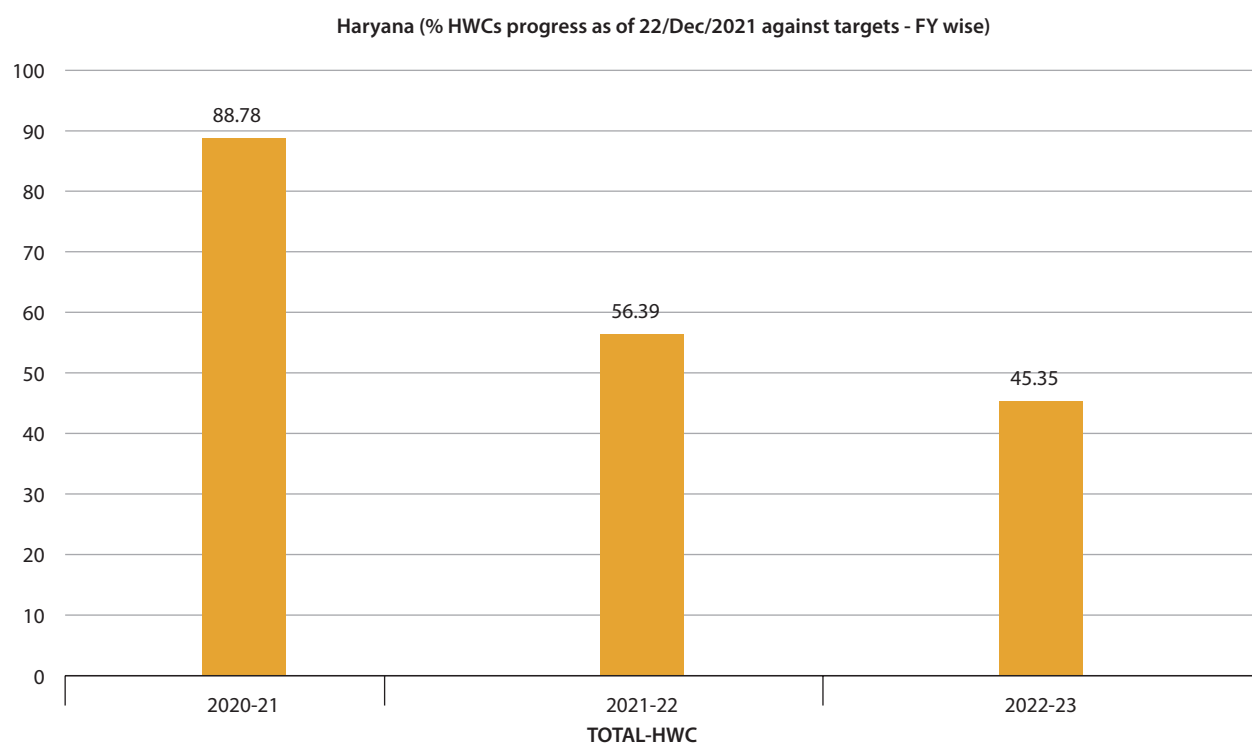


Figure 10: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)															
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet** # (%)	Children Under 5 Years - Stunted√ (Height For Age) (%)	Children Under 5 Years - Wasted√ (Weight For Height) (%)		
1	Haryana	NFHS 4 Total	836	12.2	NA	19.4	63.7	5.7	12	9.3	45.1	80.4	79.4	7.5	34	21.2		
2	Haryana	NFHS 5 Urban	943	28.3	85.7	9.9	73.5	5	24.6	7.7	63.1	96.1	82	9.6	26.1	10.8		
3	Haryana	NFHS 5 Rural	873	24.2	76.7	13.7	72.9	4.9	14.9	7.5	59.2	94.4	80.8	12.7	28.1	11.8		
4	Haryana	NFHS 5 Total	893	25.7	79.7	12.5	73.1	5	18.1	7.6	60.4	94.9	81.1	11.8	27.5	11.5		
5	Ambala	NFHS 5 Total	764	19	85	6.4	69.5	3.2	23.9	7	57.4	97.8	86.9	17.4	24.1	10.9		
6	Bhiwani	NFHS 5 Total	899	28.2	78.8	15	72	3.6	11.1	9.3	60.4	97.7	80.4	8.4	29	6		
7	Charkhi Dadri	NFHS 5 Total	1007	29.7	83.6	11.8	69.4	4	11.8	11.1	53.4	98.9	89.3	11.5	23.9	10.6		
8	Faridabad	NFHS 5 Total	955	32.8	82.3	15.3	77.5	5.7	23.9	7.4	51.2	92.5	73.2	11.7	28.9	8		
9	Fatehabad	NFHS 5 Total	901	29.4	71.1	11.7	75.8	5	15.6	4.6	60.1	97.9	96.7	11.2	24.6	16		
10	Gurgaon	NFHS 5 Total	858	34.6	85.4	20.7	70.3	6	18.5	7.8	48.1	96.7	80.1	10.1	22.1	15.7		
11	Hisar	NFHS 5 Total	856	27.9	77.7	8.9	74.4	4.9	13.1	8.9	69.9	98.2	90.6	2.6	27.8	16.4		
12	Jhajjar	NFHS 5 Total	1282	27	88.2	7.7	80.2	7.2	17.1	4.6	60.1	97.2	84.1	15.4	15.6	8		
13	Jind	NFHS 5 Total	850	23.7	81.3	8.7	79.2	8.6	12.4	5.4	49.6	98.7	83.3	10.5	25.5	8.8		
14	Kaithal	NFHS 5 Total	804	29.1	70.9	11	76.5	4	15.4	4.8	68.8	98.2	86.3	10	29.9	20.7		
15	Karnal	NFHS 5 Total	821	24.6	84	6.6	79.1	3.1	28.1	5.4	84.7	99	84.6	19.2	29.2	9.8		
16	Kurukshetra	NFHS 5 Total	869	19.2	83	11.7	68.4	4.7	30.1	9.5	59.8	98.4	72.1	28.7	24.9	12.8		

17	Mahendragarh	NFHS 5 Total	962	25.6	81.1	13.4	70.2	3.3	9.8	9.3	55.2	98.9	70.1	8.7	25.2	8.4
18	Mewat	NFHS 5 Total	891	11.5	41.9	28.7	37.8	2.3	6.1	19.6	45.9	74.6	63.5	13	44.4	14.2
19	Palwal	NFHS 5 Total	884	23.5	68.3	23.8	71.2	6.9	10.2	8	53.4	78.3	74.4	21.2	31	9.9
20	Panchkula	NFHS 5 Total	854	19.9	84.9	7.4	76.6	3.5	26.8	7	76.9	97	92.6	10.3	21.8	12
21	Panipat	NFHS 5 Total	938	26.5	83.8	11.9	70.1	5	21.9	7.3	49.2	97.1	79.4	10.3	25.1	9.9
22	Rewari	NFHS 5 Total	787	25.3	86	5.8	70.6	3.4	14.7	8.5	63.8	98.7	83.6	6.1	25.9	9.3
23	Rohtak	NFHS 5 Total	880	24.8	85.8	12.4	74.4	7.8	16	8.5	72.3	97.4	88.1	6	28.9	12.5
24	Sirsa	NFHS 5 Total	787	26.6	70.6	8.9	74	4	18	8.3	61.9	99.3	NA	9.1	25	12.6
25	Sonipat	NFHS 5 Total	906	22.4	87.3	15.5	78.7	6.7	18	4.8	64.1	99.7	77.4	5.1	23.6	9.2

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'Vaccinated'. Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best five performing districts within the districts for a particular indicator

B. Red – Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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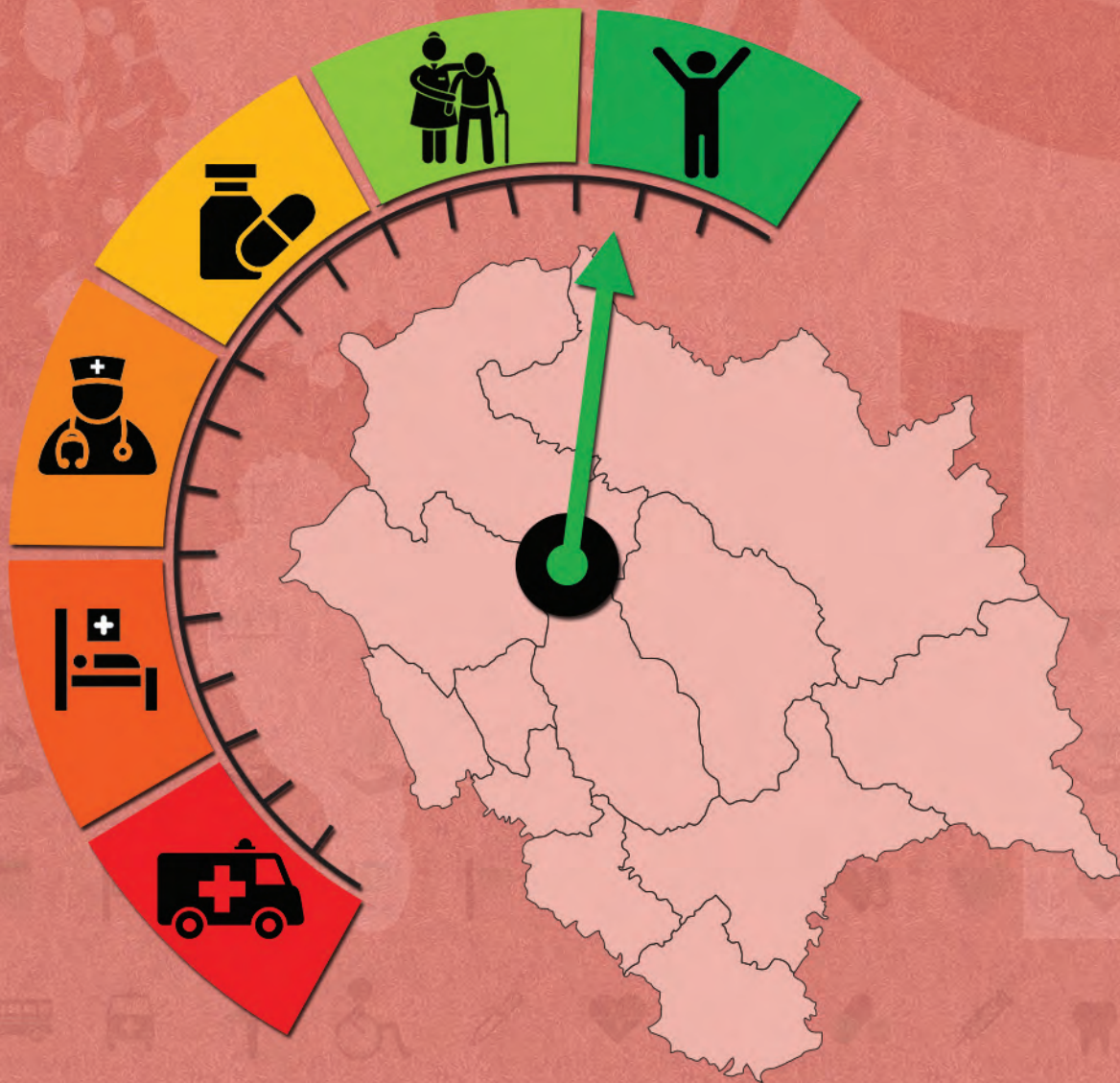
Dr. Diksha Dhupar, Consultant



NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



HIMACHAL PRADESH

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
5 th	Kinnaur	Hamirpur
7 th	Kangra	Chamba
9 th	Hamirpur	Sirmaur
10 th	Mandi	Solan
12 th	Bilaspur	Chamba

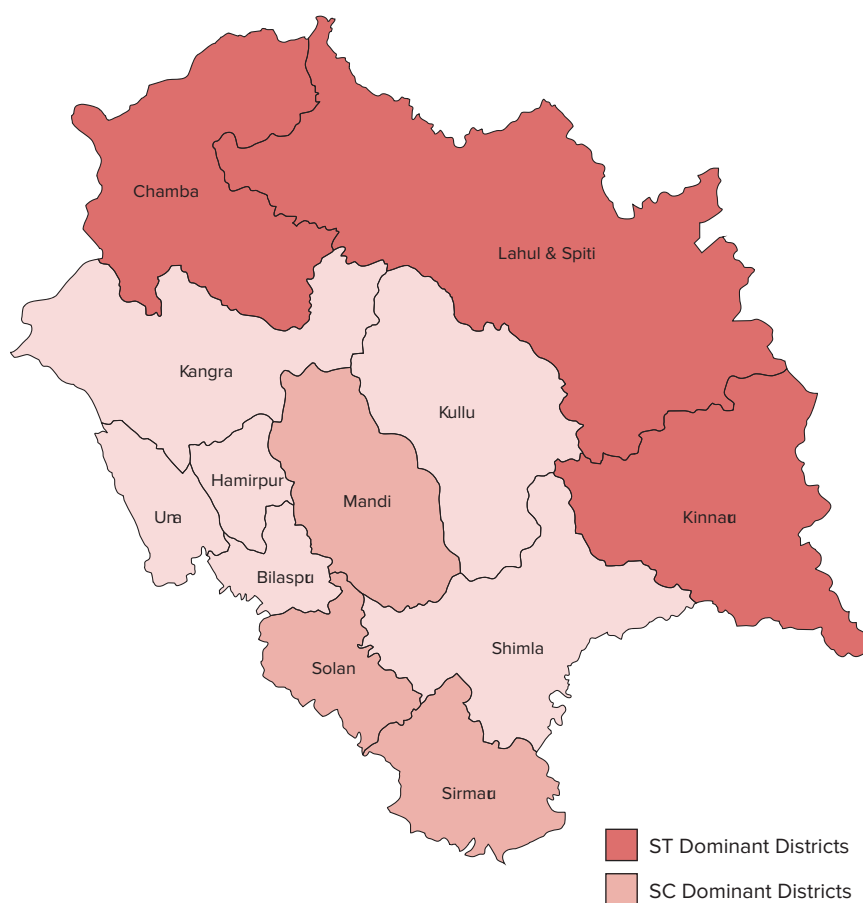
HIMACHAL PRADESH

1. BACKGROUND

1.1 State Profile

Himachal Pradesh is positioned^a 17th in India for a geographical spread of 55,673 km². The State is divided into 12 districts and is estimated to have a population of over 0.69 crores^b. It is projected that the population would reach around 0.73 crores by 2021^c. As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 0.17 crores (25.19%) and 0.03 crores (5.71%), respectively. In the State, 89.97% of the population reside in rural areas, while only 10% constitute the urban population. Out of the 12 districts, top three ST & SC dominant districts account for 53.54% of ST & 35.80% of SC population in the State (Annexure 1, State Profile).

Figure 1: Top 3 ST & SC Dominant Districts



^a Including all States & UTs; RHS 2019

^b RHS 2020 & Census 2011

^c Census Population Projection 2019 Report

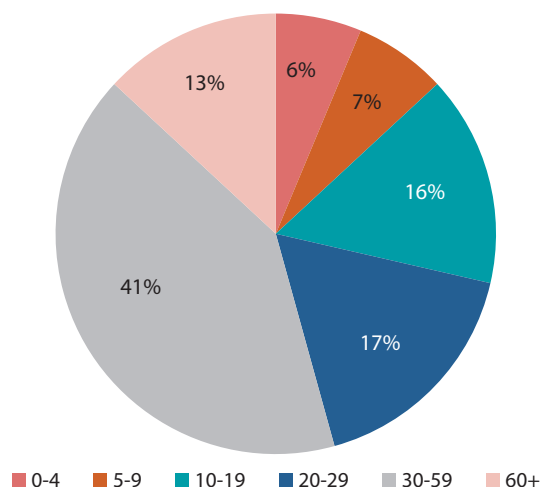
The total length of roads^d in the State is 62,812 km (1.25%^e), in which the length of the national highways is 2,643 km (2.31%^f) and state highways is 827 km (0.47%^g).

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

Out of the 12 districts, only 1 district has a population between 10-20 lakhs, while the remaining 11 districts have a population less than 10 lakhs (Annexure 1.1 State profile). The State's Sex ratio at birth (930 females for every 1000 males) is higher than the national average (899) (Annexure 1.2). It is estimated that 16% of the total population is in the age group of 10-19 years, 58% within 20 to 59 years; and 13% is 60 years and above (Figure 2). The crude birth rate has declined from 20.0 in 2005 to 15.7 in 2018, but the crude death rate has remained a constant of 6.9 (Annexure 2; figure2). The literacy rate increased from 76.5% in 2001 to 82.8% in 2011, with male & female literacy rates being 89.5% and 75.9%, respectively (Annexure 1.1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)^h is reported as 32.5% for higher education, 95.53% for senior secondary education, 107.08% for secondary education, 100.89% for elementary education, and 98.80% for primary education.

Figure 2: Himachal Pradesh - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 13% (figure 2) of the State's total population. The life expectancy at 60 years of age is 18.0 and 22.7 for males and females, respectively (2014-2018). In Himachal Pradesh, 62% of elderly females and 3% elderly males living in urban areas; 47% of elderly females and 11% elderly males in rural areas are economically fully dependent on others. The old age dependency ratio is 16.1 in 2011; which is 15.5 for males, 16.6 for females, 16.7 in rural & 11.3 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 30% for men and 27% for women, which are below the national average of 31% for each (Elderly in India 2016).

^d Basic Road Statistics 2019, MoRTH

^e Percentage of total length of roads in Himachal Pradesh

^f Percentage of total length of National Highways in the country

^g Percentage of total length of State Highways in the country

^h Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+Nⁱ services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^j, institutional deliveries, C sections, distribution of IFA^k tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). In Himachal Pradesh, 77.7% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5, Bilaspur, Kinnaur, Shimla, Sirmaur and Solan districts reported comparatively better ANC coverage, ranging between 75.3% - 88.2%; while Chamba, Hamirpur, Kangra, Kullu and Lahul & Spiti districts reported poor full ANC coverage ranging between 56.3% - 65.6%. As reported in HMIS 2019-20, around 92.5% of the deliveries took place in institutions, out of which 82.9% took place in public health facilities. Total percentage of C-sections (24.1%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 47.6% is conducted at private facilities in the State. Around 97.4% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years increased from 52.7% (NFHS 4) to 53.2% (NFHS 5). Anaemia in females of reproductive age group is almost thrice than in men of similar age group (Annexure 2, Figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 48.6 (2005) to 19 (2018), which is exceptionally lower than the national average of 32 (Annexure 2, Figure 1). Similarly, NNMR^l and Still Birth (per 1,000 live births) rates have also significantly declined from 30 and 19 (2005) to 13 and 7 (2018), respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 70 (2006-10) to 72.9 (2014-18) which is higher than the national average of 69.4 years (Annexure 2, Figure 3). As per NFHS 5, Kinnaur, Kangra, Shimla, Mandi and Una districts reported low SRBs^m ranging from 691 to 873 and Sirmaur, Chamba, Kullu, Hamirpur and Lahul & Spiti districts reported high SRBs ranging from 925 to 1182.

Full vaccinationⁿ coverage for children between 12 – 23 months of age has improved from 85.4% (NFHS 4) to 96.4% (NFHS 5). The percentage of under 6-months children exclusively breastfed has also increased from 67.2% (NFHS 4) to 69.9% (NFHS 5). An increase in childhood anaemia from 53.7% to 55.4% in children aged 6-59 months has been reported (Annexure 2, Figure 5). As per NFHS 5 report, Una, Shimla, Lahul & Spiti, Hamirpur and Kangra districts reported comparatively low burden of stunting ranging from 24.7 to 28.5 and Kinnaur, Solan, Kullu, Bilaspur and Chamba districts reported high burden ranging from 32.2 to 42.6. For under-5 wasting - Kinnaur, Bilaspur, Una, Hamirpur, and Chamba districts reported

ⁱ Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^j Antenatal Check up

^k Iron Folic Acid Tablets

^l Neonatal Mortality Rate

^m Sex Ratio at Birth

ⁿ NFHS 5 State/UT Factsheet, based on information from vaccination card only

a comparatively low burden ranging from 11.3 to 15.4; while Kangra, Lahul & Spiti, Mandi, Sirmaur and Solan reported high burden ranging from 16.3 to 20.9.

2.3 Family Planning

The TFR^o reduced from 2 in 2005 to 1.6 in 2018 (Annexure 2, Figure 4). As per NHFS 5 report, the total unmet need in the State is 7.9, and unmet need for spacing is 2.8%. Una district reported the highest total unmet need (15.8%), while Solan reported the lowest (2.9%). Approximately 63.4% of married women reported to avail any modern method of family planning in the State (NFHS 5); with sterilization acceptance being 37.7% among females and 3.3% among males.

2.4 Communicable Diseases

The State has 12 functional IDSP units in place^p. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 20.81% of total disease burden (Annexure 1.4). Lower respiratory tract infections & neonatal preterm births are the leading causes of deaths due to CMNND in the State (Annexure 2, Figure 6^q). As per QPR reports, for TB, the annual total case notification rate is 210% and NSP^r success rate is 87% as opposed to the national averages of 163% and 79%, respectively. For NLEP^s, the reported prevalence rate of 0.18 per 10,000 population is less than the national average of 0.61. In FY 2019-20, 2 deaths due to Dengue are reported in the State, while none due to Malaria nor Kala Azar.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that premature deaths contribute to 59% of the total disease burden in the State, while disability or morbidity accounts for 41%^t. Ischaemic heart disease and COPD are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 67.83% and injuries contribute to 11.36% of DALYs in the State^u. The State is positioned 20th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 1.7% of women and 32.30% of men used any kind of tobacco, while 0.6% of women and 31.90% of men consumed alcohol. Overall, smoking, high systolic blood pressure and high fasting plasma glucose are the major risk factors for all DALYs and YLLs (Annexure 2, figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 1,33,303 crores. The State is positioned 14th out of 32 states in terms of per capita^v of ₹ 1,83,108. According to NHA 2017-18, the per capita Government Health Expenditure in the State is ₹ 3,177, which is more than the national average of ₹ 1,753. On the other hand, the OOPE^w as a share of Total Health Expenditure is 49.2%, which is more than

^o Total Fertility Rate

^p QPR NHM Reports (Status as on 01.03.2020)

^q <https://vizhub.healthdata.org/gbd-compare/india>

^r New Smear Positive

^s National Leprosy Eradication Programme

^t India: Health of the Nation's States: The India State-Level Disease Burden Initiative

^u <https://vizhub.healthdata.org/gbd-compare/india>

^v Directorate of Economics & Statistics

^w Out of Pocket Expenditure

the national average of 48.8%. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 14,874 in public facilities, ₹ 45,971 in private facilities; whereas for urban areas, it is ₹ 12,415 in public facilities and ₹ 31,457 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 3,893 in public facilities and ₹ 27,058 in private facilities; whereas in urban areas – it is around ₹ 6,700 in public facilities and ₹ 25,914 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated as 47% and 53% whereas for diagnostics, it is around 17% and 19% in rural and urban areas, respectively (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). The State has adequate public health facilities in place (Annexure 2, Figure 9). Currently, there are 2,092 SCs, 564 PHCs and 85 CHCs are in place against the required 1,375 SCs, 226 PHCs and 56 CHCs. Similarly, in urban settings there are 24 PHCs in place against the required 15 accounting to an excess of 60%. The State has 9 DHs, 83 SDHs and 6 government medical colleges. In the State 12 DHs, 5 SDHs and only 1 CHC serve as functional FRUs. In tribal catchments, there are 105 SCs, 47 PHCs and 8 CHCs in place against the required 133 SCs, 20 PHCs and 5 CHCs.

Under the recently introduced Ayushman Bharat – Health and Wellness Centers (AB-HWCs) 1131 HWCs (17 UPHC-HWC, 512 HWC-PHC, and 602 HWC-SHC) are operationalized in the State as of 30th September 2020^x.

In the State, all the 12 districts are equipped with MMUs under the NRHM. The State has 98.20% of required ASHAs in position under the NRHM and 97.06% under the NUHM. The doctor to staff nurse ratio in place is 1:1, with 9 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population.

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 2119.77 availed (events) OPD services and 97.57 availed (events) IPD services. As per NSS data (2017-18), 67% of all OPD cases in rural and 73% in urban areas; and 78% of all IPD cases in rural areas & 74% in urban areas utilized public health facilities. The public health facility utilization in the State is more than the national averages for both (Annexure 1.6).

^x AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^y

Indicator	Himachal Pradesh 2011 ¹	India
Total Population (In Crore)	0.69	121.08
Rural (%)	89.97	68.85
Urban (%)	10.03	31.14
Scheduled Caste population (SC) (in crore)	0.17 (25.19%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.03 (5.71%)	10.45 (8.63%)
Total Literacy Rate (%)	82.8	72.99
Male Literacy Rate (%)	89.5	80.89
Female Literacy Rate (%)	75.9	64.64
Number of Districts in the Himachal Pradesh ²	12	
Number of districts per lakh population in Himachal Pradesh (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	11
	≥ 10 Lakhs - <20 Lakhs	1
	≥20 Lakhs - <30 lakhs	0
	≥30 Lakhs	0
ST SC Dominant (Top 3) Districts of Himachal Pradesh ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Lahul & Spiti - 81.44%	Sirmaur - 30.33%	
Kinnaur - 57.94%	Mandi - 29.38%	
Chamba - 26.10%	Solan - 28.35%	
Top 3 ST dominant district accounts for - 53.54%	Top 3 SC dominant district accounts for - 35.80%	

1.2 Key Health Status & Impact Indicators

Indicators	Himachal Pradesh	India
Infant Mortality Rate (IMR) ³	19	30
Crude Death Rate (CDR) ³	6.9	6
Crude Birth Rate (CBR) ³	15.4	19.7

^y Sources are mentioned at the end of Annexure 1

Maternal Mortality Ratio (MMR) ³	NA	113
Neo Natal Mortality Rate (NNMR) ⁴	13	23
Under Five Mortality Rate (U5MR) ⁴	23	36
Still Birth Rate ⁴	7	4
Total Fertility Rate (TFR) ⁴	1.6	2.2
Life expectancy at birth ⁵	72.9	69.4
Sex Ratio at Birth ⁴	930	899

1.3 Key Health Infrastructure Indicators²

Indicators	Numbers (Total)			
Number of District Hospitals ²	9			
Number of Sub District Hospital ²	83			
Number of Government (Central + State) Medical College ⁶	6			
Number of Private (Society + Trust) Medical Colleges ⁶	1			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	602	399	964	1341
PHC-HWC	512	576	576	576
UPHC-HWC	17	8	8	8
Total-HWC	1131	983	1548	1925
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	56	85	-51.79	
Number of Primary Health Centres (PHC)	226	564	-149.56	
Number of Sub Centres (SC)	1,375	2,092	-52.15	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	12	5	1	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	15	24	-60.00	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	5	8	-60.00	
Number of PHC	20	47	-135.00	
Number of SC	133	105	21.05	

² Sources are mentioned at the end of Annexure 1

Patient Service⁹	Himachal Pradesh	India
IPD per 1000 population	97.57	62.6
OPD per 1000 population	2119.77	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	52.08	36.4

1.4 Major Health Indicator^{aa}

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Himachal Pradesh	India
% DALY ^{bb} accountable for CMNNDs ^{cc}	20.81	27.46
% DALY accountable for NCDs	67.83	61.43
% DALY accountable for Injuries	11.36	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Himachal Pradesh	India
Level of Birth Registration (%)	82.5	92.7
Level of Death Registration (%)	86.4	92
Percentage of medically certified deaths to total registered deaths (%)	13	20.7
RMNCHA+N		
Maternal Health⁹	Himachal Pradesh	India
% 1st Trimester registration to Total ANC Registrations	87.5	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	77.7	79.4
Total Reported Deliveries	88701	21410780
% Institutional deliveries to Total Reported Deliveries	92.5	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	82.9	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	17.1	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	24.1	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	19.2	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	47.6	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	97.4	53.4

^{aa} Denominator for computation is not available

^{bb} Sources are mentioned at the end of Annexure 1

^{cc} Disability Adjusted Life Years

Neonatal⁹	Himachal Pradesh	India
% live birth to Reported Birth	99.7	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	13.6	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	92.5	89.9
New Born Care Units Established¹¹	Himachal Pradesh	India
Sick New Born Care Unit (SNCU)	15	895
New Born Stabilization Unit (NBSU)	6	2418
New Born Care Corner (NBCC)	124	20337
Child Health & Nutrition¹⁰	Himachal Pradesh (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	4.7	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	73.7	60.6
Children under 5 years who are underweight (weight-for-age) (%)	25.5	32.1
Child Immunization¹⁰	Himachal Pradesh (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	96.4	83.8
Children age 12-23 months who have received BCG (%)	98.2	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	95.9	87.9
Family Planning¹⁰	Himachal Pradesh (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	2.8	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Himachal Pradesh	India
Number of districts with functional IDSP unit	12	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Himachal Pradesh	India
Annualized total case notification rate (%)	210	163
New Smear Positive (NSP) Success rate (in %)	87	79

National Leprosy Eradication Programme (NLEP)¹¹	Himachal Pradesh	India
Prevalence Rate/10,000 population	0.18	0.61
Number of new cases detected	141	1,14,359
Malaria, Kala Azar, Dengue¹¹	Himachal Pradesh	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	2	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Himachal Pradesh (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	36.2	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	40.8	30.7
Non-Communicable Disease		
Diabeties and Hypertension¹⁰	Himachal Pradesh (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	11.90	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	16.50	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	6.40	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	6.80	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Himachal Pradesh (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	1.70	8.9
Men who use any kind of tobacco (%)	32.30	38
Women who consume alcohol (%)	0.60	1.3
Men who consume alcohol (%)	31.90	18.8
Injuries		
Road Traffic Accident¹²	Himachal Pradesh	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	20	N/A
Total number of fatal Road Accidents	930	1,37,689

Severity (Road accident deaths per 100 accidents) of Road Accidents	39.9	33.7
Number of persons killed in Road Accidents	1146	115113

1.5 Access to Care^{dd}

Health Systems Strengthening

Ambulances & Mobile Medical Units (MMU)¹¹	Himachal Pradesh	India
Number of Districts equipped with MMU under NRHM	12	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Himachal Pradesh	India
102 Type	125	9955
104 Type	0	605
108 Type	204	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	200	11070

Key Domain Indicators

ASHA¹³	Himachal Pradesh	India
Total number of ASHA targeted under NRHM	7930	946563
Total number of ASHA in position under NRHM	7787	904211
% of ASHA in position under NRHM	98.20	96
Total number of ASHA targeted under NUHM	34	75597
Total number of ASHA in position under NUHM	33	64272
% of ASHA in position under NUHM	97.06	85
Community Process¹¹	Himachal Pradesh	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	7831	554847
Number of Mahila Arogya Samitis (MAS) formed	12	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Himachal Pradesh	India
DH	12	796
CHC	92	6036
PHC	588	20273
UCHC	0	126
UPHC	2	3229

^{dd} Sources are mentioned at the end of Annexure 1

Human Resource for Health ¹⁴						
HRH Governance			Himachal Pradesh			
Specialist Cadre Available in the state (Y/N)			No			
HR Policy available (Y/N)			No			
Implementation of HRIS (Y/N)			Yes			
HR Integration initiated (Y/N)			No			
Public Health Cadre available (Y/N)			No			
Overall Vacancies (Regular + contractual)	Specialists + MO MBBS (%)		58			
	Dentists (%)		22			
	Nurse (%)		20			
	LT (%)		73			
	ANM (%)		42			
HRH Distribution			Sanctioned		In Place	
Doctors (MO & specialists) to staff nurse ¹⁴			1:1		1:1	
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴			13 per 10,000		9 per 10,000	
Regular to contractual service delivery staff ratio ¹⁴			12:1		10:1	
Ranking: Human Resource Index of Himachal Pradesh ¹⁵						
Category	Total (Regular + NHM)					
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	Ranking: HR Gap Index
MPW ^{ee}	5058	4405	2265	2140	2793	55.93
Staff Nurse	6557	3823	2828	995	3729	
Lab Technician	1596	1081	421	660	1175	
Pharmacists	994	1223	876	347	118	
MO MBBS ^{ff}	2077	2115	2139	-24	0	
Specialist ^{gg}	1717	517	478	39	1239	

1.6 Healthcare Financing^{hh}

National Health Accounts (NHA) (2017-18)	Himachal Pradesh	India
Per Capita Government Health Expenditure (in ₹)	3177	1753
Government Health expenditure as % of Gross Domestic Product (GSDP)	1.6	1.35

^{ee} MPW – Multi Purpose Health Worker (Female + Male)

^{ff} MO MBBS (Full Time)

^{gg} Specialist (All Specialist)

^{hh} Sources are mentioned at the end of Annexure 1

Government Health Expenditure as % of General Government Expenditure (GGE)	7.2		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	49.2		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Himachal Pradesh		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	67	73	33	26
IPD - % of hospitalized cases using public facility	78	74	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	1195	575	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	723	414	845	915
IPD - Per hospitalized case (in INR) - Public	14,874	12,415	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	45,971	31,457	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	17	19	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	47	53	53	43
Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	3,893	6,700	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	27,058	25,914	20,692	26,701
State Health Expenditure	Himachal Pradesh		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	5.8		5 ⁱⁱ	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

ⁱⁱ Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

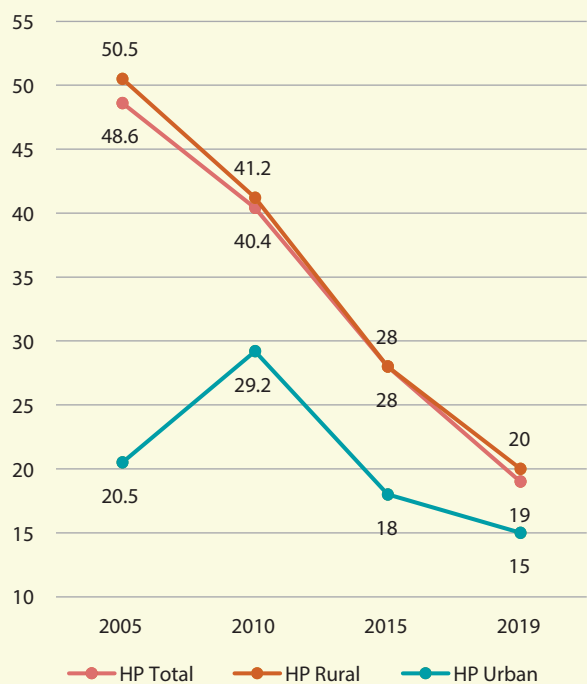


Figure 2: CBR & CDR Trend

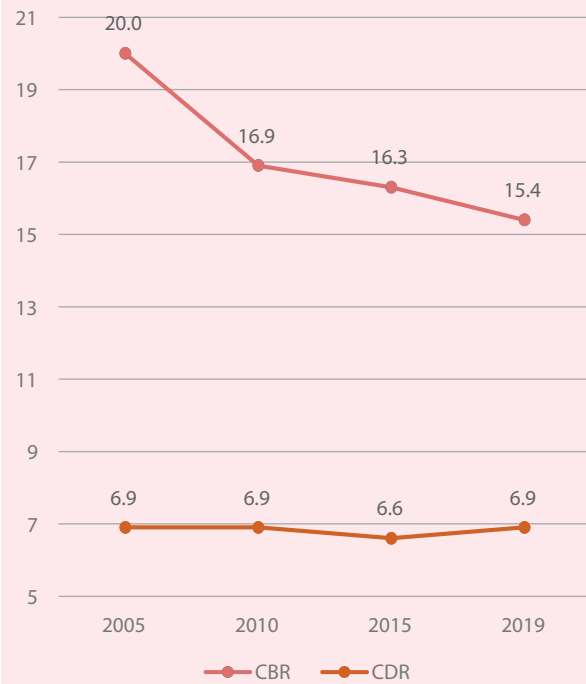


Figure 3: Life Expectancy At Birth Trend

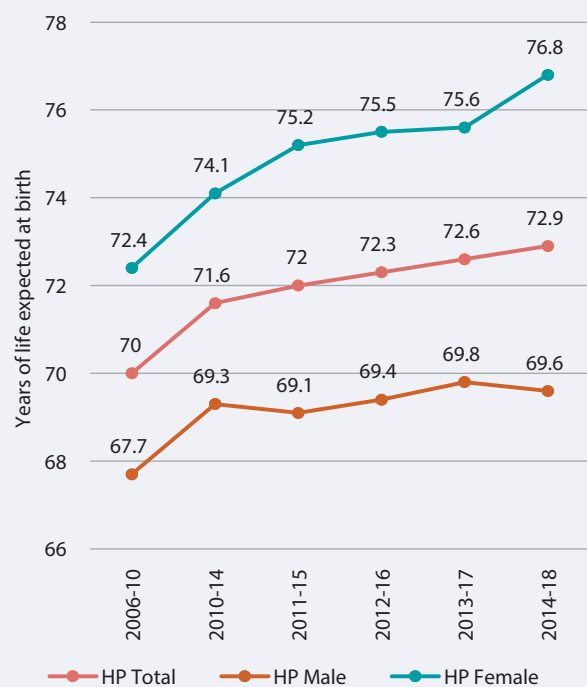


Figure 4: NNMR, TFR & Still Birth Trend

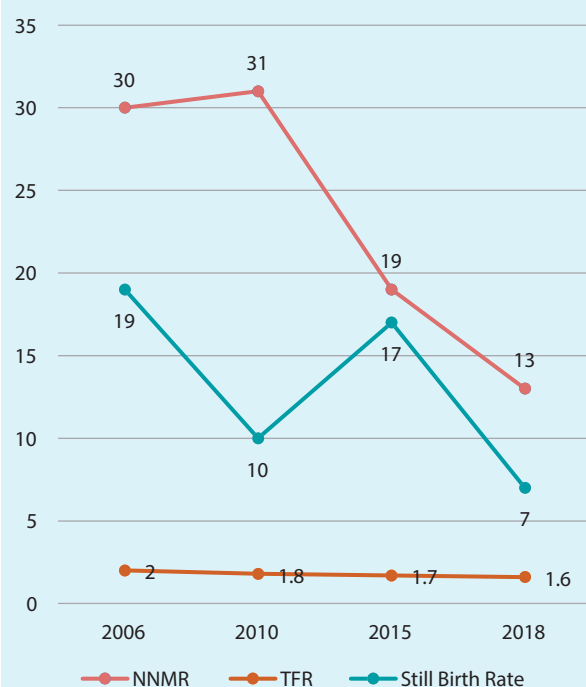


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

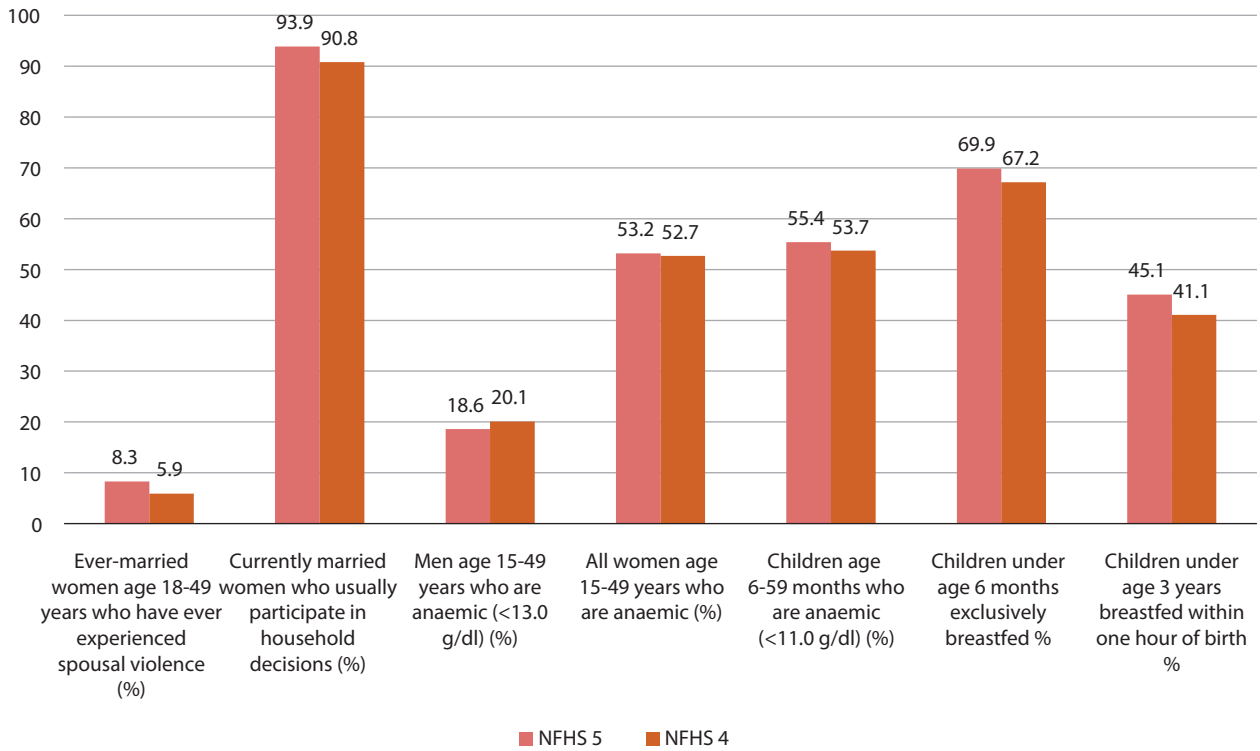


Figure 6: Top 15 causes of DALYs, 1990-2019

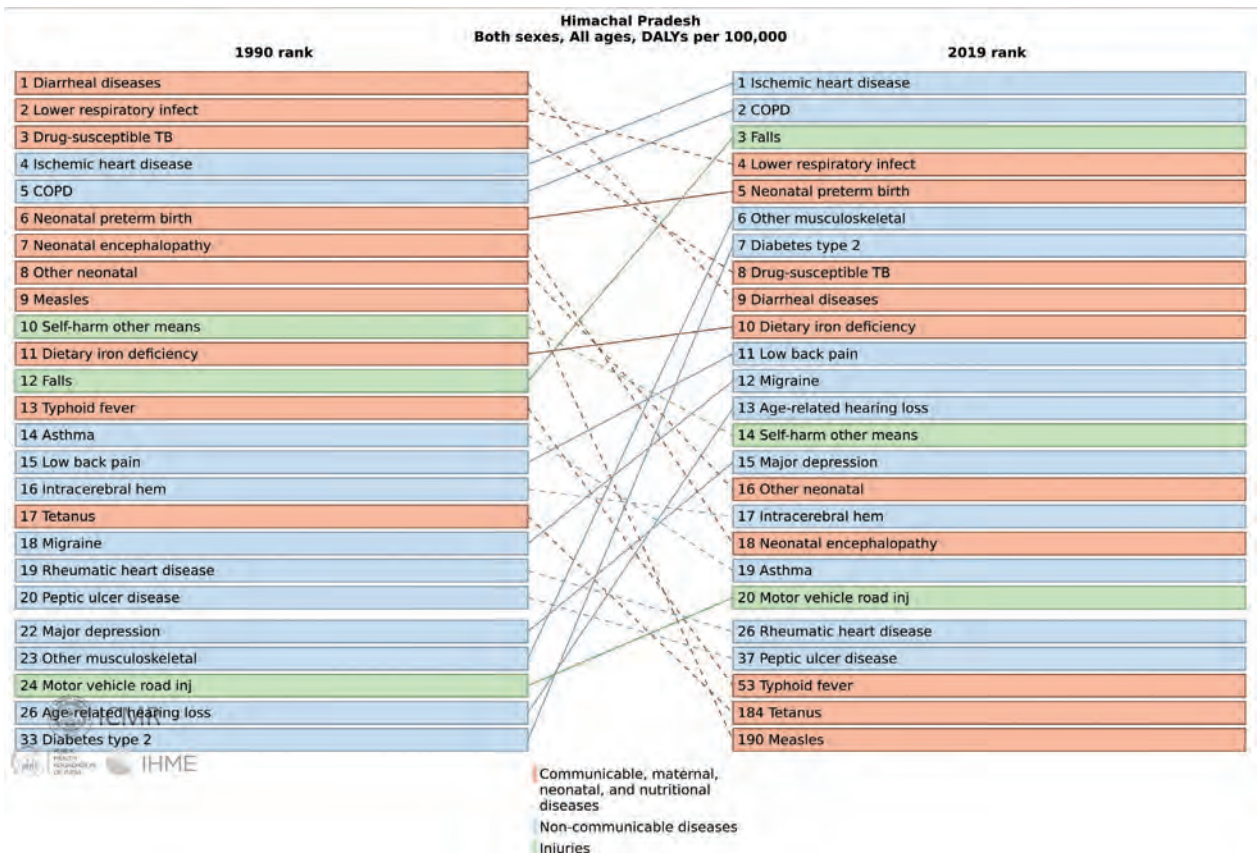


Figure 7: Top 15 risk of DALYs, 1990-2019

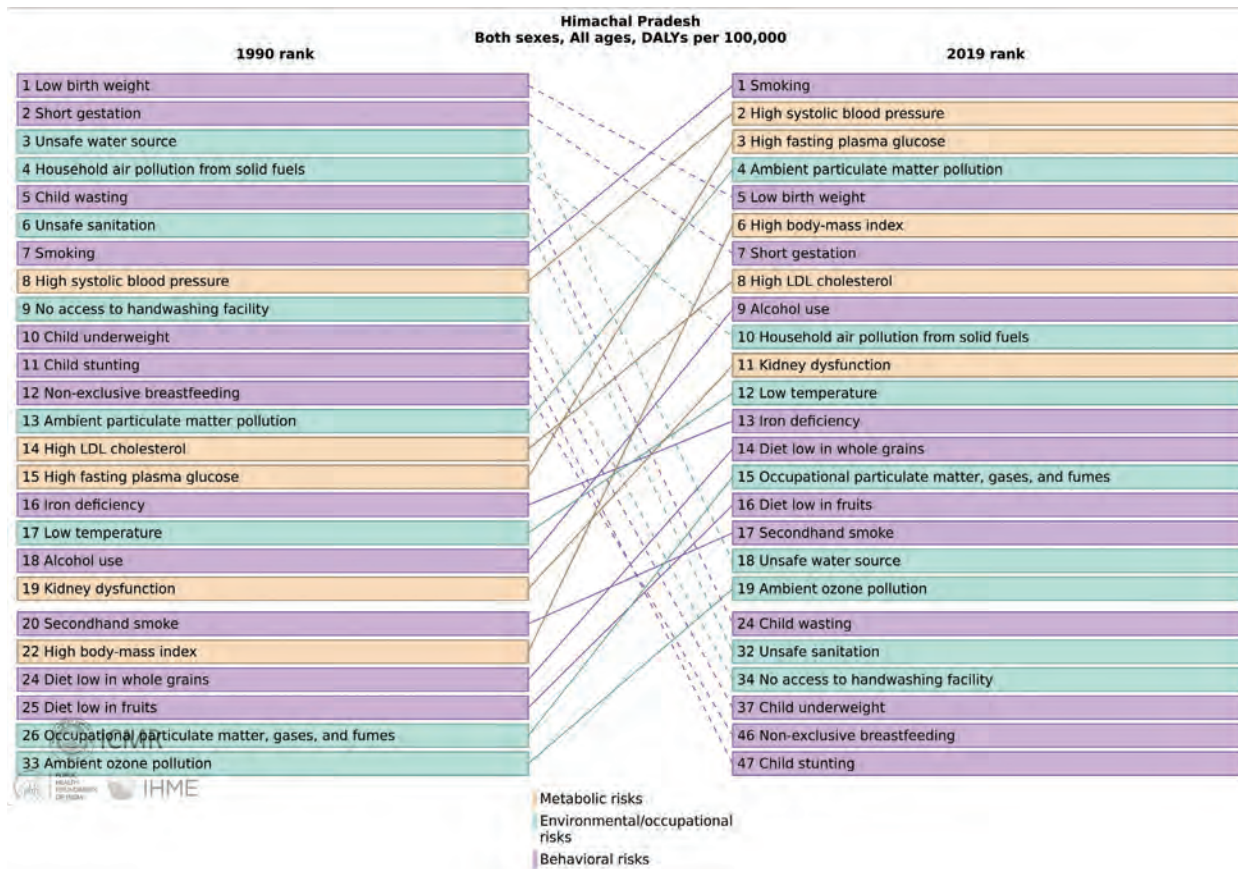


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

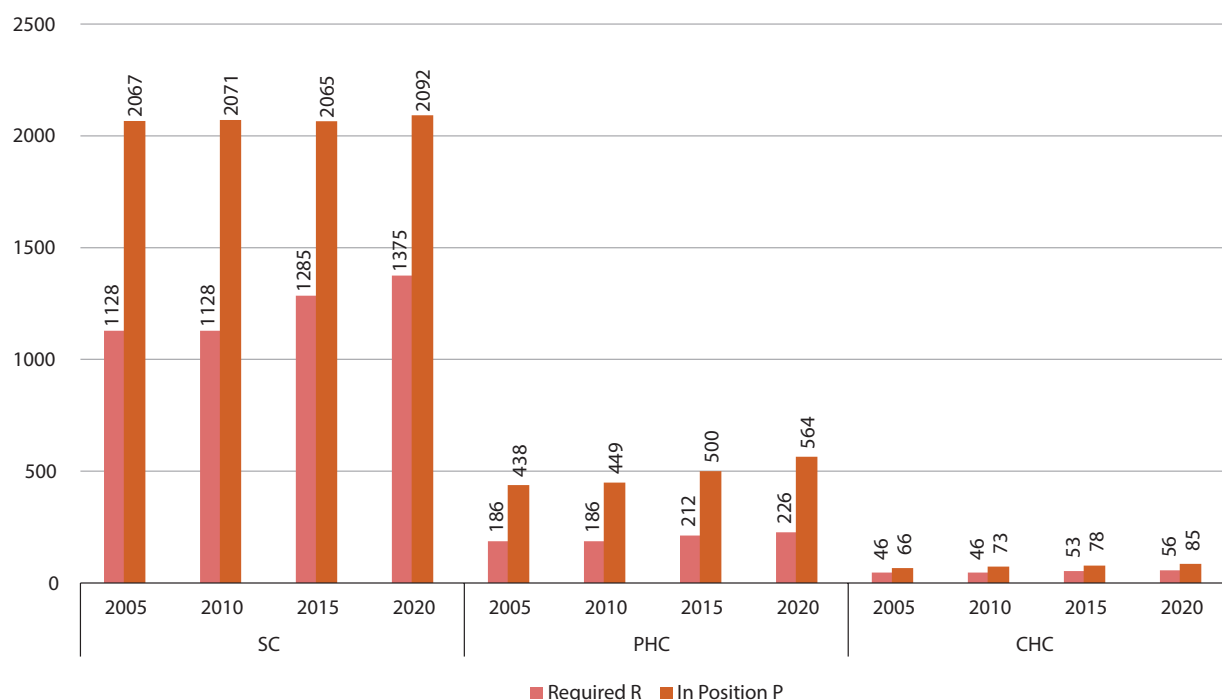


Figure 9: Year Wise Health Infrastructure Shortfall (%)

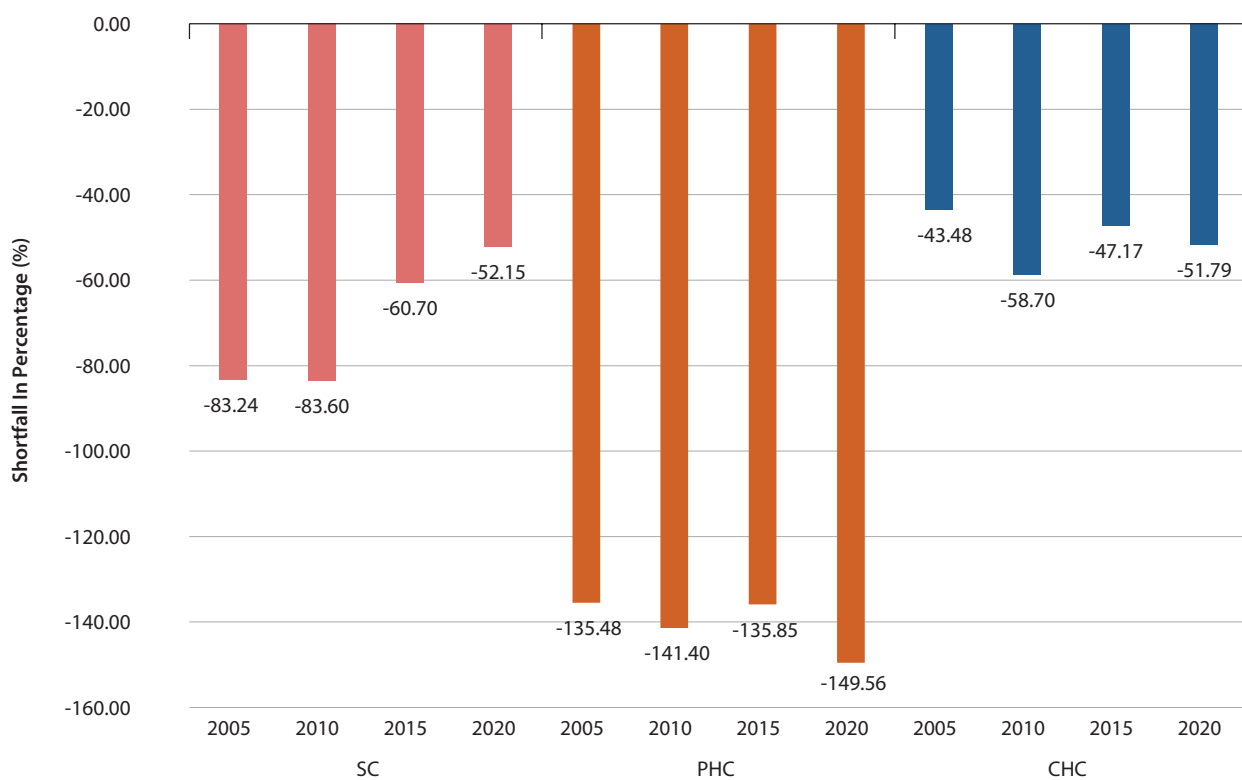
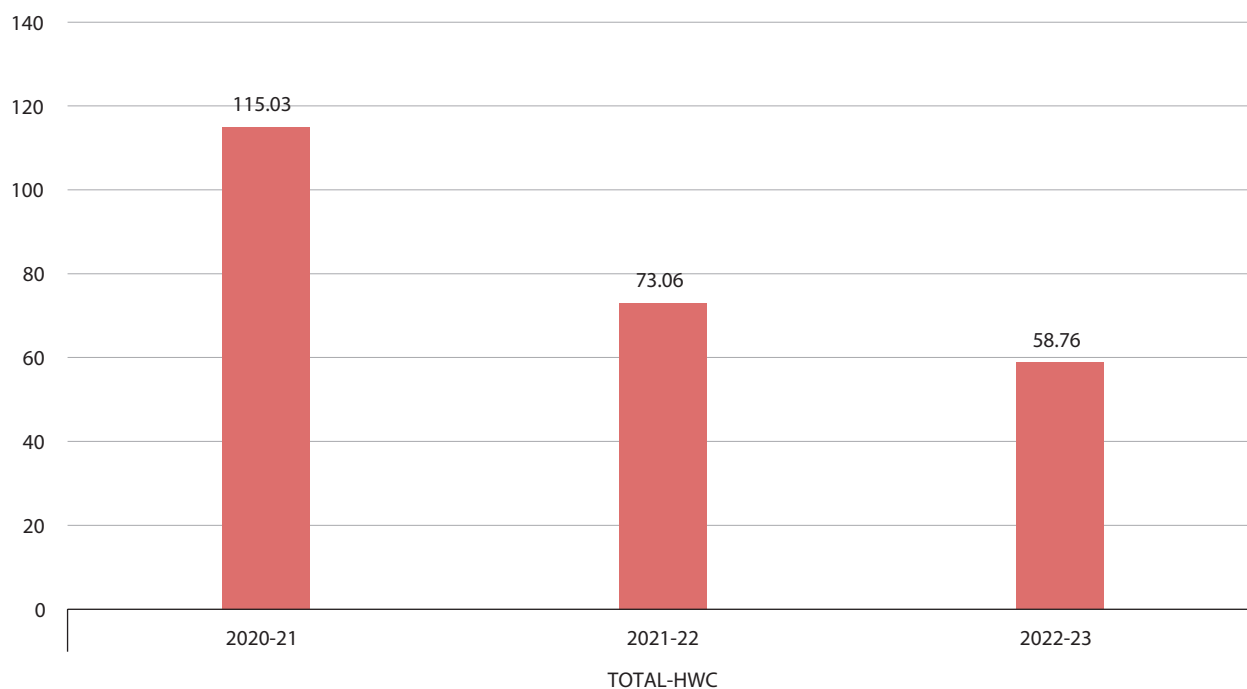


Figure 10: Percentage HWCs progress against target - FY wise (%)

Himachal Pradesh (% HWCs progress as of 22/Dec/2021 against targets - FY wise)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)																
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted^ (Height For Age) (%)	Children Under 5 Years - Wasted^ (Weight For Height) (%)			
1	Himachal Pradesh	NFHS 4 Total	937	25.8	N/A	8.6	57	0.9	12.7	15.7	69.1	76.4	85.4	10.9	26.3	13.7			
2	Himachal Pradesh	NFHS 5 Urban	843	37.1	95	7.2	75.2	0.9	31.9	9.3	77.3	93.1	100	14.4	27	16.2			
3	Himachal Pradesh	NFHS 5 Rural	880	34.1	91.2	5.1	74.1	1.2	17.3	7.7	69.3	87.6	95.8	19.7	31.3	17.6			
4	Himachal Pradesh	NFHS 5 Total	875	34.5	91.7	5.4	74.2	1.1	19.2	7.9	70.3	88.2	96.4	19	30.8	17.4			
5	Bilaspur	NFHS 5 Total	875	35.4	91.2	10	80.8	0.4	12.4	7.2	81.4	91.7	100	10.6	40.1	12			
6	Chamba	NFHS 5 Total	1001	26.8	84.1	3.8	81.8	0.2	19.3	6.2	62.7	72	100	19.9	42.6	15.4			
7	Hamirpur	NFHS 5 Total	1073	32	94.8	3.5	57.7	1.3	12.4	12.6	59.4	97.6	100	31.8	27.3	14.9			
8	Kangra	NFHS 5 Total	795	36.4	94.4	1.5	59.1	1.3	16.4	11.8	56.3	90.2	92	18.6	28	19.4			
9	Kinnaur	NFHS 5 Total	691	35.9	89.1	27.9	83.4	8.8	21	4.1	75.3	82.7	91.7	6.8	32.2	11.3			
10	Kullu	NFHS 5 Total	1017	26.8	87.4	8.7	78.3	0.9	20.9	5	60	87	95	28.7	35.9	16.1			
11	Lahul and Spiti	NFHS 5 Total	1182	31.2	86.2	11.2	78.5	4.4	18.1	5.7	65.6	86.4	100	19.7	28.5	16.3			
12	Mandi	NFHS 5 Total	840	41.3	94	6.3	81.4	0.6	17.6	7.1	70.3	86.6	98	24.4	31.3	19.9			
10	Shimla	NFHS 5 Total	808	37.1	93.4	6.1	89.1	1.3	31.2	3.8	85.3	92.2	98.2	18.3	27.1	15.5			
14	Sirmaur	NFHS 5 Total	925	26.2	84.9	5	86.9	1.3	25.8	3.1	85.2	87.4	93.7	9.9	28.6	18.5			

15	Solan	NFHS 5 Total	882	41.9	91	13.3	84.6	0.6	19	2.9	88.2	90.2	100	19	32.3	20.9
16	Una	NFHS 5 Total	873	22.6	92.5	1.6	53.3	2.4	14.6	15.8	71.7	89.7	93.8	8.8	24.7	13.1

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'. Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best five performing districts within the districts for a particular indicator

B. Red – Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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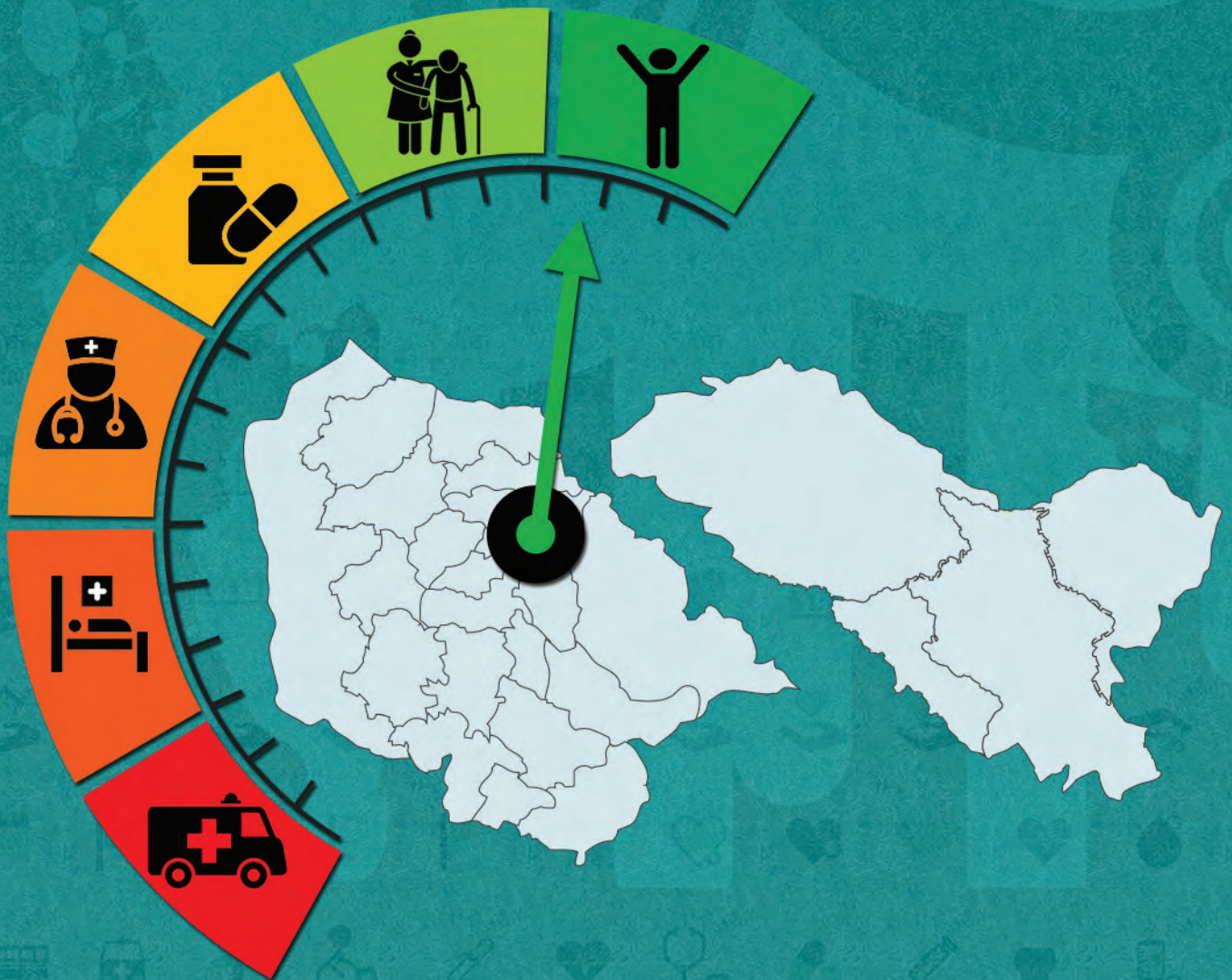
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



JAMMU & KASHMIR AND LADAKH

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
1 st	Udhampur, Jammu, Samba, Anantnag & Baramula	
3 rd	Phulwama, Kupwara, Baramulla & Jammu	
7 th	Kathua	Kupwara
10 th	Anantnag	Ramban
12 th	Kupwara	Doda

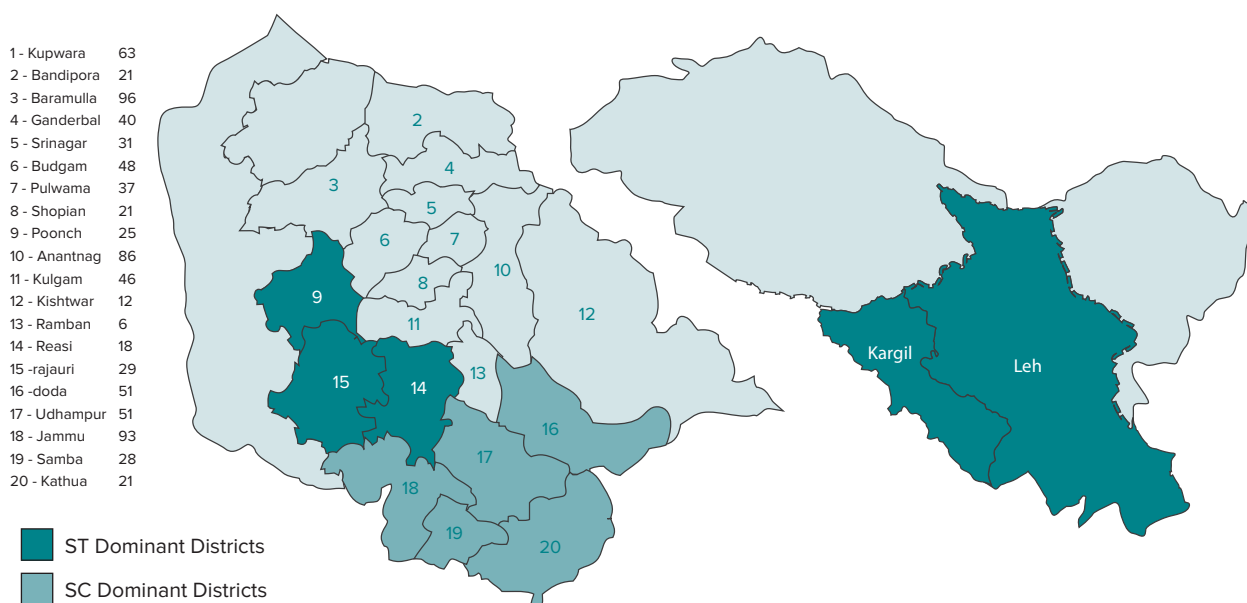
JAMMU & KASHMIR AND LADAKH

1. BACKGROUND

1.1 State Profile

Jammu and Kashmir (inclusive of Ladakh) has a geographical spread of 2,22,236.00 km² (RHS 2019). The state of Jammu & Kashmir has been reorganized as the new Union Territory of Jammu and Kashmir and the new Union Territory of Ladakh on 31st October 2019^a. Jammu & Kashmir is divided into 20 districts and Ladakh is divided into 2 districts^b. As per Census 2011, total population of Jammu & Kashmir and Ladakh is 1.25 crores, and is estimated to reach around 1.3 crores by 2021^c. In Jammu & Kashmir and Ladakh, 72.62% of the population reside in rural areas. The Scheduled Caste (SC) and Scheduled Tribe (ST) population is 0.09 crores (7.38%) and 0.14% (11.91%), respectively. Top five ST and SC dominant districts account for 47.91% of ST and 86.81% of SC population (Annexure 1.1; fig 1). The total length of

Figure 1: Top 5 ST & SC Dominant Districts



^a <https://pib.gov.in/PressReleasePage.aspx?PRID=1590112>

^b RHS 2020

^c Census Population Projection 2019 Report

roads^d in the UT is 63,386 km (1.26%^e), the length of the national highways is 2,601 km (2.3%^f) and state highways is 130 km.

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography^g

Out of the 22 districts, 1 district has a population between 15-20 lakhs, 3 districts have a population between 10-15 lakhs, and 6 districts have a population between 5-10 lakhs and 12 districts have a population less than 5 lakhs (Annexure 1.1 State profile). The UT's Sex ratio at birth of 927 females for every 1000 males is more than the national average of 899 (Annexure 1.2). The crude birth rate and the crude death rate have declined from 18.9 & 5.5 in 2005 to 14.9 & 4.6 in 2019, respectively (Annexure 2; figure 2). The literacy rate increased from 55.5% in 2001 to 67.2% in 2011 with male & female literacy rates being 76.8% and 56.4%, respectively (Annexure 1.1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)^h is 24.8% for higher education, 58.60% for senior secondary education, 66.81% for secondary education, 80.09% for elementary education, and 85.98% for primary education.

1.3 Elderlyⁱ

Population ageing has profound social, economic, and political implications. The life expectancy at 60 years of age is 20.3 and 23.6 for males and females, respectively (2014-2018). In the UT^j, 79% of elderly females and 17% elderly males living in rural areas and 85.0% of elderly females and 22% elderly males are economically fully dependent on others. In Jammu & Kashmir and Ladakh, the old age dependency ratio is 12.5 in 2011; which are 12.4 for males and 12.7 for females, 12.7 in rural & 12.1 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 35% for men and women as opposed to the national average of 31% for both (Elderly in India 2016).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health^k

The UT has been able to provide RMNCHA+N^l services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^m, institutional deliveries, C sections, distribution of IFAⁿ tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has

^d Basic Road Statistics 2019, MoRTH

^e Percentage of total length of roads in Jammu & Kashmir

^f Percentage of total length of National Highways in the country

^g Jammu & Kashmir and Ladakh

^h Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

ⁱ Jammu & Kashmir and Ladakh

^j Inclusive of Ladakh

^k Jammu & Kashmir and Ladakh

^l Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^m Antenatal Check up

ⁿ Iron Folic Acid Tablets

significantly declined from 160^o (SRS MMR Bulletin 2007-09) to 85^p (SRS MMR Bulletin 2016-18). In Jammu & Kashmir and Ladakh, 79.3% of women received 4 ANC check-ups (Annexure 1.4)^q. As per NFHS 5 report- Jammu, Kulgam, Kupwara, Pulwama and Samba reported good ANC coverage, ranging from 89.2% to 96.2%; and Badgam, Kathua, Rajouri, Udampur and Leh (Ladakh) reported low ANC coverage ranging from 31.6% to 71.9%. As reported in HMIS 2019-20^r, around 94.6% of the deliveries took place in institutions, out of which 91.2% took place in public health facilities. Total percentage of C-sections (43.5%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 89.4% was conducted at private facilities in the UT. Around 65.6% of women were tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). In Jammu & Kashmir, prevalence of anaemia in women aged 15-49 years increased from 48.9% (NFHS 4) to 65.9% (NFHS 5) and in Ladakh, prevalence increased from 78.4% (NFHS 4) to 92.8% (NFHS 5). Anaemia in females of reproductive age group is more than in men of similar age group (Annexure 2, figures 5,6).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the UT has shown a significant decline in IMR from 50 (2005) to 20 (2019), which is lower than the national average of 30 (Annexure 2, Figure 1)^s. Similarly, NNMR^t and Still Birth (per 1,000 live births) rates have also significantly decreased from 31.5 and 7.6 (2005) to 17 and 1 (2018) respectively (Annexure 2, figure 4)^u. Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 70.1 (2006-10) to 74 (2014-18) and is more than the national average of 69.4 years (Annexure 2, Figure 3)^v. As per NFHS 5, Badgam, Ganderbal, Jammu, Pulwama and Samba reported low SRBs^w ranging between 816 – 892; and Anantnag, Kathua, Punch, Shupiyan and Kargil reported high SRBs ranging between 1100 – 1336.

Full vaccination^x coverage for children between 12–23 months of age increased from 84.4% (NFHS 4) to 96.5% (NFHS 5) in Jammu & Kashmir but improved in Ladakh from 92.5% (NFHS 4) to 100% (NFHS 5). The proportion of under 6-months children exclusively breastfed has increased from 65.4% (NFHS 4) to 62.0% (NFHS 5) in Jammu & Kashmir but improved in Ladakh from 64.1% (NFHS 4) to 70.9% (NFHS 5). In Jammu & Kashmir and Ladakh, an increase in childhood anaemia from 53.8% and 91.4% to 72.7% and 92.5% (respectively) in children aged 6-59 months has been (Annexure 2, Figures 5,6). As per NFHS 5 report, Ganderbal, Kathua, Pulwama, Reasi, and Shupiyan reported relatively low stunting rates ranging from 17.7 to 22.4; and Doda, Rajouri, Srinagar, Udampur and Kargil reported high stunting rates ranging from 30.3 to 37.3. For under-5 wasting – Bandipore, Doda, Kulgam, Pulwama and Reasi reported relatively low burden ranging from 9.5 to 15.3; and Badgam, Ganderbal, Kishtwar, Kupwara and Shupiyan reported high burden ranging from 22.8 to 32.8.

^o Other smaller states & UTs, inclusive of Jammu & Kashmir

^p Other smaller states & UTs, inclusive of Jammu & Kashmir

^q Jammu & Kashmir and Ladakh

^r Jammu & Kashmir and Ladakh

^s Jammu & Kashmir and Ladakh

^t Neonatal Mortality Rate

^u Jammu & Kashmir and Ladakh

^v Jammu & Kashmir and Ladakh

^w Sex Ratio at Birth

^x NFHS 5 Jammu & Kashmir Factsheet, based on information from vaccination card only

2.3 Family Planning

The TFR^y reduced from 2.4 in 2005 to 1.6 in 2018 (Annexure 2, Figure 4)^z. As per NFHS 5 report, the total unmet need in the Jammu & Kashmir and Ladakh is 7.8% and 7.9%, and unmet need for spacing is 3.9% and 4.0%, respectively. Baramulla reported the highest total unmet need (15.7%) and Kathua reported the lowest (4.2%) in the UTs. In Jammu & Kashmir and Ladakh, approximately 52.5% and 48% of married women reported to avail any modern method of family planning in the UT (NFHS 5); with sterilization acceptance being 21.1 and 16.7% among females; 0.4% and 0.3% among males.

2.4 Communicable Diseases^{aa}

The UT has 22 functional IDSP units in place^{ab}. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 23.14% of total disease burden (Annexure 1.4). Lower respiratory tract infection, neonatal preterm birth, dietary iron deficiency, diarrheal diseases and other neonatal conditions are the leading causes of deaths due to CMNND in the UT (Annexure 2, Figure 7^{ac}). As per QPR report, for TB, the annualized total case notification rate is 137% and NSP^{ad} success rate is 83% as opposed to the national averages of 163% and 79%, respectively. For NLEP^{ae}, the reported prevalence rate is 0 as opposed to the national average of 0.61. In FY 2019-20, no deaths due to Dengue, Malaria, and Kala Azar were reported in the UT.

2.5 Non-Communicable Diseases (NCDs) and Injuries^{af}

It is reported that 59.2% of total burden of disease is from premature deaths and 40.8% is from disability or morbidity. Ischaemic heart diseases, COPD, other musculoskeletal conditions and Diabetes type 2 the major NCD causes of DALYs in the UT (Annexure 2, Figure 7). NCDs contribute to 63.78% of DALYs; and injuries contribute to 13.08% of DALYs in the UT^{ag}. Jammu & Kashmir and Ladakh is positioned 21st in the country for the total number of fatal road accidents with respect to other States. It was found in the recent NFHS 5 report that 3.6% of women and 38.8% of men in Jammu & Kashmir; and 3.2% of women and 35.7% of men in Ladakh used any kind of tobacco. Whereas 0.2% of women and 8.8% of men in Jammu & Kashmir and 3.8% of men and 23.6% of women in Ladakh consumed alcohol (Annexure 1.4). Overall, smoking, high systolic blood pressure, ambient particulate matter pollution, high fasting plasma glucose and high body mass index are the major risk factors for all DALYs and YLLs (Annexure 2, figure 8).

2.6 Health Care Financing

The UT's Net State Domestic Product (NSDP) for FY 2018-19 was ₹ 1,29,877 crores. The UT is positioned 25th out of 32 states in terms of per capita^{ah} of ₹ 92,347. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 6,451 in public facilities, ₹ 50,142 in private facilities; whereas for urban areas, it is around ₹ 11,306 in public facilities and ₹ 42,672 in private facilities.

^y Total Fertility Rate

^z Jammu & Kashmir and Ladakh

^{aa} Jammu & Kashmir and Ladakh

^{ab} QPR NHM MIS Report (Status as on 01.03.2020)

^{ac} <https://vizhub.healthdata.org/gbd-compare/india>

^{ad} New Smear Positive

^{ae} National Leprosy Eradication Programme

^{af} Jammu & Kashmir and Ladakh

^{ag} <http://vizhub.healthdata.org/gbd-compare/india>

^{ah} Directorate of Economics & Statistics

For childbirth in rural areas, OOPE is estimated to be around ₹ 5,138 in public facilities & ₹ 22,794 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 5,220 in public facilities and ₹ 31,459 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated to be 58% in rural and 40% in urban areas; whereas for diagnostics, it is 21% in rural and 17% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 9). There are 2,470 SCs, 923 PHCs and 77 CHCs in place against the required 2,042 SCs, 333 PHCs and 83 CHCs. In J&K, there are 49 PHCs in urban areas against the required 80 PHCs; and in Ladakh - there are none in urban areas. In Jammu & Kashmir, there are 227 SCs, 35 PHCs and 4 CHCs in tribal areas against the required 427 SCs, 64 PHCs and 16 CHCs. In Ladakh, there are 238 SCs, 32 PHCs and 7 CHCs in tribal areas against the required 70 SCs, 10 PHCs and 2 CHCs. In total, there are 23 DHs and 6 government medical colleges in the UTs.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), 1476 HWCs in Jammu & Kashmir and 108 HWCs in Ladakh are operationalized as of 22nd December 2021^{ai} (Annexure 1.3).

In the Jammu & Kashmir, 10 districts are equipped with MMUs under the NRHM. The UT has 93.54% of required ASHAs in position under the NRHM and 63.04% under the NUHM. The doctor to staff nurse ratio in place is 1:1 with 6 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 2219.37 availed (events) OPD services and 94.35 availed (events) IPD services. As per NSS (2017-18), 77% of all OPD cases in rural and 51% in urban areas; and 96% of all IPD cases in rural & 78% in urban areas utilized public facilities. The public health facility utilization in the UT is above the national averages for both (Annexure 1.6).

^{ai} AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profileⁱⁱ

Indicator	Jammu & Kashmir and Ladakh 2011 ¹	India
Total Population (In Crore)	1.25	121.08
Rural (%)	72.62	68.85
Urban (%)	27.37	31.14
Scheduled Caste population (SC) (in crore)	0.092 (7.38%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.14 (11.91%)	10.45 (8.63%)
Total Literacy Rate (%)	67.2	72.99
Male Literacy Rate (%)	76.8	80.89
Female Literacy Rate (%)	56.4	64.64
Number of Districts in the Jammu & Kashmir and Ladakh ²	Jammu & Kashmir	Ladakh
	20	2
Number of districts per lakh population in Jammu & Kashmir and Ladakh (Census 2011)	Population¹	Districts¹ (Numbers)
	<5 Lakhs	12
	≥ 5 Lakhs - <10 Lakhs	6
	≥10 Lakhs - <15 lakhs	3
	≥15 Lakhs - <20 lakhs	1
ST SC Dominant (Top 5) Districts of Jammu & Kashmir and Ladakh¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Kargil (86.88%)	Samba (28.79%)	
Leh (Ladakh) (71.80%)	Udhampur (24.96%)	
Punch (36.93%)	Jammu (24.70%)	
Rajouri (36.24%)	Kathua (22.90%)	
Reasi (28.08%)	Doda (13.02%)	
Top 5 ST dominant district accounts for - 47.91%	Top 5 SC dominant district accounts for - 86.81%	

1.2 Key Health Status & Impact Indicators

Indicators	Jammu & Kashmir and Ladakh	India
Infant Mortality Rate (IMR) ³	20	30

ⁱⁱ Sources are mentioned at the end of Annexure 1

Crude Death Rate (CDR) ³	4.6	6
Crude Birth Rate (CBR) ³	14.9	19.7
Maternal Mortality Ratio (MMR) ³	N/A	113
Neo Natal Mortality Rate (NNMR) ⁴	17	23
Under Five Mortality Rate (U5MR) ⁴	23	36
Still Birth Rate ⁴	1	4
Total Fertility Rate (TFR) ⁴	1.6	2.2
Life expectancy at birth ⁵	74	69.4
Sex Ratio at Birth ⁴	927	899

1.3 Key Health Infrastructure Indicators^{kk}

Indicators	Jammu & Kashmir	Ladakh		
Number of District Hospitals ²	21	2		
Number of Sub District Hospital ²	0	0		
Number of Government (Central + State) Medical College ⁶	Jammu & Kashmir and Ladakh			
	6			
Number of Private (Society + Trust) Medical Colleges ⁶	1			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Jammu and Kashmir			
	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	1059	806	1057	1770
PHC-HWC	398	434	923	923
UPHC-HWC	19	49	49	49
Total-HWC	1476	1289	2029	2742
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Ladakh			
	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	76	104	150	221
PHC-HWC	32	25	53	53
UPHC-HWC	N/A	0	0	0
Total-HWC	108	129	203	274

^{kk} Sources are mentioned at the end of Annexure 1

Rural ²	Jammu & Kashmir		
	Required (R)	In place (P)	Shortfall (S) (%)
Number of Community Health Centres (CHC)	83	77	7.23
Number of Primary Health Centres (PHC)	333	923	-177.18
Number of Sub Centres (SC)	2,042	2,470	-20.96
Number of functional First Referral Units (FRUs)	Jammu & Kashmir and Ladakh		
	DH	SDH	CHC
	21	0	71
Urban ²	Jammu & Kashmir		
	Required (R)	In place (P)	Shortfall (S) (%)
Number of PHC	80	49	38.75
Urban ²	Ladakh		
	Required (R)	In place (P)	Shortfall (S) (%)
Number of PHC	2	0	100.00
Tribal ²	Jammu & Kashmir		
	Required (R)	In place (P)	Shortfall (S)%
Number of CHC	16	4	75.00
Number of PHC	64	35	45.31
Number of SC	427	227	46.84
Tribal ²	Ladakh		
	Required (R)	In place (P)	Shortfall (S)%
Number of CHC	2	7	-250.00
Number of PHC	10	32	-220.00
Number of SC	70	238	-240.00
Patient Service ⁹		Jammu & Kashmir and Ladakh	India
IPD per 1000 population		94.35	62.6
OPD per 1000 population		2219.37	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population		96.34	36.4

1.4 Major Health Indicator^{aa}

% Share of DALYs to Total Disease Burden (GBD 2019) ⁷	Jammu & Kashmir and Ladakh	India
% DALY ^{bb} accountable for CMNNDs ^{cc}	23.14	27.46

ⁱⁱ Sources are mentioned at the end of Annexure 1

^{mmm} Disability Adjusted Life Years

ⁿⁿ Communicable, Maternal, Neonatal, and Nutritional Diseases

% DALY accountable for NCDs	63.78	61.43
% DALY accountable for Injuries	13.08	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Jammu & Kashmir and Ladakh	India
Level of Birth Registration (%)	74.6	92.7
Level of Death Registration (%)	66.7	92
Percentage of medically certified deaths to total registered deaths (%)	N/A	20.7
RMNCHA+N		
Maternal Health⁹	Jammu & Kashmir and Ladakh	India
% 1st Trimester registration to Total ANC Registrations	67.1	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	79.3	79.4
Total Reported Deliveries	193368	21410780
% Institutional deliveries to Total Reported Deliveries	94.6	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	91.2	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	8.8	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	43.5	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	39	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	89.4	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	65.6	53.4
Neonatal⁹	Jammu & Kashmir and Ladakh	India
% live birth to Reported Birth	98.2	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	5.5	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	93.4	89.9
New Born Care Units Established¹¹	Jammu & Kashmir and Ladakh	India
Sick New Born Care Unit (SNCU)	32	895
New Born Stabilization Unit (NBSU)	69	2418
New Born Care Corner (NBCC)	282	20337

Child Health & Nutrition¹⁰	Jammu & Kashmir (NFHS 5)	Ladakh (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	5.6	8.5	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	80.8	78.3	60.6
Children under 5 years who are underweight (weight-for-age) (%)	21	13.4	32.1
Child Immunization¹⁰	Jammu & Kashmir (NFHS 5)	Ladakh (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	96.5	100	83.8
Children age 12-23 months who have received BCG (%)	95.1	99.1	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	91.7	92.9	87.9
Family Planning¹⁰	Jammu & Kashmir (NFHS 5)	Ladakh (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	3.9	4	4
Communicable Diseases^{oo}			
Integrated Disease Surveillance Programme (IDSP)¹¹		Jammu & Kashmir	India
Number of districts with functional IDSP unit		22	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹		Jammu & Kashmir	India
Annualized total case notification rate (%)		137	163
New Smear Positive (NSP) Success rate (in %)		83	79
National Leprosy Eradication Programme (NLEP)¹¹		Jammu & Kashmir	India
Prevalence Rate/10,000 population		0	0.61
Number of new cases detected		111	1,14,359
Malaria, Kala Azar, Dengue¹¹		Jammu & Kashmir	India
Deaths due to Malaria ¹¹		0	79
Deaths due to Kala azar reported ¹¹		0	0
Deaths due to Dengue reported ¹¹		0	168
Number of Kala Azar Cases reported ¹¹		0	3,706

^{oo} Sources are mentioned at the end of Annexure 1

HIV¹⁰	Jammu & Kashmir (NFHS 5)	Ladakh (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/ Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	15.8	24.3	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	33.6	29.6	30.7
Non-Communicable Disease^{PP}			
Diabetics and Hypertension¹⁰	Jammu & Kashmir (NFHS 5)	Ladakh (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	11.7	10.4	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	12.3	11.2	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	4.2	3.9	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	4.3	4.4	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Jammu & Kashmir (NFHS 5)	Ladakh (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	3.6	3.2	8.9
Men who use any kind of tobacco (%)	38.3	35.7	38
Women who consume alcohol (%)	0.2	3.8	1.3
Men who consume alcohol (%)	8.8	23.6	18.8
Injuries			
Road Traffic Accident¹²	Jammu & Kashmir and Ladakh		India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	21		N/A
Total number of fatal Road Accidents	762		1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	17.2		33.7
Number of persons killed in Road Accidents	996		115113

1.5 Access to Care^{qq}

Health Systems Strengthening			
Ambulances & Mobile Medical Units (MMU)¹¹	Jammu & Kashmir	Ladakh	India
Number of Districts equipped with MMU under NRHM	10	0	506
Number of Districts equipped with MMU/Health Units under NUHM	0	0	31

^{PP} Sources are mentioned at the end of Annexure 1

^{qq} Sources are mentioned at the end of Annexure 1

Number of ERS vehicles operational in the States/ UTs Under NHM	Jammu & Kashmir	Ladakh	India
102 Type	286	14	9955
104 Type	0	0	605
108 Type	140	4	10993
Others	0	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	611	81	11070
Key Domain Indicators			
ASHA ¹³	Jammu & Kashmir and Ladakh		India
Total number of ASHA targeted under NRHM	13116		946563
Total number of ASHA in position under NRHM	12270		904211
% of ASHA in position under NRHM	93.54		96
Total number of ASHA targeted under NUHM	138		75597
Total number of ASHA in position under NUHM	87		64272
% of ASHA in position under NUHM	63.04		85
Community Process ¹¹	Jammu & Kashmir	Ladakh	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	6494	247	554847
Number of Mahila Arogya Samitis (MAS) formed	220	0	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total) ¹¹	Jammu & Kashmir	Ladakh	India
DH	21	4	796
CHC	79	7	6036
PHC	373	32	20273
UCHC	0	0	126
UPHC	48	0	3229
Human Resource for Health ¹⁴			
HRH Governance	Jammu & Kashmir and Ladakh		
Specialist Cadre Available in the state (Y/N)	Yes		
HR Policy available (Y/N)	No		
Implementation of HRIS (Y/N)	No		
HR Integration initiated (Y/N)	No		
Public Health Cadre available (Y/N)	No		

Overall Vacancies (Regular + contractual)	Specialists (%)	39				
	Dentists (%)	17				
	MO MBBS (%)	36				
	Nurse (%)	49				
	LT (%)	19				
	ANM (%)	32				
HRH Distribution		Sanctioned	In Place			
Doctors (MO & specialists) to staff nurse ¹⁴		1:1	1:1			
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴		9 per 10,000	6 per 10,000			
Regular to contractual service delivery staff ratio ¹⁴		1:1	2:1			
Ranking: Human Resource Index of Jammu & Kashmir and Ladakh¹⁵						
Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{rr}	6755	6444	5942	502	813	75.34
Staff Nurse	6787	3447	2459	988	4328	
Lab Technician	1326	1245	1083	162	243	
Pharmacists	769	2816	2403	413	0	
MO MBBS ^{ss}	1477	3648	2924	724	0	
Specialist ^{tt}	1575	1162	745	417	830	

1.6 Healthcare Financing^{uu}

National Health Accounts (NHA) (2017-18)	Jammu & Kashmir and Ladakh	India
Per Capita Government Health Expenditure (in ₹)	1,679	1753
Government Health expenditure as % of Gross Domestic Product (GSDP)	1.6	1.35
Government Health Expenditure as % of General Government Expenditure (GGE)	4.3	5.12
OOPE as a Share of Total Health Expenditure (THE) %	42.8	48.8

^{rr} MPW – Multi Purpose Health Worker (Female + Male)

^{ss} MO MBBS (Full Time)

^{tt} Specialist (All Specialist)

^{uu} Sources are mentioned at the end of Annexure 1

National Sample Survey Office (NSSO) (2017-2018)	Jammu & Kashmir and Ladakh		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	77	51	33	26
IPD - % of hospitalized cases using public facility	96	78	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	461	395	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	678	451	845	915
IPD - Per hospitalized case (in INR) - Public	6,451	11,306	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	50,142	42,672	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	21	17	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	58	40	53	43
Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	5,138	5,220	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	22,794	31,459	20,692	26,701
State Health Expenditure	Jammu & Kashmir		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	5.6		5 ^{vv}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{vv} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: Jammu & Kashmir including Ladakh - IMR Trend

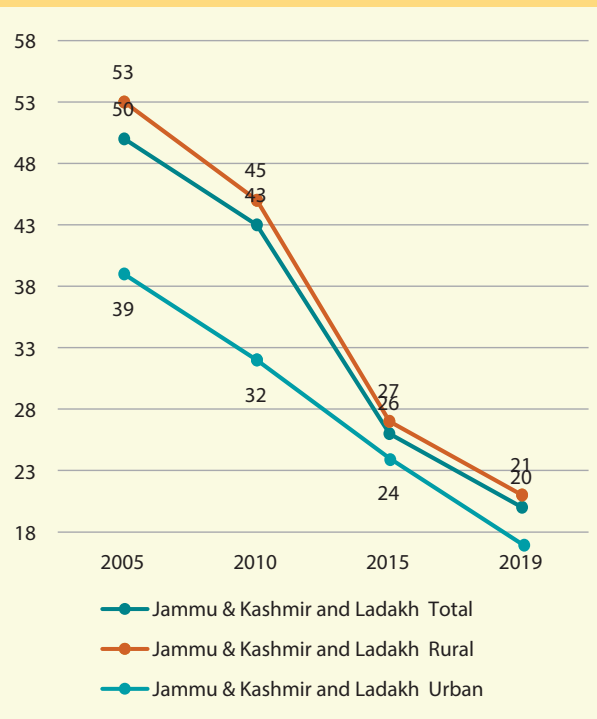


Figure 2: Jammu & Kashmir including Ladakh - CBR & CDR Trend

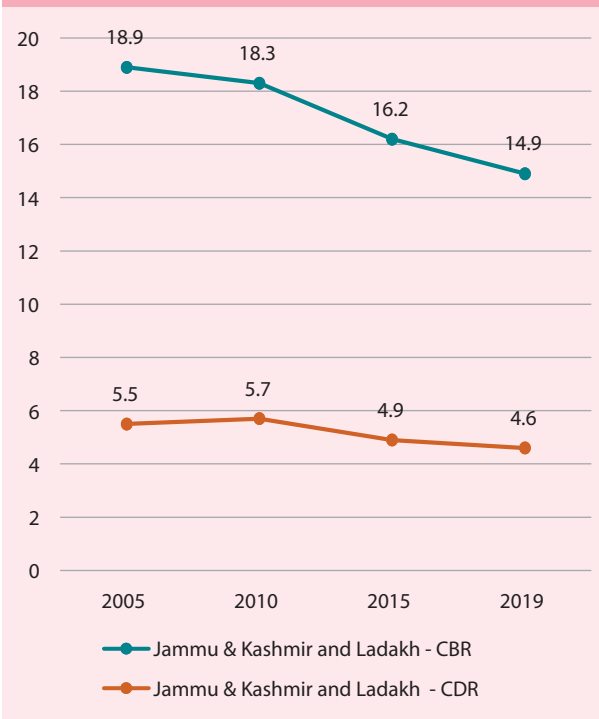


Figure 3: Jammu & Kashmir including Ladakh - Life Expectancy At Birth Trend

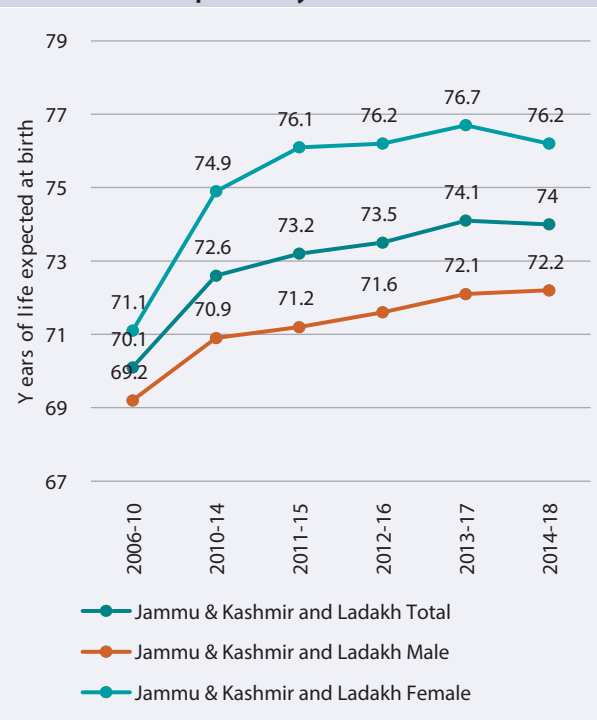


Figure 4: Jammu & Kashmir including Ladakh - NNMR, TFR & Still Birth Trend

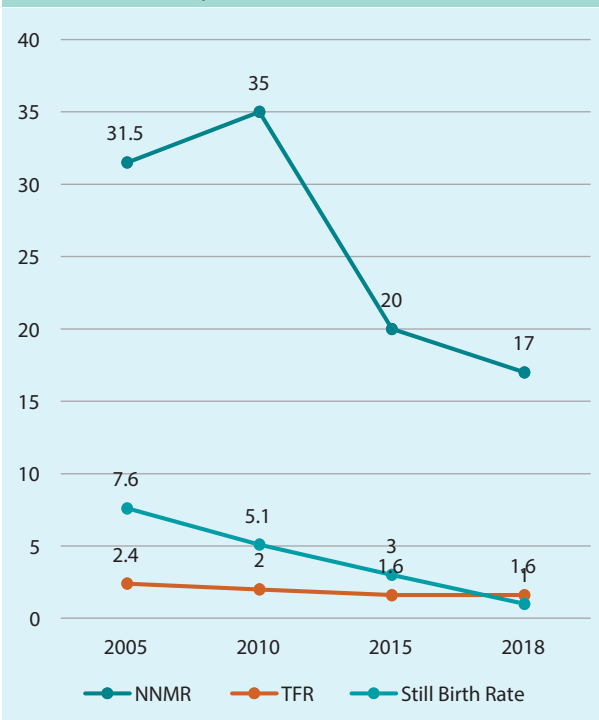


Figure 5: Jammu & Kashmir - Comparison of Key NFHS 5 & 4 Indicators

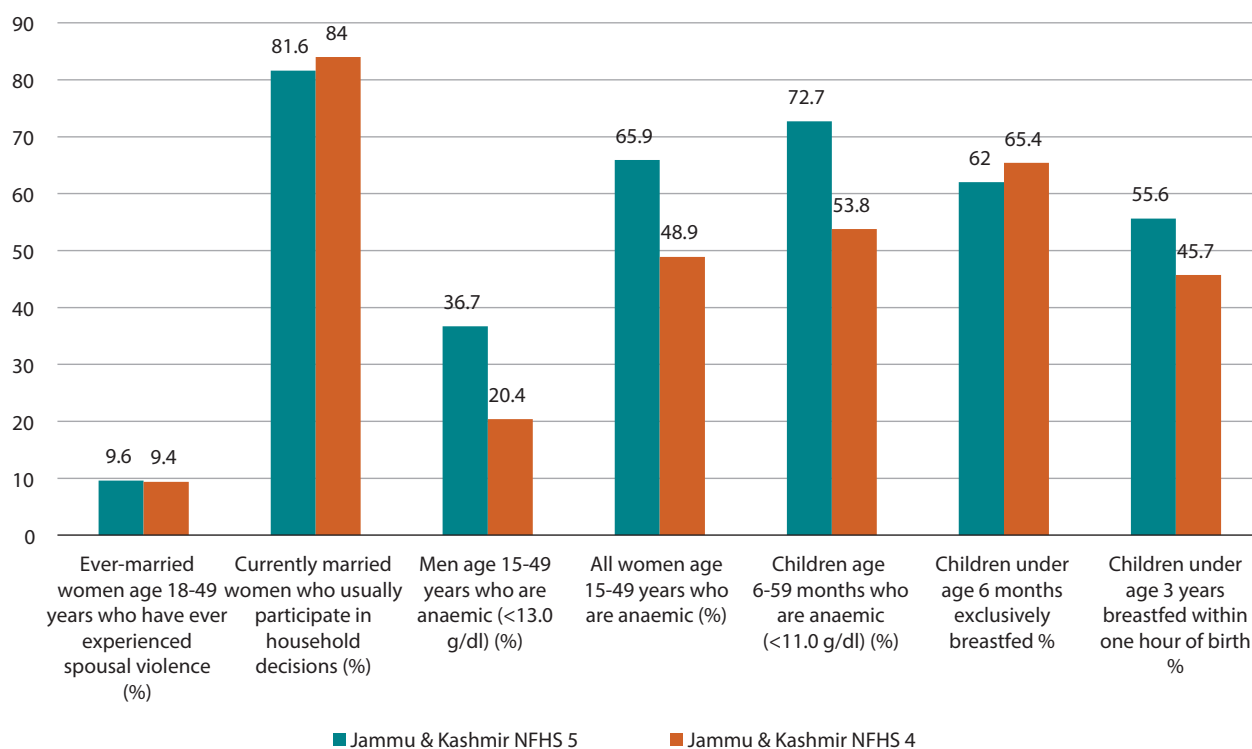


Figure 6: Ladakh - Comparison of Key NFHS 5 & 4 Indicators

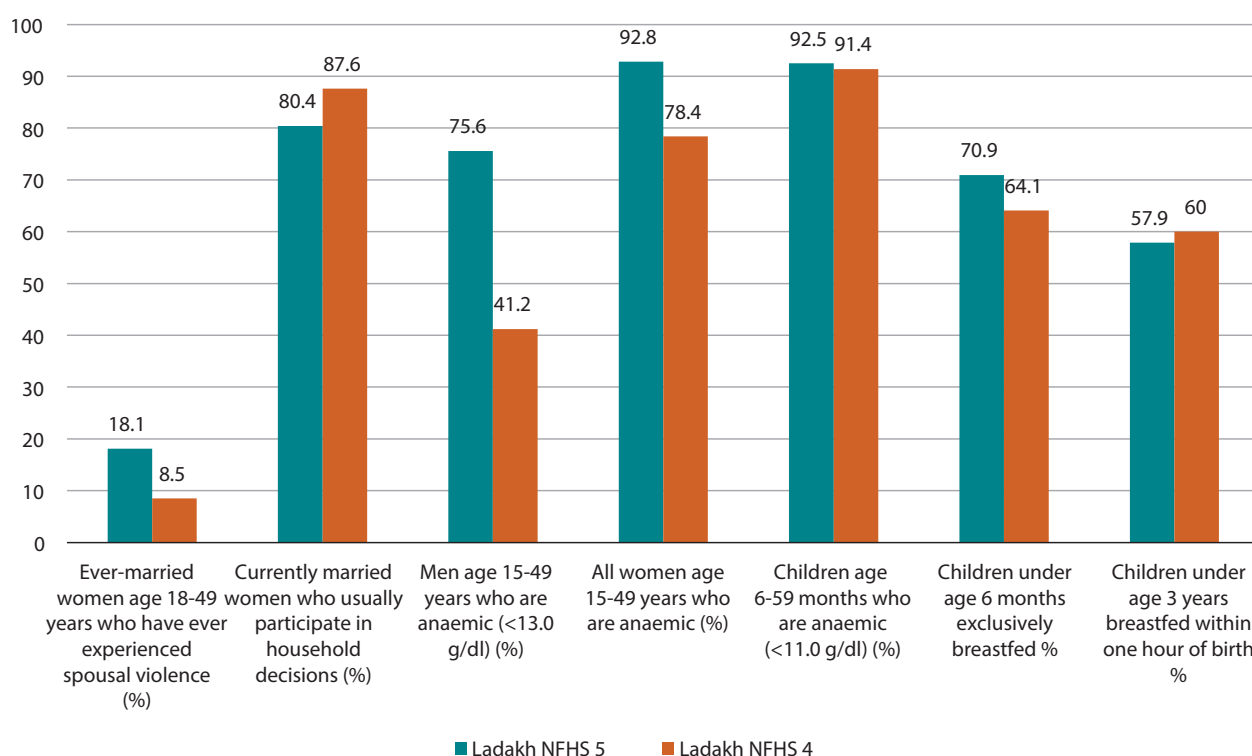


Figure 7: Top 15 causes of DALYs, 1990-2019

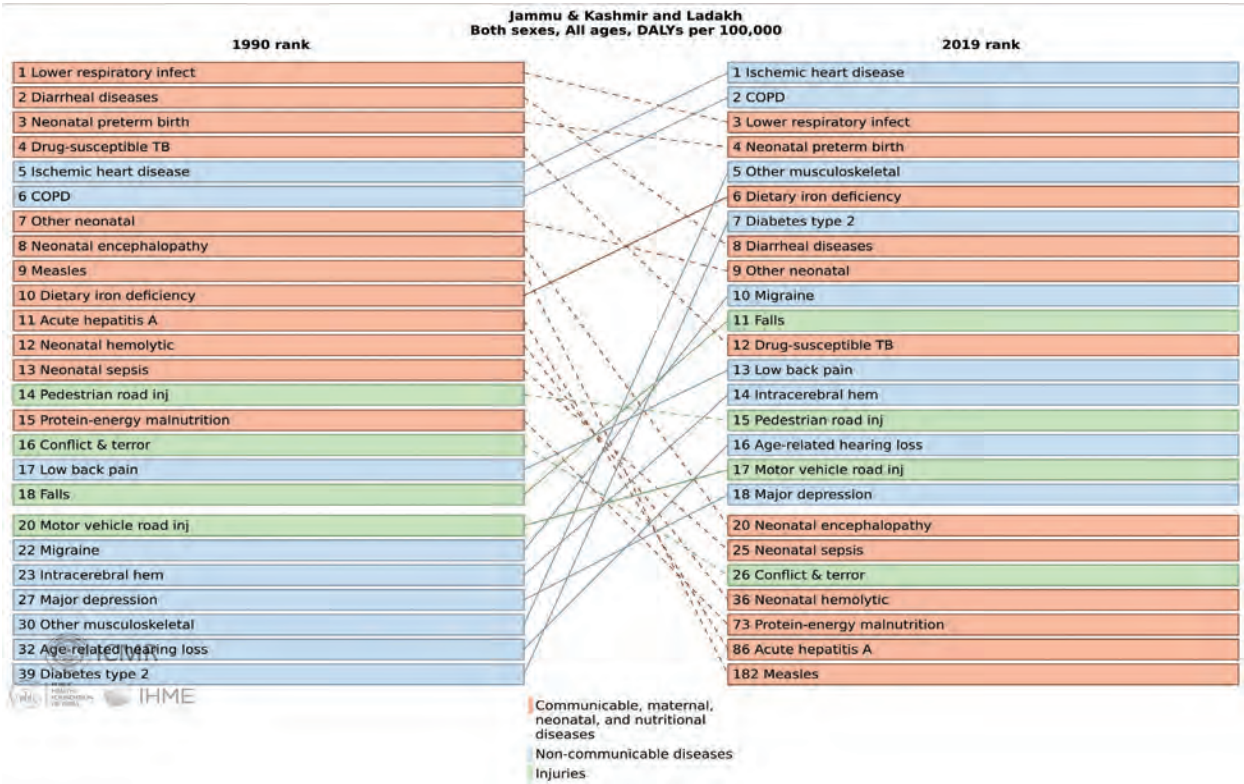


Figure 8: Top 15 risk of DALYs, 1990-2019

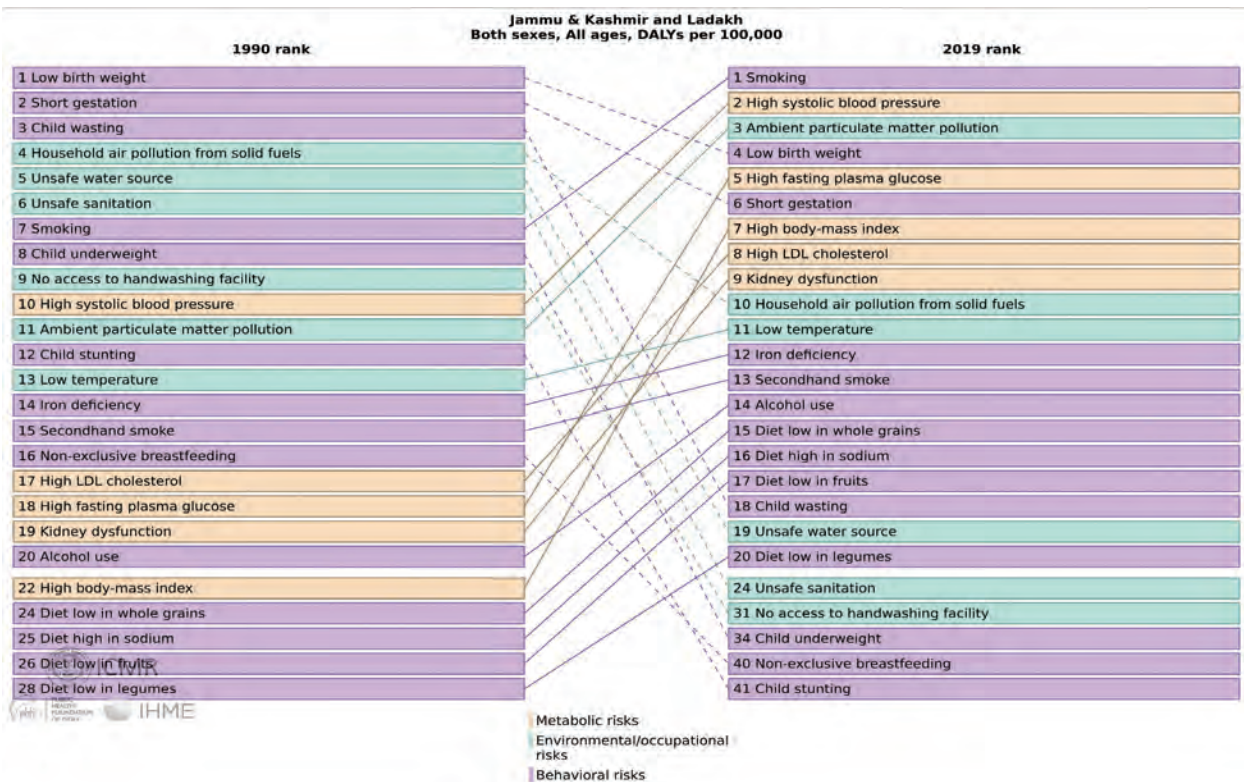


Figure 9: Jammu & Kashmir and Ladakh - Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

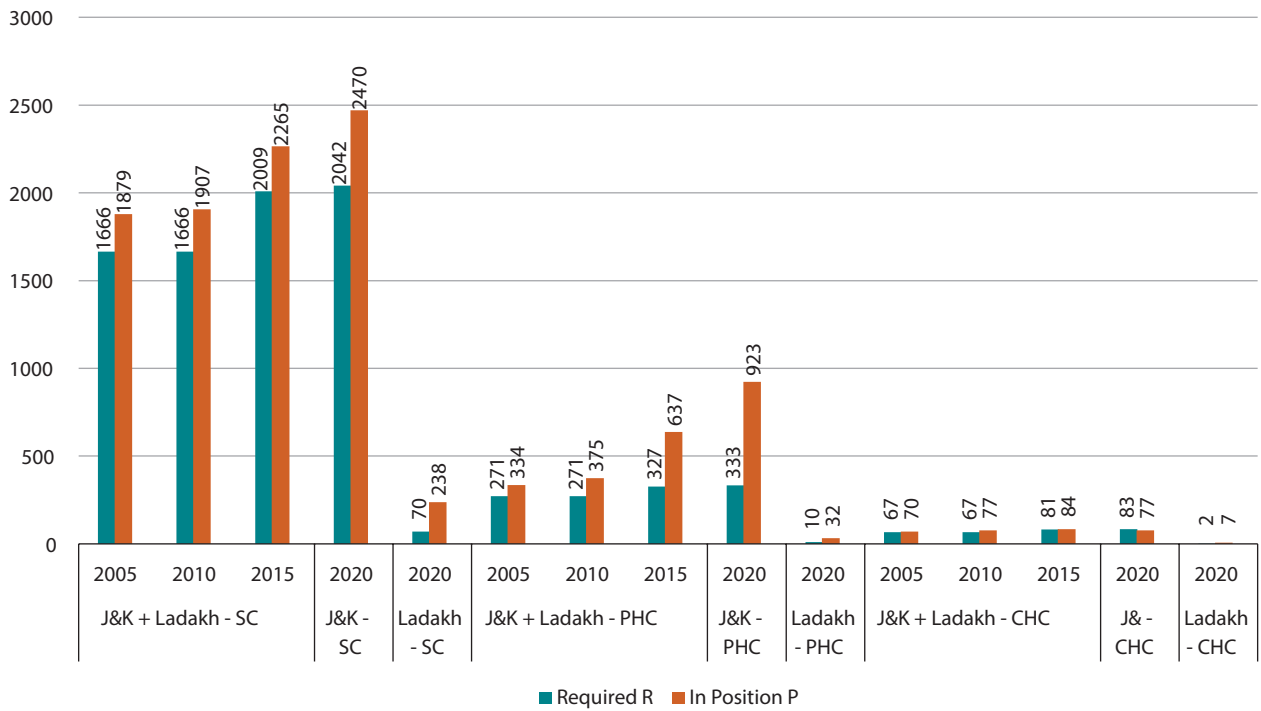
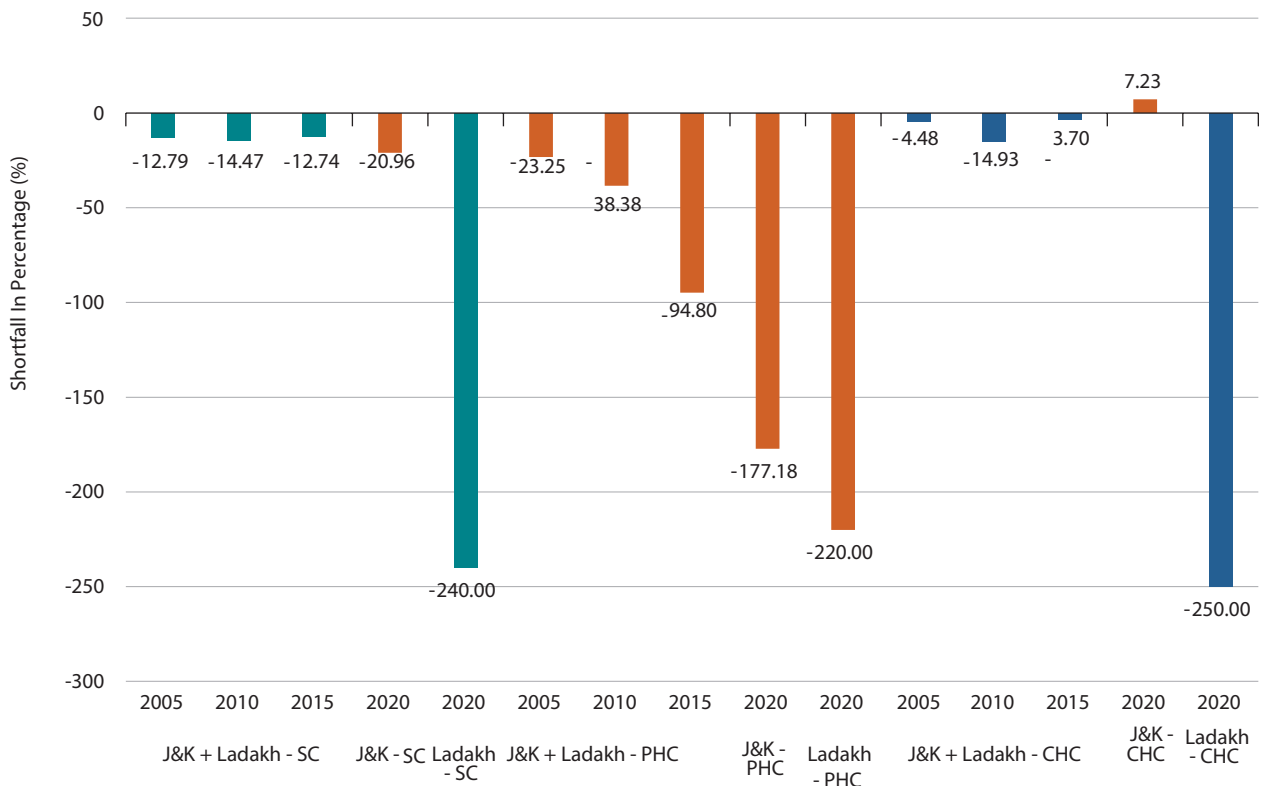


Figure 10: Jammu & Kashmir and Ladakh - Year Wise Health Infrastructure Shortfall (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

Serial No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)																
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted* (Height For Age) (%)	Children Under 5 Years - Wasted* (Weight For Height) (%)			
1.	Jammu & Kashmir	NFHS 4 Total	923	4.3	N/A	8.7	57.1	2.4	11.3	12.4	81.2	85.5	84.4	23.5	27.4	12.2			
2.	Jammu & Kashmir	NFHS 5 Urban	978	19.2	84.3	2	59.2	7.2	11.6	6.1	83.1	98.6	99.8	12.3	30.1	17.6			
3.	Jammu & Kashmir	NFHS 5 Rural	976	10.2	74.7	5.3	60	5.4	11.7	8.4	80.2	90.5	95.6	14	25.9	19.4			
4.	Jammu & Kashmir	NFHS 5 Total	976	12.7	77.3	4.5	59.8	5.9	11.7	7.8	80.9	92.4	96.5	13.6	26.9	19			
5.	Ladakh	NFHS 4 Total	823	2.3	N/A	4.9	66.6	30.1	7.4	9.6	87.5	90.8	92.5	23.9	30.9	9.3			
6.	Ladakh	NFHS 5 Urban	897	26.7	77.7	0	50.6	8.1	8.2	11.5	78.2	99.1		25.3	28.2	14.8			
7.	Ladakh	NFHS 5 Rural	1193	12.1	76.6	3.1	51.5	7.9	9.1	7	78.5	94	100	23.6	31.1	18.2			
8.	Ladakh	NFHS 5 Total	1125	14.9	76.8	2.5	51.3	7.9	9	7.9	78.4	95.1	100	24	30.5	17.5			
9.	Jammu & Kashmir	NFHS 4 Total	923	4.3		8.7	57.1	2.4	11.3	12.4	81.2	85.5	84.4	23.5	27.4	12.2			
10.	Jammu & Kashmir	NFHS 5 Urban	978	19.2	84.3	2	59.2	7.2	11.6	6.1	83.1	98.6	99.8	12.3	30.1	17.6			
11.	Jammu & Kashmir	NFHS 5 Rural	976	10.2	74.7	5.3	60	5.4	11.7	8.4	80.2	90.5	95.6	14	25.9	19.4			
12.	Jammu & Kashmir	NFHS 5 Total	976	12.7	77.3	4.5	59.8	5.9	11.7	7.8	80.9	92.4	96.5	13.6	26.9	19			
13.	Anantnag	NFHS 5 Total	1177	7.3	74.7	2.5	58.3	4.8	20.2	7.8	80.9	90.5	100	14.8	28.2	24.9			
14.	Badgam	NFHS 5 Total	843	5.2	74.1	1.5	59.9	7.4	12.5	4.2	66.5	96.5	95.5	14.2	26.8	18.9			
15.	Bandipore	NFHS 5 Total	1000	9.1	66.6	1.8	41.4	1.7	6.3	13.8	82.6	92.8	92.1	21.7	25.2	14			

16.	Baramula	NFHS 5 Total	952	6.5	67.9	3.8	31.1	2.1	4.5	15.7	75.2	96.2	98.2	19.9	23.2	18.2
17.	Doda	NFHS 5 Total	959	7.6	69.2	11	69.5	3.7	11.2	7.2	74.3	73.5	75.3	12.9	32.7	9.5
18.	Ganderbal	NFHS 5 Total	816	8.3	64	5.3	34.4	0.8	6.5	14.1	80.4	98	88.1	13.1	18.5	25.9
19.	Jammu	NFHS 5 Total	892	23.3	91.5	5.3	67.9	6.9	17.3	6.7	95.4	96.5	100	12.9	27	18
20.	Kathua	NFHS 5 Total	1100	7	87.7	1.4	74.9	1.1	25.9	4.2	31.6	97.1	100	24.6	21.8	22.5
21.	Kishtwar	NFHS 5 Total	1024	16.4	71.3	7.2	52.5	5.1	6.7	9.6	76.4	91.6	100	6.6	27.5	22.8
22.	Kulgam	NFHS 5 Total	1097	4.2	70.9	3.7	70.8	6.6	11.1	5	92.2	98.9	98	2.3	28.4	11.3
23.	Kupwara	NFHS 5 Total	940	10.4	76	3.1	64.5	6.8	9.4	5.9	89.2	97.1	100	17	24.9	25.1
24.	Pulwama	NFHS 5 Total	889	9.9	76.6	0.5	61.8	3.2	10.4	11.1	96.2	97.8	94	8.4	22.4	15.3
25.	Punch	NFHS 5 Total	1175	11.1	79.3	5.4	58.8	8.2	10.1	8.4	86.4	86	92.1	9.6	25.9	15.6
26.	Rajouri	NFHS 5 Total	968	16.4	79.4	12.2	65.9	7	6.3	5.7	71.9	88.8	98.1	7.7	30.3	22.5
27.	Ramban	NFHS 5 Total	1022	9.2	62.2	5.5	56.5	7.8	8.1	10.3	79.2	80.4	93.7	18.6	25.7	15.6
28.	Reasi	NFHS 5 Total	1000	11.2	68.2	9.6	56.9	4.8	12.3	7.5	75.9	69.3	86.6	17.2	17.7	13
29.	Samba	NFHS 5 Total	888	19	84.8	6.3	62.8	6.4	14.1	9.5	96.2	97.9	97.8	7.9	24.5	20.4
30.	Shupiyan	NFHS 5 Total	1142	8.4	80.8	2.1	60.8	4.5	8.8	7.1	86.8	98.3	100	16.6	22	32.8
31.	Srinagar	NFHS 5 Total	924	17.9	78.4	1.7	56.5	11.2	5.1	4.7	85.1	99.2	100	10.9	33	18.6
32.	Udhampur	NFHS 5 Total	997	16.8	77.3	6.1	69.7	7.8	10.5	6.3	69.8	87.2	97.7	7.3	37.3	19.8
33.	Kargil	NFHS 5 Total	1336	13.6	77.2	2.5	46.9	5.7	8.6	8.8	88	93.7	100	18.5	36.5	17.7
34.	Leh (Ladakh)	NFHS 5 Total	949	16.2	76.4	2.5	55.6	10	9.3	7.1	69.6	96.4	100	29.2	24.3	17.2

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'Vaccinated'; Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color - Best five performing districts within the districts for a particular indicator

B. Red - Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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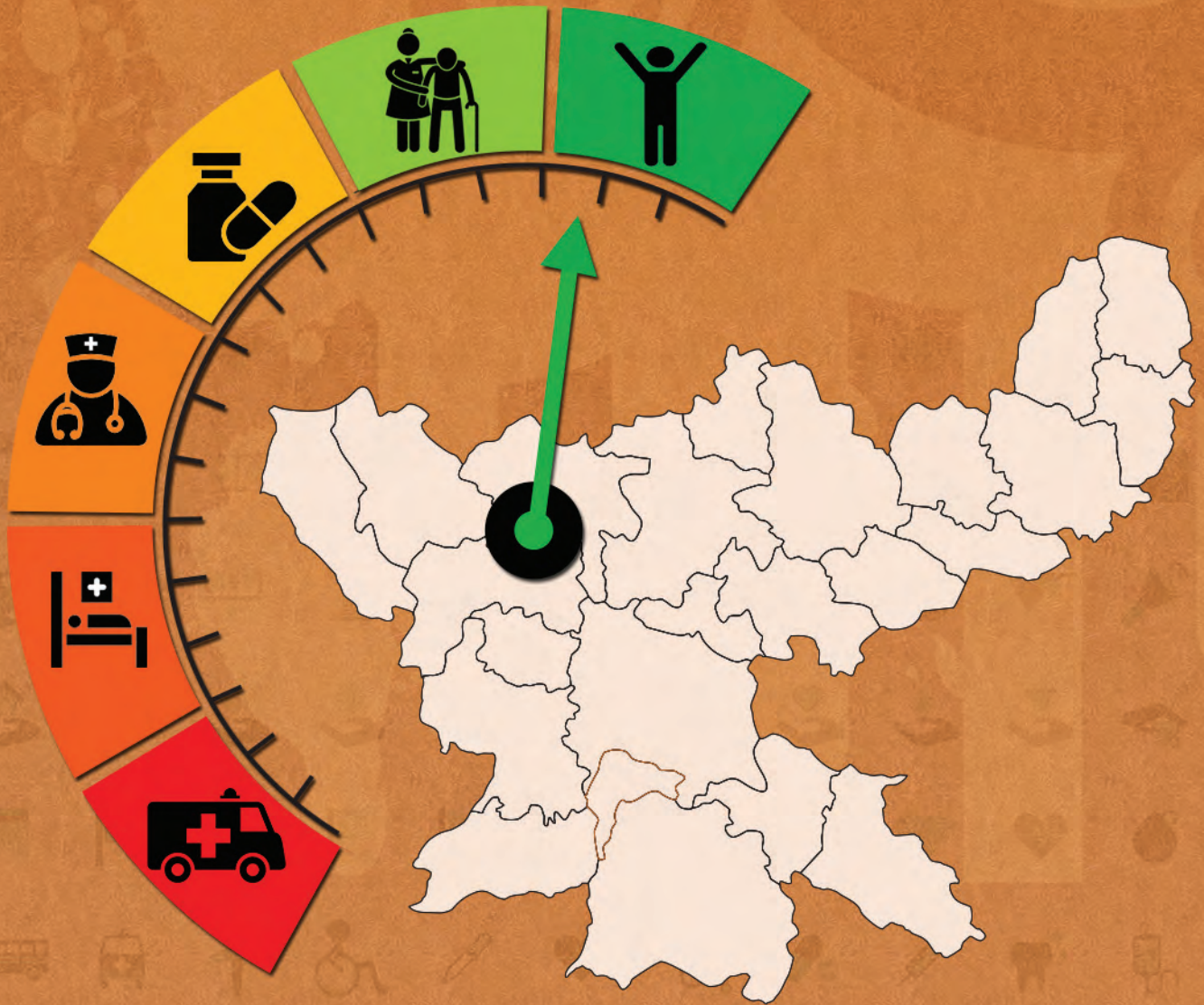
Dr. Diksha Dhupar, Consultant



NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



JHARKHAND

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
2 nd	Hazaribagh, West Singhbhum, Chaibasa, Jorapokhar (Dhanbad)	
4 th	Gumla	Palamu
5 th	Deoghar	Giridh
7 th	Bokaro	Sahibganj
9 th	Lohardaga	Dhanbad
10 th	Lohardaga	Dhanbad
11 th	Pakur	East (Purni) Singhbhum
12 th	Ranchi	Bokaro
13 th	Gumla	West Singhbhum

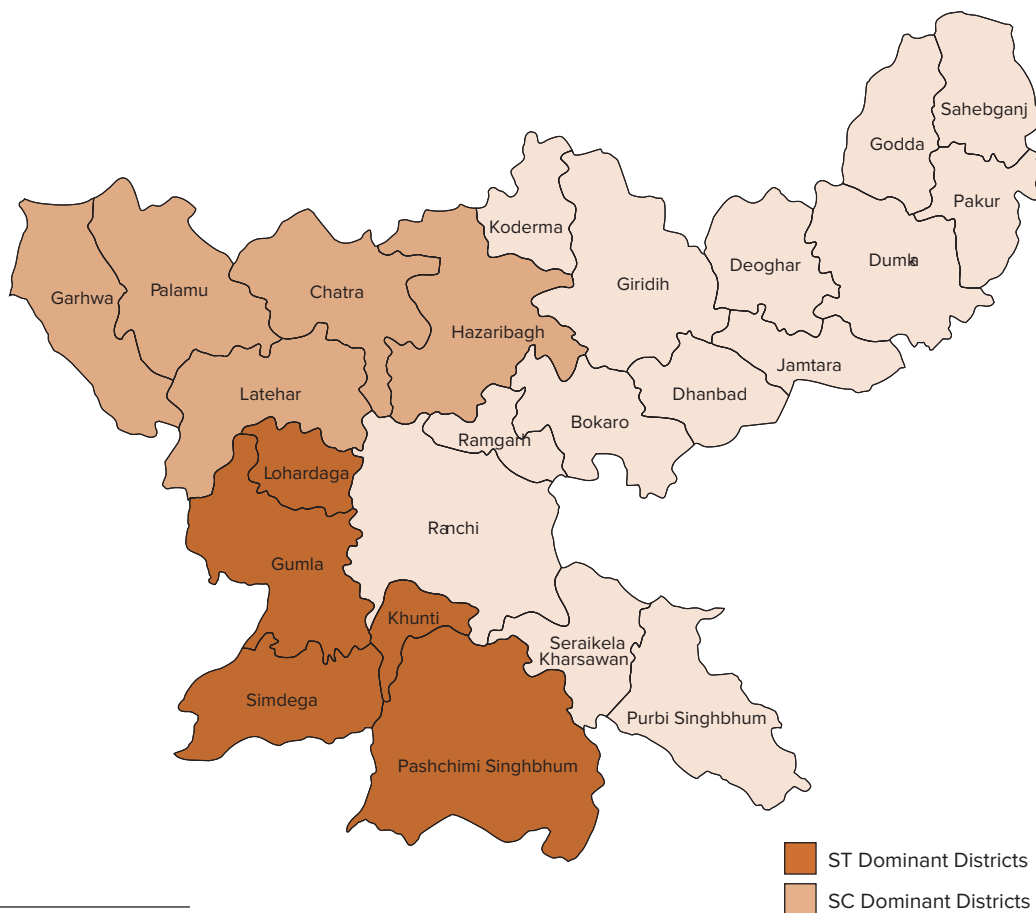
JHARKHAND

1. BACKGROUND

1.1 Jharkhand Profile

Jharkhand is the 16th largest state in India for a geographical spread of 79,714 km² with an estimated population of 3.2 crore^a. The State is divided into 24 districts, with a projected population increase to 3.8 Crores by 2021^b. As per census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 0.39 crores (12.08%) and 0.86 crores (26.21%), respectively. Out of the 24 districts, top five ST & SC

Figure 1: Top 5 ST & SC Dominant Districts



^a Census 2011

^b Census Population Projection 2021

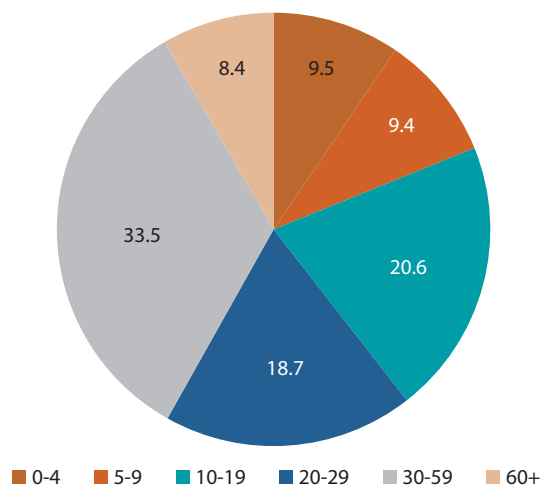
dominant districts account for 32.33% of ST & 41.53% of SC population in the State (Annexure 1, State Profile). As per Census 2011, 75.95% reside in rural areas, while the rest constitute the urban population. The total length of roads^c in the State is 69,871 km (1.39%^d), in which the national highways constitute 2,654 km (2.3%^e) and state highways constitute 1,339 km (0.76%^f).

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

In Jharkhand, out of the 24 districts, 5 districts have a population of 20-30 lakhs, 11 districts have a population between 10-20 lakhs and 8 districts have a population less than 10 lakhs (Annexure 1.1, State Profile). The State's sex ratio at birth (923 females for every 1000 males) is higher than the national average (899 females for every 1000 males) (Annexure 1.2). Around 20.6% of the total population is in 10-19 years' age group, 54.2% between 20 to 59 years; and 8.4% above 60 years of age (Figure 2). The crude birth and death rates have declined from 26.8 and 7.9 in 2005 to 22.3 and 5.3 in 2019 respectively (Annexure 2, Figure 2). The literacy rate increased from 53.6% in 2001 to 66.4% in 2011, with male and female literacy rates being 76.8% and 55.4%, respectively (Annexure 1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)^g is 15.5% for higher education, 48.32% for senior secondary education, 73.65% for secondary education, 107.08% for elementary education, and 109.22% for primary education.

Figure 2: Jharkhand - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people over 60 years constitute 8.4% of the State's total population. The life expectancy at 60 years of age is 18.1 years for males, and 16.8 years for females (2014-2018)^h. The old age dependency ratio is 12.7 in 2011; 12.3 for males, 13.0 for females; 13.4 in rural and 10.5 in urban areas. As per NSS report, 71.0% of elderly females and 23% of elderly males in rural areas; 66.0% of elderly females and 28.0% of elderly males in urban areas are economically fully dependent on others. The illness (any deviation from the state of physical and mental well-being) perception among elderly men and women is 12% & 8% respectively, which is lower than the national average of 31% for each (Elderly in India 2016).

^c Basic Road Statistics 2019, MoRTH

^d Percentage of total length of roads in State

^e Percentage of total length of National Highways in the country

^f Percentage of total length of State Highways in the country

^g Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

^h SRS Based Life Abridged Tables

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+Nⁱ services with major focus on primary and secondary care services under NHM. Indicators for Antenatal care (ANC)^j, institutional deliveries, C sections, distribution of IFA^k tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care, have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined^l from 261 (2007-09) to 71 (2016-18). In Jharkhand, 78.4% women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5, Chatra, Deoghar, Garhwa, Pakur, and Palamu districts reported poor ANC coverage ranging from 26.833.8% to 49.5%; whereas, Bokaro, Dhanbad, Gumla, Koderma and Saraikela-Kharsawan districts reported relatively better full ANC coverage ranging from 44.6% to 54.4%. As reported, around 96% of the deliveries took place in institutions, out of which 73.9% took place in public health facilities. Total percentage of C-sections (8.3%) is slightly above the recommended range by the WHO (10-15%); out of which 19.5% is conducted at private facilities in the State. It is reported that around 50.3% women are given their first postpartum checkup between 48 hours and 14 days (Annexure 1.4). Prevalence of Anaemia in women aged 15-49 years marginally increased from 65.2% (NFHS 4) to 65.3% (NFHS 5). Anaemia in females of reproductive age group is more than twice than in men of similar age group (Annexure 2, Figure 5).

Refer Annexure 3 for detailed district wise comparison of NFHS 5 key indicators.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 50 (2005) to 27 (2019); as opposed to the national average of 30 (Annexure 2, Figure 1 & Annexure 1.2). Though NNMR^m significantly declined from 25.9 (2005) to 21 (2018), there is a rising trend of Still Birth (per 1,000 live births) rate from 1 (2005) to 2.5 (2018). (Annexure 2, Figure 4). In general, improvement in key indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCsⁿ. The life expectancy at birth has also improved from 66.6 (2006-10) to 69.1 (2014-18) (Annexure 2, Figure 3). As per NFHS 5, Chatra, Garhwa, Jamtara, Khunti and Purbi Singhbhum districts reported low SRB^o ranging from 709 to 837; whereas, Gumla, Latehar, Lohardaga, Palamu and Sahibganj districts reported high SRB ranging from 967 to 1098.

Full immunization coverage for children between 12 – 23 months improved from 72.7% (NFHS 4) to 79.2% (NFHS 5). The proportion of under 6-months children exclusively breastfed improved from 64.8% (NFHS 4) to 76.1% (NFHS 5). Prevalence of childhood anaemia has shown a decline from 69.9% to 67.5% (Annexure 2, Figure 5). As per NFHS 5, Dhanbad, Giridih, Kodarma, Ramgarh and Ranchi districts reported comparatively low burden of stunting, ranging from 27% to 35.3%; whereas Garhwa, Pakur, Palamu, Pashchimi Singhbhum and Sahibganj districts reported high burden of stunting, ranging from

ⁱ Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^j Antenatal Check up

^k Iron Folic Acid Tablets

^l SRS MMR Bulletin

^m Neonatal Mortality Rate

ⁿ QPR Reports

^o Sex Ratio at Birth

43.7% to 60.6%. For under-5 wasting, Chatra, Deoghar, Dhanbad, Hazaribagh and Kodarma districts reported relatively low burden, ranging from 17.2% to 18%; whereas Khunti, Pashchimi Singhbhum, Purbi Singhbhum, Ranchi and Saraikela-Kharsawan districts reported high burden ranging from 29.4% to 32.9%.

2.3 Family Planning

The TFR^p reduced from 3.5 in 2005 to 2.5 in 2018, which is still higher than the national average of 2.2 (Annexure 2 Figure 4). The total unmet need in the State is reported as 11.5%, while unmet need for spacing is 4.8% (NFHS 5). Simdega reported highest unmet need (15.8%), while Saraikela-Kharsawan reported the lowest (7.2%) in the State. Around 49.5% of married women reported to avail any modern method of family planning in the State (NFHS 5), with sterilization acceptance being 37.4% among females and 0.3% among males.

2.4 Communicable Diseases

The State has 24 functional IDSP units in place. The proportion of Communicable, Maternal, Neonatal, and Nutritional Diseases [CMNND] contribute to 37.2% of total disease burden (GBD 2019) with diarrheal diseases, neonatal preterm birth, lower respiratory tract infection, dietary iron deficiency, neonatal conditions, malaria & drug-susceptible TB being the major causes of DALY in the State (Annexure 2, Figure 6)^q. For TB, the annualized total case notification rate is 131% and NSP^r success rate is 80% as opposed to the national averages of 163% and 79%, respectively. For NLEP^s, the reported prevalence rate of 1 per 10,000 population is higher than the national average of 0.61. In FY 2019-20, deaths from vector borne diseases include 3 due to malaria, and none due to JE^t, Dengue & Kala azar.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that premature deaths account for 67.9% of the total disease burden, while disability or morbidity account for 32.1%. Ischaemic heart disease, COPD & Diabetes Mellitus Type 2 remain the major causes for DALYs (Annexure 2, Figure 6). NCDs contribute 53.52% of total DALYs, while injuries contribute to 9.28% of total DALYs. The State ranks 17th in the country for the total number of fatal road accidents (Annexure 1.4). It is reported that 5.8% of women and 48.6% of men used any kind of tobacco, while 4.1% of women and 39.3% of men consumed alcohol. In general, low birth weight, short gestation period, high systolic blood pressure, household air pollution from solid fuels, high fasting plasma glucose, and unsafe water source are the major risk factors for all DALYs (Annexure 2, Figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 2,71,990 crores. The State is positioned 30th out of 32 States in terms of per capita^u expenditure of ₹ 73,155^v. According to NHA (2017-18), the per capita Government Health Expenditure in the State is estimated as ₹ 801, which is less than the

^p Total Fertility Rate

^q <https://vizhub.healthdata.org/gbd-compare/india>

^r New Smear Positive

^s National Leprosy Eradication Programme

^t Japanese Encephalitis

^u Directorate of Economics & Statistics

^v Directorate of Economics and Statistics of State Government

national average of ₹ 1,753. On the other hand, the OOPE^w as a share of Total Health Expenditure is estimated as 68%, which is higher than the national average of 48.8%. As per NSSO 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated as ₹ 29,103 in private hospitals and ₹ 5,736 in public hospitals, while the same in urban areas is around ₹ 31,441 in private hospitals and ₹ 16,764 in public hospitals. For childbirth, OOPE in public facilities is estimated to be around ₹ 2,087 in rural areas & ₹ 3,081 in urban areas, whereas in private health facilities, it is ₹ 14,813 in rural areas and ₹ 19,405 in urban areas. In public health facilities, the share of expenditure on drugs is estimated as 59% and 45% for inpatient care; and 12% and 10% for diagnostics in rural and urban areas respectively (Annexure 1.6, Healthcare Financing).

1.7 Health Infrastructure

As per the RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figures 8). Though public health facilities have been increasing over time, a shortfall in the required infrastructure still remain (Annexure 2, Figures 9). Currently, there are 3,848 SCs, 291 PHCs & 17 CHCs in place, against the required 6,848 SCs, 1,091 PHCs and 272 CHCs in rural areas, thereby amounting to shortfall of 43.81% SCs, 73.33% PHCs and 37.13% CHC. However, in urban settings there are 60 PHCs in place against the required 196 which accounts to a shortfall of 69.39%. Jharkhand has 23 DHs, 13 SDHs and 7 Government medical colleges. In the State, 23 DHs, 11 SDH & 39 CHCs serve as functional FRUs. In tribal catchments, there are 2,462 SCs, 175 PHCs, and 103 CHCs in place against the required 2,963 SCs, 444 PHCs and 111 CHCs, thereby amounting to shortfall of 16.91% SCs, 60.59% PHCs and 7.21% CHCs.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 1,645 HWCs (54 SHCs, 178 PHCs & 1413 UPHCs) are operationalized in the State as of 22nd December 2021^x.

In Jharkhand, 24 districts are equipped with MMUs under NHRM, while none under the NUHM. The State has 97.56% of ASHAs in position under the NRHM & 100% under the NUHM. In the State, doctors to staff nurse ratio is 1:1.5, with 3 public healthcare providers available for every 10,000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 436 availed (events) OPD services and 20.4 availed (events) IPD services. However, as per the NSSO data (2017-18), 31% of all OPD cases in rural and 15% in urban; 43% of all IPD cases in rural and 37% in urban utilized public health facilities. Public health facilities utilization in the State is less than the national average (Annexure 1.6).

^w Out of Pocket Expenditure

^x AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^y

Indicator	Jharkhand 2011 ¹	India
Total Population (In Crore)	3.29	121.08
Rural (%)	75.95	68.85
Urban (%)	24.04	31.14
Scheduled Caste population (SC) (in crore)	0.39 (12.08%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.86 (26.21%)	10.45 (8.63%)
Total Literacy Rate (%)	66.4	72.99
Male Literacy Rate (%)	76.8	80.89
Female Literacy Rate (%)	55.4	64.64
Number of Districts in the Jharkhand ²	24	
Number of districts per lakh population in Jharkhand (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	8
	≥ 10 Lakhs - <20 Lakhs	11
	≥20 Lakhs - <30 lakhs	5
	≥30 Lakhs	0

ST SC Dominant (Top 5) Districts of Jharkhand¹

ST Dominant Districts (%)	SC Dominant Districts (%)
Khunti - 73.25%	Chatra - 32.65%
Simdega - 70.78%	Palamu - 27.65%
Gumla - 68.93%	Garhwa - 24.18%
Paschimi Singhbhum - 67.31%	Latehar - 21.30%
Lohardaga - 56.89%	Hazaribagh - 17.49%
Top 5 ST dominant district accounts for 32.33%	Top 5 SC dominant district accounts for 41.53%

1.2 Key Health Status & Impact Indicators^z

Indicators	Jharkhand	India
Infant Mortality Rate (IMR) ³	27	30
Crude Death Rate (CDR) ³	5.3	6

^y Sources are mentioned at the end of Annexure 1

^z Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	22.3	19.7
Maternal Mortality Ratio (MMR) ³	71	113
Neo Natal Mortality Rate (NNMR) ⁴	21	23
Under Five Mortality Rate (U5MR) ⁴	34	36
Still Birth Rate ⁴	1	4
Total Fertility Rate (TFR) ⁴	2.5	2.2
Life expectancy at birth ⁵	69.1	69.4
Sex Ratio at Birth ⁴	923	899

1.3 Key Health Infrastructure Indicators^{aa}

Indicators	Numbers (Total)			
Number of District Hospitals ²	23			
Number of Sub District Hospital ²	13			
Number of Government (Central + State) Medical College ⁶	7			
Number of Private (Society + Trust) Medical Colleges ⁶	0			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	1413	1479	2534	3237
PHC-HWC	178	298	298	298
UPHC-HWC	54	59	59	59
Total-HWC	1645	1836	2891	3594
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	272	171	37.13	
Number of Primary Health Centres (PHC)	1,091	291	73.33	
Number of Sub Centres (SC)	6,848	3,848	43.81	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	23	11	39	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	196	60	69.39	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	111	103	7.21	
Number of PHC	444	175	60.59	
Number of SC	2,963	2,462	16.91	

^{aa} Sources are mentioned at the end of Annexure 1

Patient Service⁹	Jharkhand	India
IPD per 1000 population	20.4	62.6
OPD per 1000 population	436.0	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	22.8	36.4

1.4 Major Health Indicator^{bb}

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Jharkhand	India
% DALY ^{cc} accountable for CMNNDs ^{dd}	37.2	27.46
% DALY accountable for NCDs	53.52	61.43
% DALY accountable for Injuries	9.28	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Jharkhand	India
Level of Birth Registration (%)	84.3	92.7
Level of Death Registration (%)	58.8	92
Percentage of medically certified deaths to total registered deaths (%)	5.8	20.7
RMNCHA+N		
Maternal Health⁹	Jharkhand	India
% 1st Trimester registration to Total ANC Registrations	66.6	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	78.4	79.4
Total Reported Deliveries	7,33,372	21410780
% Institutional deliveries to Total Reported Deliveries	96	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	73.9	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	26.1	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	8.3	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	4.4	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	19.5	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	50.3	53.4
Neonatal⁹	Jharkhand	India
% live birth to Reported Birth	98.8	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	7	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	95.9	89.9

^{bb} Sources are mentioned at the end of Annexure 1

^{cc} Disability Adjusted Life Years

^{dd} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Jharkhand	India
Sick New Born Care Unit (SNCU)	19	895
New Born Stabilization Unit (NBSU)	42	2418
New Born Care Corner (NBCC)	594	20337
Child Health & Nutrition¹⁰	Jharkhand (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	7.2	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	55.6	60.6
Children under 5 years who are underweight (weight-for-age) (%)	39.4	32.1
Child Immunization¹⁰	Jharkhand (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	79.2	83.8
Children age 12-23 months who have received BCG (%)	95	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	86.7	87.9
Family Planning¹⁰	Jharkhand (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	4.8	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Jharkhand	India
Number of districts with functional IDSP unit	24	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Jharkhand	India
Annualized total case notification rate (%)	131	163
New Smear Positive (NSP) Success rate (in %)	80	79
National Leprosy Eradication Programme (NLEP)¹¹	Jharkhand	India
Prevalence Rate/10,000 population	1	0.61
Number of new cases detected	6,094	114,359
Malaria, Kala Azar, Dengue¹¹	Jharkhand	India
Deaths due to Malaria ¹¹	3	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	669	3,706
HIV¹⁰	Jharkhand (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	13.8	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	31.2	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Jharkhand (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	11.1	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	15.1	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	5.4	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	6.9	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Jharkhand (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	5.8	8.9
Men who use any kind of tobacco (%)	48.6	38
Women who consume alcohol (%)	4.1	1.3
Men who consume alcohol (%)	39.3	18.8
Injuries		
Road Traffic Accident¹²	Jharkhand	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	17	N/A
Total number of fatal Road Accidents	10,182	137,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	72.9	33.7
Number of persons killed in Road Accidents	3801	115113

1.5 Access to Care^{ee}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Jharkhand	India
Number of Districts equipped with MMU under NRHM	24	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Jharkhand	India
102 Type	0	9955
104 Type	0	605
108 Type	337	10993
Others	1803	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	2140	11070

^{ee} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Jharkhand	India
Total number of ASHA targeted under NRHM	40964	946563
Total number of ASHA in position under NRHM	39964	904211
% of ASHA in position under NRHM	97.56	96
Total number of ASHA targeted under NUHM	1165	75597
Total number of ASHA in position under NUHM	1165	64272
% of ASHA in position under NUHM	100	85
Community Process¹¹	Jharkhand	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	30012	554847
Number of Mahila Arogya Samitis (MAS) formed	918	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Jharkhand	India
DH	24	796
CHC	188	6036
PHC	330	20273
UHC	0	126
UPHC	4	3229
Human Resource for Health ¹⁴		
HRH Governance	Jharkhand	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	In Process	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	79
	Dentists (%)	85
	MO MBBS (%)	42
	Nurse (%)	59
	LT (%)	60
	ANM (%)	36
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1/2	1:1/2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	6 per 10,000	3 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	1:1	1:1

Ranking: Human Resource Index of Jharkhand¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{ff}	14440	13949	9723	4226	4717	48.87
Staff Nurse	8456	2439	1062	1377	7394	
Lab Technician	1690	1300	719	581	971	
Pharmacists	870	854	367	487	503	
MO MBBS ^{gg}	2055	2277	2027	250	28	
Specialist ^{hh}	1996	1372	444	928	1552	

1.6 Healthcare Financingⁱⁱ

National Health Accounts (NHA) (2017-18)	Jharkhand		India	
Per Capita Government Health Expenditure (in ₹)	801		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	1.1		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	4.7		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	68		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Jharkhand		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	31	15	33	26
IPD - % of hospitalized cases using public facility	43	37	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	431	788	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	1156	1364	845	915
IPD - Per hospitalized case (in INR) - Public	5,736	16,764	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	29,103	31,441	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	12	10	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	59	45	53	43

^{ff} MPW – Multi Purpose Health Worker (Female + Male)

^{gg} MO MBBS (Full Time)

^{hh} Specialist (All Specialist)

ⁱⁱ Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	2,087	3,081	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	14,813	19,405	20,692	26,701
State Health Expenditure	Jharkhand		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	4.2		5 ^{jj}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{jj} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

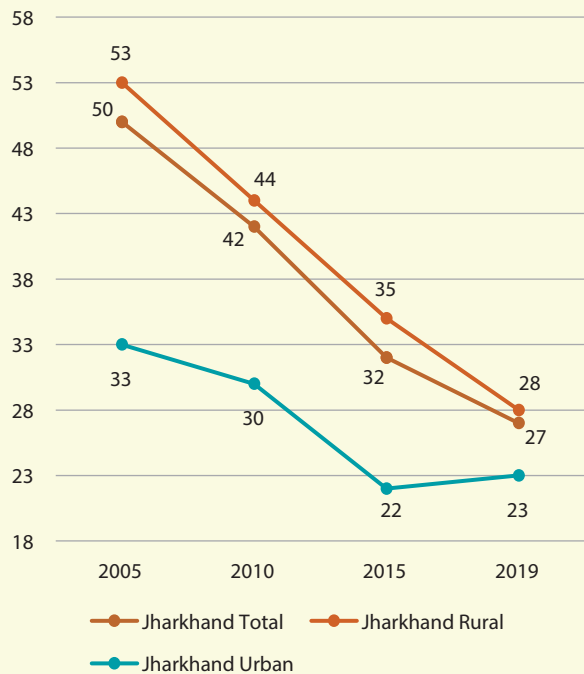


Figure 2: CBR & CDR Trend

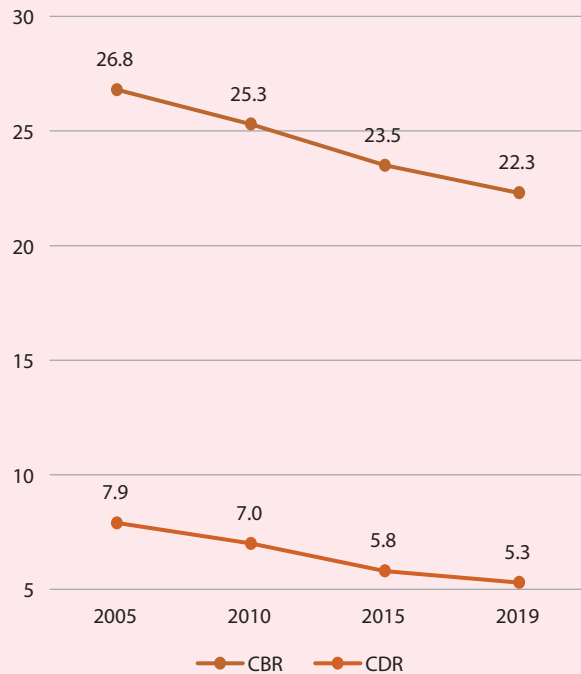


Figure 3: Life Expectancy At Birth Trend

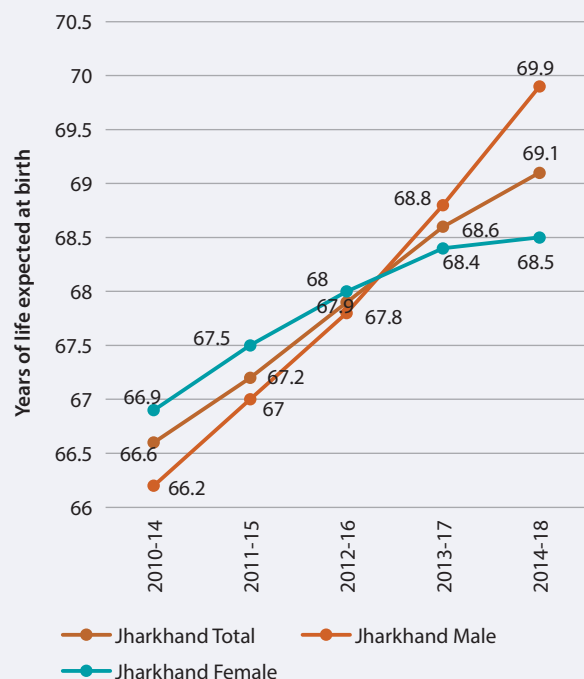


Figure 4: NNMR, TFR & Still Birth Trend

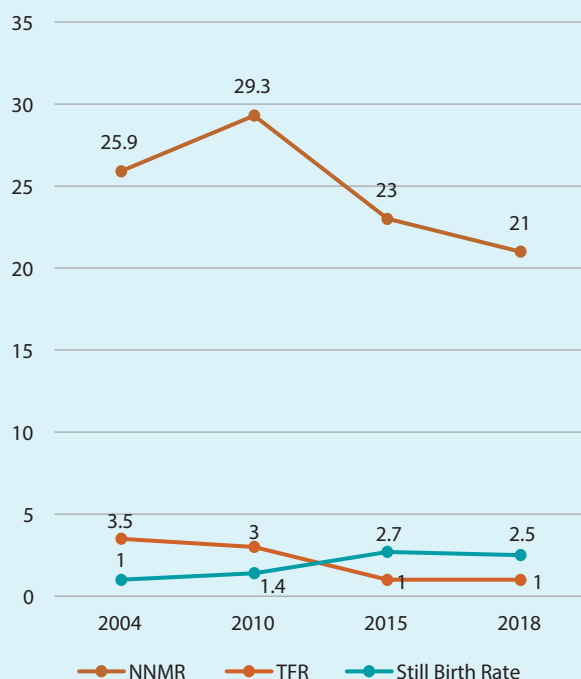


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

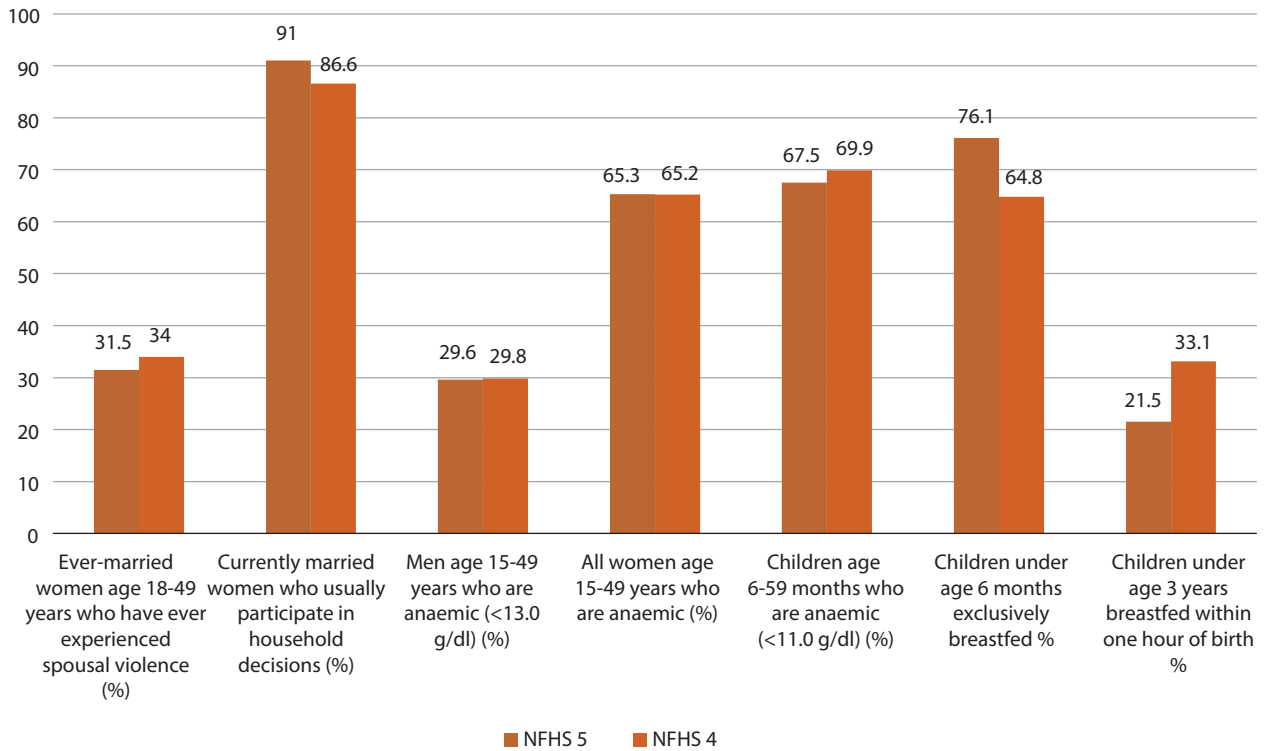


Figure 6: Top 15 causes of DALYs, 1990-2019

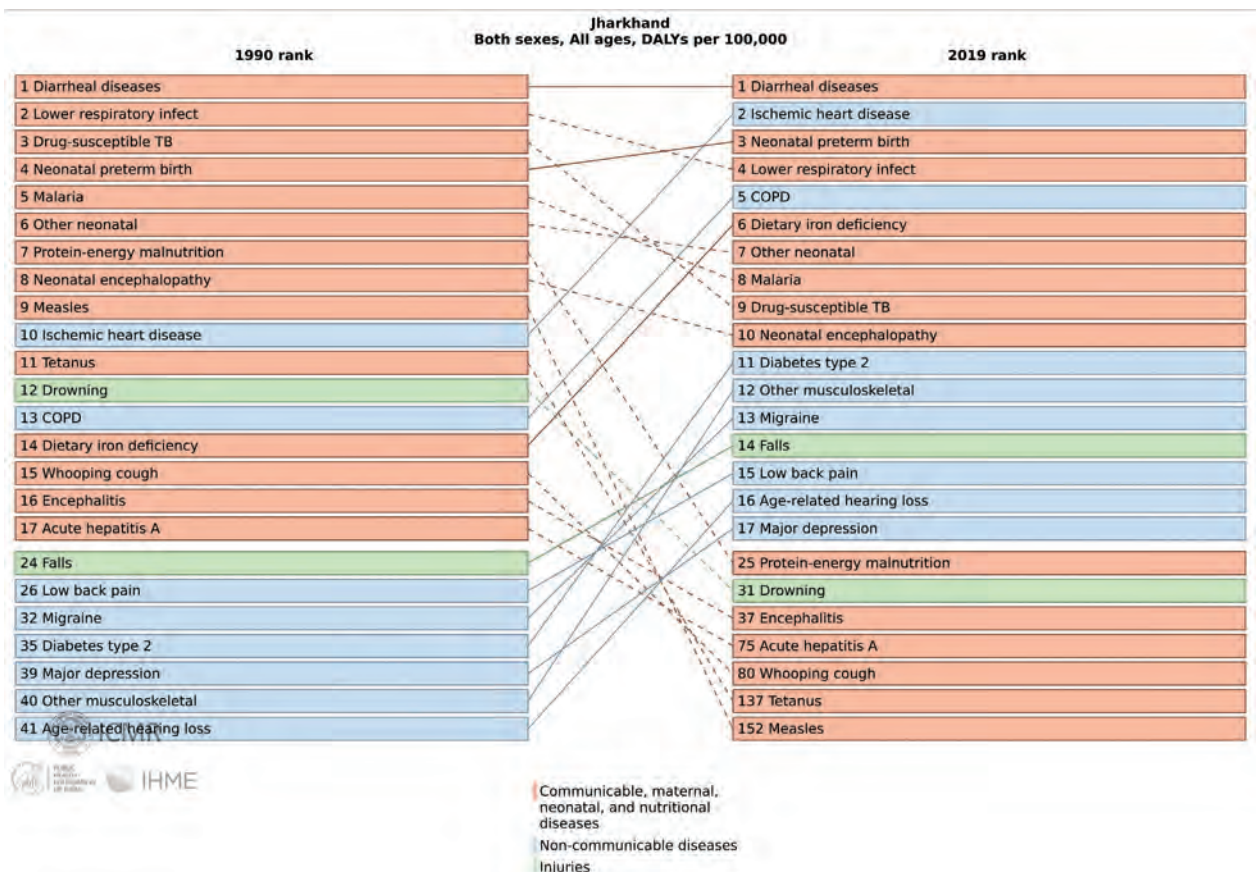


Figure 7: Top 15 risk of DALYs, 1990-2019

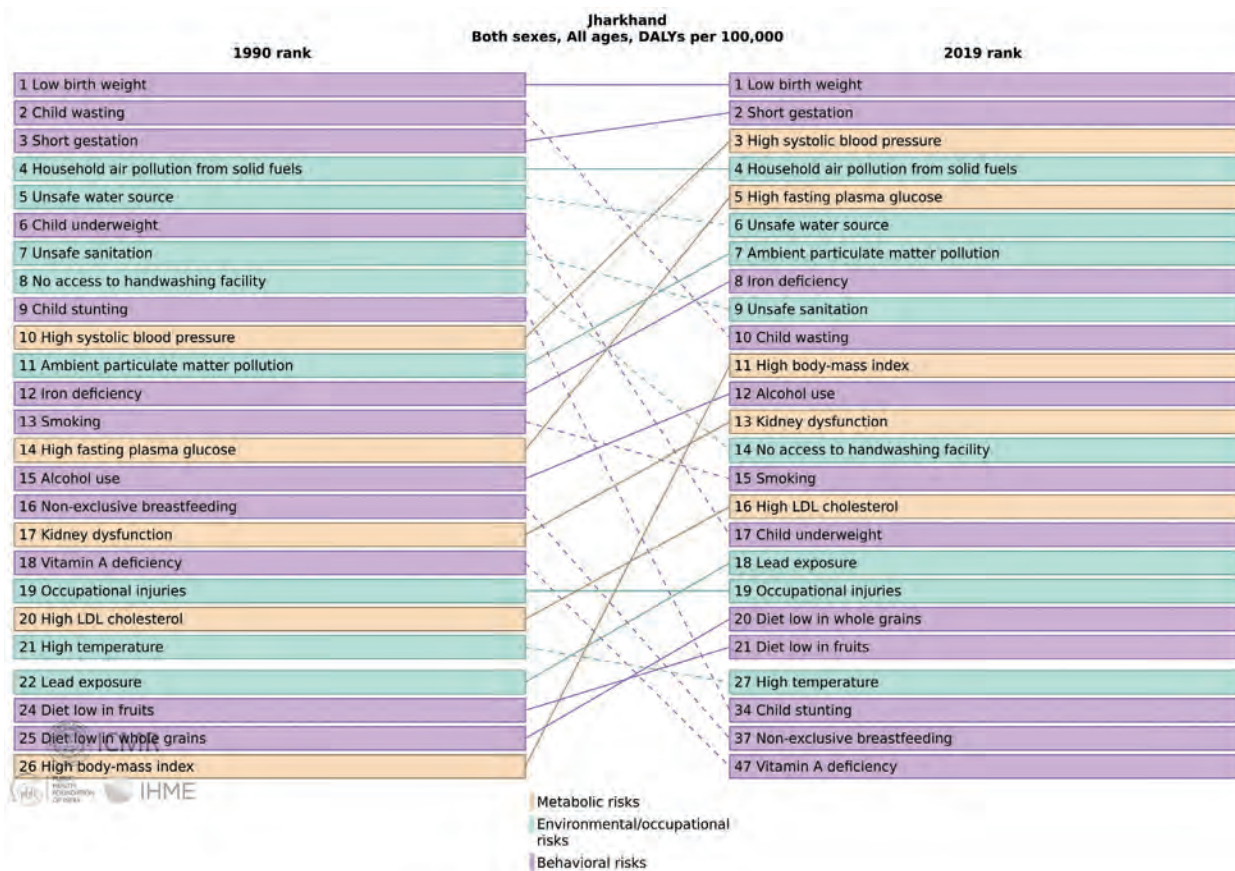


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

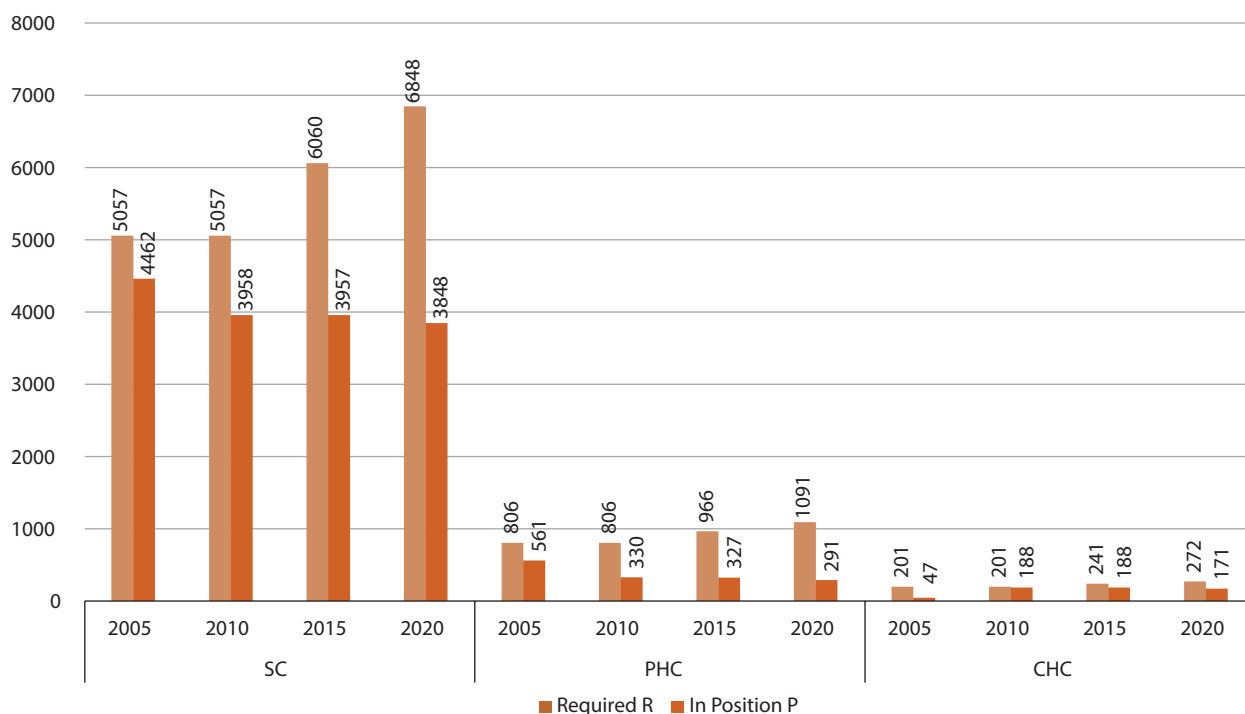


Figure 9: Year Wise Health Infrastructure Shortfall (%)

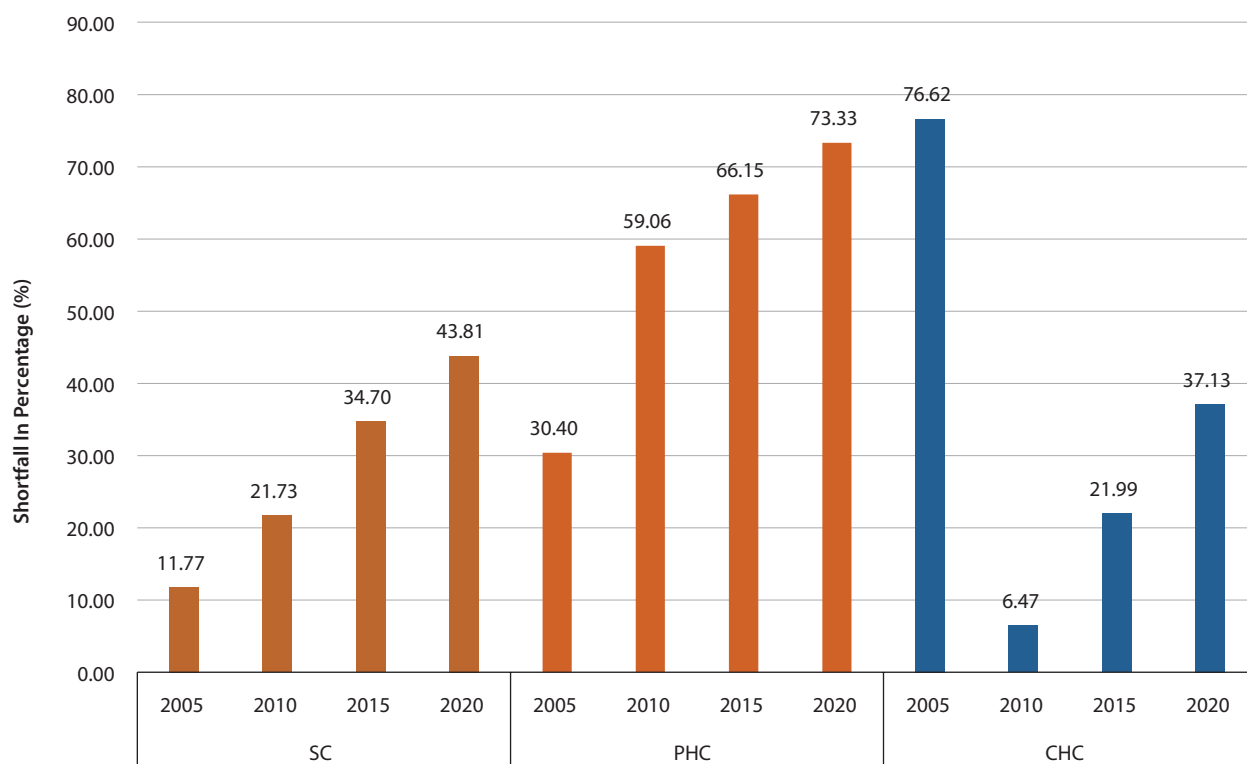
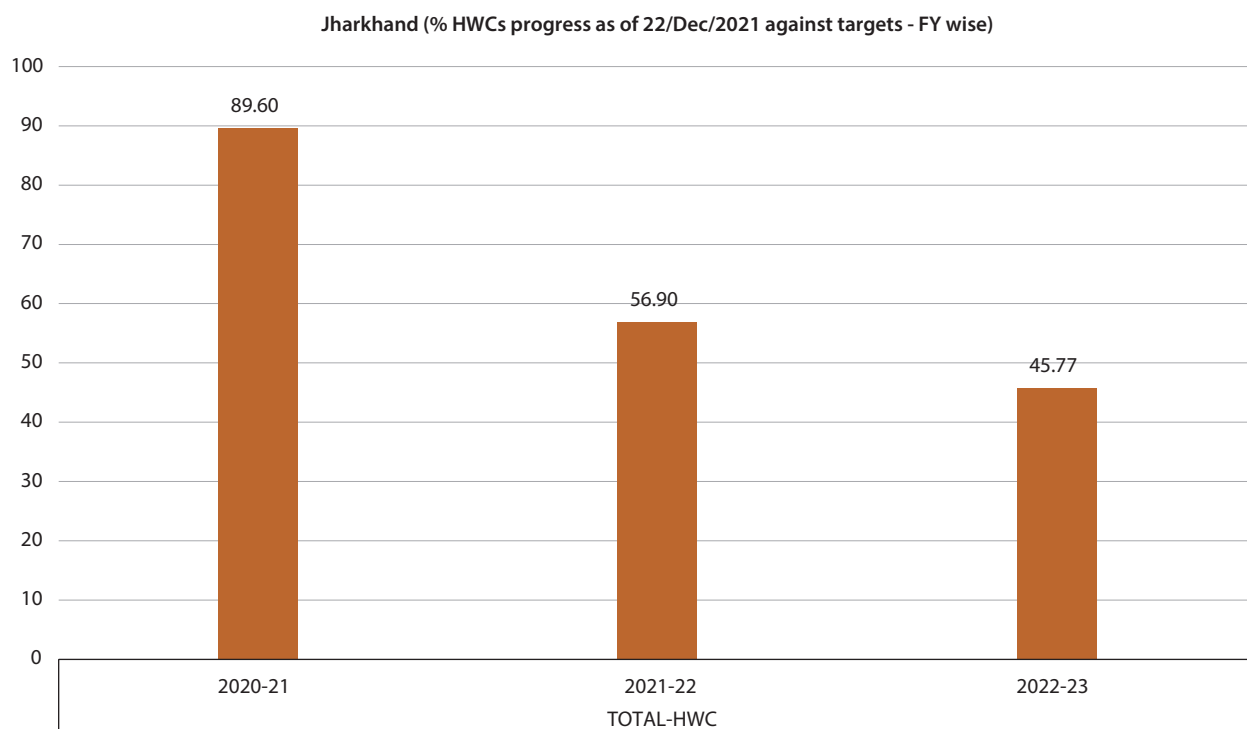


Figure 10: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

(Green – Good Performance, Red – Poor Performance)
(District Wise Rural/Urban Stats Not Available)

S. No.	States/Districts	Data Source	Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted* (Height For Age) (%)	Children Under 5 Years - Wasted* (Weight For Height) (%)
1	Jharkhand	NFHS 4 Total	919	13.3	NA	37.9	40.4	1	2.2	18.4	30.3	61.9	72.7	7.2	45.3	29
2	Jharkhand	NFHS 5 Urban	781	41.6	80.1	19.4	66	2.1	6	11.2	48.5	89.1	74.6	10.3	26.8	23
3	Jharkhand	NFHS 5 Rural	926	53.1	55.6	36.1	60.4	1.6	3.5	11.6	36.4	73.1	80.1	10.5	42.3	22.3
4	Jharkhand	NFHS 5 Total	899	50.3	61.7	32.2	61.7	1.7	4.1	11.5	38.6	75.8	79.2	10.5	39.6	22.4
5	Bokaro	NFHS 5 Total	899	44.7	69.2	26.3	68.5	1.4	6.4	9.5	48.7	80.9	72.9	18.1	36.2	19.7
6	Chatra	NFHS 5 Total	764	46.5	57.7	31.7	59.5	1	0.6	10.1	32.4	71.5	82.4	6.1	42.2	17.2
7	Deoghar	NFHS 5 Total	929	53.8	50.7	49.2	65.4	1	2.6	11.1	30.7	61.3	54.7	7.2	41.7	17.7
8	Dhanbad	NFHS 5 Total	869	45.7	69.7	28.3	67.3	1	5.2	9.7	44.6	78.8	72.5	4.7	27	14
9	Dumka	NFHS 5 Total	946	45.4	51.8	43.1	60	1.6	5.1	13.1	39.3	60.3	76.6	7.8	38.2	27.8
10	Garhwa	NFHS 5 Total	829	55.3	59.6	31.3	58.3	0.8	0.9	12.3	29.8	84	82.9	6.4	47.7	18.9
11	Giridih	NFHS 5 Total	852	52.4	53.4	45.6	63.7	0.7	3.6	12	42.1	70.7	83.6	10.7	31.9	27.8
12	Godda	NFHS 5 Total	881	45.9	46.6	48.5	65	2.2	3.4	11.3	39.2	70.2	71	7.6	39.4	24.5
13	Gumla	NFHS 5 Total	1028	51.7	63.7	20.9	52.7	2.1	4	14.9	49.3	83.8	86.2	10.7	40.2	20.1
14	Hazaribagh	NFHS 5 Total	856	55	67.2	38.6	60.8	0.8	3.4	11.5	36.4	82	80.5	16.9	37.8	16.2
15	Jamtara	NFHS 5 Total	825	62.9	53.5	50.5	69.3	1.3	4.1	9.9	36	75.4	82.9	15.9	41.9	23
16	Khunti	NFHS 5 Total	709	58.2	55.3	21.7	58.4	3.2	5	11.8	37.4	73.8	79.6	10.5	38.5	32.1

17	Kodarma	NFHS 5 Total	872	56.8	63.6	42.5	63.6	0.5	1.7	12	47.6	91.3	87.4	10.8	34.6	18
18	Latehar	NFHS 5 Total	967	52.2	54.9	32.2	56.6	1.1	2.3	13.4	43.1	70.3	74.5	7.5	40.1	19.2
19	Lohardaga	NFHS 5 Total	1011	58.9	65.2	21.9	56.6	4.7	3.6	13.9	37.7	84.1	88.2	7	40.7	26.6
20	Pakur	NFHS 5 Total	925	52.5	41.4	43.4	55.4	0.7	2.9	12	26.6	64.6	69.5	8.1	51.3	23.6
21	Palamu	NFHS 5 Total	1098	55.8	62.5	35.4	60.1	0.5	1.7	13.8	33.8	74.9	81.5	5.4	43.7	18.4
22	Pashchimi Singhbhum	NFHS 5 Total	872	46.7	47.8	24.4	55.9	2.9	7.6	12.5	34.9	67.9	89	11.7	60.6	30.5
23	Purbi Singhbhum	NFHS 5 Total	837	50.7	73.8	19.8	61	2.8	4.4	11.4	40.7	94	87	11.1	35.9	29.4
24	Ramgarh	NFHS 5 Total	903	49.7	71	25.1	68.2	1	3.5	7.3	40.9	79	89.2	12.5	35.3	23.5
25	Ranchi	NFHS 5 Total	874	43.9	76	20.9	61.5	5	6.4	12	35.2	87.3	85.4	19.7	28.3	32.7
26	Sahibganj	NFHS 5 Total	984	34.8	48.8	39.9	50.4	1	1.8	13.2	36.2	64.7	72.6	8.2	49.1	19.7
27	Saraikele-Kharsawan	NFHS 5 Total	919	63.1	64	19.2	66.9	2.8	8.3	7.2	54.4	81.8	85.3	13.8	40	32.9
28	Simdega	NFHS 5 Total	907	60.6	66.4	15.9	48.5	1.7	4.1	15.8	34.4	75.7	81.1	10.8	42.2	21.1

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'; Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother
Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best five performing districts within the districts for a particular indicator

B. Red – Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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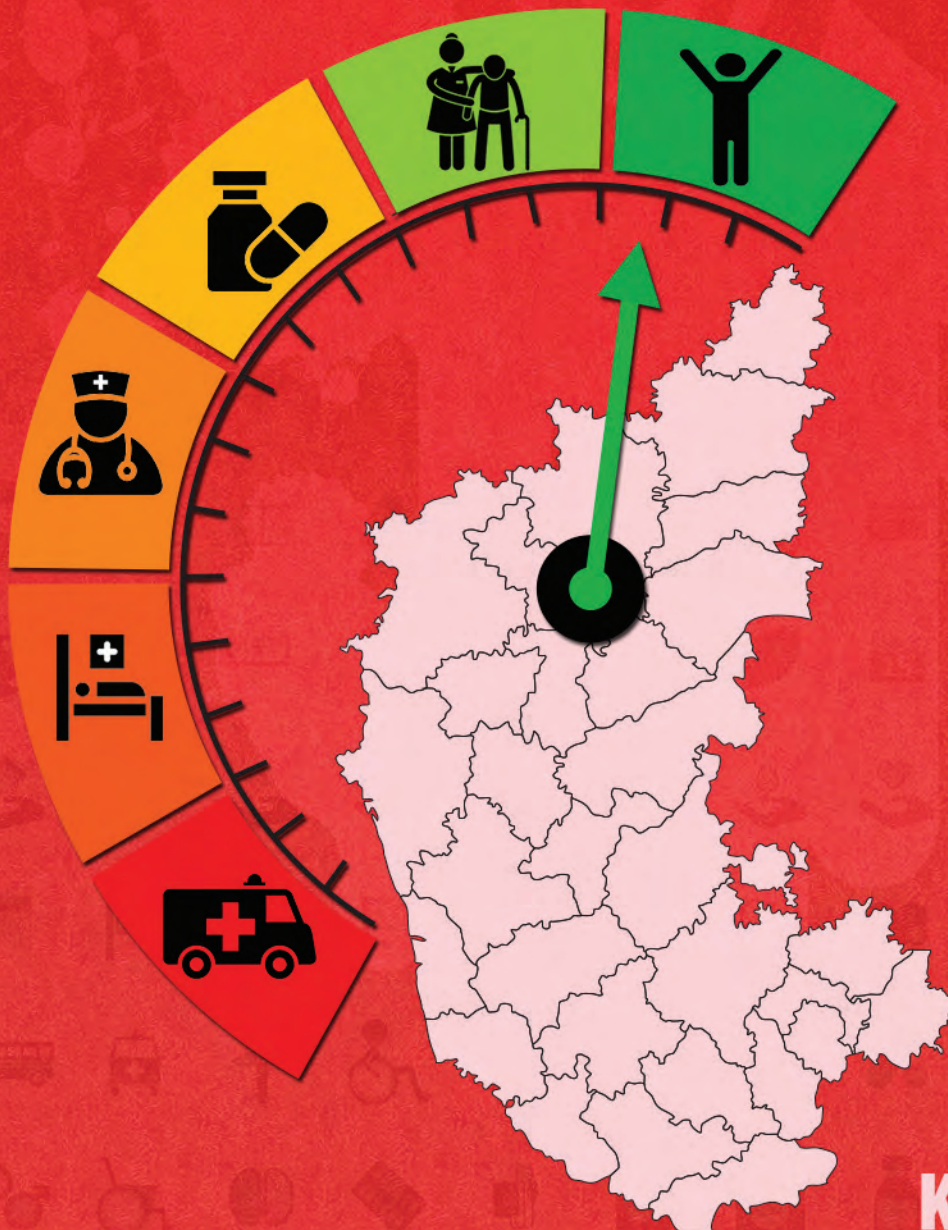
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



KARNATAKA

**DISTRICTS VISITED IN
COMMON REVIEW MISSIONS**

CRM	Districts Visited	
2 nd	Tumkur	Raichur
5 th	Bijapur	Chamarajanagar
7 th	Gulbarga	Haveri
9 th	Koppal	Dakshina Kannada
11 th	Raichur	Chitradurga
12 th	Chikmagalur	Udupi
14 th	Yadgir	Davangere

KARNATAKA

1. BACKGROUND

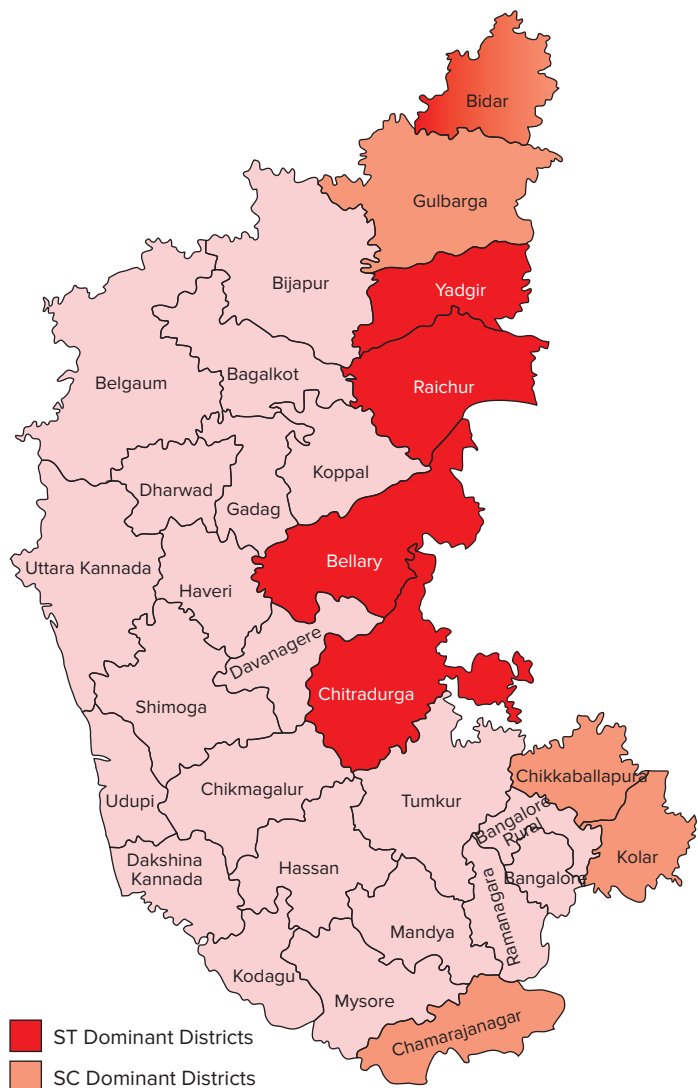
1.1 Karnataka Profile

Karnataka is positioned^a 7th in India for a geographical spread of 1,91,791.00 km² (RHS 2019). It is divided into 30 districts and estimated to have a population of over 6.10 crores^b, which accounts for approximately 5.05 percent of India's total population (RHS 2019). It is projected that the population would reach around 6.68 crores by 2021(Census Population Projection 2019). As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 1.04 crores (17.15%) and 0.42 crores (6.95%), respectively. Out of the 30 districts, top five ST & SC dominant districts account for 35.39% of ST & 19.92% of SC population in Karnataka (Figure 1 & Annexure 1, Karnataka Profile). Around 61.33% of the population reside in rural areas, while the rest constitute the urban population.

At present, 80 cities^c are covered under National Urban Health Mission, with a catchment of around 44.76 lakh urban population.

The total length of roads^d in Karnataka is 3,61,041 km (7.22%^e), in which, the length

Figure 1: Top 5 ST & SC Dominant Districts



^a Including all States & UTs

^b Census 2011

^c QPR NHM MIS Report as on 31 Dec 2020

^d Basic Road Statistics 2019, MoRTH

^e Percentage of total length of roads in Karnataka

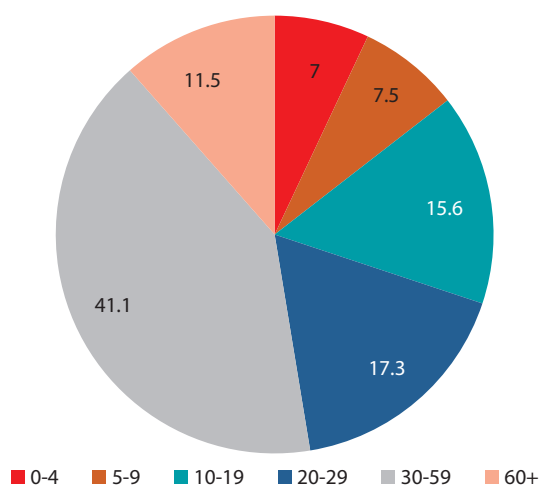
of the national highways is 6,762 km (5.9%^f) and state highways is 19,556 km (11.17%^g). About 45.6% of the main worker population are self-employed in the State, followed by casual laborers and wage earners (27.2%)^h.

A detail report on the key indicators has been attached as Annexure 1.

1.2 Demography

Out of the 30 districts, 3 districts have a population of 30 lakhs and above, 5 districts have a population between 20-30 lakhs, 20 districts have a population between 10-20 lakhs, and 2 districts have a population less than 10 lakhs (Annexure 1.1 Karnataka profile). Karnataka's Sex ratio at birth (924 females for every 1000 males) is higher than the national average of 899 (Annexure 1.2). It is estimated that 15.6% of the total population are in the age group of 10-19 years, 58.4% within 20 to 59 years; while 11.5% are 60 years and aboveⁱ (Figure 2). The crude birth rate and the crude death rate have declined from 20.6 & 7.1 in 2005 to 16.9 & 6.2 in 2019, respectively (Annexure 2; figure2). The literacy rate increased from 66.6% in 2001 to 75.4% in 2011, with male & female literacy rates being 82.5% and 68.1%, respectively (Annexure 1.1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)ⁱ is 26.1% for higher education, 39.86% for senior secondary education, 83.22% for secondary education, 99.38% for elementary education, and 102.98% for primary education.

Figure2: Karnataka - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 11.5% of the Karnataka's total population. The life expectancy at 60 years of age is 16.6 and 18.1 for males and females, respectively (2014-2018). In Karnataka, 59% of elderly females and 22% elderly males living in rural areas are economically fully dependent on others. Whereas in urban areas, 71% of elderly females and 24% elderly males are economically fully dependent on others. The old age dependency ratio is 14.8 in 2011; which is 13.8 for males and 15.8 for females; 16.7 in rural & 12.0 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 33% for men and 29% for women. The latter is less and the former is more than the national average of 31% for both men and women (Elderly in India 2016 report).

^f Percentage of total length of National Highways in the country

^g Percentage of total length of State Highways in the country

^h Directorate of Economics and Statistics; <https://mahades.maharashtra.gov.in/esm.do?type=R>

ⁱ Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

Karnataka has been able to provide RMNCHA+N^j services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^k, institutional deliveries, C sections, distribution of IFA^l tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined from 178 (SRS MMR Bulletin 2007-09) to 92 (SRS MMR Bulletin 2016-18) per 1,00,000 live births. In Karnataka, 97.2% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 (Annexure 3), Bangalore rural, Chikkaballapura, Kolar, Mandya and Ramanagara districts reported good ANC coverage ranging between 88.7% - 90.9%; and Bellary, Bidar, Bijapur, Gulbarga and Koppal districts reported poor ANC coverage ranging between 50.7% - 56.4%. As reported in HMIS 2019-20, around 99.9% of the deliveries took place in institutions, out of which 61.2% took place in public health facilities. Total percentage of C-sections (32.2%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 41.7% is conducted at private facilities in Karnataka. Around 90.5% of women are tracked for their first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years increased from 44.8% (NFHS-4) to 47.8% (NFHS-5). Anaemia in females of reproductive age group is more than twice than in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, Karnataka has shown a significant decline in IMR from 50 (2005) to 21 (2019), which is lower than the national average of 30 (Annexure 2, Figure 1). Similarly, NNMR^m and Still Birth (per 1,000 live births) rates have also significantly decreased from 28.3 and 13 (2005) to 16 and 5 (2018) respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 67.2 (2006-10) to 69.4 (2014-18), which is on par with the national average of 69.4 years (Annexure 2, Figure 3). As per NFHS 5, the low SRBsⁿ ranging between 724-849 are reported in Chikmagalur, Davanagere, Haveri, Ramanagara and Uttara Kannada districts, while the high SRBs ones, ranging between 1123-1190 are reported in Bangalore, Bangalore rural, Kodagu, Mysore and Tumkur districts.

Full vaccination^o coverage for children between 12 – 23 months of age has improved from 72.7% (NFHS 4) to 88.3% (NFHS 5). The percentage of under 6-months children exclusively breastfed has also increased from 54.2% (NFHS 4) to 61.0% (NFHS 5). An increase in childhood anaemia from 60.9% (NFHS 4) to 65.5% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 5). As per NFHS 5 report, Dakshina Kannada, Hassan, Mandya, Ramanagara, and Udupi districts reported low burden of

^j Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^k Antenatal Check up

^l Iron Folic Acid Tablets

^m Neonatal Mortality Rate

ⁿ Sex Ratio at Birth

^o NFHS 5 Karnataka Factsheet, based on information from vaccination card only

stunting which ranged from 15.6% to 27.1% and Bagalkot, Bijapur, Dharwad, Gadag and Koppal districts reported considerably high burden which ranged from 45.2% to 56.7%. For under-5 wasting –Bijapur, Hassan, Kolar, Mandya, and Tumkur districts reported a low burden, which ranged from 10.9% to 15.5%; and Belgaum, Chikmagalur, Dakshina Kannada, Gulbarga, Raichur and Shimoga districts reported a high burden which ranged from 23.2% to 30.5%.

2.3 Family Planning

The TFR^p has reduced from 2.2 in 2005 to 1.7 in 2018 (Annexure 2, Figure 4). As per the NFHS 5 report, the total unmet need in Karnataka is reported as 6.5%, while the unmet need for spacing is 3.8% (NFHS 5). Gulbarga district reported the highest total unmet need of 12.6% while Chamarajanagar reported the lowest (3.4%). Approximately 68.2% of married women reported to avail any modern method of family planning in the State (NFHS 5); with sterilization acceptance among females being 57.4% and nil among males.

2.4 Communicable Diseases

Karnataka has 30 districts having functional IDSP units^q. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 20.95% of total disease burden (Annexure 1.4). Neonatal preterm birth, diarrheal diseases, intracerebral hemorrhage and drug susceptible TB are the leading causes of deaths due to CMNND in Karnataka (Annexure 2, Figure 6^r). As per QPR report, for TB, the annual total case notification rate is 131% and NSP^s success rate is 163% as opposed to the national averages of 163% and 79%, respectively. For NLEP^t, the reported prevalence rate of 0.3 per 10,000 population is less than the national average of 0.61. In FY 2019-20, 13 deaths due to Dengue, and none due to Malaria, and Kala Azar are reported in Karnataka.

2.5 Non-Communicable Diseases (NCDs) & Injuries

It is reported that as high as 65.9% deaths are premature in the State, while disability or morbidity accounts for 34.1%. Ischaemic heart diseases, COPD, Self-harm means, & Diabetes Mellitus Type 2 are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 65.42% of DALYs, whereas, injuries contribute to 13.63% of DALYs in the State. Karnataka is positioned 4th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). As per NFHS 5 data, it is reported that 8.5% of women and 27.1% of men used any kind of tobacco, while 0.9% of women and 16.5% of men consumed alcohol. Overall, high systolic blood pressure, high fasting blood sugar, smoking, high body mass index and ambient particulate matter pollution are the top five major risk factors for all DALYs (Annexure 2, figure 7).

2.6 Health Care Financing

Karnataka's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 14,09,126 crores. The State is positioned 7th out of 32 states in terms of per capita of ₹ 2,12,477. According to NHA 2017-18, the per

^p Total Fertility Rate

^q QPR NHM MIS Report, status as on 01.03.2020

^r <https://vizhub.healthdata.org/gbd-compare/india>

^s New Smear Positive

^t National Leprosy Eradication Programme

capita Government Health Expenditure in the Karnataka is ₹ 1,476 which is below the national average of ₹ 1,753. On the other hand, the OOPE^u as a share of Total Health Expenditure is 34.2%, which is less than the national average of 48.8%. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 4,719 in public facilities, ₹ 18,120 in private facilities; whereas for urban areas, it is around ₹ 5,451 in public facilities and ₹ 27,560 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 3,588 in public facilities & ₹ 19,977 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 3,944 in public facilities and ₹ 26,260 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated as 49% in rural and 51% in urban areas; whereas for diagnostics, it is 18% in rural and 20% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Except for CHCs, there is no shortfall in the required SCs, & PHCs (Annexure 2, Figure 9). Currently, there are 9188 SCs, 2176 PHCs, and 189 CHCs in place, against the required 8024 SCs, 1318 PHCs and 329 CHCs in rural areas. In urban settings, there are 358 PHCs in place against the required 575, amounting to a shortfall of 38%. The State has 26 DHs, 150 SDHs and 19 government medical colleges. In tribal catchments, there are 291 SCs, 65 PHCs and 7 CHCs in place, against the required 1153 SCs, 173 PHCs and 43 CHCs. This accounts to a shortfall of 74.76% of the required SCs, 62.43% of the required PHCs and 83.72% of the required CHCs in the tribal areas. There are 26 DHs, 150 SDHs and 19 government medical colleges in the state.

Under Government of India flagship program of Ayushman Bharat, a total of 5,829 (3,298 SHCs, 2,166 PHCs & 365 UPHCs) primary care facilities have been upgraded and are currently operational as Health & Wellness Centres (HWCs) to deliver Comprehensive Primary Health Care (as on 22nd Dec 2021, Annexure 1.3).

In Karnataka, 62 MMUs under the NRHM and 3 under the NUHM districts are functional. Karnataka has 98% of required ASHAs in position under the NRHM and 90% under the NUHM. The doctor to staff nurse ratio in place is 1:2, with 4 public health providers (MO, specialists, staff nurse & ANM) per 10,000 populations (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 1734.5 availed (events) OPD services and 124.3 availed (events) IPD services. As per the NSSO data (2017-18), 29% of all OPD cases in rural areas and 14% in urban areas; and 32% of all IPD cases in rural areas & 17% in urban areas utilized public health facilities. The public health facility utilization in Karnataka is below the national averages for both (Annexure 1.6).

^u Out of Pocket Expenditure

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^v

Indicator	Karnataka 2011 ¹	India
Total Population (In Crore)	6.1	121.08
Rural (%)	61.33	68.85
Urban (%)	38.67	31.14
Scheduled Caste population (SC) (in crore)	1.04 (17.15)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.42 (6.95%)	10.45 (8.63%)
Total Literacy Rate (%)	75.4	72.99
Male Literacy Rate (%)	82.5	80.89
Female Literacy Rate (%)	68.1	64.64
Number of Districts in the Karnataka ²	30	
Number of districts per lakh population in Karnataka (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	2
	≥ 10 Lakhs - <20 Lakhs	20
	≥20 Lakhs - <30 lakhs	5
	≥30 Lakhs	3

ST SC Dominant (Top 5) Districts of Karnataka¹

ST Dominant Districts (%)	SC Dominant Districts (%)
Raichur - 19.03%	Kollar - 30.32%
Bellary - 18.40%	Chamarajanagar - 25.41%
Chitradurga - 18.23%	Gulbarga - 25.28%
Bidar - 13.84%	Chikkaballapura - 24.90%
Yadgir - 12.50%	Bidar - 23.47%
Top 5 ST dominant district accounts for - 35.39%	Top 5 SC dominant district accounts for - 19.92%

1.2 Key Health Status & Impact Indicators^w

Indicators	Karnataka	India
Infant Mortality Rate (IMR) ³	21	30
Crude Death Rate (CDR) ³	6.2	6

^v Sources are mentioned at the end of Annexure 1

^w Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	16.9	19.7
Maternal Mortality Ratio (MMR) ³	92	113
Neo Natal Mortality Rate (NNMR) ⁴	16	23
Under Five Mortality Rate (U5MR) ⁴	28	36
Still Birth Rate ⁴	5	4
Total Fertility Rate (TFR) ⁴	1.7	2.2
Life expectancy at birth ⁵	69.4	69.4
Sex Ratio at Birth ⁴	924	899

1.3 Key Health Infrastructure Indicators^x

Indicators	Numbers (Total)			
Number of District Hospitals ²	26			
Number of Sub District Hospital ²	150			
Number of Government (Central + State) Medical College ⁶	19			
Number of Private (Society + Trust) Medical Colleges ⁶	41			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	3298	1886	4534	6299
PHC-HWC	2166	2359	2359	2359
UPHC-HWC	365	364	364	364
Total-HWC	5829	4609	7257	9022
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	329	189	42.55	
Number of Primary Health Centres (PHC)	1,318	2,176	-65.10	
Number of Sub Centres (SC)	8,024	9,188	-14.51	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	15	136	22	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	574	358	37.63	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	43	7	83.72	
Number of PHC	173	65	62.43	
Number of SC	1,153	291	74.76	

^x Sources are mentioned at the end of Annexure 1

Patient Service⁹	Karnataka	India
IPD per 1000 population	124.3	62.6
OPD per 1000 population	1734.5	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	75.7	36.4

1.4 Major Health Indicator^y

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Karnataka	India
% DALY ^z accountable for CMNNDs ^{aa}	20.95	27.46
% DALY accountable for NCDs	65.42	61.43
% DALY accountable for Injuries	13.63	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Karnataka	India
Level of Birth Registration (%)	92.3	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	30.4	20.7
RMNCHA+N		
Maternal Health⁹	Karnataka	India
% 1st Trimester registration to Total ANC Registrations	78.8	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	97.2	79.4
Total Reported Deliveries	9,00,933	21410780
% Institutional deliveries to Total Reported Deliveries	99.9	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	61.2	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	38.8	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	32.2	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	26.2	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	41.7	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	90.5	53.4
Neonatal⁹	Karnataka	India
% live birth to Reported Birth	99	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	10.8	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	92.3	89.9

^y Sources are mentioned at the end of Annexure 1

^z Disability Adjusted Life Years

^{aa} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Karnataka	India
Sick New Born Care Unit (SNCU)	42	895
New Born Stabilization Unit (NBSU)	165	2418
New Born Care Corner (NBCC)	1070	20337
Child Health & Nutrition¹⁰	Karnataka (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	5.3	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	71.3	60.6
Children under 5 years who are underweight (weight-for-age) (%)	32.9	32.1
Child Immunization¹⁰	Karnataka (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	88.3	83.8
Children age 12-23 months who have received BCG (%)	97.2	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	91.2	87.9
Family Planning¹⁰	Karnataka (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	3.8	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Karnataka	India
Number of districts with functional IDSP unit	30	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Karnataka	India
Annualized total case notification rate (%)	131	163
New Smear Positive (NSP) Success rate (in %)	79	79
National Leprosy Eradication Programme (NLEP)¹¹	Karnataka	India
Prevalence Rate/10,000 population	0.3	0.61
Number of new cases detected	2,728	114,359
Malaria, Kala Azar, Dengue¹¹	Karnataka	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	13	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Karnataka (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	24.5	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	26.6	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Karnataka (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	14.8	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	17.2	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	5.7	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	6.6	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Karnataka (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	8.5	8.9
Men who use any kind of tobacco (%)	27.1	38
Women who consume alcohol (%)	0.9	1.3
Men who consume alcohol (%)	16.5	18.8
Injuries		
Road Traffic Accident¹²	Karnataka	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	4	N/A
Total number of fatal Road Accidents	10,060	137,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	27	33.7
Number of persons killed in Road Accidents	10,958	115113

1.5 Access to Care^{bb}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Karnataka	India
Number of Districts equipped with MMU under NRHM	62	506
Number of Districts equipped with MMU/Health Units under NUHM	3	31
Number of ERS vehicles operational in the States/UTs Under NHM	Karnataka	India
102 Type	0	9955
104 Type	0	605
108 Type	711	10993
Others	200	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	812	11070

^{bb} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Karnataka	India
Total number of ASHA targeted under NRHM	39195	946563
Total number of ASHA in position under NRHM	38427	904211
% of ASHA in position under NRHM	98.04	96
Total number of ASHA targeted under NUHM	3329	75597
Total number of ASHA in position under NUHM	3007	64272
% of ASHA in position under NUHM	90.33	85
Community Process¹¹	Karnataka	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	26087	554847
Number of Mahila Arogya Samitis (MAS) formed	3833	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Karnataka	India
DH	35	796
CHC	208	6036
PHC	2538	20273
UHC	9	126
UPHC	365	3229
Human Resource for Health ¹⁴		
HRH Governance	Karnataka	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	38
	Dentists (%)	22
	MO MBBS (%)	10
	Nurse (%)	11
	LT (%)	13
	ANM (%)	30
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:2	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	5 per 10,000	5 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	3:1	5:1

Ranking: Human Resource Index of Karnataka¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{cc}	23450	13454	10045	3409	13405	53.26
Staff Nurse	31127	15146	12785	2361	18342	
Lab Technician	6022	4245	3530	715	2492	
Pharmacists	4128	3887	2783	1104	1345	
MO MBBS ^{dd}	6497	3969	3281	688	3216	
Specialist ^{ee}	5091	4305	2971	1334	2120	

1.6 Healthcare Financing^{ff}

National Health Accounts (NHA) (2017-18)	Karnataka		India	
Per Capita Government Health Expenditure (in ₹)	1,476		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	0.7		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	5.5		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	34.2		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Karnataka		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	29	14	33	26
IPD - % of hospitalized cases using public facility	32	17	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	524	451	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	732	815	845	915
IPD - Per hospitalized case (in INR) - Public	4,719	5,451	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	18,120	27,560	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	18	20	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	49	51	53	43

^{cc} MPW – Multi Purpose Health Worker (Female + Male)

^{dd} MO MBBS (Full Time)

^{ee} Specialist (All Specialist)

^{ff} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	3,588	3,944	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	19,977	26,260	20,692	26,701
State Health Expenditure	Karnataka		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	4.4		5 ⁹⁹	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

⁹⁹ Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

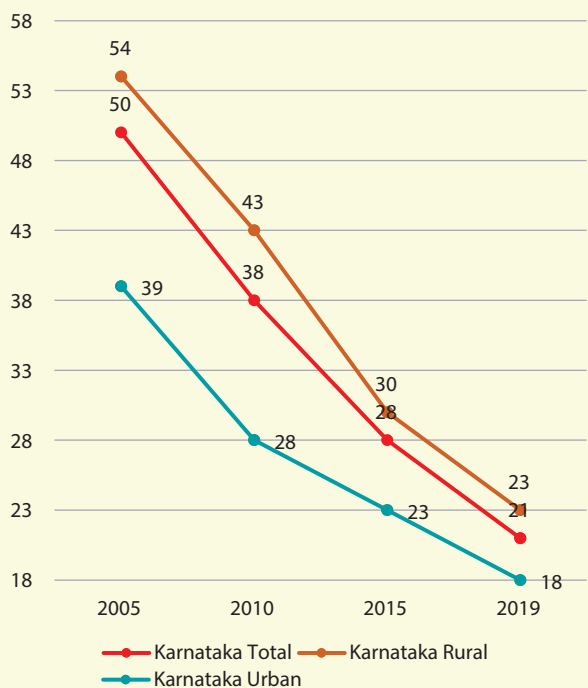


Figure 2: CBR & CDR Trend

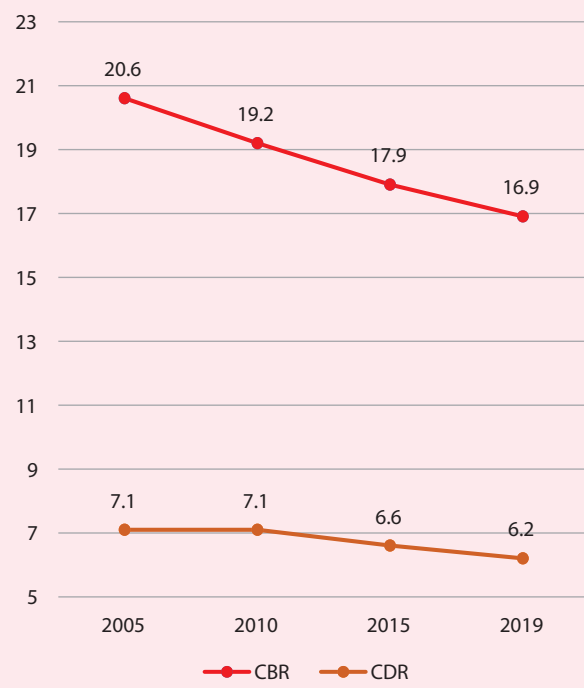


Figure 3: Life Expectancy At Birth Trend

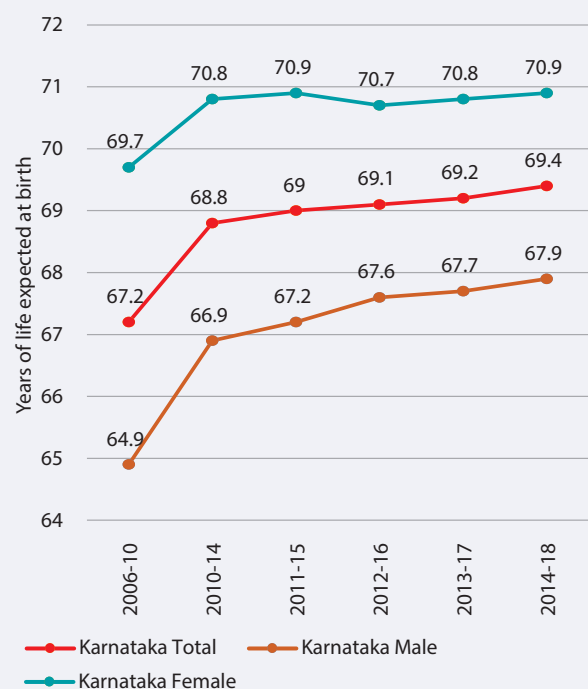


Figure 4: NNMR, TFR & Still Birth Trend

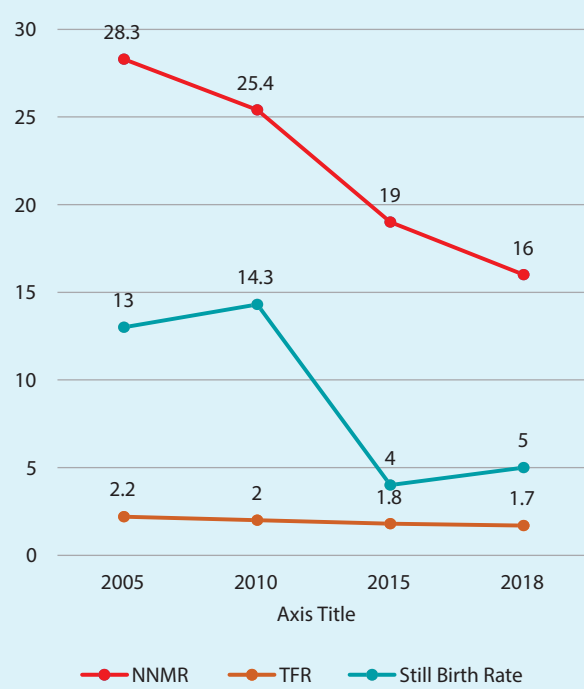


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

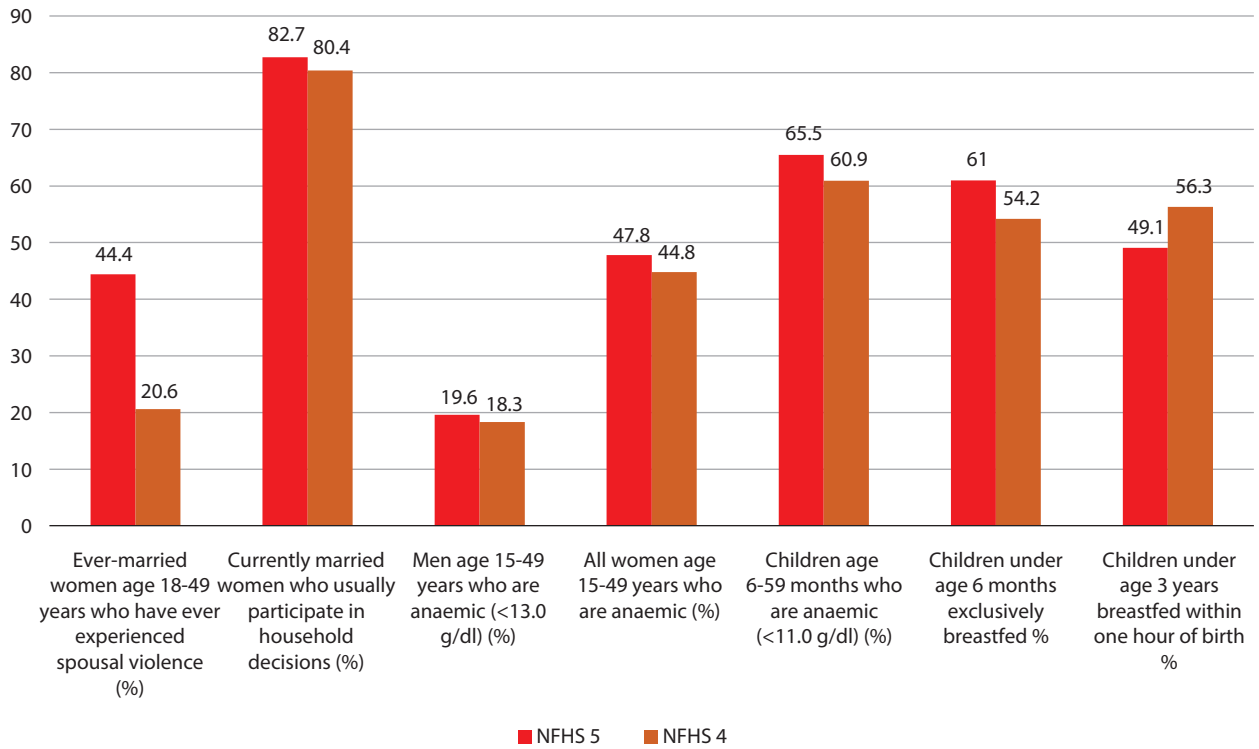


Figure 6: Top 15 causes of DALYs, 1990-2019

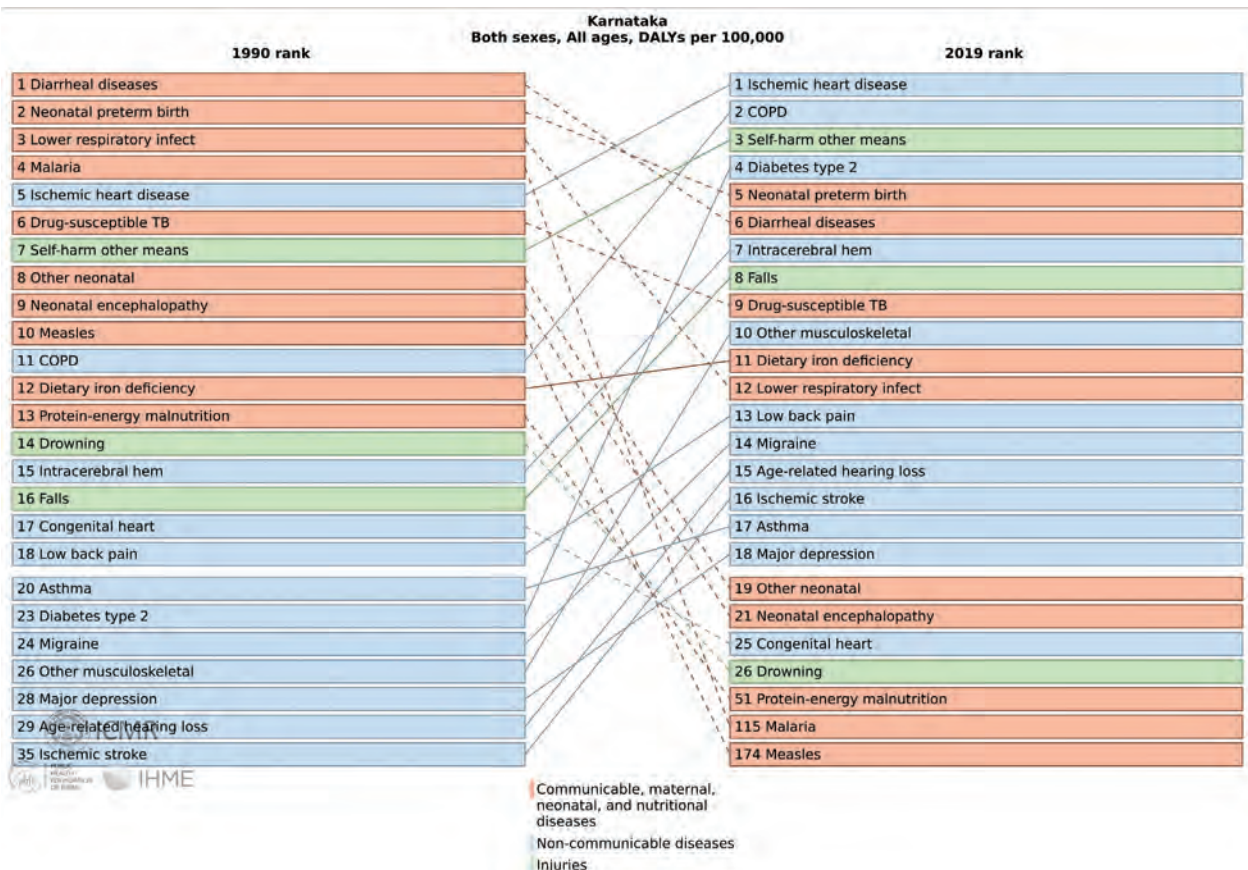


Figure 7: Top 15 risk of DALYs, 1990-2019

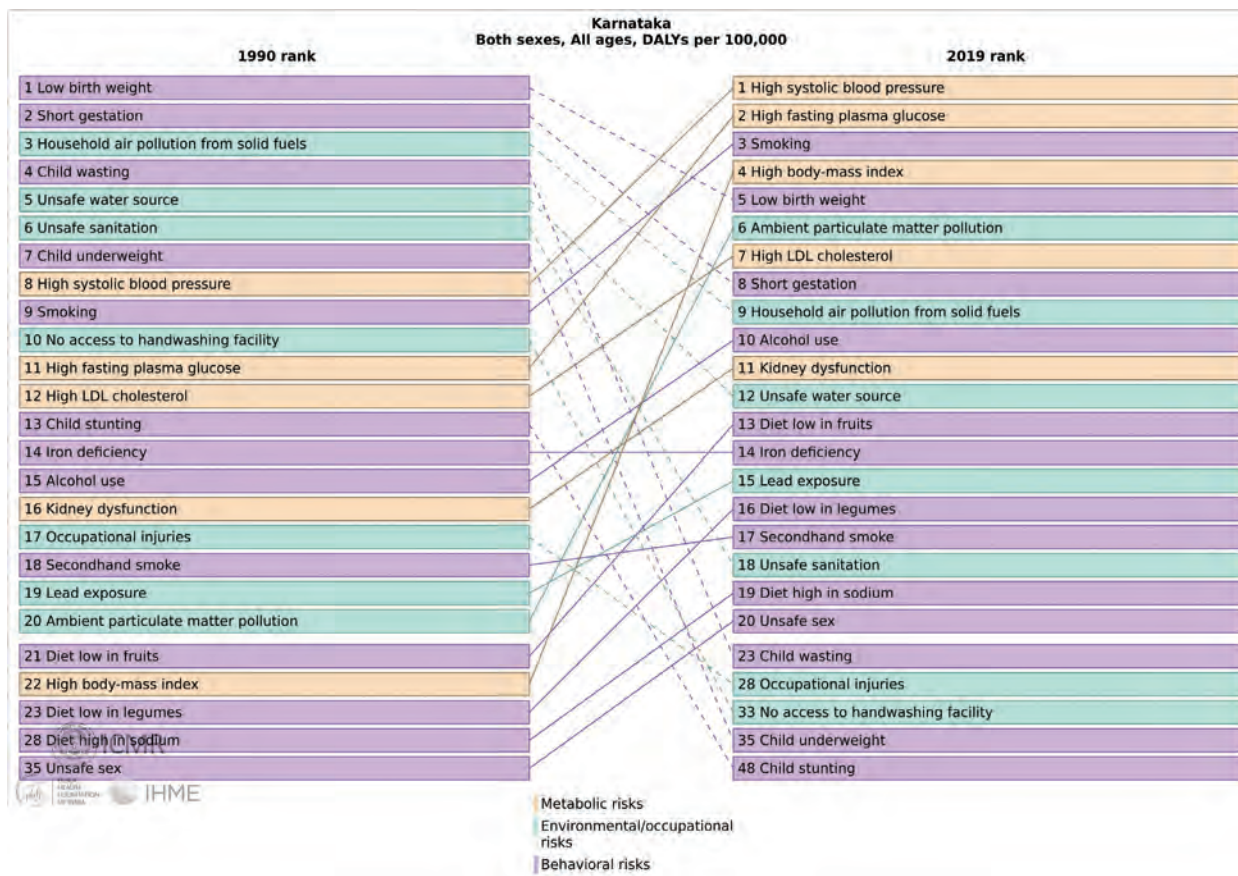


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

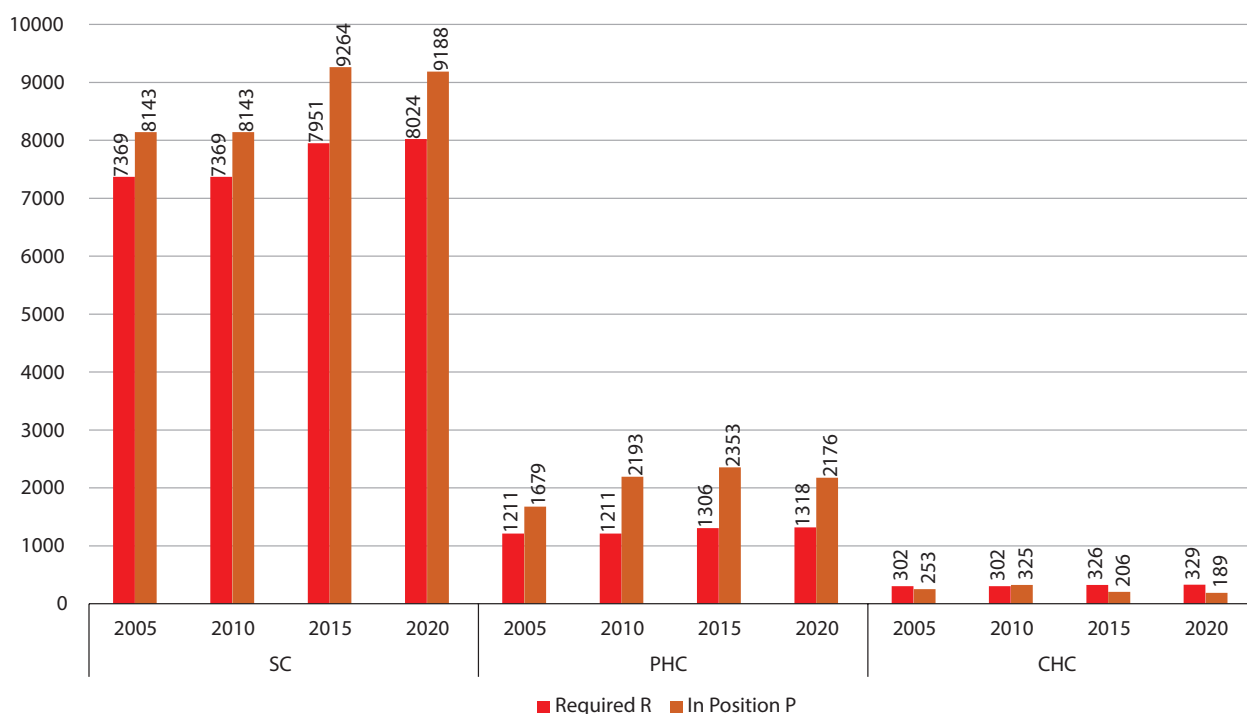


Figure 9: Year Wise Health Infrastructure Shortfall (%)

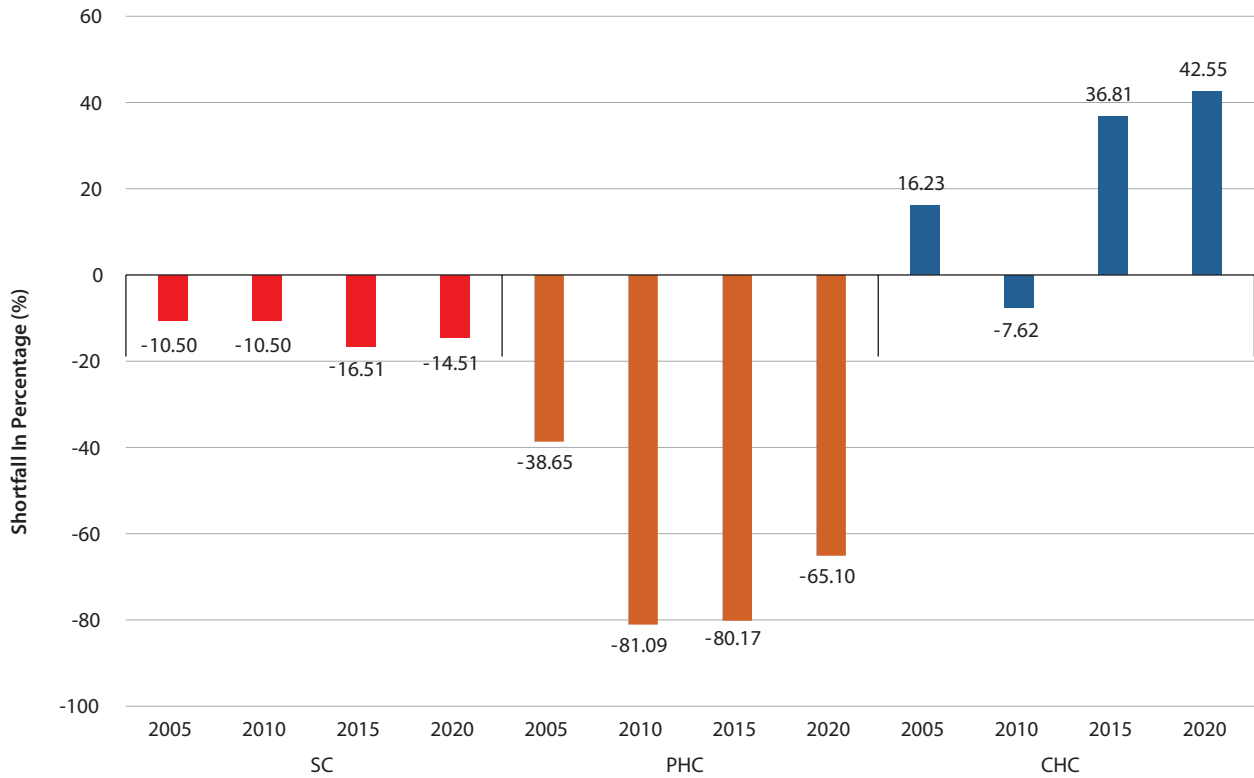
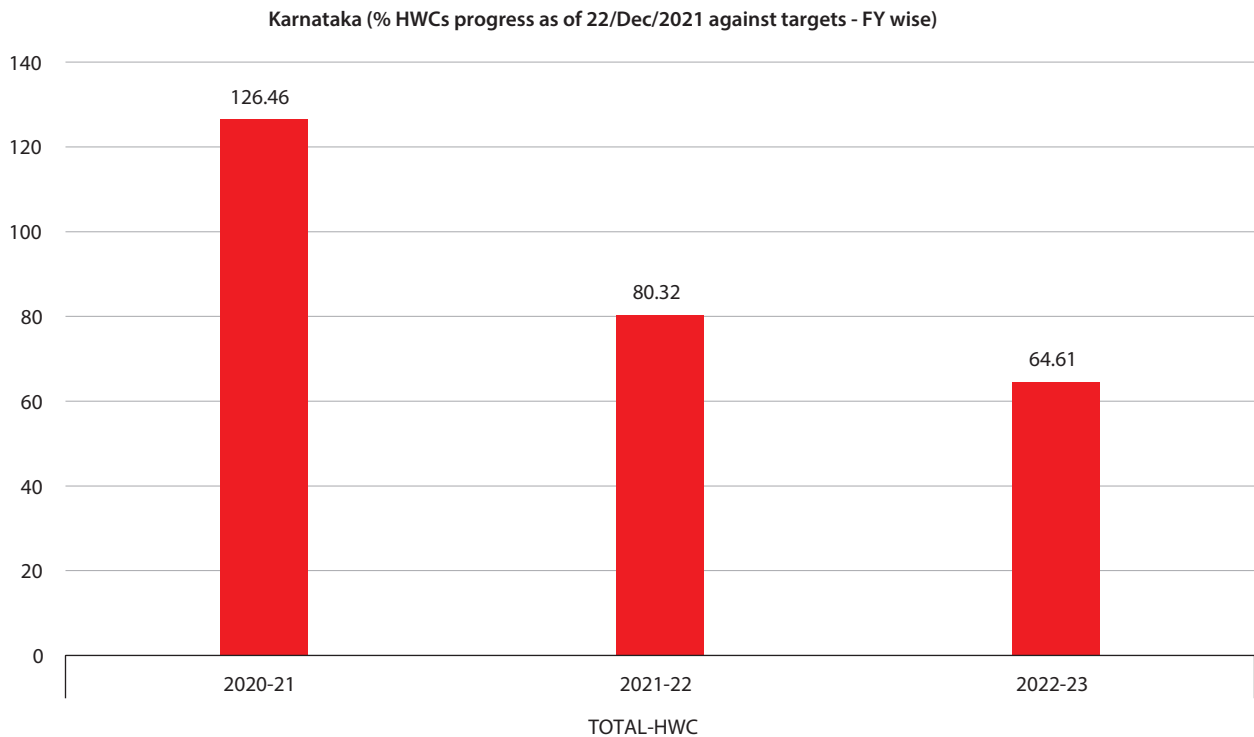


Figure 10: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)																
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted√ (Height For Age) (%)	Children Under 5 Years - Wasted√ (Weight For Height) (%)			
1	Karnataka	NFHS 4 Total	910	28.1	N/A	21.4	51.8	0.8	1.3	10.4	70.1	94	72.7	8.2	36.2	26.1			
2	Karnataka	NFHS 5 Urban	1063	28.2	85.1	16.1	69.6	3.4	6	7.3	71.2	98.3	88.3	11.4	32.2	18.5			
3	Karnataka	NFHS 5 Rural	931	28	71	24.7	68.2	2.5	2.9	5.9	70.6	96.2	88.3	13.7	37.2	20.1			
4	Karnataka	NFHS 5 Total	978	28.1	76.7	21.3	68.7	2.9	4.1	6.5	70.9	97	88.3	12.8	35.4	19.5			
5	Bagalkot	NFHS 5 Total	879	22.3	69.7	38.7	65.3	2.2	1.2	5.8	76.2	95.2	79.5	6.1	48.3	16.9			
6	Bangalore	NFHS 5 Total	1163	28.8	87.3	14.5	73.2	3.4	9.1	4.7	74.6	99.3	88.4	7.4	31.3	19.2			
7	Bangalore Rural	NFHS 5 Total	1177	34.9	83.8	14.1	77.5	3.2	3.5	5.9	90.9	100	92.5	17.6	36.6	16.2			
8	Belgaum	NFHS 5 Total	892	20.7	74	32.8	70.8	1.9	1.9	5.5	63.7	97.5	86.5	8.8	32.8	23.6			
9	Bellary	NFHS 5 Total	1072	25.7	64.4	22.2	62.7	1.7	2.6	5.6	56.4	95.7	79.2	9.7	36.1	22.9			
10	Bidar	NFHS 5 Total	898	21.4	73.8	19.2	69.1	2	5.4	8.1	55.3	99	77.7	13.8	36.8	22.1			
11	Bijapur	NFHS 5 Total	885	21.2	66.6	39.2	63.1	1.3	2.5	7	56.4	91.8	73.2	14.6	45.9	15			
12	Chamarajanagar	NFHS 5 Total	953	34.4	72.4	19.3	79.8	2.9	4.5	3.4	84.1	100	90.8	17.8	32.2	18			
13	Chikkaballapura	NFHS 5 Total	1110	26.1	76.3	27.1	77.8	3.4	1.8	3.8	90.5	99	79.5	18.1	31.3	16.1			
14	Chikmagalur	NFHS 5 Total	849	30	82.9	19.5	79.7	5.3	6.1	3.8	74.3	98.4	93.4	15.4	27.3	24.9			
15	Chitradurga	NFHS 5 Total	1050	35.3	75.6	20.7	72.8	3.7	4.3	5	79.3	98.3	97.2	27.2	36	17.9			
16	Dakshina Kannada	NFHS 5 Total	1038	36.3	92.7	4.9	61.9	3	7.5	9.5	82	100	93.9	5.3	25.1	30.5			
17	Davanagere	NFHS 5 Total	797	25.2	76	19.1	47.1	1.5	2.3	11.5	63.1	98.3	83.5	16.8	38.4	18.8			

18	Dhanwad	NFHS 5 Total	1110	24.5	81.8	17.8	67.1	2.1	1.8	6.3	85.2	99.7	93.6	15.3	45.2	16.5
19	Gadag	NFHS 5 Total	911	28.3	70.7	27.7	58.3	2.5	2.7	7	68.7	96.2	81.4	9.5	45.2	18.2
20	Gulbarga	NFHS 5 Total	976	17.4	68.2	29.8	53	0.7	5.4	12.6	53.6	88.7	86.3	15.4	34.5	25
21	Hassan	NFHS 5 Total	872	36.9	82	16.2	78.1	6.3	3.3	5.2	75.8	100	94.3	29.1	27.1	15.2
22	Haveri	NFHS 5 Total	805	28.8	71.5	16.5	44.6	0.7	1	8.4	58.7	97.2	93.4	7.4	29.9	17.7
23	Kodagu	NFHS 5 Total	1190	45.6	88.5	12.8	73	6.3	5.6	5.6	74.4	98.4	96.5	9.1	30.4	21.7
24	Kolar	NFHS 5 Total	919	33.9	78.3	26.7	72.7	4.2	0.8	5.1	90.9	99.6	86.3	21.7	31.1	15.5
25	Koppal	NFHS 5 Total	952	20.6	59.8	27.1	63.4	1.9	1.2	9.7	50.7	90.7	93.4	12.2	49.1	23.1
26	Mandya	NFHS 5 Total	1041	39.9	78.3	13.1	80	3.6	3.6	3.8	90.1	99.5	96.9	12.4	24.3	11.8
27	Mysore	NFHS 5 Total	1123	26.2	78.9	17.5	79.5	2.4	4.2	5.6	85.7	100	92.6	13.4	27.5	15.6
28	Raichur	NFHS 5 Total	907	17.8	54.3	21.9	50.1	0.7	1.8	10	67.5	88.9	89.6	13	39.8	23.2
29	Ramanagara	NFHS 5 Total	781	35.7	82.7	11.8	78.1	2.8	2.4	5.1	88.7	100	92.6	16.6	15.6	20
30	Shimoga	NFHS 5 Total	1111	26.5	79.8	11.1	76.4	3.4	2.4	5.3	79.4	99.7	97.9	18.5	29	23.2
31	Tumkur	NFHS 5 Total	1133	31	81.9	24.8	77	5.1	4.4	5.3	80.4	100	93.5	15.5	40.3	10.9
32	Udupi	NFHS 5 Total	1093	50.9	90.3	4.4	72	6.4	8.9	7.1	59.4	98.9	87.8	10.3	23.1	17.6
33	Uttara Kannada	NFHS 5 Total	724	32	84.3	11.6	69.3	4.8	2.8	7.4	57.9	99.3	96.8	14.7	29.6	21.9
34	Yadgir	NFHS 5 Total	922	16.7	48.1	33.2	64	1.7	1.1	7.5	63.6	93.3	84.6	13.4	57.6	17.7

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'Vaccinated', Out of two indicators with 'either vaccination card or mother's recall & vaccination card only', indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best five performing districts within the districts for a particular indicator

B. Red – Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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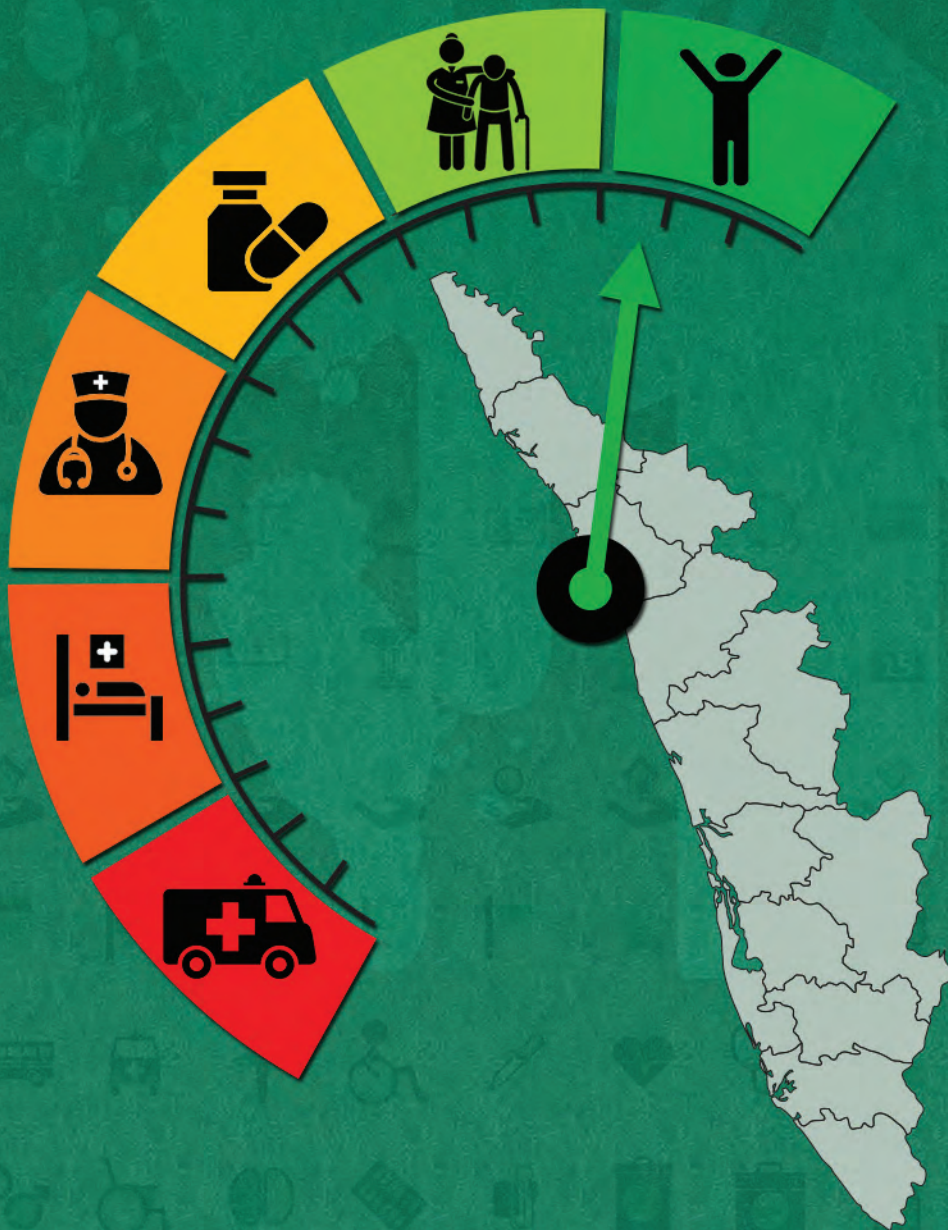
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



KERALA

DISTRICTS VISITED IN
COMMON REVIEW MISSIONS

CRM	Districts Visited	
2 nd	Thiruvananthapuram & Directorate of Health Services etc.	
4 th	Kozhikode	Kottayam
6 th	Malappuram	Alappuzha
8 th	Palakkad	Ernakulum
10 th	Idukki	Kollam

KERALA

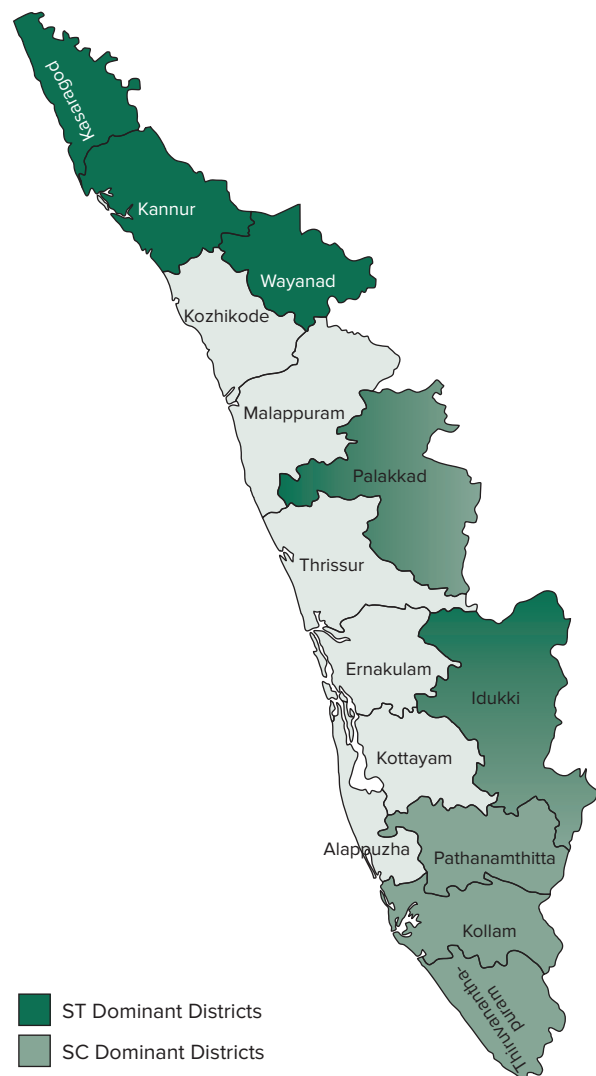
1. BACKGROUND

1.1 State Profile

Kerala is positioned^a 22nd in India for a geographical spread of 38,863 km² (RHS 2019). The State is divided into 14 districts and is estimated to have a population of over 3.34 crores^b, which accounts for approximately 2.75% of India's total population (RHS 2019). It is projected that the population would reach around 3.54 crores by 2021 (Census Population Projection 2019 Report). As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 3.04 crores (9.10%) and 0.5 crores (1.45%), respectively. Out of the 14 districts, top five ST dominant districts account for 71.46% of ST population, and top five SC dominant districts account for 46.55% of SC population in the State (Annexure 1.1; fig 1). In the State, 52.3% of the population reside in rural areas, while 47.70% constitute the urban population.

The total length of roads^c in the State is 2,40,562 km (4.81%^d), in which, the length of the national highways is 1,811 km (1.6%^e) and state highways is 4,342 km (2.48%^f). In terms of agriculture^g, about half of the main worker population workers in the State participate in agricultural activities.

Figure 1: Top 5 ST & SC Dominant Districts



^a Including all States & UTs

^b Census 2011

^c Basic Road Statistics 2019, MoRTH

^d Percentage of total length of roads in Kerala

^e Percentage of total length of National Highways in the country

^f Percentage of total length of State Highways in the country

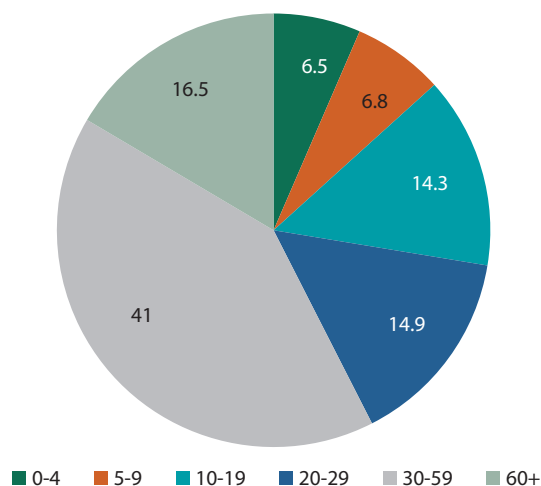
^g <https://indiawris.gov.in/wiki/doku.php?id=kerala>

A detail report on the key indicators has been attached as Annexure 1.

1.2 Demography

Out of the 14 districts, 5 districts have population of 30 lakhs and above, 4 districts have a population between 20-30 lakhs, 4 districts have a population between 10-20 lakhs, and 1 district has a population less than 10 lakhs (Annexure 1.1 State profile). The State's Sex ratio at birth of 957 females for every 1000 males is higher than the national average of 899 (Annexure 1.2). It is estimated that there are 14.3% of the total population in the age group of 10-19 years, 55.9% within 20 to 59 years; while 16.5% are 60 years and above (Figure 2). The crude birth rate and the crude death rate have declined from 15 & 6.4 in 2005 to 13.5 & 7.1 in 2019, respectively (Annexure 2; figure2). The literacy rate increased from 90.9% in 2001 to 94.0% in 2011, with male & female literacy rates being 96.1% and 92.1%, respectively (Annexure 1.1). As per the ESAG 2018 report, the Gross Enrollment Rate (GER)^h is 30.8% for higher education, 77.56% for senior secondary education, 102.44% for secondary education, 95.42% for elementary education, and 95.44% for primary education.

Figure 2: Kerala - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 16.5% of the State's total population. The life expectancy at 60 years of age is 17.9 and 21.9 for males and females, respectively (2014-2018). In Kerala, 61.0% of elderly females and 25.0% elderly males living in rural areas are economically fully dependent on others. Whereas in urban areas, 50.0% of elderly females and 20.0% elderly males are economically fully dependent on others. The old age dependency ratio is 19.6 in 2011; which is 18.6 for males and 20.6 for females, 19.8 in rural & 19.5 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 57% for men and 60% for women, as opposed to the national average of 31% for both (Elderly in India 2016).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+Nⁱ services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^j, institutional deliveries, C sections,

^h Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

ⁱ Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^j Antenatal Check up

distribution of IFA^k tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined from 81 (SRS MMR Bulletin 2007-09) to 43 (SRS MMR Bulletin 2016-18) per 1,00,000 live births. In Kerala, 99.1% of women received 4 ANC check-ups (Annexure 1.4). As per the NFHS 5 report- Kasaragod, Kozhikode, Malappuram, Pathanamthita and Wayanad districts reported high ANC coverage, ranging between 83.9% - 94.2%. Whereas, Alappuzha, Idukki, Kottayam, Palakkad and Thiruvananthapuram districts reported low ANC coverage, ranging between 55.37% - 74.3%. As reported in HMIS 2019-20, around 99.9% of the deliveries took place in institutions, out of which 31.8% took place in public health facilities. Total percentage of C-sections (40.8%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 41.7% is conducted at private facilities in the State. Around 113.7% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anemia in women aged 15-49 years increased from 34.3% (NFHS-4) to 36.3% (NFHS-5). Anemia in females of reproductive age group is almost twice than that in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 14 (2005) to 6 (2019), which is exceptionally lower than the national average of 30 (Annexure 2, Figure 1). Similarly, NNMR^l and Still Birth (per 1,000 live births) rates have also significantly decreased from 10.9 and 8.8 (2005) to 5 and 5 (2018) respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 74.2 (2006-10) to 75.3 (2014-18), which is above the national average of 69.4 years (Annexure 2, Figure 3). As per the NFHS 5, the lowest SRBs^m ranging between 763 - 880 are reported in Thrissur, Malappuram, Idukki, Kottayam and Kannur districts; while the highest ones, ranging between 1003-1485 are reported in Wayanad, Palakkad, Ernakulam, Kollam and Alappuzha districts.

Full vaccinationⁿ coverage for children between 12 – 23 months of age has improved from 88.3% (NFHS 4) to 85.2% (NFHS 5). The proportion of under 6-months children exclusively breastfed has also increased from 53.3% (NFHS 4) to 55.5% (NFHS 5). An increase in childhood anemia from 35.7% to 39.4% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 5). As per the NFHS 5 report, relatively low stunting rates, ranging from 15.5 to 21.3, are reported from Alappuzha, Kannur, Kollam, Kozhikode & Thiruvananthapuram districts. While relatively higher stunting rates, ranging from 24.3 to 31.3, are reported from Idukki, Kasaragod, Malappuram, Palakkad & Wayanad districts. For under-5 wasting – Kannur, Kasaragod, Kottayam, Pathanamthitta & Thrissur districts reported a low burden, which ranged from 8.4% to 14%; while Ernakulam, Kollam, Malappuram, Palakkad & Thiruvananthapuram districts reported a relatively higher burden, which ranged from 17.1% to 21.7%.

^k Iron Folic Acid Tablets

^l Neonatal Mortality Rate

^m Sex Ratio at Birth

ⁿ NFHS 5 Kerala Factsheet, based on information from vaccination card only

2.3 Family Planning

The TFR^o of Kerala is constant (1.7) since 2005 with minor increase in 2010 & 2015 (Annexure 2, Figure 4). As per the NFHS 5 report, the total unmet need in the State is reported as 12.5%, while the unmet need for spacing is 7.0% (NFHS 5). Thiruvananthapuram district reported the highest total unmet need of 19.3%, while Wayanad reported the lowest (5.6%). Approximately 52.8% of married women reported to avail any modern method of family planning in the State (NFHS 5); with sterilization acceptance among females being 46.6% and 0.1% among males.

2.4 Communicable Diseases

The State has 14 functional IDSP units in place^p. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 11.83% of total disease burden (Annexure 1.4). Diarrheal diseases, Neonatal preterm birth, lower respiratory infection & drug susceptible TB are the leading causes of deaths due to CMNND in the State (Annexure 2, Figure 6). As per QPR, for TB, the annualized total case notification rate is 74% and NSP^q success rate is 83% as opposed to the national averages of 163 and 79, respectively. For NLEP^r, the reported prevalence rate of 0.23 per 10,000 population is less than the national average of 0.61. In FY 2019-20, 17 deaths due to Dengue are reported in the State.

2.5 Non-Communicable Diseases (NCDs)

It is reported that as high as 54.8% of all deaths are premature in the State, while disability or morbidity accounts for 45.2%. Ischemic heart disease, COPD, Diabetes type 2, other musculoskeletal are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute^s to 76.92% of DALYs; whereas, injuries contribute to 11.25% of DALYs in the State. The State is positioned 16th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 2.2% of women and 16.9% of men used any kind of tobacco, while 0.2% of women and 19.9% of men consumed alcohol. Overall, metabolic factors (high systolic blood pressure, high fasting plasms glucose, high body mass index, high LDL cholesterol) and behaviour (smoking) are the major risk factors for all DALYs and YLLs (Annexure 2, figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 7,07,542 crores. The State is positioned 9th out of 32 states in terms of per capita^t of ₹ 2,04,105. According to NHA 2017-18, the per capita Government Health Expenditure in the State is ₹ 2,272, which is above the national average of ₹ 1,753. On the other hand, the OOPE^u as a share of Total Health Expenditure was 68.7%, which is also above the national average of 48.8%. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 5,827 in public facilities, ₹ 25,812 in private facilities; whereas for urban areas, it is around ₹ 5,295 in public facilities and ₹ 30,370 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 7,650 in public facilities & ₹ 30,441 in private facilities; whereas in

^o Total Fertility Rate

^p QPR NHM MIS Report (status as on 01.03.2020)

^q New Smear Positive

^r National Leprosy Eradication Programme

^s <https://vizhub.healthdata.org/gbd-compare/india>

^t Directorate of Economics & Statistics

^u Out of Pocket Expenditure

urban areas - OOPE is estimated to be around ₹ 7,552 in public facilities and ₹ 31,096 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated to be 44% in rural and 43% in urban areas; whereas for diagnostics, it is 25% in rural and 27% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Public health facilities have increased over time with no shortfall in public health facilities in rural areas (Annexure 2, Figure 9). Currently, there are 5410 SCs, 784 PHCs and 211 CHCs are in place, against the required 2191 SCs, 363 PHCs and 90 CHCs. Similarly, in urban settings, there are 148 PHCs in place against the required 492, which accounts to a shortfall of 70%. The State has 48 DHs, 86 SDHs and 10 government medical colleges. In the State, 77.08% of DHs (37), and 50% of SDHs (43) serve as functional FRUs. In tribal catchments, there are 272 SCs, 150 PHCs and 35 CHCs in place, against the required 89 SCs, 13 PHCs and 3 CHCs, accounting for an excess of the required SCs, PHCs and CHCs in the tribal areas.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 2451 HWCs (1517 SHCs, 840 PHCs & 94 UPHCs) are operationalized in the State as of 22nd December 2021^v.

In the State, 12 districts are equipped with MMUs under the NRHM, and none under the NUHM. The State has 84% of required ASHAs in position under the NRHM and 100% under the NUHM. The doctor to staff nurse ratio in place is 1:2, with 4 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 101.64 availed (events) IPD services and 3910.05 availed (events) OPD services. As per the NSSO data (2017-18), 52% of all OPD cases in rural areas and 42% in urban areas; and 40% of all IPD cases in rural areas & 36% in urban areas utilized public health facilities. The public health facility utilization in the State is below the national averages for both (Annexure 1.6).

^v AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^w

Indicator	Kerala 2011 ¹	India
Total Population (In Crore)	3.34	121.08
Rural (%)	52.30	68.85
Urban (%)	47.70	31.14
Scheduled Caste population (SC) (in crore)	3.04 (9.10%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.5 (1.45%)	10.45 (8.63%)
Total Literacy Rate (%)	94	72.99
Male Literacy Rate (%)	96.1	80.89
Female Literacy Rate (%)	92.1	64.64
Number of Districts in the Kerala ²	14	
Number of districts per lakh population in Kerala (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	1
	≥ 10 Lakhs - <20 Lakhs	4
	≥20 Lakhs - <30 lakhs	4
	≥30 Lakhs	5
ST SC Dominant (Top 5) Districts of Kerala ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Wayanad - 18.53%	Palakkad - 14.37%	
Idukki - 5.03%	Pathanamthitta - 13.74%	
Palakkad - 1.74%	Idukki - 13.12%	
Kasaragod - 3.74%	Kollam - 12.46%	
Kannur - 1.64%	Thiruvananthapuram - 11.3%	
Top 5 ST dominant district accounts for - 71.46%	Top 5 SC dominant district accounts for - 46.55%	

1.2 Key Health Status & Impact Indicators

Indicators	Kerala	India
Infant Mortality Rate (IMR) ³	6	30
Crude Death Rate (CDR) ³	7.1	6

^w Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	13.5	19.7
Maternal Mortality Ratio (MMR) ³	43	113
Neo Natal Mortality Rate (NNMR) ⁴	5	23
Under Five Mortality Rate (U5MR) ⁴	10	36
Still Birth Rate ⁴	5	4
Total Fertility Rate (TFR) ⁴	1.7	2.2
Life expectancy at birth ⁵	75.3	69.4
Sex Ratio at Birth ⁴	957	899

1.3 Key Health Infrastructure Indicators^x

Indicators	Numbers (Total)			
Number of District Hospitals ²	48			
Number of Sub District Hospital ²	86			
Number of Government (Central + State) Medical College ⁶	10			
Number of Private (Society + Trust) Medical Colleges ⁶	21			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	1517	1636	3111	4094
PHC-HWC	840	849	849	849
UPHC-HWC	94	83	83	83
Total-HWC	2451	2568	4043	5026
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	90	211	-134.44	
Number of Primary Health Centres (PHC)	363	784	-115.98	
Number of Sub Centres (SC)	2,191	5,410	-146.92	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	37	43	0	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	492	148	69.92	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	3	35	-1066.67	
Number of PHC	13	150	-1053.85	
Number of SC	89	272	-205.62	

^x Sources are mentioned at the end of Annexure 1

Patient Service⁹	Kerala	India
IPD per 1000 population	101.64	62.6
OPD per 1000 population	3910.05	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	95.43	36.4

1.4 Major Health Indicator^y

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Kerala	India
% DALY ^z accountable for CMNNDs ^{aa}	11.83	27.46
% DALY accountable for NCDs	76.92	61.43
% DALY accountable for Injuries	11.25	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Kerala	India
Level of Birth Registration (%)	98.2	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	11.6	20.7
RMNCHA+N		
Maternal Health⁹	Kerala	India
% 1st Trimester registration to Total ANC Registrations	83	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	99.1	79.4
Total Reported Deliveries	4,60,850	21410780
% Institutional deliveries to Total Reported Deliveries	99.9	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	31.8	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	68.2	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	40.8	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	38.9	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	41.7	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	113.7	53.4
Neonatal⁹	Kerala	India
% live birth to Reported Birth	99.6	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	11.3	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	92.4	89.9

^y Sources are mentioned at the end of Annexure 1

^z Disability Adjusted Life Years

^{aa} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Kerala	India
Sick New Born Care Unit (SNCU)	17	895
New Born Stabilization Unit (NBSU)	68	2418
New Born Care Corner (NBCC)	101	20337
Child Health & Nutrition¹⁰	Kerala (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	4.3	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	61.1	60.6
Children under 5 years who are underweight (weight-for-age) (%)	19.7	32.1
Child Immunization¹⁰	Kerala (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	85.2	83.8
Children age 12-23 months who have received BCG (%)	97.6	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	88.3	87.9
Family Planning¹⁰	Kerala (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	7	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Kerala	India
Number of districts with functional IDSP unit	14	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Kerala	India
Annualized total case notification rate (%)	74	163
New Smear Positive (NSP) Success rate (in %)	83	79
National Leprosy Eradication Programme (NLEP)¹¹	Kerala	India
Prevalence Rate/10,000 population	0.23	0.61
Number of new cases detected	675	114,359
Malaria, Kala Azar, Dengue¹¹	Kerala	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	17	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Kerala (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	34.8	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	45.4	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Kerala (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	15.5	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	19.2	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	8.3	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	9.8	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Kerala (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	2.2	8.9
Men who use any kind of tobacco (%)	16.9	38
Women who consume alcohol (%)	0.2	1.3
Men who consume alcohol (%)	19.9	18.8
Injuries		
Road Traffic Accident¹²	Kerala	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	16	N/A
Total number of fatal Road Accidents	4,183	137,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	10.8	33.7
Number of persons killed in Road Accidents	4440	115113

1.5 Access to Care^{bb}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Kerala	India
Number of Districts equipped with MMU under NRHM	12	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Kerala	India
102 Type	0	9955
104 Type	0	605
108 Type	43	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	447	11070

^{bb} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA ¹³	Kerala	India
Total number of ASHA targeted under NRHM	30927	946563
Total number of ASHA in position under NRHM	26057	904211
% of ASHA in position under NRHM	84.25	96
Total number of ASHA targeted under NUHM	1927	75597
Total number of ASHA in position under NUHM	1927	64272
% of ASHA in position under NUHM	100	85
Community Process ¹¹	Kerala	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	19692	554847
Number of Mahila Arogya Samitis (MAS) formed	1048	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total) ¹¹	Kerala	India
DH	53	796
CHC	227	6036
PHC	848	20273
UHC	0	126
UPHC	76	3229
Human Resource for Health ¹⁴		
HRH Governance	Kerala	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	Yes	
HR Integration initiated (Y/N)	Yes	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	79
	Dentists (%)	22
	MO MBBS (%)	23
	Nurse (%)	39
	LT (%)	38
	ANM (%)	7
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	6 per 10,000	4 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	5:1	5:1

Ranking: Human Resource Index of Kerala¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{cc}	12358	6141	5722	419	6636	67.16
Staff Nurse	16805	9125	8579	546	8226	
Lab Technician	3511	1882	1768	114	1743	
Pharmacists	2051	1989	1903	86	148	
MO MBBS ^{dd}	4434	4437	4307	130	127	
Specialist ^{ee}	3808	2347	2219	128	1589	

1.6 Healthcare Financing^{ff}

National Health Accounts (NHA) (2017-18)	Kerala		India	
Per Capita Government Health Expenditure (in ₹)	2,272		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	1.1		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	7.3		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	68.7		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Kerala		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	52	42	33	26
IPD - % of hospitalized cases using public facility	40	36	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	252	367	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	843	743	845	915
IPD - Per hospitalized case (in INR) - Public	5,827	5,295	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	25,812	30,370	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	25	27	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	44	43	53	43

^{cc} MPW – Multi Purpose Health Worker (Female + Male)

^{dd} MO MBBS (Full Time)

^{ee} Specialist (All Specialist)

^{ff} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	7650	7552	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	30441	31096	20,692	26,701
State Health Expenditure	Kerala		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	5.5		5 ⁹⁹	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

⁹⁹ Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

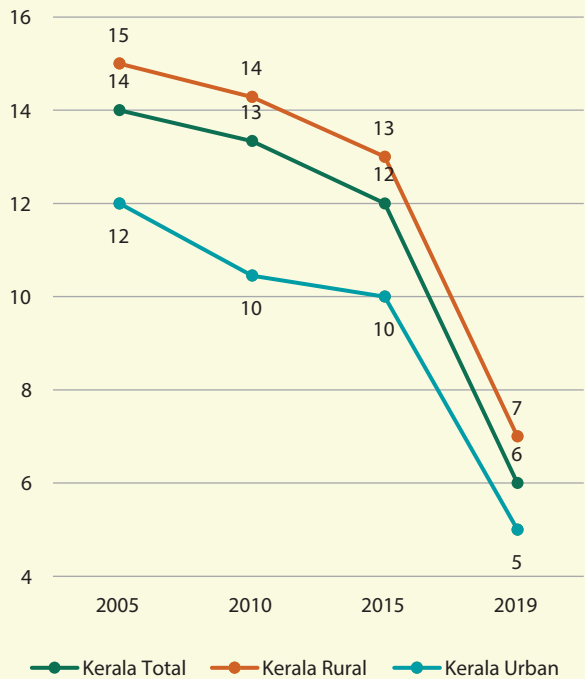


Figure 2: CBR & CDR Trend

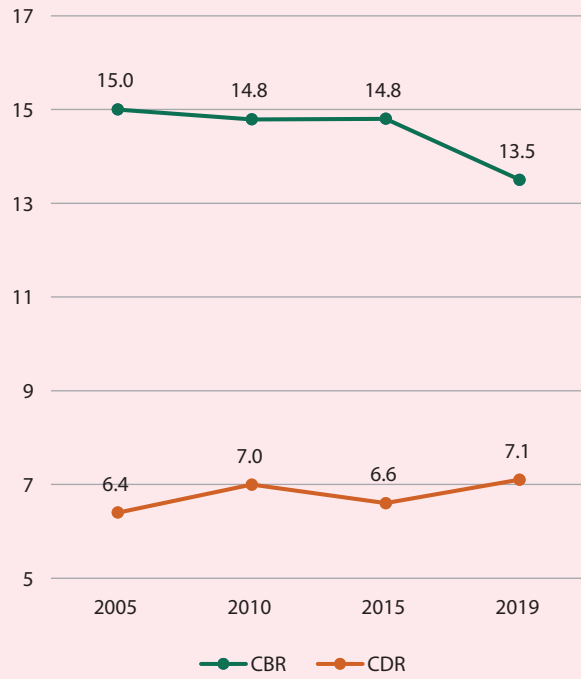


Figure 3: Life Expectancy At Birth Trend

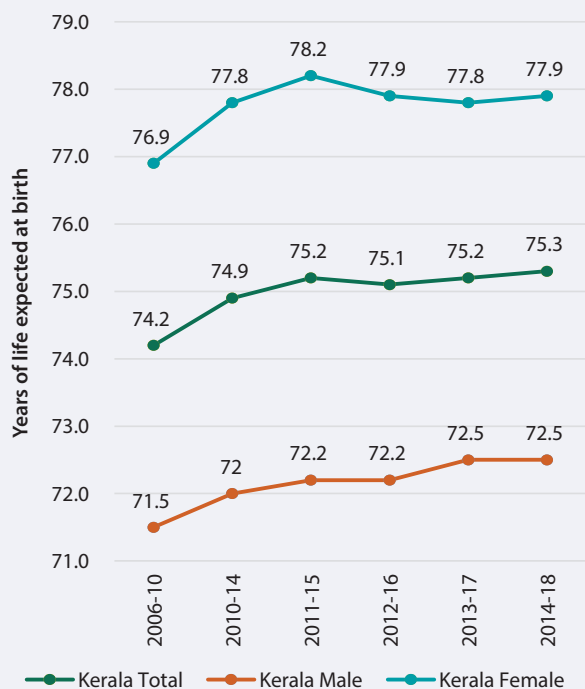


Figure 4: NNMR, TFR & Still Birth Trend

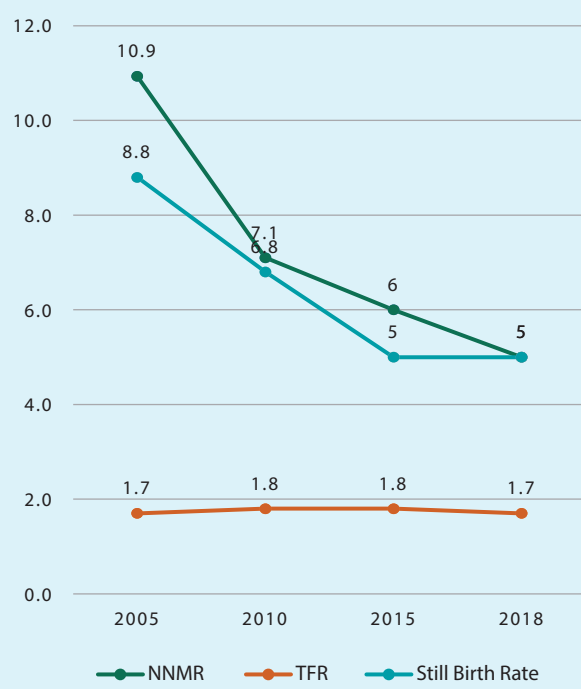


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

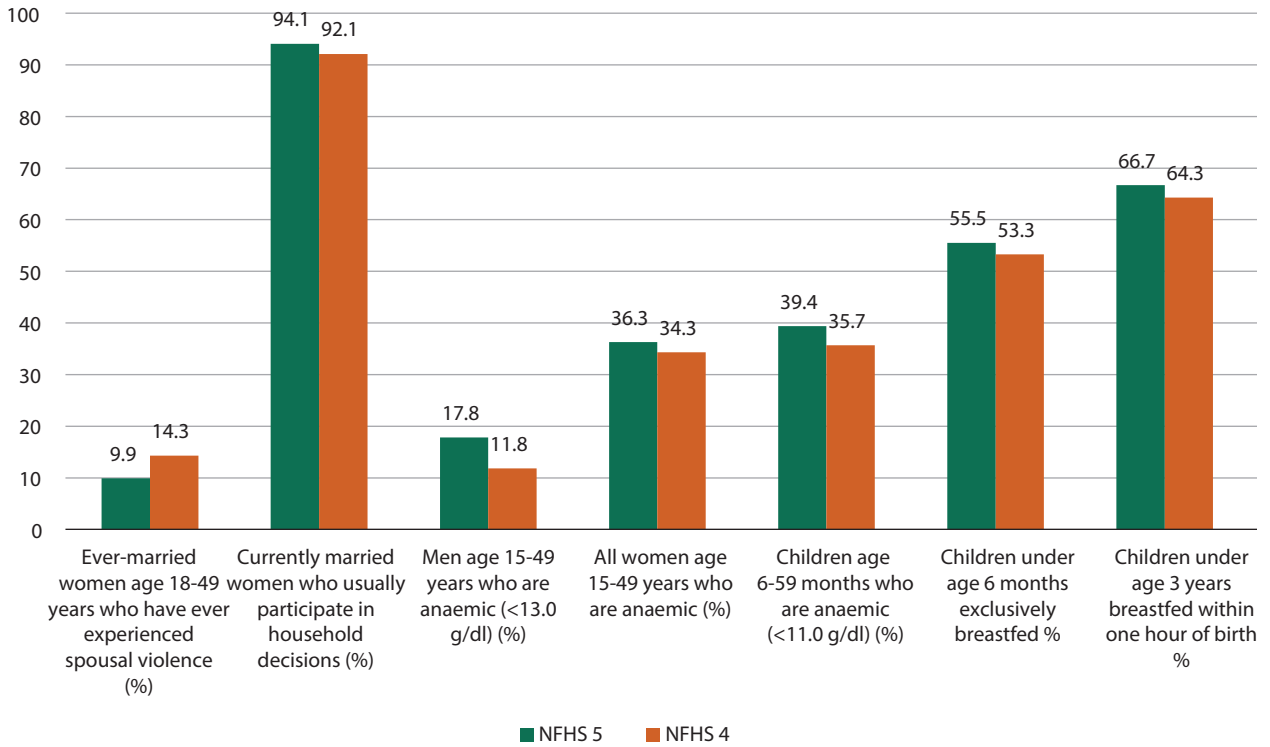


Figure 6: Top 15 causes of DALYs, 1990-2019

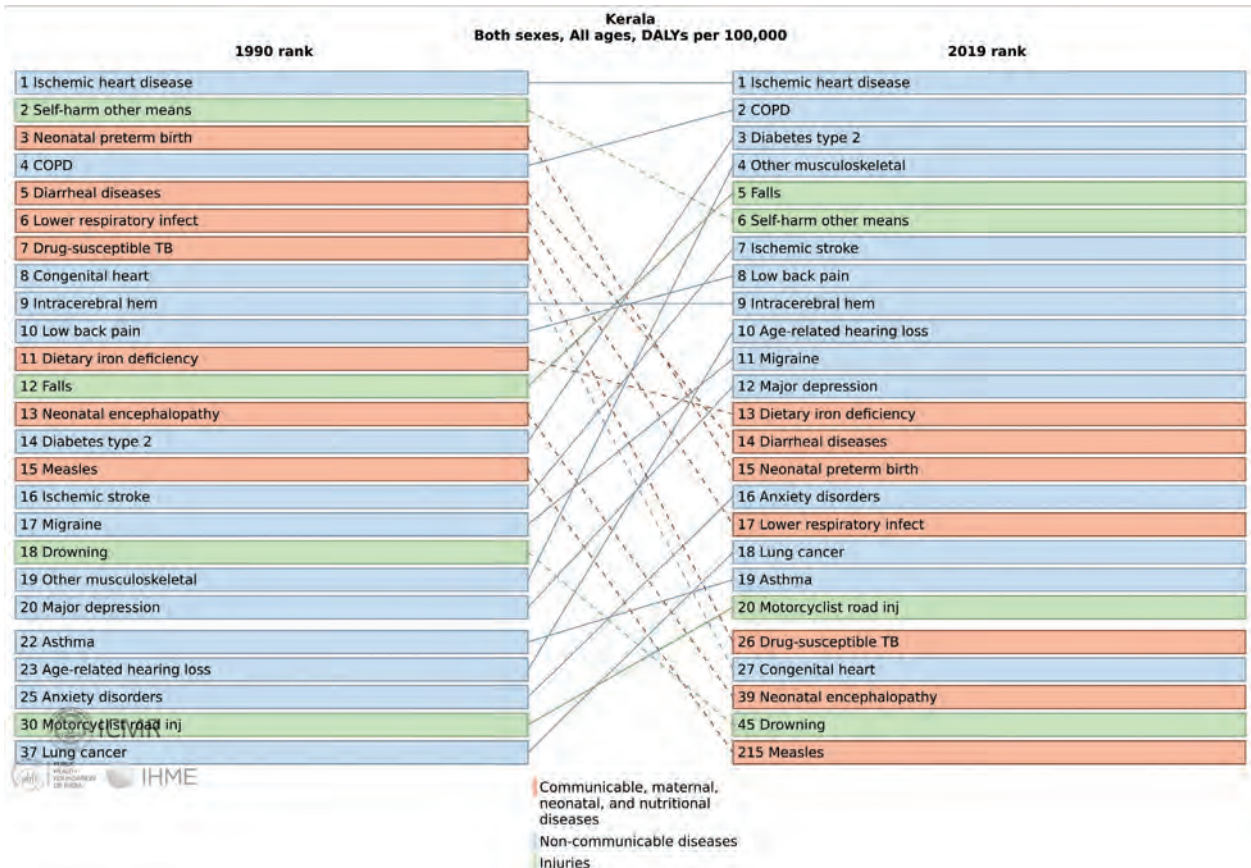


Figure 7: Top 15 risk of DALYs, 1990-2019

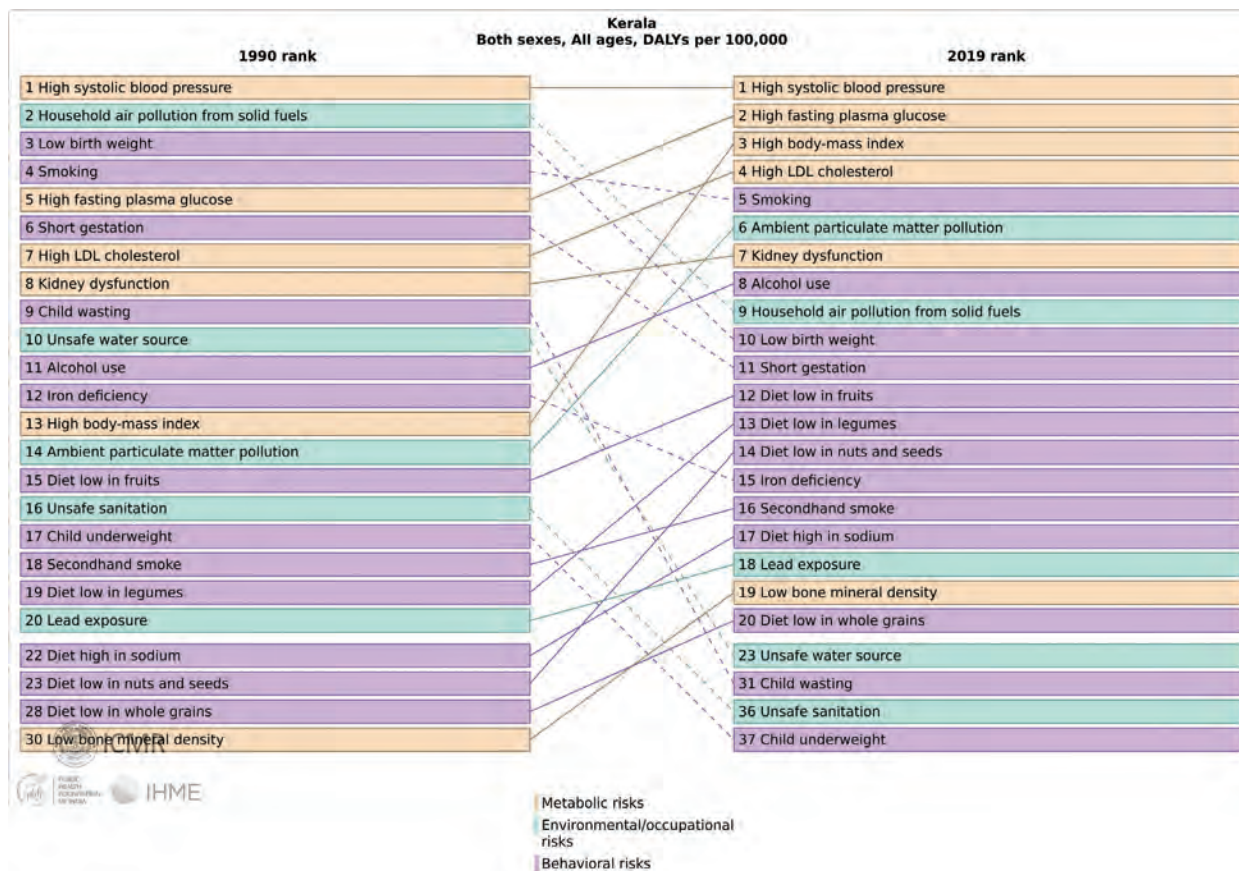


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

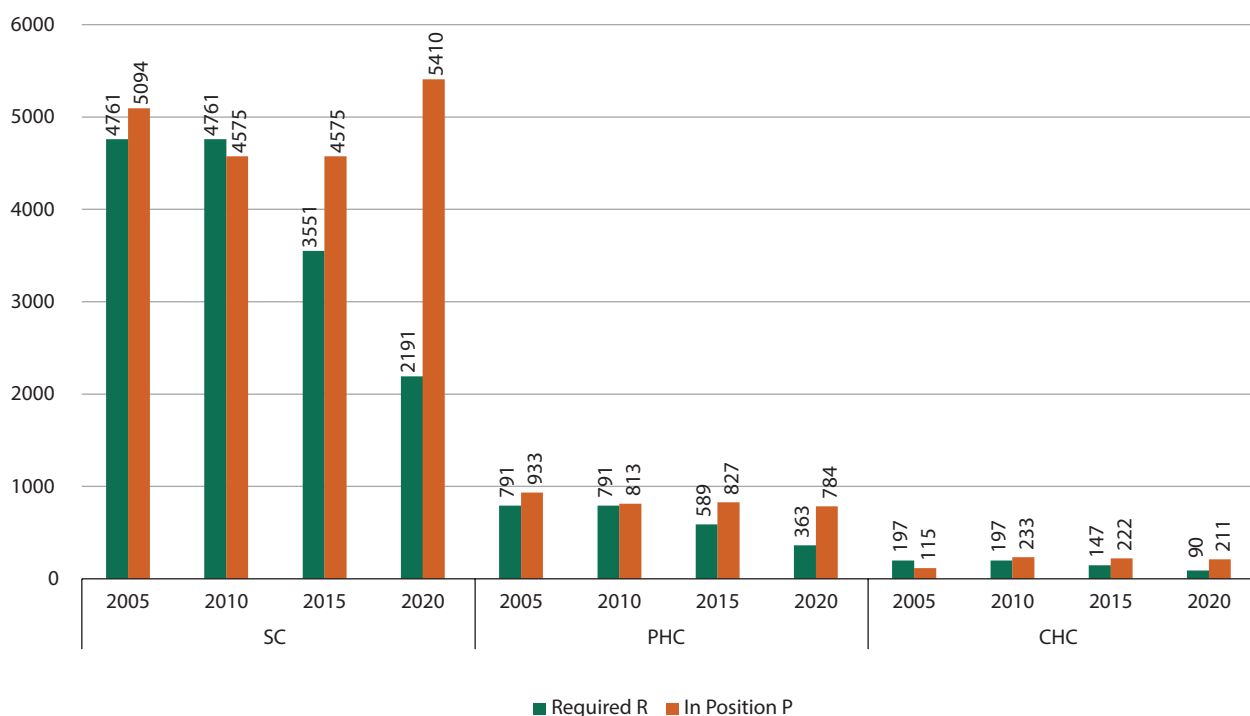


Figure 9: Year Wise Health Infrastructure Shortfall (%)

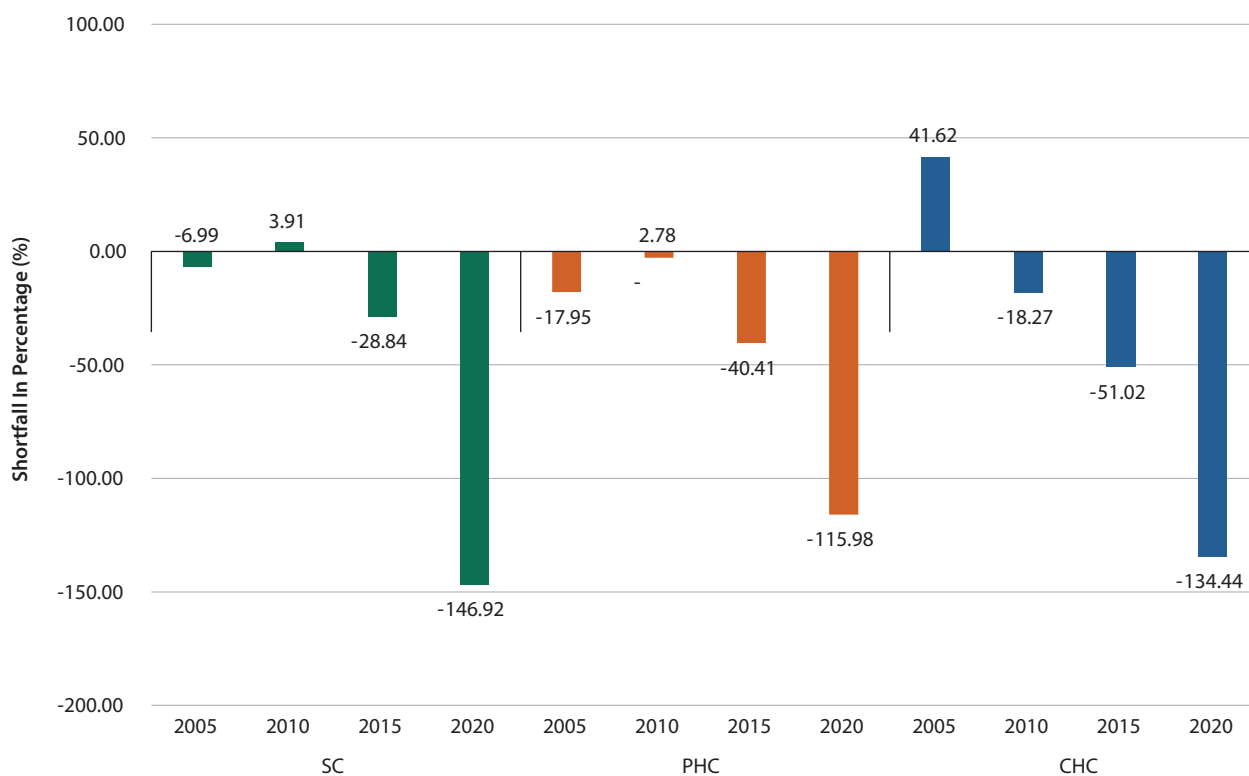
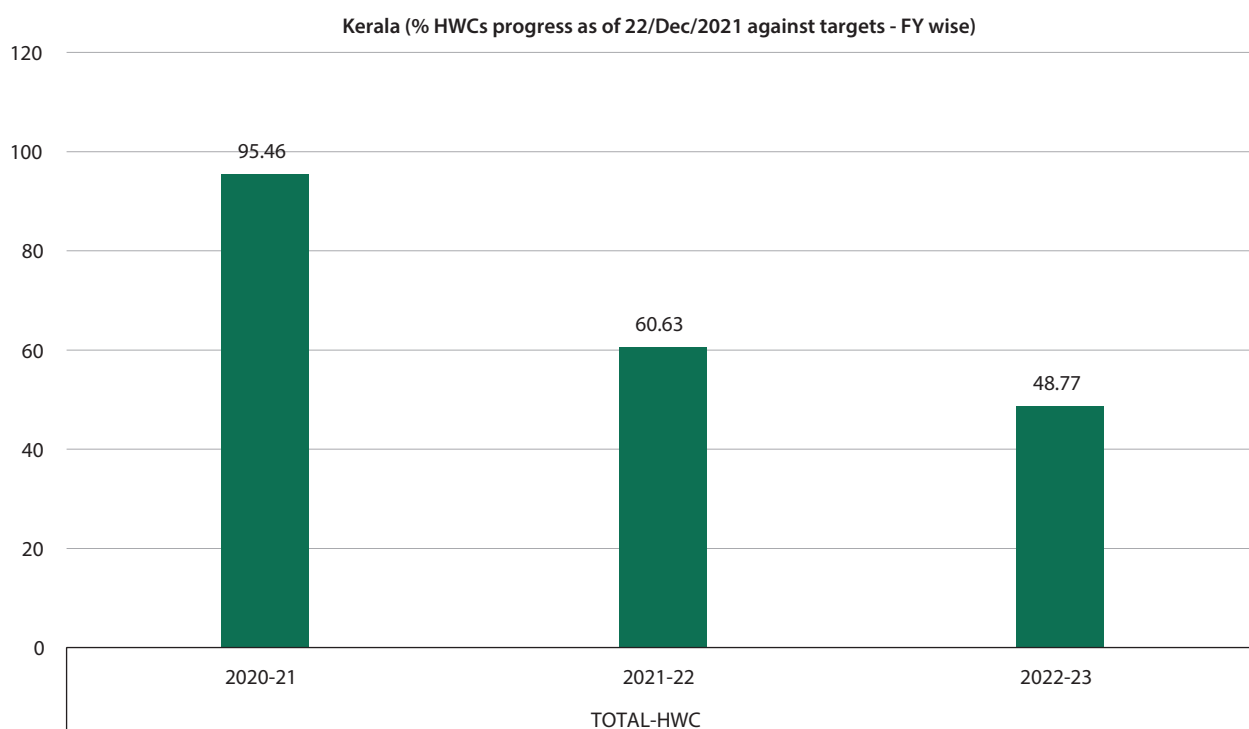


Figure 10: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted* (Height For Age) (%)	Children Under 5 Years - Wasted* (Weight For Height) (%)
1	Kerala	NFHS 4 Total	1047	47.7	NA	7.6	53.1	1.6	2.6	13.7	90.1	99.8	88.3	21.4	19.7	15.7
2	Kerala	NFHS 5 Urban	983	47.2	99.1	4.1	61.4	1.6	4	13	79.3	99.7	83.3	21.5	20.1	16
3	Kerala	NFHS 5 Rural	922	55.4	97.5	8.2	60.1	1.5	2.9	12	78	99.8	87.1	25.4	26.4	15.5
4	Kerala	NFHS 5 Total	951	51.5	98.3	6.3	60.7	1.5	3.4	12.5	78.6	99.8	85.2	23.5	23.4	15.8
5	Alappuzha	NFHS 5 Total	1485	60.4	99.7	3.8	61.5	1.3	4.3	12.3	65.7	99.4	NA	17.9	20.1	14.4
6	Ermakulam	NFHS 5 Total	1034	46.2	99.3	2.9	69.7	1.5	6.1	10.7	82.2	99.1	96.9	11.3	22	17.1
7	Idukki	NFHS 5 Total	859	58.1	94.4	7.1	72.3	2.1	5.2	9.4	74.3	100	89.6	36.5	24.3	14.5
8	Kannur	NFHS 5 Total	880	47.9	99.1	5.4	61.9	1.3	4.3	12.7	78.3	100	88.4	38.4	19.4	14
9	Kasaragod	NFHS 5 Total	984	44	95.9	4.7	56.4	2.4	3.5	12.5	91.2	100	98	12.2	25.3	12.6
10	Kollam	NFHS 5 Total	1135	56	98.2	1.8	62.9	0.6	1.7	11.9	79.3	100	NA	17.3	15.5	21.4
11	Kottayam	NFHS 5 Total	865	53.2	99.7	1.6	44.7	1.9	3.6	16.1	55.1	98.7	NA	19	23.4	8.4
12	Kozhikode	NFHS 5 Total	1000	61.1	99.1	4.2	67.7	1.4	3.4	9.6	91.8	100	92.3	25.1	21.3	14.1
13	Malappuram	NFHS 5 Total	807	42.8	99.2	15.3	58.6	0.8	1.9	13.8	90.4	100	82.6	26.1	29.4	18.2
14	Palakkad	NFHS 5 Total	1012	53.8	94.4	14.1	58.9	1.7	1.9	10.8	68.4	100	73.2	23.7	29.7	21.7
15	Pathanamthitta	NFHS 5 Total	916	50.1	99.7	0	59.3	2.6	3.4	12.3	83.9	99.1	NA	50.1	22.7	11.4

16	Thiruvananthapuram	NFHS 5 Total	1000	48.7	98.5	6.2	41.3	1.2	3.4	19.3	55.3	99.5	NA	32.3	19.5	17.4
17	Thrissur	NFHS 5 Total	763	48.7	99.4	1	69.7	2.9	4.6	10.9	82.4	100	NA	14.3	22	9.6
18	Wayanad	NFHS 5 Total	1003	64.8	93.7	8.4	78.9	2.7	1.1	5.6	94.2	100	88.4	14.1	31.3	16.1

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'; Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MM/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or pentavaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. **Green Color** – Best five performing districts within the districts for a particular indicator

B. **Red** – Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



LAKSHADWEEP

**No COMMON REVIEW MISSION
visits have been made till date in Lakshadweep**

LAKSHADWEEP

1. BACKGROUND

1.1 State Profile

Lakshadweep has a geographical spread^a of 30 km². The UT is estimated to have a population of over 0.0064 crores^b and is projected to reach around 0.0068 crores by 2021^c. As per Census 2011, the Scheduled Tribe (SC) population is 0.61 lakh (94.80%). In the UT, only 21.93% of the population reside in rural areas, while 78.07% constitute the urban population. The total length of roads^d in the UT is 212 km (0.06%^e).

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

The UT's Sex ratio at birth is 1,051 females for every 1000 males (NFHS 5). The crude birth rate and the crude death rate have declined from 19.1 & 6.3 in 2005 to 14.8 & 5.6 in 2019, respectively (Annexure 2; figure 2). The literacy rate increased from 86.7% in 2001 to 91.8% in 2011, with male & female literacy rates being 95.6% and 87.9%, respectively (Annexure 1.1). As per ESAG 2018 report, the Gross Enrolment Rate (GER)^f is 7.1% for higher education, 98.16% for senior secondary education, 103.66% for secondary education, 77.48% for elementary education, and 73.80% for primary education.

1.3 Elderly

Population ageing has profound social, economic, and political implications. In Lakshadweep, 89% of elderly females and 22% elderly males living in rural areas and 99% of elderly females and 19% elderly males in urban areas are economically fully dependent on others. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 45% for men and 60% for women as opposed to the national average of 31% for both.

^a RHS 2020

^b Census 2011

^c Census Population Projection 2019

^d Basic Road Statistics 2019, MoRTH

^e Percentage of total length of roads in Lakshadweep

^f Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The UT has been able to provide RMNCHA+N^g services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^h, institutional deliveries, C sections, distribution of IFAⁱ tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined^j from 160 (2007-09) to 85 (2016-18). In Lakshadweep, 90% of women received 4 ANC check-ups (Annexure 1.4). As reported in HMIS 2019-20, around 99.9% of the deliveries took place in institutions, out of which 100.0% took place in public health facilities. Total percentage of C-sections (39.4%) is higher than the WHO's standard (10-15%). Around 72.1% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years decreased from 46% (NFHS-4) to 25.8% (NFHS-5). Anaemia in females of reproductive age group is almost four times more than in men of similar age group (Annexure 2, figure 3).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the UT has shown a significant decline in IMR from 22 (2005) to 8 (2019), which is lower than the national average of 30 (Annexure 2, Figure 1). Full vaccination^k coverage for children between 12 – 23 months of age declined from 93.2% (NFHS 4) to 91.7% (NFHS 5). A decrease in childhood anaemia from 53.6% to 43.1% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 3). The proportion of exclusively breastfed children under 6 months improved from 54.8% (NFHS 4) to 67% (NFHS 5). The burden of under-5 years stunting increased from 26.8% (NFHS 4) to 32.0% (NFHS 5). For under-5 years wasting, the burden increased from 13.7% (NFHS 4) to 17.4% (NFHS 5).

2.3 Family Planning

As per NFHS 5 report, the total unmet need in the UT is 12.3% and unmet need for spacing is 8.0%. Approximately 30.1% of married women reported to avail any modern method of family planning in the UT; with sterilization acceptance among females being 20.7% and nil among males (NFHS 5).

2.4 Communicable Diseases

The UT has 1 functional IDSP unit in place^l. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 19.67%^m of total disease burden (Annexure 1.4). as per QPR reports, for TB, the annual total case notification rate is 18% and NSPⁿ success rate is 83% as opposed

^g Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^h Antenatal Check up

ⁱ Iron Folic Acid Tablets

^j SRS MMR Bulletin

^k NFHS 5 State/UT Factsheet, based on information from vaccination card only

^l QPR NHM MIS Report (status as on 01.03.2020)

^m Includes all UTs except Delhi

ⁿ New Smear Positive

to the national averages of 163% and 79%, respectively. For NLEP^o, the reported prevalence rate of 0.29 per 10,000 population is less than the national average of 0.61. In FY 2019-20, no deaths due to Dengue, Malaria, and Kala Azar are reported in the UT.

2.5 Non-Communicable Diseases (NCDs) and Injuries

NCDs contribute to 67.90% of DALYs and injuries contribute to 12.42% of DALYs in the UT^p. The UT is positioned last in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 17.5% of women and 28.5% of men used any kind of tobacco, while 0.3% of women and 0.4% of men consumed alcohol.

2.6 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 4). Currently there are 11 SCs, 4 PHCs and 3 CHC in rural areas; and 11 SCs, 4 PHCs and 3 CHCs in tribal areas. The UT has 1 DH and 2 SDHs. Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), 3 HWCs (3 PHCs) are operationalized in Lakshadweep as of 22nd December 2021^q.

The doctor to staff nurse ratio in place is 1:1, with 4 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1.5). The UT has 94.54% of ASHA in position under NRHM. Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 7986.40 availed (events) OPD services and 112.54 availed (events) IPD services.

^o National Leprosy Eradication Programme

^p Includes all UTs except Delhi

^q AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^r

Indicator	Lakshadweep 2011 ¹	India
Total Population (In Crore)	0.0064	121.08
Rural (%)	21.93	68.85
Urban (%)	78.07	31.14
Scheduled Caste population (SC) (in crore)	0	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.0061 (94.80%)	10.45 (8.63%)
Total Literacy Rate (%)	91.8	72.99
Male Literacy Rate (%)	95.6	80.89
Female Literacy Rate (%)	87.9	64.64
Number of Districts in the Lakshadweep ²	1	
Number of districts per lakh population in Lakshadweep (Census 2011)	Population¹	Districts¹ (Numbers)
	<1 Lakhs	1

1.2 Key Health Status & Impact Indicators

Indicators	Lakshadweep	India
Infant Mortality Rate (IMR) ³	8	30
Crude Death Rate (CDR) ³	5.6	6
Crude Birth Rate (CBR) ³	14.8	19.7
Maternal Mortality Ratio (MMR) ³	N/A	113
Neo Natal Mortality Rate (NNMR) ⁴	N/A	23
Under Five Mortality Rate (U5MR) ⁴	N/A	36
Still Birth Rate ⁴	N/A	4
Total Fertility Rate (TFR) ⁴	N/A	2.2
Life expectancy at birth ⁵	N/A	69.4
Sex Ratio at Birth ⁴	N/A	899

^r Sources are mentioned at the end of Annexure 1.

1.3 Key Health Infrastructure Indicators

Indicators				Numbers (Total)
Number of District Hospitals ²				1
Number of Sub District Hospital ²				2
Number of Government (Central + State) Medical College ⁶				0
Number of Private (Society + Trust) Medical Colleges ⁶				0
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	0	0	0	0
PHC-HWC	3	3	6	6
UPHC-HWC	0	0	0	0
Total-HWC	3	3	6	6
Rural ²	Required (R)	In place (P)	Shortfall (S)	
Number of Community Health Centres (CHC)	0	3	-3	
Number of Primary Health Centres (PHC)	0	4	-4	
Number of Sub Centres (SC)	0	11	-11	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	1	1	0	
Urban ²	Required (R)	In place (P)	Shortfall (S)	
Number of PHC	1	0	1	
Tribal ²	Required (R)	In place (P)	Shortfall (S)	
Number of CHC ⁵	0	3	-3	
Number of PHC	0	4	-4	
Number of SC	0	11	-11	
Patient Service ⁹		Lakshadweep	India	
IPD per 1000 population		112.54	62.6	
OPD per 1000 population		7986.40	1337.1	
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population		86.32	36.4	

⁵ Total population is less than the norm (CHC) of 80,000

1.4 Major Health Indicator^t

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Lakshadweep^u	India
% DALY ^v accountable for CMNNDs ^w	19.67	27.46
% DALY accountable for NCDs	67.9	61.43
% DALY accountable for Injuries	12.42	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Lakshadweep	India
Level of Birth Registration (%)	91	92.7
Level of Death Registration (%)	88.2	92
Percentage of medically certified deaths to total registered deaths (%)	95.8	20.7
RMNCHA+N		
Maternal Health⁹	Lakshadweep	India
% 1st Trimester registration to Total ANC Registrations	83.8	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	90	79.4
Total Reported Deliveries	870	21410780
% Institutional deliveries to Total Reported Deliveries	99.9	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	100	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	0	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	39.4	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	39.4	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	0	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	72.1	53.4
Neonatal⁹	Lakshadweep	India
% live birth to Reported Birth	99.4	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	9.6	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	102.7	89.9

^t Sources are mentioned at the end of Annexure 1

^u Represents all UTs including Lakshadweep

^v Disability Adjusted Life Years

^w Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established^{11v}	Lakshadweep	India
Sick New Born Care Unit (SNCU)	2	895
New Born Stabilization Unit (NBSU)	0	2418
New Born Care Corner (NBCC)	5	20337
Child Health & Nutrition¹⁰	Lakshadweep (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	2.3	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	N/A	60.6
Children under 5 years who are underweight (weight-for-age) (%)	25.8	32.1
Child Immunization¹⁰	Lakshadweep (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	91.7	83.8
Children age 12-23 months who have received BCG (%)	94.2	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	91	87.9
Family Planning¹⁰	Lakshadweep (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	8	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Lakshadweep	India
Number of districts with functional IDSP unit	1	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Lakshadweep	India
Annualized total case notification rate (%)	18	163
New Smear Positive (NSP) Success rate (in %)	83	79
National Leprosy Eradication Programme (NLEP)¹¹	Lakshadweep	India
Prevalence Rate/10,000 population	0.29	0.61
Number of new cases detected	2	1,14,359
Malaria, Kala Azar, Dengue¹¹	Lakshadweep	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706

HIV¹⁰	Lakshadweep (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	46.9	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	65.5	30.7
Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Lakshadweep (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	13.9	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	16.6	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	8.4	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	10.2	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Lakshadweep (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	17.5	8.9
Men who use any kind of tobacco (%)	28.5	38
Women who consume alcohol (%)	0.3	1.3
Men who consume alcohol (%)	0.4	18.8
Injuries		
Road Traffic Accident¹²	Lakshadweep	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	36	N/A
Total number of fatal Road Accidents	0	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	0	33.7
Number of persons killed in Road Accidents	0	115113

1.5 Access to Care

Health Systems Strengthening

Ambulances & Mobile Medical Units (MMU)¹¹	Lakshadweep	India
Number of Districts equipped with MMU under NRHM	0	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31

Number of ERS vehicles operational in the States/UTs Under NHM	Lakshadweep	India
102 Type	0	9955
104 Type	0	605
108 Type	0	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	0	11070
Key Domain Indicators^{aa}		
ASHA¹³	Lakshadweep	India
Total number of ASHA targeted under NRHM	110	946563
Total number of ASHA in position under NRHM	104	904211
% of ASHA in position under NRHM	94.54	96
Total number of ASHA targeted under NUHM	0	75597
Total number of ASHA in position under NUHM	0	64272
% of ASHA in position under NUHM	0	85
Community Process¹¹	Lakshadweep	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	9	554847
Number of Mahila Arogya Samitis (MAS) formed	0	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Lakshadweep	India
DH	1	796
CHC	3	6036
PHC	4	20273
UCHC	0	126
UPHC	0	3229
Human Resource for Health¹⁴		
HRH Governance	Lakshadweep	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	

Overall Vacancies (Regular + contractual)	Specialists + MO MBBS (%)	70				
	Dentists (%)	100				
	MO MBBS (%)	4				
	Nurse (%)	16				
	LT (%)	8				
HRH Distribution		Sanctioned	In Place			
Doctors (MO & specialists) to staff nurse ¹⁴		1:1	1:1			
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴		24 per 10,000	21 per 10,000			
Regular to contractual service delivery staff ratio ¹⁴		1:1	1:1			
Ranking: Human Resource Index of Lakshadweep¹⁵						
Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^x	35	77	77	0	0	62.21
Staff Nurse	228	71	71	0	157	
Lab Technician	38	24	24	0	14	
Pharmacists	21	25	25	0	0	
MO MBBS ^y	47	39	39	0	8	
Specialist ^z	68	15	5	10	63	

1.6 Healthcare Financing

National Health Accounts (NHA) (2017-18)	Lakshadweep	India
Per Capita Government Health Expenditure (in ₹)	N/A	1753
Government Health expenditure as % of Gross Domestic Product (GSDP)	N/A	1.35
Government Health Expenditure as % of General Government Expenditure (GGE)	N/A	5.12
OOPE as a Share of Total Health Expenditure (THE) %	N/A	48.8

^x MPW – Multi Purpose Health Worker (Female + Male)

^y MO MBBS (Full Time)

^z Specialist (All Specialist)

National Sample Survey Office (NSSO) (2017-2018)	Lakshadweep		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	N/A		33	26
IPD - % of hospitalized cases using public facility	N/A		46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	N/A		472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	N/A		845	915
IPD - Per hospitalized case (in INR) - Public	N/A		5,729	5,939
IPD - Per hospitalized case (in INR) - Private	N/A		28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	N/A		18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	N/A		53	43
Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	N/A		2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	N/A		20,692	26,701
State Health Expenditure	Lakshadweep		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	N/A		5 ^{aa}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{aa} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

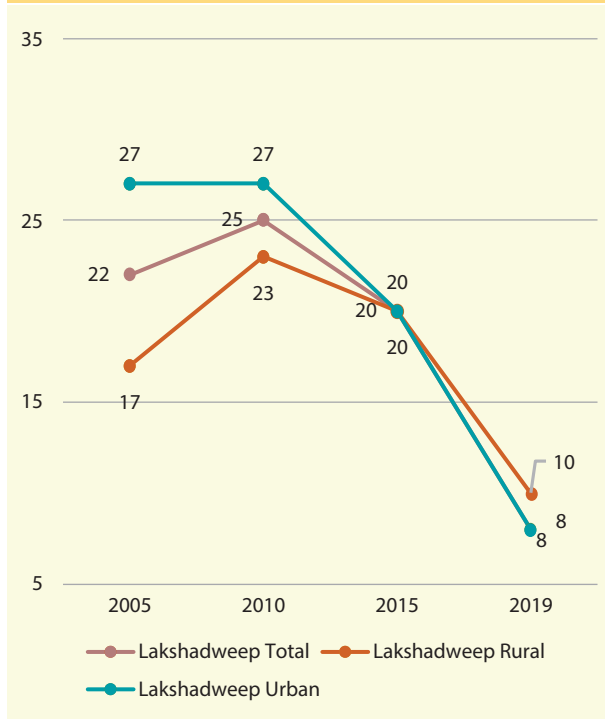


Figure 2: CBR & CDR Trend

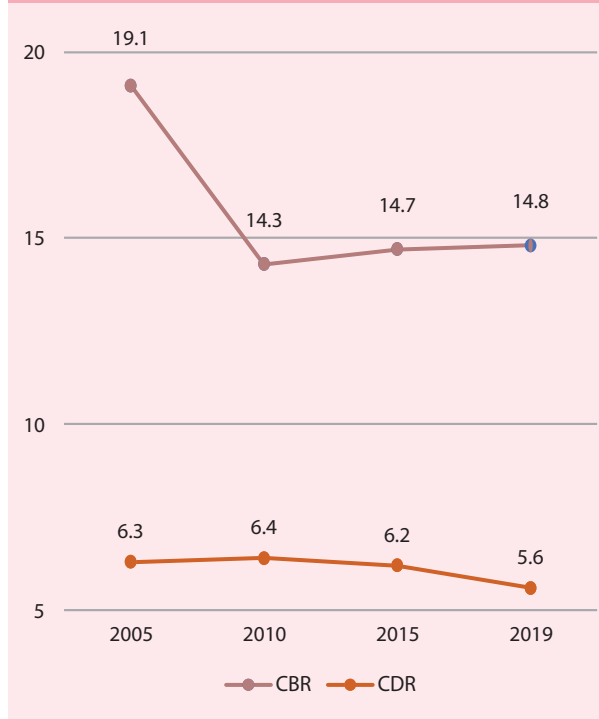


Figure 3: Comparison of Key NFHS 5 & 4 Indicators

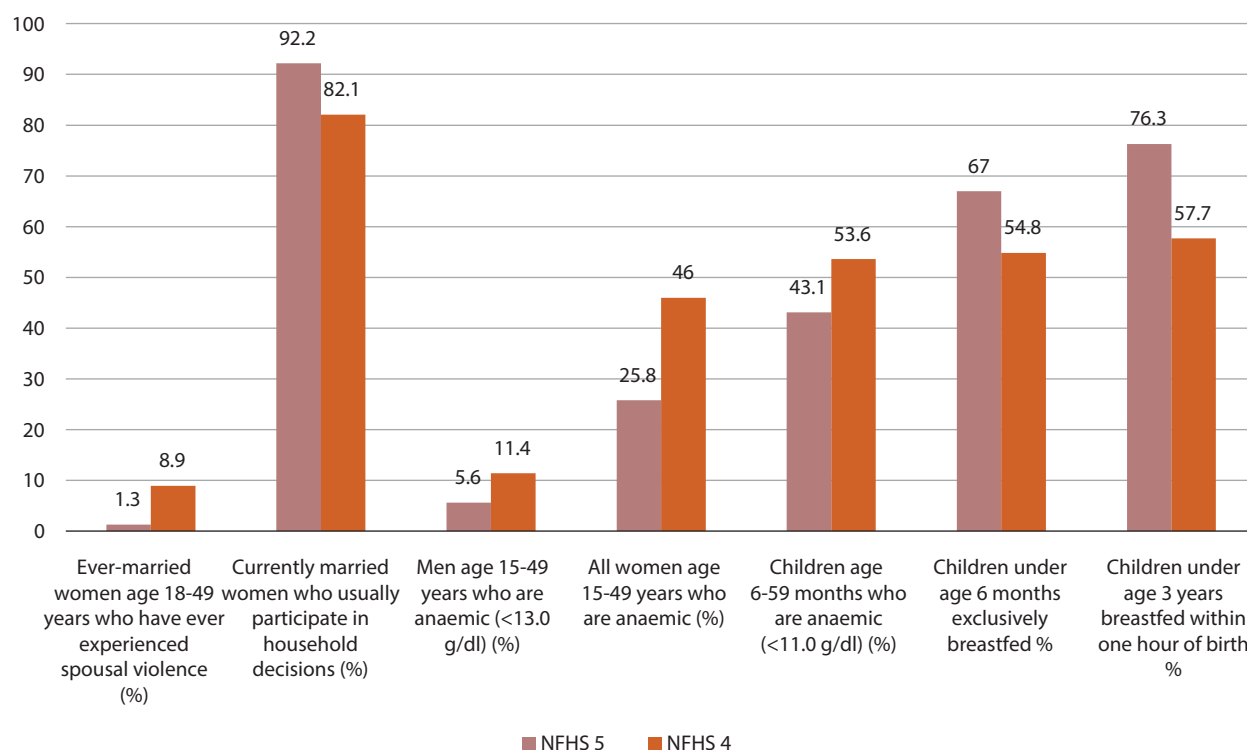


Figure 4: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

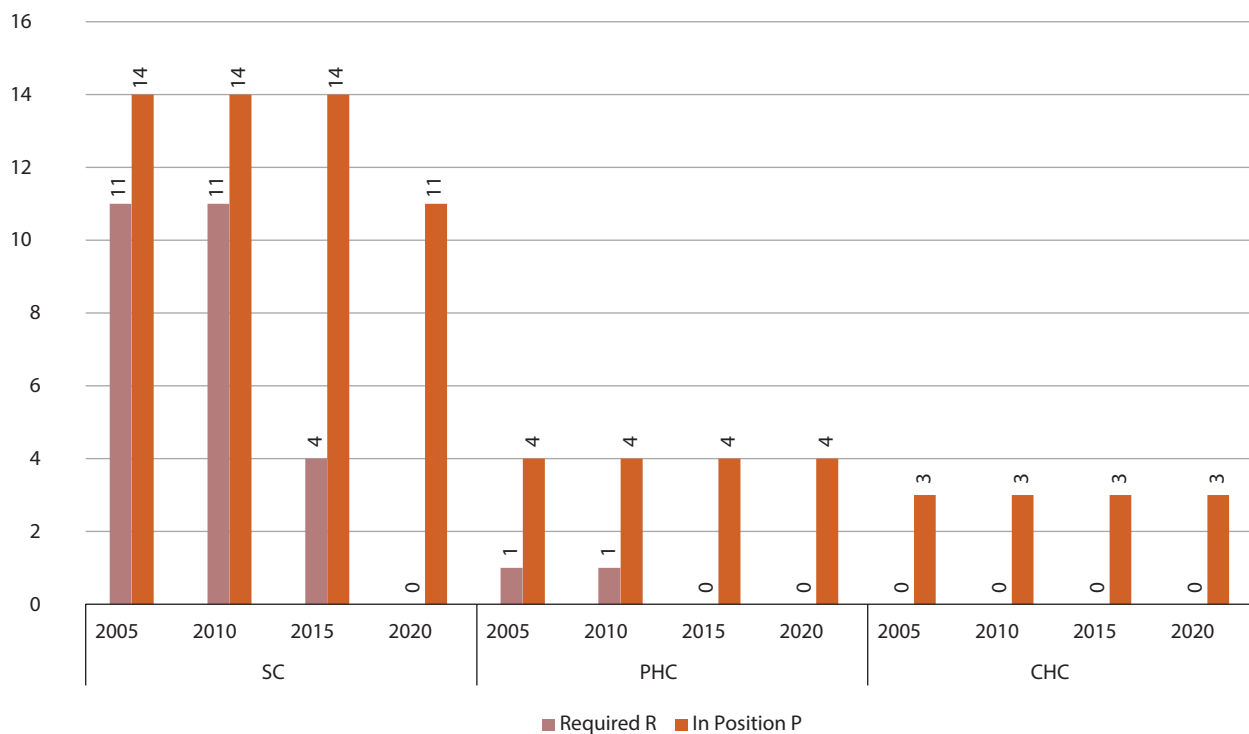
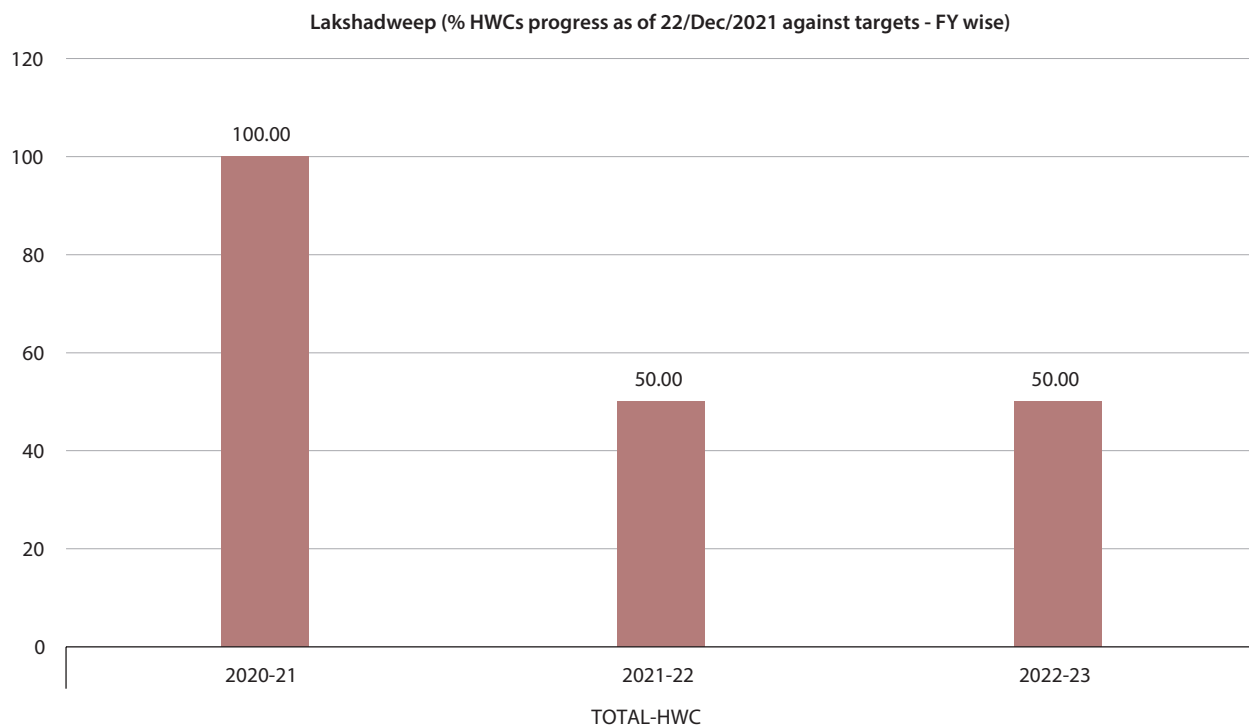


Figure 5: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

		(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)														
S. No.	States/Districts	Data Source	Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted (Height For Age) (%)	Children Under 5 Years - Wasted (Weight For Height) (%)
1	Lakshadweep	NFHS 4 Total	905	2.9	N/A	1.9	29.7	0.7	4.1	16.9	82.3	99.3	93.2	15.9	26.8	13.7
2	Lakshadweep	NFHS 5 Urban	964	58.4	96.4	1.9	51.8	1.3	4.7	13.6	86.2	99.5	93	21.8	30.7	18.5
3	Lakshadweep	NFHS 5 Rural	1361	66.7	96.8	0	55.4	0	2.2	7.6	94.2	100	N/A	N/A	35.6	14.2
4	Lakshadweep	NFHS 5 Total	1051	60.1	96.5	1.3	52.6	1	4.1	12.3	88.3	99.6	91.7	19	32	17.4

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated', Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' - 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below - 2 standard deviations, based on the WHO standard. 13 Below - 3 standard deviations, based on the WHO standard

A. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

B. ** Based on the youngest child living with the mother

C. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

D. ^ Below - 2 standard deviations, based on the WHO standard. 13 Below - 3 standard deviations, based on the WHO standard

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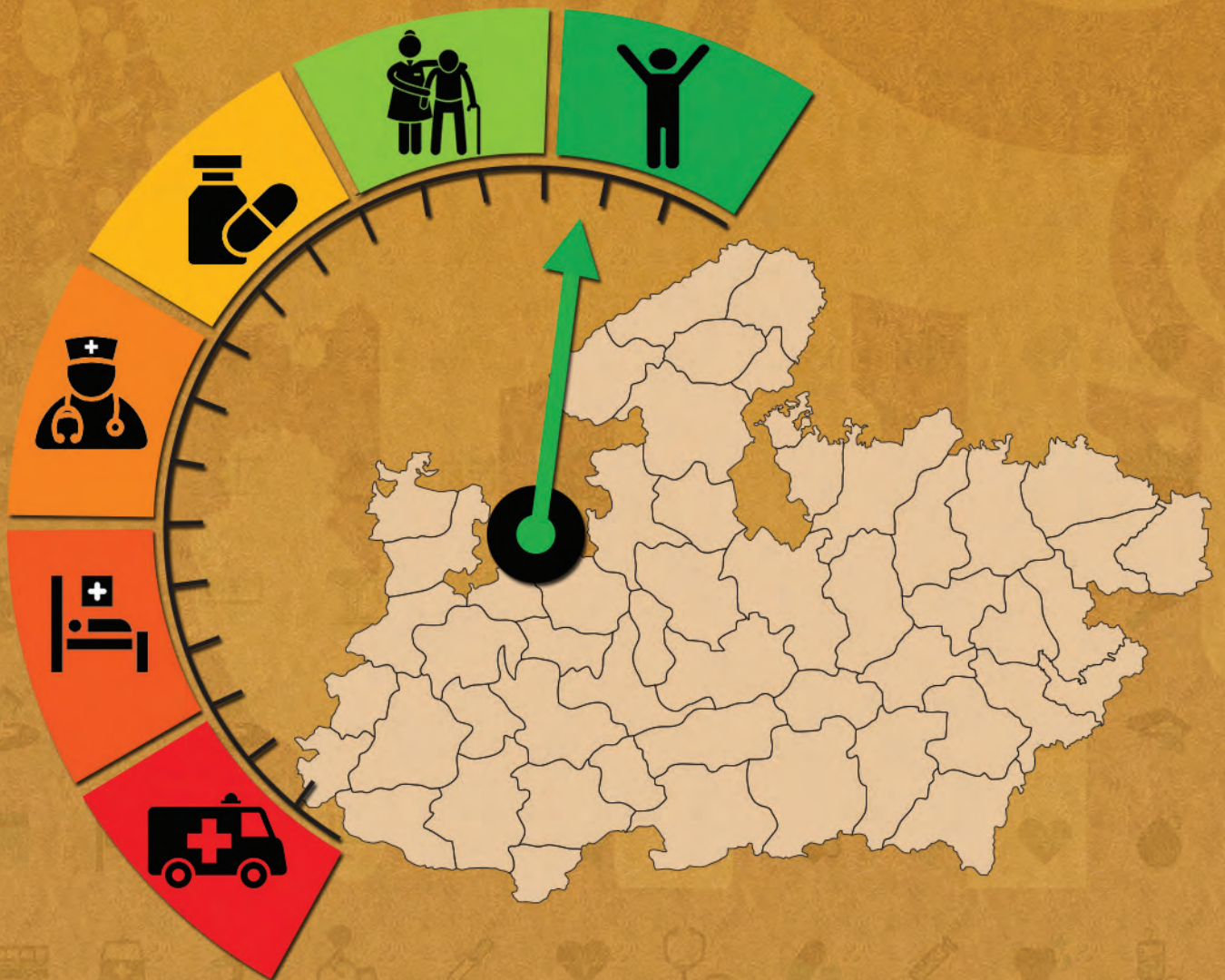
Dr. Diksha Dhupar, Consultant



NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



MADHYA PRADESH

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
1 st	Jabalpur	Barwani
2 nd	Khargone	Dhar
3 rd	Chhindwara	Guna
4 th	Khargone	Damoh
6 th	Gwalior	Hoshangabad
8 th	Panna	Katni
9 th	Dewas	Shahdol
10 th	Dindori	Ratlam
12 th	Betul	Rajgarh
13 th	Chhindwara	Khandwa

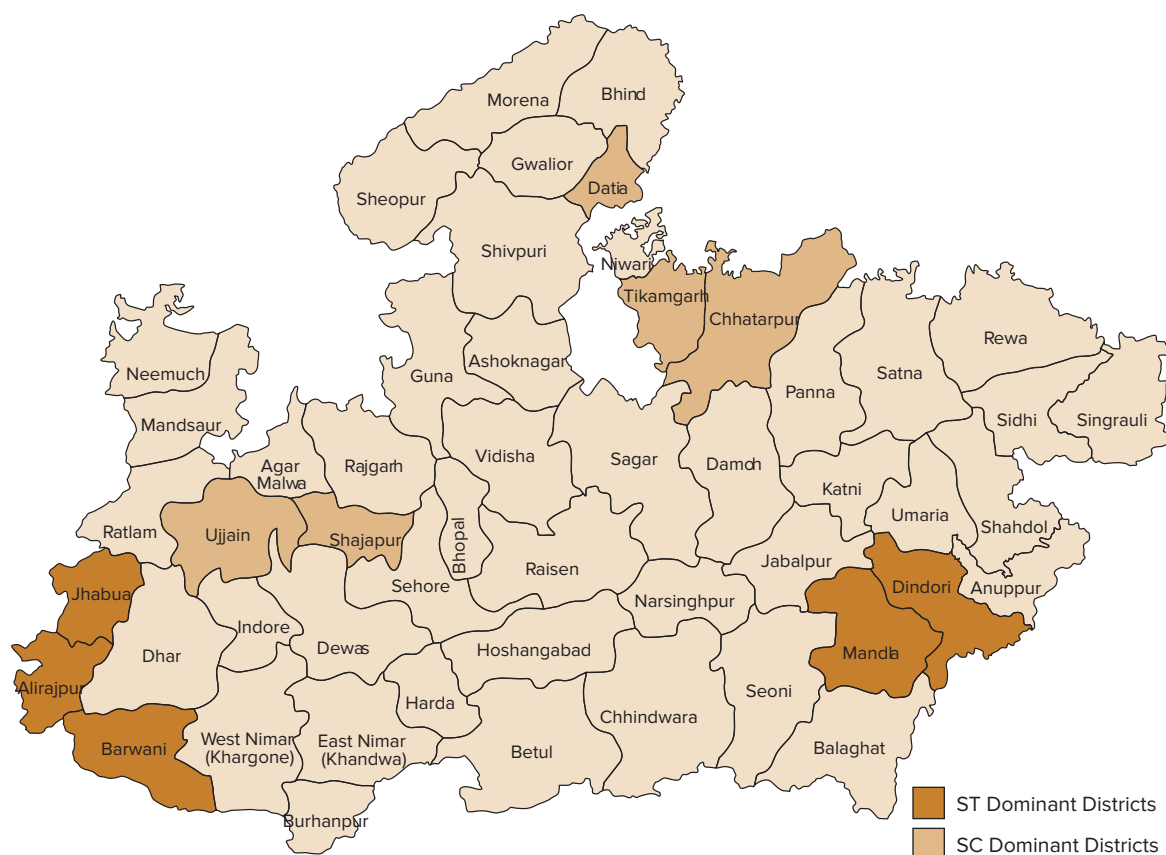
MADHYA PRADESH

1. BACKGROUND

1.1 State Profile

Madhya Pradesh is the 2nd largest state in India for a geographical spread of 3,08,245 km², and with a population of over 7.26 crore^a. The state has expanded from 45 districts in 2001 to 52 districts^b as of 2020 with a projected increase in population to 8.45 crores by 2021^c. As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 1.13 crores (15.62%) and 1.53 crores (21.09%), respectively.

Figure 1: Top 5 ST & SC Dominant Districts



^a RHS 2020

^b Available from: <https://agarmalwa.nic.in/en/history/> & <https://niwari.nic.in/en/about-district/>

^c Census Population Projection 2019 Report

Around 72.37% of the population reside in rural areas, while the remaining 27.63% reside in urban areas. Out of the 52 districts, top five ST & SC dominant districts account for 23.30% of ST & 16.27% of SC population in the State (Figure 1 and Annexure 1, State Profile).

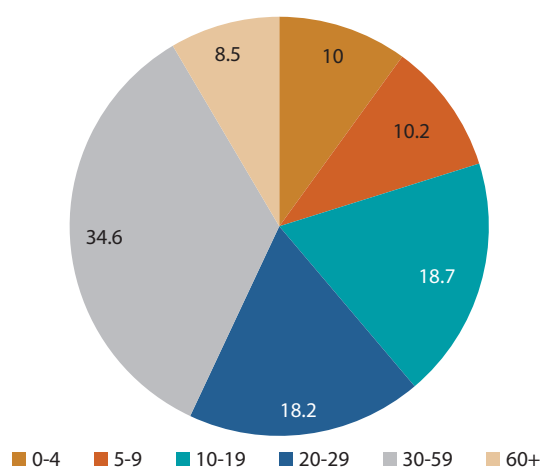
As of 2020-21 Quarterly Progress Report, 66 cities are covered under National Urban Health Mission at present. There are no Metro cities in the state; four cities i.e. Indore, Bhopal, Jabalpur and Gwalior come under the classification of Million plus cities. The total length of roads^d in the State is 3,42,654 km (6.85%^e), with national highways constituting 7,854 km (6.9%^f) and state highways constituting 11,839 km (6.76%^g). Agriculture remains the mainstay of the state's economy with 72.36%^h.

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

Among the 52 districts, 1 district has a population of over 30 lakhs, 8 districts have a population between 20-30 lakhs, 31 districts have a population between 10-20 lakhs and 10 districts have a population less than 10 lakhs (Annexure 1.1, State Profile). The State's sex ratio at birth (925 females for every 1000 males) is more than the national average (899 females for every 1000 males) (Annexure 1.2). Around 18.7% of the total population is in 10-19 years' age group, 52.8% between 20 to 59 years; and 8.5% above 60 years of age (Figure 2). The crude birth and death rates have declined from 29.4 and 9.0 in 2005 to 24.5 and 6.6 in 2019, respectively (Annexure 2, Figure 2). The literacy rate increased from 63.74% in 2001 to 69.3% in 2011, with male and female literacy being 78.7% and 59.2%, respectively (Annexure 1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)ⁱ is 19.6% for higher education, 45.25% for senior secondary education, 80.49% for secondary, 94.31% for elementary education and 94.47% for primary education.

Figure 2: Madhya Pradesh - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people over 60 years constitute 8.5% of the State's total population. The life expectancy at 60 years of age is 10.5 for males, and 11.4 for females (2014-2018)^j. 67% of elderly females and 23% elderly males in rural areas, and 64% of elderly females and 16.0% elderly males in urban areas are economically fully dependent on

^d Basic Road Statistics 2019, MoRTH

^e Percentage of total length of roads in State

^f Percentage of total length of National Highways in the country

^g Percentage of total length of State Highways in the country

^h Available from: <https://knowindia.gov.in/states-uts/madhya-pradesh.php>

ⁱ Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

^j SRS Based Abridged Life Tables

others. The old age dependency ratio is 13.4 in 2011; which are 12.5 for males, 14.5 for females, 14.1 in rural areas and 11.9 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly men and women is 24% & 22% respectively, which is lower than the national average of 31% for each.

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+N^k services with major focus on primary and secondary care services under NHM. Indicators for Antenatal care (ANC)^l, institutional deliveries, C sections, distribution of IFA^m tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care, have shown substantial improvement since 2005 (NFHS 4 & %). The maternal mortality ratio has significantly declined (SRS MMR Bulletin) from 269 (2007-09) to 173 (2016-18). In Madhya Pradesh, 79.1% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5, Hoshangabad, Panna, and Rewa reported low full ANC coverage ranging from 30.9% to 33%. As reported, around 95.7% of the deliveries took place in institutions, out of which 89.3% took place in public health facilities. Total percentage of C-sections (10.9%) is within the WHO's standard (10-15%); where 43.8% conducted at private facilities in the State. It is reported that around 11.1% women are given their first postpartum checkup between 48 hours and 14 days (Annexure 1.4). Prevalence of Anaemia in women aged 15-49 years increased from 52.5% (NFHS 4) to 54.7% (NFHS 5). Anaemia in females of reproductive age group is more than twice than in men of similar age group (Annexure 2, Figure 5).

Refer Annexure 3 for detailed district wise comparison of NFHS 5 key indicators.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 76 (2005) to 46 (2019), yet is still more than the national average of 30 (Annexure 2, Figure 1 & Annexure 1.2). Additionally, NNMRⁿ and Still Birth (per 1,000 live births) Rates have also significantly declined from 50.7 and 8.1 (2005) to 35 and 5 (2018), respectively (Annexure 2, Figure 4). The life expectancy at birth has also improved from 62.4 in 2006-10 to 66.5 in 2014-18, yet is less than the national average of 69.4 (Annexure 1.2 Figure 3). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs^o. As per NFHS 5, Damoh, Datia, and Satna reported low SRB^p ranging from 658 to 751; Agar Malwa, Khandwa (East Nimar) and Seoni reported high SRB ranging from 1212 to 1272.

Full immunization coverage for children between 12 – 23 months improved from 76.3% (NFHS 4) to 83.3% (NFHS 5). The percentage of under 6-months children exclusively breastfed also significantly increased from 58.2% (NFHS 4) to 74.0% (NFHS 5). An increase in childhood anaemia from 68.9% (NFHS 4) to 72.7% (NFHS 5) in children aged 6-59 months is reported (Annexure 2, Figure 5). For under-5 stunting, Jhabua, Katni, and Satna reported high burden ranging from 49.3% to 49.5%; Bhopal, Jabalpur

^k Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^l Antenatal Check up

^m Iron Folic Acid Tablets

ⁿ Neonatal Mortality Rate

^o QPR NHM Reports

^p Sex Ratio at Birth

and Score reported comparatively low burden ranging from 18% to 21.9%. For under-5 wasting, Dhar, Harda, and Ujjain reported high burden ranging from 28% to 29.8%; Bhind, Guna and Gwalior reported comparatively low burden ranging from 10.1% to 12.4%.

2.3 Family Planning

The TFR^q reduced from 3.6 in 2005 to 2.7 in 2018, yet is still higher than the national average of 2.2 (Annexure 2 Figure 4). The total unmet need in the State is reported as 7.7%, while unmet need for spacing is 3.9% (NFHS 5). Hoshangabad reported the highest total unmet (17.7%) and Jabalpur reported the lowest (2.9%). Around 65.5% of married women reported to avail any modern method of family planning in the State (NFHS 5), with sterilization acceptance being 51.9% among females, and 0.7% among males.

2.4 Communicable Diseases

The State has 51 functional IDSP units in place^r. The proportion of Communicable, Maternal, Neonatal, and Nutritional Diseases [CMNND] contribute to 36.55% of the total disease burden (GBD 2019). Lower respiratory tract infection, diarrhoeal diseases, & drug-susceptible TB are reported as the major causes of DALY in the State (Annexure 2, Figure 6)^s. As per QPR reports, the annualized total case notification rate for TB is 202% and NSP^t success rate is 81%, as opposed to the national average of 163% & 79%, respectively. For NLEP^u, the reported prevalence rate of 0.82 per 10,000 population is more than the national average of 0.61. In FY 2019-20, deaths from vector borne diseases include 3 from malaria, 1 death from JE^v, 2 from dengue, while none from Kala azar.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that premature death accounts for 69.9% and disability or morbidity account for 30.1% of the total disease burden in the State. NCDs contribute to 51.71% of DALYs, while injuries contribute to 11.75% of DALYs in the State. Ischaemic heart disease, COPD, Intracerebral hemorrhage & Diabetes Mellitus Type 2 remain the major causes for DALYs (Annexure 2, Figure 6). Madhya Pradesh ranks 3rd for the total number of fatal road accidents reported in the country (Annexure 1.4). Recent report reveals that 10.2% of women and 46.5% of men used any kind of tobacco, while 1.0% of women and 17.1% of men consumed alcohol. In general, low birth weight, short gestation period, household air pollution from solid fuels, high systolic blood pressure, & ambient particulate matter pollution are the major risk factors for all DALYs (Annexure 2, Figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 7,37,156 crores. The State is positioned 26^h out of 32 states/UTs in terms of per capita expenditure of ₹ 90,165^w. According to NHA (2017-18), the per capita Government Health Expenditure in the State is estimated as ₹ 980, which is less than

^q Total Fertility Rate

^r QPR NHM MIS Report (Status as on 01.03.2020)

^s <https://vizhub.healthdata.org/gbd-compare/india>

^t New Smear Positive

^u National Leprosy Eradication Programme

^v Japanese Encephalitis

^w Directorate of Economics and Statistics of State Government

the national average of ₹ 1,753. On the other hand, the OOPE^x as a share of Total Health Expenditure is estimated as 56.3%, which is more than the national average of 48.8%. As per NSSO 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated as ₹ 26,041 in private hospitals and ₹ 2,987 in public hospitals, while the same in urban areas is estimated as ₹ 24,022 in private hospitals and ₹ 2,115 in public hospitals. For childbirth, OOPE in public facilities is estimated as ₹ 1,436 in rural areas & ₹ 1,668 in urban areas, whereas in private health facilities, it is estimated as ₹ 19,551 in rural areas and ₹ 23,242 in urban areas. In public health facilities, the share of expenditure on drugs is estimated as 62% and 50% for inpatient care; whereas for diagnostics, it is estimated as 14% and 15% in rural and urban areas, respectively (Annexure 1.6, Healthcare Financing).

2.7 Health Infrastructure

As per the RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Though public health facilities have increased over time, 27.51% shortfall in SCs, 46.95% shortfall in PHCs and 45.31% shortfall in CHCs still remain in the State (Annexure 2, Figure 9). Currently, there are 10,226 SCs, 1,199 PHCs, 309 CHCs in place, against the required 14,106 SCs, 2,260 PHCs and 565 CHCs. Similarly, in urban settings, there are 277 PHCs in place against the required 481, hence, a shortfall of 42.41% exists. The State has 51 DHs, 84 SDH and 14 Government medical colleges. In the State, 51 DHs, 52 SDH&45CHCs serve as functional FRUs. In tribal catchments, there are 2,999 SCs, 320 PHCs and 86 CHCs in place against the required 5,407 SCs, 811 PHCs and 202 CHCs, respectively.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 6,164 HWCs (4873 SHCs, 1140 PHCs& 151 UPHCs) are operationalized in the State as of 22nd December 2021^y.

In the State, 44 districts are equipped with MMUs under the NHRM, while none under the NUHM. The State has 98% of ASHAs in position under NRHM and 79% in place under NUHM. The doctors to staff nurse ratio in place is 1:2, with 4 public healthcare providers available for every 10,000 populations (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, around 802 availed (events) OPD services and 64 availed (events) IPD services. However, as per the NSSO data (2017-18), 34% of all OPD cases in rural and 23% in urban used public facilities, which are less than the national averages - 33% and 26%, respectively. Similarly, 48% of all IPD cases in rural and 47% of all IPD cases in urban utilized public health facilities, which are more the national averages – 46% and 35%, respectively.

^x Out of Pocket Expenditure

^y AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile²

Indicator	Madhya Pradesh 2011 ¹	India
Total Population (In Crore)	7.26	121.08
Rural (%)	72.37	68.85
Urban (%)	27.63	31.14
Scheduled Caste population (SC) (in crore)	1.13 (15.62%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	1.53 (21.09%)	10.45 (8.63%)
Total Literacy Rate (%)	63.7	72.99
Male Literacy Rate (%)	78.7	80.89
Female Literacy Rate (%)	59.2	64.64
Number of Districts in the Madhya Pradesh ²	52	
Number of districts per lakh population in Madhya Pradesh (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	10
	≥ 10 Lakhs - <20 Lakhs	31
	≥20 Lakhs - <30 lakhs	8
	≥30 Lakhs	1
ST SC Dominant (Top 5) Districts of Madhya Pradesh ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Alirajpur - 88.97%	Ujjain - 26.36%	
Jhabua - 87%	Datia - 25.45%	
Barwani - 69.42%	Tikamgarh - 25.02%	
Dindori - 64.69%	Shajapur - 23.39%	
Mandla - 57.87%	Chatarpur - 22.99%	
Top 5 ST dominant district accounts for - 23.30%	Top 5 SC dominant district accounts for - 16.27%	

1.2 Key Health Status & Impact Indicators

Indicators	Madhya Pradesh	India
Infant Mortality Rate (IMR) ³	46	30
Crude Death Rate (CDR) ³	6.6	6

² Sources used are mentioned at Annexure 5

Crude Birth Rate (CBR) ³	24.5	19.7
Maternal Mortality Ratio (MMR) ³	173	113
Neo Natal Mortality Rate (NNMR) ⁴	35	23
Under Five Mortality Rate (U5MR) ⁴	56	36
Still Birth Rate ⁴	5	4
Total Fertility Rate (TFR) ⁴	2.7	2.2
Life expectancy at birth ⁵	66.5	69.4
Sex Ratio at Birth ⁴	925	899

1.3 Key Health Infrastructure Indicators^{aa}

Indicators	Numbers (Total)			
Number of District Hospitals ²	51			
Number of Sub District Hospital ²	84			
Number of Government (Central + State) Medical College ⁶	14			
Number of Private (Society + Trust) Medical Colleges ⁶	9			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	4873	3952	7044	9105
PHC-HWC	1140	1171	1171	1171
UPHC-HWC	151	259	259	259
Total-HWC	6164	5382	8474	10535
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	565	309	45.31	
Number of Primary Health Centres (PHC)	2,260	1,199	46.95	
Number of Sub Centres (SC)	14,106	10,226	27.51	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	51	52	45	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	481	277	42.41	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	202	86	57.43	
Number of PHC	811	320	60.54	
Number of SC	5,407	2,999	44.53	

^{cc} Sources used are mentioned at Annexure 5

Patient Service⁹	Madhya Pradesh	India
IPD per 1000 population	63.67	62.6
OPD per 1000 population	801.52	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	16.16	36.4

1.4 Major Health Indicator^{bb}

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Madhya Pradesh	India
% DALY ^{cc} accountable for CMNND ^{dd}	36.55	27.46
% DALY accountable for NCDs	51.71	61.43
% DALY accountable for Injuries	11.75	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Madhya Pradesh	India
Level of Birth Registration (%)	78.8	92.7
Level of Death Registration (%)	89.1	92
Percentage of medically certified deaths to total registered deaths (%)	9.1	20.7
RMNCHA+N		
Maternal Health⁹	Madhya Pradesh	India
% 1st Trimester registration to Total ANC Registrations	69.6	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	79.1	79.4
Total Reported Deliveries	1,412,758	21,410,780
% Institutional deliveries to Total Reported Deliveries	95.7	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	89.3	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	10.7	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	10.9	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	7	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	43.8	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	11.1	53.4
Neonatal⁹	Madhya Pradesh	India
% live birth to Reported Birth	98.4	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	15.6	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	92.8	89.9

^{bb} Sources used are mentioned at Annexure 5

^{cc} Disability Adjusted Life Years

^{dd} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Madhya Pradesh	India
Sick New Born Care Unit (SNCU)	54	895
New Born Stabilization Unit (NBSU)	62	2418
New Born Care Corner (NBCC)	1303	20337
Child Health & Nutrition¹⁰	Madhya Pradesh (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	6.4	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	65.2	60.6
Children under 5 years who are underweight (weight-for-age) (%)	33	32.1
Child Immunization¹⁰	Madhya Pradesh (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	88.3	83.8
Children age 12-23 months who have received BCG (%)	95.4	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	88	87.9
Family Planning¹⁰	Madhya Pradesh (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	3.9	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Madhya Pradesh	India
Number of districts with functional IDSP unit	51	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Madhya Pradesh	India
Annualized total case notification rate (%)	202	163
New Smear Positive (NSP) Success rate (in %)	81	79
National Leprosy Eradication Programme (NLEP)¹¹	Madhya Pradesh	India
Prevalence Rate/10,000 population	0.82	0.61
Number of new cases detected	8,032	114,359
Malaria, Kala Azar, Dengue¹¹	Madhya Pradesh	India
Deaths due to Malaria ¹¹	3	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	2	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Madhya Pradesh (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	18.7	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	26.3	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Madhya Pradesh (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	13.2	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	16	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	5.3	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	6.6	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Madhya Pradesh (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	10.2	8.9
Men who use any kind of tobacco (%)	46.5	38
Women who consume alcohol (%)	1	1.3
Men who consume alcohol (%)	17.1	18.8
Injuries		
Road Traffic Accident¹²	Madhya Pradesh	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	3	NA
Total number of fatal Road Accidents	10,182	137,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	22.2	33.7
Number of persons killed in Road Accidents	11249	115113

1.5 Access to Care^{ee}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Madhya Pradesh	India
Number of Districts equipped with MMU under NRHM	44	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Madhya Pradesh	India
102 Type	796	9955
104 Type	15	605
108 Type	596	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	0	11070

^{ee} Sources used are mentioned at Annexure 5

Key Domain Indicators		
ASHA ¹³	Madhya Pradesh	India
Total number of ASHA targeted under NRHM	63687	946563
Total number of ASHA in position under NRHM	62511	904211
% of ASHA in position under NRHM	98	96
Total number of ASHA targeted under NUHM	5100	75597
Total number of ASHA in position under NUHM	4025	64272
% of ASHA in position under NUHM	79	85
Community Process ¹¹	Madhya Pradesh	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	49567	554847
Number of Mahila Arogya Samitis (MAS) formed	3825	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total) ¹¹	Madhya Pradesh	India
DH	51	796
CHC	329	6036
PHC	1199	20273
UHC	0	126
UPHC	0	3229
Human Resource for Health ¹⁴		
HRH Governance	Madhya Pradesh	
Specialist Cadre Available in the state (Y/N)	No	
HR Policy available (Y/N)	Yes	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	Yes	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	70
	Dentists (%)	38
	MO MBBS (%)	31
	Nurse (%)	27
	LT (%)	19
	ANM (%)	13
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	5 per 10,000	4 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	2:1	2:1

Ranking: Human Resource Index of Madhya Pradesh¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{ff}	30654	28855	20097	8758	10557	63.21
Staff Nurse	23746	19062	12925	6137	10821	
Lab Technician	4434	3286	2198	1088	2236	
Pharmacists	2508	3701	2698	1003	0	
MO MBBS ^{gg}	4888	6931	5162	1769	0	
Specialist ^{hh}	4985	4251	691	3560	4294	

1.6 Healthcare Financingⁱⁱ

National Health Accounts (NHA) (2017-18)	Madhya Pradesh		India	
Per Capita Government Health Expenditure (in ₹)	980		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	1.1		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	4.9		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	56.3		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Madhya Pradesh		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	34	23	33	26
IPD - % of hospitalized cases using public facility	48	47	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	483	317	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	1086	1083	845	915
IPD - Per hospitalized case (in INR) - Public	2987	2115	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	26041	24022	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	14	15	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	62	50	53	43

^{ff} MPW – Multi Purpose Health Worker (Female + Male)

^{gg} MO MBBS (Full Time)

^{hh} Specialist (All Specialist)

ⁱⁱ Sources used are mentioned at Annexure 5

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	1436	1668	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	19551	23242	20,692	26,701
State Health Expenditure	Madhya Pradesh		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	4.4		5 ^{jj}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{jj} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

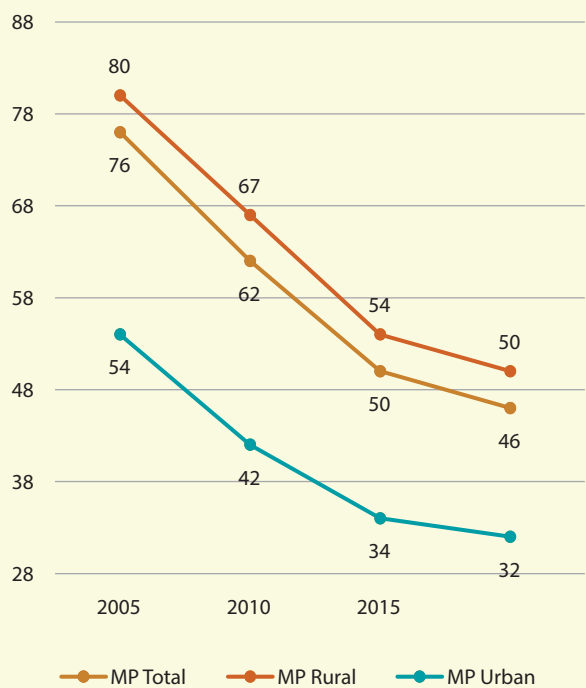


Figure 2: CBR & CDR Trend

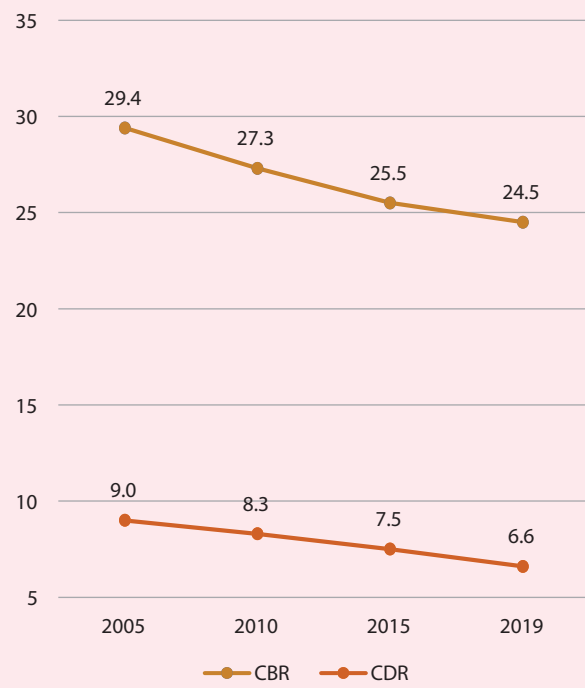


Figure 3: Life Expectancy At Birth Trend

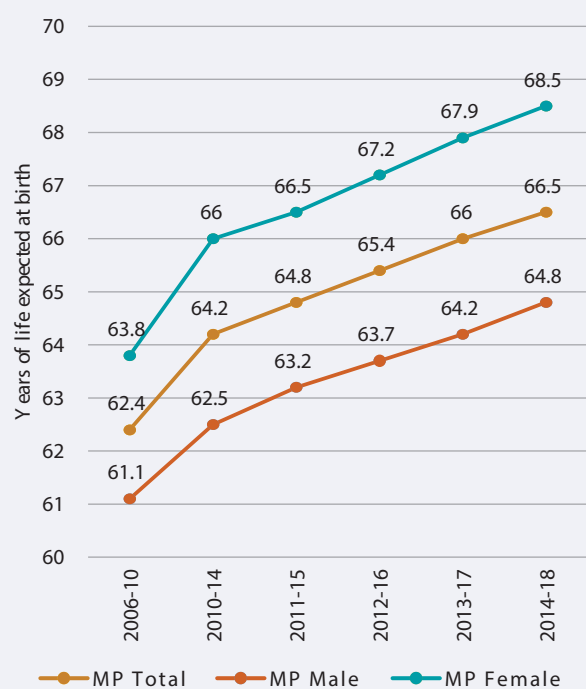


Figure 4: NNMR, TFR & Still Birth Trend

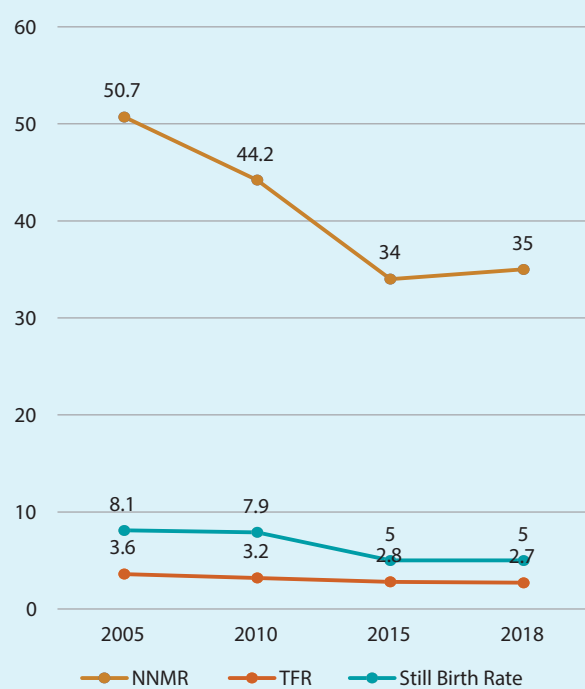


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

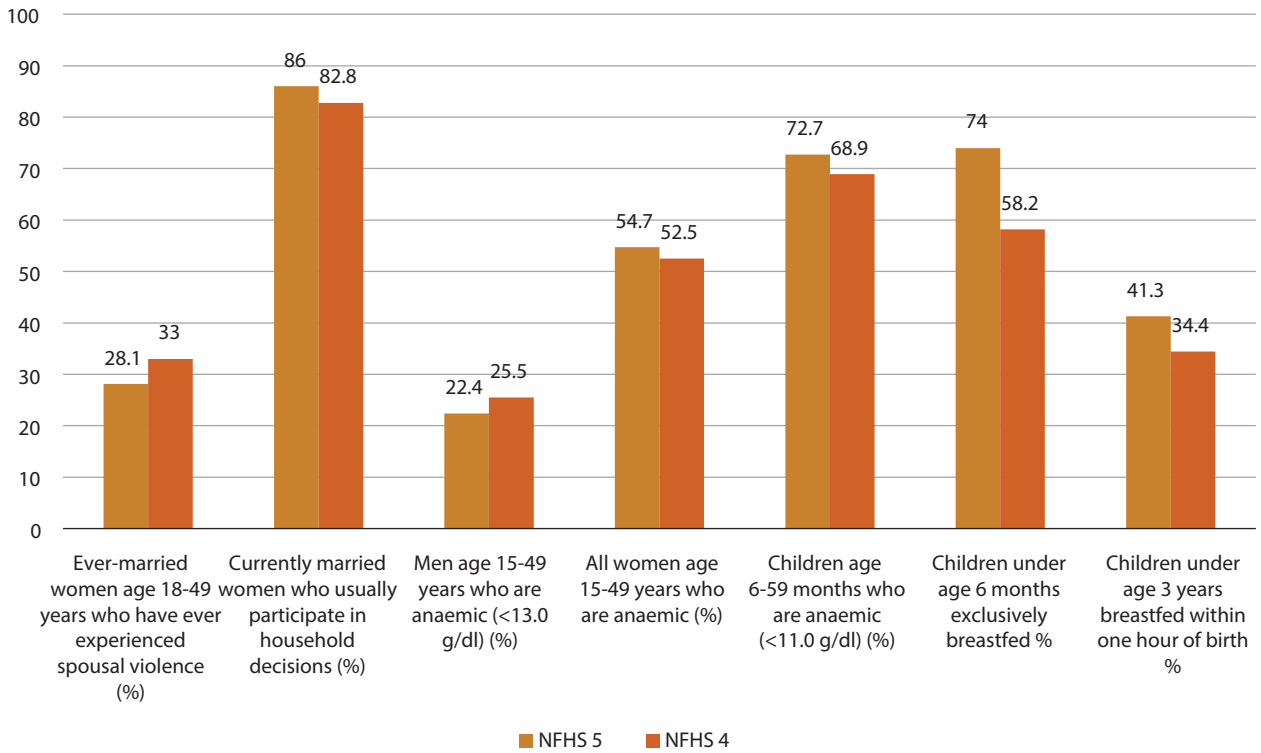


Figure 6: Top 15 causes of DALYs, 1990-2019

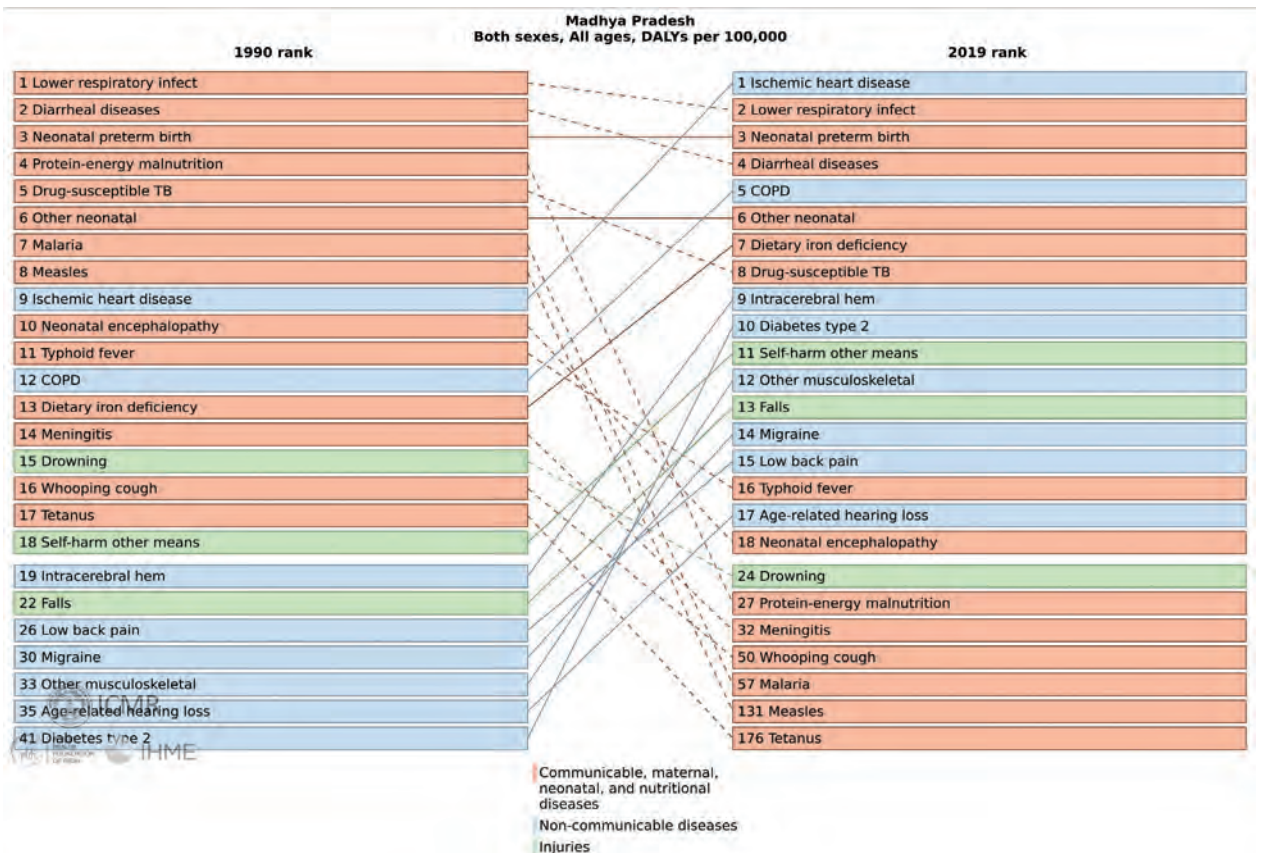


Figure 7: Top 15 risk of DALYs, 1990-2019

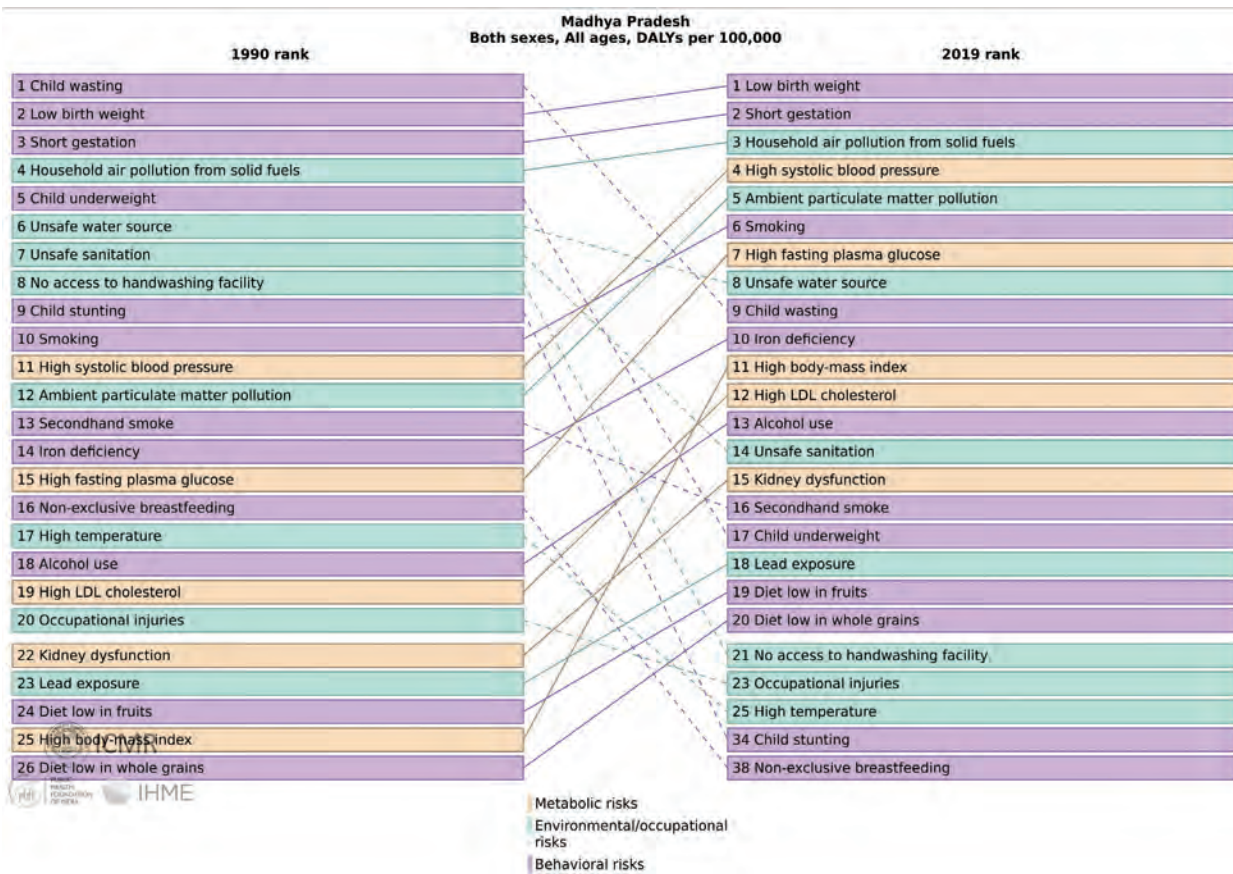


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

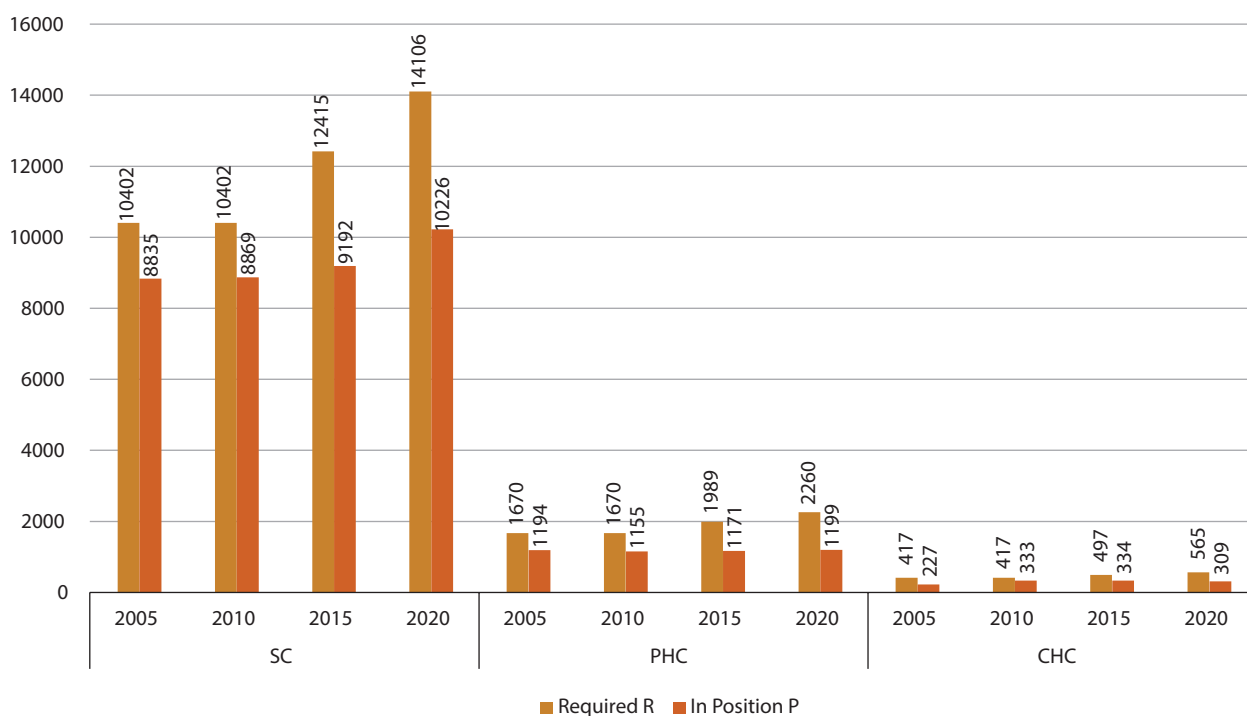


Figure 9: Year Wise Health Infrastructure Shortfall (%)

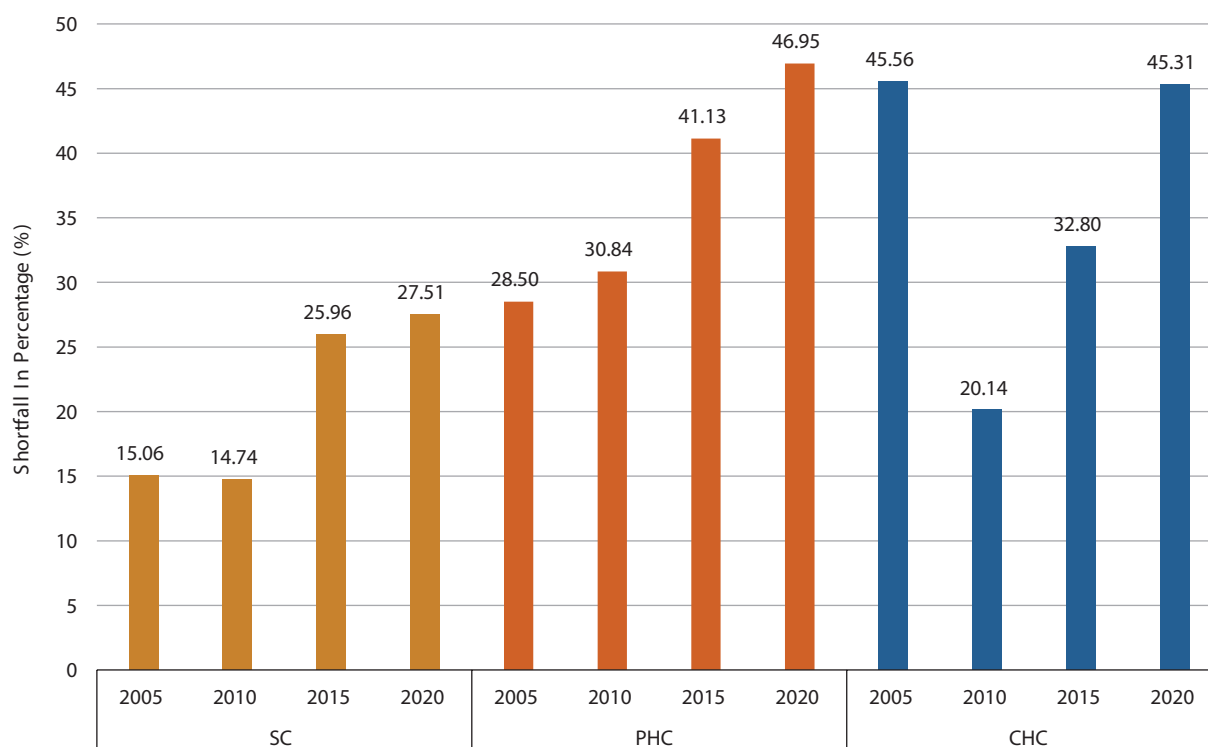
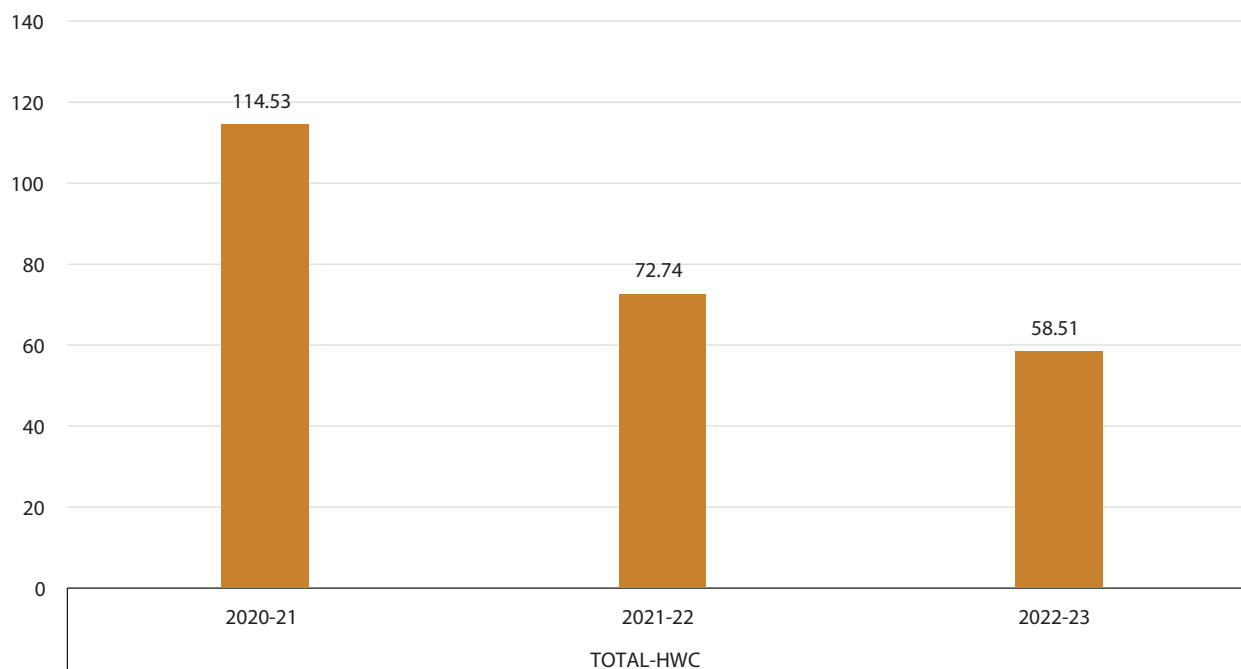


Figure 10: Percentage HWCs progress against target - FY wise (%)

Madhya Pradesh (% HWCs progress as of 22/Dec/2021 against targets- FY wise)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)													
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted\ (Height For Age) (%)	Children Under 5 Years - Wasted\ (Weight For Height) (%)
1	Madhya Pradesh	NFHS 4 Total	927	17.7	NA	32.4	51.4	0.5	4.9	12.1	35.7	80.8	76.3	6.6	42	25.8
2	Madhya Pradesh	NFHS 5 Urban	948	41.4	81.5	13	71.4	1.4	15.8	8.4	63.3	95.8	83.5	10.6	30.1	19.9
3	Madhya Pradesh	NFHS 5 Rural	959	36.8	59.2	26.6	71.9	0.9	5.3	7.4	55.6	89.2	83.2	8.7	37.3	18.7
4	Madhya Pradesh	NFHS 5 Total	956	38.1	65.4	23.1	71.7	1.1	8.1	7.7	57.5	90.7	83.3	9.2	35.7	19
5	Agar Malwa	NFHS 5 Total	1212	58.9	55.5	35.6	78.2	0.6	5.8	3.4	76.5	98.9	NA	0	40.3	18.7
6	Alirajpur	NFHS 5 Total	942	42.5	40.8	30.7	75.9	1.1	6.1	6.8	54.7	83.2	82.7	6.6	34.6	15.4
7	Anuppur	NFHS 5 Total	970	52.8	72.1	18.6	65.5	0.7	1.2	8.2	63.6	84.8	90.1	6.3	24	18.4
8	Ashoknagar	NFHS 5 Total	915	34.2	57	29.7	76.6	0.5	7.6	6.5	57.9	91.3	82	3.1	32.6	19.7
9	Balaghat	NFHS 5 Total	979	68.4	77.4	4.4	75.2	0.3	1.6	6.5	69.1	95.1	82	9.7	41.9	20.5
10	Barwani	NFHS 5 Total	896	29.2	49.3	29.6	76.1	0.9	7.9	6.6	64.2	85.1	78.3	11.1	45.8	18.9
11	Betul	NFHS 5 Total	1049	51.3	72.7	11.2	77.2	0.8	5.7	4.6	74	87.6	83.6	9.9	30.8	21.7
12	Bhind	NFHS 5 Total	968	31	70.2	25.1	58.7	1.2	5.7	17.2	63.1	93.5	77.8	13.6	32.2	12.4
13	Bhopal	NFHS 5 Total	NA	50.7	80	11.3	78.7	2.9	17.3	9.6	64.6	98.3	NA	14.4	19.9	20.6
14	Burhanpur	NFHS 5 Total	816	42.2	64.7	17.8	75.7	0.9	10.8	6.8	63.1	90.7	92.6	16.8	38.7	27.9
15	Chhatarpur	NFHS 5 Total	925	17.1	60.5	39.2	72.9	0.3	8.9	6.4	36.9	85.2	80.4	6.8	45.1	17.5
16	Chhindwara	NFHS 5 Total	1078	48.5	72.7	11.6	80.2	2.1	4.6	3.6	67	92.2	75.7	5.8	23.9	18.1
17	Damoh	NFHS 5 Total	751	21.6	61.6	28.6	72.9	1.2	4.6	6.4	46.4	85	76.9	12.7	40.3	16.2
18	Datia	NFHS 5 Total	658	30.9	67.2	27.7	73.1	0.2	5.9	7.4	54.2	89.4	80.6	2.8	36.8	16.4
19	Dewas	NFHS 5 Total	885	35.1	64.2	28.1	63.6	0.9	9.8	7.7	49.1	92.2	95	13.1	36.8	20.4
20	Dhar	NFHS 5 Total	1056	30.3	55.6	26.5	77.7	2.4	6.1	4.8	76.5	95.5	82.3	4.6	28.8	29.5
21	Dindori	NFHS 5 Total	903	47.2	63.7	21.1	78.1	1.8	2.2	3.5	56.5	77.6	81.7	12.9	38.9	15.8
22	Guna	NFHS 5 Total	825	43.1	53.2	28.1	73	0.6	8	8.5	68.3	98	81.7	9.9	31.9	10.1
23	Gwalior	NFHS 5 Total	753	40.6	76	11.8	60.6	0.5	10.9	13.4	68.9	94.8	86.6	11.6	40.1	12.4
24	Harda	NFHS 5 Total	891	33.3	71.4	10	78	0.4	10.9	5.2	71.9	88.4	93.8	9.9	38.8	28
25	Hoshangabad	NFHS 5 Total	950	28.6	67.6	16.7	28.6	0.4	4.9	17.7	31.5	91.8	90.3	11.2	34.8	19.5
26	Indore	NFHS 5 Total	996	40.3	80.3	21.7	83.4	2.3	2.2	4	74.6	96.5	90.3	9.8	28.7	21.2
27	Jabalpur	NFHS 5 Total	NA	61.2	68.2	7.2	83	0.5	1.9	2.9	60.4	94.7	NA	NA	18	26.4
28	Jhabua	NFHS 5 Total	1156	43.7	37.1	36.5	76	1	5.4	5.8	63.6	92.9	92.2	15.7	49.3	17.9

29	Katni	NFHS 5 Total	958	18.1	67.2	17.2	72.4	1	6.3	6	52.9	91.8	77.9	8.2	49.5	21.8
30	Khandwa (East Nimar)	NFHS 5 Total	1272	38.1	65.8	10.8	72.9	0	3.6	8.5	62.2	93.2	94	3.5	38.4	20.7
31	Khargone (West Nimar)	NFHS 5 Total	1043	43.7	59.5	13.3	77.8	0.9	9.1	5.5	61.3	92.8	76.9	6.6	31.4	27.4
32	Mandla	NFHS 5 Total	1130	42.6	66.5	15	79.1	2	3.4	3.6	54.4	87.6	94.6	7.3	32.1	15.9
33	Mandsaur	NFHS 5 Total	1021	48.4	64.8	34.8	72.6	0.5	11.8	8.7	60.8	99.4	85.2	1.2	30.9	13.1
34	Morena	NFHS 5 Total	1087	36.3	65.5	27.8	58.9	0.4	5.2	15	64.9	94.8	69.3	8.2	40	10.1
35	Narsimhapur	NFHS 5 Total	947	49.4	69.2	19.6	78.9	0.8	4.3	3.5	74.2	91.4	81.3	18.1	32	19.6
36	Neemuch	NFHS 5 Total	993	43.3	67.3	29.3	73.4	0.5	11.1	7.6	60.6	97.5	87.9	3.3	33	13.1
37	Panna	NFHS 5 Total	889	12.6	55.7	22.8	67.6	0.7	7	9.4	30.9	84	76.2	9.4	45.1	23.2
38	Raisen	NFHS 5 Total	754	41	75.2	12.6	76.3	0	16.3	5.3	56.6	96	NA	19	30.4	21.1
39	Rajgarh	NFHS 5 Total	971	27.1	52.1	46	69.2	1.1	11.7	8.7	55.2	91.7	83.8	5.2	27.6	22.4
40	Ratlam	NFHS 5 Total	1067	37.9	62.4	31.3	72.6	0.5	12.4	7	65.1	95.2	95.5	16.7	29	16.2
41	Rewa	NFHS 5 Total	954	29.4	62.3	28.2	70.7	1.3	6.4	8.8	33	80.4	77.7	10.1	37	18.7
42	Sagar	NFHS 5 Total	939	27.5	69.4	21.4	68.5	0.7	8.1	8	35.9	86.9	77	8.5	42.7	15.2
43	Satna	NFHS 5 Total	658	22	69.1	12.9	71.6	0.7	3.8	9.1	51.5	85.5	79.5	7	49.4	16.8
44	Sehore	NFHS 5 Total	824	33.2	64.3	21.7	53.4	0.7	11.3	14.7	45	94.7	82.7	5.5	21.9	20.3
45	Seoni	NFHS 5 Total	1212	44.6	71.6	11.2	78	1.3	4.7	4.4	64.5	94.8	96.1	12.1	23.5	21.1
46	Shahdol	NFHS 5 Total	1032	58.4	68.5	27.5	64.5	1.7	3.2	9.2	57.4	85.6	87.4	6.2	44	20.4
47	Shajapur	NFHS 5 Total	1012	34.3	58	24.4	78.2	1.8	10.9	6.1	64.7	98.1	89.2	8.2	27.8	23.4
48	Sheopur	NFHS 5 Total	974	27.1	49.8	39.5	67.7	0.7	7.2	9	41	84.2	78.3	4.4	45.8	16.2
49	Shivpuri	NFHS 5 Total	963	38.9	56.7	32.5	64.3	0.3	5.2	12.7	52.7	94.5	67.8	7.2	39.2	18.4
50	Sidhi	NFHS 5 Total	763	26.1	64.4	23	71.7	2.5	6.6	6.4	39.4	83.8	77.5	13.2	39.1	16.6
51	Singrauli	NFHS 5 Total	884	58.5	60.7	24.7	58.1	1.8	1.2	12.5	58.1	69.9	78.3	6.4	37.3	25.2
52	Tikamgarh	NFHS 5 Total	1105	40.5	67.7	32.6	76.2	0.2	3.7	4.1	64.2	89.8	79.9	8.8	27.5	19.7
53	Ujjain	NFHS 5 Total	958	35.7	64.3	33.4	75.4	0.9	11.8	6.4	60.3	97.1	96.4	11.2	34.7	29.8
54	Umaria	NFHS 5 Total	906	19.9	63	21.2	71.2	0.8	5.3	5.7	48.9	92.2	91.9	9.8	45.3	15.5
55	Vidisha	NFHS 5 Total	960	48.2	64.8	22.8	75.1	1.4	13.8	5.9	54.4	90.6	88.2	3.9	36.5	16.6

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'. Out of two indicators with either vaccination card or mother's recall, & vaccination card only, - vaccination card only indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color - Best five performing districts within the districts for a particular indicator

B. Red - Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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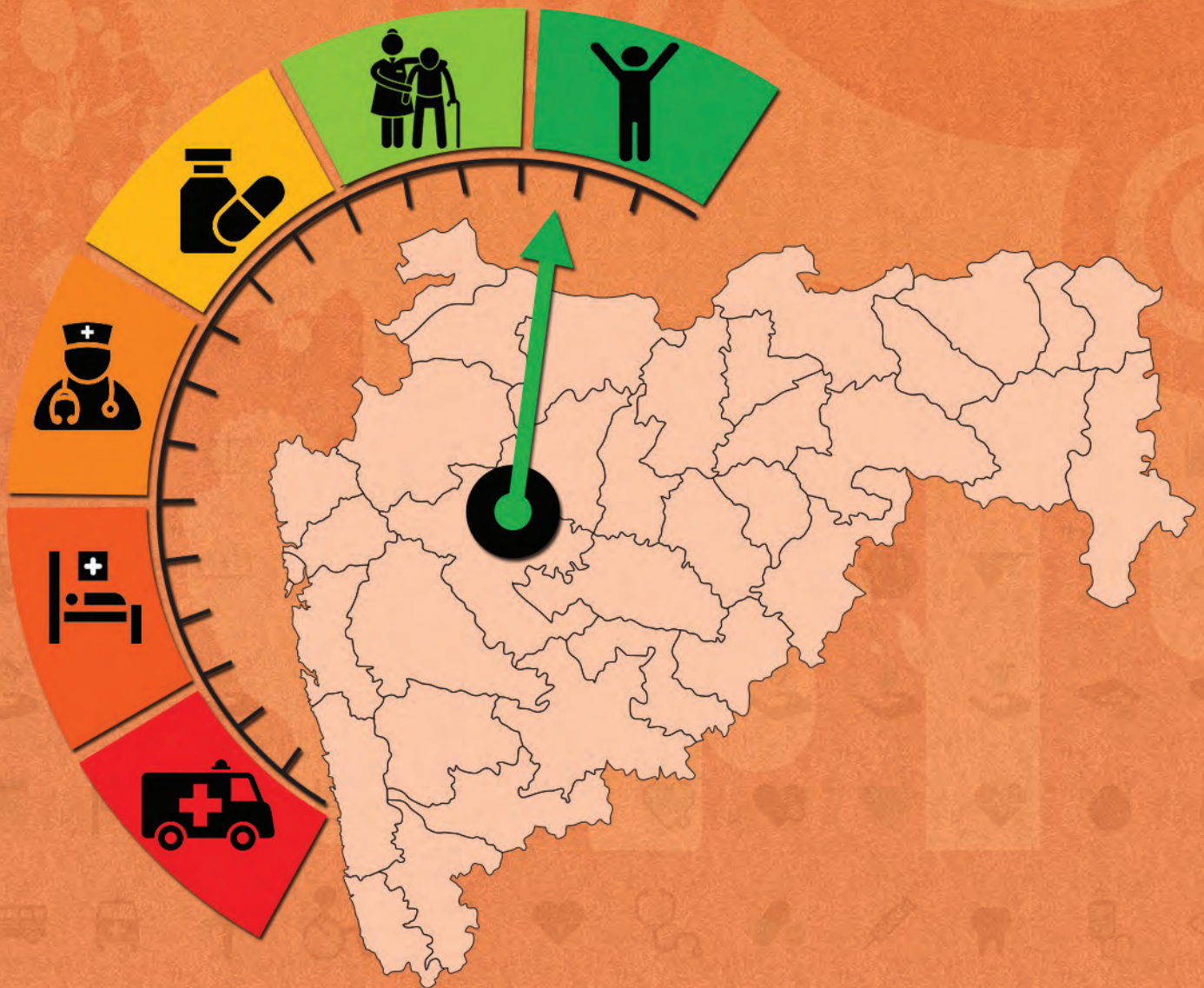
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



MAHARASHTRA

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
2 nd	Pune	Nashik
4 th	Kolhapur	Gondia
7 th	Ratnagiri	Nandurbar
9 th	Bhandara	Osmanabad
10 th	Nashik	Nagpur
11 th	Wardha	Parbhani
12 th	Satara	Gadchiroli

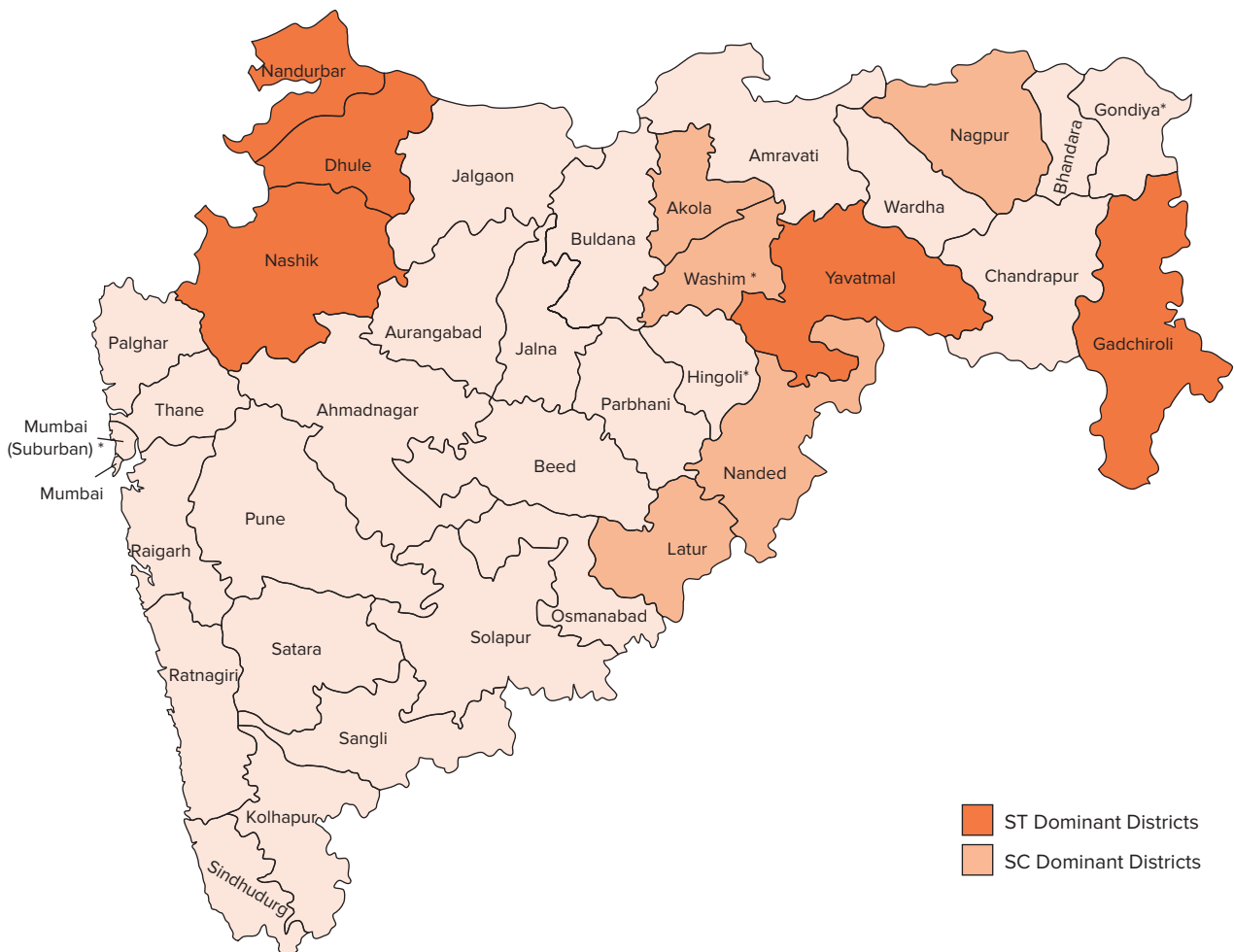
MAHARASHTRA

1. BACKGROUND

1.1 State Profile

Maharashtra is the 3rd largest state^a in India with a geographical spread of 3,07,713 km². The State is divided into 36 districts. It is the second most populous State in the country with a population of over 11.23 crores, accounting for 9.28% of the total population^b of India, with a projection to increase over

Figure 1: Top 5 ST & SC Dominant Districts



^a Including all states & UTs; RHS 2020

^b Census 2011

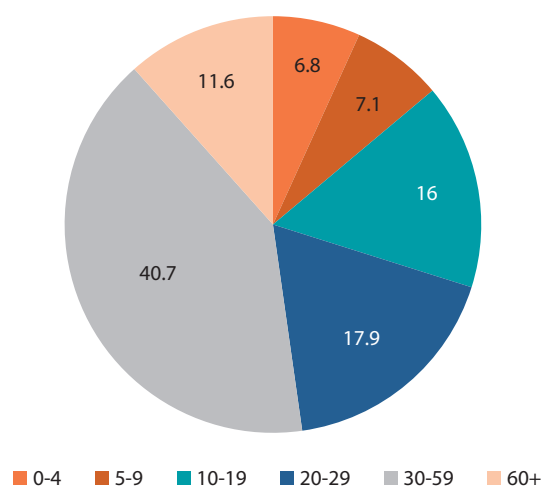
12.4 crores by 2021^c. As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 1.32 crores (11.81%) and 1.05 crores (9.35%), respectively. Out of the 36 districts, top five ST & SC dominant districts account for 40.75% of ST & 19.45% of SC population in the State(Annexure 1, State Profile). In Maharashtra 54.77% of the population reside in rural areas, while the remaining 45.22% reside in urban areas. There are 3 metro cities and 6 Million plus cities in the State. At present, 95 cities^d are covered under the National Urban Health Mission. The total length of roads in the State is 6,23,972 km (12.48%^e), with national highways constituting 15,437 km (13.52%^f) and state highways constituting 39,000 km (22.28%^g). Agriculture is the mainstay of the state of Maharashtra. Nearly 65% of the total workers in the State depend on agriculture and allied activities^h.

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

In Maharashtra, out of the 36 districts -13 districts have a population of over 30 lakhs, 9 districts have a population between 20-30 lakhs, 12 districts have a population between 10-20 lakhs and only 1 district has a population less than 10 lakhs (Annexure 1.1, State Profile). The State's sex ratio at birth (880 females for every 1000 males) is lower than the national average (899 females for every 1000 males) (Annexure 1.2). It is estimated that 16% of the total population is in 10-19 years age group, 58.6% between 20 to 59 years age group; and 11.6% is 60 years and above(Figure 2).The crude birth and death rates have declined from 19 and 6.7 in 2005 to 15.3 and 5.4 in 2019 respectively (Annexure 2, Figure 2). The literacy rate increased from 76.88% in 2001 to 82.33% in 2011, with male & female literacy rates being 88.38% and 75.87% respectively (Annexure 1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)ⁱis 29.9% for higher education, 67.81% for senior secondary education, 89.95% for secondary education, 98.3% for elementary education, and 97.74% for primary education.

Figure 2: Maharashtra - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people over 60 years constitute 11.6% of the State's total population. The life expectancy at 60 years of age is 18.8 years for males, and 19.7 years for females (2014-2018)^j. 79% of elderly females and 31% elderly males

^c Census Population Projection 2019

^d QPR NHM MIS Report as on 31 Dec 2020

^e Percentage of total length of roads in Maharashtra

^f Percentage of total length of National Highways in the country

^g Percentage of total length of State Highways in the country

^h Maharashtra - State Agricultural Portal; https://agricoop.nic.in/sites/default/files/Maharashtra-SAP_V1.3-2.pdf

ⁱ Gross Enrollment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

^j SRS Based Life Abridged Tables

in urban areas, and 61% of elderly females and 26% elderly males in rural areas are economically fully dependent on others. The old age dependency ratio is 15.7 in 2011; which are 14.2 for males, 17.2 for females, 18.8 in rural and 12.2 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly men and women is 35% each, which is higher than the national average of 31% for both.

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+N^k services with major focus on primary and secondary care services under NHM. Indicators for Antenatal care (ANC)^l, institutional deliveries, C sections, distribution of IFA^m tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care, have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declinedⁿ from 104 (2007-09) to 46 (2016-18). In Maharashtra, 94.7% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5, Parbhani, Nanded, Bid/Beed, Aurangabad & Nandurbar districts reported poor full ANC coverage (mother who has at least 4 ANC) ranging from 47.4% to 58.2%. As reported, around 99.4% of total reported deliveries took place in institutions, out of which 49% took place in public institutions. Total percentage of C-sections (23.9%) is higher than that of the WHO's standard (10-15%); and out of the total reported C-sections, 26.4% is conducted at private facilities in the State. Around 61.1% of women are tracked for their first postpartum checkup between 48 hours and 14 days (Annexure 1.4). Prevalence of Anaemia aged 15-49 years increased in women from 49.7% (NFHS 4) to 57.2% (NFHS 5). Anaemia in females of reproductive age group is more than twicethan in men of similar age group (Annexure 2, Figure 5).

Refer Annexure 3 for detailed district wise comparison of NFHS 5 key indicators.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 36 (2005) to 17 (2019), which is exceptionally lower than the national average of 30 (Annexure 2, Figure 1). Additionally, NNMR^o and Still Birth (per 1,000 live births) Rates have also significantly declined from 25.1 and 11.9 (2005) to 13 and 5 (2018), respectively (Annexure 2, Figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs. The life expectancy at birth has also improved from 69.9 (2006-10) to 72.5 (2014-18), which is higher than the national average of 69.4 (Annexure 2, Figure 3). As per NFHS 5, Mumbai Suburban, Palghar, Nashik, Hingoli & Bid/Beed districts reported low SRBs^p ranging from 703 to 843; whereas Latur, Wardha, Gadchiroli, Amravati, Gondiya & Osmanabad districts reported high SRB, ranging from 1265 to 1050.

^k Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^l Antenatal Check up

^m Iron Folic Acid Tablets

ⁿ SRS MMR Bulletin

^o Neonatal Mortality Rate

^p Sex Ratio at Birth

Full vaccination^q coverage for children between 12 – 23 months improved from 78.4% (NFHS 4) to 81.7% (NFHS 5). The percentage of under 6-months children exclusively breastfed also improved from 56.6% (NFHS 4) to 71% (NFHS 5). An increase in childhood anaemia from 53.8% to 68.9% in children aged 6-59 months is reported (Annexure 2, Figure 5). For under-5 years stunting - Satara, Mumbai, Nagpur, Wardha & Amravati districts reported comparatively low burden ranging from 20.2% to 29%, while Nandurbar, Buldhana, Latur, Nashik, Thane & Bid/Beed districts reported high burden ranging from 40.8% to 45.8%. For under 5 years stunting - Osmanabad, Thane, Latur, Mumbai Suburban and Sangli districts reported comparatively low burden, ranging between 16.1% - 18.6%; whereas Dhule, Chandrapur, Nagpur, Buldhana and Washim districts reported high burden ranging from 31.7% to 38.9%,

2.3 Family Planning

The TFR^r reduced from 2.2 in 2005 to 1.7 in 2018, which is lower than the national average of 2.2 (Annexure 2 Figure 4). The total unmet need in the State is reported as 9.6%, while unmet need for spacing is 3.9% (NFHS 5). Parbhani district reported the highest total unmet need (18.5%) and Nagpur reported the lowest (4.2%) (NFHS 5). Around 63.8% of married women reported to avail any modern method of family planning in the State (NFHS 5), with sterilization acceptance being 49.1% among females and 0.4% among males.

2.4 Communicable Diseases

The State has 36 functional IDSP units in place^s. The proportion of Communicable, Maternal, Neonatal, and Nutritional Diseases [CMNND] contribute to 22.27% of total disease burden (GBD 2019) with diarrheal diseases, lower respiratory infections & drug-susceptible TB being the major causes of death in the State (Annexure 2, Figure 6)^t. As per QPR reports, the annualized total case notification rate for TB is 161% and NSP^u success rate is 74% as opposed to the national average of 163% and 79%, respectively. For NLEP^v, the reported prevalence rate of 1.19 per 10,000 population is higher than the national average of 0.61. In FY 2019-20, deaths from vector borne diseases include 8 due to malaria, 29 due to dengue, while none due to Kala azar.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that 63.7% of total disease burden in the State is due to premature deaths, while disability or morbidity accounts for 36.3%. Ischaemic heart disease, COPD & Diabetes Mellitus Type 2 remain the major causes for DALYs (Annexure 2, Figure 6). NCDs contribute to 66% of DALYs, while injuries contribute to 11.72% of DALYs in the State (GBD 2019). The State ranks second in the country for the total number of fatal road accidents with respect to other states (Annexure 1.4). The recent NFHS5 report revealed that 10.9% of women and 33.8 % of men used any kind of tobacco, while 0.4% of women and 13.9% of men consumed alcohol. High systolic blood pressure, high fasting plasma glucose, ambient particulate matter pollution and smoking are the major risk factors for all DALYs (Annexure 2, Figure 7).

^q NFHS 5 Maharashtra Factsheet, based on information from vaccination card only

^r Total Fertility Rate

^s QPR NHM MIS Report (Status as on 01.03.2020)

^t <https://vizhub.healthdata.org/gbd-compare/india>

^u New Smear Positive

^v National Leprosy Eradication Programme

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 23,32,992 crores. The State is positioned 13th out of 32 States in terms of per capita^w of ₹ 1,91,736. According to NHA (2017-18), the per capita Government Health Expenditure in the State is ₹ 1,356, which is less than the national average of ₹ 1753. On the other hand, the OOPE^x as a share of Total Health Expenditure is 49.1%, which is more than the national average of 48.8%. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated as ₹ 25,843 in private hospitals and ₹ 6,844 in public hospitals, while the same in urban areas is estimated as ₹ 37,057 in private hospitals and ₹ 8,369 in public hospitals. For childbirth, OOPE in public facilities is estimated to be around ₹ 2,104 in rural areas and ₹ 2,984 in urban areas, whereas in private health facilities, it is estimated as ₹ 15,801 in rural areas and ₹ 23,229 in urban areas. In public health facilities, the share of expenditure on medicines for in-patient care is estimated as 41% and 36% for rural and urban areas, respectively; whereas for diagnostics, it is around 22% and 11% in rural and urban areas, respectively (Annexure 1.6, Healthcare Financing).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Though public health facilities have increased over time, 24.86% shortfall in HWC-SCs, 20.79% shortfall in PHCs and 51.82% shortfall in CHCs still remain in the State (Annexure 2, Figure 9). Currently, there are 10,647 SCs, 1,829 PHCs, 278 CHCs in place against the required 14,170 SCs, 2,309 PHCs and 577 CHCs. Similarly, in urban settings, there are 846 PHCs in place against the required 1,182; thereby accounting to a shortfall of 28.43%. The State has 49 DHs, 100 SDH and 26 Government medical colleges. In the State, 84% of DHs (41), 89% of SDH (89) and only 42.8% of CHCs (119) serve as functional FRUs. In tribal catchments, there are 2,568 SCs, 397 PHCs and 64 CHCs in place against the required 3,148, 472 and 118 respectively; thereby amounting to a shortfall of 18.61%, 15.89% and 45.76% respectively.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 8,864 HWCs (6,573 SHCs, 1,828 PHCs & 463 UPHCs) are operationalized in the State as of 22nd December 2021^y.

In the State, 33 districts are equipped with MMUs under NHRM, and 10 under NUHM. The State has 99% of ASHAs in position under NRHM and 87% under NUHM, which are higher than the national average of 96% and 85%, respectively. The doctors to staff nurse ratio in place is 1:1, with 3 public healthcare providers available for every 10,000 populations (Annexure 1, Table 1.5)

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 906.41 availed (events) OPD services and 49.15 availed (events) IPD services. However, as per the NSSO data (2017-18), only 29% of all OPD cases in rural and 22% in urban used public facilities, respectively. Similarly, 26% of all IPD cases in rural and 18% in urban utilized public facilities. Utilization of public health facilities in the State is lower than the national average.

^w Directorate of Economics and Statistics of Maharashtra State Government

^x Out of Pocket Expenditure

^y AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^z

Indicator	Maharashtra 2011 ¹	India
Total Population (In Crore)	11.23	121.08
Rural (%)	54.77	68.85
Urban (%)	45.22	31.14
Scheduled Caste population (SC) (in crore)	1.32 (11.81%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	1.05 (9.35%)	10.45 (8.63%)
Total Literacy Rate (%)	82.3	74.04
Male Literacy Rate (%)	88.4	82.14
Female Literacy Rate (%)	75.9	65.46
Number of Districts in the Maharashtra ²	36 ^{aa}	
Number of districts per lakh population in Maharashtra (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	1
	≥ 10 Lakhs - <20 Lakhs	12
	≥20 Lakhs - <30 lakhs	9
	≥30 Lakhs	13
ST SC Dominant (Top 5) Districts of Maharashtra ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Nandurbar - 69.27%	Akola - 20.07%	
Gadchiroli - 38.70%	Latur - 19.57%	
Dhule - 31.56%	Washim - 19.16%	
Nashik - 25.61%	Nanded - 19.05%	
Yavatmal - 18.54%	Nagpur - 18.64%	
Top 5 ST dominant district accounts for - 40.75%	Top 5 SC dominant district accounts for - 19.45%	

1.2 Key Health Status & Impact Indicators^{bb}

Indicators	Maharashtra	India
Infant Mortality Rate (IMR) ³	17	30
Crude Death Rate (CDR) ³	5.4	6

^z Sources used are mentioned at Annexure 5

^{aa} Palghar district is added in 2014

^{bb} Sources used are mentioned at Annexure 5

Crude Birth Rate (CBR) ³	15.3	19.7
Maternal Mortality Ratio (MMR) ³	46	113
Neo Natal Mortality Rate (NNMR) ⁴	13	23
Under Five Mortality Rate (U5MR) ⁴	22	36
Still Birth Rate ⁴	5	4
Total Fertility Rate (TFR) ⁴	1.7	2.2
Life expectancy at birth ⁵	72.5	69.4
Sex Ratio at Birth ⁴	880	899

1.3 Key Health Infrastructure Indicators

Indicators	Numbers (Total)			
Number of District Hospitals ²	49			
Number of Sub District Hospital ²	100			
Number of Government (Central + State) Medical College ⁶	26			
Number of Private (Society + Trust) Medical Colleges ⁶	31			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	6573	2849	5888	7915
PHC-HWC	1828	1823	1823	1823
UPHC-HWC	463	618	618	618
Total-HWC	8864	5290	8329	10356
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	577	278	51.82	
Number of Primary Health Centres (PHC)	2,309	1,829	20.79	
Number of Sub Centres (SC)	14,170	10,647	24.86	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	41	89	119	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	1,182	846	28.43	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	118	64	45.76	
Number of PHC	472	397	15.89	
Number of SC	3,148	2,562	18.61	

Patient Service⁹	Maharashtra	India
IPD per 1000 population	49.15	62.6
OPD per 1000 population	906.41	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	26.54	36.4

1.4 Major Health Indicator^{cc}

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Maharashtra	India
% DALY ^{dd} accountable for CMNNDs ^{ee}	22.27	27.46
% DALY accountable for NCDs	66	61.43
% DALY accountable for Injuries	11.72	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Maharashtra	India
Level of Birth Registration (%)	91.4	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	38.2	20.7
RMNCHA+N		
Maternal Health⁹	Maharashtra	India
% 1st Trimester registration to Total ANC Registrations	85.7	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	94.7	79.4
Total Reported Deliveries	1798428	21410780
% Institutional deliveries to Total Reported Deliveries	99.4	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	49	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	51	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	23.9	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	21.2	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	26.4	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	61.1	53.4
Neonatal⁹	Maharashtra	India
% live birth to Reported Birth	99.2	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	12.1	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	92.3	89.9

^{cc} Sources used are mentioned at Annexure 5

^{dd} Disability Adjusted Life Years

^{ee} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Maharashtra	India
Sick New Born Care Unit (SNCU)	51	895
New Born Stabilization Unit (NBSU)	180	2418
New Born Care Corner (NBCC)	1511	20337
Child Health & Nutrition¹⁰	Maharashtra (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	8.9	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	59.5	60.6
Children under 5 years who are underweight (weight-for-age) (%)	36.1	32.1
Child Immunization¹⁰	Maharashtra (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	81.7	83.8
Children age 12-23 months who have received BCG (%)	93.8	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	84.7	87.9
Family Planning¹⁰	Maharashtra (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	3.9	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Maharashtra	India
Number of districts with functional IDSP unit	36	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Maharashtra	India
Annualized total case notification rate (%)	161	163
New Smear Positive (NSP) Success rate (in %)	74	79
National Leprosy Eradication Programme (NLEP)¹¹	Maharashtra	India
Prevalence Rate/10,000 population	1.19	0.61
Number of new cases detected	16,531	114,359
Malaria, Kala Azar, Dengue¹¹	Maharashtra	India
Deaths due to Malaria ¹¹	8	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	29	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Maharashtra (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	34.4	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	42.6	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Maharashtra (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	13.7	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	16	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	5.7	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	6.5	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Maharashtra (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	10.9	8.9
Men who use any kind of tobacco (%)	33.8	38
Women who consume alcohol (%)	0.4	1.3
Men who consume alcohol (%)	13.9	18.8
Injuries		
Road Traffic Accident¹²	Maharashtra	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	2	NA
Total number of fatal Road Accidents	11,787	137,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	38.8	33.7
Number of persons killed in Road Accidents	12788	115113

1.5 Access to Care^{ff}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Maharashtra	India
Number of Districts equipped with MMU under NRHM	33	506
Number of Districts equipped with MMU/Health Units under NUHM	10	31
Number of ERS vehicles operational in the States/UTs Under NHM	Maharashtra	India
102 Type	2674	9955
104 Type	0	605
108 Type	937	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	3293	11070

^{ff} Sources used are mentioned at Annexure 5

Key Domain Indicators		
ASHA ¹³	Maharashtra	India
Total number of ASHA targeted under NRHM	61260	946563
Total number of ASHA in position under NRHM	60816	904211
% of ASHA in position under NRHM	99	96
Total number of ASHA targeted under NUHM	9845	75597
Total number of ASHA in position under NUHM	8562	64272
% of ASHA in position under NUHM	87	85
Community Process ¹¹	Maharashtra	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	39770	554847
Number of Mahila Arogya Samitis (MAS) formed	5557	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total) ¹¹	Maharashtra	India
DH	24	796
CHC	469	6036
PHC	1835	20273
UHC	31	126
UPHC	347	3229
Human Resource for Health ¹⁴		
HRH Governance	Maharashtra	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	Yes	
Public Health Cadre available (Y/N)	Yes	
Overall Vacancies (Regular + contractual)	Specialists (%)	48
	Dentists (%)	12
	MO MBBS (%)	26
	Nurse (%)	26
	LT (%)	32
	ANM (%)	14
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	4 per 10,000	3 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	2:1	1:1

Ranking: Human Resource Index of Maharashtra¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ⁹⁹	35891	40192	27265	12927	8626	71.41
Staff Nurse	24551	16123	11451	4672	13100	
Lab Technician	6496	4513	2875	1638	3621	
Pharmacists	3588	4210	3585	625	3	
MO MBBS ^{hh}	6015	6258	5886	372	129	
Specialist ⁱⁱ	4502	4126	2662	1464	1840	

1.6 Healthcare Financing^{jj}

National Health Accounts (NHA) (2017-18)	Maharashtra		India	
Per Capita Government Health Expenditure (in ₹)	1356		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	0.7		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	6.1		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	49.1		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Maharashtra		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	29	22	33	26
IPD - % of hospitalized cases using public facility	26	18	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	194	287	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	689	734	845	915
IPD - Per hospitalized case (in INR) - Public	6,844	8,369	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	25,843	37,057	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	22	11	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	41	36	53	43

⁹⁹ MPW – Multi Purpose Health Worker (Female + Male)

^{hh} MO MBBS (Full Time)

ⁱⁱ Specialist (All Specialist)

^{jj} Sources used are mentioned at Annexure 5

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	2,104	2,984	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	15,801	23,229	20,692	26,701
State Health Expenditure	Maharashtra		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	4.3		5 ^{kk}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{kk} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

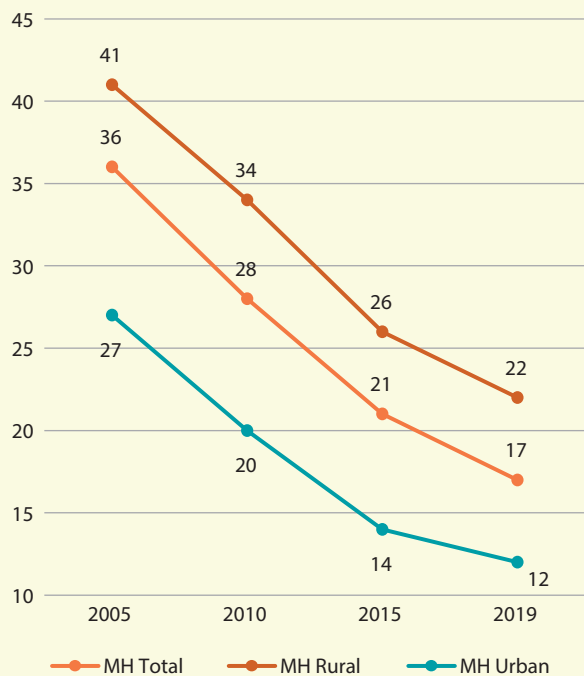


Figure 2: CBR & CDR Trend

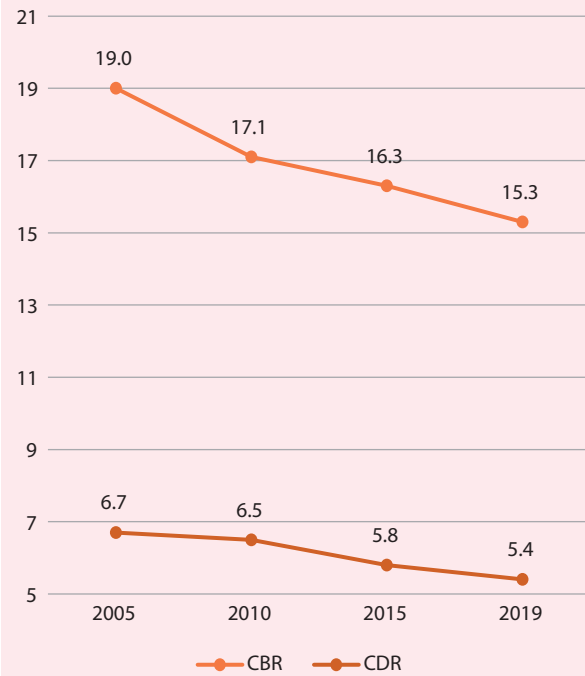


Figure 3: Life Expectancy At Birth Trend

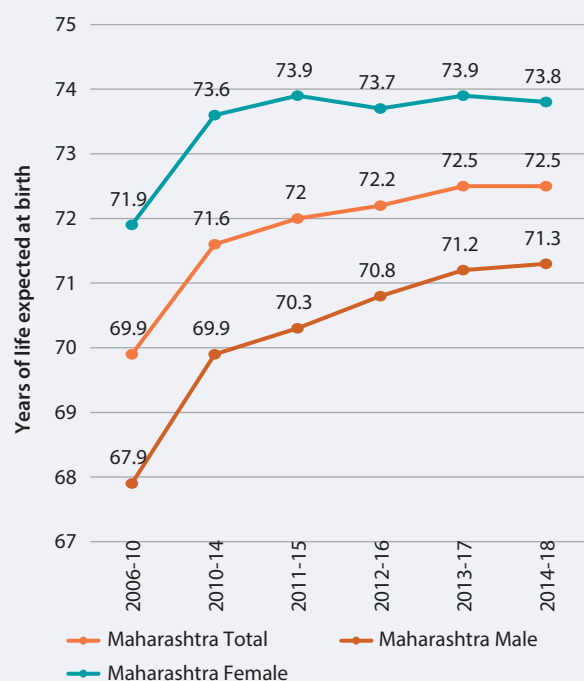


Figure 4: NNMR, TFR & Still Birth Trend

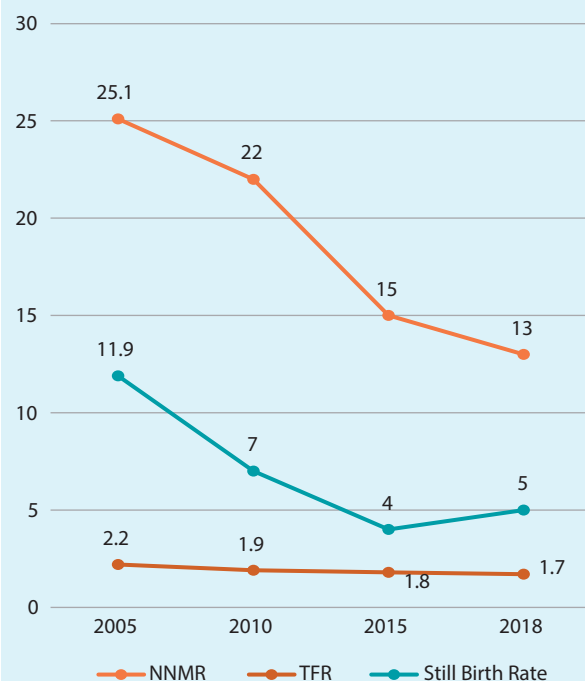


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

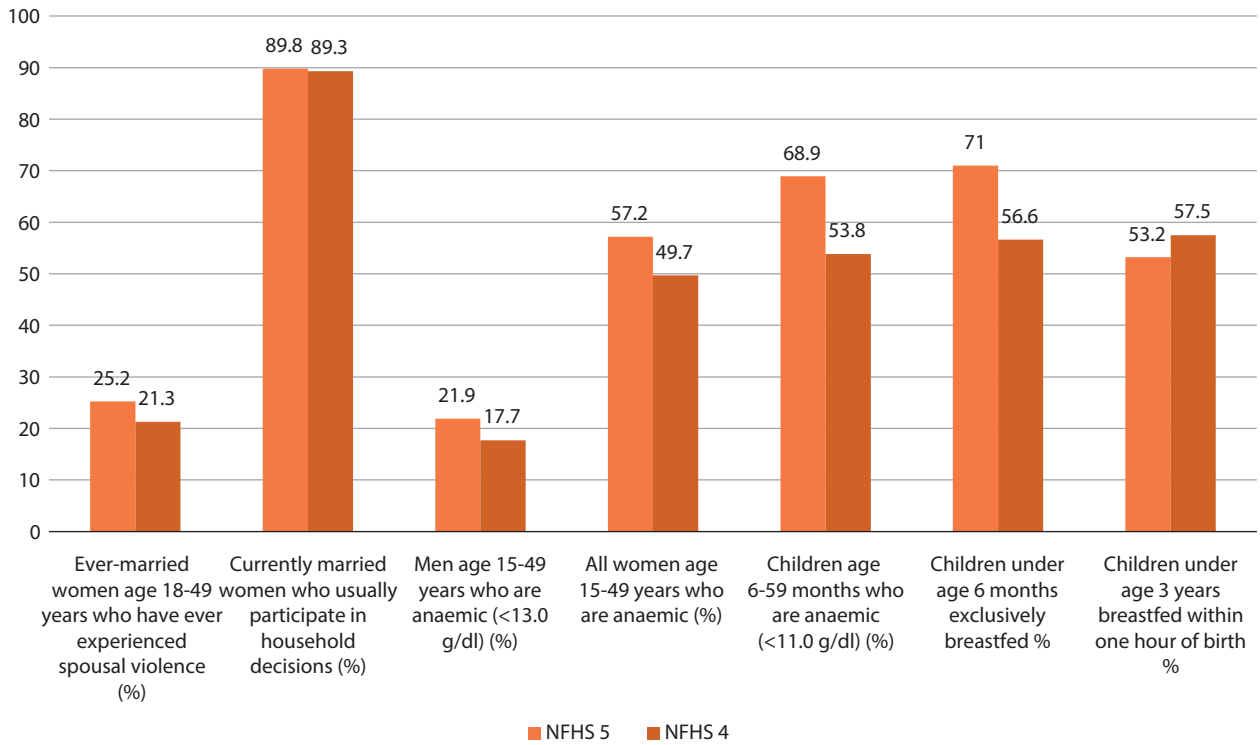


Figure 6: Top 15 causes of DALYs, 1990-2019

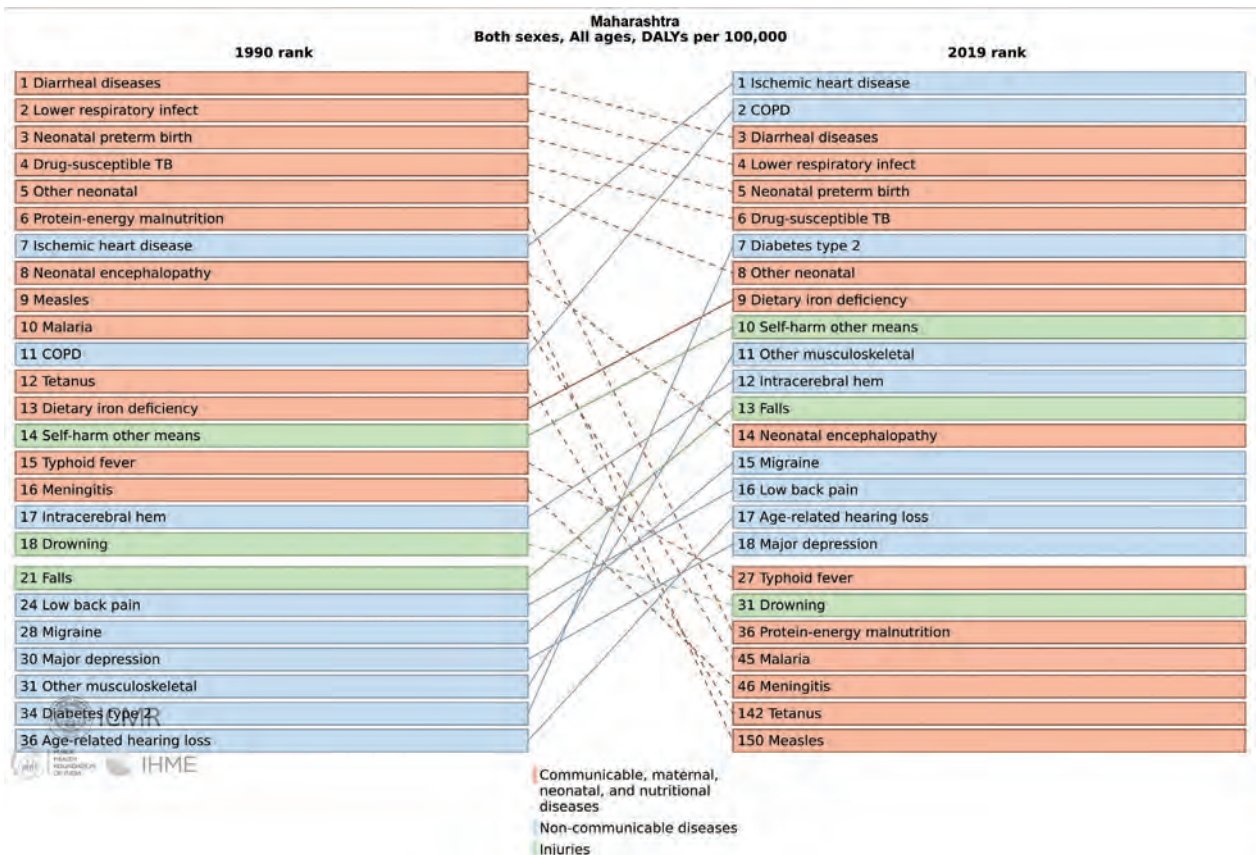


Figure 7: Top 15 risk of DALYs, 1990-2019

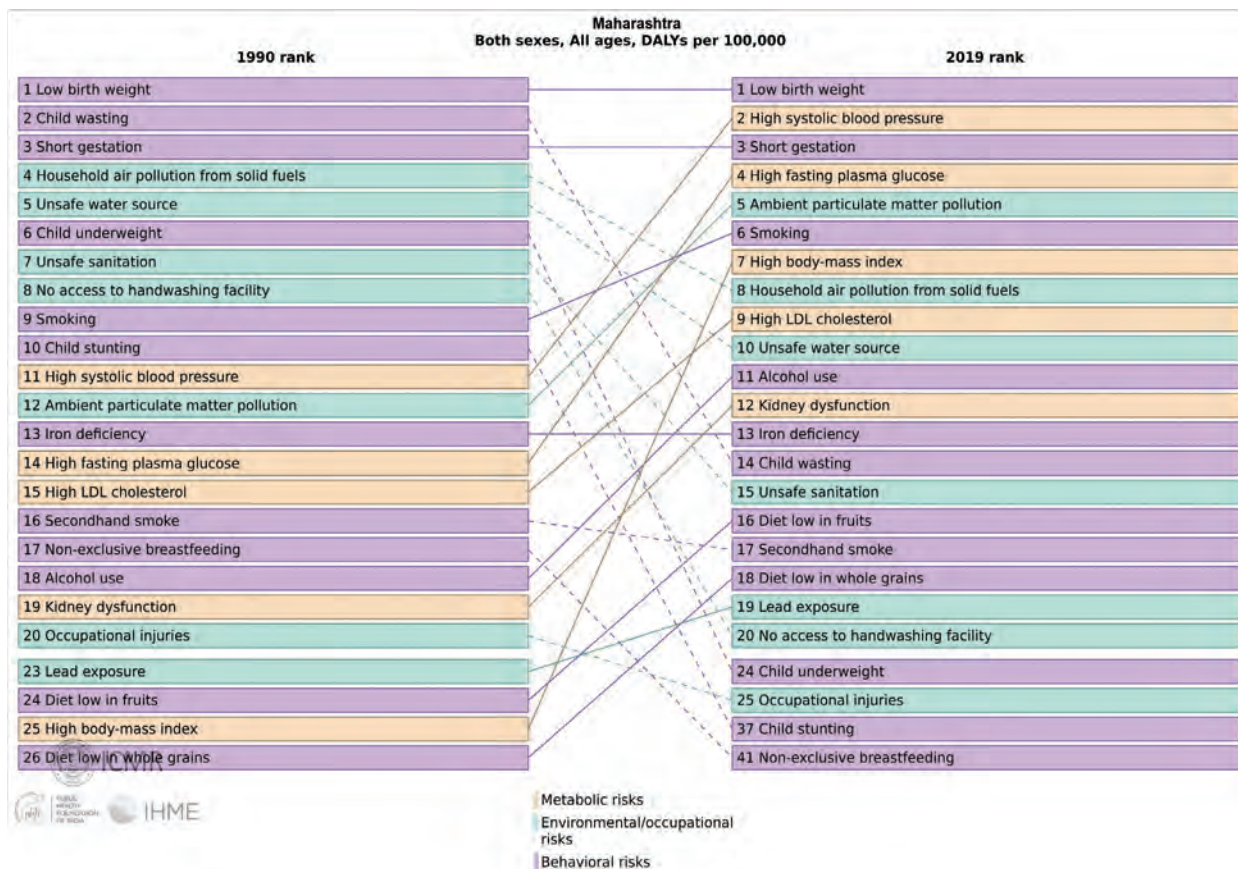


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

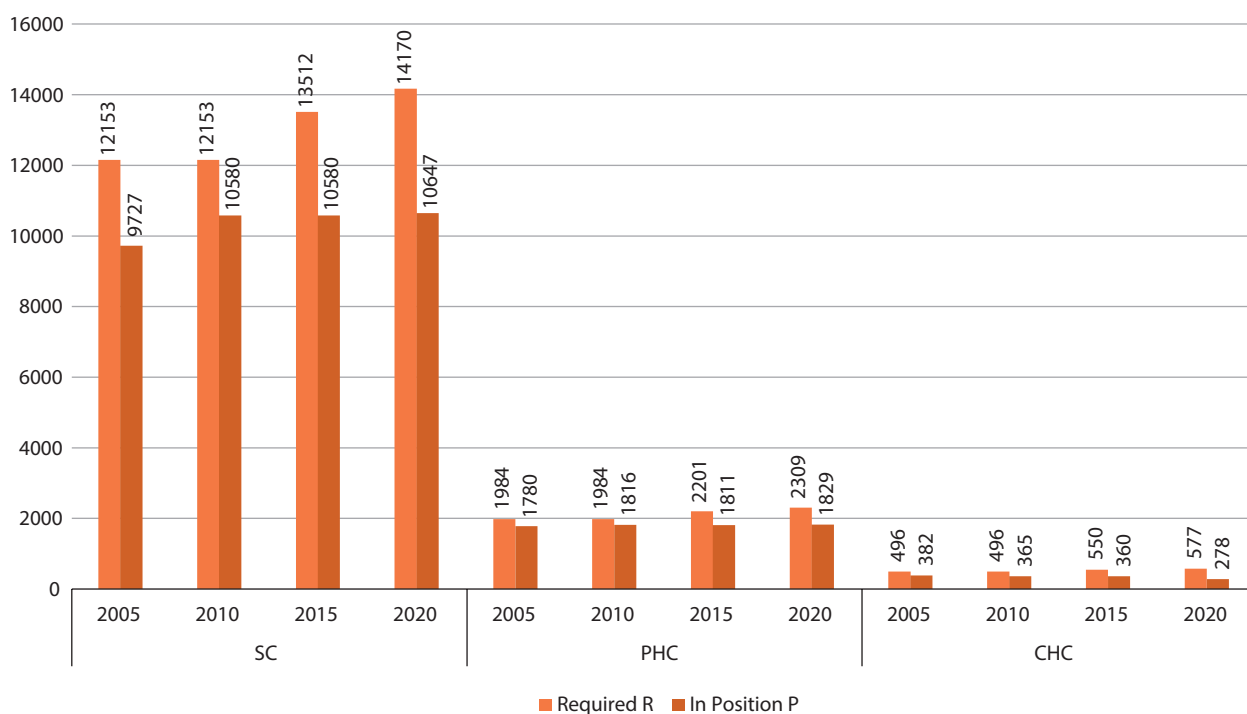


Figure 9: Year Wise Health Infrastructure Shortfall (%)

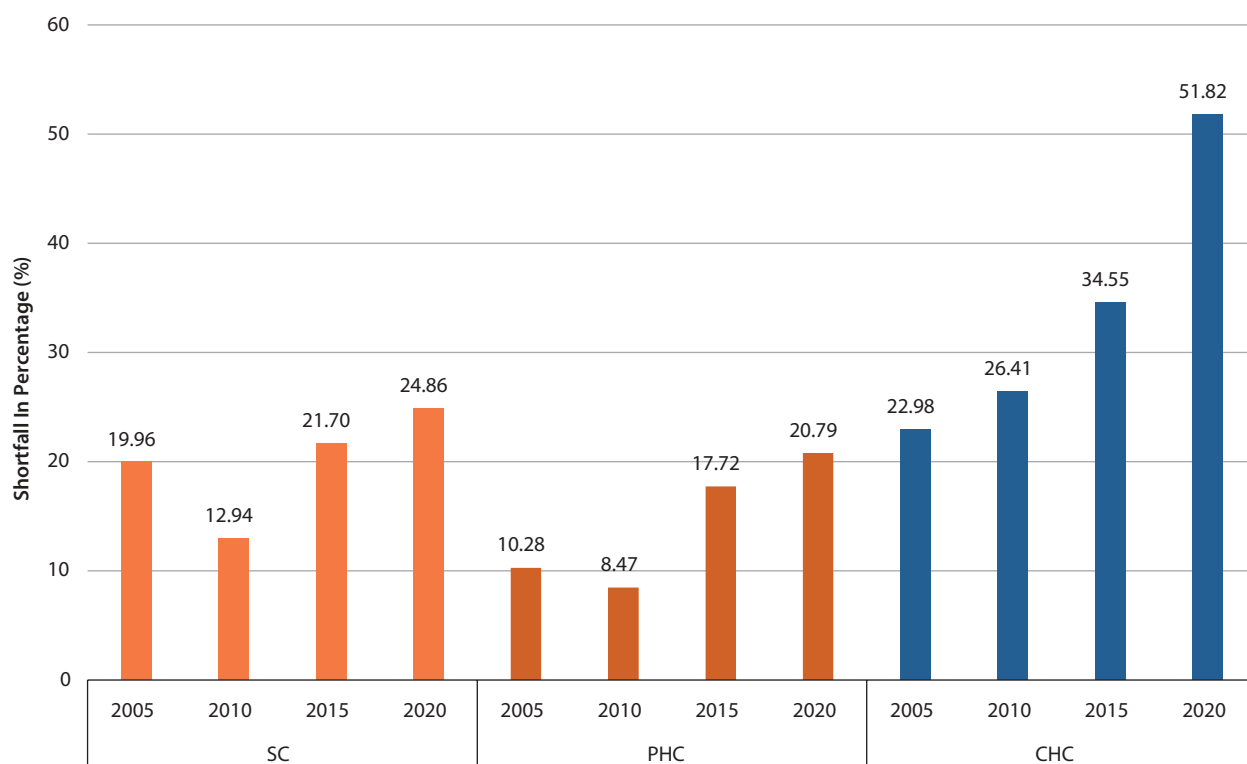
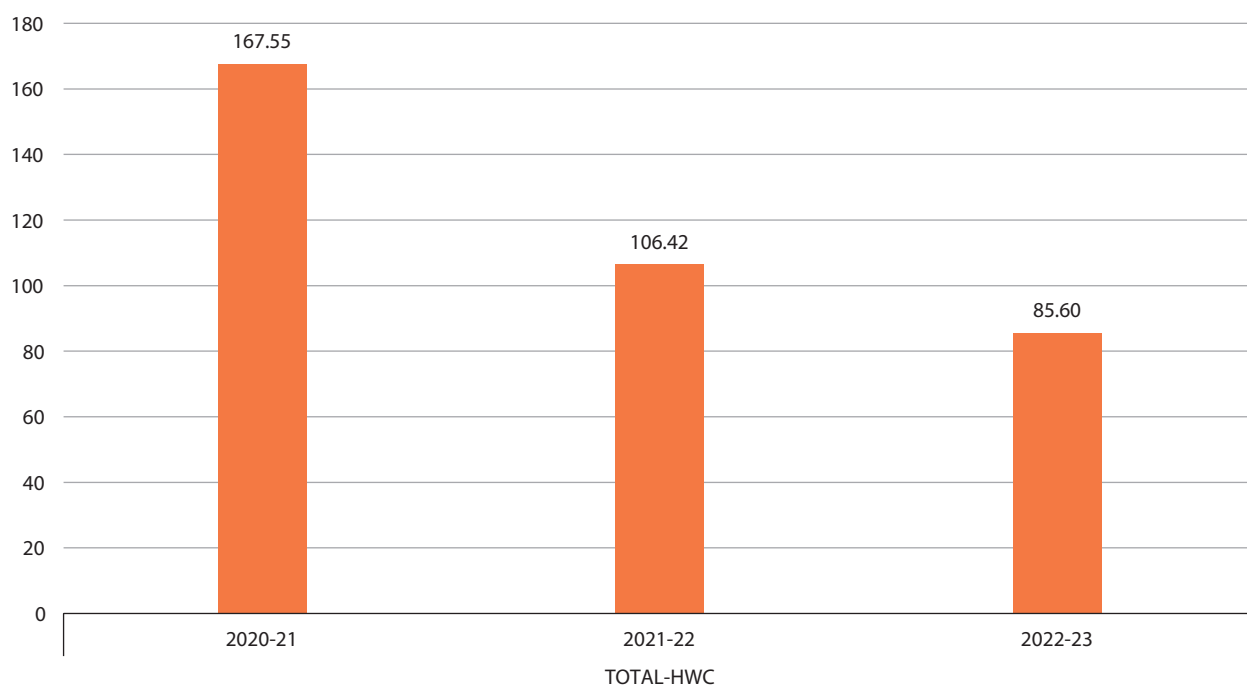


Figure 10: Percentage HWCs progress against target - FY wise (%)

Maharashtra (% HWCs progress as of 22/Dec/2021 against targets - FY wise)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

(Green – Good Performance, Red – Poor Performance)
(District Wise Rural Urban Stats Not Available)

S. No.	States/Districts	Data Source	Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet*, # (%)	Children Under 5 Years - Stunted* (Height For Age) (%)	Children Under 5 Years - Wasted* (Weight For Height) (%)
1	Maharashtra	NFHS 4 Total	924	15	N/A	26.3	64.8	1.6	7.1	9.7	72.2	90.3	78.4	6.5	34.4	25.6
2	Maharashtra	NFHS 5 Urban	878	20.1	90.2	15.7	65.8	2.2	14.1	9.9	72.2	96.7	81.6	9.2	34.9	23
3	Maharashtra	NFHS 5 Rural	941	19.9	79.5	27.6	66.5	1.6	7.1	9.3	68.7	93.1	81.7	9	35.5	27.3
4	Maharashtra	NFHS 5 Total	913	20	84.6	21.9	66.2	1.9	10.2	9.6	70.3	94.7	81.7	9	35.2	25.6
5	Ahmednagar	NFHS 5 Total	845	12	86.2	26.9	69.5	1.7	8	8.3	76.6	97.9	88.3	9.8	31.7	24.9
6	Akola	NFHS 5 Total	896	40.1	87.5	13.5	77	2.9	16.3	6.8	76.3	97.7	66.1	4	31.8	29.4
7	Amravati	NFHS 5 Total	1090	31.9	87.8	9.8	79.2	1.3	14.4	4.6	71.7	91.3	92.5	13.4	29	26.2
8	Aurangabad	NFHS 5 Total	875	12.4	83.1	35.8	48.1	2.4	11.7	17.1	57.2	94.8	81.7	11.7	34.2	26.4
9	Bhandara	NFHS 5 Total	897	30	89.1	1.5	77.5	1.1	6.7	6.1	79	100	91.9	8.4	31.3	28.4
10	Bid	NFHS 5 Total	843	9.3	76.3	43.7	58.1	3	8.4	13.9	56.8	94	79.1	3.2	40.8	28.4
11	Buldana	NFHS 5 Total	1036	37.9	79.9	24.1	81.1	2.9	14.7	4.4	72.7	93.9	78.5	4.1	45	31.7
12	Chandrapur	NFHS 5 Total	1025	28.9	87.8	9	80.1	3.1	11.9	4.5	68.5	99.6	87.6	6.8	37.3	38.5
13	Dhule	NFHS 5 Total	919	19.8	68.8	40.5	51.9	1	6.7	13.1	63.2	77.2	69.1	11.4	37.6	38.9
14	Gadchiroli	NFHS 5 Total	1098	33.3	79.4	10.1	76.5	0.6	10.1	5.6	86.8	97.3	95.6	4.5	35.7	30
15	Gondiya	NFHS 5 Total	1050	30.6	87.5	6.5	78.3	0.9	6.6	7.8	66.2	99.1	90.4	7.2	36.9	23.7
16	Hingoli	NFHS 5 Total	838	14.7	76.5	37.1	73.1	1.3	8.8	10.4	66.6	94	79.4	11.5	37.4	25.8
17	Jalgaon	NFHS 5 Total	857	11.9	76.5	28	44	1.8	5.6	14.9	58.4	86.5	79.9	15.6	36.3	30.5
18	Jalna	NFHS 5 Total	867	9.7	71.8	35	49.7	1.6	9.6	13.1	58.4	92.8	68.9	5.2	38	22.2
19	Kolhapur	NFHS 5 Total	937	16.5	90.7	21	71.4	0.4	6.6	8.1	81.8	99.2	78	15.1	33.6	18.9
20	Latur	NFHS 5 Total	1265	33.6	83.3	31	78.2	0.9	9.5	4.6	72.6	94.7	77.9	14	43.2	18

21	Mumbai	NFHS 5 Total	1019	30.7	94.3	4.5	74.3	4.1	18.1	4.9	87.1	99.5	N/A	14.1	26.6	25.3
22	Mumbai Suburban	NFHS 5 Total	703	20.2	91.6	10	64.6	2.2	18	10.4	72.2	98.1	N/A	17.8	37.2	18.6
23	Nagpur	NFHS 5 Total	926	25.6	94.6	7.1	84.1	3.5	14	4.2	71.4	100	87.4	4.6	27.6	34
24	Nanded	NFHS 5 Total	888	15.7	71.9	32.2	68.1	1.5	5.3	9.2	53.5	94.8	84.9	3.8	36	19
25	Nandurbar	NFHS 5 Total	885	15.3	57.7	24	62.6	1.2	3.6	9.7	58.2	76.3	77.9	9.6	45.8	30.7
26	Nashik	NFHS 5 Total	816	14.7	80	29.6	55	1.5	8.8	12	66.4	90.5	82.8	13.5	42.2	27.2
27	Osmanabad	NFHS 5 Total	1050	14.8	83.7	36.6	78.9	1.7	9.7	6.4	89.2	98.1	85.3	12.8	37.2	16.1
28	Palghar	NFHS 5 Total	747	18.8	77.6	14.6	71.8	1.2	12.4	8.2	86.3	94.2	90.8	5.2	33	23.9
29	Parbhani	NFHS 5 Total	983	10.5	73.4	48	42	1.3	5.4	18.5	47.4	85.6	75.4	1.9	37.6	22.8
30	Pune	NFHS 5 Total	873	14.4	89	24	57.8	2.3	7.6	13.7	68.6	98	79.2	9.6	30.7	31.4
31	Raigarh	NFHS 5 Total	871	26.3	79.2	16	73.6	1.5	11.6	6.1	83.1	96.6	88.3	5.9	35.8	19.1
32	Ratnagiri	NFHS 5 Total	948	16.6	87.2	4.4	62.3	1.6	7.6	10.4	78.6	97.8	95.2	8.6	31.7	23.7
33	Sangli	NFHS 5 Total	1012	12.3	90.3	27	67.1	1.1	5.7	10.4	80.1	98	83.3	5.3	35	18.6
34	Satara	NFHS 5 Total	958	11.4	87.2	18.1	74.7	2.4	7.4	6.2	81.7	97.1	76.3	15.9	20.2	20.5
35	Sindhudurg	NFHS 5 Total	874	13.2	92.1	5	58.7	1.2	8.5	12.1	73.4	100	76.3	2.6	30.8	27.7
36	Solapur	NFHS 5 Total	960	20.5	76.4	40.3	75.7	1.7	3.7	5.6	81.9	96.2	86.3	7.9	36.3	23.2
37	Thane	NFHS 5 Total	1029	22.7	90.5	18.4	61.6	1.7	16.1	10.3	70.2	93.6	86.8	4.6	40.8	17.8
38	Wardha	NFHS 5 Total	1173	27.1	93	9	79.2	1.5	8.6	6.6	70.4	98.8	87.4	7.3	27.7	28.1
39	Washim	NFHS 5 Total	991	24.1	78	27.7	71.3	1.3	10.7	8	60	92.9	75.5	3.3	35.3	31.7
40	Yavatmal	NFHS 5 Total	1012	29	80.8	11.7	78.3	1.7	7.5	5.5	66.9	96.3	77.6	2.6	36.6	27.5

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'. Out of two indicators with 'either vaccination card or mother's recall & vaccination card only', indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color - Best five performing districts within the districts for a particular indicator

B. Red - Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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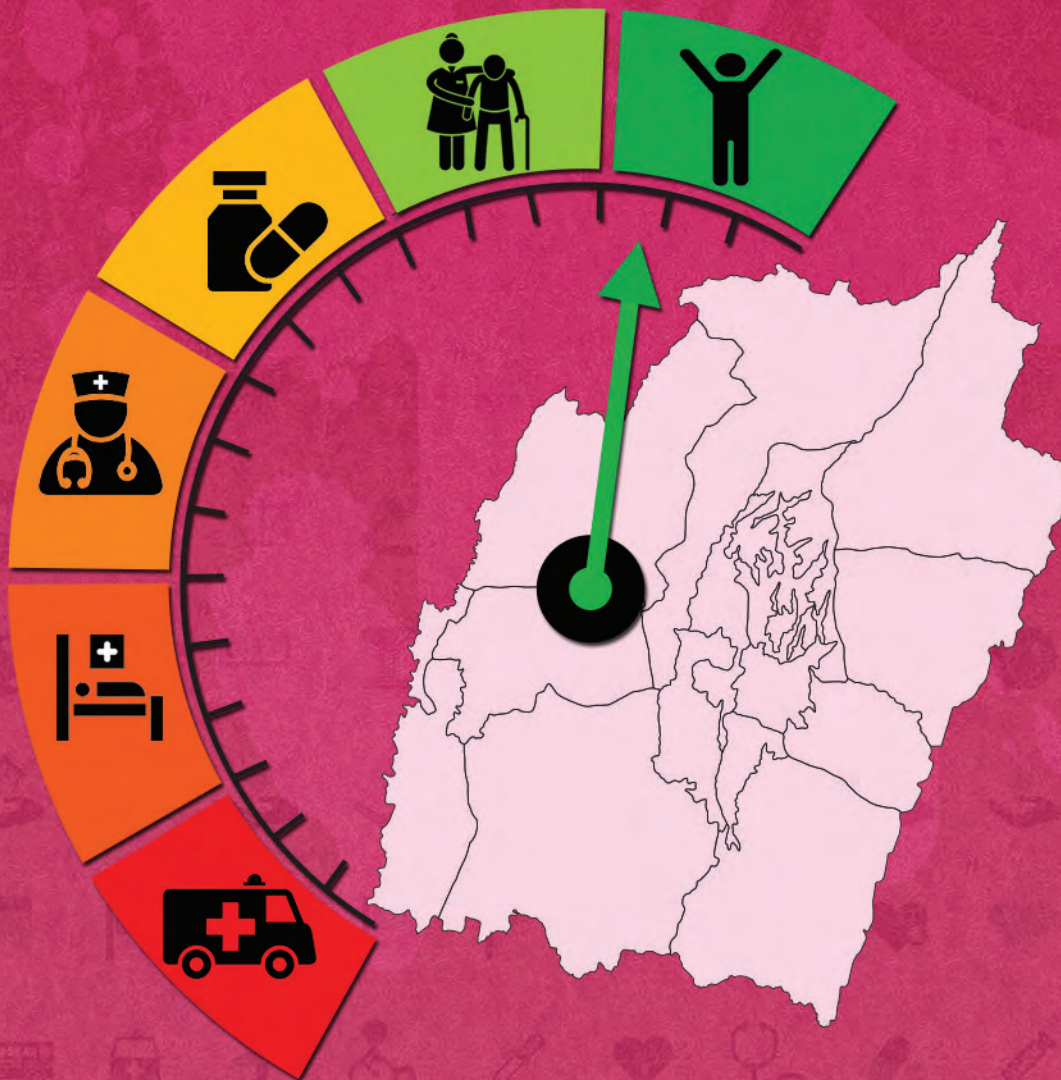
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



MANIPUR

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
6 th	Ukhrul	Churachandpur
9 th	Senapati	Thoubal
11 th	Imphal West	Tamenglong
13 th	Bishnupur	Chandel

MANIPUR

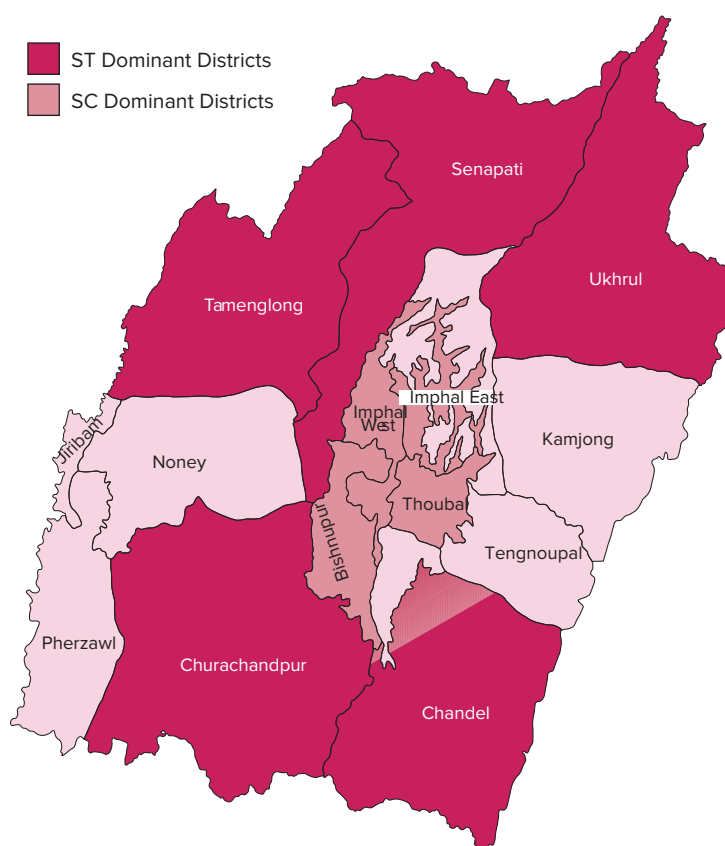
1. BACKGROUND

1.1 State Profile

Manipur is positioned^a 24th in India for a geographical spread of 22,327 km². The State is divided into 9 districts and is estimated to have a population of over 28 lakhs^b. It is projected that the State's population would increase to 31.65 lakhs by 2021^c. As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 0.97 lakh (3.41%) and 11 lakhs (40.8%), respectively. Around 70.79% of the population reside in rural areas, while the rest constitute the urban population. Out of the total 9 districts, top five ST & SC dominant districts account for 95.12% of ST & 98.24% of SC population in the State (Figure 1 & Annexure 1, State Profile). Agriculture contributes a major share to the State Domestic Product where around 52.81 % of the workers in Manipur are engaged as cultivators and Agricultural Laborers^d.

The total length of roads^e in Manipur is 27,612 km (0.55%^f), in which, the length of the national highways is 1,745 km (1.5%^g) and state highways is 715 km (0.40%^h).

Figure 1: Top 5 ST & SC Dominant Districts



^a RHS 2020

^b Census 2011

^c Census Population Projection 2019

^d Economic Survey Manipur FY 2020-21; <http://desmanipur.gov.in/files/NewsFiles/15Feb2021011944Economic%20Survey%20Manipur,%202020-21.pdf>

^e Basic Road Statistics 2019, MoRTH

^f Percentage of total length of roads in State

^g Percentage of total length of National Highways in the country

^h Percentage of total length of State Highways in the country

A detailed report on the key indicators has been attached as Annexure 1

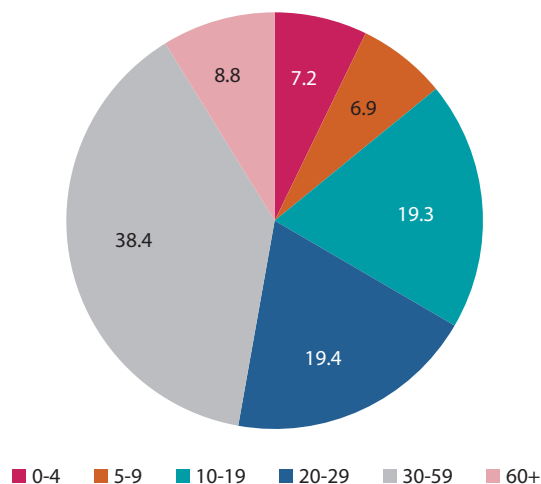
1.2 Demography

In North-Eastern States (excluding Assam)ⁱ, 19.3% of the total population is in 10-19 years age group, 57.8% between 20 to 59 years; and 8.8% is 60 years and above. The literacy rate increased from 70.5% in 2001 to 76.9% in 2011 with male & female literacy rates being 83.6% and 70.3% respectively. As per ESAG 2018 report, the Gross Enrolment Rate^j is 34.2% for higher education, 67.95% for senior secondary education, 93.07% for secondary, 130.55% for elementary education and 130.85% for primary education.

1.3 Elderly

Population aging has profound social, economic, and political implications. Elderly people aged (60 and above) constitute 8.8% of the state's total population. In Manipur, 48% of elderly females and 14% elderly males living in urban areas; 26% of elderly females and 24% elderly males in rural areas are economically fully dependent on others. The illness (any deviation from the state of physical and mental well-being) perception among the elderly men and women is 6% & 9%, respectively which is lower than the national average of 31% for each (Elderly in India 2016).

Figure 2: North-East States (Excluding Assam) Distribution of estimated Population 2021 (%)



2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

Manipur has been able to provide RMNCHA+N^k services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^l, institutional deliveries, C sections, distribution of IFA^m tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care have shown substantial improvement since 2005 (NFHS 4 & 5). In Manipur, 55.2% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 (Annexure 3), Imphal West, Thoubal & Imphal East districts reported comparatively better ANC coverage ranging between 93.4% - 87.1%; and Ukhrul, Tamenglong and Churachandpur districts reported poor 4 ANC coverage ranging between 38.8% - 61.3%. As reported in HMIS 2019-20, around 84.5% of the deliveries took place in institutions, out of which 78% took place in public health facilities. Total percentage of C-sections (33.2%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 55.1% is conducted at private

ⁱ Population projection 2021 for Manipur is not available

^j Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

^k Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^l Antenatal Check up

^m Iron Folic Acid Tablets

facilities in Manipur. Around 43.3% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years increased from 26.4% (NFHS 4) to 29.4% (NFHS 5). Anaemia in females of reproductive age group is more than five times than that in men of similar age group (Annexure 2, figure 3).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, Manipur has shown a significant decline in IMR from 13 (2005) to 10 (2019), which is lower than the national average of 30. Yet, a rising trend in the IMR from 2015 is reported (Annexure 2, Figure 1). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). As per NFHS 5, Thoubal, Tamenglong & Imphal East districts reported low SRBⁿ ranging between 909 – 936, while Churachandpur, Imphal West & Chandel districts reported high SRB, ranging between 1057 - 1008.

Full vaccination^o coverage for children between 12 – 23 months of age declined from 78% (NFHS 4) to 75.7% (NFHS 5). Proportion of under 6-months children exclusively breastfed has also declined from 73.6% (NFHS 4) to 70.7% (NFHS 5). An increase in childhood anaemia from 23.9% (NFHS 4) to 42.8% in children aged 6-59 months is reported (Annexure 2, Figure 3). As per NFHS 5 report, Bishnupur, Imphal West & Imphal East districts reported comparatively low burden of stunting ranging from 15.5% to 18.4%; whereas Chandel, Thoubal & Senapati districts reported high stunting rates ranging from 34% to 27.3%. For under-5 wasting – Bishnupur, Thoubal & Chandel districts reported a comparatively low burden ranging from 7.9% to 8.3%; while Churachandpur, Imphal East & Ukhrul districts reported a high burden ranging from 12.1% to 11.6%.

2.3 Family Planning

As per NFHS 5 report, the total unmet need in Manipur is 12.2% and the unmet need for spacing is 4.7%. Bishnupur district reported the highest total unmet need (20%) and Thoubal reported the least (6%). Approximately 18.2% of married women reported to avail any modern method of family planning in the State (NFHS 5), with sterilization acceptance being 3.7% among females and nil among males.

2.4 Communicable Diseases

Manipur has 16 IDSP units functional^p. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 27.36% of total disease burden (Annexure 1.4). Diarrheal diseases, Lower respiratory infection & Drug Susceptible TB are the leading causes of deaths in Manipur (Annexure 2, Figure 4^q). As per QPR reports, the annualized total case notification rate for TB is 61% and NSP^r success rate is 70% as opposed to the national averages of 163% and 79%, respectively. For NLEP^s, the reported prevalence rate of 0.08 per 10,000 population is less than the national average of 0.61. In FY 2019-20, no deaths are reported due to Dengue, Malaria, Kala Azar.

ⁿ Sex Ratio at Birth

^o NFHS 5 State Factsheet, based on information from vaccination card only

^p QPR NHM MIS Reports (status as on 01.03.2020)

^q <https://vizhub.healthdata.org/gbd-compare/india>

^r New Smear Positive

^s National Leprosy Eradication Programme

2.5 Non-Communicable Diseases (NCDs) & Injuries

It is reported that 64.5% of the total disease burden is due to premature deaths and 35.5% due to disability or morbidity. Ischemic heart diseases, Diabetes Mellitus Type 2 & COPD are the major causes of DALYs (Annexure 2, Figure 4). NCDs contribute to 61.61% of DALYs, whereas injuries contribute to 11.03% of DALYs^t. Manipur is positioned 26th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is reported that as high as 43.1% of women and 58.1% of men (roughly half of the population) used any kind of tobacco, while 0.9% of women and 37.5% of men consumed alcohol. Overall, high fasting blood sugar, high systolic blood pressure, smoking, low birth weight, and short gestation period are the five major risk factors for all DALYs (Annexure 2, figure 5).

2.6 Health Care Financing

Manipur's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 25,322 crores. The State is positioned 29th out of 32 states in terms of per capita^u of ₹ 75,226. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 8,506 in public facilities, ₹ 63,889 in private facilities; whereas for urban areas, it is around ₹ 12,111 in public facilities and ₹ 45,722 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 8,802 in public facilities and ₹ 29,479 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 9,728 in public facilities and ₹ 33,443 in private facilities. In public health facilities, the share of expenditure on drugs as a proportion of inpatient medical expenditure is estimated as 69% in rural and 71% in urban areas; whereas for diagnostics, it is 19% in rural and 18% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 6). Except for PHCs, there is a shortfall of 22.59% SCs and 19.05% CHCs (Annexure 2, Figure 7). Currently, there are 418 SCs, 85 PHCs, and 17 CHCs in place against the required 540 SCs, 85 PHCs and 21 CHCs in rural areas. Whereas, in urban settings there are 8 PHCs in place against the required 20 amounting to a shortfall of 60%. The State has 7 DHs, 1 SDHs and 2 government medical colleges. In tribal catchments, there are 232 SCs, 44 PHCs and 6 CHCs in place against the required 279 SCs, 41 PHCs and 10 CHCs. This accounts to a shortfall of 16.85% of the required SCs and 40% of the required CHCs in the tribal areas.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 211 HWCs (154 SHCs, 55 PHCs and 2 UPHCs) are operationalized in the State as of 22nd December 2021^v.

In Manipur, 9 districts are equipped with MMUs under the NRHM while none under the NUHM. Manipur has 100% of the required ASHAs in position under both NRHM & NUHM. The doctor to staff nurse ratio in place is 1:1 with 11 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1, Table 1.5).

^t <https://vizhub.healthdata.org/gbd-compare/india>

^u Directorate of Economics & Statistics

^v AB-HWC Portal

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities 644 availed (events) OPD services and 45 availed (events) IPD services. As per the NSSO data (2017-18), 82% of all OPD cases in rural area and 83% in urban areas; and 84% of all IPD cases in rural & 72% in urban areas utilized public health facilities. The public health facility utilization in Manipur is above the national averages for both (Annexure 1.6).

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^w

Indicator	Manipur 2011 ¹	India
Total Population (In Crore)	0.28	121.08
Rural (%)	70.79	68.85
Urban (%)	29.21	31.14
Scheduled Caste population (SC) (in crore)	0.0097 (3.41%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.11 (40.88%)	10.45 (8.63%)
Total Literacy Rate (%)	76.9	72.99
Male Literacy Rate (%)	83.6	80.89
Female Literacy Rate (%)	70.3	64.64
Number of Districts in the Manipur ²	9	
Number of districts per lakh population in Manipur (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<1 Lakhs	0
	≥ 1 Lakhs - <5 Lakhs	8
	≥5 Lakhs - <10 lakhs	1
	≥10 Lakhs	0
ST SC Dominant (Top 5) Districts of Manipur ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Tamenglong - 95.71%	Thoubal - 9.61%	
Ukhrol - 94.35%	Bishnupur - 9.31%	
Churachandpur - 92.93	Imphal East - 3.47%	
Chandel - 88.97%	Imphal West - 3.19%	
Senapati - 87.49%	Chandel - 0.37%	
Top 5 ST dominant district accounts for -95.12%	Top 5 SC dominant district accounts for - 98.24%	

1.2 Key Health Status & Impact Indicators

Indicators	Manipur	India
Infant Mortality Rate (IMR) ³	10	30
Crude Death Rate (CDR) ³	4.3	6

^w Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	13.6	19.7
Maternal Mortality Ratio (MMR) ³ (For other states including Manipur)	85	113
Neo Natal Mortality Rate (NNMR) ⁴	N/A	23
Under Five Mortality Rate (U5MR) ⁴	N/A	36
Still Birth Rate ⁴	N/A	4
Total Fertility Rate (TFR) ⁴	N/A	2.2
Life expectancy at birth ⁵	N/A	69.4
Sex Ratio at Birth ⁴	N/A	899

1.3 Key Health Infrastructure Indicators^x

Indicators	Numbers (Total)			
Number of District Hospitals ²	7			
Number of Sub District Hospital ²	1			
Number of Government (Central + State) Medical College ⁶	2			
Number of Private (Society + Trust) Medical Colleges ⁶	0			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	154	106	224	303
PHC-HWC	55	91	91	91
UPHC-HWC	2	9	9	9
Total-HWC	211	206	324	403
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	21	17	19.05	
Number of Primary Health Centres (PHC)	85	85	0.00	
Number of Sub Centres (SC)	540	418	22.59	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	4	0	0	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	20	8	60	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	10	6	40	
Number of PHC	41	44	-7.32	
Number of SC	279	232	16.85	

^x Sources are mentioned at the end of Annexure 1

Patient Service⁹	Manipur	India
IPD per 1000 population	44.99	62.6
OPD per 1000 population	643.67	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	64.23	36.4

1.4 Major Health Indicator^y

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Manipur	India
% DALY ^z accountable for CMNNDs ^{aa}	27.36	27.46
% DALY accountable for NCDs	61.61	61.43
% DALY accountable for Injuries	11.03	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Manipur	India
Level of Birth Registration (%)	67.7	92.7
Level of Death Registration (%)	21.4	92
Percentage of medically certified deaths to total registered deaths (%)	67.3	20.7
RMNCHA+N		
Maternal Health⁹	Manipur	India
% 1st Trimester registration to Total ANC Registrations	58.7	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	55.2	79.4
Total Reported Deliveries	39373	21410780
% Institutional deliveries to Total Reported Deliveries	84.5	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	78	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	22	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	33.2	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	27	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	55.1	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	43.3	53.4
Neonatal⁹	Manipur	India
% live birth to Reported Birth	99.6	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	4	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	88.9	89.9

^y Sources are mentioned at the end of Annexure 1

^z Disability Adjusted Life Years

^{aa} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Manipur	India
Sick New Born Care Unit (SNCU)	5	895
New Born Stabilization Unit (NBSU)	4	2418
New Born Care Corner (NBCC)	78	20337
Child Health & Nutrition¹⁰	Manipur (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	5.6	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	69.8	60.6
Children under 5 years who are underweight (weight-for-age) (%)	13.3	32.1
Child Immunization¹⁰	Manipur (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	75.7	83.8
Children age 12-23 months who have received BCG (%)	95.4	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	76.6	87.9
Family Planning¹⁰	Manipur (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	4.7	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Manipur	India
Number of districts with functional IDSP unit	16	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Manipur	India
Annualized total case notification rate (%)	61	163
New Smear Positive (NSP) Success rate (in %)	70	79
National Leprosy Eradication Programme (NLEP)¹¹	Manipur	India
Prevalence Rate/10,000 population	0.08	0.61
Number of new cases detected	21	1,14,359
Malaria, Kala Azar, Dengue¹¹	Manipur	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Manipur (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	50.6	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	55.9	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Manipur (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	13.6	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	20.8	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	6.2	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	7	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Manipur (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	43.1	8.9
Men who use any kind of tobacco (%)	58.1	38
Women who consume alcohol (%)	0.9	1.3
Men who consume alcohol (%)	37.5	18.8
Injuries		
Road Traffic Accident¹²	Manipur	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	26	NA
Total number of fatal Road Accidents	146	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	23.2	33.7
Number of persons killed in Road Accidents	156	115113

1.5 Access to Care^{bb}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Manipur	India
Number of Districts equipped with MMU under NRHM	9	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Manipur	India
102 Type	43	9955
104 Type	0	605
108 Type	0	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	24	11070

^{bb} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Manipur	India
Total number of ASHA targeted under NRHM	3928	946563
Total number of ASHA in position under NRHM	3928	904211
% of ASHA in position under NRHM	100	96
Total number of ASHA targeted under NUHM	81	75597
Total number of ASHA in position under NUHM	81	64272
% of ASHA in position under NUHM	100	85
Community Process¹¹	Manipur	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	3878	554847
Number of Mahila Arogya Samitis (MAS) formed	409	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Manipur	India
DH	8	796
CHC	23	6036
PHC	91	20273
UHC	0	126
UPHC	9	3229
Human Resource for Health ¹⁴		
HRH Governance	Manipur	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	69
	Dentists (%)	15
	MO MBBS (%)	44
	Nurse (%)	4
	LT (%)	6
	ANM (%)	8
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1/2	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	16 per 10,000	11 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	3:1	2:1

Ranking: Human Resource Index of Manipur¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{cc}	1127	1571	1435	136	0	69.69
Staff Nurse	1412	679	562	117	850	
Lab Technician	289	119	115	4	174	
Pharmacists	162	375	346	29	0	
MO MBBS ^{dd}	403	1385	918	467	0	
Specialist ^{ee}	351	271	136	135	215	

1.6 Healthcare Financing^{ff}

National Health Accounts (NHA) (2017-18)	Manipur		India	
Per Capita Government Health Expenditure (in ₹)	NA		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	NA		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	NA		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	NA		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Manipur		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	82	83	33	26
IPD - % of hospitalized cases using public facility	84	72	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	1999	1775	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	1303	1395	845	915
IPD - Per hospitalized case (in INR) - Public	8,506	12,111	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	63,889	45,722	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	19	18	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	69	71	53	43

^{cc} MPW – Multi Purpose Health Worker (Female + Male)

^{dd} MO MBBS (Full Time)

^{ee} Specialist (All Specialist)

^{ff} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	8,802	9,728	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	29,479	33,443	20,692	26,701
State Health Expenditure	Manipur		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	5.2		5 ⁹⁹	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

⁹⁹ Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

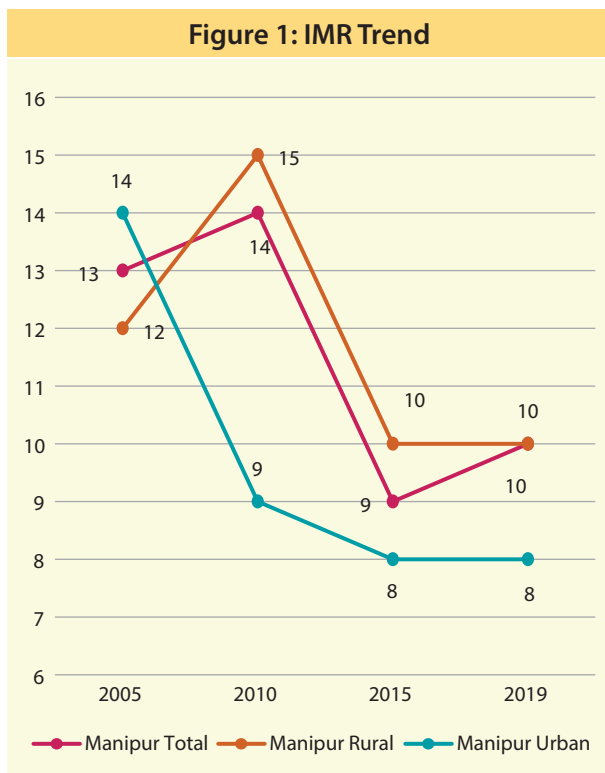


Figure 2: CBR & CDR Trend

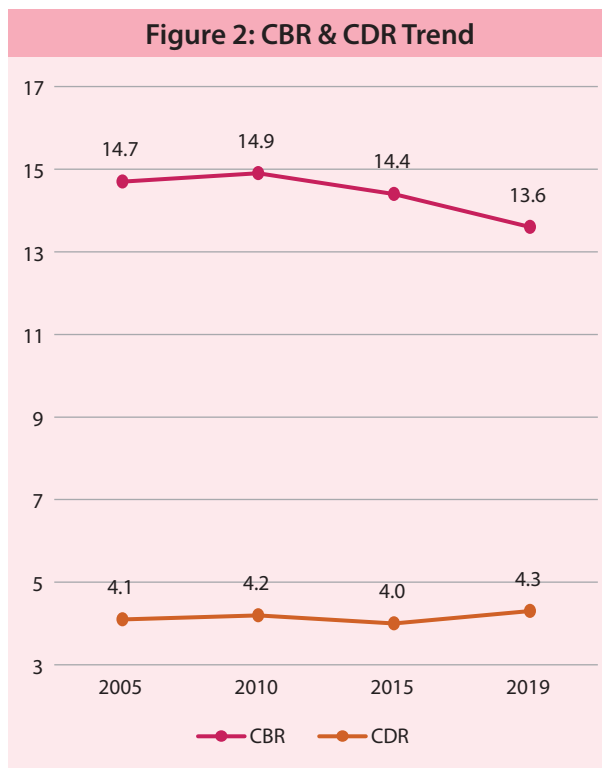


Figure 3: Comparison of Key NFHS 5 & 4 Indicators

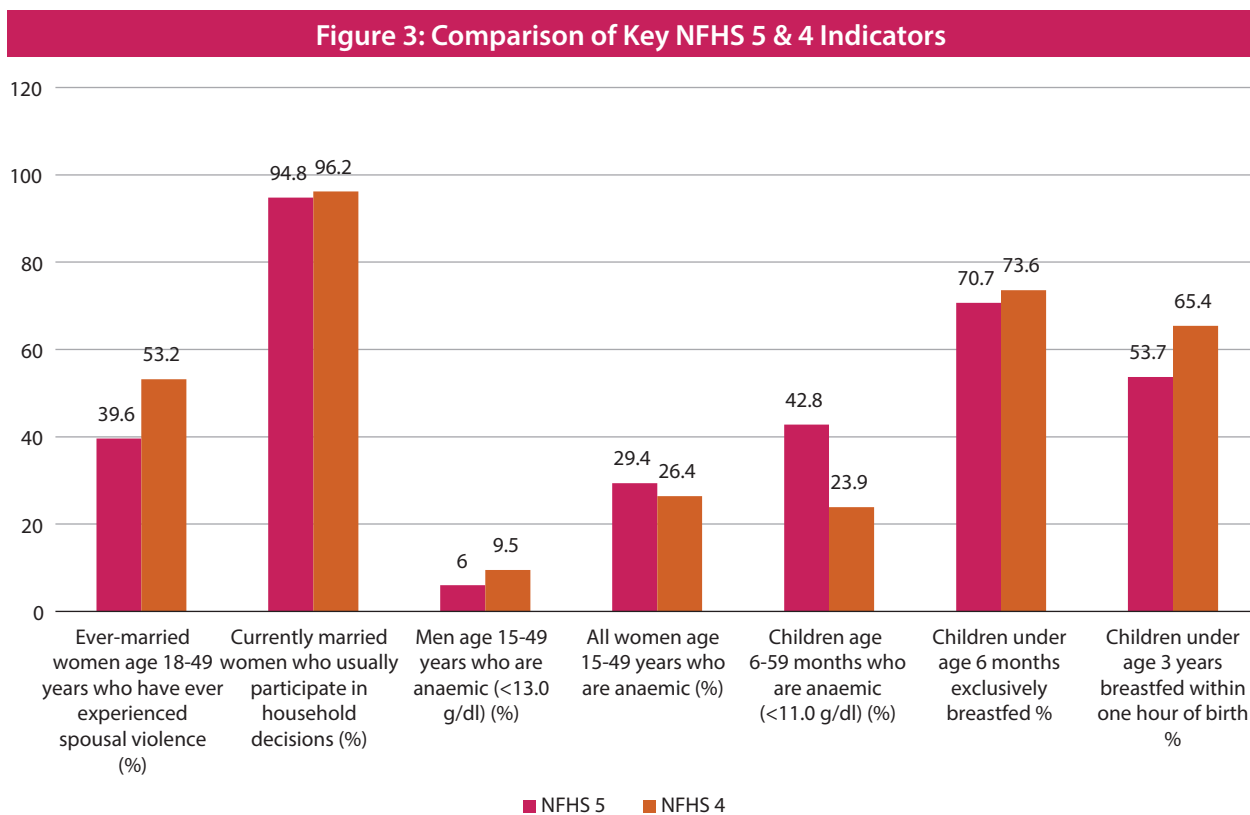


Figure 4: Top 15 causes of DALYs, 1990-2019

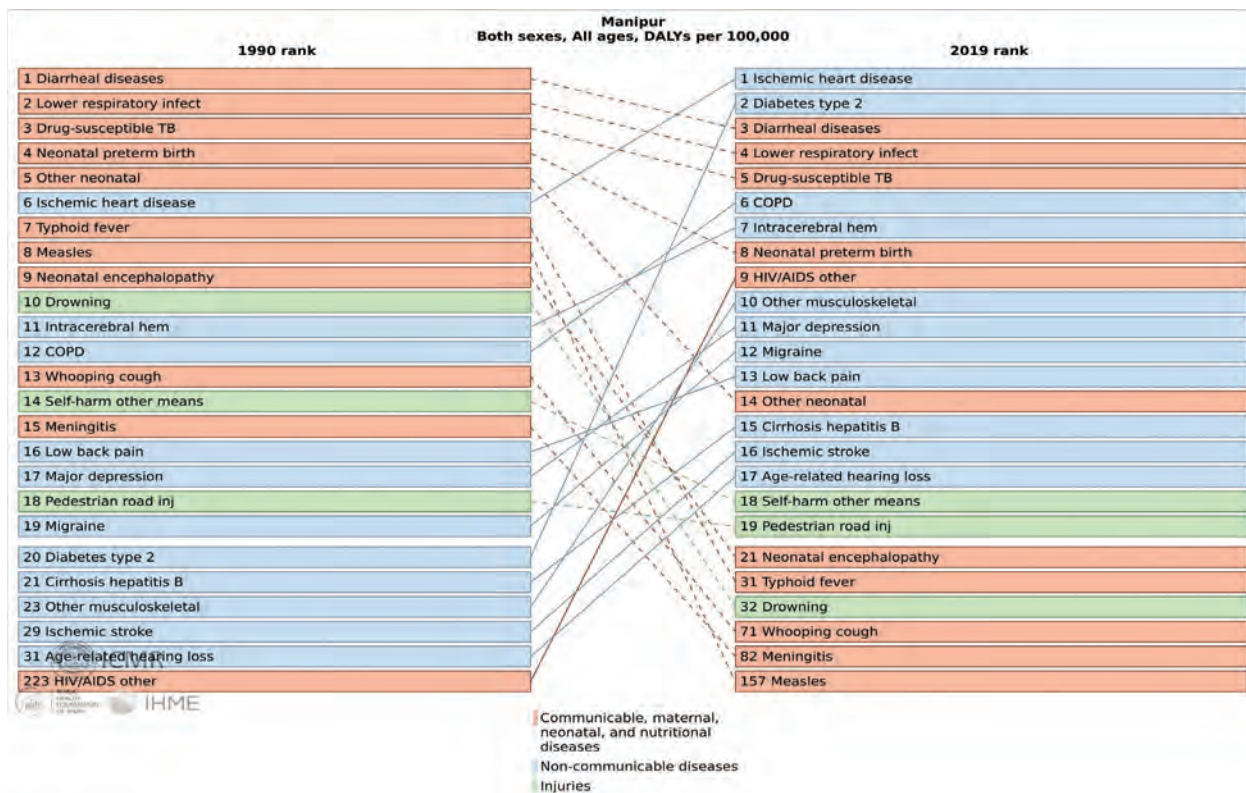


Figure 5: Top 15 risk of DALYs, 1990-2019

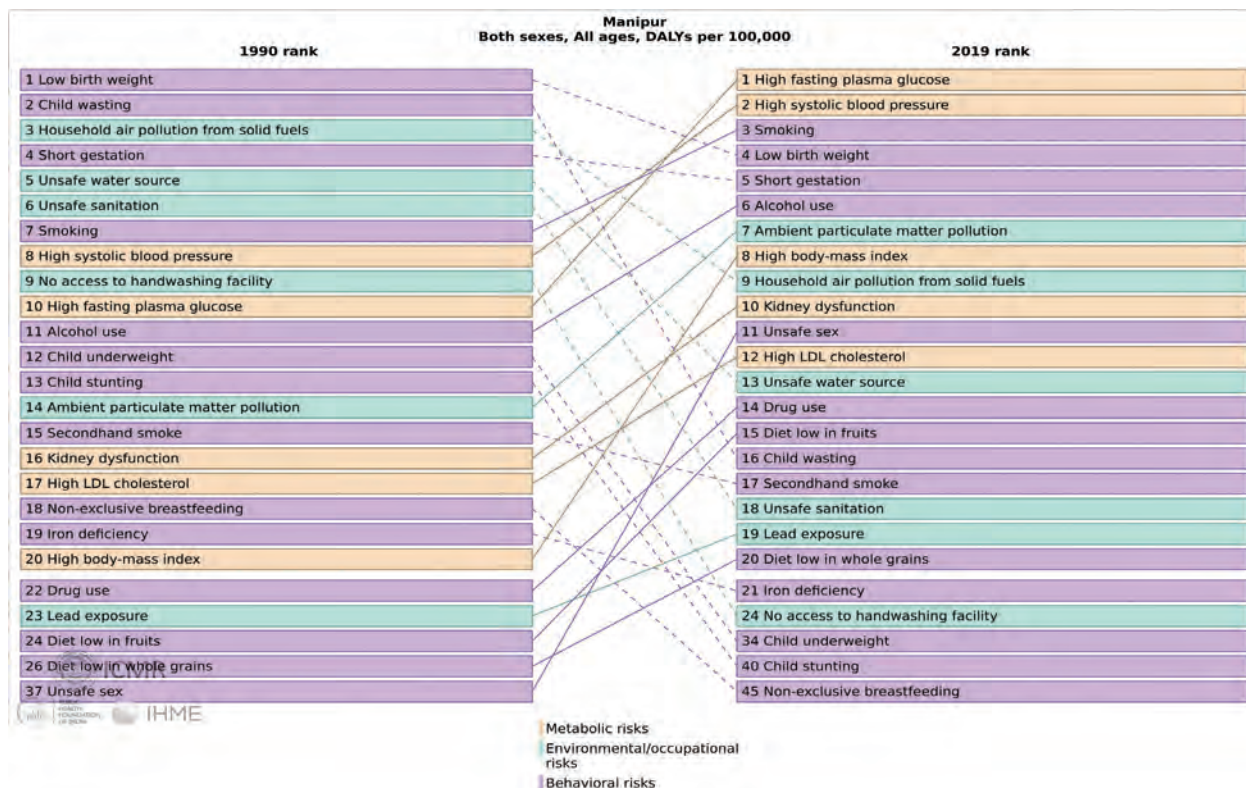


Figure 6: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

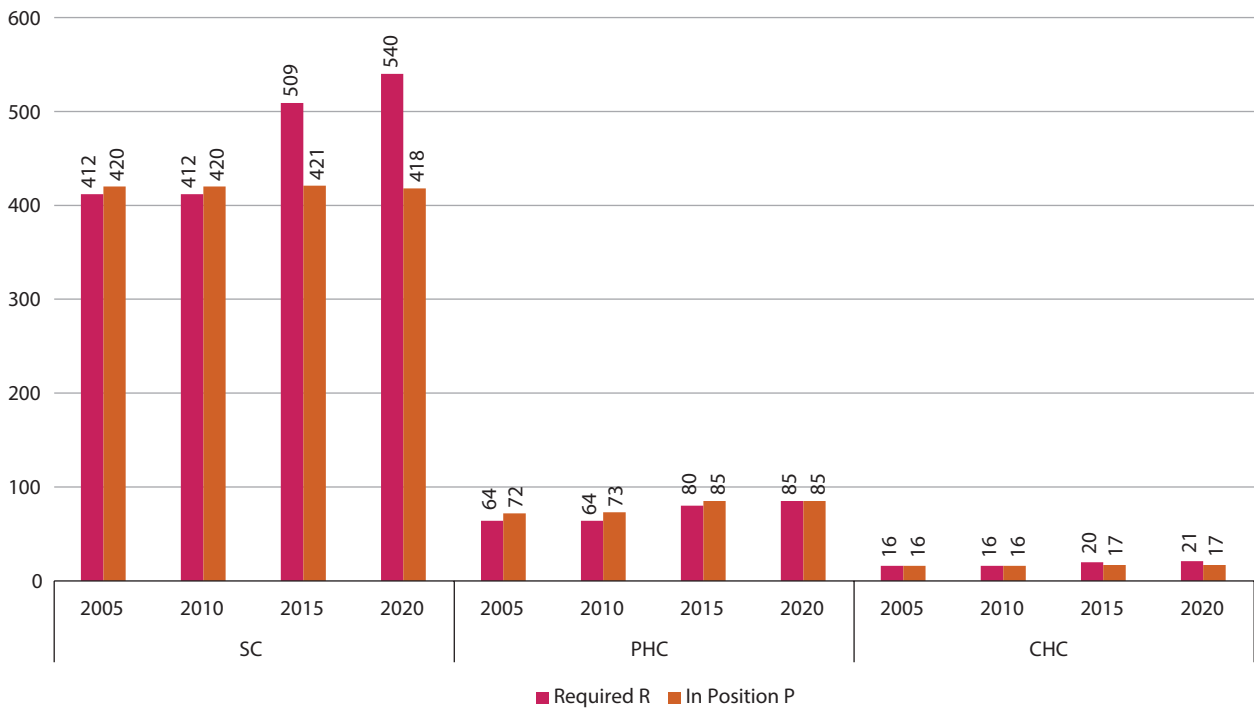
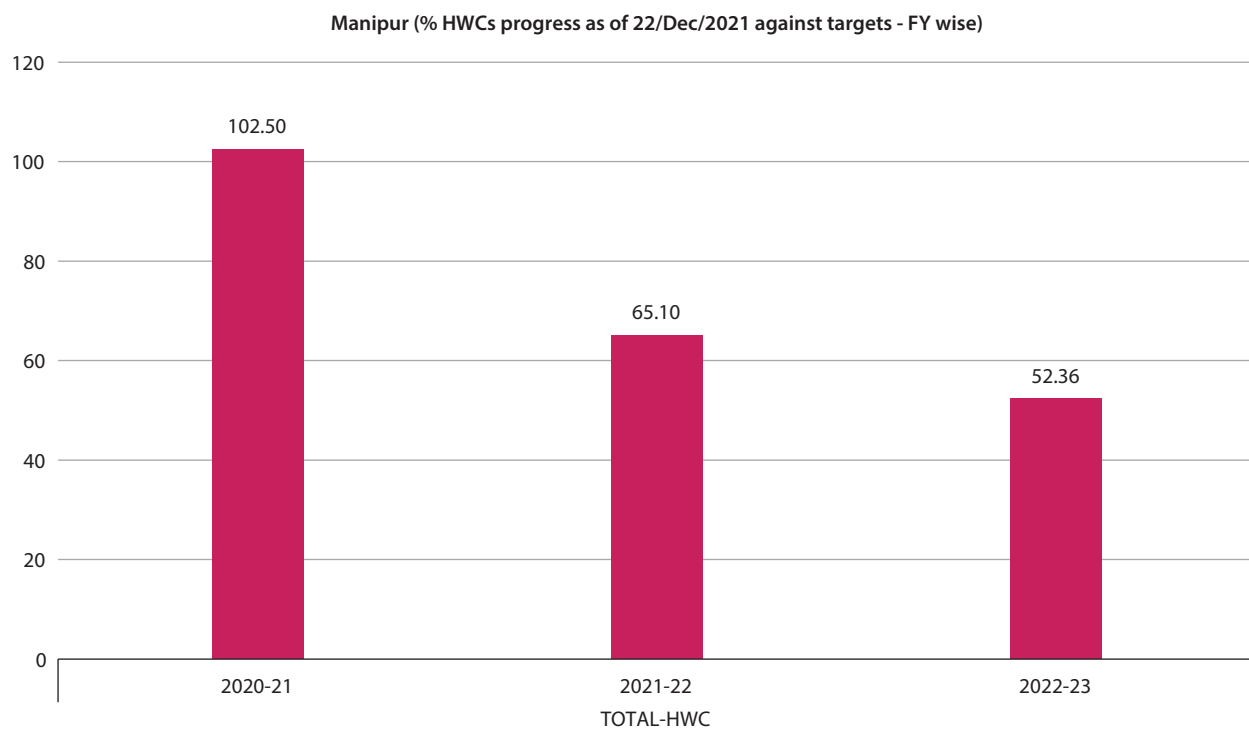


Figure 7: Year Wise Health Infrastructure Shortfall (%)



Figure 8: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States / Districts	Data Source	Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet** # (%)	Children Under 5 Years - Stunted^ (Height For Age) (%)	Children Under 5 Years - Wasted^ (Weight For Height) (%)
1	Manipur	NFHS 4 Total	962	3.6	N/A	13.7	23.6	3.7	1.3	30.1	69	69.1	78	18.8	28.9	6.8
2	Manipur	NFHS 5 Urban	1010	12.3	92.1	14.2	61.5	5.5	6.1	12.7	88.8	92.5	79.6	20	20.1	9.8
3	Manipur	NFHS 5 Rural	947	15.3	84.8	17.6	61.2	4.5	4	12	74.5	73.9	73.9	19.4	25.1	10
4	Manipur	NFHS 5 Total	967	14.2	87.6	16.3	61.3	4.9	4.8	12.2	79.4	79.9	75.7	19.6	23.4	9.9
5	Bishnupur	NFHS 5 Total	945	9.3	88.4	20.9	46.3	3.9	3.7	20	77.4	89.5	76.7	21.1	15.5	7.9
6	Chandel	NFHS 5 Total	1008	16.1	80.2	22.3	56.6	9	4.9	11	66.6	55.5	69.9	14.2	34	8.3
7	Churachandpur	NFHS 5 Total	1057	18.2	84.2	10.5	61.8	6.3	5.5	8.7	61.3	72.9	78.9	23.6	25.1	12.1
8	Imphal East	NFHS 5 Total	936	7	90	15.2	50.1	3.1	5.4	16.7	87.1	91.7	72.5	19.2	18.4	11.7
9	Imphal West	NFHS 5 Total	1039	15.7	92.5	15.3	69.9	4.5	5.2	12.5	93.4	95.7	83.6	13	15.6	9.3
10	Senapati	NFHS 5 Total	938	15.4	81.9	15.5	65.2	4.3	3.2	8.5	64.9	45.8	79.9	21.9	27.3	10.7
11	Tamenglong	NFHS 5 Total	932	16.8	76.8	19.9	65.2	12.3	4.4	8.4	56.4	57.7	78.1	26.5	27.1	9.6
12	Thoubal	NFHS 5 Total	909	19.1	85.4	17.5	72.2	5.5	4.8	6	89.9	87.8	79.9	22.9	31.5	8.3
13	Ukhrul	NFHS 5 Total	996	17	86.9	11.1	56.9	3.8	2.9	12.7	38.8	44.6	45	15.3	27.1	11.6

- * NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'. Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine
- ** Based on the youngest child living with the mother
- # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)
- ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard
- A. **Green Color** – Best three performing districts within the districts for a particular indicator
- B. **Red** – Worst three performing districts within the districts for a particular indicator
- C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days
- D. ** Based on the youngest child living with the mother
- E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)
- F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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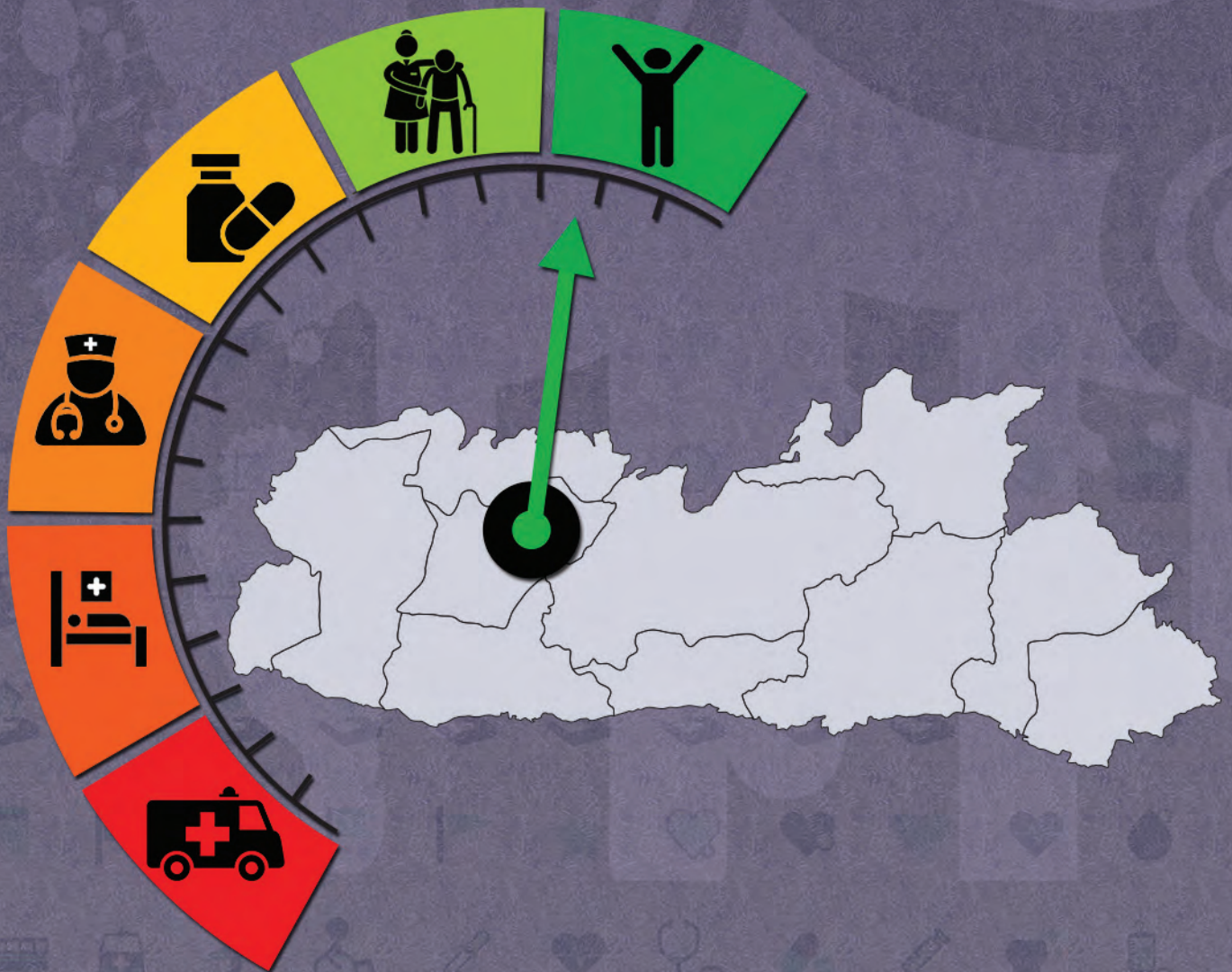
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



MEGHALAYA

DISTRICTS VISITED IN
COMMON REVIEW MISSIONS

CRM	Districts Visited	
3 rd	East Khasi Hills (Shillong), Jaintia Hills & West Khasi Hills	
7 th	Ri Bhoi	West Garo Hills
9 th	West Jaintia Hills	South West Garo Hills
11 th	East Khasi Hills	South Garo Hills
13 th	West Garo Hills	Ri Bhoi

MEGHALAYA

1. BACKGROUND

1.1 State Profile

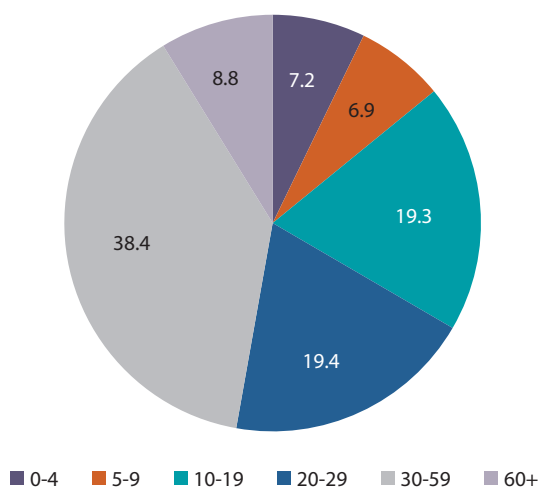
Meghalaya is positioned^a 23rd in India for a geographical spread of 22,429 km² (RHS 2019). The State is divided into 11 districts and estimated to have a population of over 0.3 crores^b, which accounts for approximately 0.24% of India's total population^c. It is projected that the population would reach around 0.32 crores by 2021 (Census Population Projection 2019). As per Census 2011, the Scheduled Tribe (ST) population is 0.26 crores (86.15%). In the State, 79.9 % of the population reside in rural areas, while 20.1% constitute the urban population. The total length of roads^d in the State is 22,939 km (0.45%^e), in which, the length of the national highways is 1203 km (1.1%^f) and state highways is 772 km (0.44%^g).

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

It is estimated that there are 19.3% of the total population in the age group of 10-19 years, 57.8% within 20 to 59 years; while 8.8% are 60 years and above in North- Eastern states (excluding Assam; Figure 2). The crude birth rate and the crude death rate have declined from 25.1 & 7.5 in 2005 to 23.2 & 5.6 in 2019, respectively (Annexure 2; figure 2). The literacy rate increased from 62.6% in 2001 to 74.4% in 2011, with male & female literacy rates being 76.0% and 72.9%, respectively (Annexure 1.1). As per the ESAG 2018 report, the Gross Enrollment Rate (GER)^h is

Figure 1: North-East States (Excluding Assam) Distribution of estimated Population 2021 (%)



^a Including all States & UTs

^b Census 2011

^c RHS 2019

^d Basic Road Statistics 2019, MoRTH

^e Percentage of total length of roads in Meghalaya

^f Percentage of total length of National Highways in the country

^g Percentage of total length of State Highways in the country

^h Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

24.1% for higher education, 43.35% for senior secondary education, 87.27% for secondary education, 139.39% for elementary education, and 140.90% for primary education.

1.3 Elderly

Population ageing has profound social, economic, and political implications. In Meghalaya, 81.0% of elderly females and 33.0% elderly males living in rural areas are economically fully dependent on others. Whereas in urban areas, 53% of elderly females and 18% elderly males are economically fully dependent on others. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 16% for men and 19% for women, which are below the national average of 31% for both (Elderly in India 2016).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+Nⁱ services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^j, institutional deliveries, C sections, distribution of IFA^k tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). In **Meghalaya**, 49.0% of women received 4 ANC check-ups (Annexure 1.4). As per the NFHS 5 report- Ribhoi, South West Khasi Hills and West Khasi Hills reported high ANC coverage, ranging between 61 to 64. Whereas, East Garo Hills, North Garo Hills and South West Garo hills reported low ANC coverage, ranging between 24.3 to 28.5. As reported in HMIS 2019-20, around 59.7% of the deliveries took place in institutions, out of which 76.4% took place in public health facilities. Total percentage of C-sections (15.7%) is on par with the WHO's standard (10-15%); and out of the total reported C-sections, about 43.1% are conducted at private facilities in the State. Around 43.5% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years decreased from 56.2% (NFHS-4) to 53.8% (NFHS-5). Anaemia in females of reproductive age group is almost twice than that in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

As per NFHS 5, Meghalaya's sex ratio at birth is 989 females per 1,000 males. The lowest SRBs^l ranging between 851 - 894 are reported in East Khasi Hills, North Garo Hills, and Ribhoi districts; while the highest ones, ranging between 1036 - 1427 are reported in East Garo hills, South West Garo Hills, West Garo hills and West Jaintia hills.

Full vaccination^m coverage for children between 12 – 23 months of age has improved from 81.3% (NFHS 4) to 80.0% (NFHS 5). The proportion of under 6-months children exclusively breastfed has increased from 35.8% to 42.7%. A decrease in childhood anaemia from 48.0% to 45.1% in children

ⁱ Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^j Antenatal Check up

^k Iron Folic Acid Tablets

^l Sex Ratio at Birth

^m NFHS 5 Meghalaya Factsheet, based on information from vaccination card only

aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 5). As per the NFHS 5 report, relatively low stunting rates, ranging from 29.8% to 35.6% are reported from North Garo Hills, South Garo Hills and South West Garo hills. While relatively higher stunting rates, ranging from 49.8% to 59% are reported from East Jaintia Hills, South West Khasi Hills and West Khasi Hills. For under-5 wasting- East Jaintia Hills, West Jaintia Hills and West Khasi Hills districts reported a low burden, ranging from 8% to 9.7%; while East Garo Hills, South Garo Hills and South West Garo Hills reported a relatively higher burden, ranging from 18.3% to 20.1%.

2.3 Family Planning

As per the NFHS 5 report, the total unmet need in the State is reported as 26.9%, while the unmet need for spacing is 18.3% (NFHS 5). East Khasi Hills reported the highest total unmet need (33%), while West Garo Hills reported the lowest (19.7%). Approximately 22.5% of married women reported to avail any modern method of family planning in the State (NFHS 5); and the sterilization acceptance among females is 5.6%, while nil in males.

2.4 Communicable Diseases

The State has 8 functional IDSP units in placeⁿ. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 36.25% of total disease burden (Annexure 1.4). Lower respiratory tract infection, malaria, neonatal preterm birth, diarrheal diseases and drug susceptible TB are the leading causes of deaths due to CMNND in the State (Annexure 2, Figure 6). As per QPR report, for TB, the annual total case notification rate is 129% and NSP^o success rate is 73% as opposed to the national averages of 163% and 79%, respectively. For NLEP^p, the reported prevalence rate of 0.04 per 10,000 population is less than the national average of 0.61. In FY 2019-20, 4 deaths due to Malaria are reported, while none by Dengue or Kala Azar.

2.5 Non-Communicable Diseases (NCDs) & Injuries

It is reported that as high as 64.1% of all deaths are premature in the State, while disability or morbidity accounts for 35.9%. Ischaemic heart diseases and Asthma and COPD are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 56.36% of DALYs; whereas, injuries contribute to 7.40% of DALYs in the State^q. The State is positioned 25th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 28.2% of women and 57.7% of men used any kind of tobacco, while 1.5% of women and 32.4% of men consumed alcohol. Overall, behavioural factors (smoking, alcohol use), metabolic factors (high systolic blood pressure, high fasting plasma glucose) and air pollution are the major risk factors for all DALYs and YLLs (Annexure 2, figure 7).

ⁿ QPR NHM MIS Report (status as on 01.03.2020)

^o New Smear Positive

^p National Leprosy Eradication Programme

^q <https://vizhub.healthdata.org/gbd-compare/india>

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is 29,544 crores. The State is positioned 27th out of 32 states in terms of per capita[†] of ₹ 84,725. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 2,201 in public facilities & ₹ 15,591 in private facilities; whereas for urban areas, it is around ₹ 8,219 in public facilities and ₹ 29,618 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 2,332 in public facilities & ₹ 12,457 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 2,971 in public facilities and ₹ 17,540 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated to be 62% in rural and 55% in urban areas; whereas for diagnostics, it is 10% in rural and 11% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Public health facilities have increased over time with no shortfall in the required facilities (Annexure 2, Figure 9). Currently, there are 440 SCs, 119 PHCs and 28 CHCs in place, against the required 830 SCs, 125 PHCs and 38 CHCs. Similarly, in urban settings, there are 24 PHCs in place against the required 13. The State has 11 DHs and 1 government medical college. In the State, 73% of DHs serve as functional FRUs. In tribal catchments, there are 444 SCs, 111 PHCs and 26 CHCs in place, against the required 778 SCs, 116 PHCs and 29 CHCs.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 301 HWCs (203 SHCs, 79 PHCs & 19 UPHCs) are operationalized in the State as of 22nd December 2021[‡].

The State has 100% of required ASHAs in position under both NRHM and 85% under the NUHM. The doctor to staff nurse ratio in place is 1:2, with 14 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 89.97 availed (events) IPD services and 1358.02 availed (events) OPD services. As per the NSSO data (2017-18), 55% of all OPD cases in rural areas and 20% in urban areas; and 93% of all IPD cases in rural areas & 44% in urban areas utilized public health facilities. The public health facility utilization in rural areas is above the national utilization averages of rural and urban areas (Annexure 1.6).

[†] Directorate of Economics & Statistics

[‡] AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^t

Indicator	Meghalaya 2011 ¹	India
Total Population (In Crore)	0.30	121.08
Rural (%)	79.93	68.85
Urban (%)	20.07	31.14
Scheduled Caste population (SC) (in crore)	0.002 (0.58%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.26 (86.15%)	10.45 (8.63%)
Total Literacy Rate (%)	72.9	72.99
Male Literacy Rate (%)	76	80.89
Female Literacy Rate (%)	74.4	64.64
Number of Districts in the Meghalaya ²	11	
Number of districts per lakh population in Meghalaya (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	7
	≥ 10 Lakhs - <20 Lakhs	0
	≥20 Lakhs - <30 lakhs	0
	≥30 Lakhs	0
ST SC Dominant (Top 5) Districts of Meghalaya ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
West Khasi Hills - 97.82%	West Garo Hills - 1.37%	
East Garo Hills - 95.99%	East Khasi Hills - 0.68%	
Jaintia Hills - 95.19%	Jaintia Hills - 0.33%	
South Garo Hills - 94.31%	Ribhoi - 0.23%	
Ribhoi - 88.89%	South Garo Hills - 0.22%	
Top 5 ST dominant district accounts for - 55.59%	Top 5 SC dominant district accounts for - 96.10%	

1.2 Key Health Status & Impact Indicators

Indicators	Meghalaya	India
Infant Mortality Rate (IMR) ³	33	30
Crude Death Rate (CDR) ³	5.6	6

^t Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	23.2	19.7
Maternal Mortality Ratio (MMR) ³	NA	113
Neo Natal Mortality Rate (NNMR) ⁴	NA	23
Under Five Mortality Rate (U5MR) ⁴	NA	36
Still Birth Rate ⁴	NA	4
Total Fertility Rate (TFR) ⁴	NA	2.2
Life expectancy at birth ⁵	NA	69.4
Sex Ratio at Birth ⁴	NA	899

1.3 Key Health Infrastructure Indicators^u

Indicators	Numbers (Total)			
Number of District Hospitals ²	11			
Number of Sub District Hospital ²	0			
Number of Government (Central + State) Medical College ⁶	1			
Number of Private (Society + Trust) Medical Colleges ⁶	0			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	203	90	215	298
PHC-HWC	79	108	108	108
UPHC-HWC	19	19	19	19
Total-HWC	301	217	342	425
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	31	28	9.68	
Number of Primary Health Centres (PHC)	125	119	4.80	
Number of Sub Centres (SC)	830	440	46.99	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	8	0	0	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	13	24	-84.62	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	29	26	10.34	
Number of PHC	116	111	4.31	
Number of SC	778	444	42.93	

^u Sources are mentioned at the end of Annexure 1

Patient Service⁹	Meghalaya	India
IPD per 1000 population	89.97	62.6
OPD per 1000 population	1358.02	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	44.74	36.4

1.4 Major Health Indicator^v

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Meghalaya	India
% DALY ^w accountable for CMNNDs ^x	36.25	27.46
% DALY accountable for NCDs	56.36	61.43
% DALY accountable for Injuries	7.4	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Meghalaya	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	97.6	92
Percentage of medically certified deaths to total registered deaths (%)	32.9	20.7
RMNCHA+N		
Maternal Health⁹	Meghalaya	India
% 1st Trimester registration to Total ANC Registrations	34.8	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	49	79.4
Total Reported Deliveries	90,491	21410780
% Institutional deliveries to Total Reported Deliveries	59.7	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	76.4	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	23.6	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	15.7	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	7.2	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	43.1	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	43.5	53.4
Neonatal⁹	Meghalaya	India
% live birth to Reported Birth	97.8	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	7.9	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	90.1	89.9

^v Sources are mentioned at the end of Annexure 1

^w Disability Adjusted Life Years

^x Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Meghalaya	India
Sick New Born Care Unit (SNCU)	5	895
New Born Stabilization Unit (NBSU)	17	2418
New Born Care Corner (NBCC)	130	20337
Child Health & Nutrition¹⁰	Meghalaya (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	10.4	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	73.2	60.6
Children under 5 years who are underweight (weight-for-age) (%)	26.6	32.1
Child Immunization¹⁰	Meghalaya (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	80	83.8
Children age 12-23 months who have received BCG (%)	89.3	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	72.5	87.9
Family Planning¹⁰	Meghalaya (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	18.3	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Meghalaya	India
Number of districts with functional IDSP unit	8	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Meghalaya	India
Annualized total case notification rate (%)	129	163
New Smear Positive (NSP) Success rate (in %)	73	79
National Leprosy Eradication Programme (NLEP)¹¹	Meghalaya	India
Prevalence Rate/10,000 population	0.04	0.61
Number of new cases detected	17	1,14,359
Malaria, Kala Azar, Dengue¹¹	Meghalaya	India
Deaths due to Malaria ¹¹	4	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Meghalaya (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	14.5	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	15.9	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Meghalaya (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	10	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	14.2	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	5	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	8.6	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Meghalaya (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	28.2	8.9
Men who use any kind of tobacco (%)	57.7	38
Women who consume alcohol (%)	1.5	1.3
Men who consume alcohol (%)	32.4	18.8
Injuries		
Road Traffic Accident¹²	Meghalaya	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	25	NA
Total number of fatal Road Accidents	169	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	37.1	33.7
Number of persons killed in Road Accidents	179	115113

1.5 Access to Care^y

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Meghalaya	India
Number of Districts equipped with MMU under NRHM	4	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Meghalaya	India
102 Type	0	9955
104 Type	0	605
108 Type	43	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	16	11070

^y Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Meghalaya	India
Total number of ASHA targeted under NRHM	6519	946563
Total number of ASHA in position under NRHM	6519	904211
% of ASHA in position under NRHM	100	96
Total number of ASHA targeted under NUHM	210	75597
Total number of ASHA in position under NUHM	179	64272
% of ASHA in position under NUHM	85.24	85
Community Process¹¹	Meghalaya	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	6249	554847
Number of Mahila Arogya Samitis (MAS) formed	89	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Meghalaya	India
DH	11	796
CHC	28	6036
PHC	111	20273
UHC	0	126
UPHC	0	3229
Human Resource for Health ¹⁴		
HRH Governance	Meghalaya	
Specialist Cadre Available in the state (Y/N)	No	
HR Policy available (Y/N)	Yes	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	61
	Dentists (%)	20
	MO MBBS (%)	28
	Nurse (%)	36
	LT (%)	12
	ANM (%)	4
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:2	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	14 per 10,000	14 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	3:1	5:1

Ranking: Human Resource Index of Meghalaya¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^z	1898	1419	1310	109	588	69.03
Staff Nurse	2148	1512	1169	343	979	
Lab Technician	420	282	255	27	165	
Pharmacists	229	235	234	1	0	
MO MBBS ^{aa}	431	717	526	191	0	
Specialist ^{bb}	443	337	142	195	301	

1.6 Healthcare Financing^{cc}

National Health Accounts (NHA) (2017-18)	Meghalaya		India	
Per Capita Government Health Expenditure (in ₹)	NA		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	NA		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	NA		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	NA		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Meghalaya		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	55	20	33	26
IPD - % of hospitalized cases using public facility	93	44	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	1073	0	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	647	2275	845	915
IPD - Per hospitalized case (in INR) - Public	2201	8219	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	15591	29618	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	10	11	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	62	55	53	43

^z MPW – Multi Purpose Health Worker (Female + Male)

^{aa} MO MBBS (Full Time)

^{bb} Specialist (All Specialist)

^{cc} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	2332	2971	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	12457	17540	20,692	26,701
State Health Expenditure	Meghalaya		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	7.2		5 ^{dd}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{dd} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

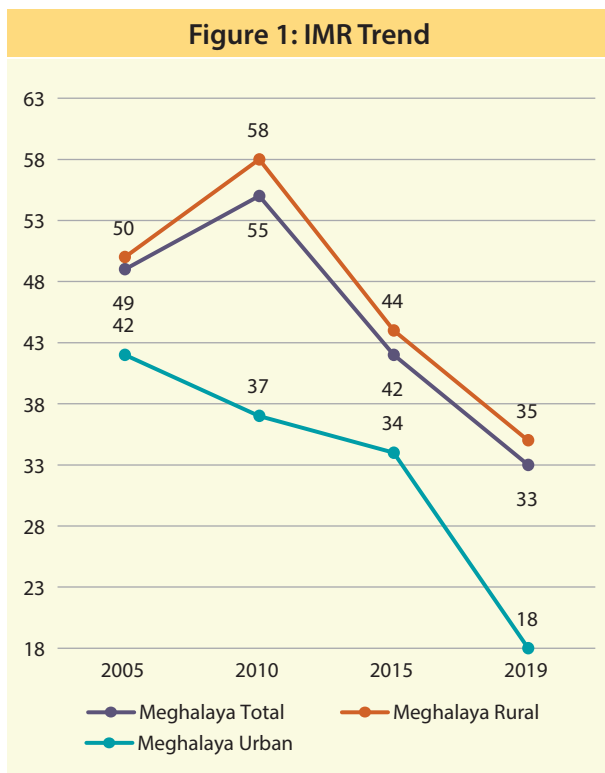


Figure 2: CBR & CDR Trend

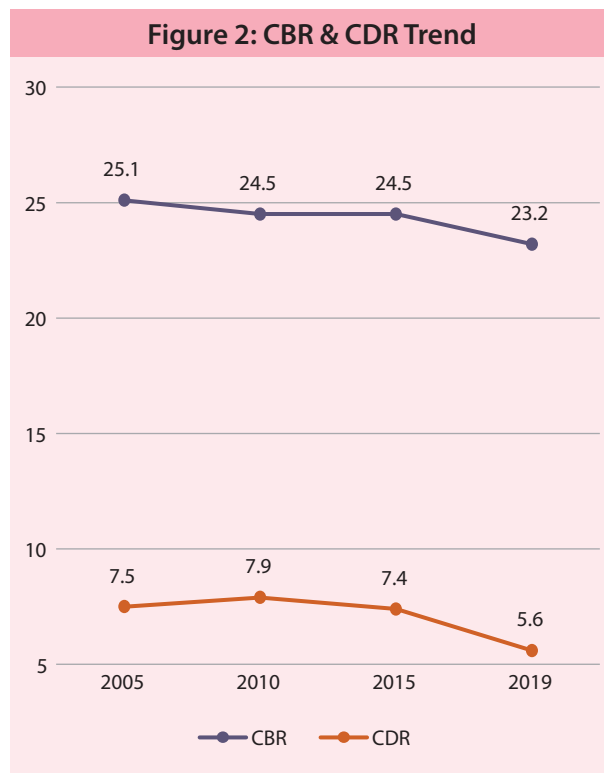


Figure 3: Comparison of Key NFHS 5 & 4 Indicators

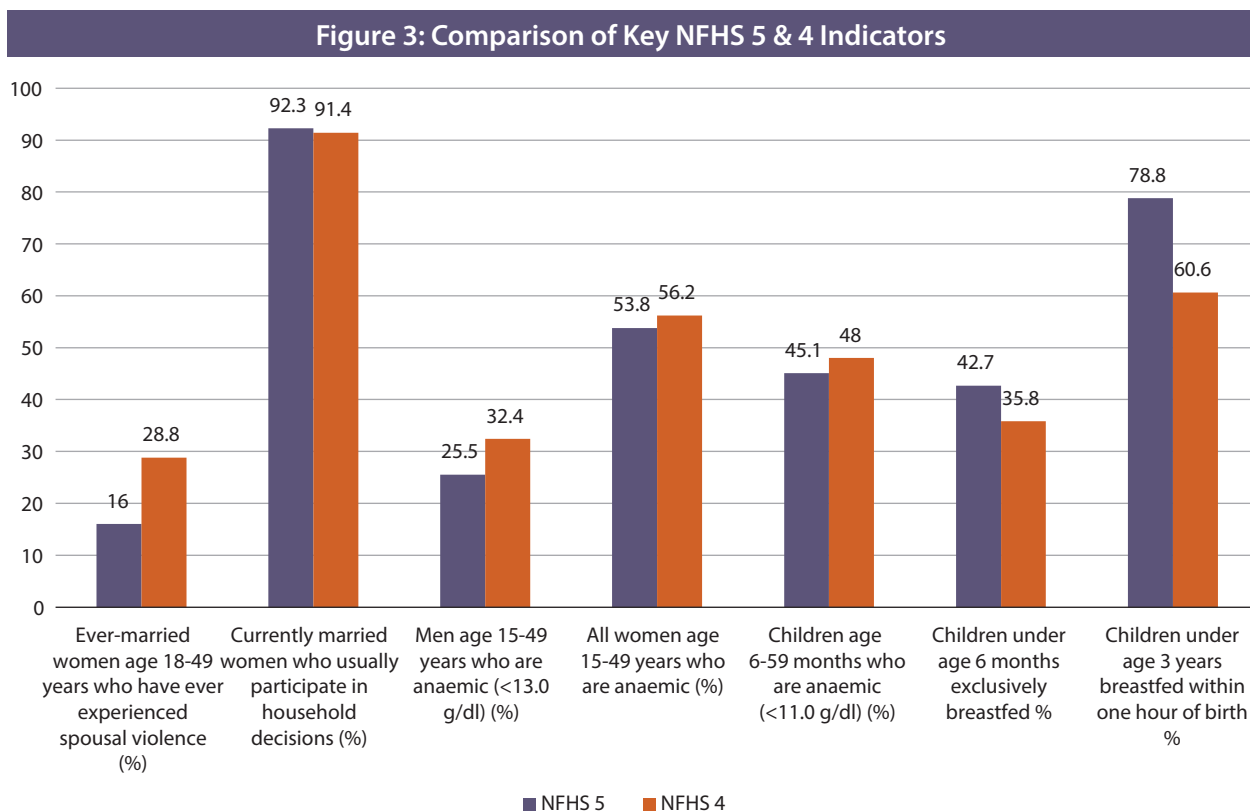


Figure 4: Top 15 causes of DALYs, 1990-2019

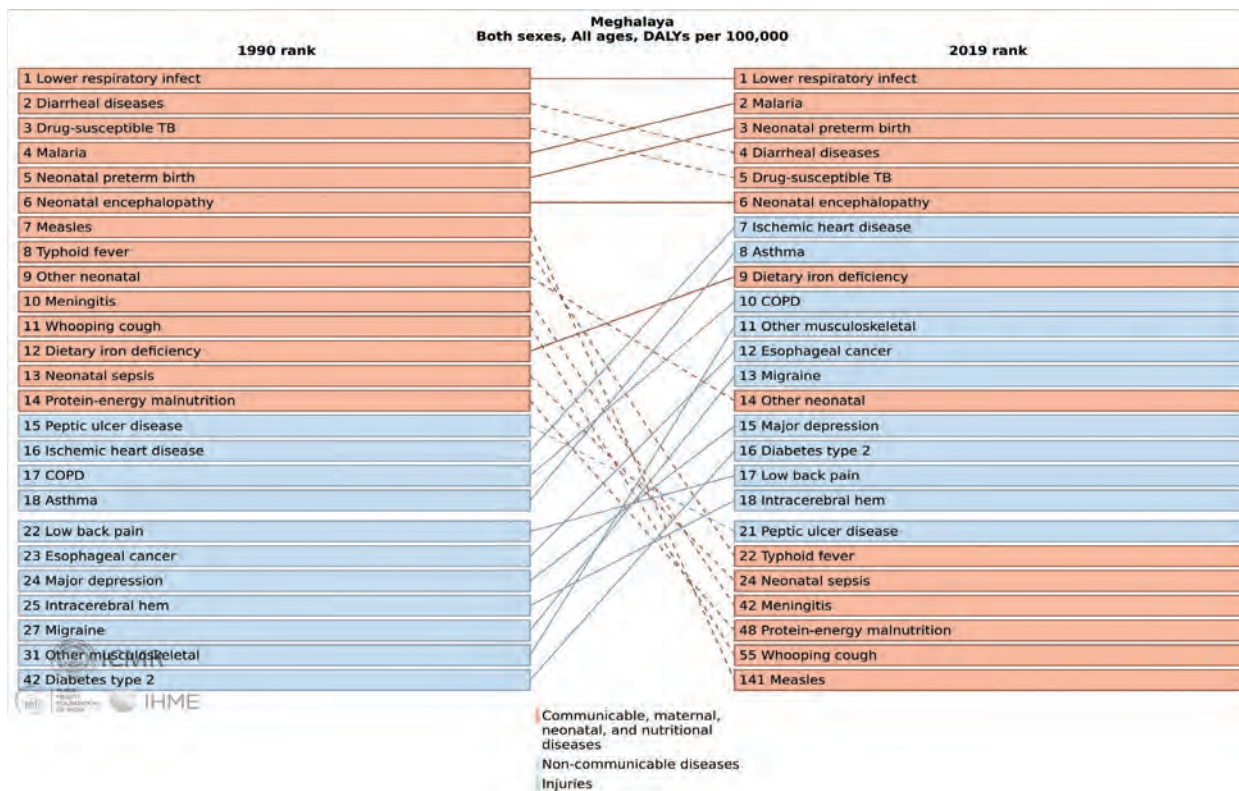


Figure 5: Top 15 risk of DALYs, 1990-2019

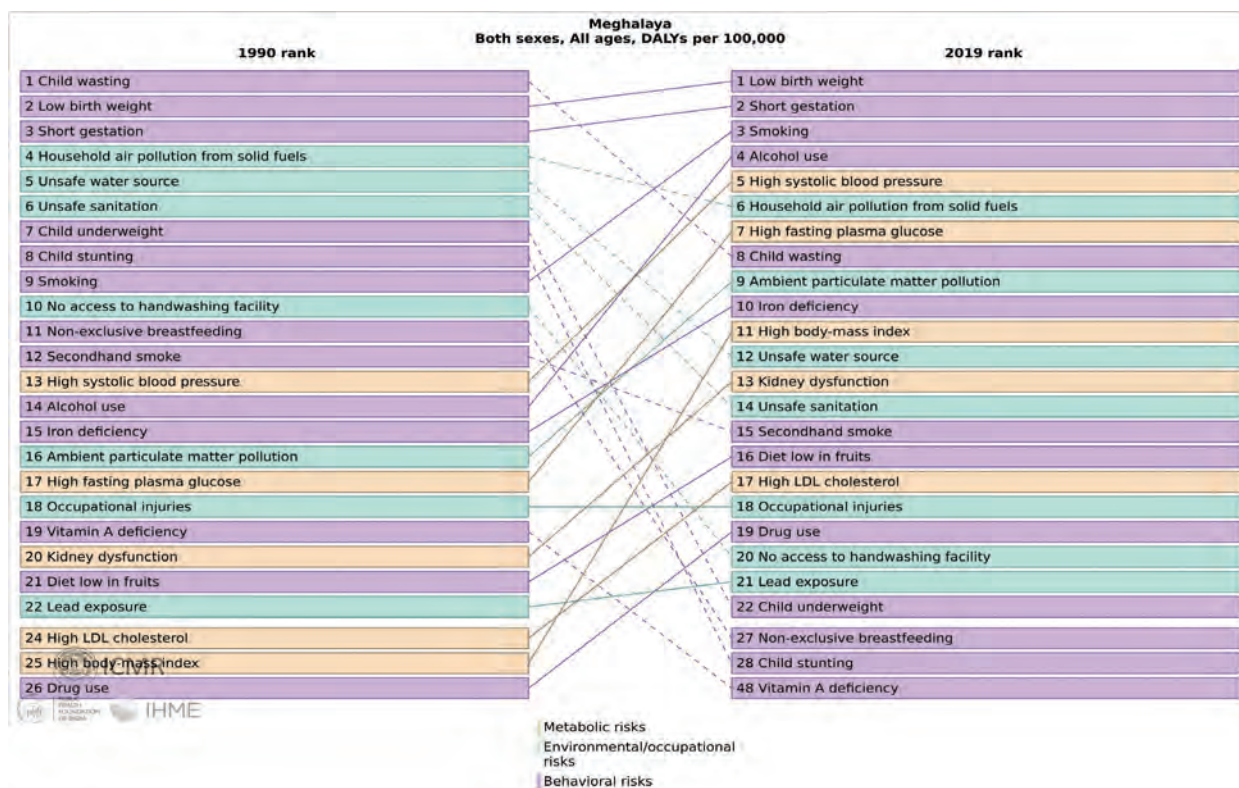


Figure 6: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

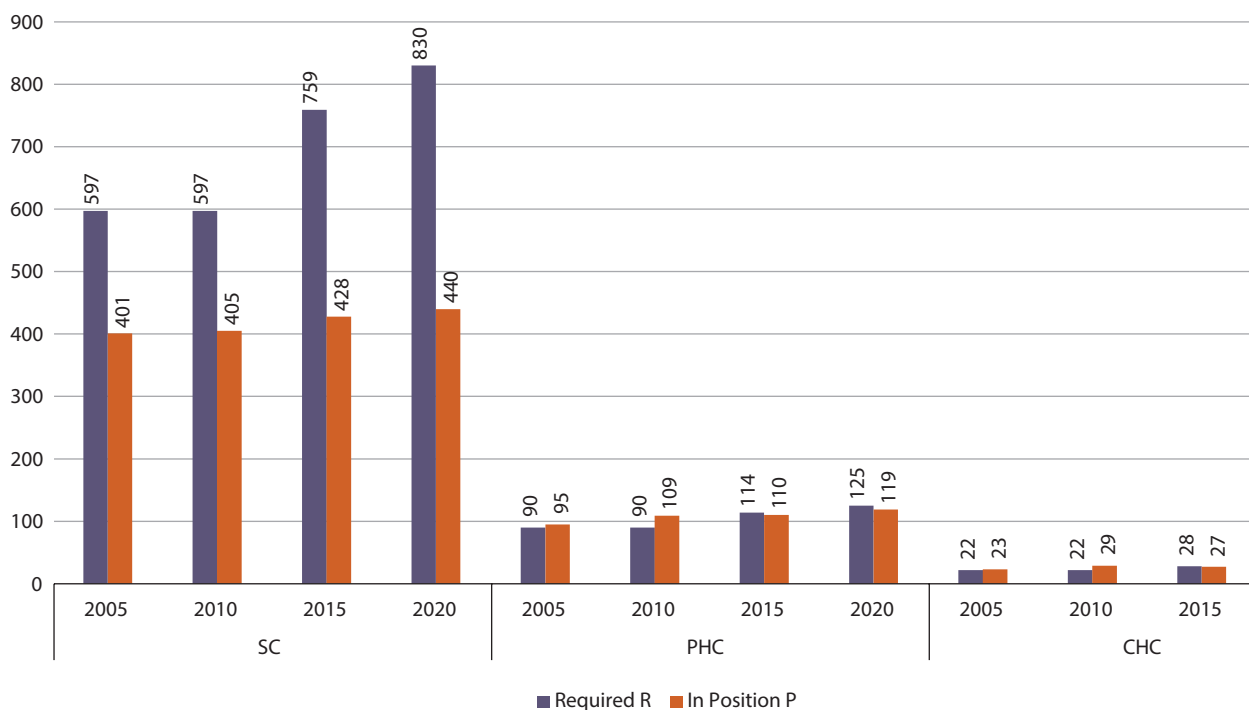


Figure 7: Year Wise Health Infrastructure Shortfall (%)

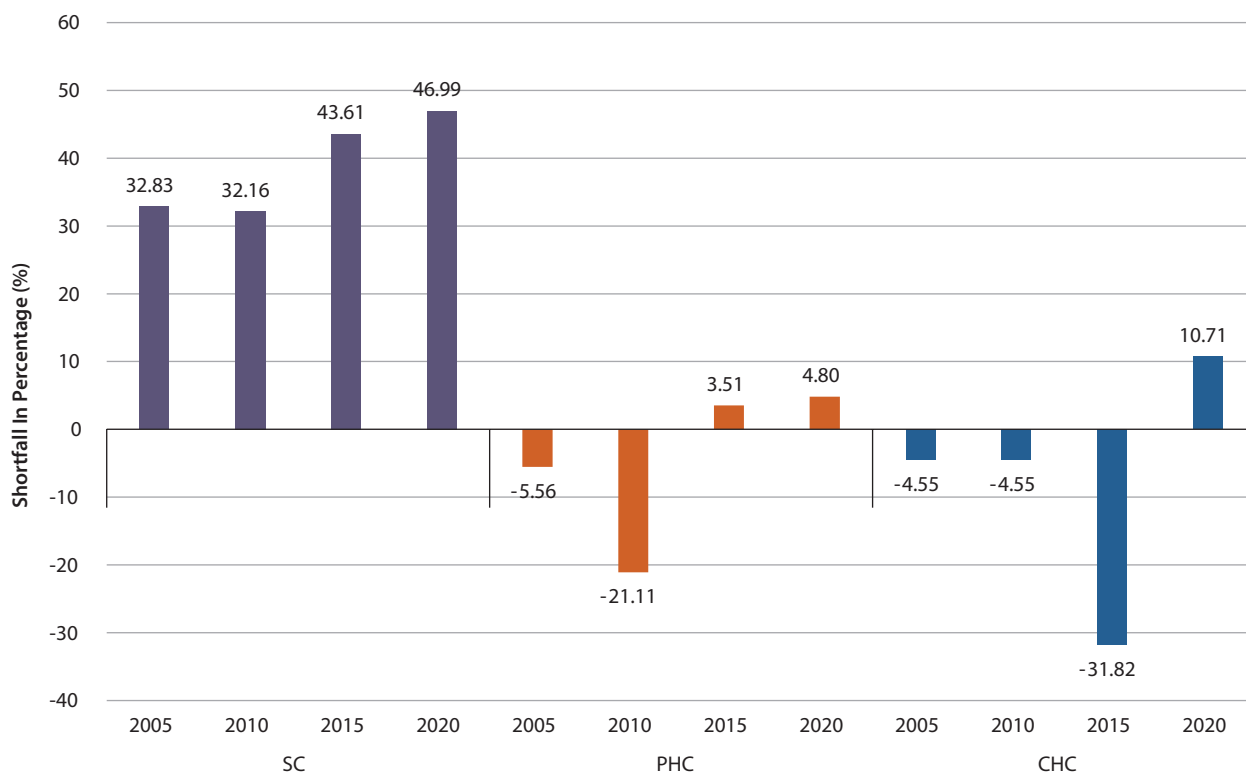
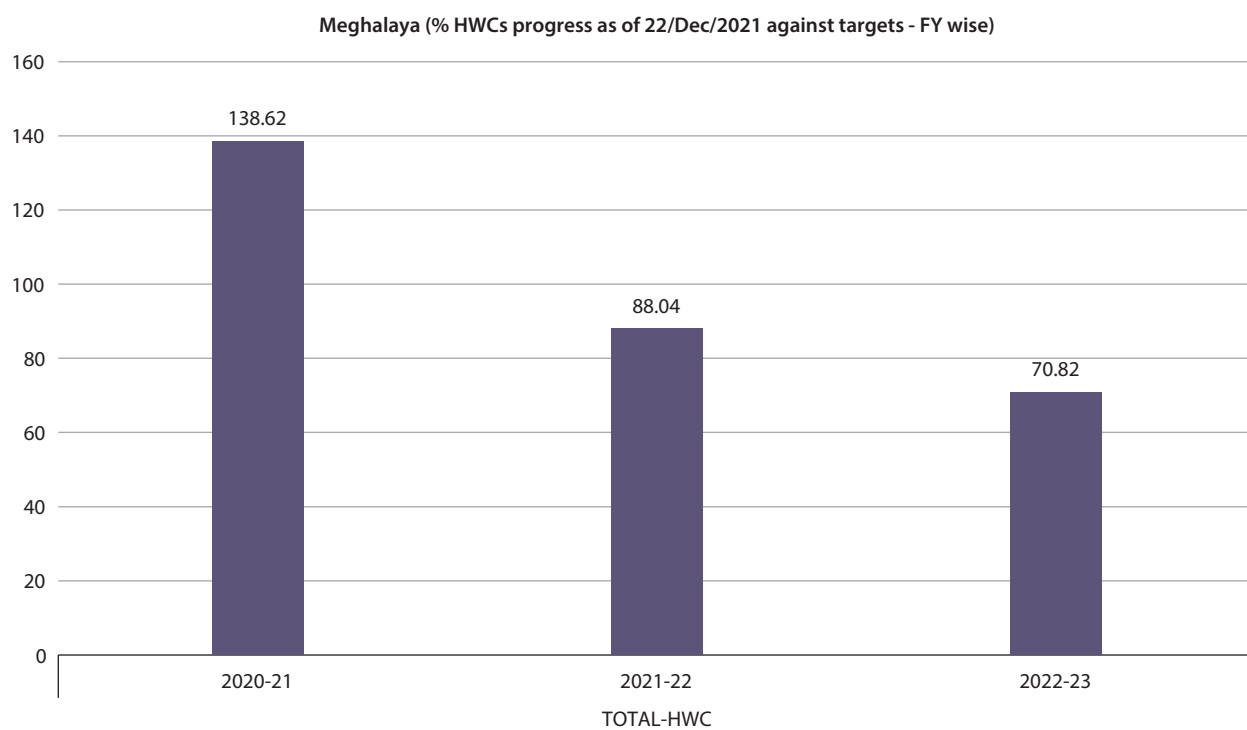


Figure 8: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)																
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted\ (Height For Age) (%)	Children Under 5 Years - Wasted\ (Weight For Height) (%)			
1	Meghalaya	NFHS 4 Total	1009	34.6	N/A	16.9	24.3	2.1	1.3	21.2	50	51.4	81.3	23.5	43.8	15.3			
2	Meghalaya	NFHS 5 Urban	915	52.8	97.1	9.1	25.9	2.9	3.9	21.9	67.5	82.7	76	39.5	35.1	13			
3	Meghalaya	NFHS 5 Rural	1001	66.5	85.5	19.1	27.8	4.7	2.4	28.2	49.6	54.3	80.5	28.4	48.2	12			
4	Meghalaya	NFHS 5 Total	989	63.5	88.2	16.9	27.4	4.4	2.7	26.9	52.2	58.1	80	29.8	46.5	12.1			
5	East Garo Hills	NFHS 5 Total	1427	71.9	86.7	13.7	37	4.7	4.9	21	25.5	73.8	94.5	43.9	39.7	20.1			
6	East Jaintia Hills	NFHS 5 Total	1015	74.1	76	25.3	33.6	1.9	2	26	58.6	48.4	82.4	25.5	49.8	8.5			
7	East Khasi Hills	NFHS 5 Total	851	47.1	93.7	14.6	12.1	2.4	1.6	33	57.5	63.4	69.4	34.8	44.6	11.2			
8	North Garo Hills	NFHS 5 Total	894	60.8	86.1	13.2	19.2	3.4	3.2	25.2	24.3	61.5		13.2	35.6	11.7			
9	Ribhoi	NFHS 5 Total	871	66.8	89.5	20.3	33.1	4.9	4.4	27	61	56.9	86.7	37.3	42.5	17.9			
10	South Garo Hills	NFHS 5 Total	1011	79.5	88.6	10.2	37.6	9	2.8	25.3	33.3	88.3	89.1	23	29.8	18.3			
11	South West Garo Hills	NFHS 5 Total	1036	75.1	82.6	15.3	36.7	5.5	6.2	30.4	28.5	83.7	90.1	30	32.2	19.9			
12	South West Khasi Hills	NFHS 5 Total	1032	72.3	85.9	21.6	26.5	1.2	1.2	26.2	63.4	41.7	86.3	31.2	51.4	10.4			
13	West Garo Hills	NFHS 5 Total	1396	77.9	89	10.4	44.1	9.5	4.1	19.7	48	89.6	78.6	17.2	39.5	14.9			

14	West Jaintia Hills	NFHS 5 Total	1036	65.6	80	19.9	19.3	2.5	1	29.3	43.1	42.2	84.1	24.5	48.7	9.7
15	West Khasi Hills	NFHS 5 Total	984	60.1	87.4	30.3	26.3	1.6	0.5	25.8	64	41.7	77.4	27.5	59	8

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'Vaccinated'. Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best four performing districts within the districts for a particular indicator

B. Red – Worst four performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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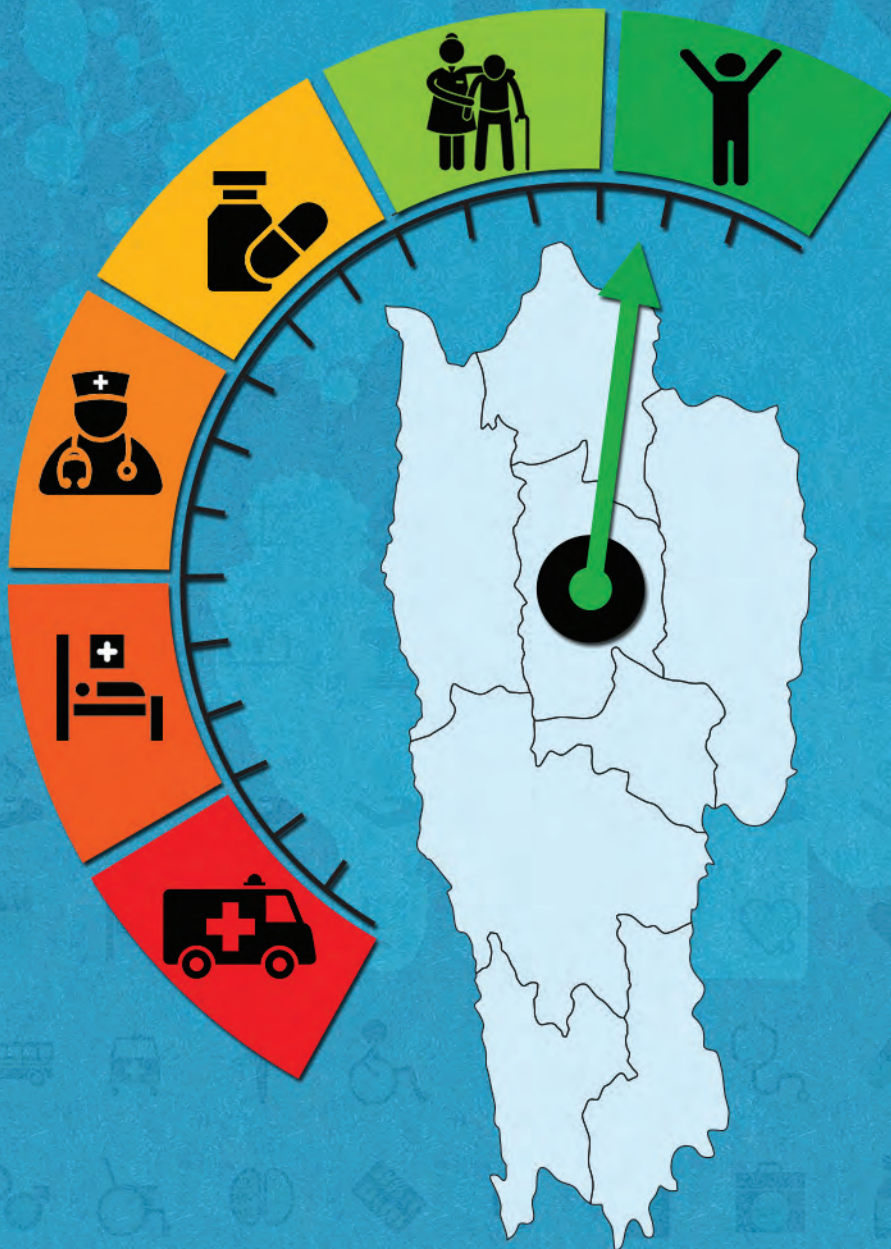
Dr. Diksha Dhupar, Consultant



NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



MIZORAM

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
2 nd	Kolasib	Serchhip
8 th	Aizwal	Lunglei
13 th	East Aizwal	Mamit
14 th	Mamit	Lawngtlai

MIZORAM

1. BACKGROUND

1.1 State Profile

Mizoram is the fifth largest^a North-Eastern State in India with a population of over 10.97 lakh. The state is divided into 9 districts as of 2021^b with an expected increase in population to 12.16 lakh by 2021^c. The literacy rate has increased from 88.8% in 2001 to 91.3% in 2011 with male & female literacy rates being 93.3% and 89.3% respectively. As per census 2011, the Scheduled Caste population is 0.012 lakh (0.11%) and the Scheduled Tribe (ST) population is 10 lakh (94.43%). Around 47.89% of the population reside in rural areas, while the rest constitute the urban population. Every district in the State has over 87% of its population constituted by the Scheduled Tribes (Figure 1 & Annexure 1, State Profile). Agriculture and allied sector are the major contributors to the State Gross Domestic Product. Around 65% of the workers in Mizoram are engaged as cultivators and agricultural laborers^d.

At present, two cities^e are covered under National Urban Health Mission with no metro & no million plus city in the state. The total length of roads^f in Mizoram is 11,012 km (0.22%^g), in which, the length of the national highways is 1382 km (1.2%^h) and state highways is 170 km (0.10%ⁱ).

A detail report on the key indicators has been attached as Annexure 1.

^a Census 2011; RHS 2020; and among North-East States

^b RHS 2020

^c Census Population Projection Report 2019

^d Economic Survey 2019-20; <https://planning.mizoram.gov.in/uploads/attachments/4d6a424cb421f1fafef5c29cb0068b83/economic-survey-2019-20.pdf>

^e QPR NHM MIS Report as on 31 Dec 2020

^f Basic Road Statistics 2019, MoRTH

^g Percentage of total length of roads in State

^h Percentage of total length of National Highways in the country

ⁱ Percentage of total length of State Highways in the country

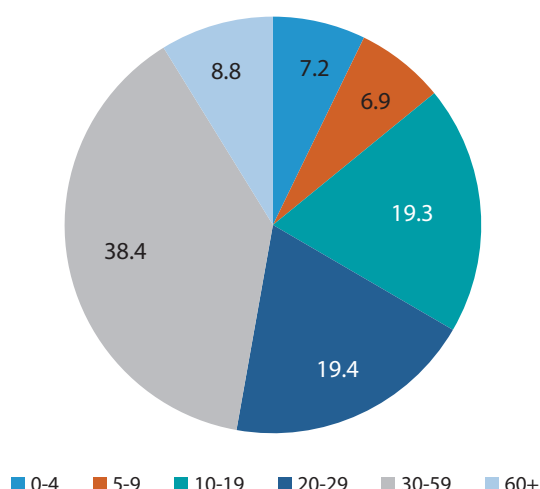
1.2 Demography

Overall, in North-Eastern States (excluding Assam), 19.3% of the total population is in 10-19 years' age group. 57.8% of the total population is between 20 to 59 years; while 8.8% are above 60 years of age. As per ESAG 2018 report, the Gross Enrollment Rate^k (GER) is 24.1% for higher education, 55.68% for senior secondary education (XI-XII), 109.02% for secondary education (IX-X), 126.56% for elementary education (I-VIII); and 122.99% for primary education (I-V).

1.3 Elderly

Population aging has profound social, economic, and political implications. Elderly people aged (60+) share 8.8% of the states' total population. In Mizoram, 49.0% of the elderly females and 16.0% elderly males living in rural areas are economically fully dependent on others, while 43% of the elderly females & 29% elderly males are economically totally dependent on others in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly men and women is 11% each, which is much below the national average of 31% for both men and women (Elderly in India 2016).

Figure 1: North-East States (Excluding Assam) Distribution of estimated Population 2021 (%)



2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

Mizoram has been able to provide RMNCHA+N^l services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^m, institutional deliveries, C sections, distribution of IFAⁿ tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care have shown improvement since 2005 (NFHS 4 & 5). In Mizoram, 57.1% of women received 4 ANC check-ups (Annexure 1.4). As per the NFHS 5 (Annexure 3) Lawngtlai, Saiha and Mamit districts reported the least ANC coverage, ranging between 33% - 52.5%. Whereas Champhai, Kolasib and Aizwal districts reported relatively better ANC coverage ranging between 66% - 68.5%. As reported in HMIS 2019-20, around 89.2% of the deliveries took place in institutions, out of which 79.8% took place in public health facilities. Total percentage of C-sections is (18.6%) is only slightly higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 34.3% is reported to be conducted at the private facilities in the State. Around 15.5% of women received their first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anemia in women aged 15-49 years increased from

^j Population projection 2021 for Manipur is not available

^k Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

^l Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^m Antenatal Check up

ⁿ Iron Folic Acid Tablets

24.8% (NFHS 4) to 34.8% (NFHS 5). Anemia in females of reproductive age group is twice than men of similar age group (Annexure 2, figure 3).

Refer Annexure 3 for detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Since the inception of NHM in 2005, Mizoram has shown a significant decline in IMR from 20 (2005) to 3 (2019) (Annexure 2, Figure 1). As per the NFHS 5, the lowest SRB^o ranging between 726 to 860 are reported in Champhai, Mamit and Kolasib districts, while the highest ones, ranging between 1084 to 1131 are reported in Serchhip, Lawngtlai and Saiha districts.

Full vaccination^p coverage for children between 12 – 23 months of age has improved from 71.3% (NFHS 4) to 83.7% (NFHS 5). The percentage of under 6-months children exclusively breastfed has increased from 61.1% (NFHS 4) to 67.9% (NFHS 5). An increase in childhood anemia from 19.3% (NFHS 4) to 46.4% in children aged 6-59 months is reported in NFHS 5 (Annexure 2, Figure 3). As per the NFHS 5 report, low stunting rates which ranged from 25.3% to 26.5% are reported from Aizwal, Mamit and Lunglei districts. While higher stunting rates which ranged from 31.8% to 43.8% are reported from Serchhip, Lawngtlai and Saiha districts. For under-5 wasting – Aizwal, Mamit and Saiha districts reported a low burden, which ranged from 7.3% to 7.7%; while Kolasib, Champhai and Lawngtlai districts reported a relatively higher burden, which ranged from 11.3% to 16.2%.

2.3 Family Planning

As per the NFHS 5 report, the total unmet need in Mizoram is reported as 18.9%, while the unmet need for spacing is 12.8%. Champhai district reported the lowest total unmet need of 11.2%, while Saiha reported the highest (22.5%). Approximately 30.8% of married women reported to avail any modern method of family planning in the State (NFHS 5). The sterilization acceptance among females is 13%, while none of the males are opting for sterilization.

2.4 Communicable Diseases

Mizoram has 9 IDSP units functional^q. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 34.18% of total disease burden (Annexure 1.4). Lower respiratory tract infections, HIV/AIDS, Other neonatal conditions and Neonatal Preterm birth are the leading causes of DALYs in Mizoram (Annexure 2, Figure 4). As per QPR reports, for TB, the annual total case notification rate is 201 and NSP^r success rate is 61; while the former is above the national average of 163, the latter is below the national average of 79. For NLEP^s, the reported prevalence rate of 0.04 per 10,000 population is less than the national average of 0.61. In FY 2019-20, 8 deaths due to Malaria, while none due to Dengue, or Kala Azar are reported.

^o Sex Ratio at Birth

^p NFHS 5 State Factsheet, based on information from vaccination card only

^q QPR NHM MIS Report (status as on 01.03.2020)

^r New Smear Positive

^s National Leprosy Eradication Programme

2.5 Non-Communicable Diseases (NCDs) & Injuries

It is reported that as high as 64.6% deaths are premature, while disability or morbidity accounts for 35.4%. COPD, other musculoskeletal conditions, lung cancer, stomach cancer and diabetes type 2 are the major causes of DALYs (Annexure 2, Figure 4). NCDs contribute to 57.37% of DALYs; while injuries contribute to 8.45% of DALYs^t. Mizoram is positioned 32nd in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). In NFHS 5, it is reported that as high as 61.6% of women and 72.9% of men used any kind of tobacco, while 0.9% of women and 23.8% of men consumed alcohol. Overall, smoking, ambient particulate matter pollution, high fasting plasma glucose, high systolic pressure, and high body mass index are the top five risk factors for all DALYs (Annexure 2, figure 5).

2.6 Health Care Financing

Mizoram's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 17,506 crores. The State is positioned 17th out of 32 states in terms of per capita^u of ₹ 1,47,602. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 5,506 in public facilities, ₹ 13,096 in private facilities; whereas for urban areas, it is around ₹ 5,772 in public facilities and ₹ 14,422 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 2,019 in public facilities & ₹ 1,800 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 2,503 in public facilities and ₹ 6,464 in private facilities. In public health facilities, the share of expenditure on drugs as a proportion of inpatient medical expenditure is estimated as 46% in rural and 65% in urban areas; whereas for diagnostics, it is 10% in rural and 15% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 6). There is no shortfall in SCs, PHCs or CHCs (Annexure 2, Figure 7). Currently, there are 311 SCs, 57 PHCs, and 9 CHCs in place, against the required 180 SCs, 27 PHCs and 6 CHCs in rural areas. The State has 9 DHs, 2 SDHs and 1 government medical college. In tribal catchments, there are 368 SCs, 65 PHCs and 9 CHCs in place, against the required 177 SCs, 26 PHCs and 6 CHCs.

Under Government of India flagship program of Ayushman Bharat, a total of 222 primary care facilities (159 SHCs, 55 PHC & 8 UPHC) have been upgraded and are currently operational as Health & Wellness Centres (HWCs) to deliver Comprehensive Primary Health Care (as on 22nd Dec 2021, Annexure 1.3).

In Mizoram, 9 districts are equipped with MMUs under the NRHM, while none under the NUHM. Mizoram has 100% of required ASHAs in position under both NRHM & NUHM. The doctor to staff nurse ratio in place is 1:2, with 16 public health providers (MO, specialists, staff nurse & ANM) per 10,000 populations (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 1362.9 availed (events) OPD services and 76 availed (events) IPD services. As per the NSSO data (2017-18), 86% of all OPD cases in rural areas and 53% in urban areas; and 90% of all IPD cases in rural areas & 69% in urban areas utilized public health facilities. The public health facility utilization in Mizoram is above the national average for rural & urban areas (Annexure 1.6).

^t <https://vizhub.healthdata.org/gbd-compare/india>

^u Directorate of Economics & Statistics

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^v

Indicator	Mizoram 2011 ¹	India
Total Population (In crore)	0.1	121.08
Rural (%)	47.89	68.85
Urban (%)	52.11	31.14
Scheduled Caste population (SC) (in crore)	0.00012 (0.11%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.10 (94.43%)	10.45 (8.63%)
Total Literacy Rate (%)	91.3	72.99
Male Literacy Rate (%)	93.3	80.89
Female Literacy Rate (%)	89.3	64.64
Number of Districts in the Mizoram ²	9	
Number of districts per lakh population in Mizoram (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<1 Lakhs	4
	≥ 1 Lakhs - <2 Lakhs	3
	≥2 Lakhs - <5 lakhs	1
	≥5 Lakhs	0
ST % share of the districts		
Champhai - 98.18%		
Serchhip - 96.84%		
Saiha - 96.58%		
Lawngtlai - 95.30%		
Lunglei - 95.10%		
Mamit - 95.03%		
Aizawl - 93.31%		
Kolasib - 87.67%		

1.2 Key Health Status & Impact Indicators

Indicators	Mizoram	India
Infant Mortality Rate (IMR) ³	3	30
Crude Death Rate (CDR) ³	4	6

^v Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	14.5	19.7
Maternal Mortality Ratio (MMR) ³ (for other states including Mizoram)	85	113
Neo Natal Mortality Rate (NNMR) ⁴	N/A	23
Under Five Mortality Rate (U5MR) ⁴	N/A	36
Still Birth Rate ⁴	N/A	4
Total Fertility Rate (TFR) ⁴	N/A	2.2
Life expectancy at birth ⁵	N/A	69.4
Sex Ratio at Birth ⁴	N/A	899

1.3 Key Health Infrastructure Indicators^w

Indicators	Numbers (Total)			
Number of District Hospitals ²	9			
Number of Sub District Hospital ²	2			
Number of Government (Central + State) Medical College ⁶	1			
Number of Private (Society + Trust) Medical Colleges ⁶	0			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	159	113	215	283
PHC-HWC	55	57	57	57
UPHC-HWC	8	8	8	8
Total-HWC	222	178	280	348
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	6	9	-50.00	
Number of Primary Health Centres (PHC)	27	57	-111.11	
Number of Sub Centres (SC)	180	311	-72.78	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	8	1	5	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	13	8	38.46	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	6	9	-50.00	
Number of PHC	26	65	-150.00	
Number of SC	177	368	-107.91	

^w Sources are mentioned at the end of Annexure 1

Patient Service⁹	Mizoram	India
IPD per 1000 population	76.0	62.6
OPD per 1000 population	1362.9	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	119.0	36.4

1.4 Major Health Indicator^x

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Mizoram	India
% DALY ^y accountable for CMNNDs ^z	34.18	27.46
% DALY accountable for NCDs	57.37	61.43
% DALY accountable for Injuries	8.45	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Mizoram	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	51.9	20.7
RMNCHA+N		
Maternal Health⁹	Mizoram	India
% 1st Trimester registration to Total ANC Registrations	75.2	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	57.1	79.4
Total Reported Deliveries	20728	21410780
% Institutional deliveries to Total Reported Deliveries	89.2	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	79.8	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	20.2	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	18.6	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	14.7	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	34.3	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	15.5	53.4
Neonatal⁹	Mizoram	India
% live birth to Reported Birth	99.2	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	5.1	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	95.7	89.9

^x Sources are mentioned at the end of Annexure 1

^y Disability Adjusted Life Years

^z Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Mizoram	India
Sick New Born Care Unit (SNCU)	5	895
New Born Stabilization Unit (NBSU)	1	2418
New Born Care Corner (NBCC)	124	20337
Child Health & Nutrition¹⁰	Mizoram (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	4.3	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	71.4	60.6
Children under 5 years who are underweight (weight-for-age) (%)	12.7	32.1
Child Immunization¹⁰	Mizoram (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	83.7	83.8
Children age 12-23 months who have received BCG (%)	83.4	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	80.9	87.9
Family Planning¹⁰	Mizoram (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	12.8	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Mizoram	India
Number of districts with functional IDSP unit	9	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Mizoram	India
Annualized total case notification rate (%)	201	163
New Smear Positive (NSP) Success rate (in %)	61	79
National Leprosy Eradication Programme (NLEP)¹¹	Mizoram	India
Prevalence Rate/10,000 population	0.04	0.61
Number of new cases detected	5	1,14,359
Malaria, Kala Azar, Dengue¹¹	Mizoram	India
Deaths due to Malaria ¹¹	8	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Mizoram (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	64.1	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	65.6	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Mizoram (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	10.7	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	16.2	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	6.9	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	7.8	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Mizoram (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	61.6	8.9
Men who use any kind of tobacco (%)	72.9	38
Women who consume alcohol (%)	0.9	1.3
Men who consume alcohol (%)	23.8	18.8
Injuries		
Road Traffic Accident¹²	Mizoram	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	32	NA
Total number of fatal Road Accidents	46	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	77.4	33.7
Number of persons killed in Road Accidents	48	115113

1.5 Access to Care^{aa}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Mizoram	India
Number of Districts equipped with MMU under NRHM	9	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Mizoram	India
102 Type	62	9955
104 Type	0	605
108 Type	0	10993
Others	3	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	9	11070

⁹⁹ Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Mizoram	India
Total number of ASHA targeted under NRHM	1091	946563
Total number of ASHA in position under NRHM	1091	904211
% of ASHA in position under NRHM	100	96
Total number of ASHA targeted under NUHM	79	75597
Total number of ASHA in position under NUHM	79	64272
% of ASHA in position under NUHM	100	85
Community Process¹¹	Mizoram	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	830	554847
Number of Mahila Arogya Samitis (MAS) formed	50	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Mizoram	India
DH	9	796
CHC	9	6036
PHC	57	20273
UHC	0	126
UPHC	8	3229
Human Resource for Health ¹⁴		
HRH Governance	Mizoram	
Specialist Cadre Available in the state (Y/N)	No	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	29
	Dentists (%)	4
	MO MBBS (%)	13
	Nurse (%)	22
	LT (%)	29
	ANM (%)	20
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:2	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	20 per 10,000	16 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	1:1	2:1

Ranking: Human Resource Index of Mizoram¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{bb}	848	1142	942	200	0	75.33
Staff Nurse	1177	877	722	155	455	
Lab Technician	230	199	163	36	67	
Pharmacists	140	169	92	77	48	
MO MBBS ^{cc}	227	238	213	25	14	
Specialist ^{dd}	320	191	190	1	130	

1.6 Healthcare Financing^{ee}

National Health Accounts (NHA) (2017-18)	Mizoram		India	
Per Capita Government Health Expenditure (in ₹)	NA		1,753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	NA		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	NA		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	NA		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Mizoram		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	86	53	33	26
IPD - % of hospitalized cases using public facility	90	69	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	782	1082	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	956	1473	845	915
IPD - Per hospitalized case (in INR) - Public	5,506	5,772	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	13,096	14,422	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	10	15	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	46	65	53	43

^{bb} MPW – Multi Purpose Health Worker (Female + Male)

^{cc} MO MBBS (Full Time)

^{dd} Specialist (All Specialist)

^{ee} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	2,019	2,503	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	1,800	6,464	20,692	26,701
State Health Expenditure	Mizoram		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	6		5 ^{ff}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{ff} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

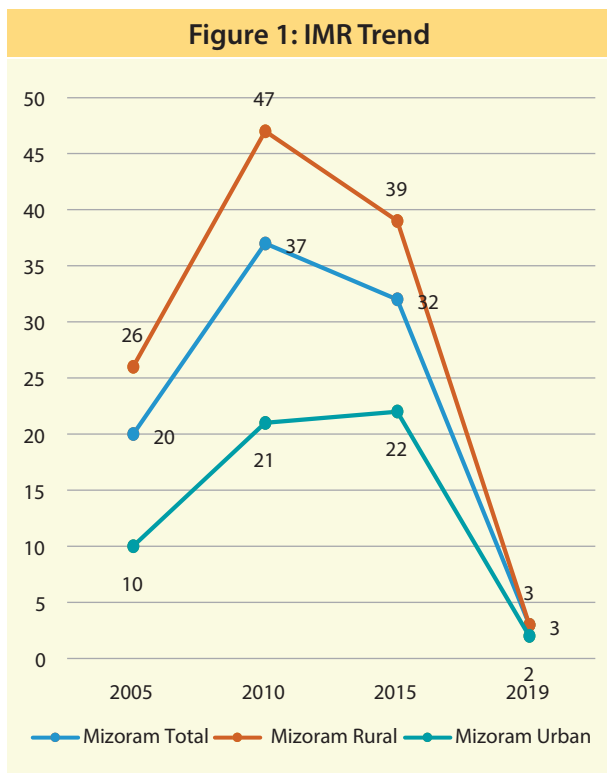


Figure 2: CBR & CDR Trend

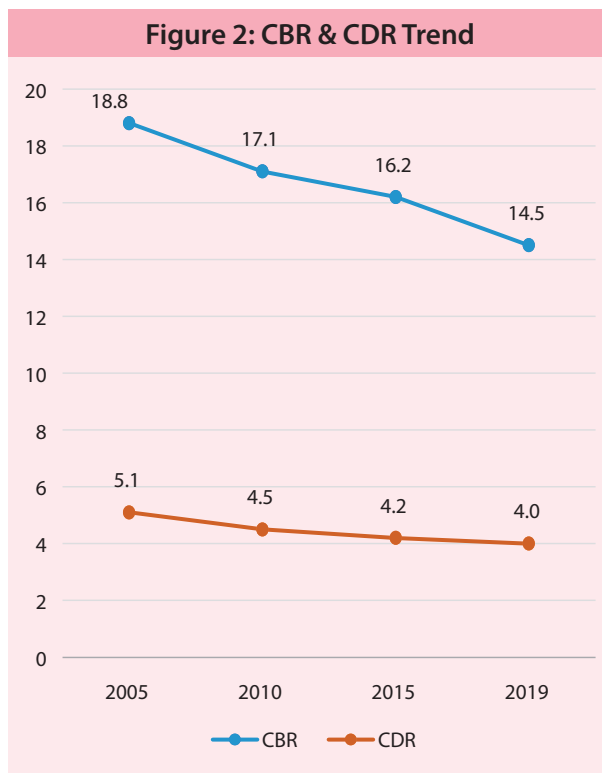


Figure 3: Comparison of Key NFHS 5 & 4 Indicators

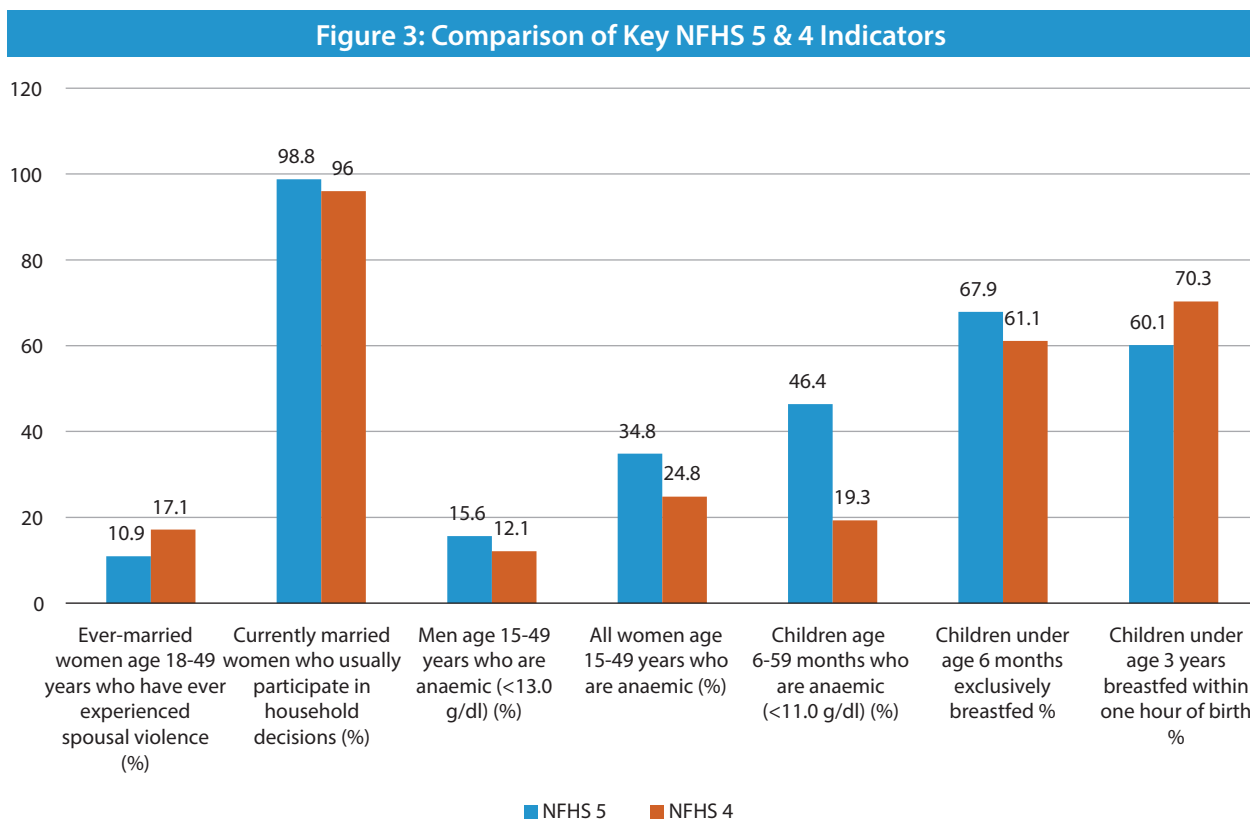


Figure 4: Top 15 causes of DALYs, 1990-2019

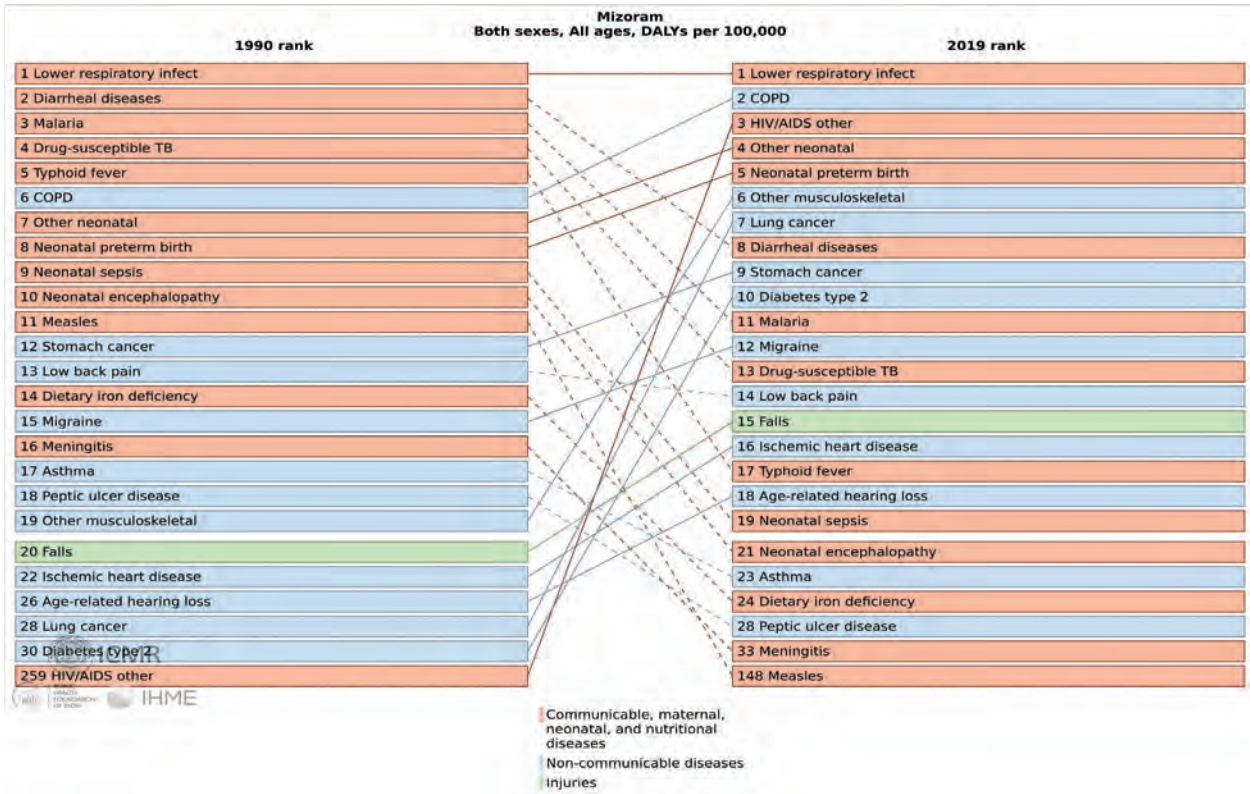


Figure 5: Top 15 risk of DALYs, 1990-2019

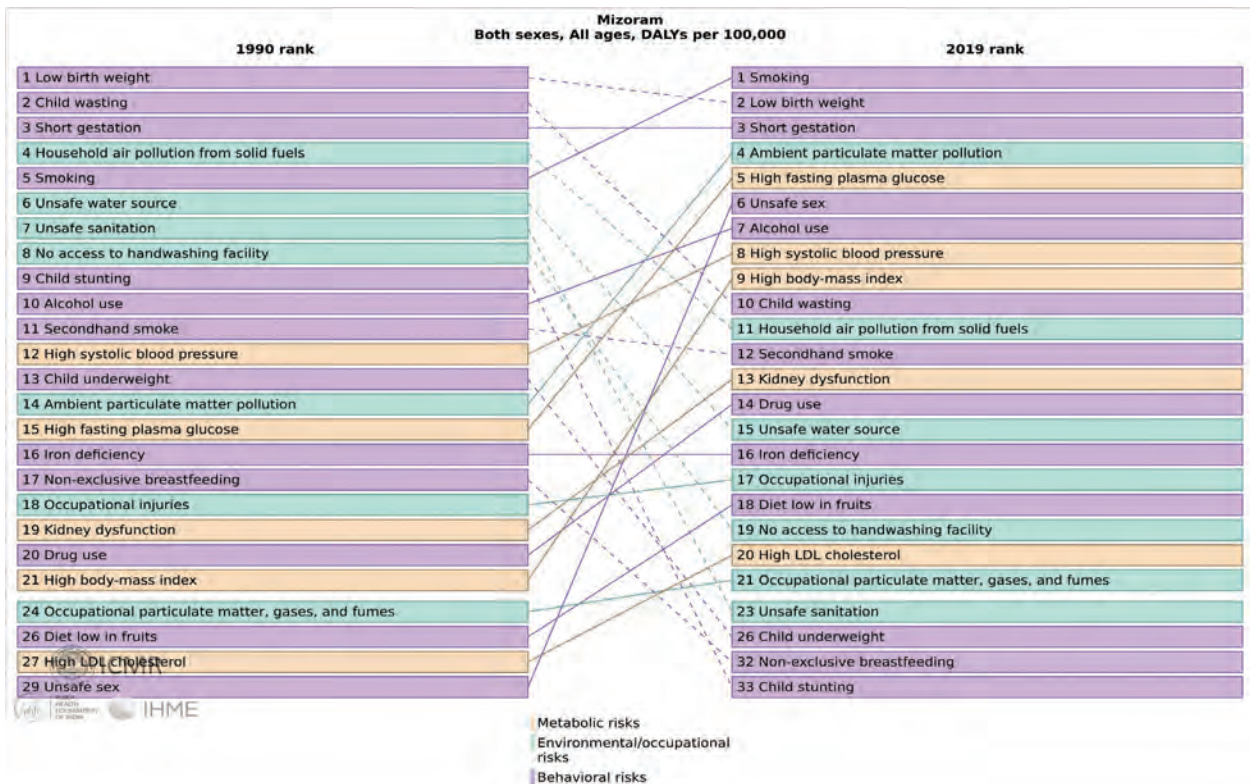


Figure 6: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

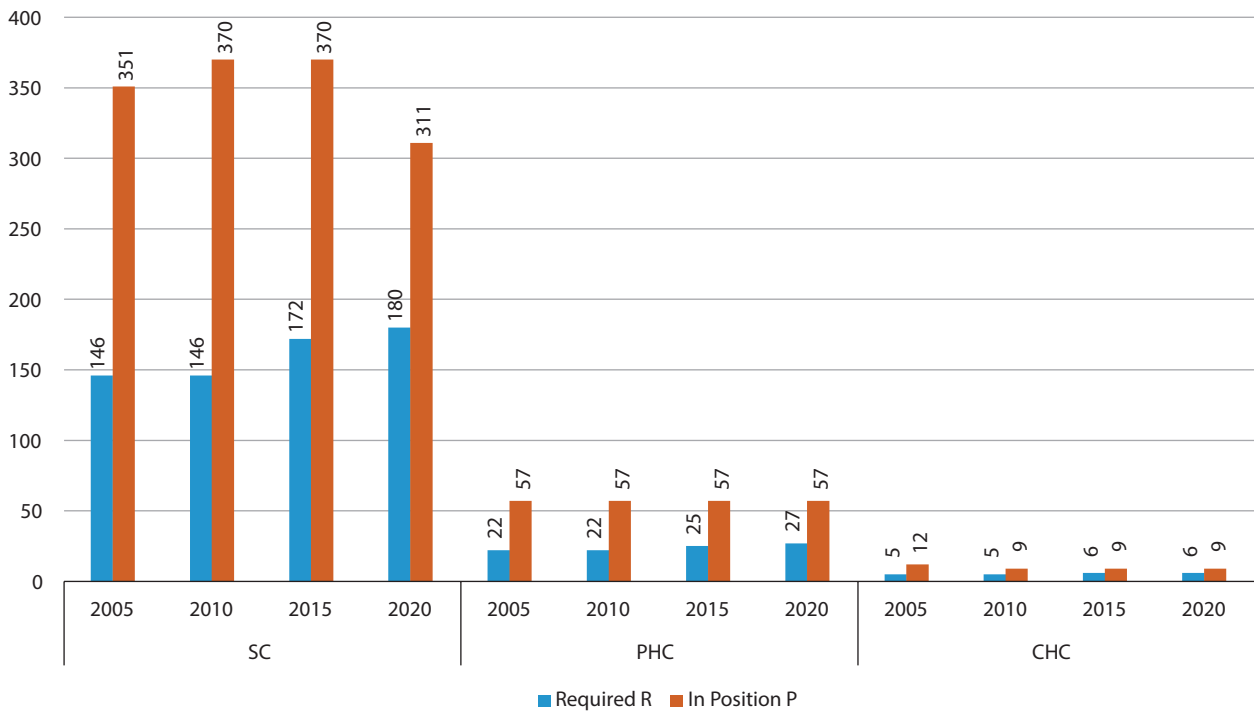


Figure 7: Year Wise Health Infrastructure Shortfall (%)

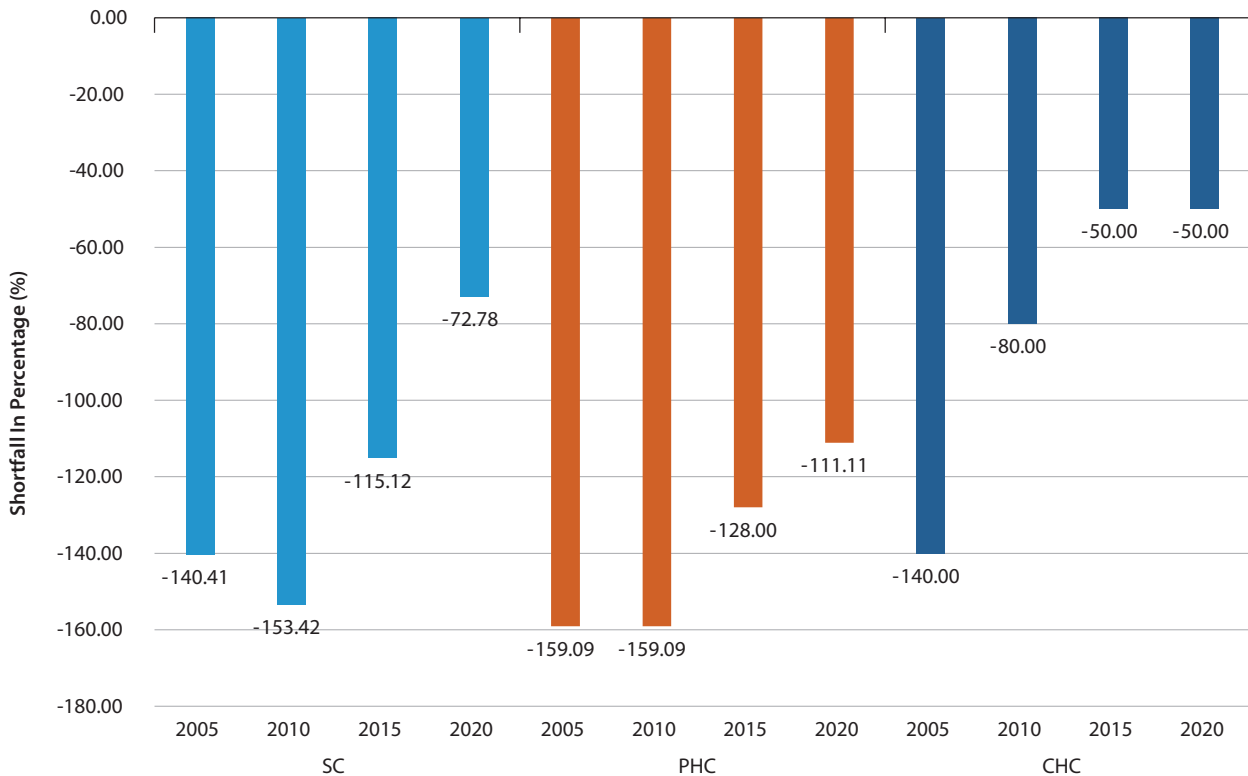
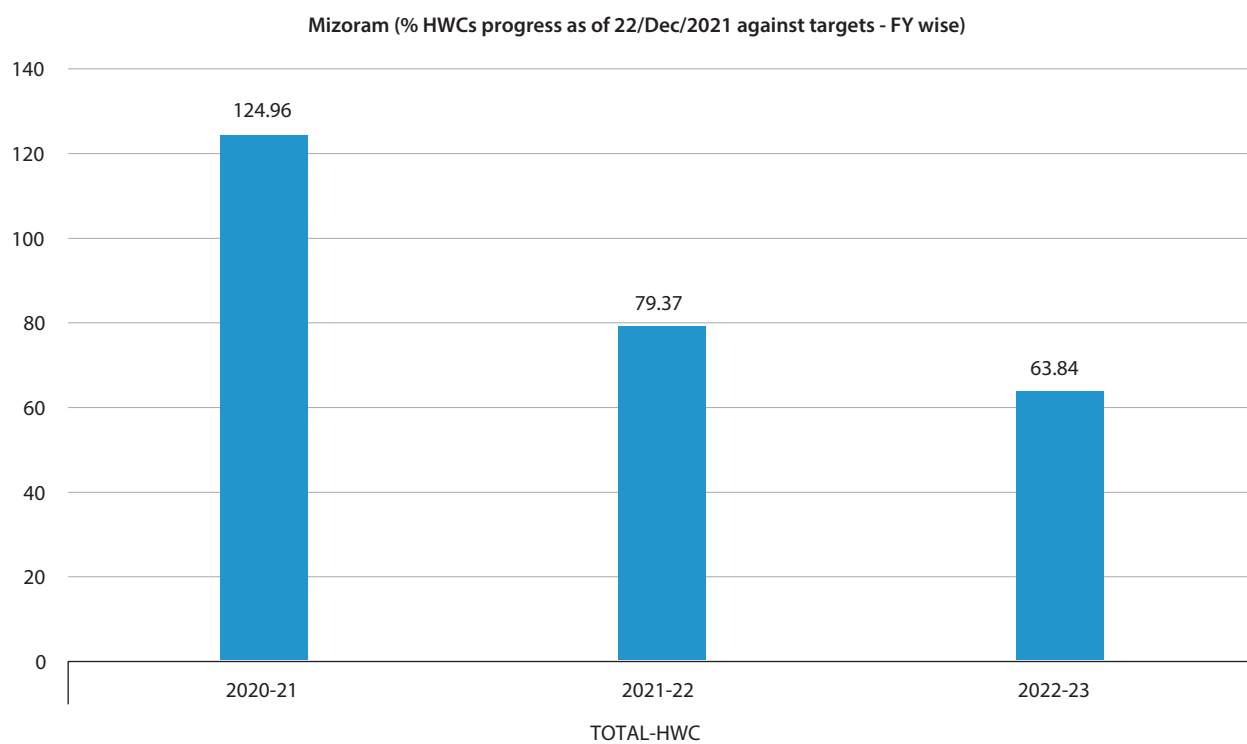


Figure 8: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural/Urban Stats Not Available)															
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIIUD (%)	Condom Use (%)	Total Unmet Need (%)	Antenatal Care Visits (At Least 4)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted (Height For Age) (%)	Children Under 5 Years - Wasted (Weight For Height) (%)		
1	Mizoram	NFHS 4 Total	949	45.8	N/A	10.9	35.3	3.4	1.3	20	61.4	79.7	71.3	14.5	28.1	6.1		
2	Mizoram	NFHS 5 Urban	907	41.2	99.1	3.2	29.1	2.4	1.5	21.4	70.3	98.8	82.2	15.9	25.5	8.3		
3	Mizoram	NFHS 5 Rural	1038	52.8	87.7	14	33.5	3.2	2.3	16.1	45	72.5	85.1	10.8	31.9	11.2		
4	Mizoram	NFHS 5 Total	969	46.4	94.4	8	31.2	2.8	1.9	18.9	58	85.8	83.7	13.4	28.9	9.8		
5	Aizawl	NFHS 5 Total	1042	37.5	98.9	3.2	21.6	2.8	1.6	24	68.5	97.4	76.3	17.9	25.3	7.3		
6	Champhai	NFHS 5 Total	726	64.9	97.7	11	50	4.2	2.5	11.2	63.4	96.7	87	5.6	27.2	12.1		
7	Kolasib	NFHS 5 Total	860	61.1	96.9	13.7	38.1	2.2	1.6	15.6	66	91.4	91.4	23.2	30.4	11.3		
8	Lawngtlai	NFHS 5 Total	1131	31.3	76	16	29.7	1.6	2.8	17.3	33	53.7	91.7	9.2	32.7	16.2		
9	Lunglei	NFHS 5 Total	876	46.5	91.6	4.8	33	1.7	2.3	15.4	56.7	82.7	84.1	9.4	26.5	9.5		
10	Mamit	NFHS 5 Total	794	61.7	89.6	16.8	41.6	4	0.2	17	52.5	75	85.7	6.8	26.4	7.4		
11	Saiha	NFHS 5 Total	1171	44.2	95.1	11.8	22.6	4.3	2.5	22.5	35.5	73.8	84.8	7.9	43.8	7.7		
12	Serchhip	NFHS 5 Total	1084	58.8	99.7	7.2	40	2.6	1.8	15.9	60.3	96.2	93	12.1	31.8	8.4		

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'. Out of two indicators with 'either vaccination card or mother's recall & vaccination card only', indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best three performing districts within the districts for a particular indicator

B. Red – Worst three performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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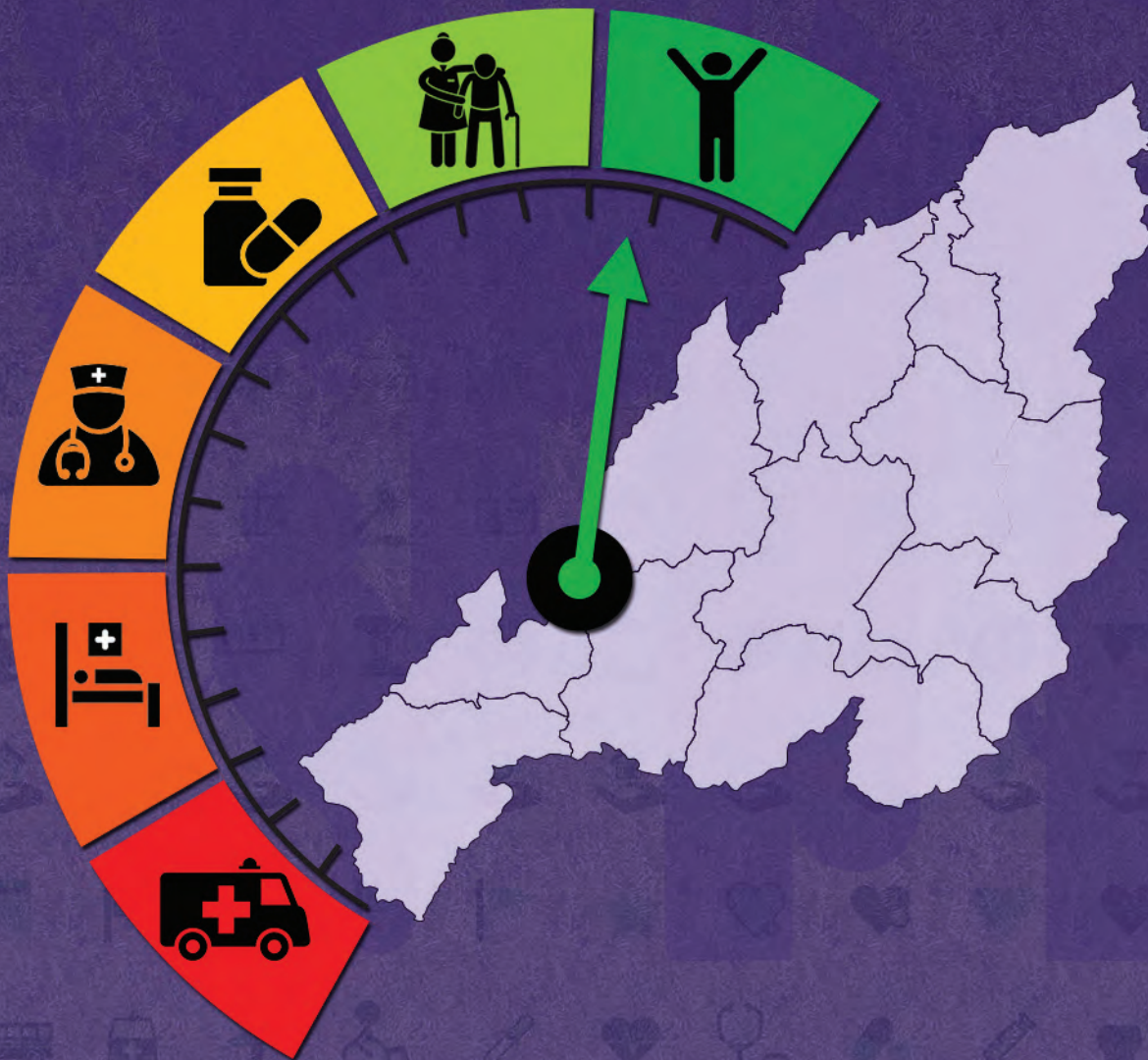
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



NAGALAND

DISTRICTS VISITED IN
COMMON REVIEW MISSIONS

CRM	Districts Visited	
4 th	Zunheboto, Mokokchung & Wokha	
7 th	Dimapur	Peren
10 th	Mon	Tuensang
11 th	Kiphire	Wokha
13 th	Phek	Kiphire

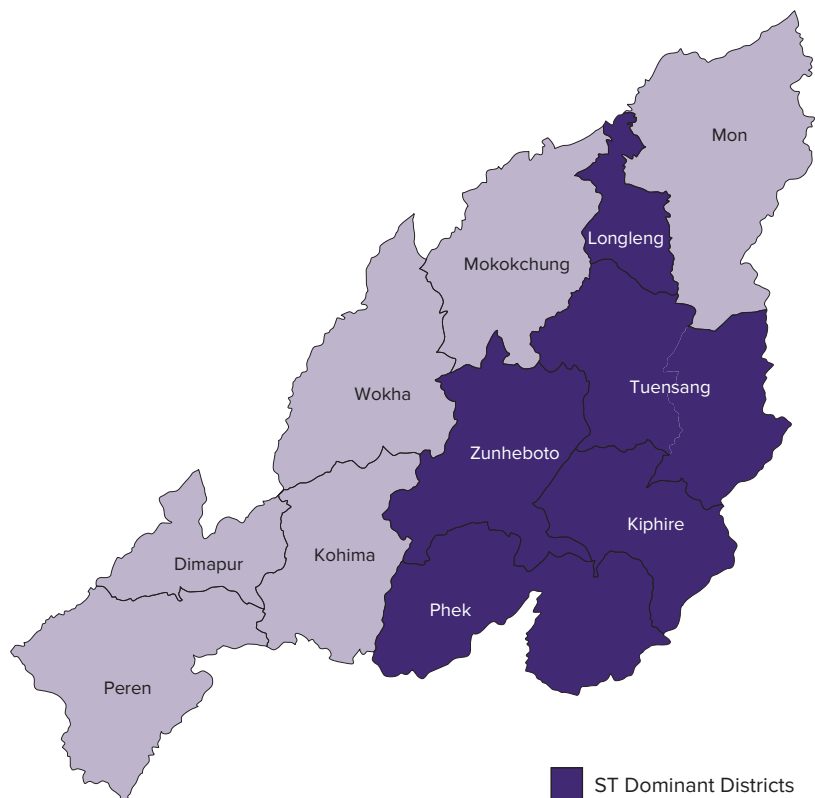
NAGALAND

1. BACKGROUND

1.1 Nagaland Profile

Nagaland is positioned^a 26th in India for a geographical spread of 16,579 km² (RHS 2019). The State is divided into 11 districts^b having population of over 0.19 crores, which accounts for approximately 0.16% of India's total population^c. It is projected that the population would reach around 0.21 crores by 2021 (Census Population Projection 2019). As per Census 2011, the Scheduled Tribe (ST) population is 0.17 crores (86.48%). Out of the 11 districts, top five ST dominant districts account for 35.34% of ST population in the State (Annexure 1.1; fig 1). In the State, 71.1% of the population reside in rural areas, while 28.9% constitute the urban population. The total length of roads^d in the State is 36,239 km (0.72%^e), in which, the length of the national highways is 1,173 km (1.0%^f) and state highways is 722 km (0.41%^g).

Figure 1: ST Dominant Districts



A detail report on the key indicators has been attached as Annexure 1

^a Including all States & UTs

^b RHS 2019

^c Census 2011

^d Basic Road Statistics 2019, MoRTH

^e Percentage of total length of roads in Nagaland

^f Percentage of total length of National Highways in the country

^g Percentage of total length of State Highways in the country

1.2 Demography

In Nagaland, out of the 11 districts, only 1 district has a population over 3 lakhs, 2 districts have a population between 2-3 lakhs, 5 districts have a population between 1-2 lakhs, and 3 districts have a population less than 1 lakhs (Annexure 1.1 State profile). It is estimated that there are 19.4% of the total population in the age group of 10-19 years, 57.8% within 20 to 59 years; while 8.8% are 60 years and above (Figure 2) in the north eastern states (excluding Assam). The crude birth rate and the crude death rate have declined from 16.4 & 3.8 in 2005 to 12.7 & 3.5 in 2019, respectively (Annexure 2; figure 2). The literacy rate increased from 66.6% in 2001 to 79.6% in 2011, with male & female literacy rates being 82.8% and 76.1%, respectively (Annexure 1.1). As per the ESAG 2018 report, the Gross Enrollment Rate (GER)^h is 14.9% for higher education, 36.43% for senior secondary education, 71.62% for secondary education, 100.37% for elementary education, and 99.50% for primary education.

1.2 Elderly

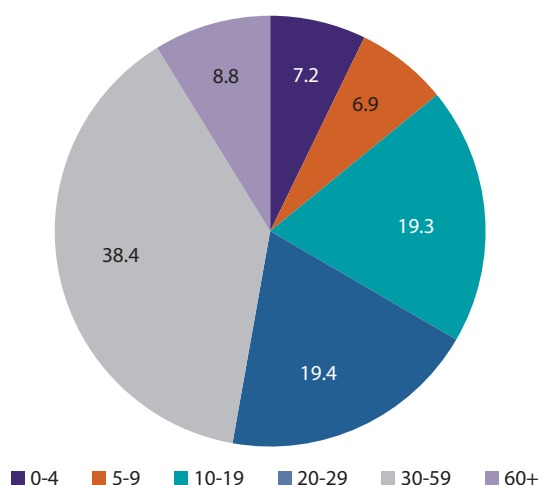
Population ageing has profound social, economic, and political implications. In Nagaland, 35.0% of elderly females and 4% elderly males living in rural areas are economically fully dependent on others. Whereas in urban areas, 69% of elderly females and 38% elderly males are economically fully dependent on others. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 25% for men and 12% for women, which are below the national average of 31% for both (Elderly in India 2016).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+Nⁱ services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^j, institutional deliveries, C sections, distribution of IFA^k tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). In Nagaland, 22.9% of women received 4 ANC check-ups (Annexure 1.4). As per the NFHS 5 report- Dimapur, Kohima and Wokha

Figure 2: North-East States (Excluding Assam) Distribution of estimated Population 2021 (%)



^h Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

ⁱ Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^j Antenatal Check up

^k Iron Folic Acid Tablets

districts reported relatively better ANC coverage, ranging between 28.3% to 50.1%. Whereas, Kiphire, Phek and Tuensang districts reported poor ANC coverage, ranging between 4.4% to 9.5%. As reported in HMIS 2019-20, around 82.4% of the deliveries took place in institutions, out of which 76.9% took place in public health facilities. Total percentage of C-sections is (18.7%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 39.4% is conducted at private facilities in the State. Around 39.8% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years increased from 27.9% (NFHS-4) to 28.9% (NFHS-5). Anaemia in females of reproductive age group is almost twice than men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

The NFHS 5 reported Nagaland's sex ratio at birth to be 945 females per 1,000 males. The lowest SRBs^l ranging between 775 to 880 are reported in Kiphire, Mon and Phek districts; while the highest ones, ranging between 1075 to 1245 are reported in Kohima, Mokochung, Wokha and Zunheboto districts.

Full vaccination^m coverage for children between 12 – 23 months of age has improved from 61.9% (NFHS 4) to 71.3% (NFHS 5). The proportion of under 6-months children exclusively breastfed has slightly declined from 44.3 to 43.2 (NFHS 5). An increase in childhood anaemia from 26.4% to 42.7% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 5). As per the NFHS 5 report, low stunting rates, ranging from 26.3 to 28.3, are reported from Dimapur, Kohima, Phek and Wokha districts. While relatively higher stunting rates, ranging from 36.9 to 44 are reported from Kiphire, Tuensang, and Zunheboto districts. For under-5 wasting – Dimapur, Kohima and Zunheboto districts reported a high burden, ranging from 25 to 26.9, while Kiphire, Mon and Peren districts reported a relatively lower burden, ranging from 7.8 to 11.

2.3 Family Planning

As per the NFHS 5 report, the total unmet need in the State is reported as 9.1%, while the unmet need for spacing is 4.5% (NFHS 5). Kiphire district reported the highest total unmet need (17.3%), while Zunheboto reported the lowest (2.8%). Approximately 45.3% of married women reported to avail any modern method of family planning in the State (NFHS 5); and the sterilization acceptance among females is 14.4%, while nil in males.

2.4 Communicable Diseases

The State has 11 functional IDSP units in placeⁿ. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 34.51% of total disease burden (Annexure 1.4). HIV/AIDS, lower respiratory tract infection, neonatal preterm birth and drug susceptible TB are the leading causes of deaths due to CMNND in the State (Annexure 2, Figure 6). As per QPR report, for TB, the annualized total case notification rate is 180 and NSP^o success rate is 76 as opposed to the national averages of

^l Sex Ratio at Birth

^m NFHS 5 State/UT Factsheet, based on information from vaccination card only

ⁿ QPR NHM MIS Report (status as on 01.03.2020)

^o New Smear Positive

163% and 79%, respectively. For NLEPP^p, the reported prevalence rate of 0.16 per 10,000 population is less than the national average of 0.61. In FY 2019-20, no deaths due to Malaria, Dengue or Kala Azar were reported.

2.5 Non-Communicable Diseases (NCDs) & Injuries

It is reported that as high as 61.0% of all deaths are premature in the State, while disability or morbidity accounts for 39.0%. Ischaemic heart disease, other musculoskeletal, intracerebral hemorrhage, and COPD are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 56.60% of DALYs; whereas, injuries contribute to 8.90% of DALYs in the State^q. The State is positioned 33rd in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 13.7% of women and 48.4% of men used any kind of tobacco, while 0.9% of women and 24.0% of men consumed alcohol. Overall, behavioral factors (low birth weight, short gestation, smoking, alcohol use) and metabolic (high systolic blood pressure and high fasting blood pressure) are the major risk factors for all DALYs and YLLs (Annexure 2, figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is 24,534 crores. The State is positioned 19th out of 32 states in terms of per capita^r of ₹ 1,16,882. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 6,905 in public facilities & ₹ 17,073 in private facilities; whereas for urban areas, it is around ₹ 7,332 in public facilities and ₹ 23,306 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 4,157 in public facilities & ₹ 16,548 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 4,842 in public facilities and ₹ 15,939 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated to be 34% in rural and 42% in urban areas; whereas for diagnostics, it is 11% in rural and 12% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Public health facilities have increased over time, with a shortfall of only 3.19% of the required sub health centers (Annexure 2, Figure 9). Currently, there are 395 SCs, 130 PHCs and 21 CHCs in place, against the required 408 SCs, 61 PHCs and 15 CHCs. Similarly, in urban settings, there are 7 PHCs in place against the required 18, which accounts to a shortfall of 62%. The State has 11 DHs, but no SDHs nor government medical college. In the State, 100% of DHs (11) and 21% of CHCs (5) serve as functional FRUs. In tribal catchments, there are 415 SCs, 137 PHCs and 21 CHCs in place, against the required 390 SCs, 58 PHCs and 14 CHCs.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 232 HWCs (177 SHCs, 48 PHCs & 7 UPHCs) are operationalized in the State as of 22nd December 2021^s.

^p National Leprosy Eradication Programme

^q <https://vizhub.healthdata.org/gbd-compare/india>

^r Directorate of Economics & Statistics

^s AB-HWC Portal

The State has 100% of required ASHAs in position under the NRHM and 83.33% under the NUHM. The doctor to staff nurse ratio in place is 1:2, with 7 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 1139.68 availed (events) OPD services and 92.86 availed (events) IPD services. As per the NSSO data (2017-18), 85% of all OPD cases in rural areas and 25% in urban areas; and 84% of all IPD cases in rural areas & 52% in urban areas utilized public facilities. The public facility utilization in the state is above the national utilization averages of both rural and urban areas (Annexure 1.6).

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^t

Indicator	Nagaland 2011 ¹	India
Total Population (In Crore)	0.19	121.08
Rural (%)	71.14	68.85
Urban (%)	28.86	31.14
Scheduled Caste population (SC) (in crore)	0.00	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.17 (86.48%)	10.45 (8.63%)
Total Literacy Rate (%)	76.10	72.99
Male Literacy Rate (%)	82.80	80.89
Female Literacy Rate (%)	79.6	64.64
Number of Districts in the Nagaland ²	11	
Number of districts per lakh population in Nagaland (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<1 Lakhs	3
	≥ 1 Lakhs - <2 Lakhs	5
	≥2 Lakhs - <3 Lakhs	2
	≥3 Lakhs	1

ST Dominant (Top 5) Districts of Nagaland¹

Tuensang - 97.11%
Zunheboto - 97.02%
Kiphire - 96.52%
Longleng - 96.30%
Phek - 96.16%
Top 5 ST dominant district accounts for - 35.34%

1.2 Key Health Status & Impact Indicators^u

Indicators	Nagaland	India
Infant Mortality Rate (IMR) ³	3	30
Crude Death Rate (CDR) ³	3.5	6

^t Sources are mentioned at the end of Annexure 1

^u Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	12.7	19.7
Maternal Mortality Ratio (MMR) ³	N/A	113
Neo Natal Mortality Rate (NNMR) ⁴	N/A	23
Under Five Mortality Rate (U5MR) ⁴	N/A	36
Still Birth Rate ⁴	N/A	4
Total Fertility Rate (TFR) ⁴	N/A	2.2
Life expectancy at birth ⁵	N/A	69.4
Sex Ratio at Birth ⁴	N/A	899

1.3 Key Health Infrastructure Indicators

Indicators	Numbers (Total)			
Number of District Hospitals ²	11			
Number of Sub District Hospital ²	0			
Number of Government (Central + State) Medical College ⁶	0			
Number of Private (Society + Trust) Medical Colleges ⁶	0			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	177	57	165	238
PHC-HWC	48	126	126	126
UPHC-HWC	7	6	6	6
Total-HWC	232	189	297	370
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	15	21	-40.00	
Number of Primary Health Centres (PHC)	61	130	-113.11	
Number of Sub Centres (SC)	408	395	3.19	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	11	0	5	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	18	7	61.11	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	14	21	-50.00	
Number of PHC	58	137	-136.21	
Number of SC	390	415	-6.41	

Patient Service⁹	Nagaland	India
IPD per 1000 population	92.86	62.6
OPD per 1000 population	1139.68	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	99.18	36.4

1.4 Major Health Indicator^v

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Nagaland	India
% DALY ^w accountable for CMNNDs ^x	34.51	27.46
% DALY accountable for NCDs	56.6	61.43
% DALY accountable for Injuries	8.9	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Nagaland	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	30	92
Percentage of medically certified deaths to total registered deaths (%)	12	20.7
RMNCHA+N		
Maternal Health⁹	Nagaland	India
% 1st Trimester registration to Total ANC Registrations	27.3	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	22.9	79.4
Total Reported Deliveries	20,774	21410780
% Institutional deliveries to Total Reported Deliveries	82.4	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	76.9	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	23.1	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	18.7	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	12.4	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	39.4	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	39.8	53.4
Neonatal⁹	Nagaland	India
% live birth to Reported Birth	98.5	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	4.4	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	81.2	89.9

^v Sources are mentioned at the end of Annexure 1

^w Disability Adjusted Life Years

^x Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Nagaland	India
Sick New Born Care Unit (SNCU)	3	895
New Born Stabilization Unit (NBSU)	16	2418
New Born Care Corner (NBCC)	131	20337
Child Health & Nutrition¹⁰	Nagaland (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	3.4	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	54.5	60.6
Children under 5 years who are underweight (weight-for-age) (%)	26.9	32.1
Child Immunization¹⁰	Nagaland (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	71.3	83.8
Children age 12-23 months who have received BCG (%)	85.5	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	73.8	87.9
Family Planning¹⁰	Nagaland (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	4.5	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Nagaland	India
Number of districts with functional IDSP unit	11	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Nagaland	India
Annualized total case notification rate (%)	180	163
New Smear Positive (NSP) Success rate (in %)	76	79
National Leprosy Eradication Programme (NLEP)¹¹	Nagaland	India
Prevalence Rate/10,000 population	0.16	0.61
Number of new cases detected	36	1,14,359
Malaria, Kala Azar, Dengue¹¹	Nagaland	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Nagaland (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	25.6	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	40.1	30.7

Non-Communicable Disease		
Diabetics and Hypertension ¹⁰	Nagaland (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	13.8	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	19.1	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	5.2	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	6.6	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above) ¹⁰	Nagaland (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	13.7	8.9
Men who use any kind of tobacco (%)	48.4	38
Women who consume alcohol (%)	0.9	1.3
Men who consume alcohol (%)	24	18.8
Injuries		
Road Traffic Accident ¹²	Nagaland	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	33	N/A
Total number of fatal Road Accidents	24	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	7.3	33.7
Number of persons killed in Road Accidents	26	115113

1.5 Access to Care^y

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU) ¹¹	Nagaland	India
Number of Districts equipped with MMU under NRHM	11	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Nagaland	India
102 Type	80	9955
104 Type	0	605
108 Type	0	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	12	11070

^y Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Nagaland	India
Total number of ASHA targeted under NRHM	1917	946563
Total number of ASHA in position under NRHM	1917	904211
% of ASHA in position under NRHM	100	96
Total number of ASHA targeted under NUHM	90	75597
Total number of ASHA in position under NUHM	75	64272
% of ASHA in position under NUHM	83.33	85
Community Process¹¹	Nagaland	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	1346	554847
Number of Mahila Arogya Samitis (MAS) formed	96	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Nagaland	India
DH	11	796
CHC	21	6036
PHC	126	20273
UHC	0	126
UPHC	7	3229
Human Resource for Health ¹⁴		
HRH Governance	Odisha	
Specialist Cadre Available in the state (Y/N)	No	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	NO	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	27
	Dentists (%)	4
	MO MBBS (%)	3
	Nurse (%)	7
	LT (%)	25
	ANM (%)	37
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:2	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	9 per 10,000	7 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	2:1	2:1

Ranking: Human Resource Index of Nagaland¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^z	1109	1171	1172	-1	0	62.74
Staff Nurse	1554	811	781	30	773	
Lab Technician	354	159	160	-1	194	
Pharmacists	228	192	192	0	36	
MO MBBS ^{aa}	355	273	250	23	105	
Specialist ^{bb}	388	160	130	30	258	

1.6 Healthcare Financing^{cc}

National Health Accounts (NHA) (2017-18)	Nagaland		India	
Per Capita Government Health Expenditure (in ₹)	N/A		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	N/A		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	N/A		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	N/A		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Nagaland		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	85	26	33	26
IPD - % of hospitalized cases using public facility	84	52	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	2302	770	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	640	1387	845	915
IPD - Per hospitalized case (in INR) - Public	6905	7332	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	17073	23306	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	11	12	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	34	42	53	43

^z MPW – Multi Purpose Health Worker (Female + Male)

^{aa} MO MBBS (Full Time)

^{bb} Specialist (All Specialist)

^{cc} Sources are mentioned at the end of Annexure 1

* Estimated by NHRSC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	4157	4842	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	16548	15939	20,692	26,701
State Health Expenditure	Nagaland		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	5.1		5 ^{dd}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{dd} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

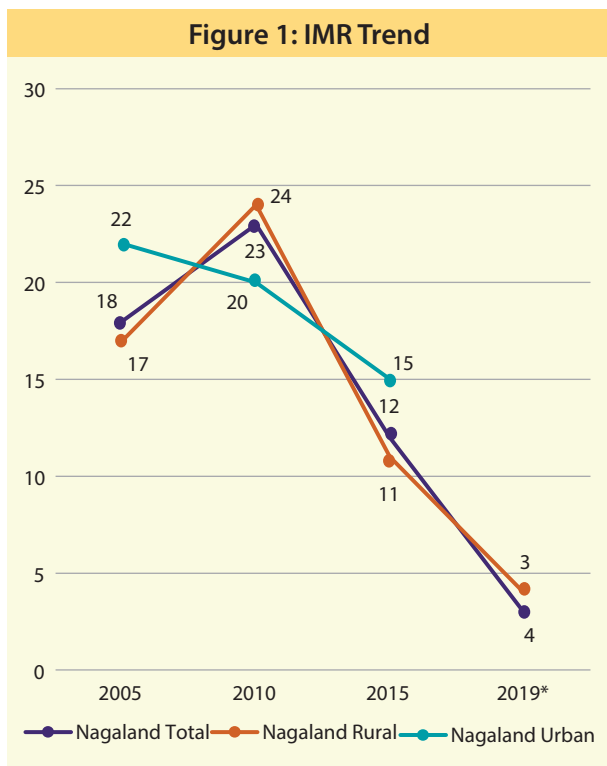


Figure 2: CBR & CDR Trend

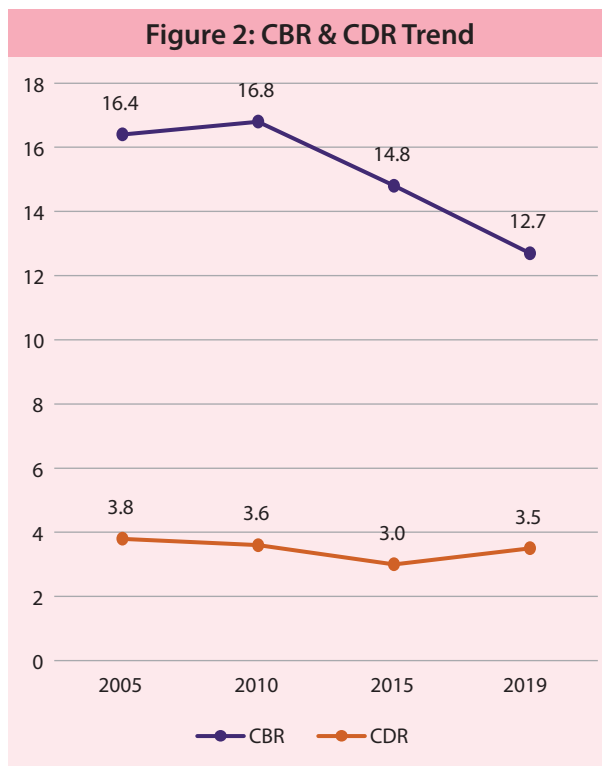
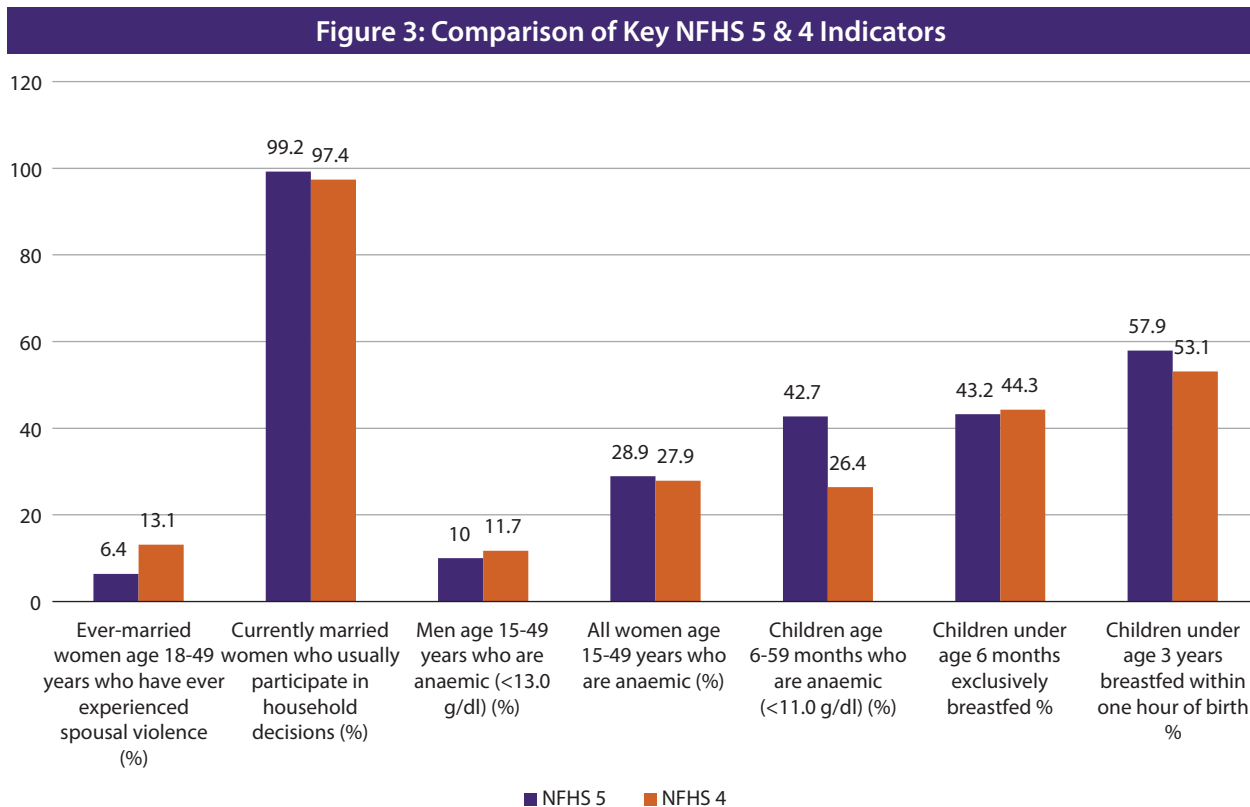


Figure 3: Comparison of Key NFHS 5 & 4 Indicators



* Not Available as no infant death was recorded in the respective sample units for the year 2019

Figure 4: Top 15 causes of DALYs, 1990-2019

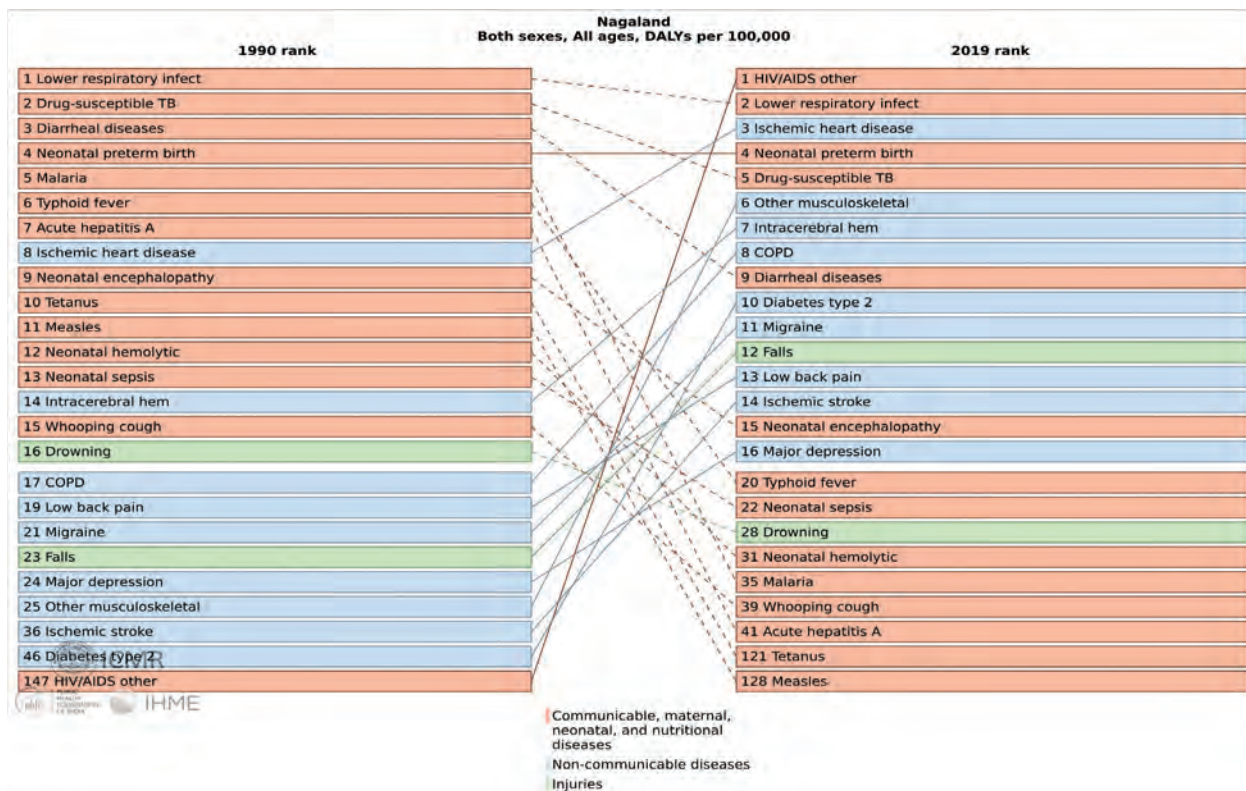


Figure 5: Top 15 risk of DALYs, 1990-2019

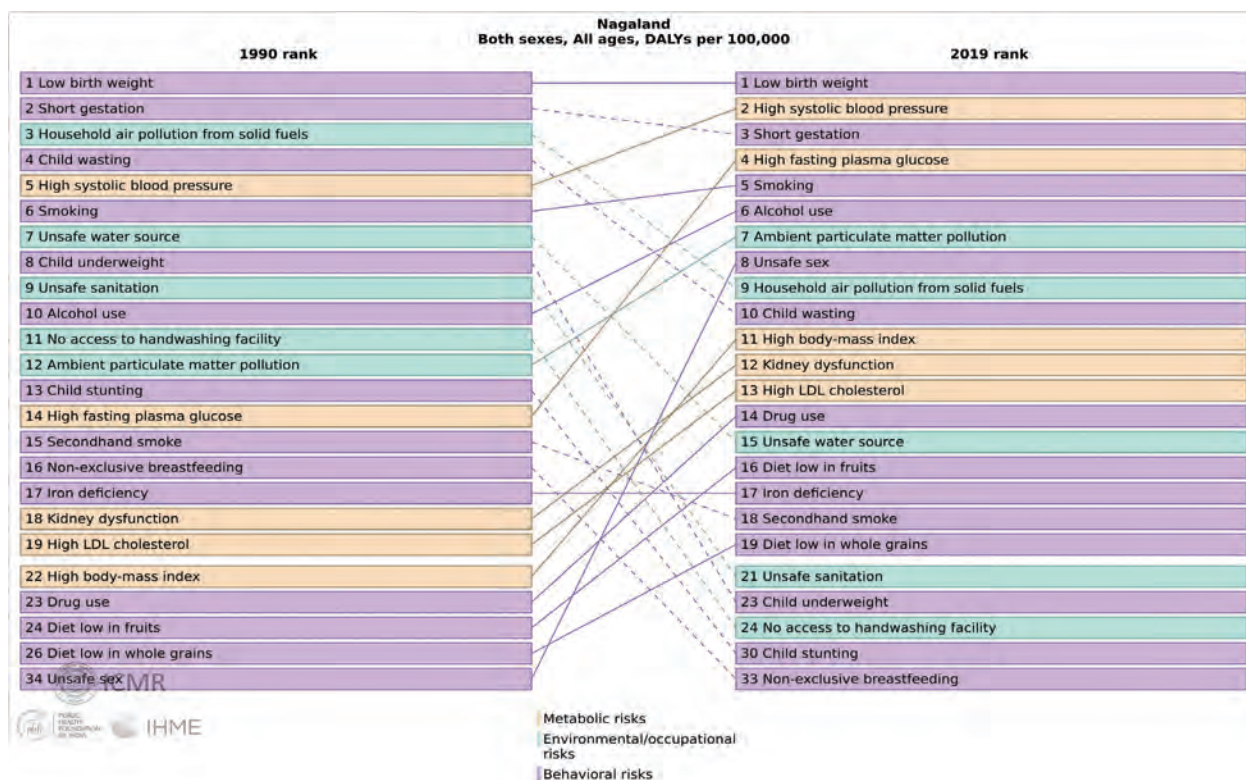


Figure 6: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

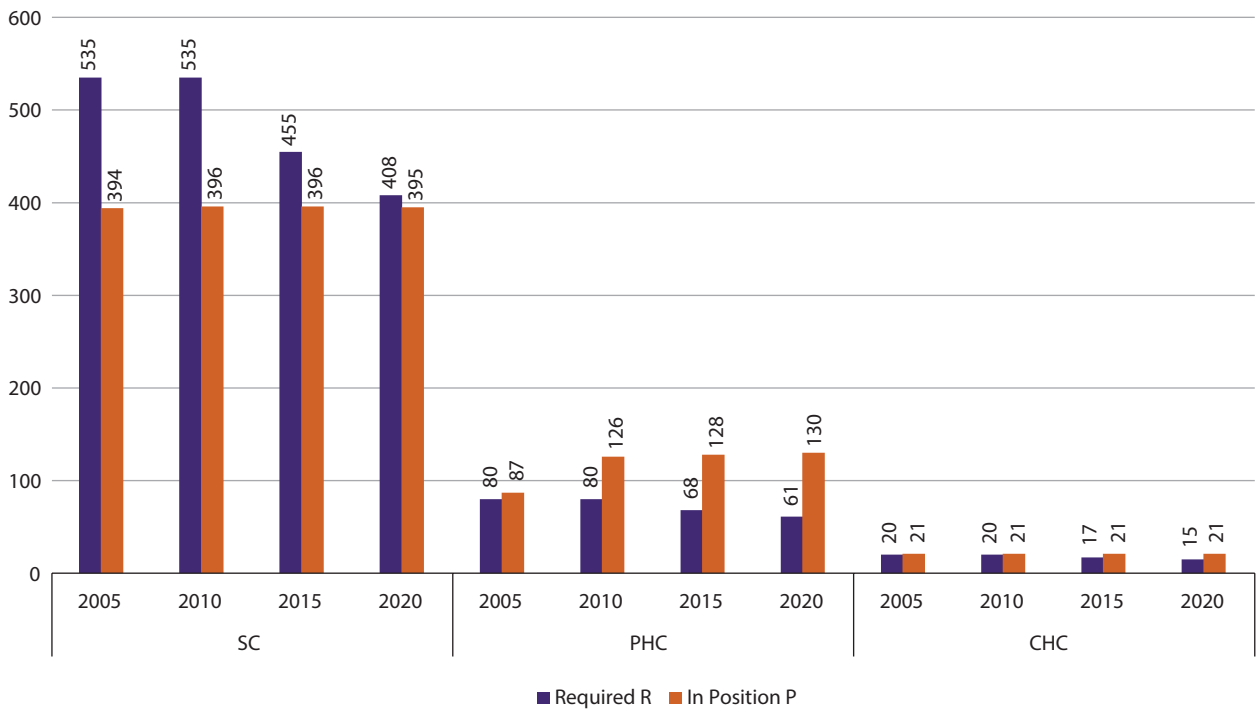


Figure 7: Year Wise Health Infrastructure Shortfall (%)

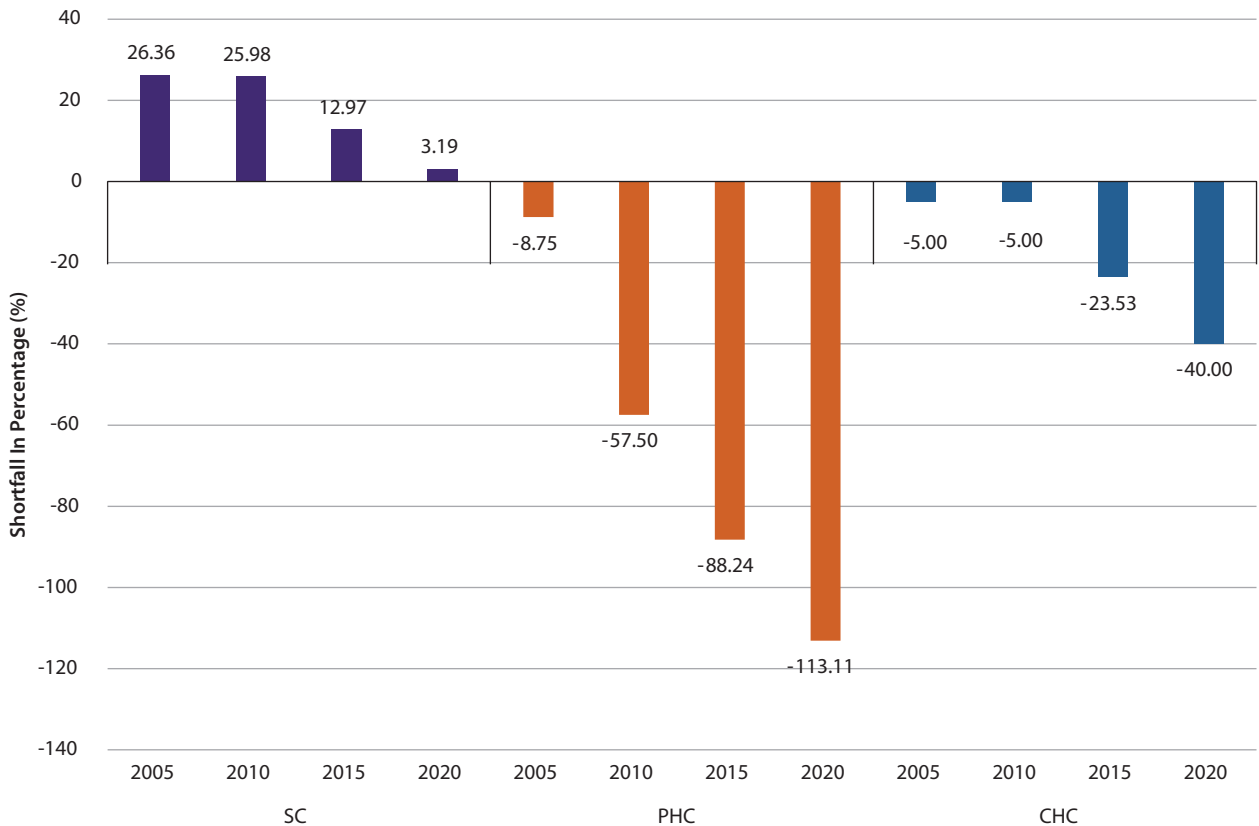


Figure 8: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural/Urban Stats Not Available)															
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted^ (Height For Age) (%)	Children Under 5 Years - Wasted^ (Weight For Height) (%)		
1	Nagaland	NFHS 4 Total	953	6.1	91.5	13.4	26.5	6.7	1.3	22.3	15	32.8	61.9	18.8	28.6	11.3		
2	Nagaland	NFHS 5 Urban	949	15	91.5	2.4	61	20.1	4.2	9.3	39.9	65	77	15.8	27.1	21.7		
3	Nagaland	NFHS 5 Rural	943	23.1	82.7	7.3	55.7	19.7	2.8	9.1	13.1	38.8	68.8	14.1	34.7	18.2		
4	Nagaland	NFHS 5 Total	945	20.5	85.8	5.6	57.4	19.8	3.3	9.1	20.7	45.7	71.3	14.5	32.7	19.1		
5	Dimapur	NFHS 5 Total	911	5.7	86.6	4.4	46.9	9.6	3.4	14.3	50.1	73.7	63.8	17.3	28.3	25		
6	Kiphire	NFHS 5 Total	871	8.8	73.7	22.5	42.5	20.2	2.5	17.3	5.8	34.8	73.5	12	36.9	11		
7	Kohima	NFHS 5 Total	1075	26.7	95.2	1	60.7	19	3.1	9.1	28.3	66.9	90.2	18	28.3	26.9		
8	Longleng	NFHS 5 Total	922	38.3	82	11	66.5	32.2	2.2	4.3	15.4	38.7	64.8	20.1	34.1	19.8		
9	Mokokchung	NFHS 5 Total	1075	22.3	94	6	66.7	25.8	3.3	6.4	18.2	51.5	95.6	6.9	31.4	11.7		
10	Mon	NFHS 5 Total	775	39.3	78.2	3	68.7	31.8	2.2	3.7	9.7	21.4	69.4	5.8	35.5	7.8		
11	Peren	NFHS 5 Total	896	5.4	77.6	9.1	58.6	19	4	6.2	14.5	43.5	76.4	11	34.9	9.1		
12	Phek	NFHS 5 Total	880	24.9	85.8	6.5	56.3	21.7	5.1	6.5	9.5	32.2	71.2	14.5	28	12.9		

13	Tuensang	NFHS 5 Total	902	22	77.8	10.4	52.6	15.6	3.2	12.9	4.4	34.8	58.8	13	37.1	24.6
14	Wokha	NFHS 5 Total	1245	20.6	91.6	3.2	64.6	22	4.7	3.2	34.7	43.6	57.1	28.8	26.3	23.5
15	Zunheboto	NFHS 5 Total	1207	18.1	87.1	4	68.8	28.2	1.9	2.8	11.2	35	75.1	20.8	44	26.9

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'; Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. **Green Color** – Best performing districts within the districts for a particular indicator

B. **Red** – Worst performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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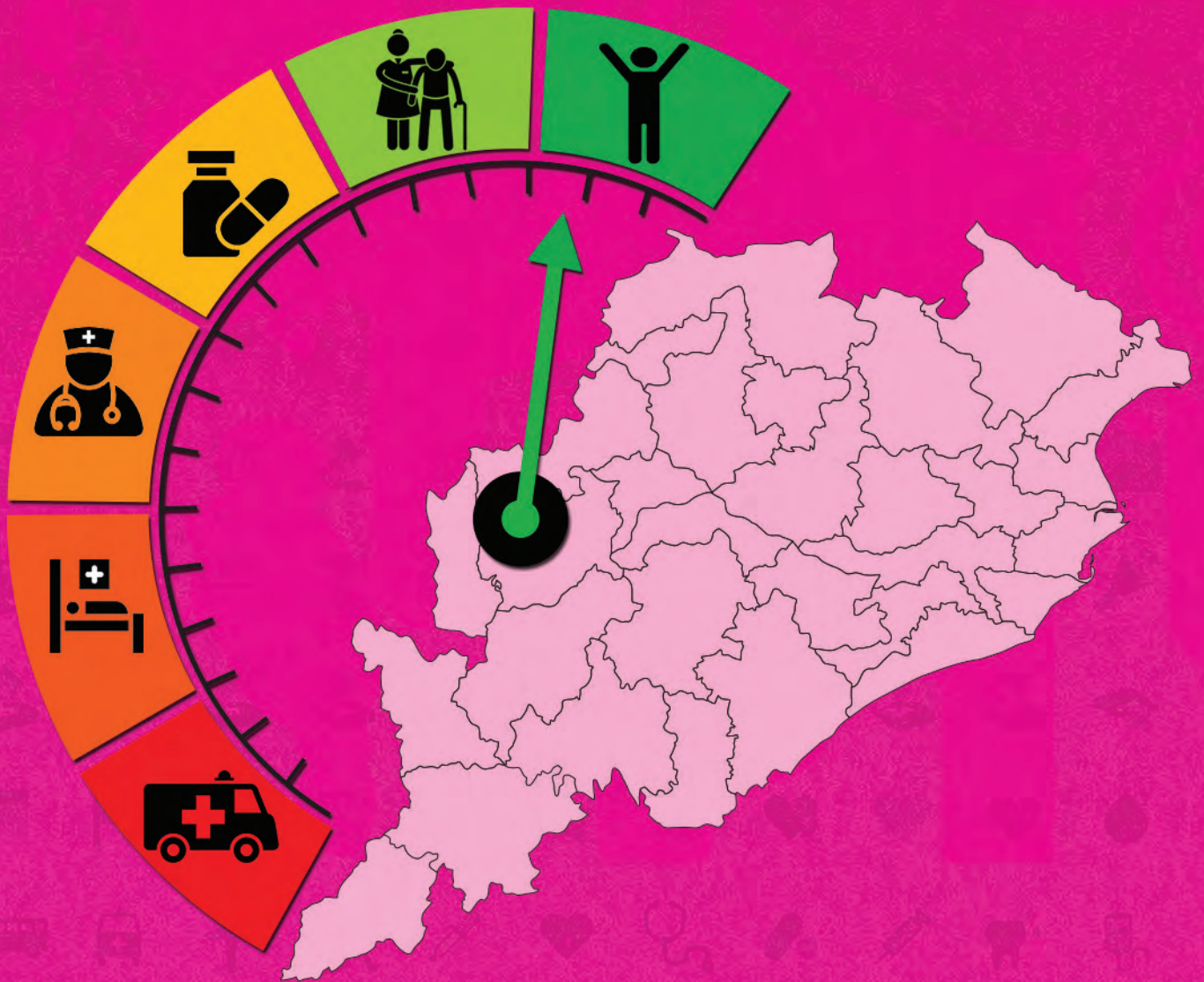
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



ODISHA

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
1 st	Sundargarh	Balangir
2 nd	Dhenkanal	Subarnapur
3 rd	Balasore	Kandhamal
4 th	Gajapati	Nuapada
5 th	Bargarh	Rayagada
6 th	Balangir	Kendrapara
7 th	Jajapur	Koraput
8 th	Kalahandi	Ganjam
9 th	Bhadrak	Nabarangpur
11 th	Keonjhar	Malkangiri
13 th	Mayurbhanj	Kandhamal
14 th	Rayagda	Sundargarh

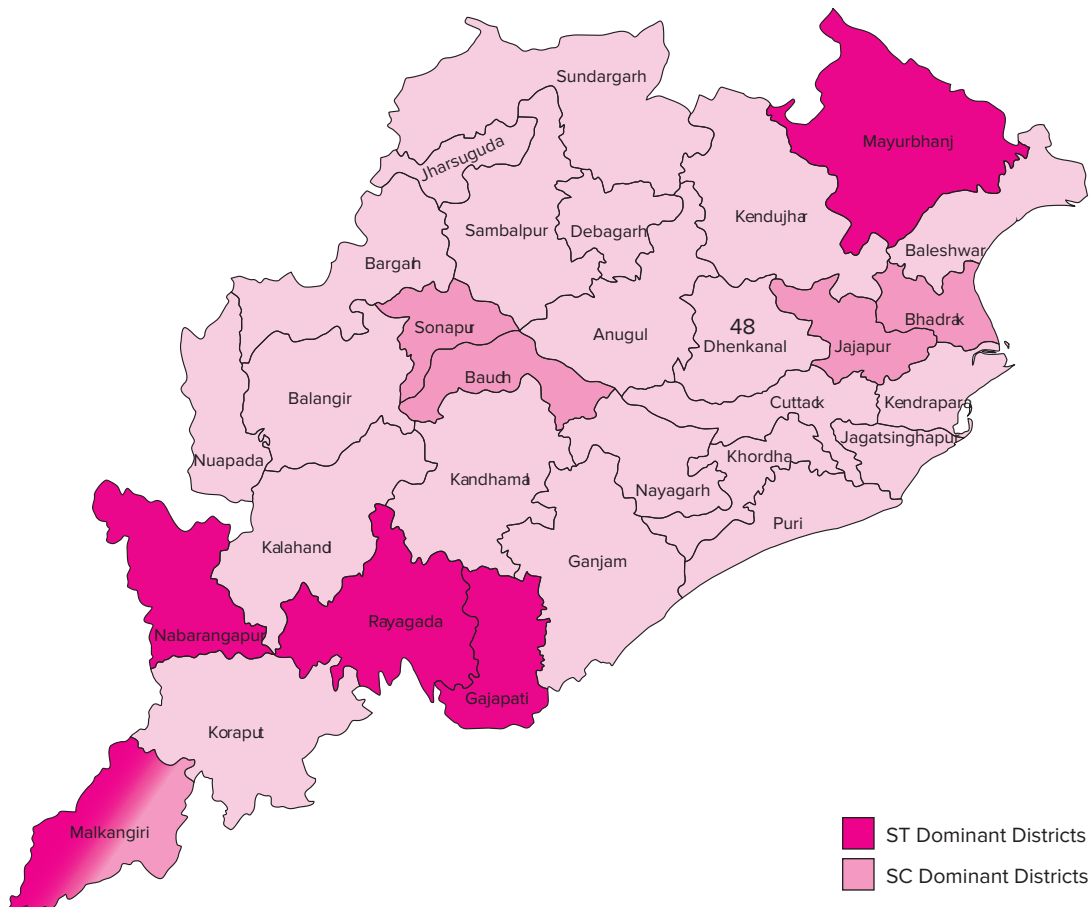
ODISHA

1. BACKGROUND

1.1 Odisha Profile

Odisha, located on the eastern coast of India, is the 9th largest state^a with a geographical spread of 1,55,707 km² (RHS 2019). The state is divided into 30 districts, with an estimated population of over 4.20 crores, accounting for about 3.47% of the country's total population^b. It is projected that the population

Figure 1: Top 5 ST & SC Dominant Districts



^a Including all states & UTs

^b Census 2011

would be around 4.4 crores by 2021 (Census Population Projection 2019 Report). As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 0.71 crores (17.13%) and 0.95 crores (22.85%), respectively. Out of the 30 districts, top five ST & SC dominant districts account for 35.15% of ST & 16.24% of SC population in the State (Annexure 1.1, Odisha Profile). In the State, 83.31% of the population reside in rural areas, while 16.69% reside in urban areas. There are no metro cities & Million plus cities in Odisha whereas around 47 cities are covered under NUHM till year 2020-21.

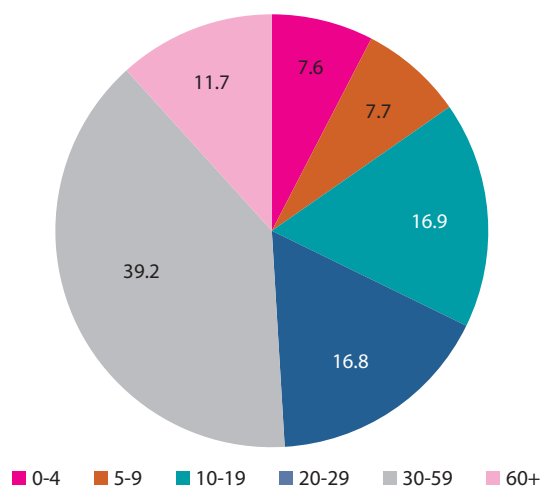
The total length of roads^c in the State is 3,03,669 km (6.07%^d), with national highways constitute 4,838 km (4.2%^e) and state highways^f constitute 4,139 km (2.36%^g). Industrial development sector currently leads the developmental change of Odisha, constituting 36% of States' GVA^h relative to 26% at the All India level as per 2020-21(AE). The Annual Average growth rate of the Industry sector during the last 9 years has been 5.36% as against 3.77% at National levelⁱ.

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

Among the 30 districts, only 1 district has a population of over 30 lakhs, 5 districts have a population between 20-30 lakhs, 14 districts have a population between 10-20 lakhs and 10 districts have a population less than 10 lakhs (Annexure 1.1, Odisha Profile). The State's sex ratio at birth of 933 females for every 1000 males is higher than the national average of 899 females for every 1000 males (Annexure 1.2). 16.9% of the total population in 10-19 years' age group, 56% between 20 to 59 years; and 11.7% above 60 years of age (Figure 2). The crude birth and death rates have declined from 22.3 and 9.5 in 2005 to 18 and 7 in 2019 respectively (Annexure 2, Figure 2). The literacy rate increased from 63.1% in 2001 to 72.9% in 2011, with male & female literacy rates being 81.6% and 64% respectively (Annexure 1). As per the ESAG 2018 report the Gross Enrollment Rate (GER)^j for higher education^k is 19.6% in total, 79.61% for secondary, 100.2% for elementary education, and 103.73% for primary.

Figure 2: Odisha - distribution of estimated population 2021 (%)



^c Basic Road Statistics 2019, MoRTH

^d Percentage of total length of roads in Odisha

^e Percentage of total length of National Highways in the country

^f Including surfaced length

^g Percentage of total length of State Highways in the country

^h Gross Value Added

ⁱ Economic Survey 2020-21; https://finance.odisha.gov.in/sites/default/files/2021-02/Economic_Survey.pdf

^j Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

^k In Odisha, senior secondary is a part of higher education

1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people over 60 years and above constitute 11.7% of the State's total population. The life expectancy¹ at 60 years of age is 18.1 years for males, and 19.8 years for females (2014-2018). 71% of the elderly females and 28% elderly males in urban areas, and 69% of the elderly females and 26% elderly males in rural areas are fully economically dependent on others. The old age dependency ratio is 15.4 in 2011; which are 15.4 for males, 15.5 for females, 16.3 in rural areas and 11.6 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly men and women is 17%, which is higher than the national average of 31% for both (Elderly in India 2016).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The Odisha has been able to provide RMNCHA+N^m services with major focus on primary and secondary care services under NHM. Indicators for Antenatal care (ANC)ⁿ, institutional deliveries, C sections, distribution of IFA^o tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care, have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined from 258 (SRS MMR Bulletin 2007-09) to 150 (SRS MMR Bulletin 2016-18) per 1,00,000 live births. In Odisha, 81.8% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5, Balangir, Jharsuguda, Khordha, Navagarh and Puri districts reported relatively good full ANC coverage, ranging from 90.3% to 95.4%. Whereas, Baleswar, Bargarh, Kendujhar, Mayurbhanj and Nuapada districts reported relatively poor full ANC coverage, ranging from 52.9% to 71.7%. As reported, around 97.3% of the deliveries took place in institutions, out of which 81.9% took place in public health facilities. Total percentage of C-sections (23.2%) is higher than that of the WHO's standard (10-15%); 60.6% is conducted at private facilities in the State. Around 95.8% of the women received their first postpartum checkup between 48 hours and 14 days (Annexure 1.4). Prevalence of Anaemia aged 15-49 years increased in women from 51% (NFHS 4) to 64.3% (NFHS 5). Anaemia amongst females of reproductive age group is twice than in men of similar age group (Annexure 2, Figure 5).

Refer Annexure 3 for detailed district wise comparison of NFHS 5 key indicators.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, Odisha has shown a significant decline in IMR from 75 (2005) to 38 (2019), which is higher than the national average of 30 (Annexure 2, Figure 1 & Annexure 1.2). In addition, NNMR^p and Still Birth (per 1,000 live births) Rates have also significantly decreased from 48.6 and 15.3 (2004) to 31 and 10 (2018) respectively (Annexure 2, Figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 63 (2006-10) to 69.3 (2014-18) (Annexure 2, Figure 3). As per NFHS 5, low SRB^q

¹ SRS Based Abridged Life Tables

^m Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

ⁿ Antenatal Check up

^o Iron Folic Acid Tablets

^p Neonatal Mortality Rate

^q Sex Ratio at Birth

ranging from 745-810 are reported from Cuttack, Jharsuguda, Khordha, Puri and Sundargarh districts; whereas Gajapati, Koraput, Nabarangapur, Nuapada and Sambalpur districts reported relatively high SRB, ranging from 999 to 1061.

Full immunization coverage for children between 12 – 23 months improved from 89.8% (NFHS 4) to 90.7% (NFHS 5). The percentage of under 6-months children exclusively breastfed also increased from 65.6% (NFHS 4) to 72.9% (NFHS 5). An increase in childhood anaemia from 44.6% (NFHS 4) to 64.2% (NFHS 5) in children aged 6-59 months is also reported (Annexure 2, Figure 5). As per NFHS 5, Debagarh, Jagatsinghapur, Khordha, Navagarh and Puri districts reported relatively low burden of stunting with respect to other districts, ranging from 13.2% to 20.4%; whereas Gajapati, Koraput, Malkangiri, Nabarangapur, and Nuapada and Ravagada districts reported relatively high burden of stunting, ranging from 43.1% to 44.3%. Similarly, Ganjam, Jagatsinghapur, Kendrapara, Navagarh and Puri districts reported relatively low burden of wasting with respect to other districts, ranging from 7.9% to 10.7%; whereas Balangir, Debagarh, Mayurbhanj, Sambalpur, and Subarnapur reported relatively high burden of wasting, ranging from 25.5% to 28.5%.

2.3 Family Planning

The TFR^r reduced from 2.7 in 2004 to 1.9 in 2018, which is lower than the national average of 2.2 (Annexure 2 Figure 4). The total unmet need in the State is reported as 7.2%, while unmet need for spacing is 2.5% (NFHS 5). Cuttack reported high total unmet need (3.7%) while Subarnapur reported the lowest (2.4%) (NFHS 5) in the State. Around 48.8% of married women reported to avail any modern method of family planning in the State (NFHS 5), with sterilization acceptance being 28.0% among females and 28.0% among males.

2.4 Communicable Diseases

The State has 30 functional IDSP units in place^s. The proportion of Communicable, Maternal, Neonatal, and Nutritional Diseases [CMNND] contribute to 34.77% of total disease burden (GBD 2019). Diarrheal diseases, malaria & drug-susceptible TB are reported as the major causes of DALY^t in the State (Annexure 2, Figure 6). As per QPR report, for TB, the annualized total case notification rate is 114% and NSP^u success rate is 86% as opposed to the national averages of 163% and 79%. For NLEP^v, the reported prevalence rate of 1.45 per 10,000 population is higher than the national average of 0.61. In FY 2019-20, deaths from vector borne diseases include 9 from malaria, 1 death from JE^w, 4 from dengue, while none from Kala azar.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that as high as 69.0% deaths are premature in the State, while disability or morbidity accounts for 31.0%. Ischaemic heart disease, Diabetes Mellitus Type 2 & COPD remain the major causes for DALYs (Annexure 2, Figure 6). NCDs contribute to 54.26% of total DALYs, whereas Injuries contribute to 10.97% of total DALYs. The State is positioned 12th in the country for the total number of fatal road accidents with respect to other states/UTs (Annexure 1.4). As reported in NFHS 5, 26% of women and

^r Total Fertility Rate

^s QPR NHM MIS Report (Status as on 01.03.2020)

^t <https://vizhub.healthdata.org/gbd-compare/india>

^u New Smear Positive

^v National Leprosy Eradication Programme

^w Japanese Encephalitis

51.6 % of men used any kind of tobacco, while 4.3% of women and 28.8% of men consumed alcohol. In general, low birth weight, high systolic blood pressure, short gestation period, high fasting plasma glucose and unsafe water source are the major risk factors for all DALYs (Annexure 2, Figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 4,32,455 crores. The State is positioned 23rd out of 32 States in terms of per capita^x of ₹ 99,196. According to NHA (2017-18), the per capita Government Health Expenditure in the State is ₹ 1,207, which is less than the national average of ₹ 1,753. On the other hand, the OOPE^y as a share of Total Health Expenditure is 55.9%, which is more than the national average of 48.8%. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 32,227 in private hospitals and ₹ 6,810 in public hospitals, whereas for urban areas it is around ₹ 34,604 in private hospitals and ₹ 8,295 in public hospitals. For childbirth, OOPE in public facilities is estimated to be around ₹ 3,640 in rural areas & ₹ 4,527 in urban areas, whereas in private health facilities, it is estimated to be around ₹ 25,061 in rural areas and ₹ 18,782 in urban areas. In public health facilities, the share of expenditure on medicines is 68% and 44% for inpatient care in rural and urban areas, respectively; whereas for diagnostics, it is 19% and 17% in rural and urban areas, respectively (Annexure 1.6, Healthcare Financing).

2.7 Health Infrastructure

As per RHS (2019-20), the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Though public health facilities have increased over time, a shortfall in 23.10% of SCs, 7.74% of PHCs still remain in the State (Annexure 2, Figure 9). Currently, there are 6,688 SCs, 1,288 PHCs, 377 CHCs in place, against the required 8,697 SCs, 1,396 PHCs and 349 CHCs. Similarly, in urban settings, there are 89 PHCs in place against the required 167, thereby amounting to a shortfall of 46.71%. The State has 32 DHs, 33 SDHs and 8 Government medical colleges. In the State, 100% of DHs (32), 84.84% of SDH (28) and only 9% of CHCs (34) serve as functional FRUs. In tribal catchments, there are 2,701 SCs, 444 PHCs and 134 CHCs in place against the required 3,182, 477 and 119 facilities, respectively.

Under the Government of India flagship Ayushman Bharat Yojana, 1,701 (374 SHCs, 1234 PHCs & 93 UPHCs) primary care facilities in the State have been upgraded and are currently operational as Health & Wellness Centres (HWCs) to deliver Comprehensive Primary Health Care (as on 22nd Dec 2021, Annexure 1.3).

In the State, none of the districts are equipped with MMUs under the NHRM whereas 9 districts are equipped MMU/Health Units under the NUHM. The State has 99% of ASHAs in position under NRHM and 98% under NUHM. The doctors to staff nurse ratio in place is 1:1, with 4 public healthcare providers available for every 10,000 populations (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 1,663.6 availed (events) OPD services and 88.3 availed (events) IPD services. However, as per the NSSO data (2017-18), 55% of all OPD cases in rural and 62% in urban used public facilities. Similarly, 75% of all IPD cases in rural and 56% of all IPD cases in urban utilized public facilities, Public facilities utilization for OPD and IPD services is higher than the national averages for the same.

^x Directorate of Economics and Statistics

^y Out of Pocket Expenditure

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^z

Indicator	Odisha 2011 ¹	India
Total Population (In Crore)	4.20	121.08
Rural (%)	83.31	68.85
Urban (%)	16.69	31.14
Scheduled Caste population (SC) (in crore)	0.71 (17.13%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.95 (22.85%)	10.45 (8.63%)
Total Literacy Rate (%)	72.9	72.99
Male Literacy Rate (%)	81.6	80.89
Female Literacy Rate (%)	64	64.64
Number of Districts in the Odisha ²	30	
Number of districts per lakh population in Odisha (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	10
	≥ 10 Lakhs - <20 Lakhs	14
	≥20 Lakhs - <30 lakhs	5
	≥30 Lakhs	1
ST SC Dominant (Top 5) Districts of Odisha ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Mayrubhanj - 58.71%	Subarnapur - 25.60%	
Malkangiri - 57.83	Baudh - 23.78%	
Rayagada - 55.98%	Jajapur - 23.71%	
Nabarangpur - 55.79%	Malkangiri - 22.55%	
Gajapati - 54.29%	Bhadrak - 22.23%	
Top 5 ST dominant district accounts for - 35.15%	Top 5 SC dominant district accounts for - 16.24%	

1.2 Key Health Status & Impact Indicators

Indicators	Odisha	India
Infant Mortality Rate (IMR) ³	38	30
Crude Death Rate (CDR) ³	7.1	6

^z Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	18	19.7
Maternal Mortality Ratio (MMR) ³	150	113
Neo Natal Mortality Rate (NNMR) ⁴	31	23
Under Five Mortality Rate (U5MR) ⁴	44	36
Still Birth Rate ⁴	10	4
Total Fertility Rate (TFR) ⁴	1.9	2.2
Life expectancy at birth ⁵	69.3	69.4
Sex Ratio at Birth ⁴	933	899

1.3 Key Health Infrastructure Indicators^{aa}

Indicators	Numbers (Total)			
Number of District Hospitals ²	32			
Number of Sub District Hospital ²	33			
Number of Government (Central + State) Medical College ⁶	8			
Number of Private (Society + Trust) Medical Colleges ⁶	4			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	374	1804	3636	4857
PHC-HWC	1234	1288	1288	1288
UPHC-HWC	93	97	97	97
Total-HWC	1701	3189	5021	6242
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	349	377	-8.02	
Number of Primary Health Centres (PHC)	1,396	1,288	7.74	
Number of Sub Centres (SC)	8,697	6,688	23.10	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	32	28	34	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	167	89	46.71	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	119	134	-12.61	
Number of PHC	477	444	6.92	
Number of SC	3,182	2,701	15.12	

^{aa} Sources are mentioned at the end of Annexure 1

Patient Service⁹	Odisha	India
IPD per 1000 population	88.3	62.6
OPD per 1000 population	1663.6	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	34.6	36.4

1.4 Major Health Indicator^{bb}

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Odisha	India
% DALY ^{cc} accountable for CMNNDs ^{dd}	34.77	27.46
% DALY accountable for NCDs	54.26	61.43
% DALY accountable for Injuries	10.97	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Odisha	India
Level of Birth Registration (%)	82.2	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	12.6	20.7
RMNCHA+N		
Maternal Health⁹	Odisha	India
% 1st Trimester registration to Total ANC Registrations	87.2	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	81.8	79.4
Total Reported Deliveries	641,324	21410780
% Institutional deliveries to Total Reported Deliveries	97.3	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	81.9	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	18.1	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	23.2	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	14.9	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	60.6	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	95.8	53.4
Neonatal⁹	Odisha	India
% live birth to Reported Birth	97.8	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	18.7	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	94.6	89.9

^{bb} Sources are mentioned at the end of Annexure 1

^{cc} Disability Adjusted Life Years

^{dd} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Odisha	India
Sick New Born Care Unit (SNCU)	40	895
New Born Stabilization Unit (NBSU)	45	2418
New Born Care Corner (NBCC)	730	20337
Child Health & Nutrition¹⁰	Odisha (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	9.7	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	65.7	60.6
Children under 5 years who are underweight (weight-for-age) (%)	29.7	32.1
Child Immunization¹⁰	Odisha (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	90.7	83.8
Children age 12-23 months who have received BCG (%)	97.3	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	95.9	87.9
Family Planning¹⁰	Odisha (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	2.5	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Odisha	India
Number of districts with functional IDSP unit	30	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Odisha	India
Annualized total case notification rate (%)	114	163
New Smear Positive (NSP) Success rate (in %)	86	79
National Leprosy Eradication Programme (NLEP)¹¹	Odisha	India
Prevalence Rate/10,000 population	1.45	0.61
Number of new cases detected	10,077	114,359
Malaria, Kala Azar, Dengue¹¹	Odisha	India
Deaths due to Malaria ¹¹	9	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	4	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Odisha (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	21.4	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	24.6	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Odisha (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	12.9	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	16.8	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	6.5	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	7.3	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Odisha (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	26	8.9
Men who use any kind of tobacco (%)	51.6	38
Women who consume alcohol (%)	4.3	1.3
Men who consume alcohol (%)	28.8	18.8
Injuries		
Road Traffic Accident¹²	Odisha	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	12	N/A
Total number of fatal Road Accidents	4,844	137,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	48.2	33.7
Number of persons killed in Road Accidents	5333	115113

1.5 Access to Care^{ee}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Odisha	India
Number of Districts equipped with MMU under NRHM	0	506
Number of Districts equipped with MMU/Health Units under NUHM	9	31
Number of ERS vehicles operational in the States/UTs Under NHM	Odisha	India
102 Type	500	9955
104 Type	1	605
108 Type	596	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	277	11070

^{ee} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Odisha	India
Total number of ASHA targeted under NRHM	45601	946563
Total number of ASHA in position under NRHM	45105	904211
% of ASHA in position under NRHM	99	96
Total number of ASHA targeted under NUHM	1546	75597
Total number of ASHA in position under NUHM	1522	64272
% of ASHA in position under NUHM	98	85
Community Process¹¹	Odisha	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	46102	554847
Number of Mahila Arogya Samitis (MAS) formed	3132	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Odisha	India
DH	32	796
CHC	377	6036
PHC	1255	20273
UHC	7	126
UPHC	87	3229
Human Resource for Health ¹⁴		
HRH Governance	Odisha	
Specialist Cadre Available in the state (Y/N)	In progress	
HR Policy available (Y/N)	Yes	
Implementation of HRIS (Y/N)	In progress	
HR Integration initiated (Y/N)	Yes	
Public Health Cadre available (Y/N)	Yes	
Overall Vacancies (Regular + contractual)	Specialists (%)	58
	Dentists (%)	65
	MO MBBS (%)	43
	Nurse (%)	59
	LT (%)	66
	ANM (%)	21
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	6 per 10,000	4 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	4:1	4:1

Ranking: Human Resource Index of Odisha¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{ff}	18996	14568	11753	2815	7243	48.71
Staff Nurse	15778	11187	6783	4404	8995	
Lab Technician	3745	2104	661	1443	3084	
Pharmacists	3605	2863	2242	621	1363	
MO MBBS ^{gg}	4823	5632	3394	2238	1429	
Specialist ^{hh}	3755	2811	1301	1510	2454	

1.6 Healthcare Financingⁱⁱ

National Health Accounts (NHA) (2017-18)	Odisha		India	
Per Capita Government Health Expenditure (in ₹)	1207		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	1.2		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	5.7		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	55.9		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Odisha		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	55	62	33	26
IPD - % of hospitalized cases using public facility	75	56	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	649	507	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	741	799	845	915
IPD - Per hospitalized case (in INR) - Public	6,810	8,295	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	32,227	34,604	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	19	17	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	68	44	53	43

^{ff} MPW – Multi Purpose Health Worker (Female + Male)

^{gg} MO MBBS (Full Time)

^{hh} Specialist (All Specialist)

ⁱⁱ Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	3,640	4,527	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	25,061	18,782	20,692	26,701
State Health Expenditure	Odisha		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	5.1		5 ^{jj}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{jj} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

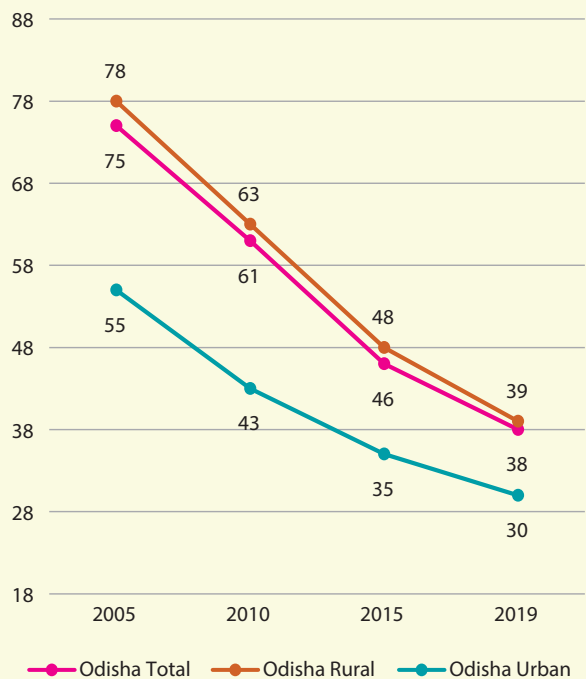


Figure 2: CBR & CDR Trend

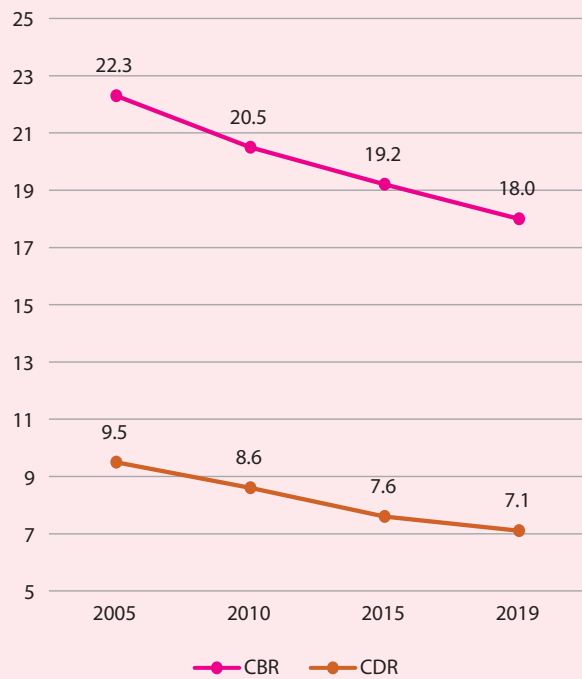


Figure 3: Life Expectancy At Birth Trend

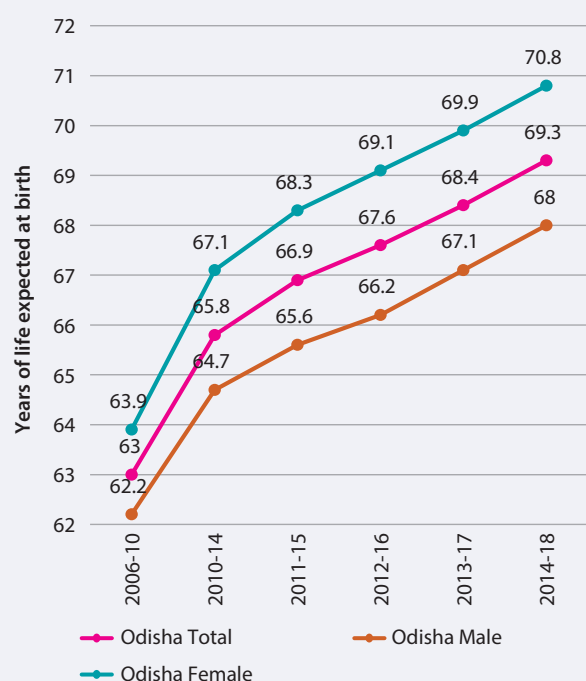


Figure 4: NNMR, TFR & Still Birth Trend

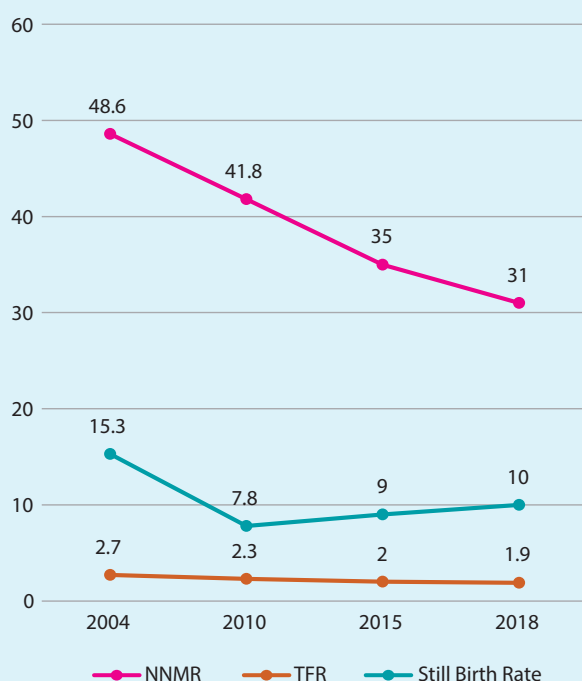


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

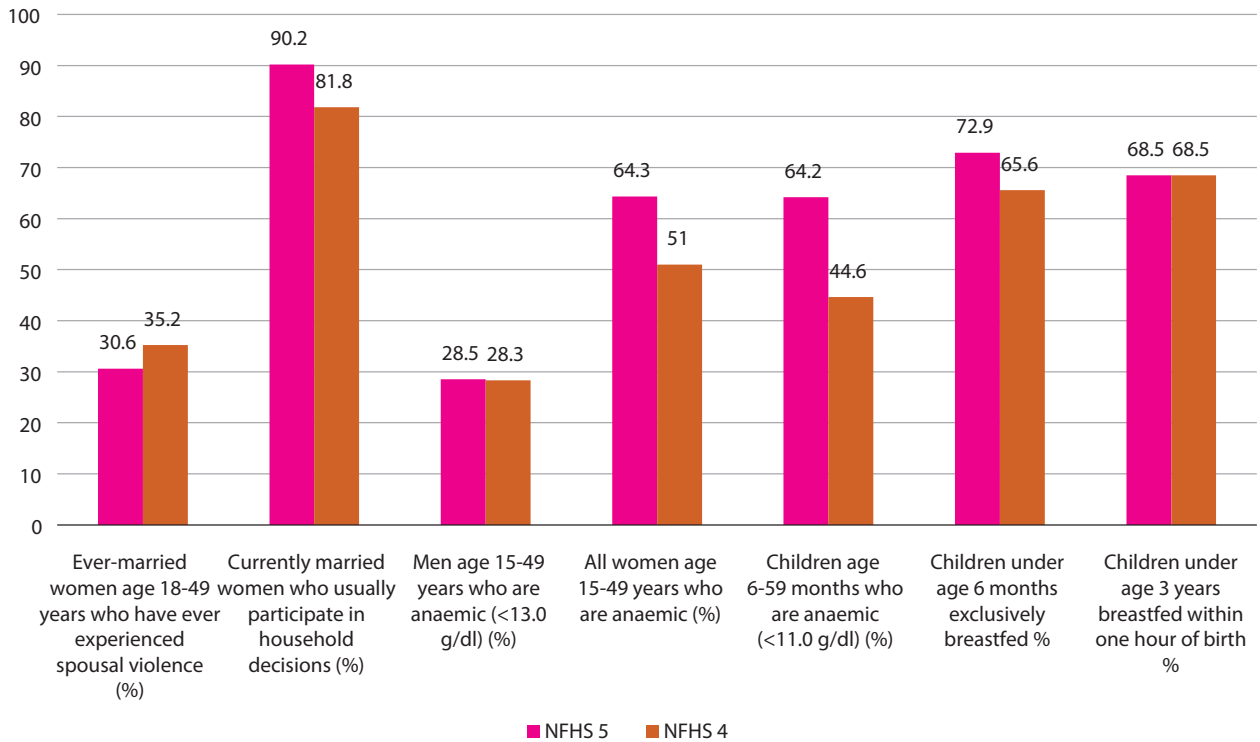


Figure 6: Top 15 causes of DALYs, 1990-2019

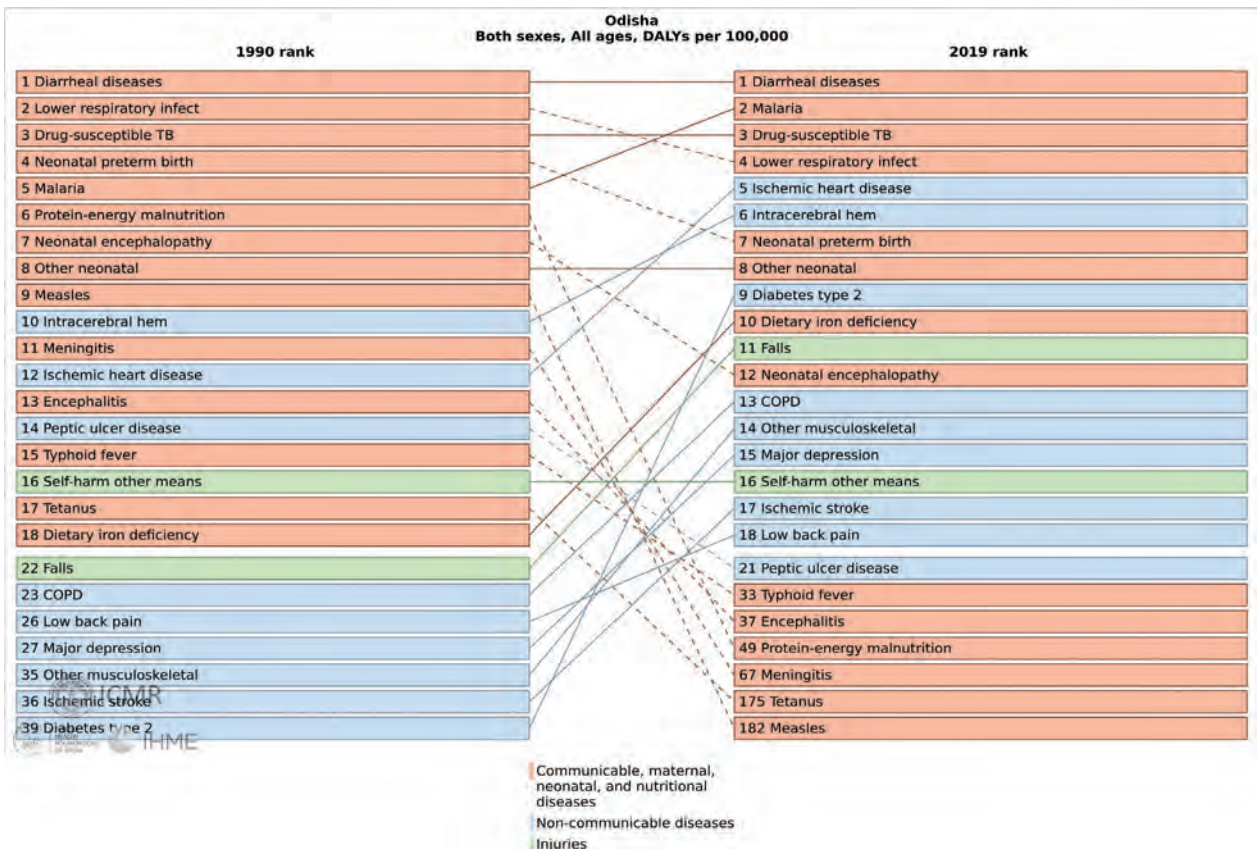


Figure 7: Top 15 risk of DALYs, 1990-2019

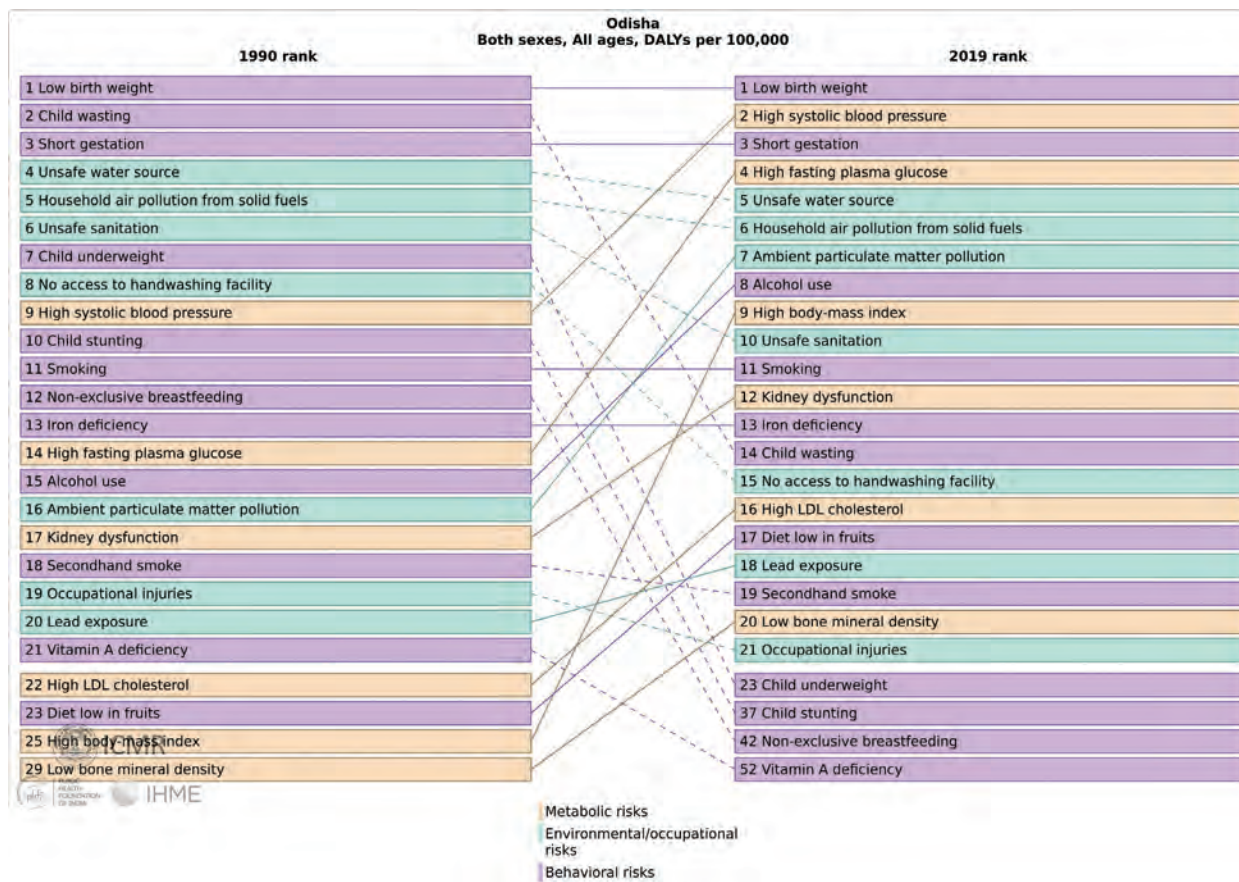


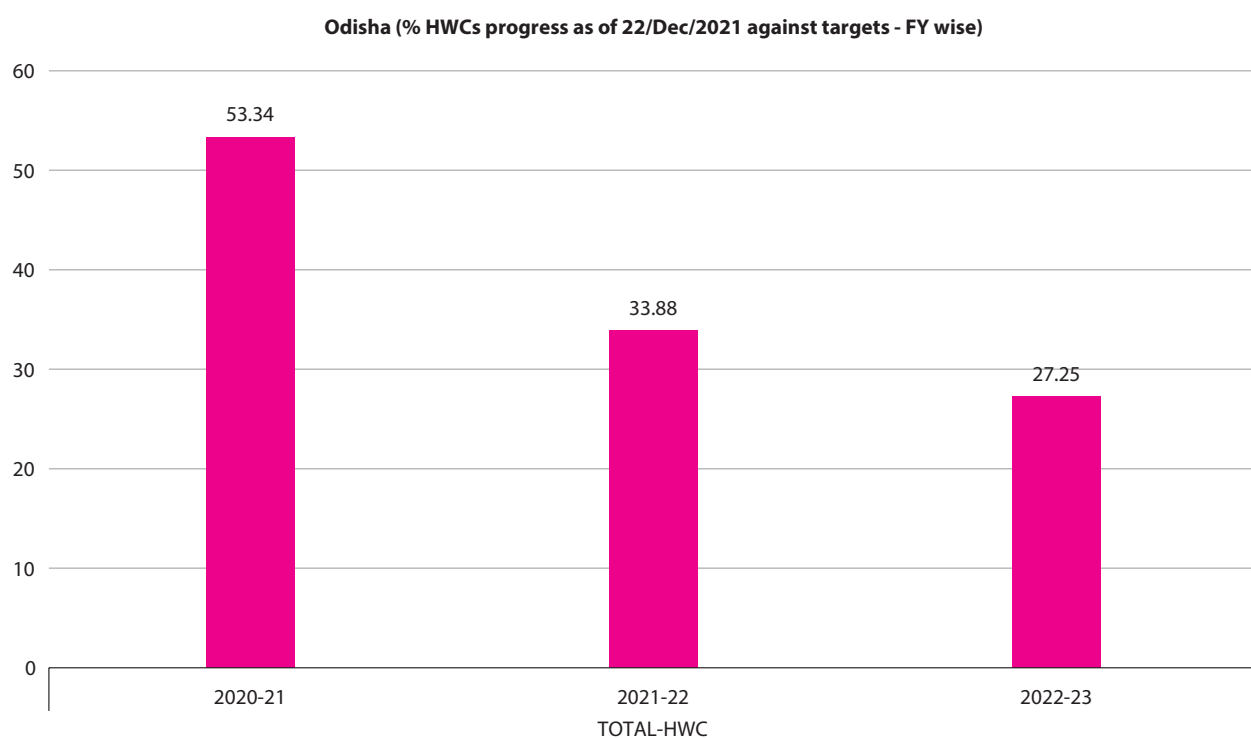
Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)



Figure 9: Year Wise Health Infrastructure Shortfall (%)



Figure 10: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)																
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted ^Δ (Height For Age) (%)	Children Under 5 Years - Wasted ^Δ (Weight For Height) (%)			
1	Odisha	NFHS 4 Total	932	47.7	NA	21.3	57.3	1.1	3.4	13.6	61.9	85.3	89.8	8.5	34.1	20.4			
2	Odisha	NFHS 5 Urban	950	29.5	81.9	14.5	76.9	2.3	8.8	6.6	82	97.5	93.4	14.7	24.9	14.9			
3	Odisha	NFHS 5 Rural	885	51.7	66.7	21.7	73.6	2.6	4.9	7.3	77.4	91.3	90.2	21.4	32	18.6			
4	Odisha	NFHS 5 Total	894	47.9	69.5	20.5	74.1	2.6	5.5	7.2	78.1	92.2	90.7	20.4	31	18.1			
5	Anugul	NFHS 5 Total	868	63.1	72.4	25	85.8	2.8	6.6	2.9	83.7	85.7	86.5	18.7	28.1	25.1			
6	Balangir	NFHS 5 Total	919	44	68.1	14	77.8	2.9	3.6	3.4	95.4	97.9	97.9	29.6	32.7	25.5			
7	Baleshwar	NFHS 5 Total	866	40.6	73.8	26.4	68.3	2	7.1	9.3	56.6	97.6	85	21.7	24.4	15			
8	Bargarh	NFHS 5 Total	950	45.5	71.6	8.6	75.4	3.3	6	5.1	70.1	99.6	97.9	17.1	38.9	18			
9	Baudh	NFHS 5 Total	844	44.7	68.8	25.3	70.7	1.8	5.4	5.2	79	93.4	92.8	19.6	37	20.1			
10	Bhadrak	NFHS 5 Total	980	44.9	80.1	10.4	72	1.1	3.9	11.8	74.9	96.1	88.7	23.1	32.3	15.8			
11	Cuttack	NFHS 5 Total	745	42.3	80.1	14.2	84.4	2.8	8.5	3.7	84.2	98.9	97	21.3	20.4	14.2			
12	Debagarh	NFHS 5 Total	822	57.5	66.7	19.2	74.1	4.1	3.8	6.8	77.5	91.2	97.1	13	28.4	27.3			
13	Dhenkanal	NFHS 5 Total	895	55.2	74.1	23.7	75.9	1.4	3.4	8.1	75.8	94.8	86	25.6	33.3	22.7			
14	Gajapati	NFHS 5 Total	999	39.6	47.6	28.1	76.2	2	0.8	5.4	83	76.4	97.7	18.8	43.4	16.1			
15	Ganjam	NFHS 5 Total	855	51.9	69.5	22.3	59.2	1.1	6.4	16.9	82.7	93	92.3	22.3	23.9	10.2			
16	Jagatsinghapur	NFHS 5 Total	843	56.8	84.8	12	71.9	2.1	7.3	11.5	82.6	98.3	92.9	31.2	13.2	10.7			
17	Jajapur	NFHS 5 Total	898	53.9	75.8	11.4	76.2	1.9	7.2	9	73.8	93.8	70.5	13.9	25.5	15.9			

18	Jharsuguda	NFHS 5 Total	793	37.7	79.1	8.5	81.4	3.3	8.4	3.7	94.1	98.6	97.6	26.7	27.1	16.9
19	Kalahandi	NFHS 5 Total	903	48.6	61.8	16.3	75.9	1.8	4.4	4	82.9	92.8	91.3	16.4	33	17.2
20	Kandhamal	NFHS 5 Total	985	54.5	68.5	20	76.7	6.3	5.8	4.5	81.1	93.9	94	22.1	34.2	23.3
21	Kendrapara	NFHS 5 Total	860	50	84.4	9.4	64.7	1.1	4.5	12.3	77.1	96.7	93.5	23.3	28.6	7.9
22	Kendujhar	NFHS 5 Total	984	43.3	64.6	29	77.6	3.7	5.4	3.8	57.1	80.4	81.4	15.1	36.2	23.8
23	Khordha	NFHS 5 Total	810	43.2	84.9	17.1	74.7	2	8.4	7.4	91	97.8	87.6	13.8	17.1	13.2
24	Koraput	NFHS 5 Total	1014	54.6	40.6	35.5	65.4	3.6	3.3	6.6	79.2	82.1	98	17.2	43.1	15.9
25	Malikangiri	NFHS 5 Total	981	47	39	32.4	74.1	4.2	2.4	4.4	82.8	90.7	97.2	19.8	44.3	19.3
26	Mayurbhanj	NFHS 5 Total	837	46.5	58.6	31.3	76.3	2.9	5.4	5.9	52.9	91.7	85.4	23.7	36.7	28.5
27	Nabarangapur	NFHS 5 Total	1045	48.4	38.5	39.4	77.1	2.5	2.3	3.4	87.7	87.6	96.1	16.8	44.1	25.2
28	Nayagarh	NFHS 5 Total	845	49.3	80.4	35.7	78.2	1.7	5.5	4.6	90.3	98.3	96.1	20.3	20	10.5
29	Nuapada	NFHS 5 Total	1025	45.3	53.5	15.6	71.4	4.4	3.6	7.3	71.7	89.8	95.9	25.3	43.1	18.1
30	Puri	NFHS 5 Total	782	61.5	86.4	10.2	74.4	2.7	5.8	7.3	94.9	97.7	96.5	20.6	13.8	8.9
31	Rayagada	NFHS 5 Total	951	45.5	42	33.2	72.7	2.2	1.9	6.1	85.3	68.9	92.7	24.7	43.6	16.1
32	Sambalpur	NFHS 5 Total	1061	49.3	71.1	7.4	77.1	2.5	5.5	9.1	89	99.5	97.9	17.4	40.7	25.5
33	Subarnapur	NFHS 5 Total	924	45.8	76.1	16.9	77.4	4.4	3.6	5.8	87.8	96.1	98	22.5	29.6	26
34	Sundargarh	NFHS 5 Total	809	39.3	70.8	12.9	79.7	4.6	5.5	2.4	73.1	91.3	81.5	14.7	32.9	21.1

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'Vaccinated'; Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best five performing districts within the districts for a particular indicator

B. Red – Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE



HEALTH DOSSIER 2021

Reflections on Key Health Indicators



PUDUCHERRY

DISTRICTS VISITED IN
COMMON REVIEW MISSIONS

Puducherry

Karaikal

PUDUCHERRY

1. BACKGROUND

1.1 Union Territory Profile

Puducherry is positioned^a 33rd Union territory in India by area, with a population of over 0.12 crore^b. The UT is divided into 4 districts as of 2021^c with an expected increase in population to 0.16 lakh by 2021^d. As per census 2011, the UT's Scheduled Caste population is 0.019 (15.73%). Around 31.66% of the population reside in rural areas, while the rest constitute the urban population. At present, no cities^e are covered under National Urban Health Mission. The total length of roads^f in Puducherry is 3,242 km (0.064%^g), in which, the length of the national highways is 64 km (0.1%^h).

A detail report on the key indicators is attached as Annexure 1

1.2 Demography

Puducherry's sex ratio at birth (823 females per 1000 males) is less than the national average of 899 females per 1000 males. The crude birth rate and the crude death rate in the UT has shown decline from 16.2 and 7.1 to 13.3 and 6.8, respectively (Annexure 2). The UT's literacy rate has improved from 81.2% (2001) to 85.8% (2011) with male & female literacy rates being 91.3% and 80.7% respectively. According to ESAG 2018 report, the Gross Enrollment Rateⁱ (GER) is 43.2% for higher education, 74.80% for senior secondary education (XI-XII), 88.95% for secondary education (IX-X), 85.64% for elementary education (I-VIII); and 84.79% for primary education (I-V).

1.3 Elderly

Population aging has profound social, economic, and political implications. In Puducherry, 1% of the elderly females living in rural areas, 13% of elderly females and 11.0% of elderly males in urban areas are

^a Among North-East UTs

^b Census 2011

^c RHS 2020

^d Census Population Projection 2019 Report

^e QPR NHM MIS Report as on 31 Dec 2020

^f Basic Road Statistics 2019, MoRTH

^g Percentage of total length of roads in State/UT

^h Percentage of total length of National Highways in the country

ⁱ Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

economically fully dependent on others. The illness (any deviation from the state of physical and mental well-being) perception among elderly men and women is 57% & 70% respectively, which are more than the national average of 31% for each (Elderly in India 2016).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

Puducherry has been able to provide RMNCHA+N^j services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^k, institutional deliveries, C sections, distribution of IFA^l tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care have shown improvement since 2005 (NFHS 4 & 5). In Puducherry, 44% of women received 4 ANC check-ups (Annexure 1.4).

As per the NFHS 5 (Annexure 3) Karaikal reported good ANC coverage (88.3%), whereas, Yanam reported relatively poor ANC coverage of (79.8%). As reported in HMIS 2019-20, almost all deliveries took place in institutions, out of which 77% took place in public health facilities. Total percentage of C-sections is (31.9%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 48.9% are conducted at private facilities in the UT. Around 28.9% of women received their first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of Anaemia in women aged 15-49 years has increased from 52.4% (NFHS 4) to 55.1% (NFHS 5). Anaemia in females of reproductive age group is almost thrice when compared with men of similar age group (Annexure 2, figure 3).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Puducherry has shown a significant decline in IMR from 28 (2005) to 9 (2019). As per the NHFS 5, the lowest SRB (884) in the UT is reported in Karaikal, while the highest (1202) is reported in Mahe.

Full vaccination^m coverage for children between 12-23 months of age has shown a decline from 92.8% (NFHS 4) to 89.7% (NFHS 5). The nutritional status within the UT has wide variation. For under 5- stunting, Mahe reported a high burden (48.2) and Puducherry reported a low burden (17) in the UT; whereas for under -5 wasting, Karaikal reported a high burden (15.3) and Mahe reported a low burden (7.3). In the UT, exclusive breastfeeding of children under 6 months has shown an improvement from 45.5% (NFHS 4) to 64.8% (NFHS 5).

2.3 Family Planning

As per the NFHS 5 report, the total unmet need in Puducherry is reported as 10.5%, while the unmet need for spacing is 3.2%. Yanam district reported the lowest total unmet need (1.2%), while Puducherry reported the highest (11.4%) in the UT. Approximately 62.1% of married women reported to avail any modern method of family planning in the UT (NFHS 5), with sterilization acceptance being 53.8% among females and 0.3% among males.

^j Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^k Antenatal Check up

^l Iron Folic Acid Tablets

^m NFHS 5 State/UT Factsheet based on information from vaccination card only

2.4 Communicable Diseases

Puducherry has 4 IDSP units functionalⁿ. As per QPR reports, for TB, the annualized total case notification rate is 292% and NSP^o success rate is 83% as opposed to the national average of 163% and 79%, respectively. For NLEP^p, the reported prevalence rate of 0.22 per 10,000 population is less than the national average of 0.61. In FY 2019-20, with 3 deaths from Dengue, while none due to Malaria or Kala Azar are reported.

2.5 Non-Communicable Diseases (NCDs) and Injuries

In NFHS 5, it is reported that as high as 2.6% of women and 14.8% of men used any kind of tobacco, while 0.3% of women and 27.7% of men consumed alcohol. Puducherry is positioned 27th in the country for the total number of fatal road accidents with respect to other States and UTs (Annexure 1.4).

2.6 Health Care Financing

Puducherry's Net UT Domestic Product (NSDP) for FY 2018-19 is ₹ 33,598 crores. The UT is positioned 6th out of 32 States/UTs in terms of per capita^q of ₹ 2,20,461.

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have increased since 2005 (Annexure 2, Figure 6). Currently, there are 53 SCs, 24 PHCs, and 4 CHCs in place, against the required 93 SCs, 15 PHCs and 3 CHCs in rural areas. There are 15 UPHCs in place against the required 22 UPHCs. In addition to that, Puducherry has 5 DHs, 3 SDHs and 2 government medical colleges.

Under the Government of India flagship Ayushman Bharat Program, a total of 126 primary healthcare facilities (82 SHCs, 43 PHC & 1 UPHC) have been upgraded and are currently operational as Health & Wellness Centres (HWCs) to deliver Comprehensive Primary Health Care (as on 22nd Dec 2021, Annexure 1.3).

In Puducherry, 4 districts are equipped with MMUs under the NRHM, while none under the NUHM. Puducherry has 57% of required ASHAs in position under the NUHM. The doctor to staff nurse ratio in place is 1:3, with 11 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population. Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 5478.4 availed (events) OPD services, while 119.2 availed (events) IPD services.

ⁿ QPR NHM MIS Report (Status as on 01.03.2020)

^o New Smear Positive

^p National Leprosy Eradication Programme

^q Directorate of Economics & Statistics

ANNEXURE 1: KEY INDICATORS

1.1 UT Profile^r

Indicator	Puducherry 2011 ¹	India
Total Population (In Crore)	0.12	121.08
Rural (%)	31.66	68.85
Urban (%)	68.33	31.14
Scheduled Caste population (SC) (in crore)	0.019 (15.83%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0	10.45 (8.63%)
Total Literacy Rate (%)	85.85	72.99
Male Literacy Rate (%)	91.26	80.89
Female Literacy Rate (%)	80.67	64.64
Number of Districts in the Puducherry ²	4	
Number of districts per lakh population in Puducherry (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<1 Lakhs	2
	≥ 1 Lakhs - <2 Lakhs	1
	<10 lakhs	1
SC Districts (%)		
Karaikal - 17.65%		
Puducherry - 16.03%		
Yanam - 15.14%		
Mahe - 0.34%		

1.2 Key Health Status & Impact Indicators

Indicators	Puducherry	India
Infant Mortality Rate (IMR) ³	9	30
Crude Death Rate (CDR) ³	6.8	6
Crude Birth Rate (CBR) ³	13.3	19.7
Maternal Mortality Ratio (MMR) ³	N/A	113
Neo Natal Mortality Rate (NNMR) ⁴	N/A	23
Under Five Mortality Rate (U5MR) ⁴	N/A	36

^r Sources are mentioned at the end of Annexure 1

Still Birth Rate ⁴	N/A	4
Total Fertility Rate (TFR) ⁴	N/A	2.2
Life expectancy at birth ⁵	N/A	69.4
Sex Ratio at Birth ⁴	823	899

1.3 Key Health Infrastructure Indicators⁵

Indicators				Numbers (Total)
Number of District Hospitals ²				5
Number of Sub District Hospital ²				3
Number of Government Medical College ⁶				2
Number of Private Medical Colleges ⁶				7
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	82	8	15	25
PHC-HWC	43	24	24	24
UPHC-HWC	1	5	5	5
Total-HWC	126	37	44	54
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	3	3	0.00	
Number of Primary Health Centres (PHC)	15	24	-60.00	
Number of Sub Centres (SC)	93	53	43.01	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	4	0	0	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	22	15	31.82	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	NA	NA	NA	
Number of PHC	NA	NA	NA	
Number of SC	NA	NA	NA	
Patient Service ⁹		Puducherry	India	
IPD per 1000 population		119.2	62.6	
OPD per 1000 population		5478.4	1337.1	
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population		113.5	36.4	

⁵ Sources are mentioned at the end of Annexure 1

1.4 Major Health Indicator^t

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Puducherry	India
% DALY ^u accountable for CMNNDs ^v	NA	27.46
% DALY accountable for NCDs	NA	61.43
% DALY accountable for Injuries	NA	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Puducherry	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	71.3	20.7
RMNCHA+N		
Maternal Health⁹	Puducherry	India
% 1st Trimester registration to Total ANC Registrations	27.5	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	44	79.4
Total Reported Deliveries	43,178	2,14,10,780
% Institutional deliveries to Total Reported Deliveries	100	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	77	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	23	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	31.9	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	26.8	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	48.9	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	28.9	53.4
Neonatal⁹	Puducherry	India
% live birth to Reported Birth	99	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	17.5	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	72.6	89.9
New Born Care Units Established¹¹	Puducherry	India
Sick New Born Care Unit (SNCU)	4	895
New Born Stabilization Unit (NBSU)	4	2418
New Born Care Corner (NBCC)	10	20337

^t Sources are mentioned at the end of Annexure 1

^u Disability Adjusted Life Years

^v Communicable, Maternal, Neonatal, and Nutritional Diseases

Child Health & Nutrition¹⁰	Puducherry (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	3.7	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	N/A	60.6
Children under 5 years who are underweight (weight-for-age) (%)	15.3	32.1
Child Immunization¹⁰	Puducherry (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	89.7	83.8
Children age 12-23 months who have received BCG (%)	96.4	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	95.6	87.9
Family Planning¹⁰	Puducherry (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	3.2	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Puducherry	India
Number of districts with functional IDSP unit	4	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Puducherry	India
Annualized total case notification rate (%)	292	163
New Smear Positive (NSP) Success rate (in %)	83	79
National Leprosy Eradication Programme (NLEP)¹¹	Puducherry	India
Prevalence Rate/10,000 population	0.22	0.61
Number of new cases detected	49	1,14,359
Malaria, Kala Azar, Dengue¹¹	Puducherry	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	3	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Puducherry (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	30.2	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	32.5	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Puducherry (NFHS 5)	India (NFHS 5)
Women - Slightly above normal (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	12.1	12.4
Men - Slightly above normal (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	19.1	15.7
Women - Blood sugar level - high (>140 mg/dl) (%)	7.2	6.1
Men - Blood sugar level - high (>140 mg/dl) (%)	7	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Puducherry (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	2.6	8.9
Men who use any kind of tobacco (%)	14.8	38
Women who consume alcohol (%)	0.3	1.3
Men who consume alcohol (%)	27.7	18.8
Injuries		
Road Traffic Accident¹²	Puducherry	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	27	NA
Total number of fatal Road Accidents	143	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	10.6	33.7
Number of persons killed in Road Accidents	147	115113

1.5 Access to Care^w

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Puducherry	India
Number of Districts equipped with MMU under NRHM	4	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Puducherry	India
102 Type	0	9955
104 Type	0	605
108 Type	11	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	43	11070

^w Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Puducherry	India
Total number of ASHA targeted under NRHM	0	946563
Total number of ASHA in position under NRHM	0	904211
% of ASHA in position under NRHM	0	96
Total number of ASHA targeted under NUHM	341	75597
Total number of ASHA in position under NUHM	193	64272
% of ASHA in position under NUHM	56.60	85
Community Process¹¹	Puducherry	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	100	554847
Number of Mahila Arogya Samitis (MAS) formed	25	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Puducherry	India
DH	5	796
CHC	4	6036
PHC	39	20273
UHC	0	126
UPHC	0	3229
Human Resource for Health ¹⁴		
HRH Governance	Puducherry	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	41
	Dentists (%)	14
	MO MBBS (%)	14
	Nurse (%)	3
	LT (%)	35
	ANM (%)	12
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:2	1:3
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	12 per 10,000	11 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	6:1	9:1

Ranking: Human Resource Index of Puducherry¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^x	324	338	272	66	52	72.59
Staff Nurse	1553	1269	1221	48	332	
Lab Technician	222	124	97	27	125	
Pharmacists	115	171	149	22	0	
MO MBBS ^y	286	399	389	10	0	
Specialist ^z	319	160	106	54	213	

1.6 Healthcare Financing^{aa}

National Health Accounts (NHA) (2017-18)	Puducherry		India	
Per Capita Government Health Expenditure (in ₹)	NA		1,753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	NA		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	NA		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	NA		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Puducherry		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	NA	NA	33	26
IPD - % of hospitalized cases using public facility	NA	NA	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	NA	NA	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	NA	NA	845	915
IPD - Per hospitalized case (in INR) - Public	NA	NA	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	NA	NA	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	NA	NA	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	NA	NA	53	43

^x MPW – Multi Purpose Health Worker (Female + Male)

^y MO MBBS (Full Time)

^z Specialist (All Specialist)

^{aa} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	NA	NA	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	NA	NA	20,692	26,701
State Health Expenditure	Puducherry		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	7.4		5 ^{bb}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{bb} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

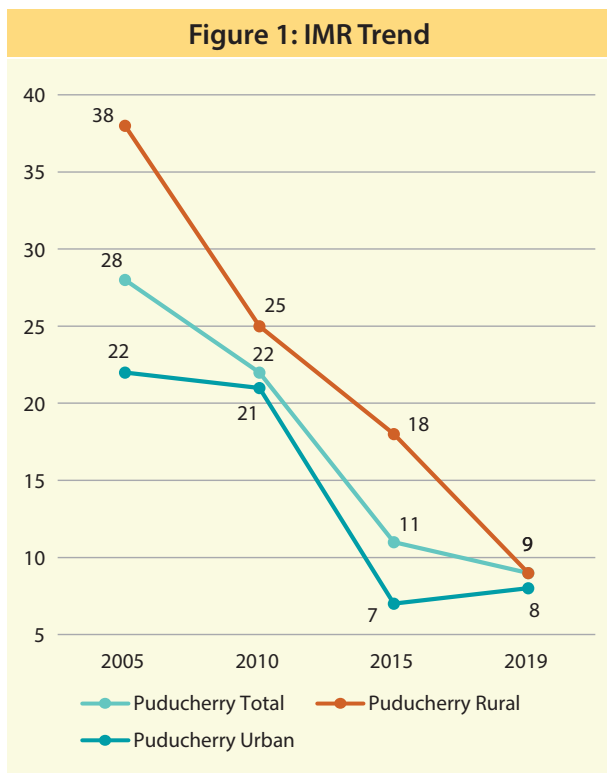


Figure 2: CBR & CDR Trend

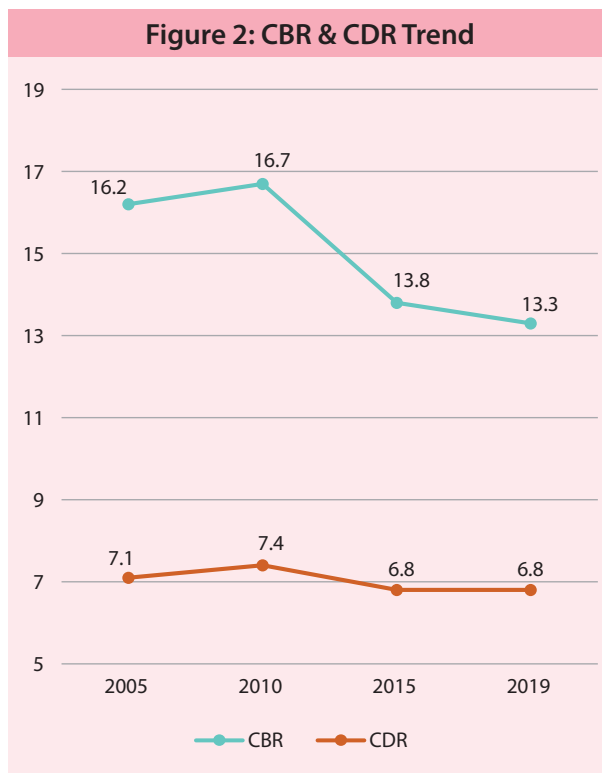


Figure 3: Comparison of Key NFHS 5 & 4 Indicators

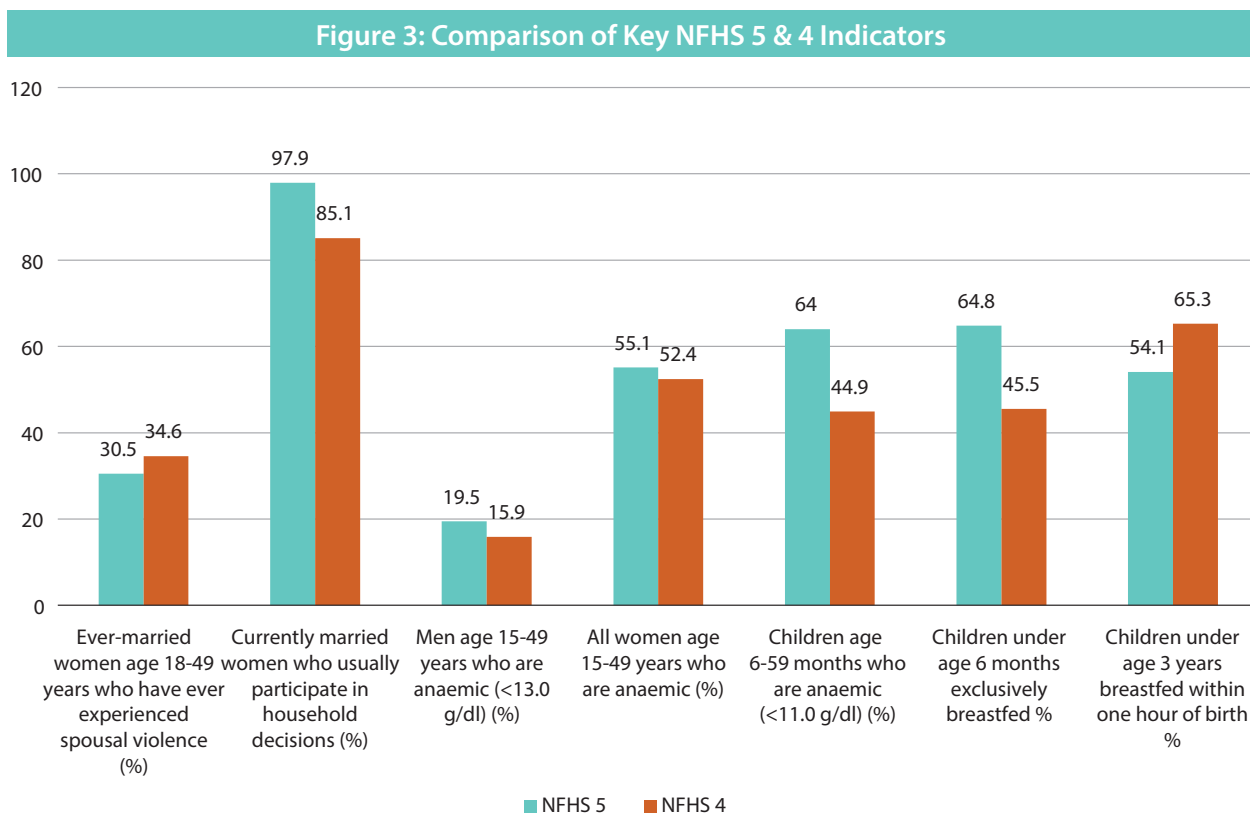


Figure 4: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

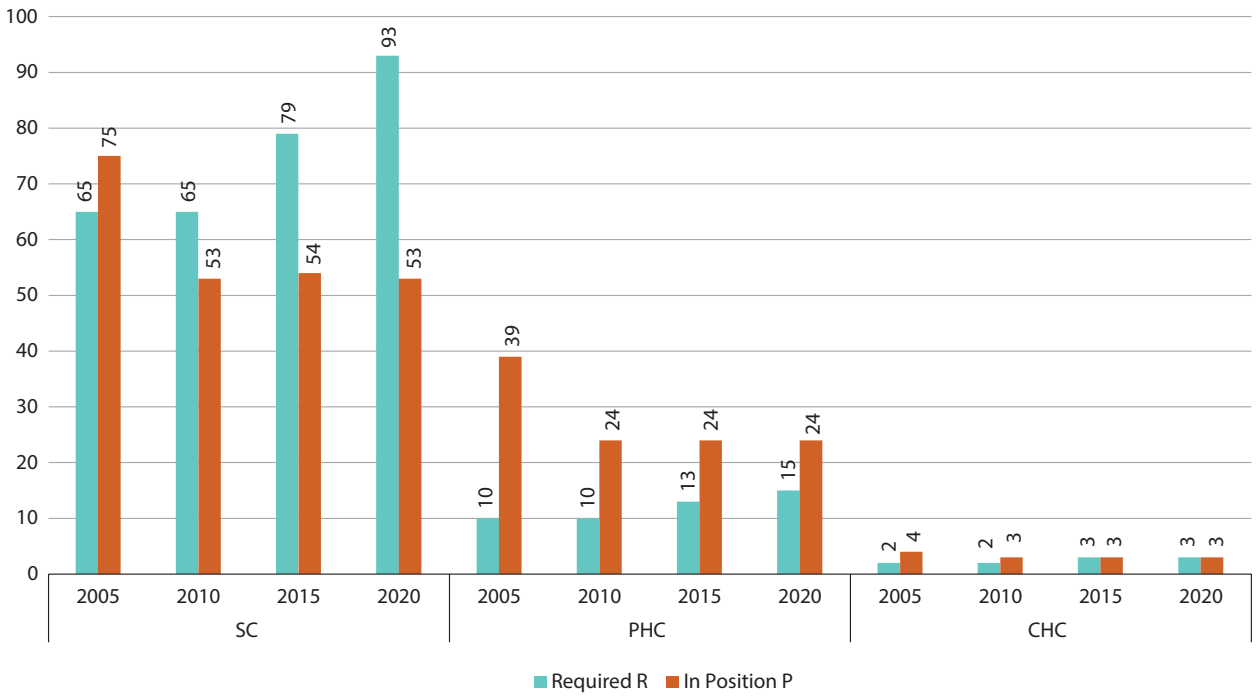


Figure 5: Year Wise Health Infrastructure Shortfall (%)

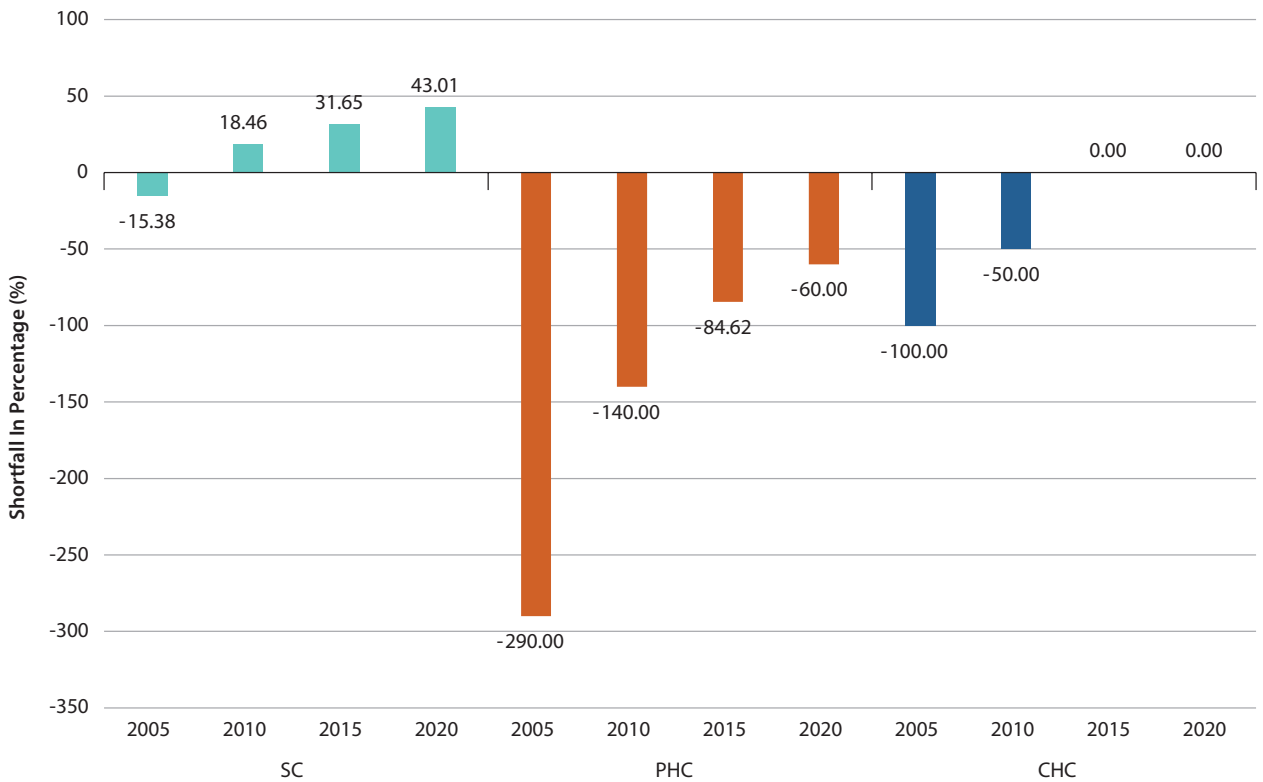
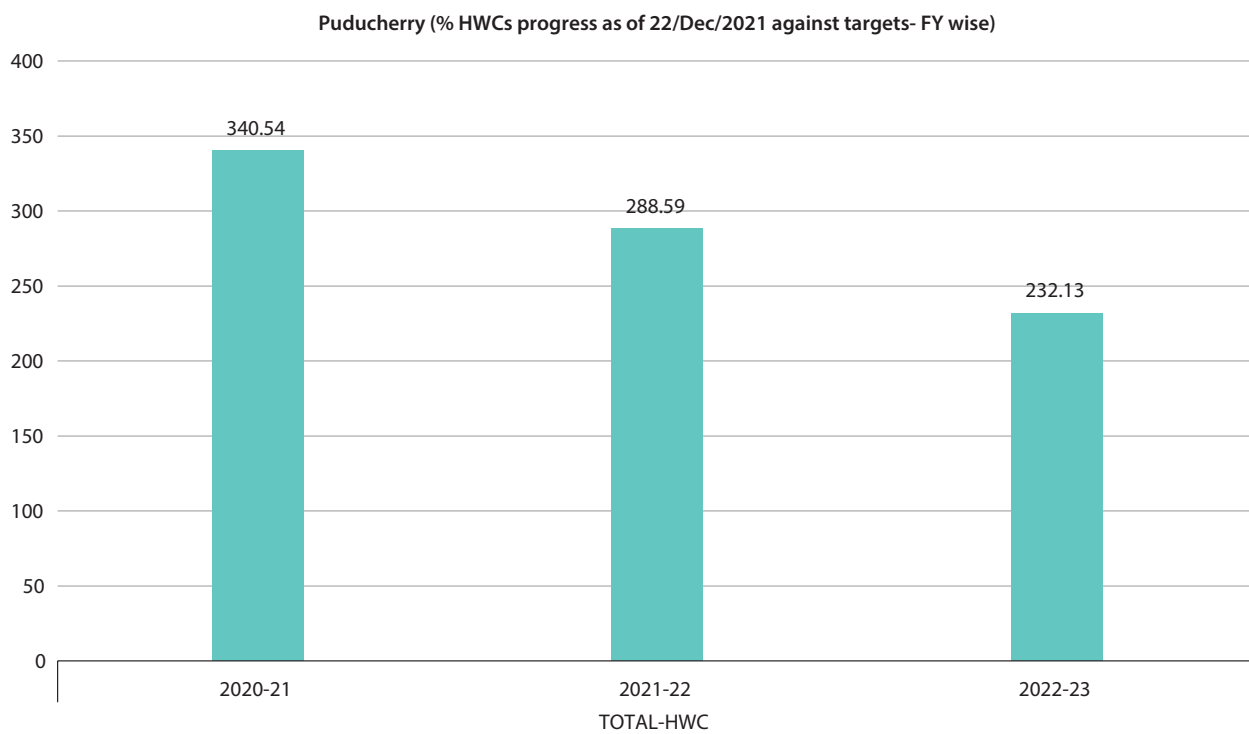


Figure 6: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PPIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted [^] (Height For Age) (%)	Children Under 5 Years - Wasted [^] (Weight For Height) (%)
1	Puducherry	NFHS 4 Total	843	32.8	NA	10.7	61.9	2.6	0.8	8.3	87.7	99.9	92.8	31.1	23.7	23.6
2	Puducherry	NFHS 5 Urban	857	30	90.7	8.6	65.8	2.1	5.8	10.7	90	99.5	90.2	20.6	21.7	12.1
3	Puducherry	NFHS 5 Rural	1268	30.5	87.4	1	66.4	1.3	3.1	10.2	78.9	99.7	NA	31.9	15.6	12.9
4	Puducherry	NFHS 5 Total	959	30.1	89.7	6.5	66	1.9	5	10.5	86.9	99.6	89.7	22.9	20	12.4
5	Karaikal	NFHS 5 Total	884	26.9	88.8	7.2	59.7	1.8	3.9	10.2	88.3	99.6	96.6	17.9	25.5	15.3
6	Mahe	NFHS 5 Total	1202	23.6	99.6	2.8	73.6	1.6	9	6.8	85	100	95.3	38.5	48.2	7.3
7	Puducherry	NFHS 5 Total	963	31.3	90.1	5.7	66.5	1.9	5.2	11.4	87	99.5	87.6	25.5	17	11.6
8	Yanam	NFHS 5 Total	1154	29.2	82.2	15.9	79.6	0.9	2.9	1.2	79.8	100	92.4	1.3	25	12.4

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'; Out of two indicators with either vaccination card or mother's recall & vaccination card only - 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT for penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 1.3 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best performing districts within the districts for a particular indicator

B. Red – Worst performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 1.3 Below -3 standard deviations, based on the WHO standard

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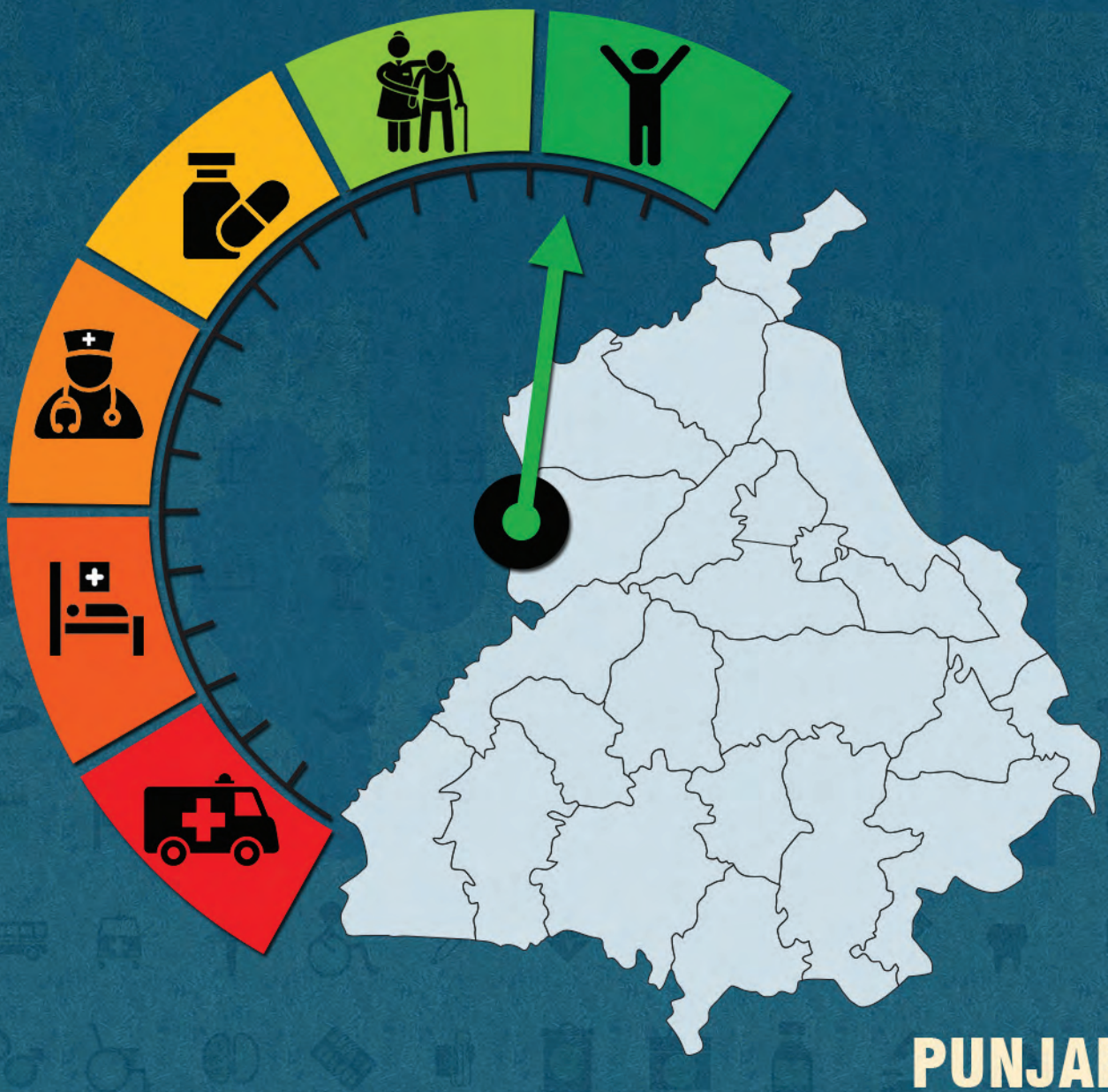
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



PUNJAB

DISTRICTS VISITED IN
COMMON REVIEW MISSIONS

CRM	Districts Visited	
4 th	Jalandhar	Muktsar
6 th	Patiala	Moga
8 th	Sangrur	SBS Nagar
9 th	Mansa	Hoshiarpur
11 th	Ludhiana	Kapurthala
12 th	Gurdaspur	Moga

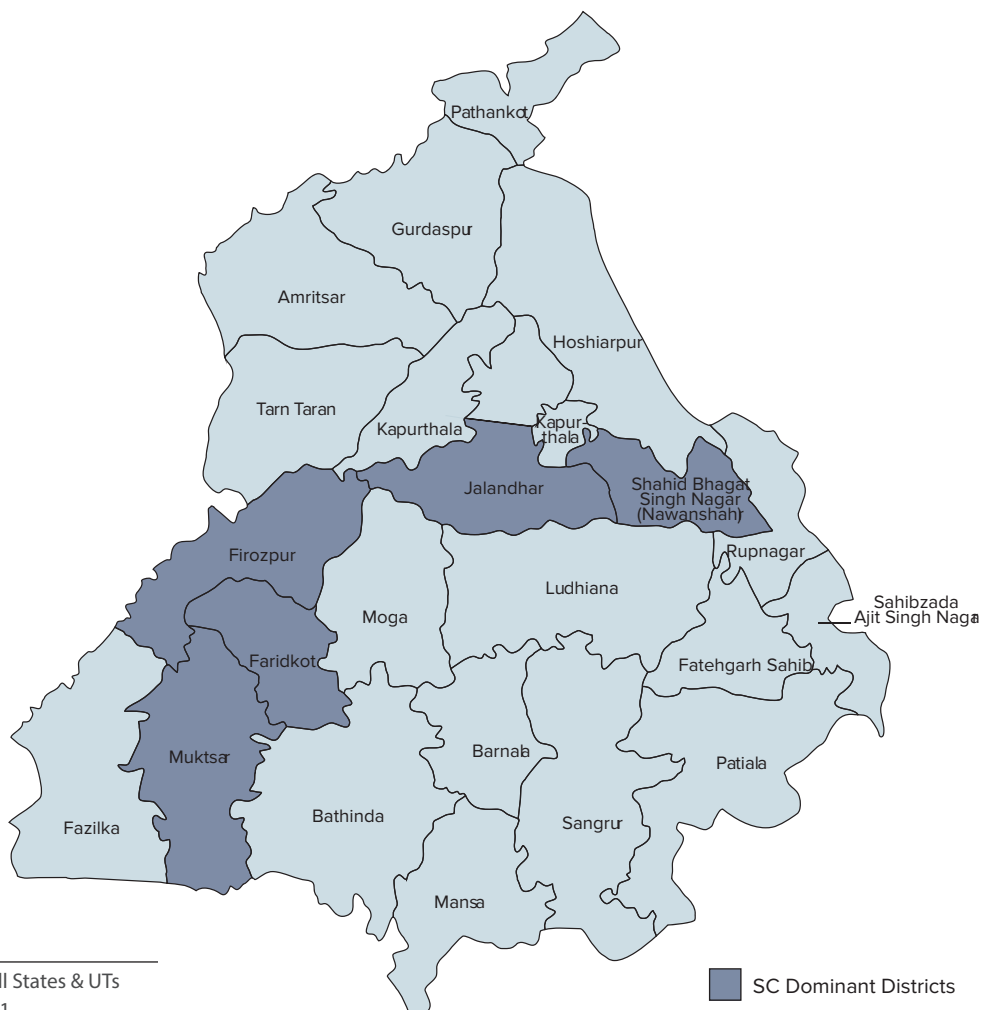
PUNJAB

1. BACKGROUND

1.1 Punjab Profile

Punjab is positioned^a 19th in India for a geographical spread of 50,362 km² (RHS 2020). The State is divided into 22 districts (RHS 2020) and estimated to have a population of over 2.77 crores^b, which accounts for approximately 2.29% of India's total population. It is projected that the population would

Figure 1: Top 5 SC Dominant Districts



^a Including all States & UTs

^b Census 2011

reach around 3.03 crores by 2021 (Census Population Projection 2019 Report). As per Census 2011, the Scheduled Caste (SC) population is 0.89 crores (31.94%). In the State, 62.5% of the population reside in rural areas, while 37.5% constitute the urban population. Out of the 22 districts, top five SC dominant districts account for 29.26% of SC population in the State (Annexure 1.1; figure 1).

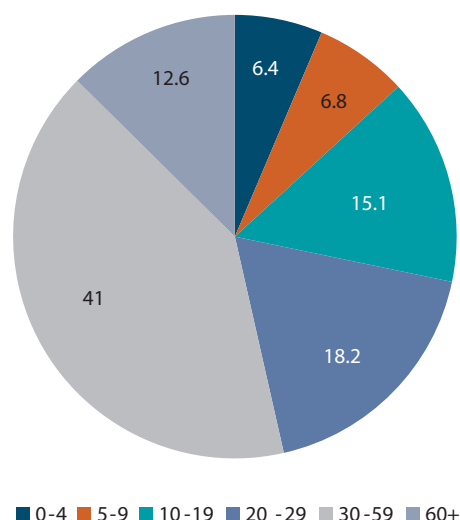
The total length of roads^c in the State is 1,39,492 km (2.79%^d), in which, the length of the national highways is 2,769 km (2.4%^e) and state highways is 1103 km (0.63%^f). About 42% of the main worker population workers in the State participate in agricultural activities^g.

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

Out of the 22 districts, 1 district has population of 30 lakhs and above, 4 districts have a population between 20-30 lakhs, 5 districts have a population between 10-20 lakhs, and 10 districts have a population less than 10 lakhs (Annexure 1.1 State profile). The State's Sex ratio at birth of 890 females for every 1000 males is lower than the national average of 899 (Annexure 1.2). It is estimated that there are 15.1% of the total population in the age group of 10-19 years, 59.2% within 20 to 59 years; while 12.6% are 60 years and above (Figure 2). The crude birth rate and the crude death rate have declined from 18.1 & 6.7 in 2005 to 14.5 & 6.6 in 2019, respectively (Annexure 2; figure 2). The literacy rate increased from 69.7% in 2001 to 75.8% in 2011, with male & female literacy rates being 80.4% and 70.7%, respectively (Annexure 1.1). As per the ESAG 2018 report, the Gross Enrollment Rate (GER)^h is 27.0% for higher education, 70.19% for senior secondary education, 87.06% for secondary education, 100.44% for elementary education, and 101.70% for primary education.

Figure 2: Punjab - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 12.6% of the State's total population. The life expectancy at 60 years of age is 20.2 for both males and females, respectively (2014-2018). In Punjab, 80% of elderly females and 34.0% elderly males living in rural areas are economically fully dependent on others. Whereas in urban areas, 80.0% of elderly females and 27.0% elderly males are economically fully dependent on others. The old

^c Basic Road Statistics 2019, MoRTH

^d Percentage of total length of roads in Punjab

^e Percentage of total length of National Highways in the country

^f Percentage of total length of State Highways in the country

^g Economic Survey 2020-21

^h Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

age dependency ratio is 16.1 in 2011; which was 15.6 for males and 16.8 for females, 18.1 in rural & 13.1 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 31% for men and 40% for women, as opposed to the national average of 31% for both (Elderly in India 2016).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+Nⁱ services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^j, institutional deliveries, C sections, distribution of IFA^k tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has declined from 145 (SRS MMR Bulletin 2007-09) to 129 (SRS MMR Bulletin 2016-18) per 1,00,000 live births. In Punjab, 81.7% of women received 4 ANC check-ups (Annexure 1.4). As per the NFHS 5 report- Bathinda, Fazilka, Firozpur, Mansa and Sangrur districts reported relatively low ANC coverage, ranging between 36.5% - 49.4%. Whereas, Fatehgarh Sahib, Jalandhar, Ludhiana, Patiala, Rupnagar and Sahibzada Ajit Singh Nagar districts reported high ANC coverage, ranging between 65.2% - 76%. As reported in HMIS 2019-20, around 98.6% of the deliveries took place in institutions, out of which 50.0% took place in public health facilities. Total percentage of C-sections is (39.3%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 50.3% are conducted at private facilities in the State. Around 88.6% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years increased from 53.5% (NFHS-4) to 58.7% (NFHS-5). Anaemia in females of reproductive age group is more than twice than that in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 44 (2005) to 19 (2019), which is exceptionally lower than the national average of 30 (Annexure 2, Figure 1). Similarly, NNMR^l and Still Birth (per 1,000 live births) rates have also significantly decreased from 29.9 and 13.8 (2005) to 13 and 5 (2018) respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 69.3 (2006-10) to 72.7 (2014-18), which is above the national average of 69.4 years (Annexure 2, Figure 3). As per the NFHS 5, the lowest SRBs^m ranging between 746 - 820 are reported in Barnala, Bathinda, Gurdaspur, Pathankot, and Sangrur districts; while the highest ones, ranging between 964 - 1037 are reported in Amritsar, Hoshiarpur, Ludhiana, Moga and Rupnagar districts.

ⁱ Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^j Antenatal Check up

^k Iron Folic Acid Tablets

^l Neonatal Mortality Rate

^m Sex Ratio at Birth

Full vaccinationⁿ coverage for children between 12 – 23 months of age declined from 93.4% (NFHS 4) to 85.2% (NFHS 5). The proportion of under 6-months children exclusively breastfed has increased from 53.0% (NFHS 4) to 55.5% (NFHS 5). An increase in childhood anaemia from 56.6% to 71.1% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 5). As per the NFHS 5 report, low stunting rates, ranging from 15.1 to 20.3 are reported from Amritsar, Hoshiarpur, Patiala, Rupnagar and Shahid Bhagat districts. While relatively higher stunting rates, ranging from 30 to 36.6 are reported by Barnala, Fatehgarh Sahib, Fazilka, Firozpur, Mansa and Muktsar districts. For under-5 wasting – Barnala, Fatehgarh Sahib, Fazilka, Gurdaspur, Ludhiana and Rupnagar districts reported a low burden, which ranged from 5.9 to 9.5; while Bathinda, Firozpur, Kapurthala, Mansa, and Muktsar districts reported a relatively higher burden, which ranged from 12.1 to 15.4

2.3 Family Planning

The TFR^o reduced from 2.1 in 2005 to 1.6 in 2018 (Annexure 2, Figure 4). As per the NFHS 5 report, the total unmet need in the State is reported as 9.9%, while the unmet need for spacing is 3.7% (NFHS 5). Bathinda district reported the highest total unmet need (17.7%), while Sahibzada Ajit Singh Nagar reported the lowest (4.7%). Approximately 50.5% of married women reported to avail any modern method of family planning in the State (NFHS 5); and the sterilization acceptance among females is 22.8% times and 0.5% in males.

2.4 Communicable Diseases

The State has 22 functional IDSP units in place^p. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 19.25% of total disease burden (Annexure 1.4). Diarrheal diseases, lower respiratory tract infections, neonatal preterm birth, drug susceptible TB and dietary iron deficiency are the leading causes of deaths due to CMNND in the State (Annexure 2, Figure 6). As per QPR reports, for TB, the annualized total case notification rate is 188% and NSP^q success rate is 78% as opposed to the national averages of 163% and 79%, respectively. For NLEP^r, the reported prevalence rate of 0.17 per 10,000 population is less than the national average of 0.61. In FY 2019-20, 14 deaths due to Dengue are reported in the State.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that as high as 64.9% of all deaths are premature in the State, while disability or morbidity accounts for 35.1%. Ischaemic heart diseases, diabetes type 2, COPD, and other musculoskeletal disorders are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 68.86% of DALYs; whereas, injuries contribute to 11.89% of DALYs in the State^s. The State is positioned 15th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 0.4% of women and 12.9% of men used any kind of tobacco, while 0.3% of women and 22.8% of men consumed alcohol. Overall, metabolic factors (high systolic blood pressure, high fasting plasma glucose, high body mass index, high LDL cholesterol) and ambient particulate matter pollution are the major risk factors for all DALYs and YLLs (Annexure 2, figure 7).

ⁿ NFHS 5 State/UT Factsheet, based on information from vaccination card only

^o Total Fertility Rate

^p QPR NHM MIS Report (Status as on 01.03.2020)

^q New Smear Positive

^r National Leprosy Eradication Programme

^s <https://vizhub.healthdata.org/gbd-compare/india>

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 4,72,506 crores. The State is positioned 15th out of 32 states in terms of per capita^t of ₹ 1,54,313. According to NHA 2017-18, the per capita Government Health Expenditure in the State is ₹ 1,086, which is below the national average of ₹ 1,753. On the other hand, the OOPE^u as a share of Total Health Expenditure is 69.4% which is higher than the national average of 48.8%. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 11,747 in public facilities, ₹ 40,579 in private facilities; whereas for urban areas, it is around ₹ 11,237 in public facilities and ₹ 33,822 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 3,187 in public facilities & ₹ 3,943 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 20,134 in public facilities and ₹ 23,289 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated to be 37% in rural and 27% in urban areas; whereas for diagnostics, it is 19% in rural and 15% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Though public health facilities have increased over time, there remains a shortfall of 17.34% SCs, 28.11% PHCs and 3.38% CHCs (Annexure 2, Figure 9). Currently, there are 2950 SCs, 427 PHCs and 143 CHCs are in place, against the required 3569 SCs, 594 PHCs and 148 CHCs in rural areas. Similarly, in urban settings, there are 100 PHCs in place against the required 247, which accounts to a shortfall of 59%. The State has 22 DHs, 41 SDHs and 4 government medical colleges. In the State, 100% of DHs (22), 95% of SDHs (39), and 81.08 % of CHCs (120) serve as functional FRUs.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 2780 HWCs (2354 SHCs, 332 PHCs & 94 UPHCs) are operationalized in the State as of 22nd December 2021^v.

In the State, 22 districts are equipped with MMUs under the NRHM, while none under the NUHM. The State has 98.76% of required ASHAs in position under the NRHM and 94.15% under the NUHM. The doctor to staff nurse ratio in place is 1:1, with 4 public health providers (MO, specialists, staff nurse & ANM) per 10,0000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 805.51 availed (events) OPD services and 30.21 availed (events) IPD services. As per the NSSO data (2017-18), 13% of all OPD cases in rural areas and 17% in urban areas; and 29% of all IPD cases in rural and urban areas utilized public health facilities. The public health facility utilization in the State is below the national averages for both (Annexure 1.6).

^t Directorate of Economics & Statistics

^u Out of Pocket Expenditure

^v AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^w

Indicator	Punjab 2011 ¹	India
Total Population (In Crore)	2.77	121.08
Rural (%)	62.52	68.85
Urban (%)	37.48	31.14
Scheduled Caste population (SC) (in crore)	0.89 (31.94%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0	10.45 (8.63%)
Total Literacy Rate (%)	75.8	72.99
Male Literacy Rate (%)	80.4	80.89
Female Literacy Rate (%)	70.7	64.64
Number of Districts in the Punjab ²	22	
Number of districts per lakh population in Punjab (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	10
	≥ 10 Lakhs - <20 Lakhs	5
	≥20 Lakhs - <30 lakhs	4
	≥30 Lakhs	1

SC Dominant (Top 5) Districts of Punjab¹

Shahid Bhagat Singh Nagar - 42.51%
Muktsar - 42.31%
Firozpur - 42.17 %
Jalandhar - 38.95%
Faridkot - 38.92%
Top 5 SC dominant district accounts for - 29.26%

1.2 Key Health Status & Impact Indicators

Indicators	Punjab	India
Infant Mortality Rate (IMR) ³	19	30
Crude Death Rate (CDR) ³	6.6	6
Crude Birth Rate (CBR) ³	14.5	19.7

^w Sources are mentioned at the end of Annexure 1

Maternal Mortality Ratio (MMR) ³	129	113
Neo Natal Mortality Rate (NNMR) ⁴	13	23
Under Five Mortality Rate (U5MR) ⁴	23	36
Still Birth Rate ⁴	5	4
Total Fertility Rate (TFR) ⁴	1.6	2.2
Life expectancy at birth ⁵	72.7	69.4
Sex Ratio at Birth ⁴	890	899

1.3 Key Health Infrastructure Indicators^x

Indicators	Numbers (Total)			
Number of District Hospitals ²	22			
Number of Sub District Hospital ²	41			
Number of Government (Central + State) Medical College ⁶	4			
Number of Private (Society + Trust) Medical Colleges ⁶	6			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	2354	899	1724	2274
PHC-HWC	332	432	432	432
UPHC-HWC	94	104	104	104
Total-HWC	2780	1435	2260	2810
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	148	143	3.38	
Number of Primary Health Centres (PHC)	594	427	28.11	
Number of Sub Centres (SC)	3,569	2,950	17.34	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	22	39	120	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	247	100	59.51	
Tribal ^{2y}	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	N/A	N/A	N/A	
Number of PHC	N/A	N/A	N/A	
Number of SC	N/A	N/A	N/A	

^x Sources are mentioned at the end of Annexure 1

^y Punjab has no separate tribal area/population

Patient Service⁹	Punjab	India
IPD per 1000 population	30.21	62.6
OPD per 1000 population	805.51	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	30.22	36.4

1.4 Major Health Indicator^z

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Punjab	India
% DALY ^{aa} accountable for CMNNDs ^{bb}	19.25	27.46
% DALY accountable for NCDs	68.86	61.43
% DALY accountable for Injuries	11.89	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Punjab	India
Level of Birth Registration (%)	88.3	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	17.5	20.7
RMNCHA+N		
Maternal Health⁹	Punjab	India
% 1st Trimester registration to Total ANC Registrations	79.9	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	81.7	79.4
Total Reported Deliveries	3,79,150	21410780
% Institutional deliveries to Total Reported Deliveries	98.6	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	50	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	50	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	39.3	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	28.4	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	50.3	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	88.6	53.4
Neonatal⁹	Punjab	India
% live birth to Reported Birth	98.7	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	7.7	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	80.6	89.9

^z Sources are mentioned at the end of Annexure 1

^{aa} Disability Adjusted Life Years

^{bb} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Punjab	India
Sick New Born Care Unit (SNCU)	24	895
New Born Stabilization Unit (NBSU)	56	2418
New Born Care Corner (NBCC)	208	20337
Child Health & Nutrition¹⁰	Punjab (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	4.9	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	60.7	60.6
Children under 5 years who are underweight (weight-for-age) (%)	16.9	32.1
Child Immunization¹⁰	Punjab (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	85.2	83.8
Children age 12-23 months who have received BCG (%)	95.3	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	88.1	87.9
Family Planning¹⁰	Punjab (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	3.7	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Punjab	India
Number of districts with functional IDSP unit	22	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Punjab	India
Annualized total case notification rate (%)	188	163
New Smear Positive (NSP) Success rate (in %)	78	79
National Leprosy Eradication Programme (NLEP)¹¹	Punjab	India
Prevalence Rate/10,000 population	0.17	0.61
Number of new cases detected	531	1,14,359
Malaria, Kala Azar, Dengue¹¹	Punjab	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	14	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Punjab (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	20.6	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	37.6	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Punjab (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	18.5	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	24.5	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	5.8	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	6.3	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Punjab (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	0.4	8.9
Men who use any kind of tobacco (%)	12.9	38
Women who consume alcohol (%)	0.3	1.3
Men who consume alcohol (%)	22.8	18.8
Injuries		
Road Traffic Accident¹²	Punjab	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	15	NA
Total number of fatal Road Accidents	4,190	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	71.3	33.7
Number of persons killed in Road Accidents	4525	115113

1.5 Access to Care^{cc}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Punjab	India
Number of Districts equipped with MMU under NRHM	22	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Punjab	India
102 Type	0	9955
104 Type	0	605
108 Type	242	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	496	11070

^{cc} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Punjab	India
Total number of ASHA targeted under NRHM	17360	946563
Total number of ASHA in position under NRHM	17144	904211
% of ASHA in position under NRHM	98.76	96
Total number of ASHA targeted under NUHM	2600	75597
Total number of ASHA in position under NUHM	2448	64272
% of ASHA in position under NUHM	94.15	85
Community Process¹¹	Punjab	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	12982	554847
Number of Mahila Arogya Samitis (MAS) formed	7473	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Punjab	India
DH	22	796
CHC	142	6036
PHC	363	20273
UHC	11	126
UPHC	100	3229
Human Resource for Health ¹⁴		
HRH Governance	Punjab	
Specialist Cadre Available in the state (Y/N)	No	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	Yes	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	37
	Dentists (%)	18
	MO MBBS (%)	18
	Nurse (%)	34
	LT (%)	22
	ANM (%)	26
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	5 per 10,000	4 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	3: 1	2: 1

Ranking: Human Resource Index of Punjab¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{dd}	9121	8723	6982	1741	2139	24.44
Staff Nurse	8113	6010	4022	1988	4091	
Lab Technician	1823	1554	1205	349	618	
Pharmacists	987	1765	1907	-142	0	
MO MBBS ^{ee}	2199	2612	2450	162	0	
Specialist ^{ff}	2259	1978	1324	654	935	

1.6 Healthcare Financing^{gg}

National Health Accounts (NHA) (2017-18)	Punjab		India	
Per Capita Government Health Expenditure (in ₹)	1,086		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	0.7		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	5		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	69.4		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Punjab		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	13	17	33	26
IPD - % of hospitalized cases using public facility	29	29	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	875	307	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	662	818	845	915
IPD - Per hospitalized case (in INR) - Public	11747	11237	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	40579	33822	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	19	15	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	37	27	53	43

^{dd} MPW – Multi Purpose Health Worker (Female + Male)

^{ee} MO MBBS (Full Time)

^{ff} Specialist (All Specialist)

^{gg} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	3187	3943	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	20134	23289	20,692	26,701
State Health Expenditure	Punjab		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	3.8		5 ^{hh}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{hh} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

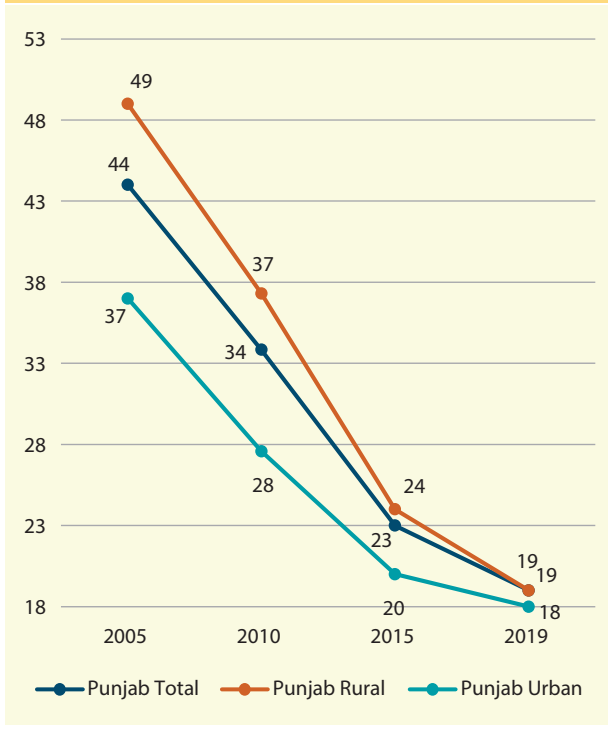


Figure 2: CBR & CDR Trend

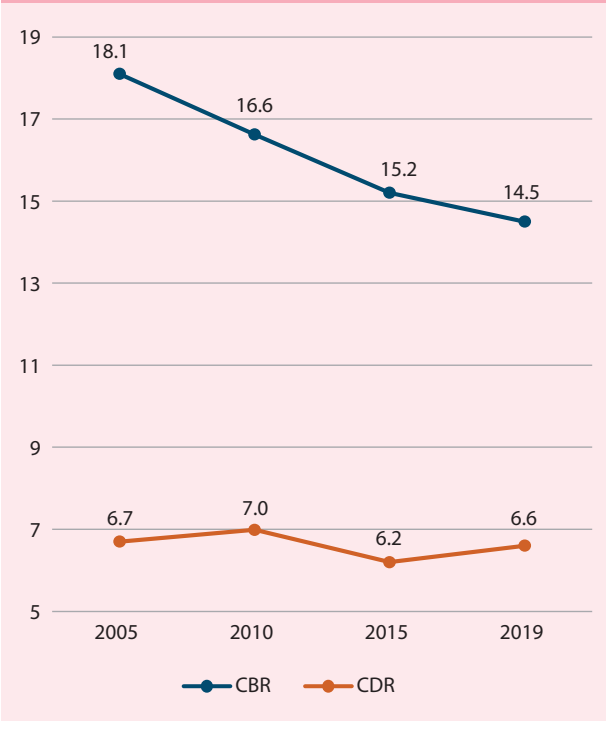


Figure 3: Life Expectancy At Birth Trend

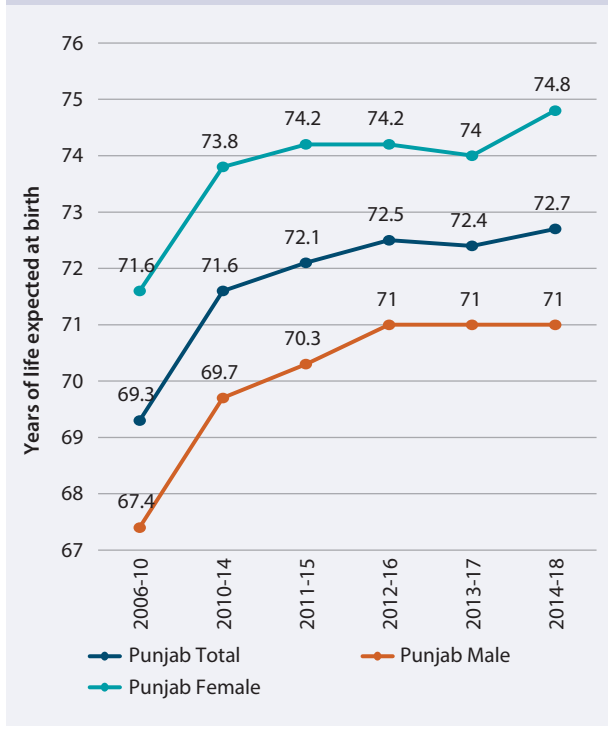


Figure 4: NNMR, TFR & Still Birth Trend

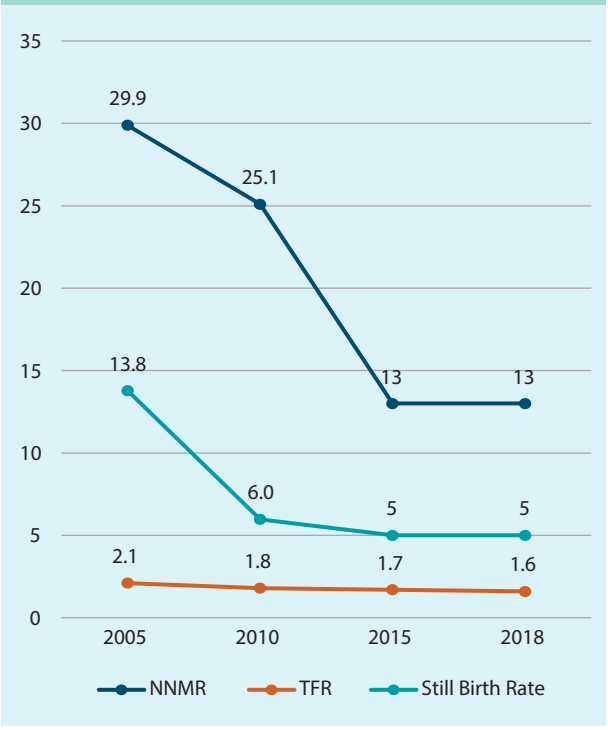


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

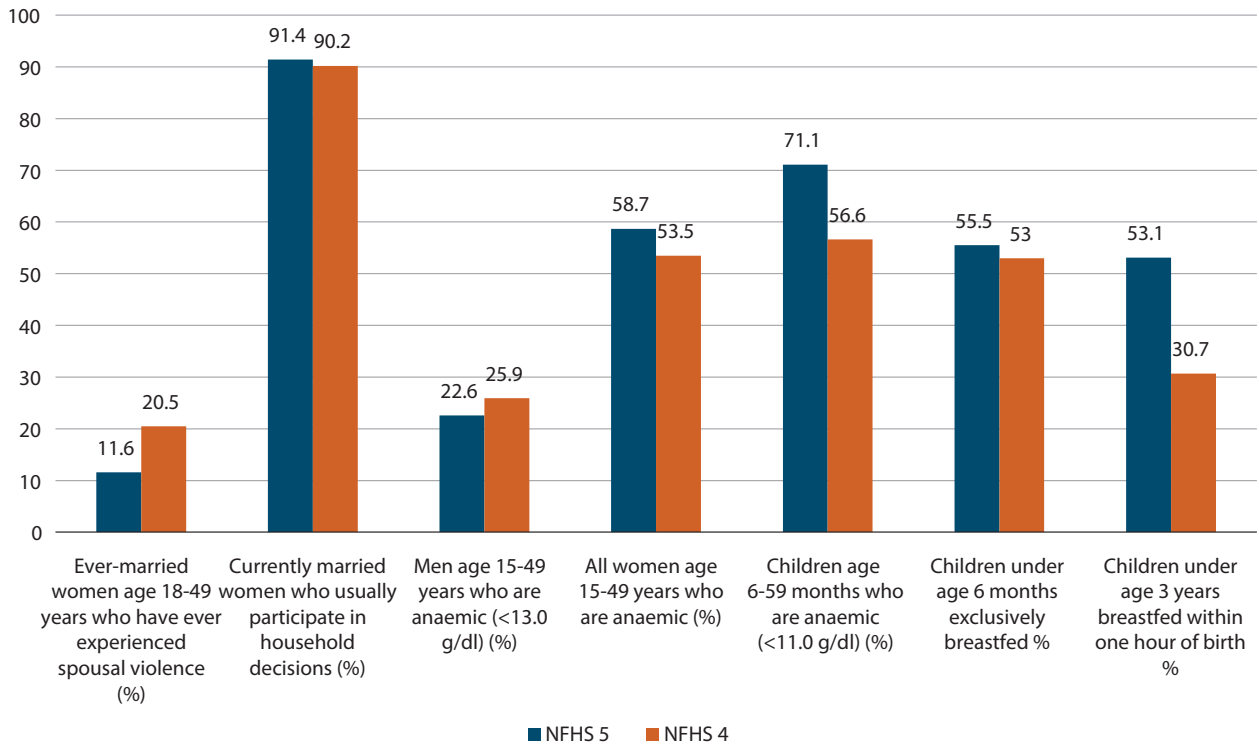


Figure 6: Top 15 causes of DALYs, 1990-2019

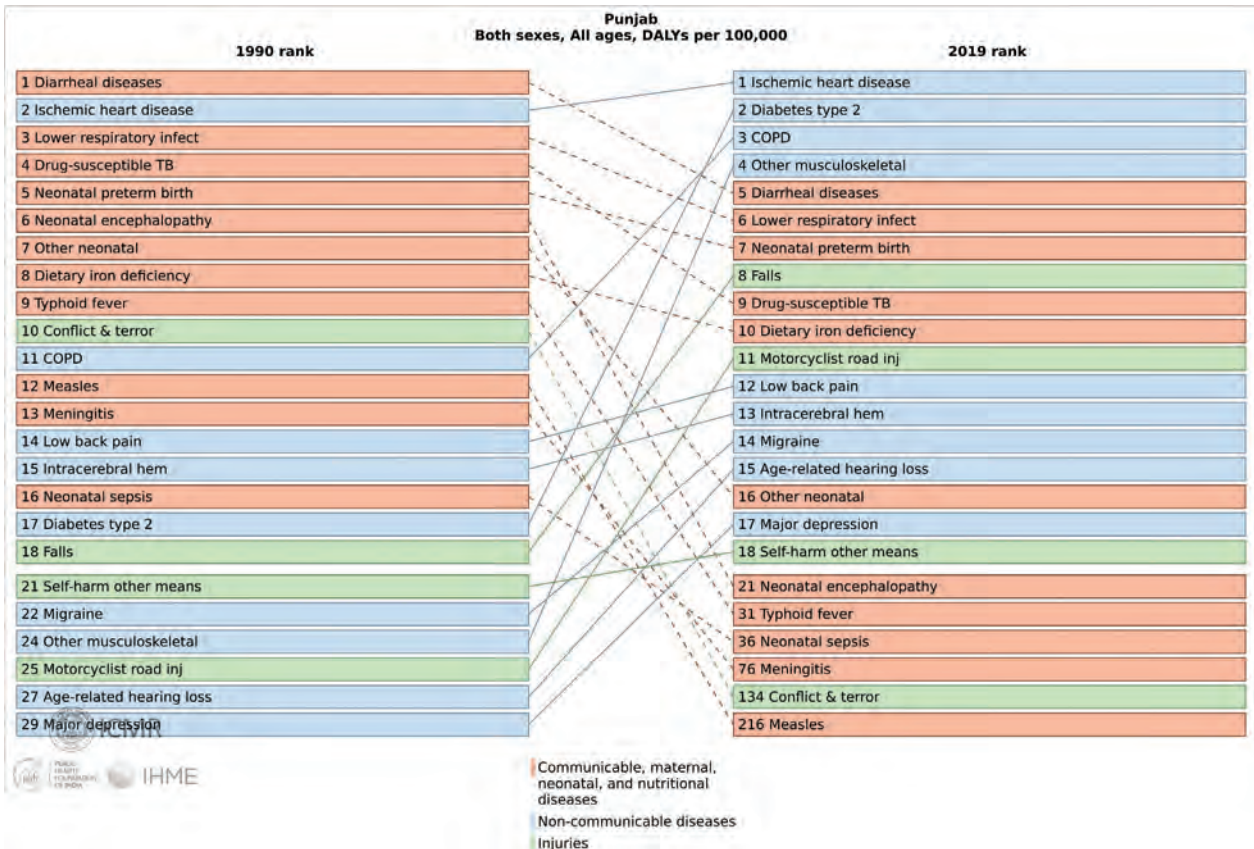


Figure 7: Top 15 risk of DALYs, 1990-2019

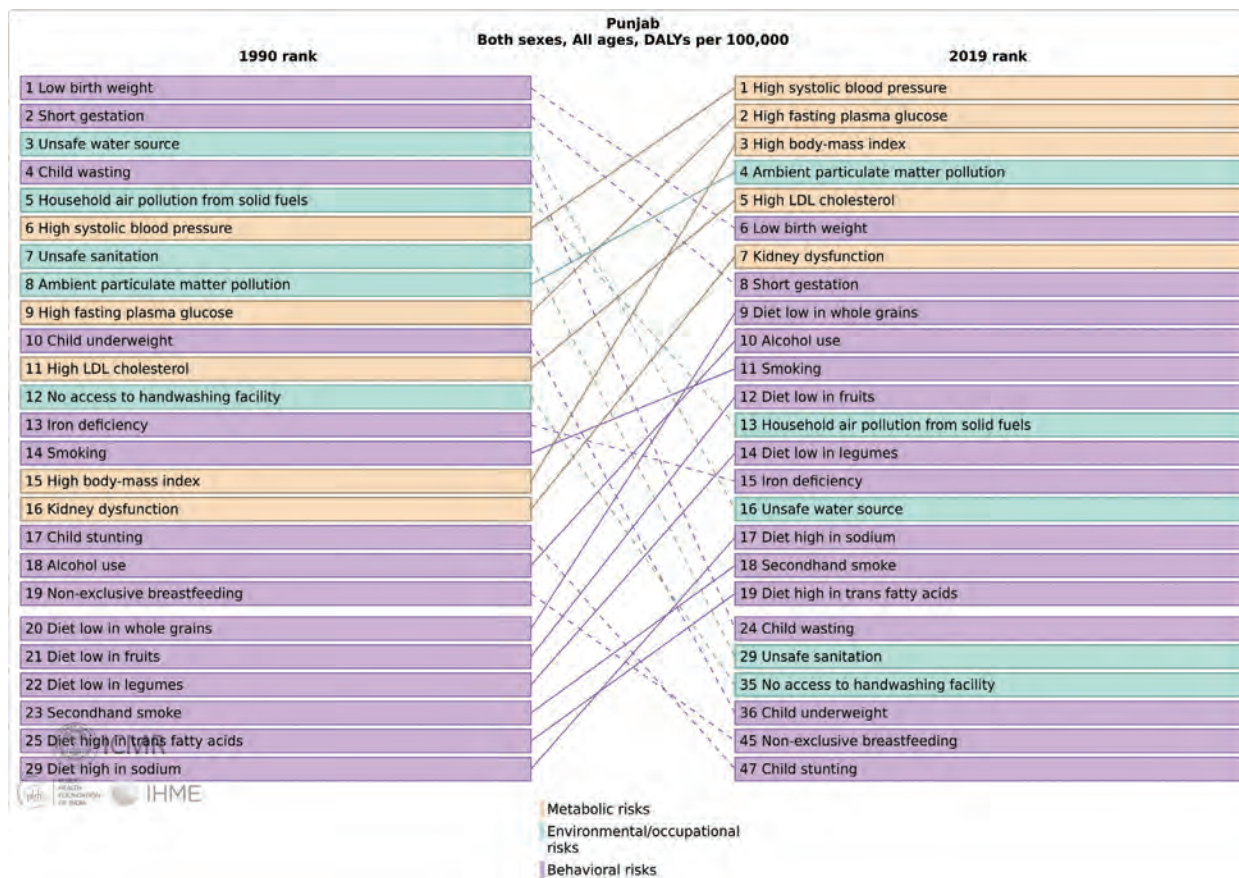


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

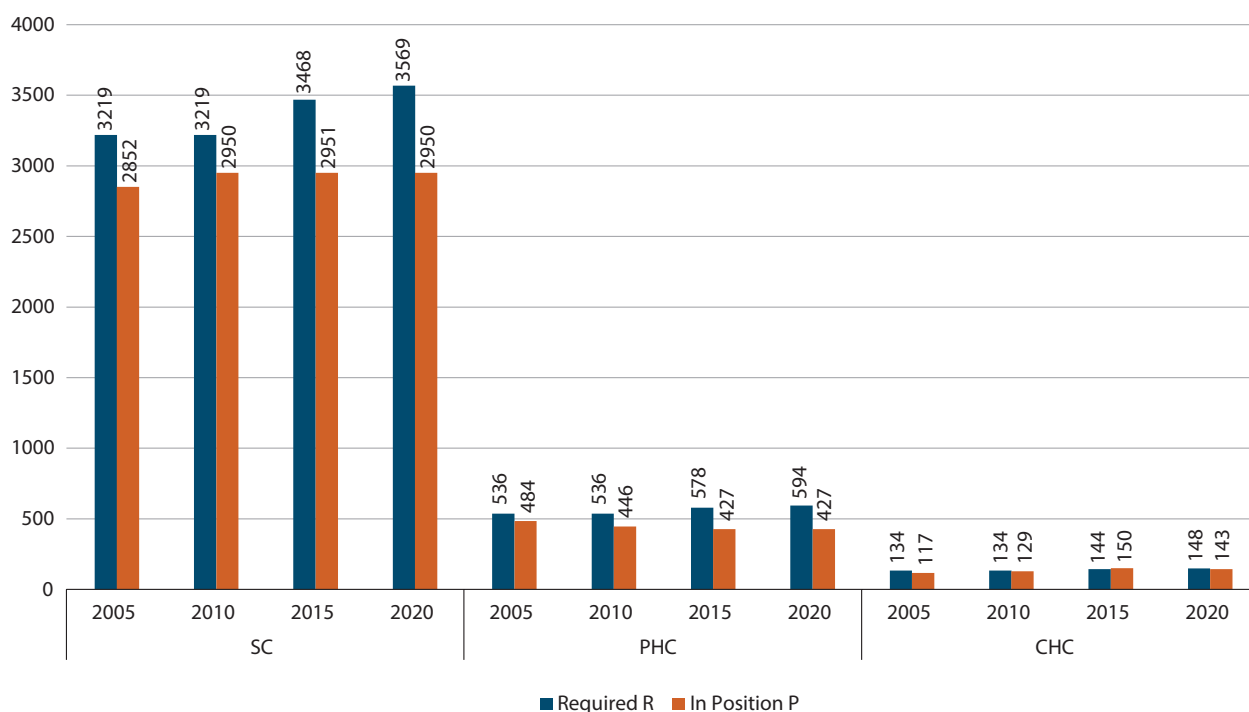
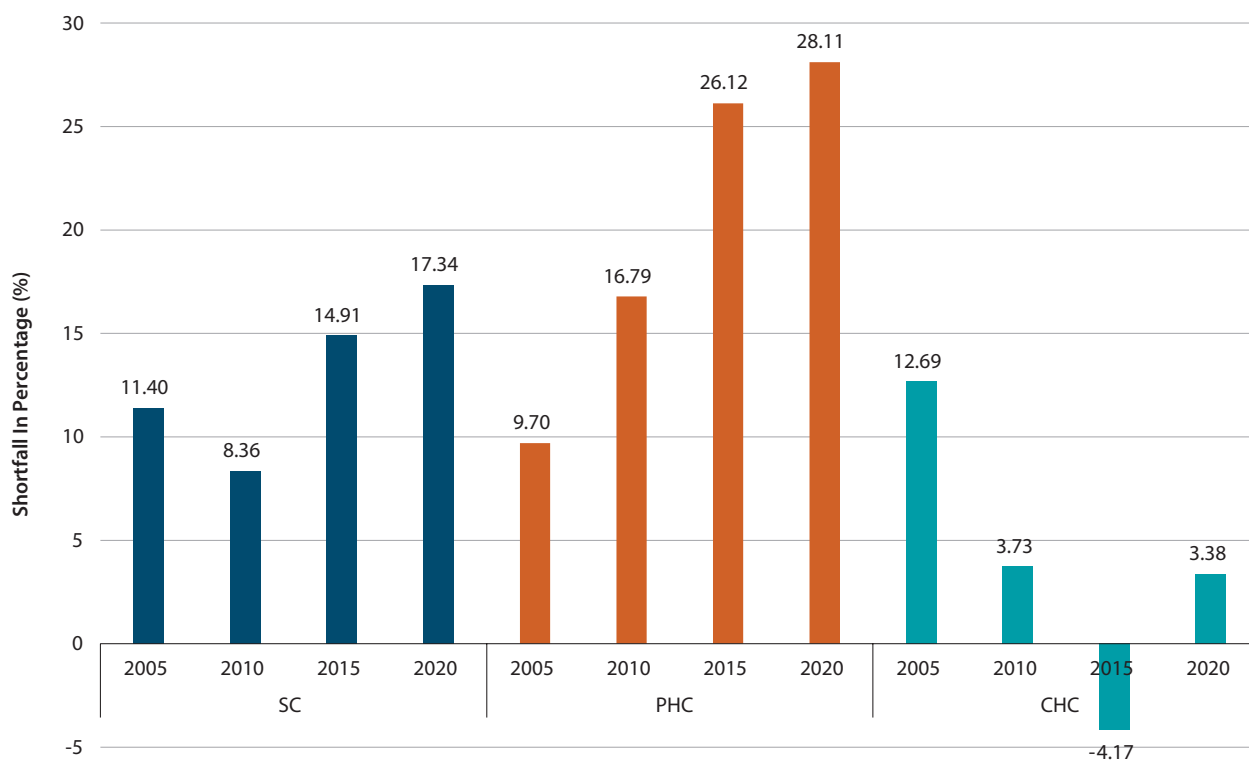


Figure 9: Year Wise Health Infrastructure Shortfall (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)															
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted^ (Height For Age) (%)	Children Under 5 Years - Wasted^ (Weight For Height) (%)		
1	Punjab	NFHS 4 Total	860	21.2	NA	7.6	75.8	6.8	18.9	6.2	68.5	90.5	93.4	5.9	25.7	15.6		
2	Punjab	NFHS 5 Urban	858	27.5	81.6	8.8	68.4	2.8	26.6	8.8	60.8	92	81.7	12.2	25.7	11.7		
3	Punjab	NFHS 5 Rural	931	23.6	78	8.7	65.4	3.2	19.7	10.5	58.4	95.5	87.1	11.8	23.9	10		
4	Punjab	NFHS 5 Total	904	25.2	79.4	8.7	66.6	3.1	22.2	9.9	59.3	94.3	85.2	11.9	24.5	10.6		
5	Amritsar	NFHS 5 Total	1037	26.2	80.2	9.2	68.9	2.7	26.3	9.7	56.5	95.9	74.3	8.2	19.4	11.9		
6	Barnala	NFHS 5 Total	755	20.7	77.9	12.8	69.3	3.2	20.7	9.4	63.8	96.7	86.7	20.5	33.8	9.4		
7	Bathinda	NFHS 5 Total	820	20.1	69.2	14.2	45.3	6.2	13.2	17.7	48.2	93.1	74.5	16.2	23	15.4		
8	Faridkot	NFHS 5 Total	914	20.4	72.6	11.9	56.3	3	17.1	15.7	53.4	94.3	81.5	16.9	28.1	10.3		
9	Fatehgarh Sahib	NFHS 5 Total	844	35.1	86.9	7.3	71.6	2	23.6	7.7	76	96.6	95.9	13	30	7.1		
10	Fazilka	NFHS 5 Total	951	20.6	69.4	12.4	68	4.3	20.1	7.1	36.5	91.7	72.6	13	35.9	9.5		
11	Firozpur	NFHS 5 Total	892	21	75.4	10.5	77.3	6.9	23.3	5.4	48.4	95.5	86.5	6.4	30	12.9		
12	Gurdaspur	NFHS 5 Total	746	23.5	82	6.5	58.5	3.3	20.8	15.4	61.1	92.4	90.2	14.6	25.1	9.5		
13	Hoshiarpur	NFHS 5 Total	970	27.7	91.3	4.7	65.6	1.2	22.6	11.9	59.7	98.3	97.6	12.6	19.3	11.5		
14	Jalandhar	NFHS 5 Total	936	25.9	86.8	7.4	66.6	2	21	8.8	72.8	92.3	95.6	12.9	24.8	10.3		
15	Kapurthala	NFHS 5 Total	922	20.7	84.1	6.9	61	1.6	20.5	13.4	51.4	95	83.4	14	24.6	12.8		
16	Ludhiana	NFHS 5 Total	964	25.2	82.4	6.5	69.8	1.8	26.6	8.3	65.2	90.1	79.8	14.1	22.1	5.9		

17	Mansa	NFHS 5 Total	871	18.4	67.4	11.5	67.6	7.3	15.7	7.2	49.4	88.8	11.7	36.6	12.1
18	Moga	NFHS 5 Total	1014	23.7	74.7	13.1	75	3.2	28.2	8	58.4	93	2.8	22	12
19	Muktsar	NFHS 5 Total	877	23.9	71.1	8.6	72	3	22.6	6.2	57.9	96.4	11.7	35	13.6
20	Pathankot	NFHS 5 Total	756	27	88.7	4.6	62.6	1.7	22.2	10.5	52.4	94.8	8.7	22.1	10.3
21	Patiala	NFHS 5 Total	954	33.8	76.6	7.8	71.7	2.8	21.1	7.5	72	97.3	12.6	20.3	9.9
22	Rupnagar	NFHS 5 Total	1022	37.8	86.6	2.4	71.8	1.8	20.5	10.8	65.2	97.8	8.3	15.1	9.1
23	Sahibzada Ajit Singh Nagar	NFHS 5 Total	855	31	83.5	10.6	76.5	2.4	29.7	4.7	69	97.4	18	26.2	10.7
24	Sangrur	NFHS 5 Total	798	18.7	78.3	8	57	4.3	17.9	12.3	47.7	94.7	7.8	23.4	10.4
25	Shahid Bhagat Singh Nagar	NFHS 5 Total	833	23.3	88.1	6.4	66.1	3	25	10.8	60.5	99.3	7.7	17.9	12
26	Tarn Taran	NFHS 5 Total	890	25	66	10.7	73.7	2.3	23.7	8	60.3	96	5.6	23.8	11.3

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'Vaccinated'; Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer; percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best five performing districts within the districts for a particular indicator

B. Red – Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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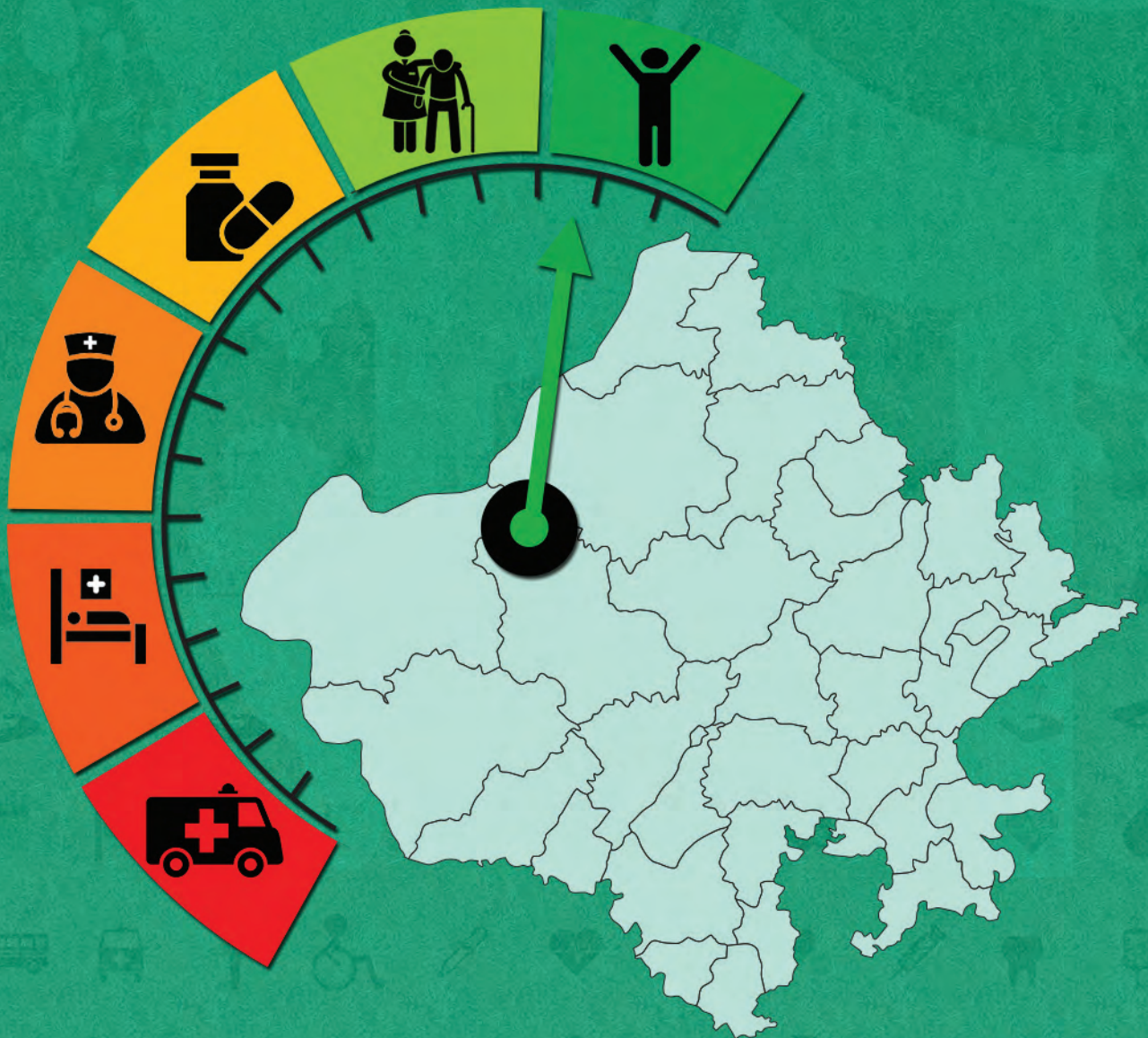
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



RAJASTHAN

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
1 st	Alwar	Churu
2 nd	Jaipur	Dungarpur
3 rd	Alwar	Bhilwara
4 th	Pali	Ajmer
5 th	Barmer	Chittaurgarh
6 th	Sawai Madhopur	Udaipur
8 th	Rajsamand	Sri Ganga Nagar
9 th	Dholpur	Bikaner
12 th	Jodhpur	Baran
13 th	Churu	Sirohi
14 th	Karauli	Jalore

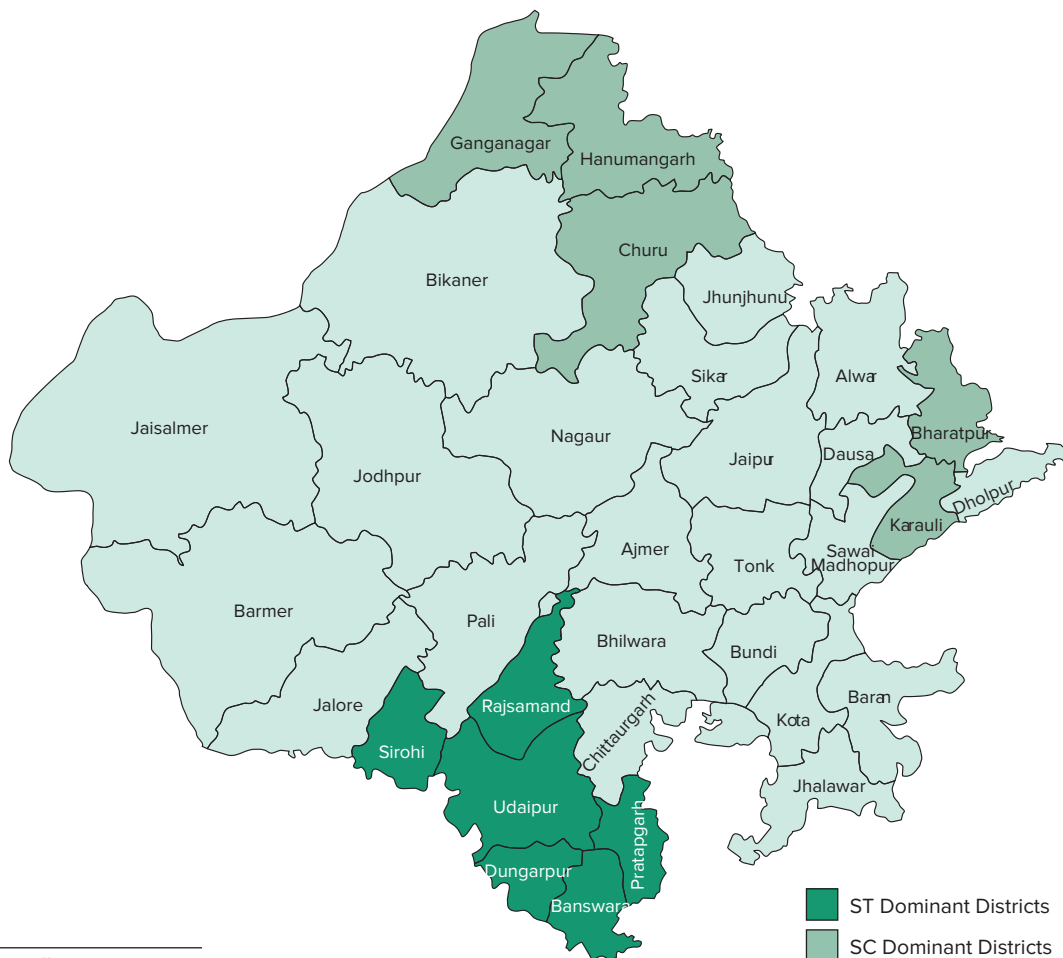
RAJASTHAN

1. BACKGROUND

1.1 Rajasthan Profile

Rajasthan is the largest state^a in India with a geographical spread of 3,42,239 km² (RHS 2019). It is divided into 34 districts and is estimated to have a population of over 6.85 crores^b, which accounts for approximately 5.66% of India's total population^c. It is projected that the population would reach around

Figure 1: Top 5 ST & SC Dominant Districts



^a Including all States & UTs

^b Census 2011

^c RHS 2019

7.9 crores by 2021^d. As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 1.2 crores (17.83%) and 0.92 crores (13.48%), respectively. Around 75.13% of the population reside in rural areas, while the rest constitute the urban population. Out of the 34 districts, top five ST & SC dominant districts account for 51.14% of ST & 21.09% of SC population in Rajasthan (Figure 1 & Annexure 1, Rajasthan Profile).

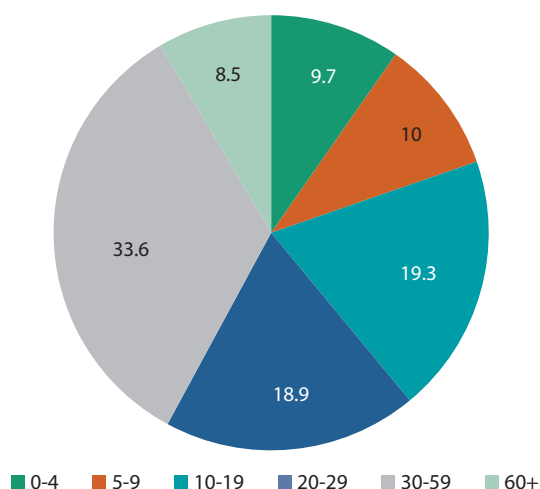
At present, 61 cities^e are covered under National Urban Health Mission. There are no metropolitan cities but has 3 Million plus cities in the State. The total length of roads^f in Rajasthan is 2,65,599 km (5.31%^g), in which, the length of the national highways is 7,906 km (6.9%^h) and state highways is 15,019 km (8.58%ⁱ). About 74.0% of the main worker population are self-employed in the State, followed by casual laborers and wage earners (26%)^j.

A detail report on the key indicators has been attached as Annexure 1.

1.2 Demography

Out of the 34 districts, 5 districts have a population of 30 lakhs and above, 9 districts have a population between 20-30 lakhs, 17 districts have a population between 10-20 lakhs, and 2 districts have a population less than 10 lakhs (Annexure 1.1 Rajasthan profile). Rajasthan's Sex ratio at birth (871 females for every 1000 males) is less than the national average of 899 (Annexure 1.2). It is estimated that 19.3% of the total population are in the age group of 10-19 years, 52.5% within 20 to 59 years; while 8.5% are 60 years and above (Figure 2). The crude birth rate and the crude death rate have declined from 28.6 & 7.0 in 2005 to 23.7 & 5.7 in 2019, respectively (Annexure 2; figure 2). The literacy rate increased from 60.4% in 2001 to 66.1% in 2011, with male & female literacy rates being 79.2% and 52.1%, respectively (Annexure 1.1). As per the ESAG 2018 report, the Gross Enrollment Rate (GER)^k is 20.2% for higher education, 59.31% for senior secondary education, 76.06% for secondary education, 97.24% for elementary education, and 100.43% for primary education.

Figure 2: Rajasthan - distribution of estimated population 2021 (%)



^d Census Population Projection Report 2019

^e QPR NHM MIS Report as on 31 Dec 2020

^f Basic Road Statistics 2019, MoRTH

^g Percentage of total length of roads in Rajasthan

^h Percentage of total length of National Highways in the country

ⁱ Percentage of total length of State Highways in the country

^j AnnualReportPLFS2018-19; http://mospi.nic.in/sites/default/files/publication_reports/Annual_Report_PLFS_2018_19_HL.pdf

^k Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 8.5% of the Rajasthan's total population. The life expectancy at 60 years of age is 17.0 and 20.1 for males and females, respectively (2014-2018). In Rajasthan, 68% of the elderly females and 31% elderly males living in rural areas; 72% of the elderly females and 21% elderly males in urban areas are economically fully dependent on others. The old age dependency ratio is 13 in 2011; which is 11.9 for males and 14.1 for females; 13.7 in rural & 11.1 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 19% for men and 16% for women, both of which are below the national average of 31% (Elderly in India).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

Rajasthan has been able to provide RMNCHA+N^l services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^m, institutional deliveries, C sections, distribution of IFAⁿ tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined from 318 (SRS MMR Bulletin 2007-09) to 164 (SRS MMR Bulletin 2016-18) per 1,00,000 live births. In Rajasthan, 60.7% of pregnant women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 (Annexure 3), Baran, Bundi, Chittaurgarh, Jhalawar and Kota districts reported better ANC coverage ranging between 72.3%-81.3%. Whereas Alwar, Bharatpur, Churu, Dhaulpur and Karauli districts reported poor ANC coverage ranging between 30%-45%. As reported in HMIS 2019-20, around 98.3% of the deliveries took place in institutions, out of which 76% took place in public health facilities. Total percentage of C-sections is (12.3%) are on par with the WHO's standard (10-15%); and out of the total reported C-sections, about 19.8% are conducted at private facilities in Rajasthan. Around 9.2% of women received their first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years increased from 46.8% (NFHS 4) to 54.4% (NFHS 5). Anaemia in females of reproductive age group is almost twice than that in men of similar age group (Annexure 2, figure 5).

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, Rajasthan has shown a significant decline in IMR from 68 (2005) to 35 (2019) (Annexure 2, Figure 1). Similarly, NNMR^o and Still Birth (per 1,000 live births) rates have also significantly decreased from 42.7 and 11.4 (2005) to 26 and 6 (2018) respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 66.5 (2006-10) to 68.7 (2014-18) (Annexure 2, Figure 3). As per NHFS 5, the low SRB^p ranging from 769- 802 are reported in Bhilwara, Bundi, Jalor, Rajsamand and Sikar districts, while the high ones, ranging from 998- 1127 are reported in Alwar, Baran, Hanumangarh, Pali and Sirohi districts.

^l Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^m Antenatal Check up

ⁿ Iron Folic Acid Tablets

^o Neonatal Mortality Rate

^p Sex Ratio at Birth

Full vaccination^q coverage for children between 12 – 23 months of age has shown an improvement from 69.7% (NFHS 4) to 85.3% (NFHS 5). The percentage of under 6-months children exclusively breastfed has also improved from 58.2% (NFHS 4) to 70.4 (NFHS 5). The prevalence of childhood anaemia has increased from 60.36% (NFHS 4) to 71.5% (NFHS 5) (Annexure 2, Figure 5). As per NFHS 5 report, comparatively less burden of stunting in the state, ranging from 20.9% to 23.1% are reported from Ajmer, Bhilwara, Bikaner, Jhunjhunun and Sikar districts. While considerably higher stunting rates, ranging from 40.3% to 46%, are reported from Banswara, Baran, Bharatpur, Dhaulpur and Jalor districts. For under-5 wasting – Barmer, Bharatpur, Jalor, Sikar and Udaipur districts reported a low burden, ranging from 8.6% to 12.8%; while Bikaner, Ganganagar, Jaisalmer, Jhalawar and Karauli districts reported a relatively higher burden, ranging from 24.9% to 29%.

2.3 Family Planning

The TFR^r reduced from 3.7 in 2005 to 2.5 in 2018 (Annexure 2, Figure 4). As per the NFHS 5 report, the total unmet need in Rajasthan is reported as 7.6%, while the unmet need for spacing is 3.7%. Jalor district reported the highest total unmet need of 14.8% while Baran reported the lowest (4%). Approximately 62.1% of married women reported to avail any modern method of family planning in the State (NFHS 5), with sterilization acceptance being 42.4% among females, and 0.2% among males.

2.4 Communicable Diseases

Rajasthan has 33 districts having functional IDSP units^s. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 37.27% of total disease burden (Annexure 1.4). Lower respiratory infection, neonatal preterm birth, drug susceptible TB, diarrheal diseases & other neonatal conditions are the leading causes of deaths due to CMNND in Rajasthan (Annexure 2, Figure 6). As per QPR reports, for TB, the annualized total case notification rate is 194% and NSP^t success rate is 76% as opposed to the national averages of 163% and 79%. For NLEP^u, the reported prevalence rate of 0.14 per 10,000 population is less than the national average of 0.61. In FY 2019-20, 17 deaths due to Dengue and 1 death due to Malaria are reported in Rajasthan.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that as high as 69.7% deaths are premature in the State, while disability or morbidity accounts for 30.3%. COPD, Ischaemic heart diseases, Asthma, and Self-harm means are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 51.35% of DALYs, whereas, injuries contribute to 11.38% of DALYs in the State^v. Rajasthan is positioned 6th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). As per NFHS 5, it is reported that 6.9% of women and 42% of men used any kind of tobacco, while 0.3% of women and 11% of men consumed alcohol. Overall, smoking, ambient particulate matter pollution, household air pollution from solid fuels, high systolic blood pressure, and high fasting plasma glucose are the top five major risk factors for all DALYs (Annexure 2, figure 7).

^q NFHS 5 Rajasthan Factsheet, based on information from vaccination card only

^r Total Fertility Rate

^s QPR NHM MIS Report (Status as on 01.03.2020)

^t New Smear Positive

^u National Leprosy Eradication Programme

^v <https://vizhub.healthdata.org/gbd-compare/india>

2.6 Health Care Financing

Rajasthan's Net State Domestic Product (NSDP) for FY 2018-19 is 8,45,247 crores. The State is positioned 21st out of 32 states in terms of per capita^w of ₹ 1,10,606. According to NHA 2017-18, the per capita Government Health Expenditure in the Rajasthan is ₹ 1,369 which is less than the national average of ₹ 1,753. On the other hand, the OOPE^x as a share of Total Health Expenditure is 49.6%, which is slightly higher than the national average of 48.8%. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 9,685 in public facilities, ₹ 27,760 in private facilities; whereas for urban areas, it is around ₹ 7,773 in public facilities and ₹ 30,435 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 2,528 in public facilities & ₹ 14,773 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 2,028 in public facilities and ₹ 18,588 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated as 14% in rural and urban areas; whereas for diagnostics, it is 61% in rural and 39% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). There is no shortfall in the required SCs, & PHCs (Annexure 2, Figure 9). Currently, there are 13,480 SCs, 2,094 PHCs, and 548 CHCs in place, against the required 12,902 SCs, 2,095 PHCs and 523 CHCs. Whereas, in urban settings, there are 383 PHCs in place against the required 412, amounting to a shortfall of 7%. The State has 27 DHs, 20 SDHs and 15 government medical colleges. In tribal catchments, there are 2,970 SCs, 197 PHCs and 65 CHCs in place, against the required 3,262 SCs, 489 PHCs and 122 CHCs. This accounts to a shortfall of 8.95% of the required SCs, 59.71% of the required PHCs and 46.72% of the required CHCs in the tribal areas.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 2,457 HWCs (191 SHCs, 1,975 PHCs & 291 UPHCs) are operationalized in the State to deliver Comprehensive Primary Healthcare, as of 22nd December 2021^y.

In Rajasthan, 34 districts are equipped with MMUs under the NRHM, and 4 under the NUHM. Rajasthan has 94% of required ASHAs in position under the NRHM and 78% under the NUHM. The doctor to staff nurse ratio in place is 1:3, with 6 public health providers (MO, specialists, staff nurse & ANM) per 10,000 populations (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 1832.0 availed (events) OPD services and 78.6 availed (events) IPD services. As per the NSSO data (2017-18), 43% of all OPD cases in rural areas and 32% in urban areas; and 51% of all IPD cases in rural areas & 50% in urban areas utilized public health facilities. The public health facility utilization in Rajasthan is better than the national averages for both (Annexure 1.6).

^w Directorate of Economics & Statistics

^x Out of Pocket Expenditure

^y AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile

Indicator	Rajasthan 2011 ¹	India
Total Population (In Crore)	6.85	121.08
Rural (%)	75.13	68.85
Urban (%)	24.87	31.14
Scheduled Caste population (SC) (in crore)	1.2 (17.83%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.92 (13.48%)	10.45 (8.63%)
Total Literacy Rate (%)	66.1	72.99
Male Literacy Rate (%)	79.2	80.89
Female Literacy Rate (%)	52.1	64.64
Number of Districts in the Rajasthan ²	34	
Number of districts per lakh population in Rajasthan (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	2
	≥ 10 Lakhs - <20 Lakhs	17
	≥20 Lakhs - <30 lakhs	9
	≥30 Lakhs	5

ST SC Dominant (Top 5) Districts of Rajasthan¹

ST Dominant Districts (%)	SC Dominant Districts (%)
Banswara - 76.38%	Ganganagar - 36.58%
Dungarpur - 70.82%	Hanumangarh - 27.84%
Pratapgarh - 63.42%	Karauli - 24.30%
Udaipur - 49.70%	Churu - 22.14%
Sirohi - 28.22%	Bharatpur - 21.86%
Top 5 ST dominant district accounts for - 51.14%	Top 5 SC dominant district accounts for - 21.09%

1.2 Key Health Status & Impact Indicators

Indicators	Rajasthan	India
Infant Mortality Rate (IMR) ³	35	30
Crude Death Rate (CDR) ³	5.7	6
Crude Birth Rate (CBR) ³	23.7	19.7

² Sources are mentioned at the end of Annexure 1

Maternal Mortality Ratio (MMR) ³	164	113
Neo Natal Mortality Rate (NNMR) ⁴	26	23
Under Five Mortality Rate (U5MR) ⁴	40	36
Still Birth Rate ⁴	6	4
Total Fertility Rate (TFR) ⁴	2.5	2.2
Life expectancy at birth ⁵	68.7	69.4
Sex Ratio at Birth ⁴	871	899

1.3 Key Health Infrastructure Indicators^{aa}

Indicators	Numbers (Total)			
Number of District Hospitals ²	27			
Number of Sub District Hospital ²	20			
Number of Government (Central + State) Medical College ⁶	15			
Number of Private (Society + Trust) Medical Colleges ⁶	8			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	191	4563	8518	11155
PHC-HWC	1975	2078	2078	2078
UPHC-HWC	291	245	245	245
Total-HWC	2,457	6,886	10,841	13,478
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	523	548	-4.78	
Number of Primary Health Centres (PHC)	2,095	2,094	0.05	
Number of Sub Centres (SC)	12,902	13,480	-4.48	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	27	17	108	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	412	383	7.04	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	122	65	46.72	
Number of PHC	489	197	59.71	
Number of SC	3,262	2,970	8.95	

^{aa} Sources are mentioned at the end of Annexure 1

Patient Service⁹	Rajasthan	India
IPD per 1000 population	78.6	62.6
OPD per 1000 population	1832.0	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	35.4	36.4

1.4 Major Health Indicator^{bb}

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Rajasthan	India
% DALY ^{cc} accountable for CMNNDs ^{dd}	37.27	27.46
% DALY accountable for NCDs	51.35	61.43
% DALY accountable for Injuries	11.38	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Rajasthan	India
Level of Birth Registration (%)	96.4	92.7
Level of Death Registration (%)	98.6	92
Percentage of medically certified deaths to total registered deaths (%)	13.9	20.7
RMNCHA+N		
Maternal Health⁹	Rajasthan	India
% 1st Trimester registration to Total ANC Registrations	70	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	60.7	79.4
Total Reported Deliveries	13,76,805	21410780
% Institutional deliveries to Total Reported Deliveries	98.3	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	76	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	24	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	12.3	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	10	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	19.8	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	9.2	53.4
Neonatal⁹	Rajasthan	India
% live birth to Reported Birth	98.2	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	14.5	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	87.6	89.9

^{bb} Sources are mentioned at the end of Annexure 1

^{cc} Disability Adjusted Life Years

^{dd} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Rajasthan	India
Sick New Born Care Unit (SNCU)	60	895
New Born Stabilization Unit (NBSU)	287	2418
New Born Care Corner (NBCC)	2065	20337
Child Health & Nutrition¹⁰	Rajasthan (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	6.1	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	64.3	60.6
Children under 5 years who are underweight (weight-for-age) (%)	27.6	32.1
Child Immunization¹⁰	Rajasthan (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	85.3	83.8
Children age 12-23 months who have received BCG (%)	95.6	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	91.2	87.9
Family Planning¹⁰	Rajasthan (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	3.7	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Rajasthan	India
Number of districts with functional IDSP unit	33	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Rajasthan	India
Annualized total case notification rate (%)	194	163
New Smear Positive (NSP) Success rate (in %)	76	79
National Leprosy Eradication Programme (NLEP)¹¹	Rajasthan	India
Prevalence Rate/10,000 population	0.14	0.61
Number of new cases detected	1,124	114,359
Malaria, Kala Azar, Dengue¹¹	Rajasthan	India
Deaths due to Malaria ¹¹	1	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	17	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Rajasthan (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	26.8	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	36	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Rajasthan (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	9.8	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	12.7	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	3.9	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	5	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Rajasthan (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	6.9	8.9
Men who use any kind of tobacco (%)	42	38
Women who consume alcohol (%)	0.3	1.3
Men who consume alcohol (%)	11	18.8
Injuries		
Road Traffic Accident¹²	Rajasthan	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	6	N/A
Total number of fatal Road Accidents	9,471	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	45	33.7
Number of persons killed in Road Accidents	10563	115113

1.5 Access to Care^{ee}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Rajasthan	India
Number of Districts equipped with MMU under NRHM	34	506
Number of Districts equipped with MMU/Health Units under NUHM	4	31
Number of ERS vehicles operational in the States/UTs Under NHM	Rajasthan	India
102 Type	0	9955
104 Type	587	605
108 Type	735	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	1322	11070

^{ee} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA ¹³	Rajasthan	India
Total number of ASHA targeted under NRHM	50331	946563
Total number of ASHA in position under NRHM	47430	904211
% of ASHA in position under NRHM	94.24	96
Total number of ASHA targeted under NUHM	5485	75597
Total number of ASHA in position under NUHM	4269	64272
% of ASHA in position under NUHM	77.83	85
Community Process ¹¹	Rajasthan	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	43440	554847
Number of Mahila Arogya Samitis (MAS) formed	4708	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total) ¹¹	Rajasthan	India
DH	29	796
CHC	651	6036
PHC	2128	20273
UHC	9	126
UPHC	291	3229
Human Resource for Health ¹⁴		
HRH Governance	Rajasthan	
Specialist Cadre Available in the state (Y/N)	No	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	40
	Dentists (%)	24
	MO MBBS (%)	28
	Nurse (%)	41
	LT (%)	59
	ANM (%)	21
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:4	1:3
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	9 per 10,000	6 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	4:1	10:1

Ranking: Human Resource Index of Rajasthan¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{ff}	31868	26937	23990	2947	7878	63.44
Staff Nurse	26925	25007	22913	2094	4012	
Lab Technician	5108	6026	3031	2995	2077	
Pharmacists	3254	4824	2500	2324	754	
MO MBBS ^{gg}	7165	5998	4274	1724	2891	
Specialist ^{hh}	5217	2956	1834	1122	3383	

1.6 Healthcare Financingⁱⁱ

National Health Accounts (NHA) (2017-18)	Rajasthan		India	
Per Capita Government Health Expenditure (in ₹)	1,369		1,753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	1.2		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	6.3		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	49.6		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Rajasthan		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	43	32	33	26
IPD - % of hospitalized cases using public facility	51	50	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	572	427	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	1566	1173	845	915
IPD - Per hospitalized case (in INR) - Public	9,685	7,773	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	27,760	30,435	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	14	14	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	61	39	53	43

^{ff} MPW – Multi Purpose Health Worker (Female + Male)

^{gg} MO MBBS (Full Time)

^{hh} Specialist (All Specialist)

ⁱⁱ Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	2,528	2,028	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	14,773	18,588	20,692	26,701
State Health Expenditure	Rajasthan		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	5.6		5 ^{jj}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{jj} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

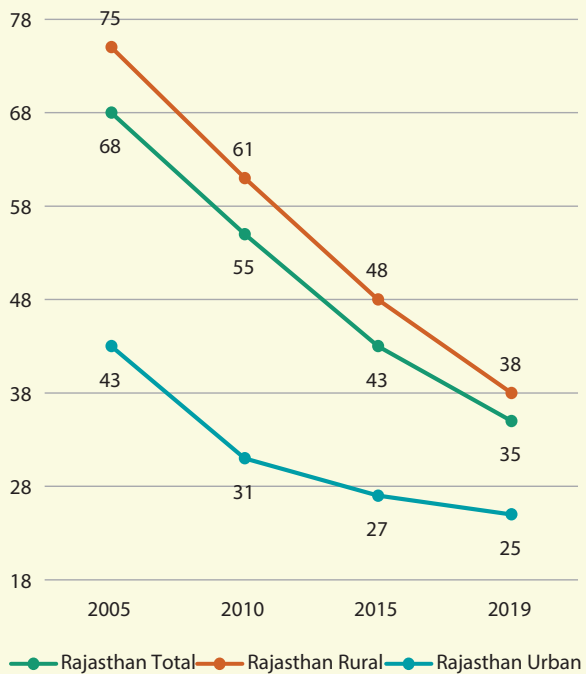


Figure 2: CBR & CDR Trend

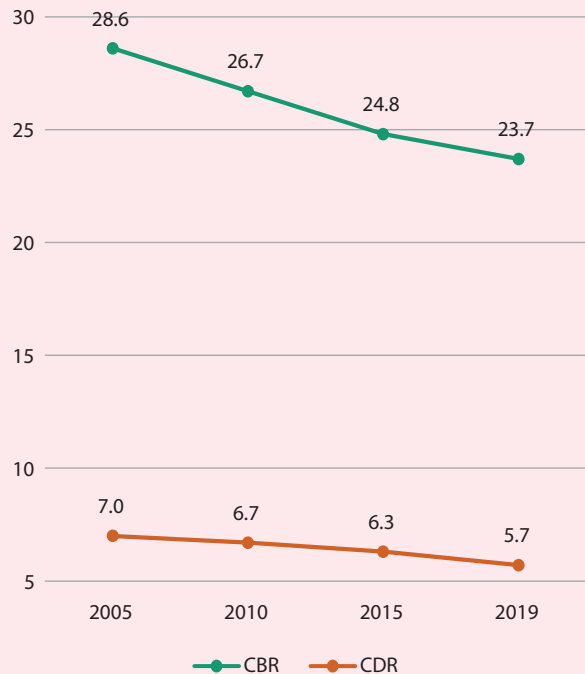


Figure 3: Life Expectancy At Birth Trend

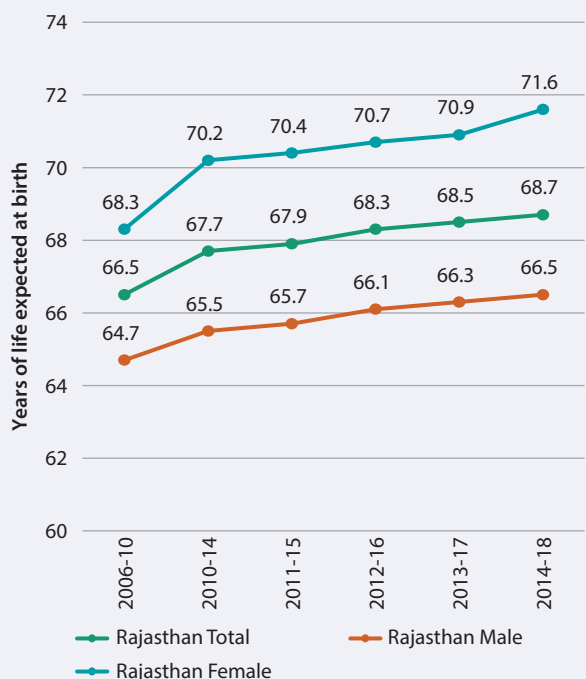


Figure 4: NNMR, TFR & Still Birth Trend

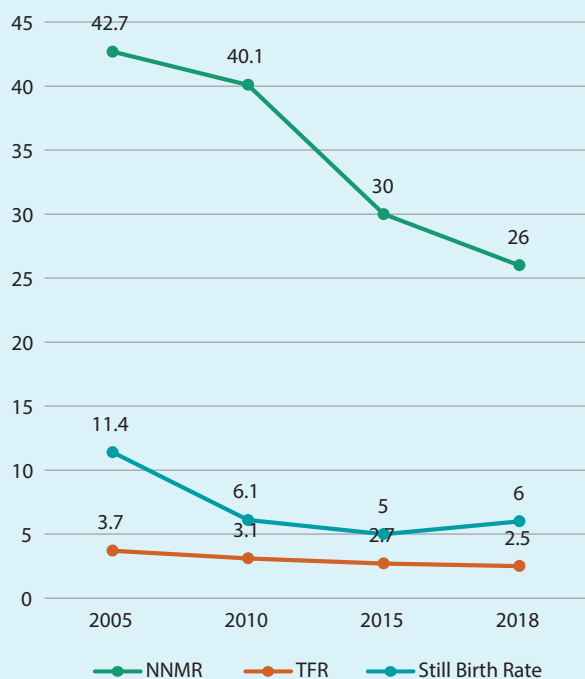


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

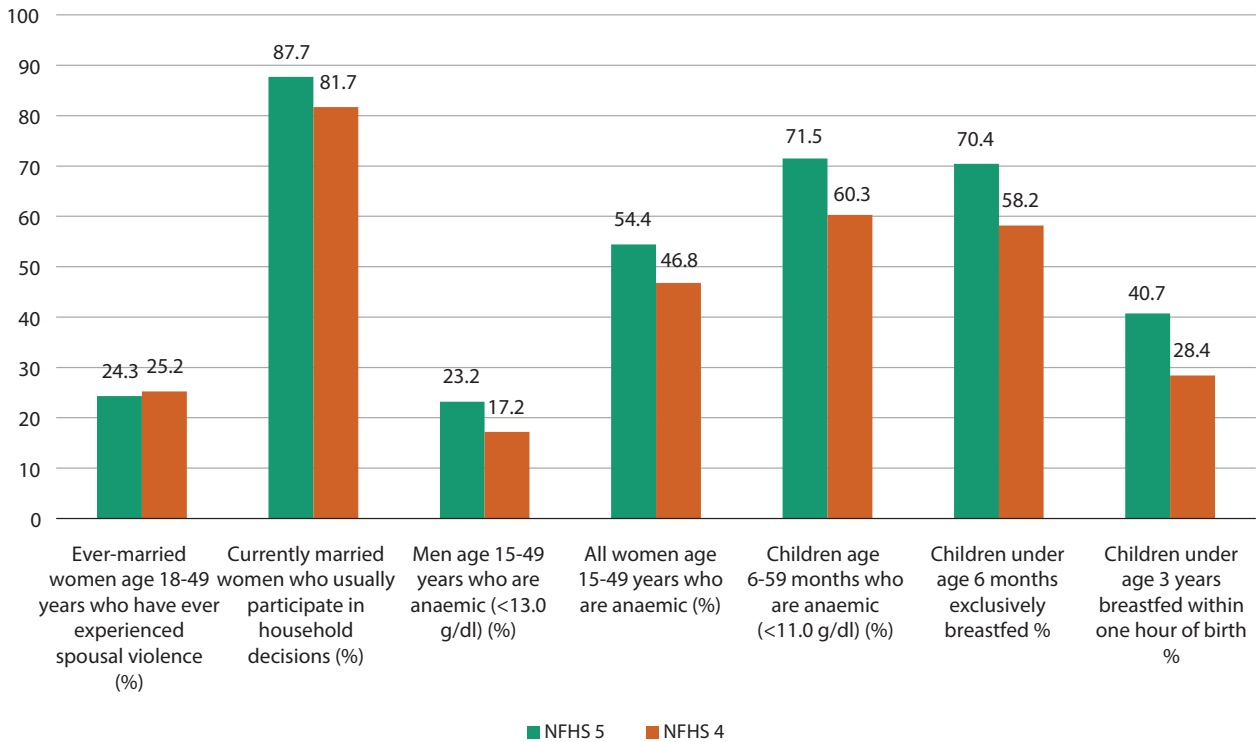


Figure 6: Top 15 causes of DALYs, 1990-2019

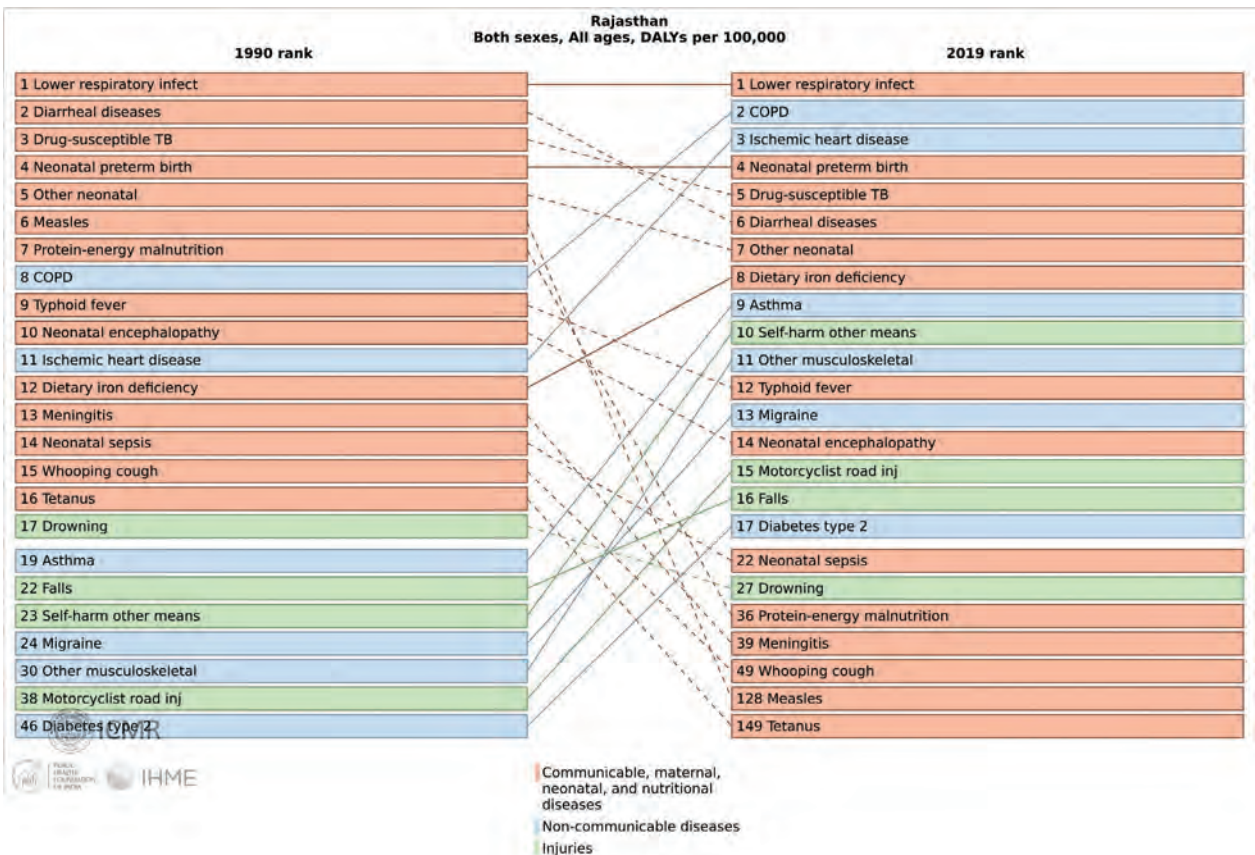


Figure 7: Top 15 risk of DALYs, 1990-2019

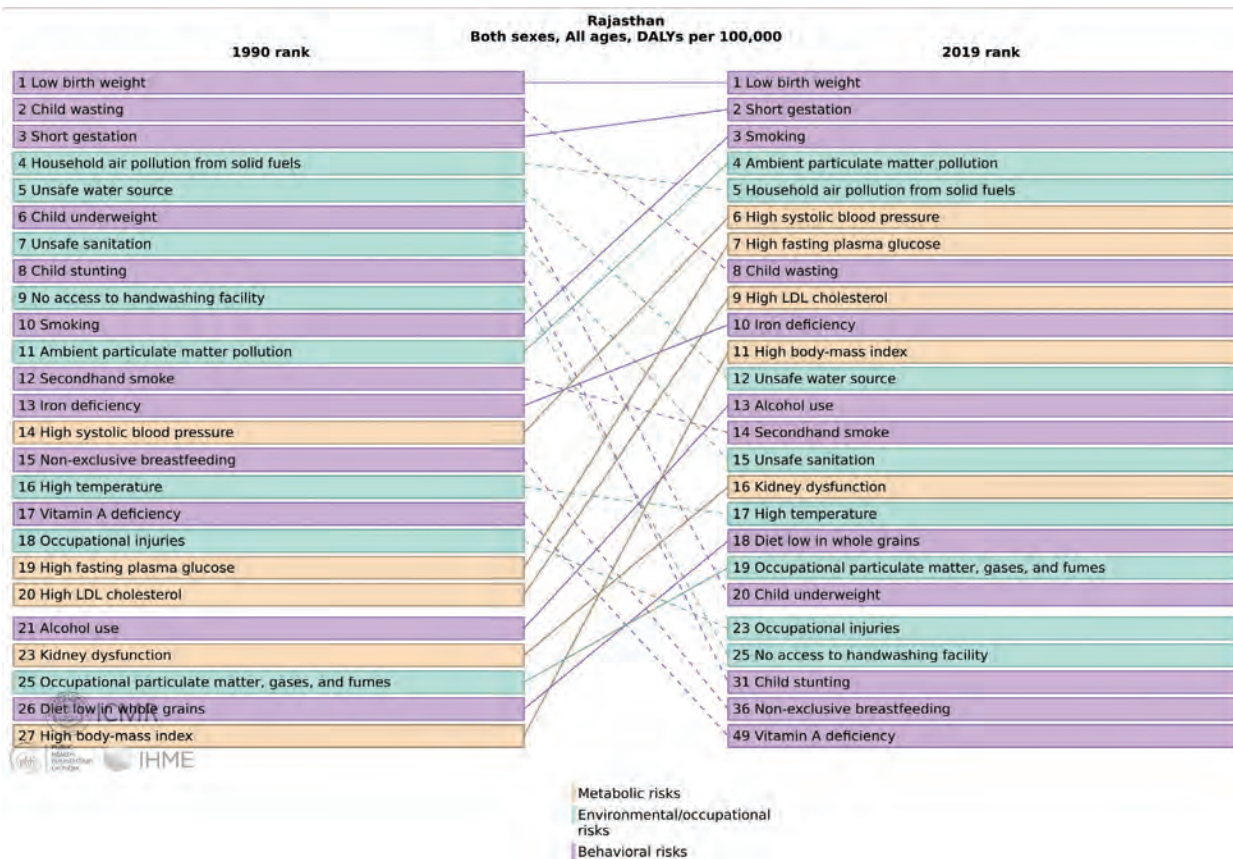


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

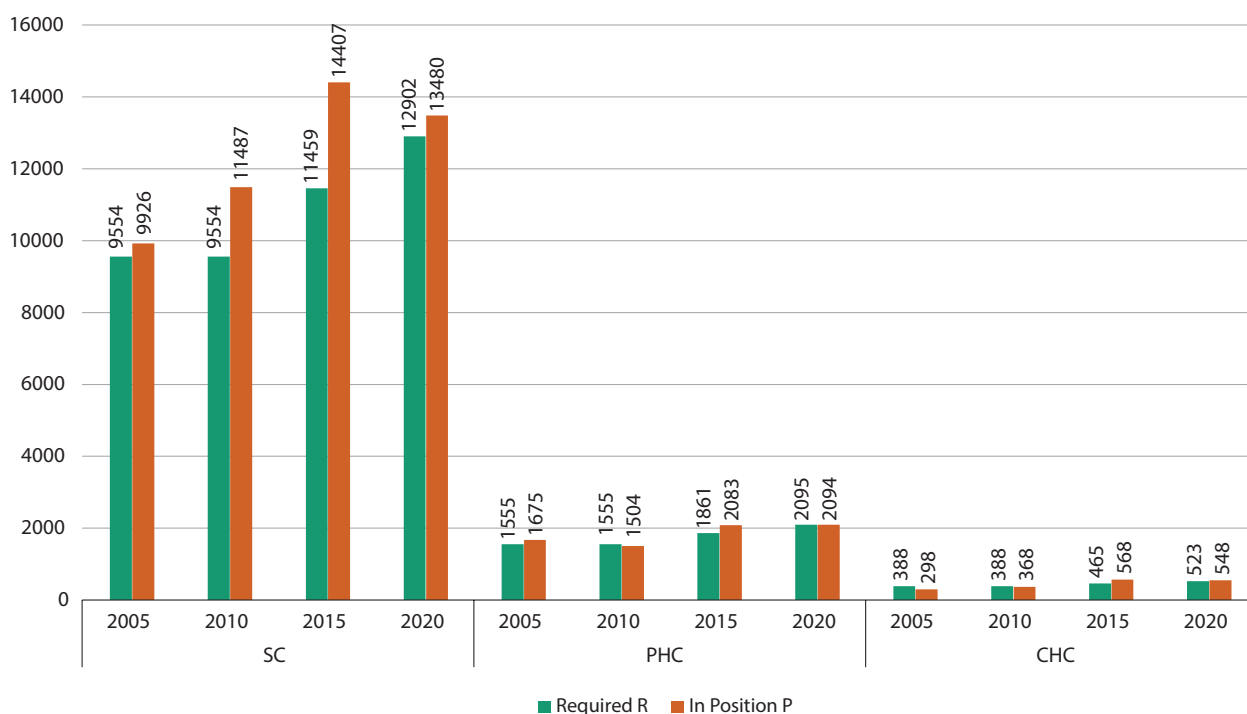


Figure 9: Year Wise Health Infrastructure Shortfall (%)

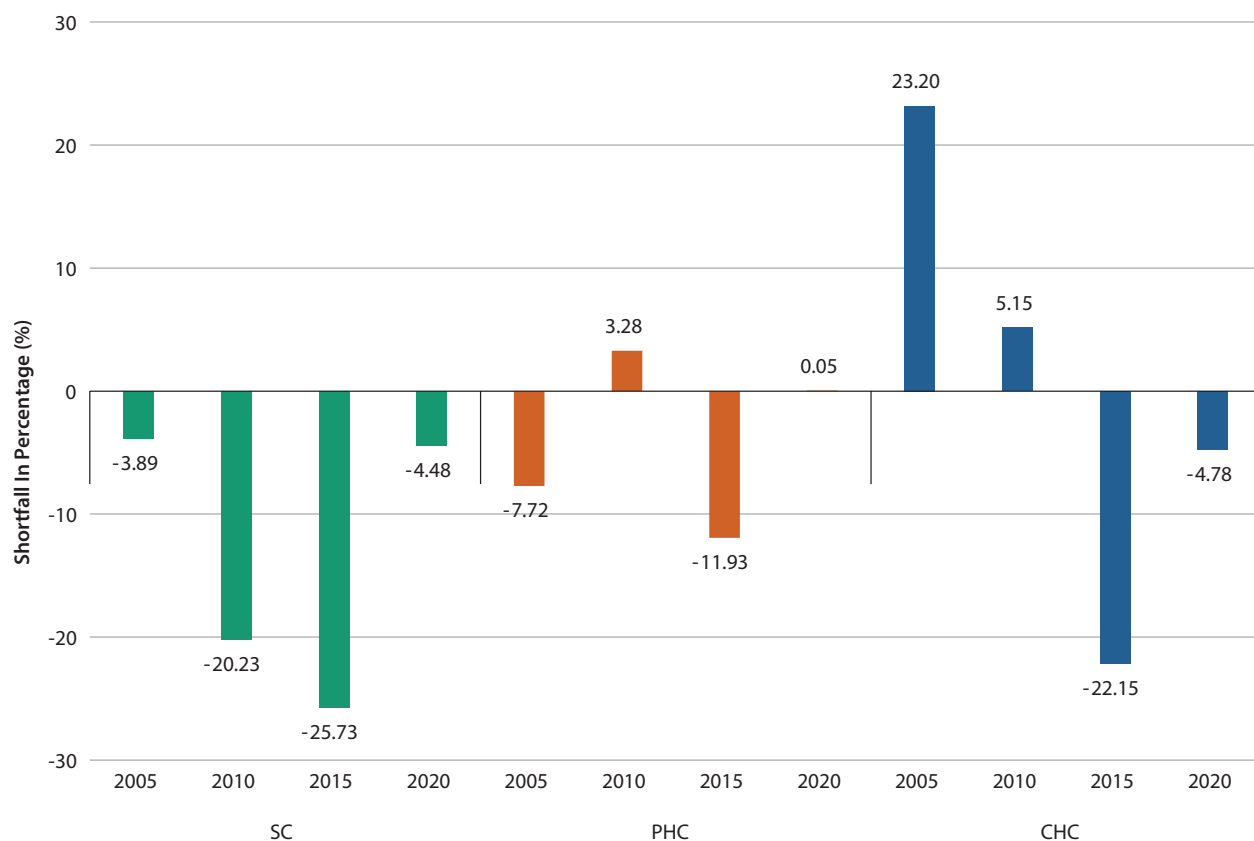
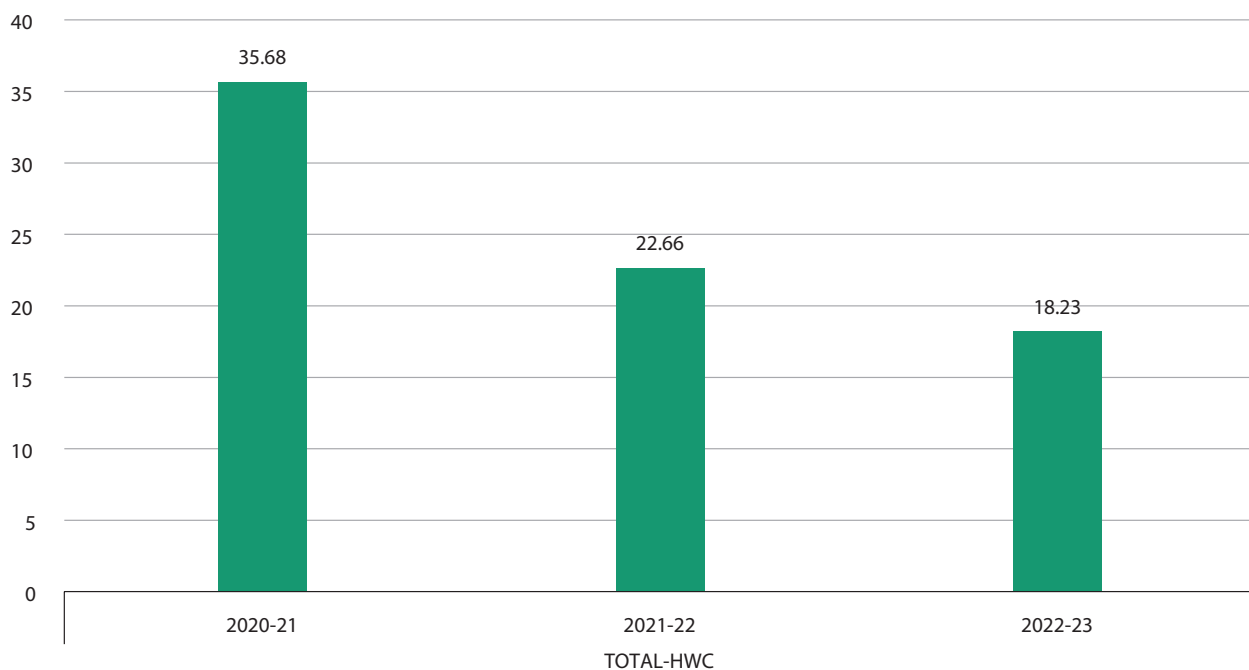


Figure 10: Percentage HWCs progress against target - FY wise (%)

Rajasthan (% HWCs progress as of 22/Dec/2021 against targets - FY wise)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	(Green – Good Performance, Red – Poor Performance) (District Wise Rural/Urban Stats Not Available)			
													Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted^ (Height For Age) (%)	Children Under 5 Years - Wasted^v (Weight For Height) (%)
1	Rajasthan	NFHS 4 Total	887	18.7	NA	35.4	59.7	1.2	8.7	12.3	38.5	84	69.7	3.4	39.1	23
2	Rajasthan	NFHS 5 Urban	940	80	80.1	15.1	74.2	1.9	21.3	6.9	60.6	97.5	88.3	9.7	28.3	18.3
3	Rajasthan	NFHS 5 Rural	879	90.4	59.9	28.3	71.7	1.3	11.4	7.8	53.9	94.2	84.5	8	32.6	16.4
4	Rajasthan	NFHS 5 Total	891	87.8	64.7	25.4	72.3	1.4	13.7	7.6	55.3	94.9	85.3	8.3	31.8	16.8
5	Ajmer	NFHS 5 Total	848	88.7	68.4	20.2	60.6	0.5	12	11.9	52.8	95.1	92.3	5.1	22.3	20
6	Alwar	NFHS 5 Total	1127	80.8	63.2	32.2	54.6	2.2	8.5	12	30	91.3	72.1	11.2	33.9	15.6
7	Banswara	NFHS 5 Total	835	84.2	53.1	25	70.4	0.6	8.5	8.1	69.9	97.7	88.3	9.7	44.6	17.3
8	Baran	NFHS 5 Total	1077	89.5	57.9	26.8	78.9	1	13	4	79.3	97.3	93.4	11.1	46	21.3
9	Barmer	NFHS 5 Total	877	97.8	66.3	20.2	77.9	0.5	13.5	5.1	64.9	93.3	92.8	9	39.1	11.5
10	Bharatpur	NFHS 5 Total	845	84.8	61.1	33.5	61.2	0.7	8.5	11.3	33.2	92.1	67.2	11.8	40.3	12.2
11	Bhilwara	NFHS 5 Total	802	89.1	56.4	41.8	71.1	2.2	12.2	7.2	64.7	95	87.8	5.8	22.6	17.4
12	Bikaner	NFHS 5 Total	907	87.4	62.5	33.3	79.5	1.7	19.9	4.6	50.5	90	81.3	10.2	22.8	25.6
13	Bundi	NFHS 5 Total	803	87.7	56.9	34.1	75.8	0.3	14.2	7.1	74	95.3	81.4	10.8	30	19.6
14	Chittaurgarh	NFHS 5 Total	861	90.6	56.1	42.6	66.9	1.6	9.6	8.1	75	96.8	89.9	5.2	31.4	14.6
15	Churu	NFHS 5 Total	944	81.9	63.9	27.9	76.7	0.9	15.8	7.6	45	87.8	82.4	11.2	27.1	16.5
16	Dausa	NFHS 5 Total	863	91.2	60.3	26.3	80	1.2	10.2	5.2	53.6	98.2	87.4	5.8	37.7	20.7
17	Dhaulpur	NFHS 5 Total	929	89	57.7	29.6	67.9	1.3	11.5	10.9	42.4	94.4	79.8	5.8	45.7	13.7
18	Dungarpur	NFHS 5 Total	843	97.5	66	16.9	70.7	2.9	12.2	5.9	50.6	94.1	89.2	4.7	31.4	15.6

19	Ganganagar	NFHS 5 Total	906	85.3	69.3	13.6	81.1	2	17.7	5.1	58.7	97.7	90.4	12.3	24.5	24.9
20	Hanumangarh	NFHS 5 Total	1117	89	68.2	18.6	80.2	1.1	13.2	6.1	53.1	94.9	86.6	7.1	24.2	19.8
21	Jaipur	NFHS 5 Total	915	81.5	72.4	23.1	76.9	1.7	16.9	5.4	53.5	97.3	96.8	5.8	25	14.6
22	Jaisalmer	NFHS 5 Total	818	93.7	62.2	28.9	83	1.5	12.5	5.6	47.6	90	74.7	6.1	25.5	25
23	Jalor	NFHS 5 Total	769	96.6	60.4	23.3	54.2	0.5	8.7	14.8	71.2	95.5	82.4	5	44.3	12.1
24	Jhalawar	NFHS 5 Total	905	93.6	54.3	37.8	74.4	0.4	13.8	6.8	72.3	98.3	92	5.8	34	29
25	Jhunjhunun	NFHS 5 Total	946	86.1	74.4	18.1	77.8	0.5	14.4	7.1	49.2	97.1	88	10.7	20.9	13.9
26	Jodhpur	NFHS 5 Total	872	87.5	67.4	28.1	78.9	1.6	18	5.7	56.7	90	77	12.5	32.6	13.3
27	Karauli	NFHS 5 Total	863	86.4	53.3	33.5	72.7	1	7.5	6.9	42	97.6	93.1	6.3	37.6	26.6
28	Kota	NFHS 5 Total	870	80.9	76.5	13.2	77.2	2.1	22.7	4.6	81.3	97.9	85.2	9.3	29.5	20.8
29	Nagaur	NFHS 5 Total	817	90	67.2	28.2	83.4	1.4	19.4	4.4	46.2	97	93.4	7.3	31.5	16.2
30	Pali	NFHS 5 Total	998	96.2	74.4	11.8	57.8	1.1	9.1	12.9	45	98.8	89.2	5.5	35.9	18.3
31	Pratapgarh	NFHS 5 Total	919	84.5	53.5	30.9	72	1	11.9	6	52.9	96.4	88.7	8	29	24.9
32	Rajsamand	NFHS 5 Total	800	93.2	67.7	27.5	56.6	1	10	14.7	60.7	95.1	76.6	7.6	30.3	16.6
33	Sawai Madhopur	NFHS 5 Total	849	80.5	55.7	35.4	58.7	0.3	9.4	11.5	47.3	97.4	56.1	10.4	26.9	22
34	Sikar	NFHS 5 Total	770	82.4	71.8	18	75.2	2.2	17.2	10.3	50.4	95.8	71.3	12	23.1	12.8
35	Sirohi	NFHS 5 Total	1064	92	60.6	18	67.9	2.5	10.3	8.9	69.5	95.7	95.6	4.3	30.7	16.4
36	Tonk	NFHS 5 Total	969	84.5	55.2	37.2	69.1	1.3	9	8.7	66.2	97.4	80.3	6	33.1	18.1
37	Udaipur	NFHS 5 Total	833	94.3	62	18.2	75.5	3.5	13.5	4.4	62.3	96.1	89.5	6.1	34	8.6

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'; Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MM/MR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color - Best five performing districts within the districts for a particular indicator

B. Red - Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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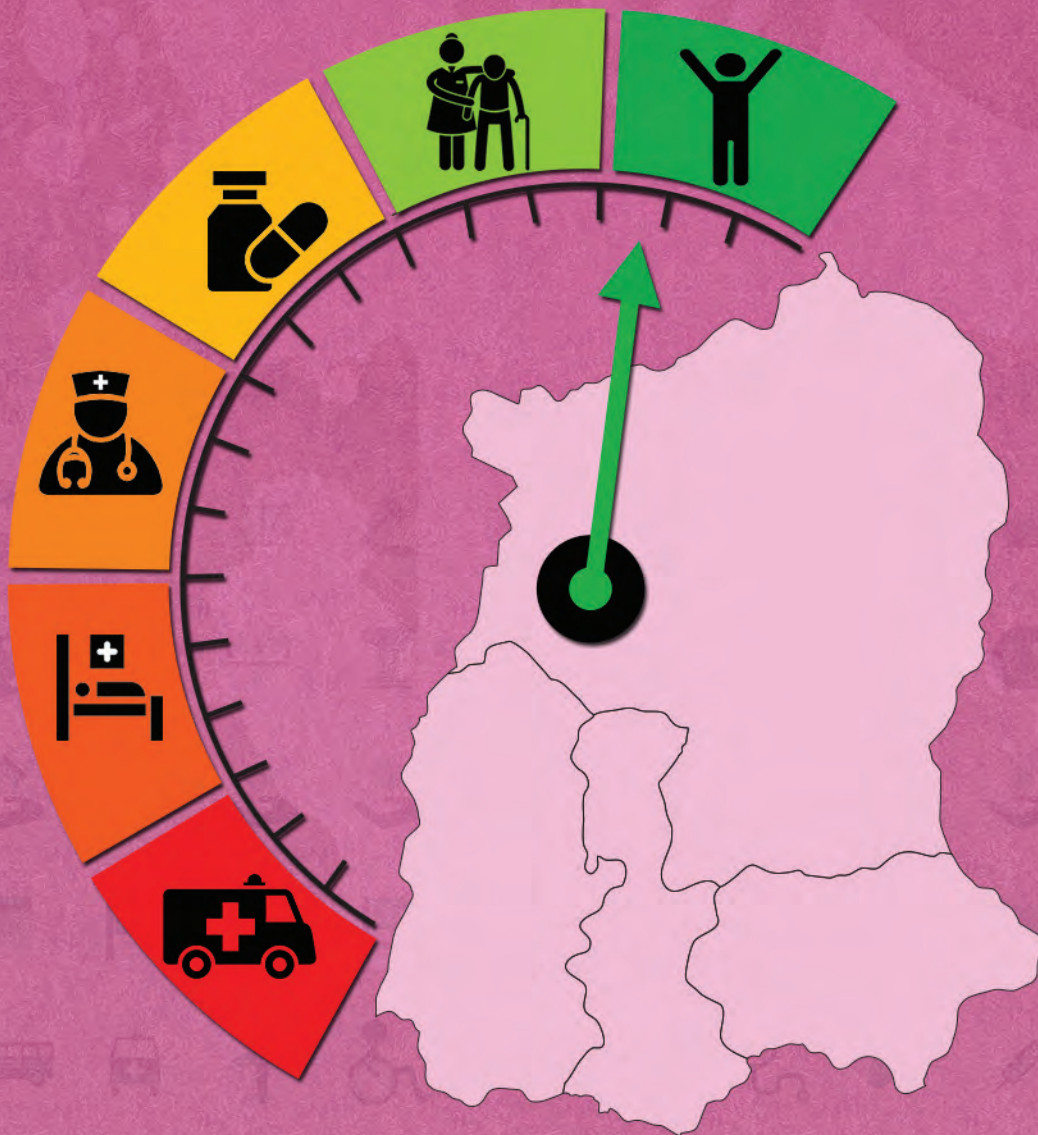
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



SIKKIM

**DISTRICTS VISITED IN
COMMON REVIEW MISSIONS**

CRM	Districts Visited	
3 rd	West District	South District
5 th	North District	East District
14 th	West Sikkim	North Sikkim

SIKKIM

1. BACKGROUND

1.2 State Profile

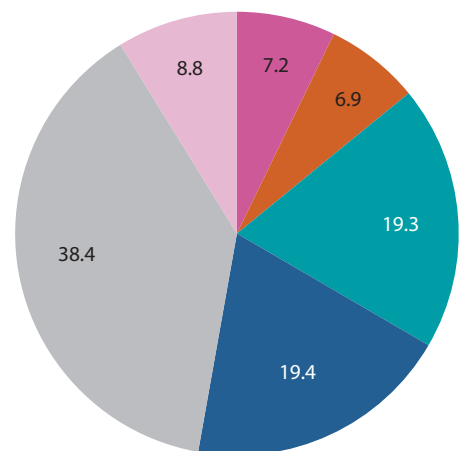
Sikkim is the smallest^a North-Eastern State in India with a population of about 6.10 lakh. The state is divided into 4 districts as of 2020^b with an expected increase in population to 6.77 lakhs by 2021^c. As per census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 0.28 lakh (4.63%) and 2 lakh (33.80%), respectively. Around 74.85% of the population reside in rural areas, while the rest constitute the urban population. Agriculture is a major contributor to the State Domestic Product in Sikkim, where around 40% of the workers are engaged as cultivators and agricultural laborers^d. At present, one city^e is covered under National Urban Health Mission with no metro & no million plus city in the state. The total length of roads^f in Sikkim is 11,386 km (0.23%^g), in which the length of the national highways is 463 km (0.4%^h) and state highways is 663 km (0.38%ⁱ).

A detailed report on the key indicators is presented in Annexure 1

1.2 Demography

Overall^j in North-East States (excluding Assam) 19.3% are in the age group of 10-19 years, 57.8% within 20 to 59 years; while 8.8% are 60 years of age and above (Figure 1). The literacy rate has improved from 68.8% in 2001 to 81.4% in 2011 with male & female literacy rates being 86.6% and 75.6% respectively. As per ESAG 2018 report the Gross

Figure 1: North-East States (Excluding Assam) Distribution of estimated Population 2021 (%)



^a Among North-East States; RHS 2019

^b RHS 2020

^c Census Population Projection 2019 Report

^d <https://www.nabard.org/demo/auth/writereaddata/tender/2410160250PLP-2016-17%20West%20Sikkim.split-and-merged.pdf>

^e QPR NHM MIS Report as on 31 Dec 2020

^f Basic Road Statistics 2019, MoRTH

^g Percentage of total length of roads in State

^h Percentage of total length of National Highways in the country

ⁱ Percentage of total length of State Highways in the country

^j Population projection 2021 for Sikkim is not available

Enrollment Rate^k (GER) is 37.6% for higher education, 68.23% for senior secondary (XI-XII) education, 119.78% for secondary (IX-X) education, 118.78% for elementary education (VI-VIII) and 102.87% % for primary education (I-VIII).

1.3 Elderly

Population aging has profound social, economic, and political implications. Elderly people aged (60+) share 8.8% of the NE states' total population. In Sikkim, 39% of elderly females and 40% of elderly males living in rural areas are economically fully dependent on others. However, in urban areas, 84% of elderly females and 45% elderly males are economically fully dependent on others. The illness (any deviation from the state of physical and mental well-being) perception among the elderly men and women is 18% & 21% respectively, which are lower than the national average of 31% for both men and women (Elderly in India 2016).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

Sikkim has been able to provide RMNCHA+N^l services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^m, institutional deliveries, C sections, distribution of IFAⁿ tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care have shown substantial improvement since 2005 (NFHS 4 & 5). In Sikkim, 67.4% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 (Annexure 3) East district reported the least ANC coverage (43.8%) while West District reported the highest (84.5%). As reported in HMIS 2019-20, around 99.4% of the deliveries took place in institutions, out of which 73.9% took place in public health facilities. Total percentage of C-sections (41.6%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 56.3% are conducted at private facilities in Sikkim. Around 82% of women received their first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years increased from 34.9% (NFHS 4) to 42.1% (NFHS-5). Anaemia in women of reproductive age group is more than twice when compared with men of similar age group (Annexure 2, figure 3).

Refer Annexure 3 for detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, Sikkim has shown a significant decline in IMR from 30 (2005) to 5 (2019), which is lower than the national average of 30 (Annexure 2, Figure 1). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). As per

^k Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

^l Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^m Antenatal Check up

ⁿ Iron Folic Acid Tablets

NFHS 5, the low SRB^o (685) is reported in West District, while the highest (1353) is reported in South District.

Full vaccination^p coverage for children between 12 – 23 months of age has declined from 94.2% (NFHS 4) to 87.6% (NFHS 5). The percentage of under 6-months children exclusively breastfed has also declined from 54.6% (NFHS 4) to 28.3% (NFHS 5). An increase in childhood anaemia from 55.1% (NFHS 4) to 56.4% in children aged 6-59 months has been reported (Annexure 2, Figure 3). As per NFHS 5 report, low stunting rate (17.8%) is reported by East District, while high stunting rate (31.8%) is reported by North District. For under-5 wasting, North District reported a low burden (4.5%), while West District reported a high burden (21.1%) in the State.

2.3 Family Planning

As per NFHS 5 report, the total unmet need in Sikkim is reported as 11.9%, while the unmet need for spacing is 4.9% (NFHS 5). West District reported the lowest total unmet need (4.3%), while East District reported the highest (17.7%). Approximately 54.9% of married women reported to avail any modern method of family planning in the State (NFHS 5), with sterilization acceptance being 14.5% among females, and 1.7% among males.

2.4 Communicable Diseases

Sikkim has 4 functional IDSP units^q. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 21.39% of total disease burden (Annexure 1.4). Lower respiratory infection, Drug Susceptible TB & Diarrheal diseases are the leading causes of DALYs in Sikkim (Annexure 2, Figure 4^r). As per QPR reports, for TB, the annualized total case notification rate is 232% and NSP^s success rate is 87%, as opposed to the national averages of 163% and 69% respectively. For NLEP^t, the reported prevalence rate of 0.22 per 10,000 population is less than the national average of 0.61. In FY 2019-20, no deaths from Dengue, Malaria, Kala Azar are reported.

2.5 Non-Communicable Diseases (NCDs) & Injuries

It is reported that premature deaths contribute to 60.2% of total disease burden, while disability or morbidity account for 39.8%. Ischemic heart diseases, COPD, Diabetes Mellitus Type 2 & Other musculoskeletal conditions are the major causes of DALYs (Annexure 2, Figure 4). NCDs contribute to 68.22% of DALYs, whereas injuries contribute to 10.39% of DALYs^u. Sikkim is positioned 30th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found that as high as 11.7% of women and 41.3% of men used any kind of tobacco, while 16.2% of women and 39.8% of men consumed alcohol. Overall, high systolic blood pressure, high fasting plasma glucose, smoking, high body mass index and ambient particulate matter pollution are the top five major risk factors for all DALYs (Annexure 2, figure 5).

^o Sex Ratio at Birth

^p NFHS 5 State Factsheet, based on information from vaccination card only

^q QPR NHM MIS Report (status as on 01.03.2020)

^r <https://vizhub.healthdata.org/gbd-compare/india>

^s New Smear Positive

^t National Leprosy Eradication Programme

^u <https://vizhub.healthdata.org/gbd-compare/india>

2.6 Health Care Financing

Sikkim's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 25,141 crores. The State is positioned 2nd out of the 32 states in terms of per capita^v of ₹ 3,80,926. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 5,691 in public facilities, ₹ 25,624 in private facilities, whereas for urban areas, it is around ₹ 4,158 in public facilities and ₹ 21,827 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 6,399 in public facilities & ₹ 19,929 in private facilities, whereas in urban areas - OOPE is estimated to be around ₹ 3,487 in public facilities and ₹ 21,056 in private facilities. In public health facilities, the share of expenditure on drugs as a proportion of inpatient medical expenditure is estimated as 51% in rural and 74% in urban areas, whereas for diagnostics, it is 17% in rural and 11% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 6). Except for CHCs, there is no shortfall in the required SCs and PHCs (Annexure 2, Figure 7). Currently, there are 147 SCs, 24 PHCs, and 2 CHCs in place, against the required 94 SCs, 14 PHCs and 3 CHCs in rural areas. Whereas, in urban settings, there is only 1 PHC in place against the required 6, amounting to a shortfall of 83.33%. The State has 4 DHs and 1 SDH. In tribal catchments, there are 58 SCs, 12 PHCs and no CHC in place, against the required 46 SCs, 6 PHCs and 1 CHC.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 116 HWCs (96 SHCs, 18 PHCs & 2 UPHCs) are operationalized in the State as of 22nd December 2021^w.

In Sikkim, no districts are equipped with MMUs both under the NRHM and the NUHM. Sikkim has 100% of required ASHAs in position under both NRHM & NUHM. The doctor to staff nurse ratio in place is 1:1, with 14 public health providers (MO, specialists, staff nurse & ANM) per 10,0000 populations (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 1394.92 availed (events) OPD services and 41.33 availed (events) IPD services. As per the NSSO data (2017-18), 56% of all OPD cases in rural areas and 45% in urban areas; and 82% of all IPD cases in rural areas & 70% in urban areas utilized public health facilities. The public health facility utilization in Sikkim is above the national averages for both OPD & IPD services (Annexure 1.6).

^v Directorate of Economics & Statistics

^w AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^x

Indicator	Sikkim 2011 ¹	India
Total Population (In Crore)	0.06	121.08
Rural (%)	74.85	68.85
Urban (%)	25.15	31.14
Scheduled Caste population (SC) (in crore)	0.0028 (4.63%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.02 (33.80%)	10.45 (8.63%)
Total Literacy Rate (%)	81.4	72.99
Male Literacy Rate (%)	86.6	80.89
Female Literacy Rate (%)	75.6	64.64
Number of Districts in the Sikkim ²	4	
Number of districts per lakh population in Sikkim (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<1 Lakhs	1
	≥ 1 Lakhs - <2 Lakhs	2
	≥2 Lakhs - <3 lakhs	1
	≥3 Lakhs	0
% ST share of each districts		
East District - 27.65%		
West District - 42.37%		
South District - 28.18%		
North District - 65.69%		

1.2 Key Health Status & Impact Indicators

Indicators	Sikkim	India
Infant Mortality Rate (IMR) ³	5	30
Crude Death Rate (CDR) ³	4.2	6
Crude Birth Rate (CBR) ³	16.5	19.7
Maternal Mortality Ratio (MMR) ³ (For other states including Sikkim)	85	113
Neo Natal Mortality Rate (NNMR) ⁴	N/A	23

^x Sources are mentioned at the end of Annexure 1

Under Five Mortality Rate (U5MR) ⁴	N/A	36
Still Birth Rate ⁴	N/A	4
Total Fertility Rate (TFR) ⁴	N/A	2.2
Life expectancy at birth ⁵	N/A	69.4
Sex Ratio at Birth ⁴	N/A	899

1.3 Key Health Infrastructure Indicators^y

Indicators	Numbers (Total)			
Number of District Hospitals ²	4			
Number of Sub District Hospital ²	1			
Number of Government (Central + State) Medical College ⁶	0			
Number of Private (Society + Trust) Medical Colleges ⁶	1			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	96	42	83	111
PHC-HWC	18	24	24	24
UPHC-HWC	2	6	6	6
Total-HWC	116	72	113	141
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	3	2	33.33	
Number of Primary Health Centres (PHC)	14	24	-71.43	
Number of Sub Centres (SC)	94	147	-56.38	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	3	0	0	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	6	1	83.33	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	1	0	100.00	
Number of PHC	6	12	-100.00	
Number of SC	46	58	-26.09	
Patient Service ⁹	Sikkim		India	
IPD per 1000 population	41.33		62.6	
OPD per 1000 population	1394.92		1337.1	
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	9.62		36.4	

^y Sources are mentioned at the end of Annexure 1

1.4 Major Health Indicator^z

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Sikkim	India
% DALY ^{aa} accountable for CMNNDs ^{bb}	21.39	27.46
% DALY accountable for NCDs	68.22	61.43
% DALY accountable for Injuries	10.39	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Sikkim	India
Level of Birth Registration (%)	61.2	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	45.6	20.7
RMNCHA+N		
Maternal Health⁹	Sikkim	India
% 1st Trimester registration to Total ANC Registrations	76.9	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	67.4	79.4
Total Reported Deliveries	7111	21410780
% Institutional deliveries to Total Reported Deliveries	99.4	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	73.9	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	26.1	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	41.6	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	36.4	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	56.3	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	82	53.4
Neonatal⁹	Sikkim	India
% live birth to Reported Birth	98.5	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	9.1	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	66.3	89.9
New Born Care Units Established¹¹	Sikkim	India
Sick New Born Care Unit (SNCU)	2	895
New Born Stabilization Unit (NBSU)	3	2418
New Born Care Corner (NBCC)	44	20337

^z Sources are mentioned at the end of Annexure 1

^{aa} Disability Adjusted Life Years

^{bb} Communicable, Maternal, Neonatal, and Nutritional Diseases

Child Health & Nutrition¹⁰	Sikkim (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	5.5	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	64.2	60.6
Children under 5 years who are underweight (weight-for-age) (%)	13.1	32.1
Child Immunization¹⁰	Sikkim (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	87.6	83.8
Children age 12-23 months who have received BCG (%)	96.6	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	90.5	87.9
Family Planning¹⁰	Sikkim (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	4.9	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Sikkim	India
Number of districts with functional IDSP unit	4	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Sikkim	India
Annualized total case notification rate (%)	232	163
New Smear Positive (NSP) Success rate (in %)	87	79
National Leprosy Eradication Programme (NLEP)¹¹	Sikkim	India
Prevalence Rate/10,000 population	0.22	0.61
Number of new cases detected	19	1,14,359
Malaria, Kala Azar, Dengue¹¹	Sikkim	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Sikkim (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	23.9	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/ AIDS (%) ¹⁰	18.5	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Sikkim (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	18.5	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	25	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	6.2	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	7.5	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Sikkim (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	11.7	8.9
Men who use any kind of tobacco (%)	41.3	38
Women who consume alcohol (%)	16.2	1.3
Men who consume alcohol (%)	39.8	18.8
Injuries		
Road Traffic Accident¹²	Sikkim	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	30	NA
Total number of fatal Road Accidents	61	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	12	33.7
Number of persons killed in Road Accidents	73	115113

1.5 Access to Care^{cc}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Sikkim	India
Number of Districts equipped with MMU under NRHM	0	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Sikkim	India
102 Type	0	9955
104 Type	1	605
108 Type	8	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	9	11070

^{cc} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Sikkim	India
Total number of ASHA targeted under NRHM	641	946563
Total number of ASHA in position under NRHM	641	904211
% of ASHA in position under NRHM	100	96
Total number of ASHA targeted under NUHM	35	75597
Total number of ASHA in position under NUHM	35	64272
% of ASHA in position under NUHM	100	85
Community Process¹¹	Sikkim	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	641	554847
Number of Mahila Arogya Samitis (MAS) formed	35	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Sikkim	India
DH	4	796
CHC	2	6036
PHC	24	20273
UCHC	0	126
UPHC	0	3229
Human Resource for Health ¹⁴		
HRH Governance	Sikkim	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	70
	Dentists (%)	41
	Nurse (%)	74
	LT (%)	20
	ANM (%)	42
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:2	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	31 per 10,000	14 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	5:1	3:1

Ranking: Human Resource Index of Sikkim¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{dd}	334	945	595	350	0	58.42
Staff Nurse	822	755	488	267	334	
Lab Technician	141	96	81	15	60	
Pharmacists	70	32	24	8	46	
MO MBBS ^{ee}	149	249	97	152	52	
Specialist ^{ff}	168	132	65	67	103	

1.6 Healthcare Financing^{gg}

National Health Accounts (NHA) (2017-18)	Sikkim		India	
Per Capita Government Health Expenditure (in ₹)	NA		1,753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	NA		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	NA		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	NA		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Sikkim		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	56	45	33	26
IPD - % of hospitalized cases using public facility	82	70	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	650	328	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	837	1430	845	915
IPD - Per hospitalized case (in INR) - Public	5,691	4,158	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	25,624	21,827	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	17	11	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	51	74	53	43

^{dd} MPW – Multi Purpose Health Worker (Female + Male)

^{ee} MO MBBS (Full Time)

^{ff} Specialist (All Specialist)

^{gg} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	6,399	3,487	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	19,929	21,056	20,692	26,701
State Health Expenditure	Sikkim		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	4.9		5 ^{hh}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

⁹⁹ Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

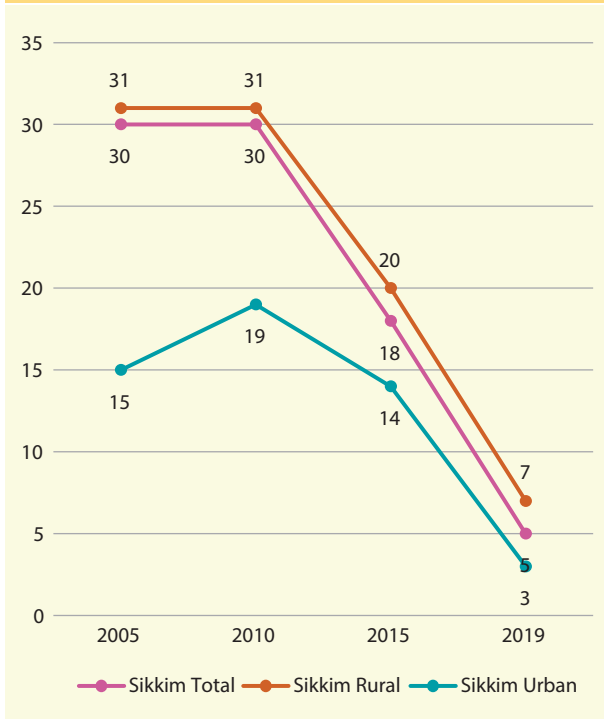


Figure 2: CBR & CDR Trend

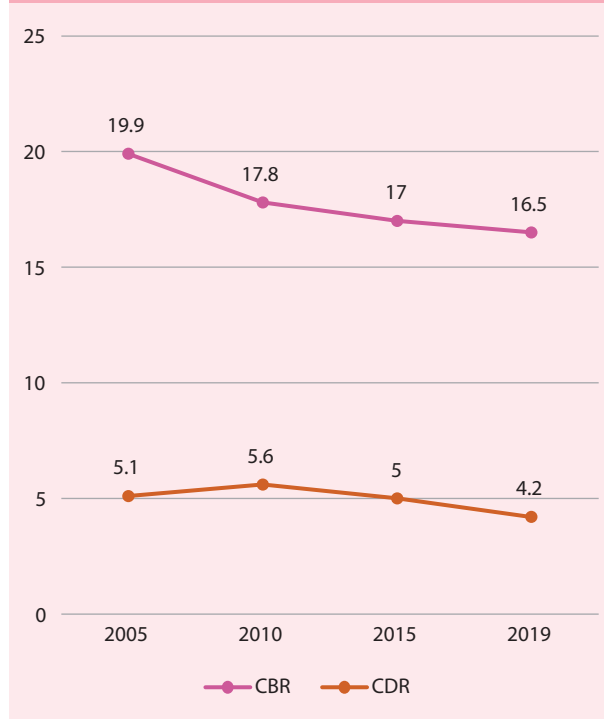


Figure 3: Comparison of Key NFHS 5 & 4 Indicators

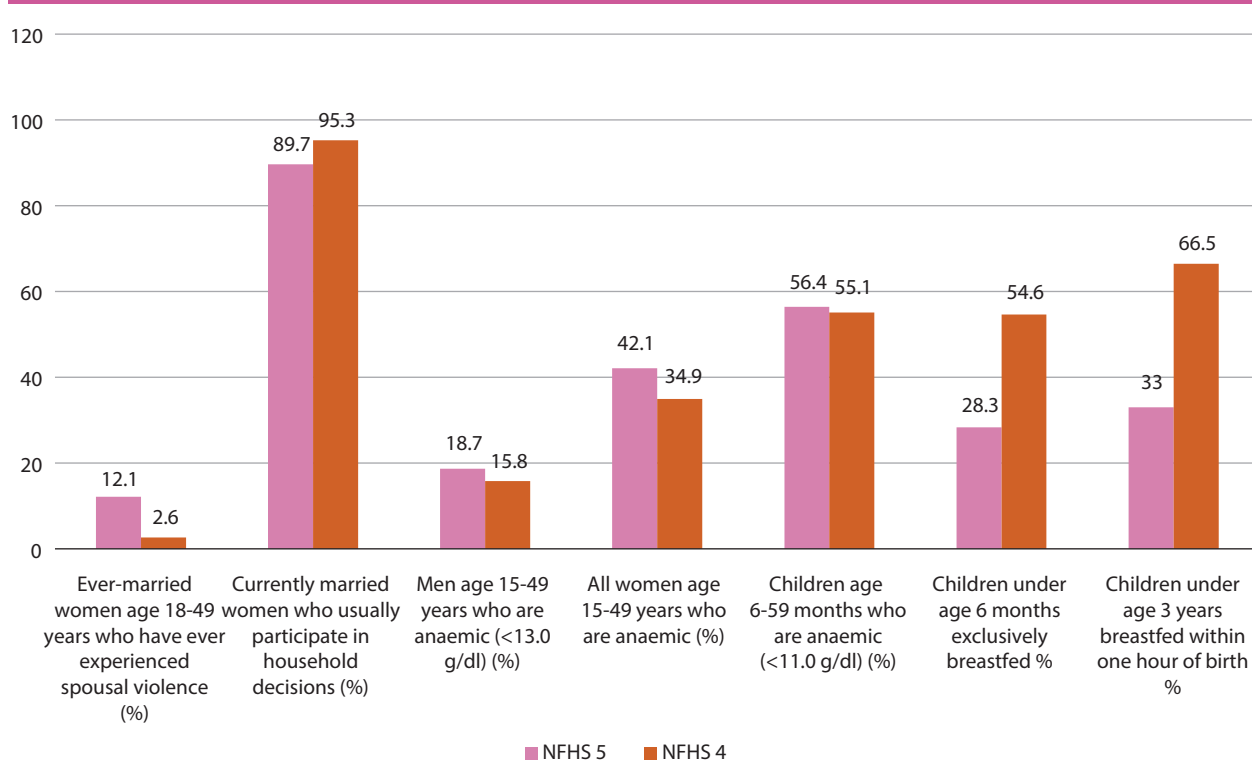


Figure 4: Top 15 causes of DALYs, 1990-2019

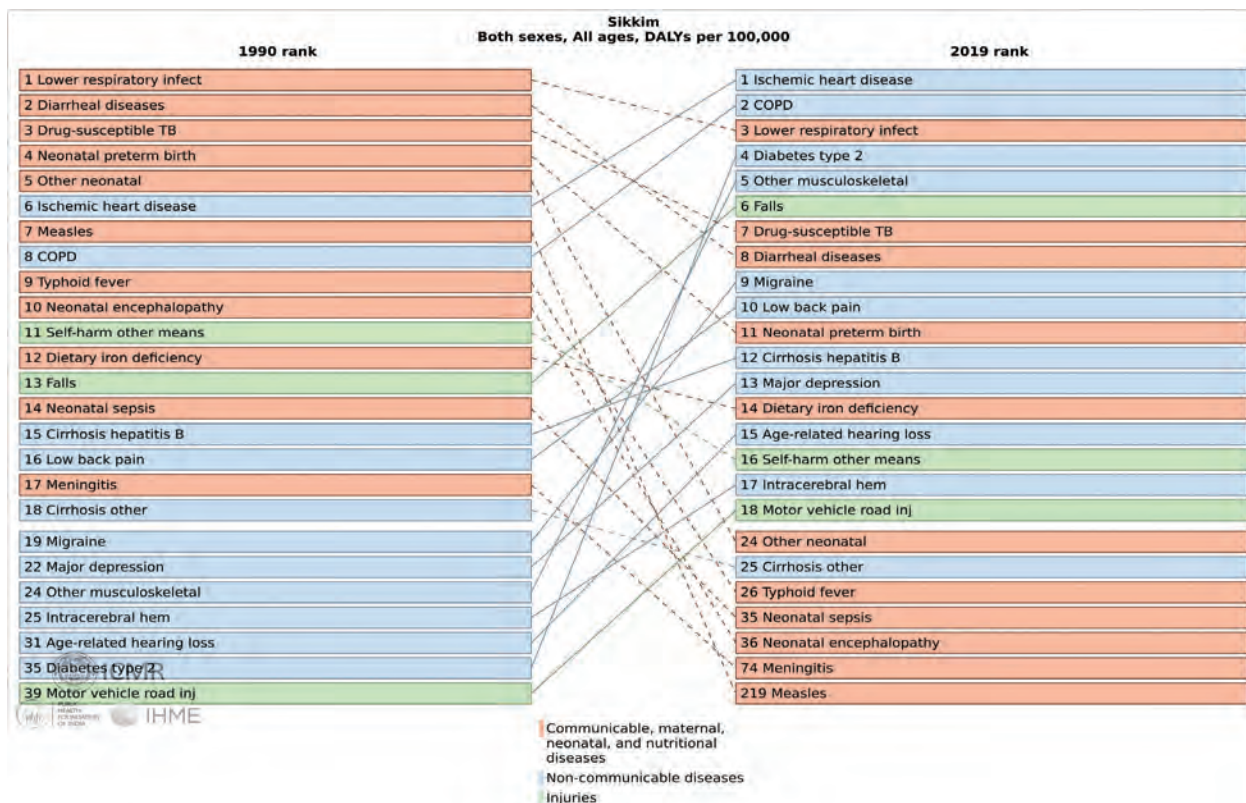


Figure 5: Top 15 risk of DALYs, 1990-2019

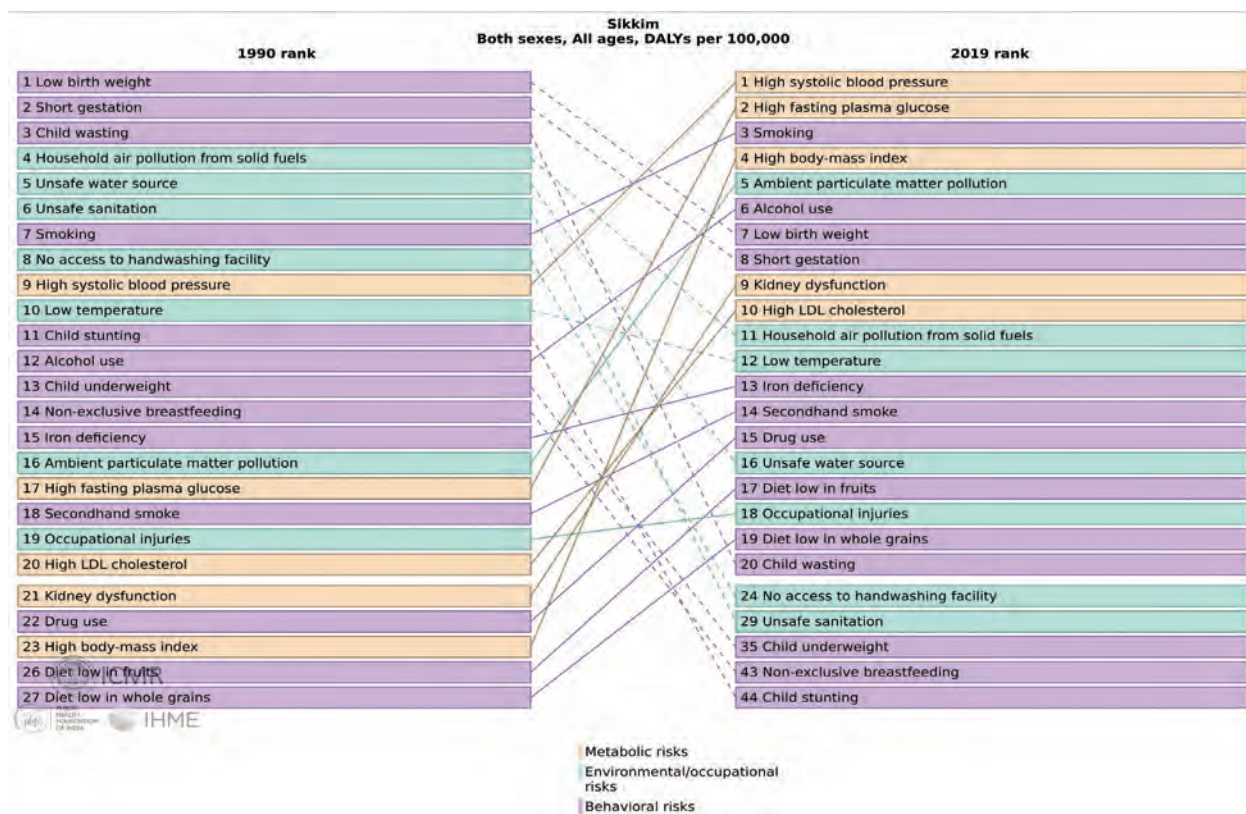


Figure 6: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

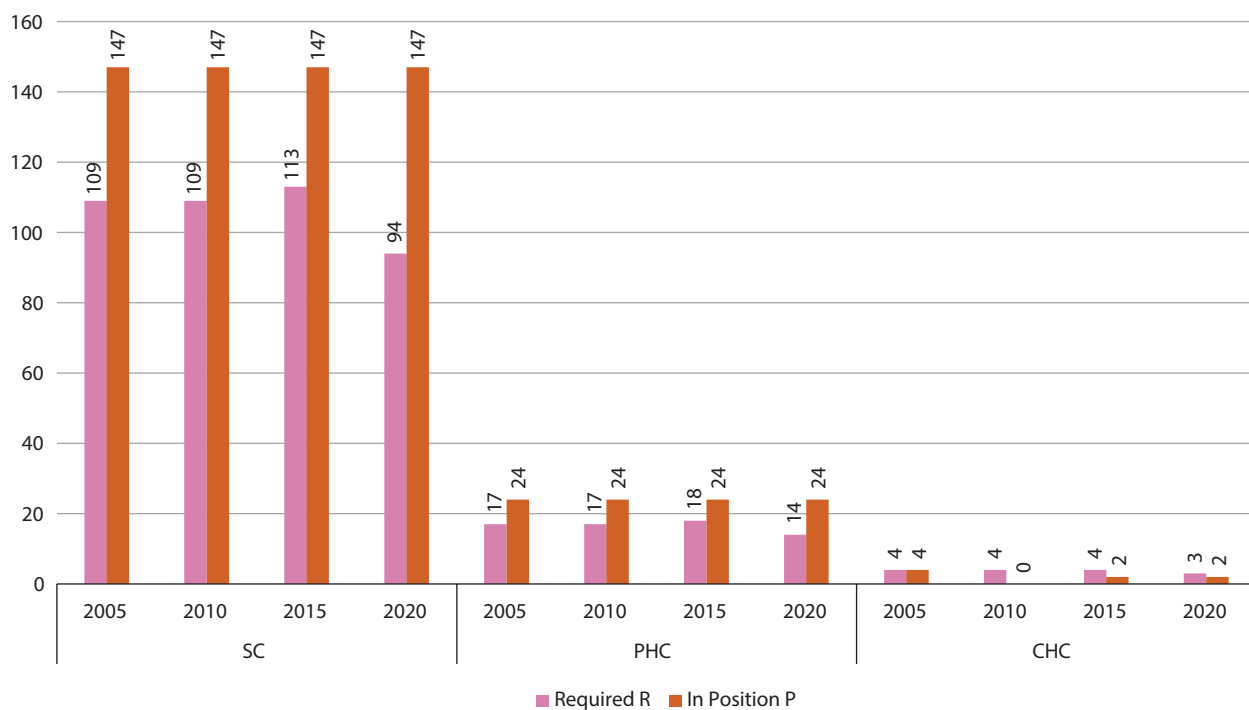


Figure 7: Year Wise Health Infrastructure Shortfall (%)

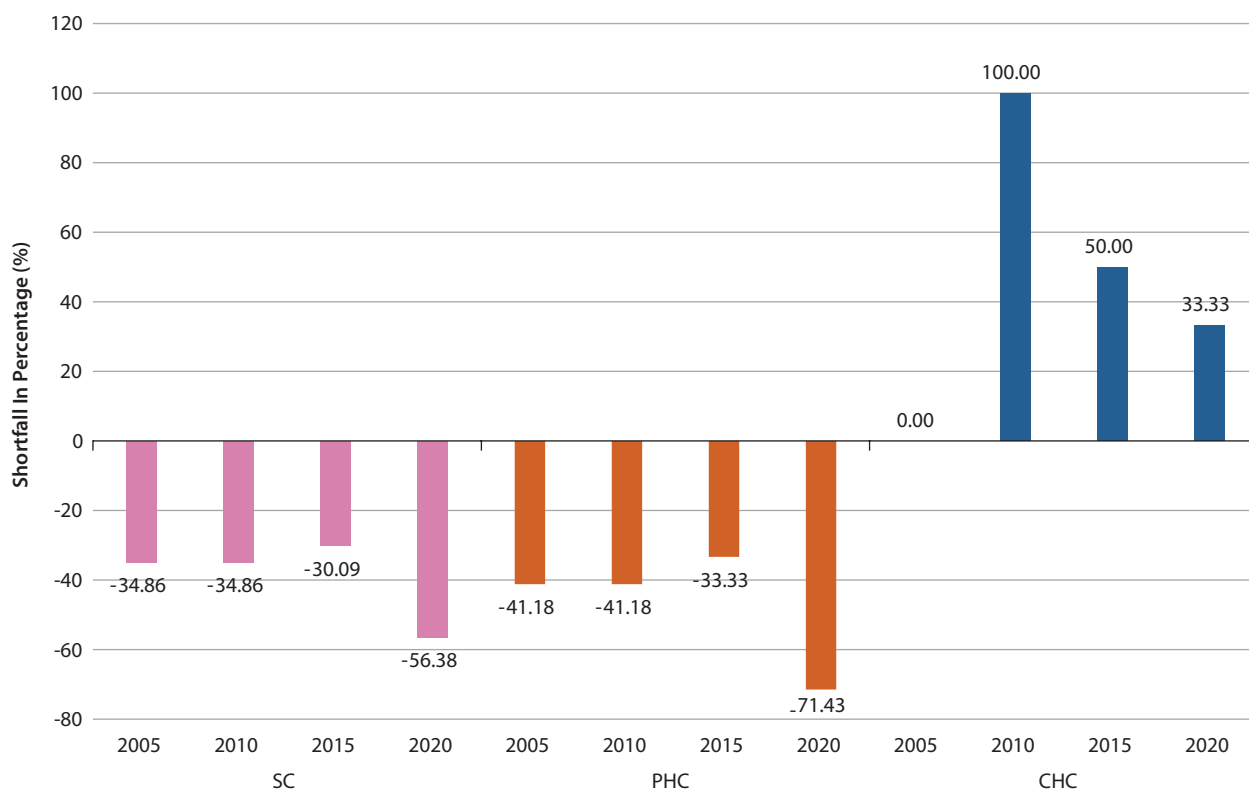
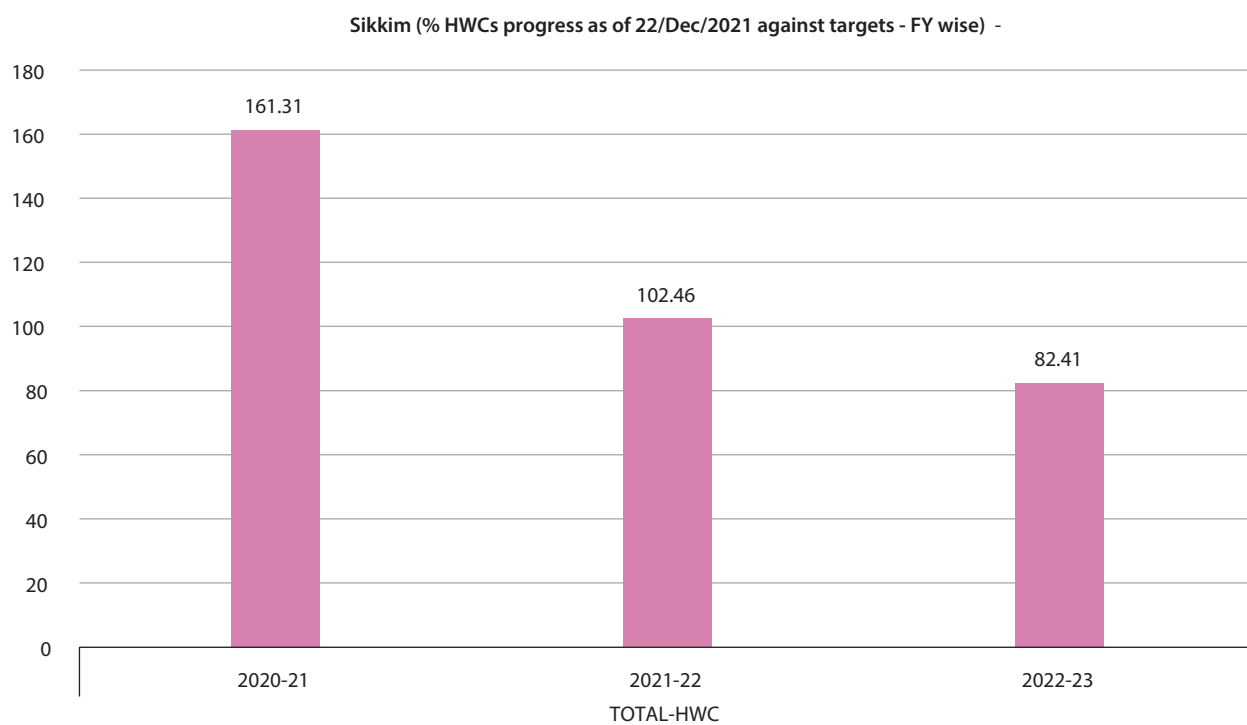


Figure 8: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)															
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted [^] (Height For Age) (%)	Children Under 5 Years - Wasted [^] (Weight For Height) (%)		
1	Sikkim	NFHS 4 Total	809	30.3	N/A	15	46.7	6.3	5.2	21.7	74.7	94.7	94.2	23.1	29.6	14.2		
2	Sikkim	NFHS 5 Urban	1520	31.2	92.8	8.5	55.5	4.6	10.7	18.2	51.4	92	N/A	N/A	15.1	13.2		
3	Sikkim	NFHS 5 Rural	746	21.6	86.2	12.5	77.3	7.1	8.4	8.2	62.3	96.3	88.7	31.9	25.6	13.9		
4	Sikkim	NFHS 5 Total	969	25.7	88.9	10.8	69.1	6.2	9.3	11.9	58.4	94.7	87.6	24.7	22.3	13.7		
5	East District	NFHS 5 Total	1000	29.9	90.1	9.4	54.3	3.9	9.1	17.7	43.8	91.8	N/A	25.2	17.8	14.3		
6	North District	NFHS 5 Total	693	24.5	81.4	16	75.7	7.5	9.8	12.8	59.4	97.3	90.6	25.3	31.8	4.5		
7	South District	NFHS 5 Total	1353	20.8	90.5	9.9	85	6.6	9.5	5.2	84.5	97.4	N/A	20.7	24.8	8		
8	West District	NFHS 5 Total	685	19.9	85.7	14.1	N/A	11	9.2	4.3	70.4	99.3	93.2	28.4	25.2	21.1		

* NFHS5 replaced 'Immunized' (word) from NFHS4 to 'Vaccinated'; Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best performing districts within the districts for a particular indicator

B. Red – Worst performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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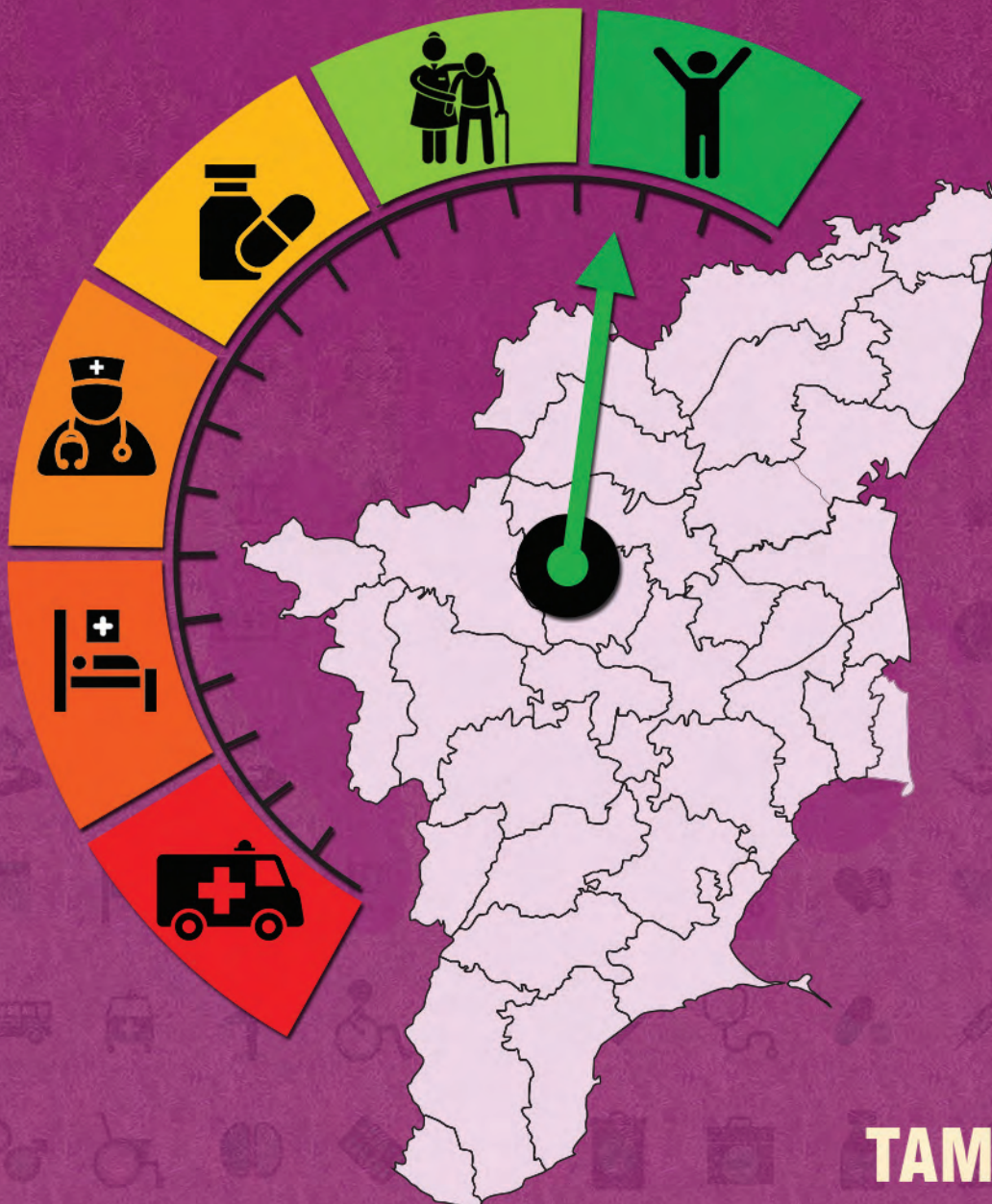
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



TAMIL NADU

**DISTRICTS VISITED IN
COMMON REVIEW MISSIONS**

CRM	Districts Visited	
2 nd	Villupuram, Salem, Krishnagiri & Vellore	
4 th	Virudhunagar	Tiruchirapalli
6 th	Tiruppur	Cuddalore
8 th	Kancheepuram	Madurai
10 th	Thirunelveli	Namakkal
12 th	Ramanathapuram	Preambulur
13 th	Villupuram	Virudhunagar

TAMIL NADU

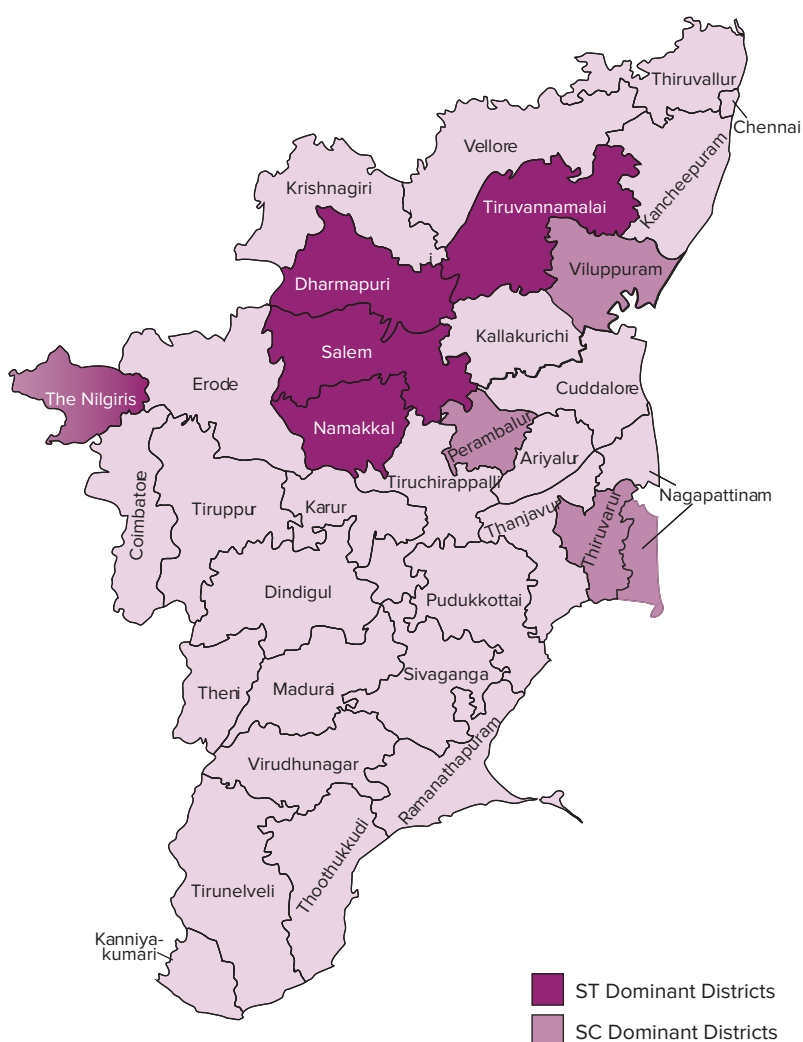
1. BACKGROUND

1.1 State Profile

Tamil Nadu is positioned^a 11th in India for a geographical spread of 1,30,058 km². The State is divided into 32 districts^b and estimated to have a population of over 7.21 crores^c, which accounts for approximately 5.94% of India's total population. It is projected that the population would reach around 7.6 crores by 2021^d. As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 1.44 crores (20.01%) and 0.08 crores (1.10%), respectively. Out of the 32 districts, top five ST dominant districts account for 45.71% of ST population, and top five SC dominant districts account for 16.40% of SC population in the State (Annexure 1.1; fig 1).

The total length of roads^e in the Tamil Nadu is 2,61,436 km (5.23%^f), in which the length of the national highways is 4,946 km (4.3%^g) and

Figure 1: ST & SC Dominant Districts



^a Including all States & UTs; RHS 2019

^b RHS 2019

^c Census 2011

^d Census Population Projection 2019 Report

^e Basic Road Statistics 2019, MoRTH

^f Percentage of total length of roads in Tamil Nadu

^g Percentage of total length of National Highways in the country

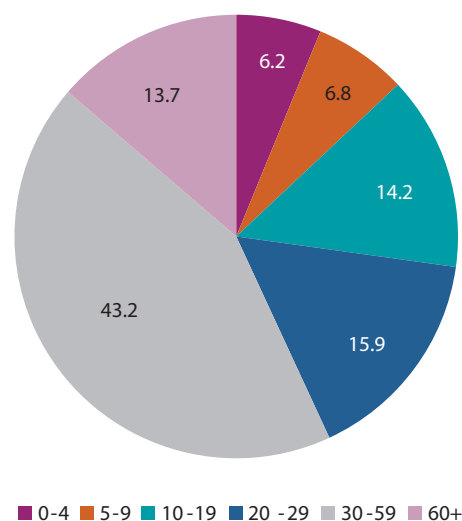
state highways is 12,095 km (6.91%^h). In the State, 51.6% of the population constitute the rural population, and 48.4% constitute the urban population^[3].

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

Out of the 32 districts, 9 districts have population of 30 lakhs and above, 7 districts have a population between 20-30 lakhs, 13 districts have a population between 10-20 lakhs, and 3 districts have a population less than 10 lakhs (Annexure 1.1 State profile). The State's Sex ratio at birth of 908 females for every 1000 males is higher than the national average of 899 (Annexure 1.2). It is estimated that there are 14.2% of the total population in the age group of 10-19 years, 59.1% within 20 to 59 years; while 13.7% is 60 years and above (Figure 2). The crude birth rate and the crude death rate have declined from 16.5 & 7.4 in 2005 to 14.2 & 6.1 in 2019, respectively (Annexure 2; figure2). The literacy rate increased from 73.5% in 2001 to 80.1% in 2011, with male & female literacy rates being 86.8% and 73.4%, respectively (Annexure 1.1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)ⁱ is 44.3% for higher education, 82.03% for senior secondary education, 93.92% for secondary education, 99.94% for elementary education, and 103.89% for primary education.

Figure 2: Tamil Nadu - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 13.7%^[2] of the Tamil Nadu's total population. The life expectancy at 60 years of age is 18.1 and 20.0 for males and females, respectively (2014-2018). In Tamil Nadu, 54.0% of elderly females and 19.0% elderly males living in urban areas and 66.0% of elderly females and 30.0% elderly males in rural areas are economically fully dependent on others. The old age dependency ratio is 15.8 in 2011; which are 15.5 for males and 16.1 for females, 16.7 in rural & 14.8 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 30% for men and 32% for women as opposed to the national average of 31% for both (Elderly in India 2016).

^h Percentage of total length of State Highways in the country

ⁱ Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+N^j services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^k, institutional deliveries, C sections, distribution of IFA^l tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined from 97% (SRS MMR Bulletin 2007-09) to 60 (SRS MMR Bulletin 2016-18) per 1,00,000 live births. In Tamil Nadu, 88.1% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 report- Dindigul, Karur, Namakkal, Theni, and Tiruvannamalai districts reported good ANC coverage, ranging between 95.7% - 98.7%. Whereas, Cuddalore, Kancheepuram, Kanniyakumari, Thoothukudi and Virudhunagar districts reported relatively low ANC coverage, ranging between 76.1% - 84.2%. As reported in HMIS 2019-20, around 100.0% of the deliveries took place in institutions, out of which 54.3% took place in public health facilities. Total percentage of C-sections (44.3%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 52.2% are conducted at private facilities in the State. Around 1.7% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years slightly decreased from 55.0% (NFHS-4) to 53.4% (NFHS-5). Anaemia in females of reproductive age group is almost thrice than that in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 37 (2005) to 15 (2019), which is exceptionally lower than the national average of 30 (Annexure 2, Figure 1). Similarly, NNMR^m and Still Birth (per 1,000 live births) rates have also significantly decreased from 26.2 and 11.2 (2005) to 10 and 4 (2018) respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 68.9 (2006-10) to 72.1 (2014-18), which is above the national average of 69.4 years (Annexure 2, Figure 3). As per NFHS 5, Nagapattinam, Ramanthapuram, Thoothukkudi, Vellore and Virudhunagar districts reported low SRBsⁿ ranging between 722- 799; while Dharmapuri, Namakkal, Sivaganga, The Nilgiris, and Theni districts reported high SRBs ranging between 1035- 1130.

Full vaccination^o coverage for children between 12 – 23 months of age has improved from 76.1% (NFHS4) to 90.4% (NFHS 5). The proportion of under 6-months children exclusively breastfed has also increased from 48.3% (NFHS 4) to 55.1% (NFHS 5). An increase in childhood anaemia from 50.7% to 57.4% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 5). As per NFHS 5 report, Erode, Kanniyakumari, Sivaganga, Thiruvallur and Thiruvallur districts reported relatively low stunting rates ranging from 17.3 to 19.8, and Karur, Madurai, Nagapattinam, Pudukottai and Tiruppur districts

^j Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^k Antenatal Check up

^l Iron Folic Acid Tablets

^m Neonatal Mortality Rate

ⁿ Sex Ratio at Birth

^o NFHS 5 Tamil Nadu Factsheet, based on information from vaccination card only

reported high stunting rates ranging from 30.6 to 33.6. For under-5 wasting - Coimbatore, Madurai, Pudukottai, Ramanathapuram, Salem and Thanjavur districts reported a low burden ranging from 7 to 10.1; and Dindigul, Erode, Karur, Sivaganga, Thiruvavur, Thoothukudi, and Tiruchirappalli reported a high burden ranging from 18.4 to 22.8.

2.3 Family Planning

The TFR^p reduced from 1.7 in 2005 to 1.6 in 2018 (Annexure 2, Figure 4). As per NFHS 5 report, the total unmet need in the State is reported as 7.5%, while the unmet need for spacing is 3.0%. Pudukottai district reported the highest total unmet need (12.2%) and Tiruppur reported the lowest (4.6%). Approximately 65.5% of married women reported to avail any modern method of family planning in the State (NFHS 5); with sterilization acceptance among females being 57.8% and 0.1% among males.

2.4 Communicable Diseases

The State has 32 functional IDSP units in place^[12]. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 17.31% of total disease burden (Annexure 1.4). Diarrheal diseases, dietary iron deficiency, and drug-susceptible are the leading causes of deaths due to CMNND in the State (Annexure 2, Figure 6^q). For TB, the annualized total case notification rate is 124 and NSP^r success rate is 80 as opposed to the national averages of 163% and 79%, respectively^[12]. For NLEP^s, the reported prevalence rate of 0.37 per 10,000 population is less than the national average of 0.61^[12]. In FY 2019-20, 5 deaths due to Dengue, and none due to Malaria, and Kala Azar are reported in the State^[12].

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that 62.0% of total disease burden in the State is from premature deaths and 38.0% is from disability or morbidity. Ischaemic heart disease, diabetes type 2, self-harm other means, falls and COPD are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 68.0% and injuries contribute to 14.69% of DALYs in the State. Tamil Nadu is positioned 5th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 4.9% of women and 20.1% of men used any kind of tobacco, while 0.4% of women and 29.2% of men consumed alcohol. Overall, metabolic factors (high fasting plasma glucose, high systolic blood pressure, high body-mass index, high LDL cholesterol) and ambient particulate matter pollution are the major risk factors for all DALYs and YLLs (Annexure 2, figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 14,65,361 crores. The State is positioned 12th out of 32 states in terms of per capita^t of ₹ 1,93,964. According to NHA 2017-18, the per capita Government Health Expenditure in the State is ₹ 1,621, which is less than the national average of ₹ 1,753. On the other hand, the OOPE^u as a share of Total Health Expenditure is 45.9%, which is less than the national average of 48.8%. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural

^p Total Fertility Rate

^q <https://vizhub.healthdata.org/gbd-compare/india>

^r New Smear Positive

^s National Leprosy Eradication Programme

^t Directorate of Economics and Statistics (Status as on 01.03.2020)

^u Out of Pocket Expenditure

areas is estimated to be around ₹ 2,691 in public facilities, ₹ 30,480 in private facilities; whereas for urban areas, it is around ₹ 2,433 in public facilities and ₹ 37,735 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 3,387 in public facilities & ₹ 35,273 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 3,648 in public facilities and ₹ 32,468 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated to be 27% in rural and 24% in urban areas; whereas for diagnostics, it is 32% in rural and 38% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Public health facilities have increased over time with no shortfall in the required SCs, PHCs and CHCs (Annexure 2, Figure 9). Currently, there are 8713 SCs, 1420 PHCs and 385 CHCs are in place, against the required 7321 SCs, 1216 PHCs and 304 CHCs. Similarly, in urban settings, there are 464 PHCs in place against the required 800, which accounts to a shortfall of 42%. Tamil Nadu has 32 DHs, 278 SDHs and 26 government medical colleges. In the State, 100% of DHs (32), 54.67% of SDHs (152), and 91.75% of CHCs (367) serve as functional FRUs. In tribal catchments, there are 543 SCs, 94 PHCs and 21 CHCs in place, against the required 213 SCs, 32 PHCs and 8 CHCs.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 4285 HWCs (2444 SHCs, 1381 PHCs & 460 UPHCs) are operationalized in the State as of 22nd December 2021^v.

In the State, 31 districts are equipped with MMUs under the NRHM, and none under the NUHM. The State has 82% of required ASHAs in position under the NRHM and none under the NUHM. The doctor to staff nurse ratio in place is 1:2, with 5 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 3613.03 availed (events) OPD services and 129.23 availed (events) IPD services. As per the NSSO data (2017-18), 63% of all OPD cases in rural areas and 41% in urban areas; and 57% of all IPD cases in rural areas & 42% in urban areas utilized public health facilities. The public health facility utilization in the State is above the national averages for both (Annexure 1.6).

^v AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^w

Indicator	Tamil Nadu 2011 ¹	India
Total Population (In Crore)	7.21	121.08
Rural (%)	51.60	68.85
Urban (%)	48.40	31.14
Scheduled Caste population (SC) (in crore)	1.44 (20.01%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.08 (1.10%)	10.45 (8.63%)
Total Literacy Rate (%)	80.09	72.99
Male Literacy Rate (%)	86.8	80.89
Female Literacy Rate (%)	73.44	64.64
Number of Districts in the Tamil Nadu ²	32	
Number of districts per lakh population in Tamil Nadu (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	3
	≥ 10 Lakhs - <20 Lakhs	13
	≥20 Lakhs - <30 lakhs	7
	≥30 Lakhs	9

ST SC Dominant (Top 5) Districts of Tamil Nadu¹

ST Dominant Districts (%)	SC Dominant Districts (%)
The Nilgiris - 4.46%	Thiruvarur - 34.08%
Dharmapuri - 4.18%	The Nilgiris - 32.08%
Tiruvannamalai - 3.69%	Nagapattinam - 31.54%
Salem - 3.43%	Perambalur - 31.01%
Namakkal - 3.30%	Viluppuram - 29.37%
Top 5 ST dominant district accounts for - 45.71%	Top 5 SC dominant district accounts for - 16.40%

1.2 Key Health Status & Impact Indicators

Indicators	Tamil Nadu	India
Infant Mortality Rate (IMR) ³	15	30
Crude Death Rate (CDR) ³	6.1	6
Crude Birth Rate (CBR) ³	14.2	19.7

^w Sources are mentioned at the end of Annexure 1

Maternal Mortality Ratio (MMR) ³	60	113
Neo Natal Mortality Rate (NNMR) ⁴	10	23
Under Five Mortality Rate (U5MR) ⁴	17	36
Still Birth Rate ⁴	4	4
Total Fertility Rate (TFR) ⁴	1.6	2.2
Life expectancy at birth ⁵	72.1	69.4
Sex Ratio at Birth ⁴	908	899

1.3 Key Health Infrastructure Indicators^x

Indicators	Numbers (Total)			
Number of District Hospitals ²	32			
Number of Sub District Hospital ²	278			
Number of Government (Central + State) Medical College ⁶	26			
Number of Private (Society + Trust) Medical Colleges ⁶	24			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	2444	2451	4917	6560
PHC-HWC	1381	1421	1421	1421
UPHC-HWC	460	420	420	420
Total-HWC	4285	4292	6758	8401
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	304	385	-26.64	
Number of Primary Health Centres (PHC)	1,216	1,420	-16.78	
Number of Sub Centres (SC)	7,321	8,713	-19.01	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	32	152	367	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	800	464	42.00	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	8	21	-162.50	
Number of PHC	32	94	-193.75	
Number of SC	213	543	-154.93	

^x Sources are mentioned at the end of Annexure 1

Patient Service⁹	Tamil Nadu	India
IPD per 1000 population	129.23	62.6
OPD per 1000 population	3613.03	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	95.17	36.4

1.4 Major Health Indicator^y

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Tamil Nadu	India
% DALY ^z accountable for CMNNDs ^{aa}	17.31	27.46
% DALY accountable for NCDs	68	61.43
% DALY accountable for Injuries	14.69	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Tamil Nadu	India
Level of Birth Registration (%)	84.4	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	44	20.7
RMNCHA+N		
Maternal Health⁹	Tamil Nadu	India
% 1st Trimester registration to Total ANC Registrations	93.1	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	88.1	79.4
Total Reported Deliveries	9,42,869	21410780
% Institutional deliveries to Total Reported Deliveries	100	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	54.3	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	45.7	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	44.3	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	37.8	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	52.2	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	1.7	53.4
Neonatal⁹	Tamil Nadu	India
% live birth to Reported Birth	99.4	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	12.8	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	76.2	89.9

^y Sources are mentioned at the end of Annexure 1

^z Disability Adjusted Life Years

^{aa} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Tamil Nadu	India
Sick New Born Care Unit (SNCU)	73	895
New Born Stabilization Unit (NBSU)	147	2418
New Born Care Corner (NBCC)	2267	20337
Child Health & Nutrition¹⁰	Tamil Nadu (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	3.7	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	53.8	60.6
Children under 5 years who are underweight (weight-for-age) (%)	22	32.1
Child Immunization¹⁰	Tamil Nadu (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on in-formation from vaccination card only (%)	90.4	83.8
Children age 12-23 months who have received BCG (%)	97.6	95.2
Children age 12-23 months who have received the first dose of measles-containing vaccine (MCV) (%)	95.8	87.9
Family Planning¹⁰	Tamil Nadu (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	3	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Tamil Nadu	India
Number of districts with functional IDSP unit	32	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Tamil Nadu	India
Annualized total case notification rate (%)	124	163
New Smear Positive (NSP) Success rate (in %)	80	79
National Leprosy Eradication Programme (NLEP)¹¹	Tamil Nadu	India
Prevalence Rate/10,000 population	0.37	0.61
Number of new cases detected	4,252	1,14,359
Malaria, Kala Azar, Dengue¹¹	Tamil Nadu	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	5	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Tamil Nadu (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	23.6	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	26.6	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Tamil Nadu (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	14.3	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	19.5	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	7.5	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	8.1	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Tamil Nadu (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	4.9	8.9
Men who use any kind of tobacco (%)	20.1	38
Women who consume alcohol (%)	0.3	1.3
Men who consume alcohol (%)	25.4	18.8
Injuries		
Road Traffic Accident¹²	Tamil Nadu	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	5	N/A
Total number of fatal Road Accidents	9,813	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	18.4	33.7
Number of persons killed in Road Accidents	10525	115113

1.5 Access to Care^{bb}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Tamil Nadu	India
Number of Districts equipped with MMU under NRHM	31	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Tamil Nadu	India
102 Type	0	9955
104 Type	0	605
108 Type	941	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	950	11070

^{bb} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Tamil Nadu	India
Total number of ASHA targeted under NRHM	3242	946563
Total number of ASHA in position under NRHM	2650	904211
% of ASHA in position under NRHM	81.74	96
Total number of ASHA targeted under NUHM	NA	75597
Total number of ASHA in position under NUHM	NA	64272
% of ASHA in position under NUHM	NA	85
Community Process¹¹	Tamil Nadu	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	15015	554847
Number of Mahila Arogya Samitis (MAS) formed	1025	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Tamil Nadu	India
DH	31	796
CHC	385	6036
PHC	1462	20273
UHC	11	126
UPHC	420	3229
Human Resource for Health ¹⁴		
HRH Governance	Tamil Nadu	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	Yes	
Public Health Cadre available (Y/N)	Yes	
Overall Vacancies (Regular + contractual)	Specialists (%)	17
	Dentists (%)	23
	MO MBBS (%)	19
	Nurse (%)	9
	LT (%)	25
	ANM (%)	15
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:2	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	6 per 10,000	5 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	2:1	2:1

Ranking: Human Resource Index of Tamil Nadu¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{cc}	21611	17440	12180	5260	9431	63.75
Staff Nurse	35736	21714	21181	533	14555	
Lab Technician	7729	3620	3376	244	4353	
Pharmacists	3729	3855	3516	339	213	
MO MBBS ^{dd}	7374	5729	5122	607	2252	
Specialist ^{ee}	7904	5386	4671	715	3233	

1.6 Healthcare Financing^{ff}

National Health Accounts (NHA) (2017-18)	Tamil Nadu		India	
Per Capita Government Health Expenditure (in ₹)	1,621		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	0.8		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	6.5		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	45.9		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Tamil Nadu		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	63	41	33	26
IPD - % of hospitalized cases using public facility	57	42	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	172	303	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	1180	1139	845	915
IPD - Per hospitalized case (in INR) - Public	2691	2443	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	30480	37735	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	32	38	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	27	24	53	43

^{cc} MPW – Multi Purpose Health Worker (Female + Male)

^{dd} MO MBBS (Full Time)

^{ee} Specialist (All Specialist)

^{ff} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	3387	3648	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	21,005	31,708	20,692	26,701
State Health Expenditure	Tamil Nadu		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	4.9		5 ⁹⁹	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

⁹⁹ Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

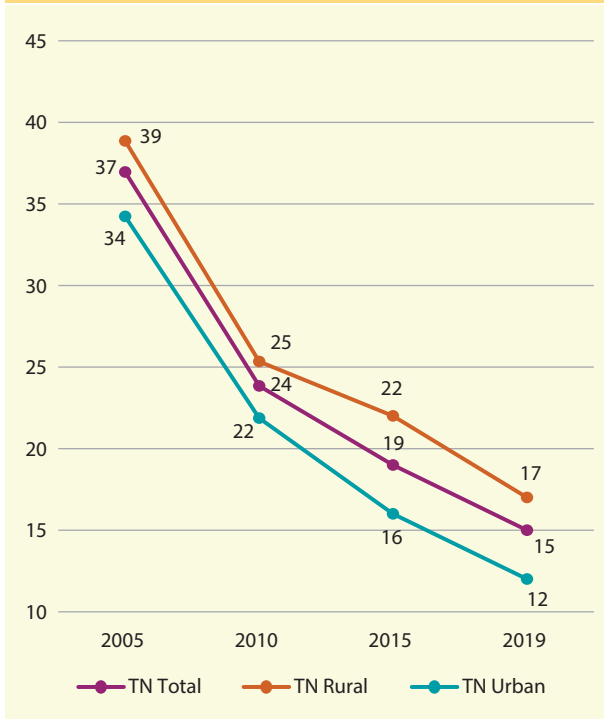


Figure 2: CBR & CDR Trend

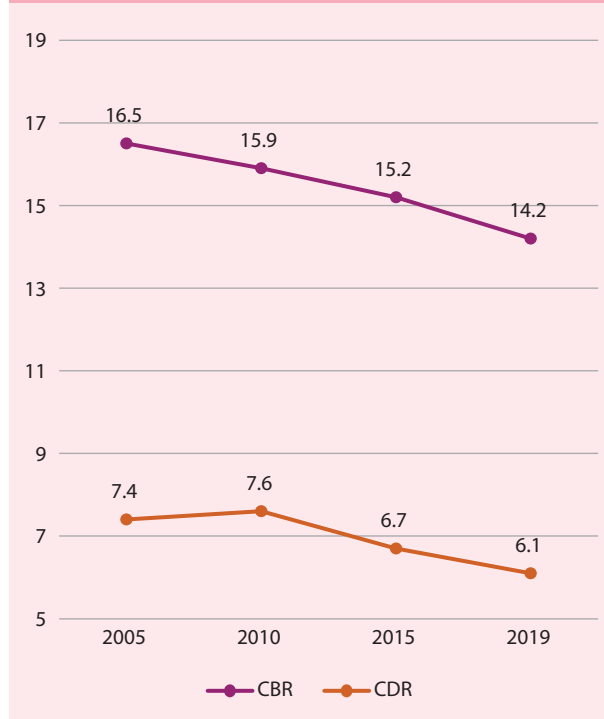


Figure 3: Life Expectancy At Birth Trend

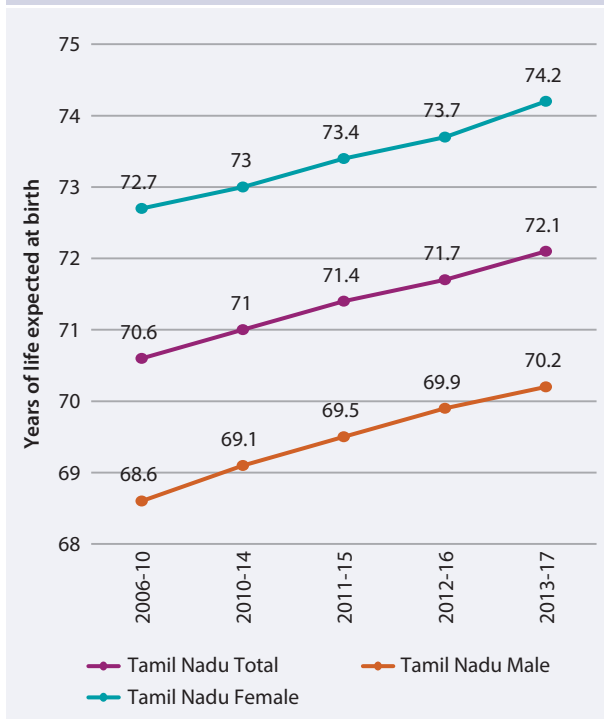


Figure 4: NNMR, TFR & Still Birth Trend

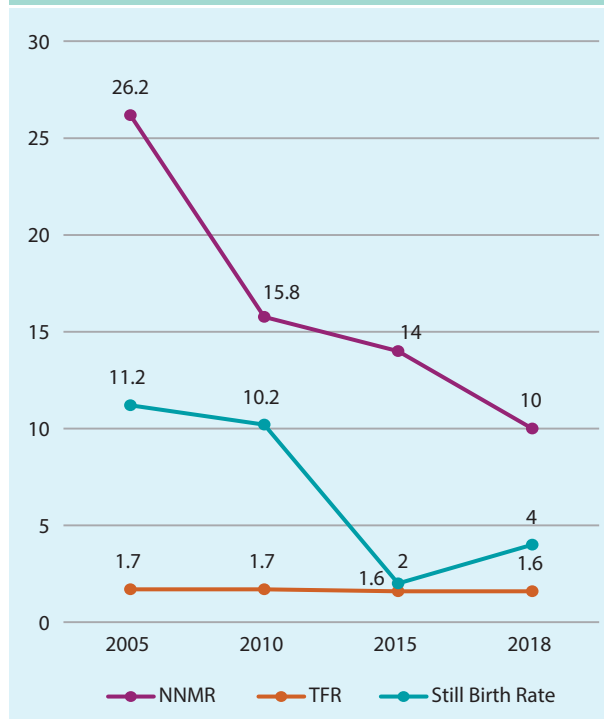


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

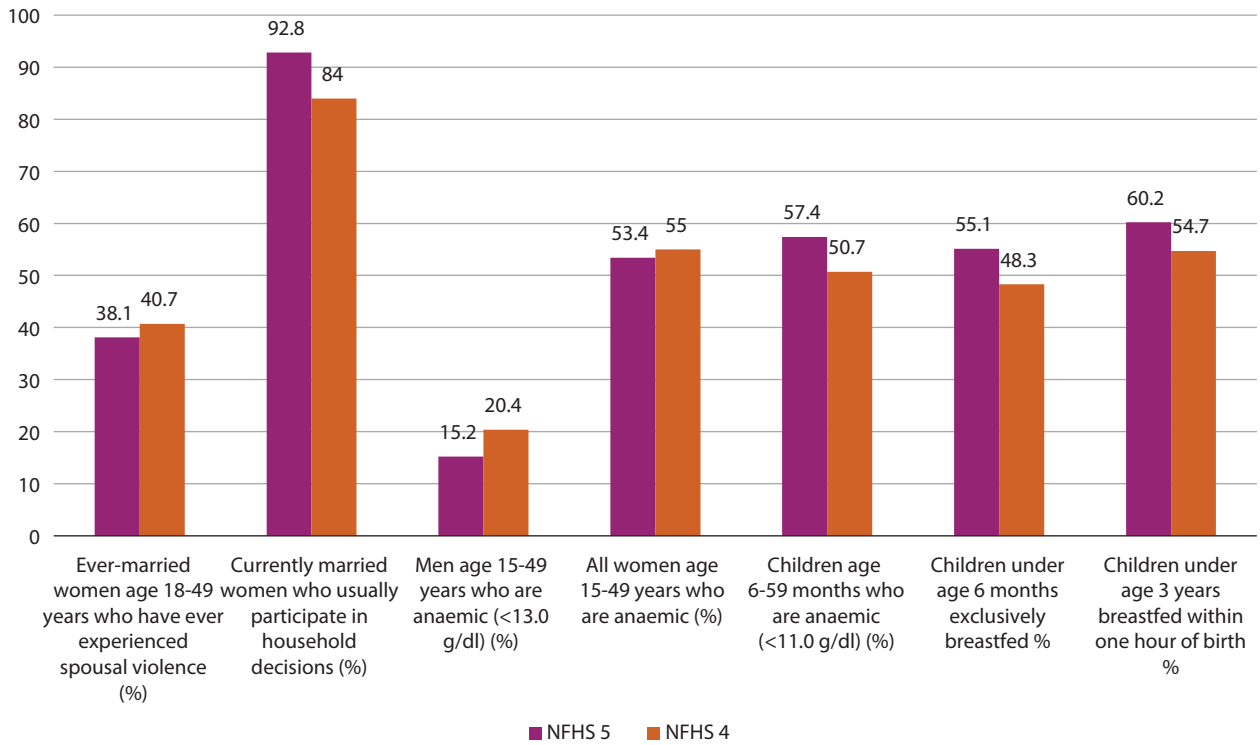


Figure 6: Top 15 causes of DALYs, 1990-2019

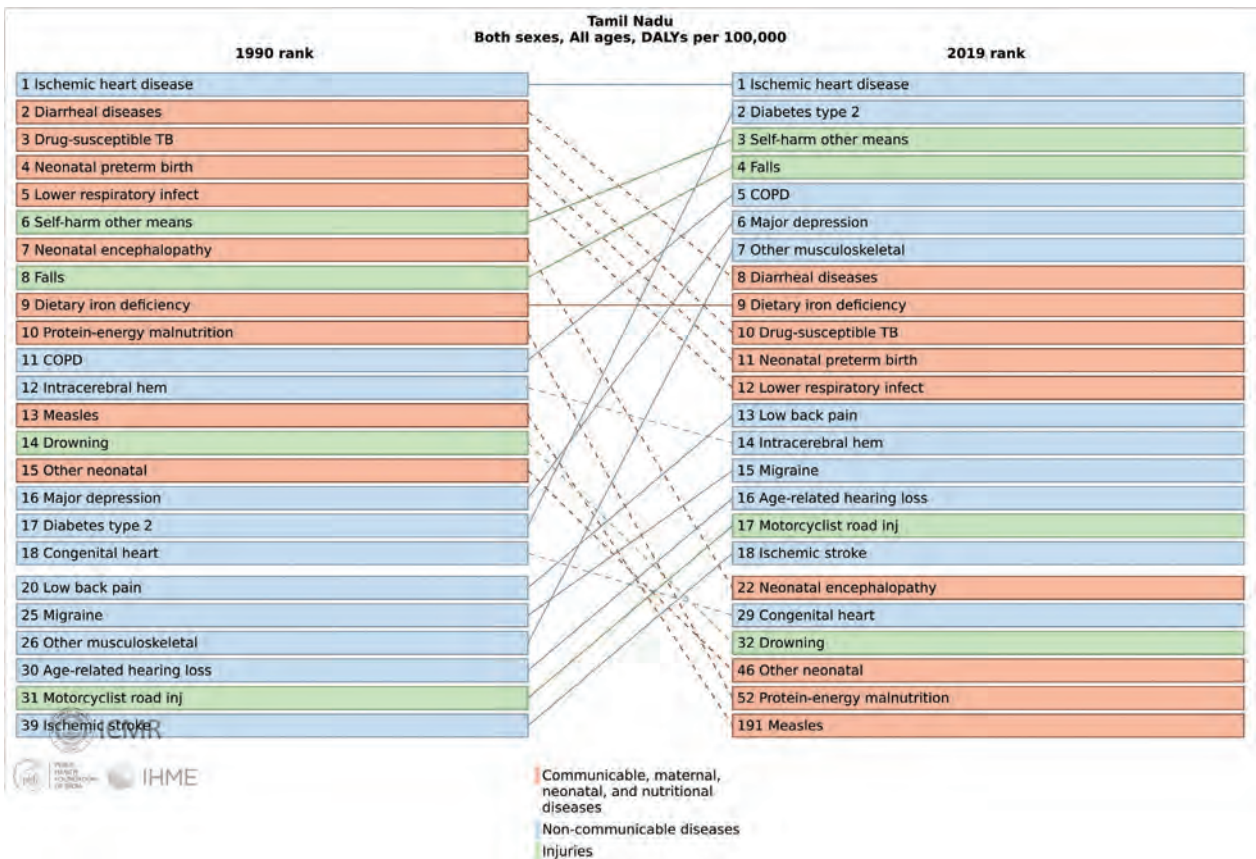


Figure 7: Top 15 risk of DALYs, 1990-2019

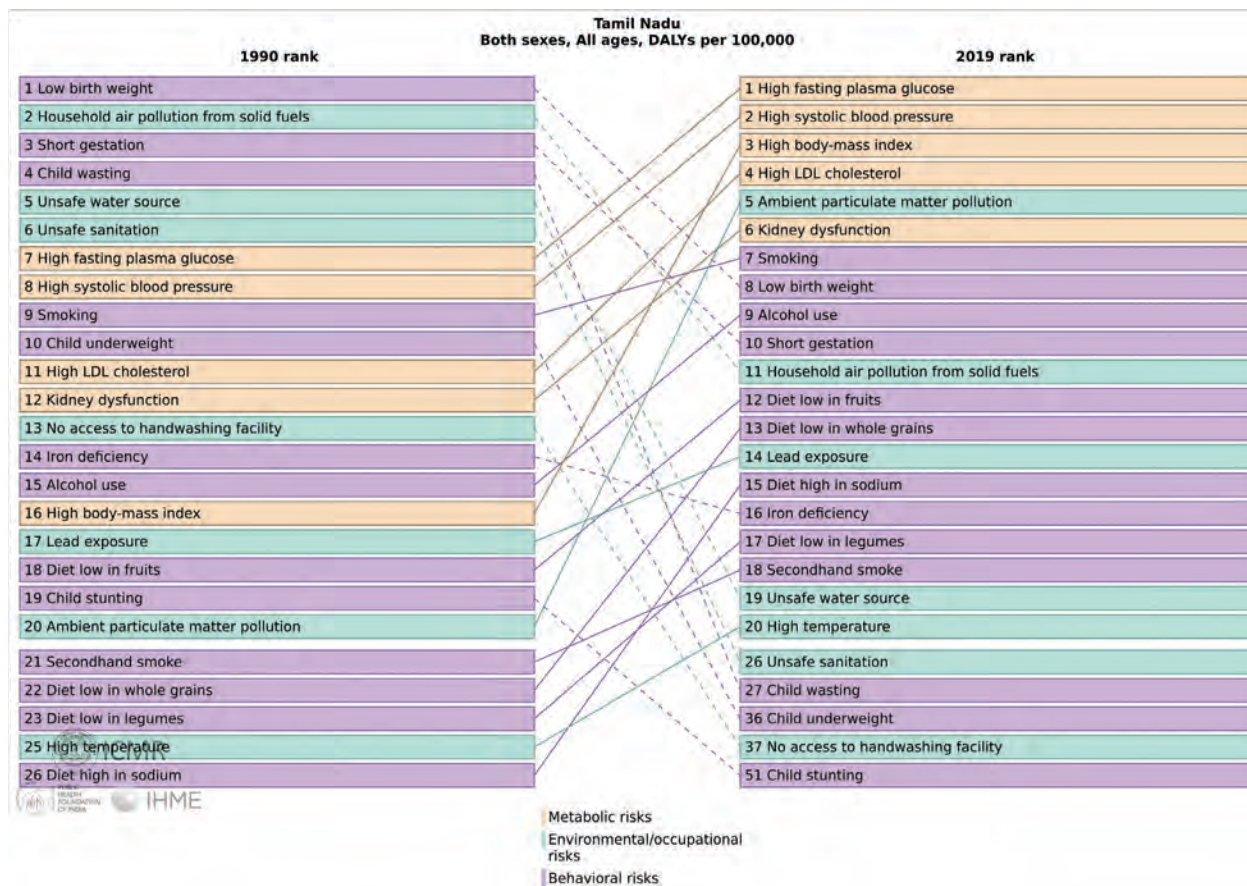


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

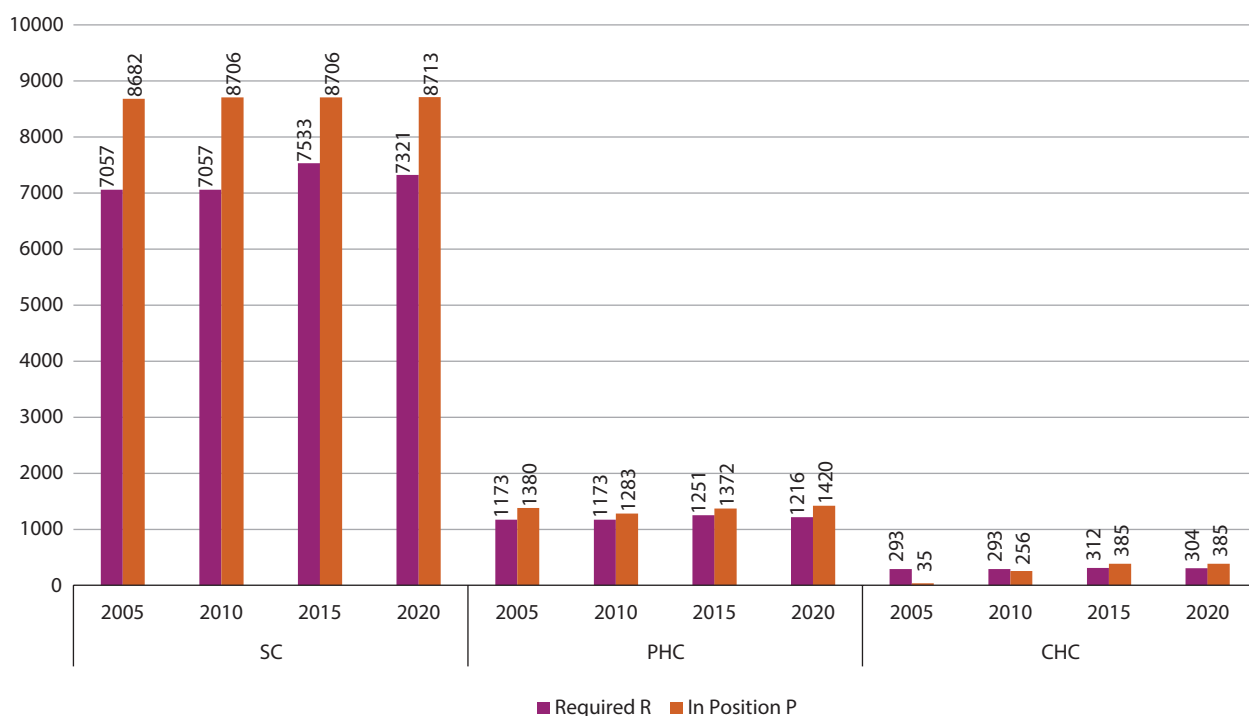


Figure 9: Year Wise Health Infrastructure Shortfall (%)

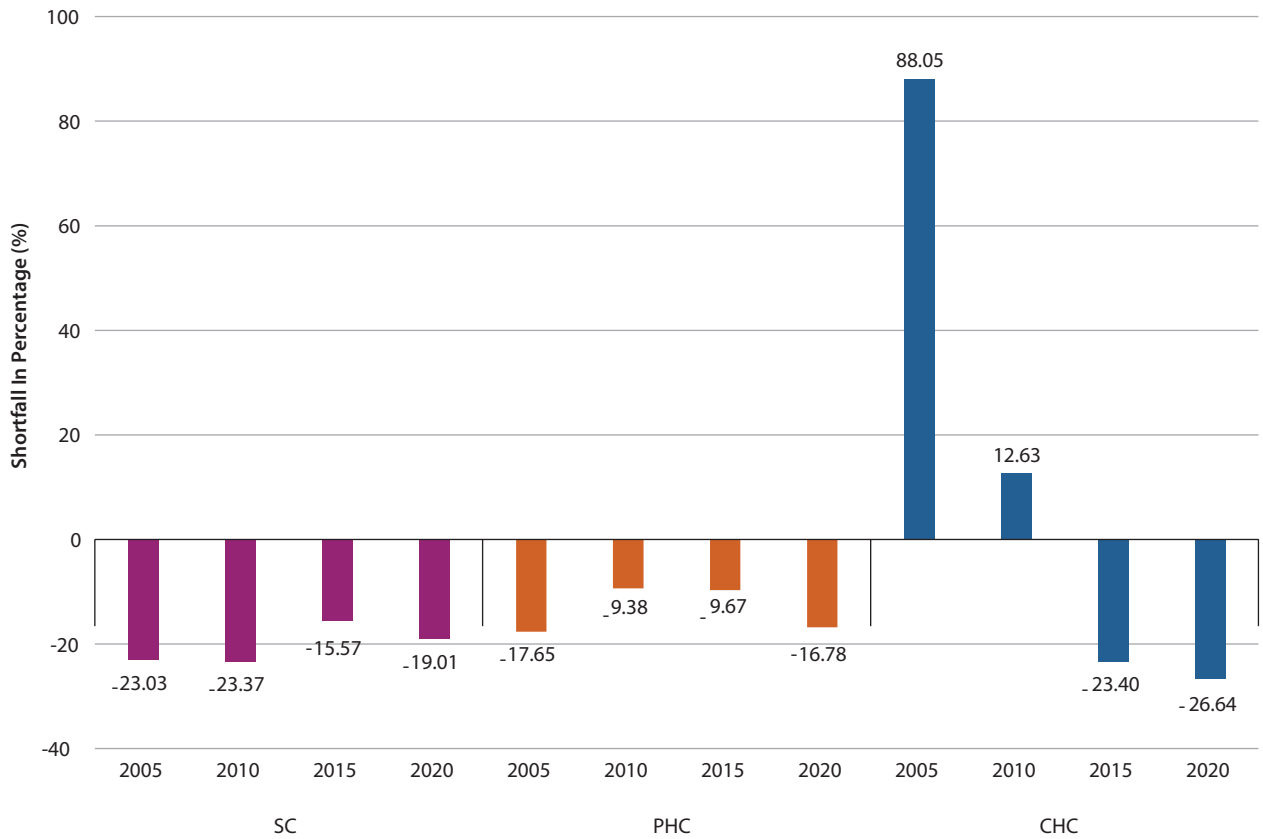
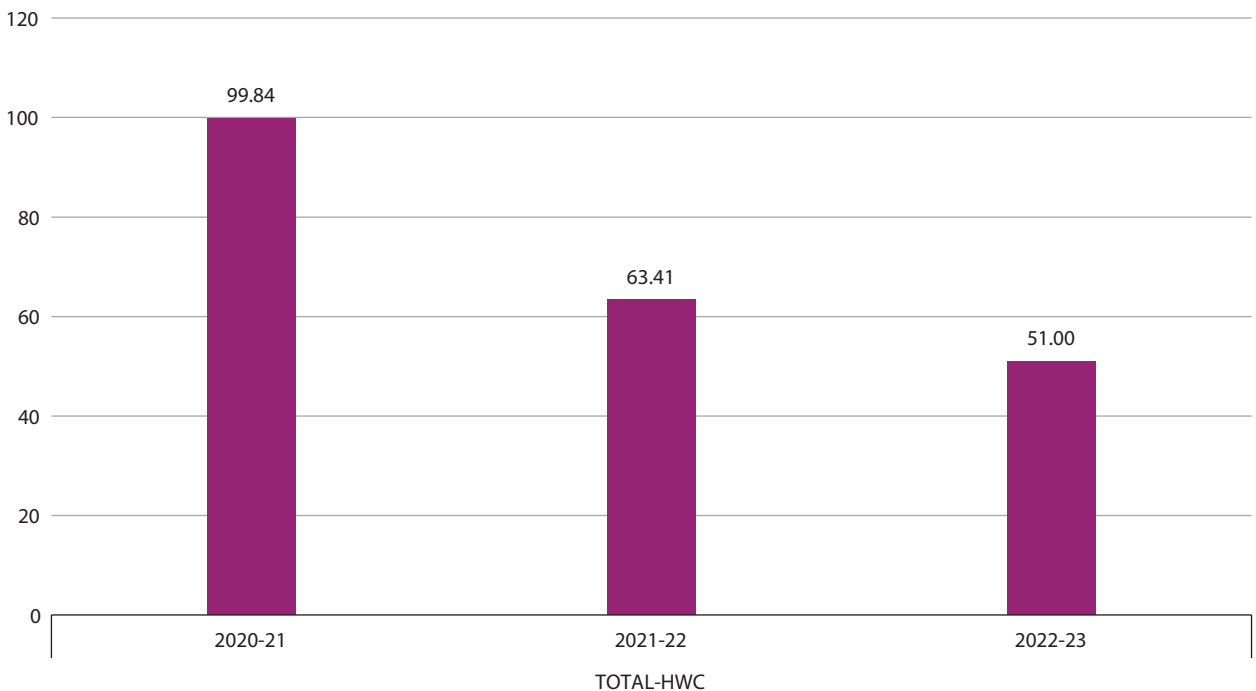


Figure 10: Percentage HWCs progress against target - FY wise (%)

Tamil Nadu (% HWCs progress as of 22/Dec/2021 against targets - FY wise)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts		(Green – Good Performance, Red – Poor Performance) (District Wise Rural/Urban Stats Not Available)													
	Sex Ratio At Birth (Females/1000 Males)	Data Source	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted ¹ (Height For Age) (%)	Children Under 5 Years - Wasted ² (Weight For Height) (%)	
1	Tamil Nadu	NFHS 4 Total	954	NA	16.3	53.2	1.9	0.8	10.1	81.1	98.9	76.1	30.7	27.1	19.7	
2	Tamil Nadu	NFHS 5 Urban	893	88.9	10.4	67.6	4.8	2.6	8.1	88.8	99.8	89.4	17.9	22.2	13.9	
3	Tamil Nadu	NFHS 5 Rural	867	79.6	15.2	69.5	4.7	1.2	6.9	90.8	99.4	91.3	15	27.2	15.2	
4	Tamil Nadu	NFHS 5 Total	878	84	12.8	68.6	4.8	1.8	7.5	89.9	99.6	90.4	16.3	25	14.6	
5	Ariyalur	NFHS 5 Total	807	74.6	12.4	61.4	8.3	0.9	7	91.4	100	90.8	11.7	25.3	15.1	
6	Chennai	NFHS 5 Total	859	94.8	1.9	65.8	4.9	1.7	6.9	89.9	100	100	15.1	20.4	18.3	
7	Coimbatore	NFHS 5 Total	952	89.3	19.8	66.5	5	3.1	9.1	90	100	94.5	11.6	23	7	
8	Cuddalore	NFHS 5 Total	819	78.3	12.6	65.3	2.7	1.8	9.2	82.2	99.2	77.3	23.2	20.2	13.9	
9	Dharmapussrsri	NFHS 5 Total	1052	79	16.7	70	6.4	0.4	8.5	94.5	99.6	96.1	8.1	28.7	16.9	
10	Dindigul	NFHS 5 Total	816	78.2	20.5	74.2	6.9	1.1	6.3	96.2	97	96.4	20.7	27.1	21.1	
11	Erode	NFHS 5 Total	807	82.4	13.7	70.6	3.6	1.8	4.9	93.9	100	97.2	19.1	19.4	20.9	
12	Kancheepuram	NFHS 5 Total	889	82.6	10	69.3	4.7	2.3	7.2	76.1	100	81.5	21.7	20.6	15.7	
13	Kanniyakumari	NFHS 5 Total	880	97.7	4.3	70.3	2.9	1.5	4.9	84.2	100	96	22.1	17.3	11.4	
14	Karur	NFHS 5 Total	839	78.2	13.3	65.8	3.9	0.9	7.5	95.7	100	84	13.3	33.6	18.4	
15	Krishnagiri	NFHS 5 Total	857	78.6	20.3	70	6	0.4	4.9	93.1	99.6	90.3	7.1	29	10.4	
16	Madurai	NFHS 5 Total	815	83.9	11.5	69.7	6.4	3.1	8.7	89.5	100	92.9	25	32.4	9.5	
17	Nagapattinam	NFHS 5 Total	799	87.8	6.3	65.9	5.8	1.8	8.5	93.1	99.7	94.6	14.4	32.3	12.5	
18	Namakkal	NFHS 5 Total	1130	87.7	14.2	65.2	4.1	1.9	6.5	97.8	100	84.4	12.9	25.2	10.3	

19	Perambalur	NFHS 5 Total	887	75.5	81.1	21.4	63.1	7.7	0.9	11.4	92.2	100	94	12.6	29.1	15.9
20	Pudukkottai	NFHS 5 Total	804	72.9	81.1	11.6	68	6			91.6	100	75.9	22.3	32.2	9.5
21	Ramanathapuram	NFHS 5 Total	787	69.7	84.1	14.7	72.2	6.5			88.2	99.6	91.1	19.9	26.4	17.7
22	Salem	NFHS 5 Total	900	67.5	81.6	23.7	69	4			85	100	81.8	6.7	23.6	10.1
23	Sivaganga	NFHS 5 Total	1127	67.7	85.3	4.5	67.3	4.9			90.9	100	81.5	16	27.6	22.8
24	Thanjavur	NFHS 5 Total	934	70.6	83.8	4.1	64.8	4.9			93.7	100	66.7	18.2	19.6	8.3
25	The Nilgiris	NFHS 5 Total	1035	74.5	89.1	11.1	77.9	4.5			92.5	100	98	18.8	26.7	17.3
26	Theni	NFHS 5 Total	1057	67.4	85.7	16	70.6	8.2			98.7	100	95.2	17.3	20.2	15.5
27	Thiruvallur	NFHS 5 Total	991	57.4	83.6	13.4	67.9	3.8			85.4	100	88.6	26.3	18.1	17
28	Thiruvarur	NFHS 5 Total	901	75.2	89.3	9.1	70.2	4.3			92.3	100	97.1	18.7	19.8	18.4
29	Thoothukkudi	NFHS 5 Total	734	57.8	88.5	8.9	67.6	6.6			80.7	100	100	19.9	20.3	18.4
30	Tiruchirappalli	NFHS 5 Total	919	67.8	83.6	13.5	68.1	6.8			90.5	98.6		12.4	27.6	20.9
31	Tirunelveli	NFHS 5 Total	939	61.3	85.6	10.7	69.8	5			85	100	95.5	8.7	29.4	12
32	Tiruppur	NFHS 5 Total	1016	59.9	87.1	10.5	69.3	3.8			93.5	100	NA	16.7	21.5	15.3
33	Tiruvannamalai	NFHS 5 Total	848	69.6	79.8	11.6	71.9	3.1			97.7	99.1		3.6	30.6	14.8
34	Vellore	NFHS 5 Total	722	71.4	81.6	14.9	65.2	3.1			95.4	99.5	97.2	9.9	29.8	13.1
35	Viluppuram	NFHS 5 Total	916	77.6	75.4	19	71.6	3.2			94.9	99.1		19.8	23.9	12.4
36	Virudhunagar	NFHS 5 Total	730	51.3	84.1	15.5	68.1	3.1			83.4	97.8		18.5	29.2	14.4

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'Vaccinated'; Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' - 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother
 # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color - Best five performing districts within the districts for a particular indicator

B. Red - Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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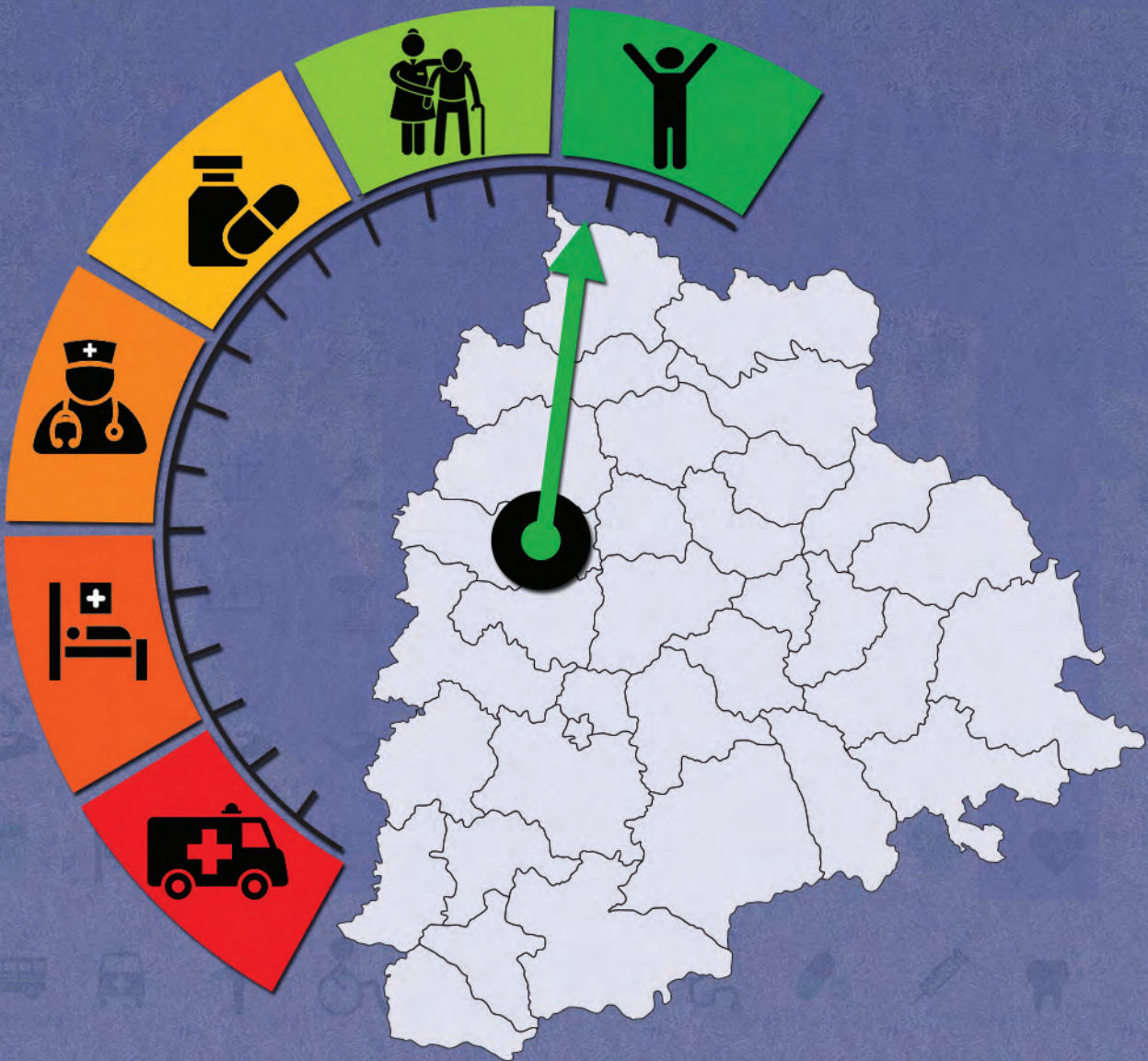
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



TELANGANA

DISTRICTS VISITED IN
COMMON REVIEW MISSIONS

CRM	Districts Visited	
8 th	Adilabad	Medak
11 th	Khammam	Adilabad
12 th	Jayashankar Bhupalpally	Karimnagar

TELANGANA

1. BACKGROUND

1.1 State Profile

Telangana is positioned^a 12th in India for a geographical spread of 1,14,840 km². The State is divided into 33 districts^b and estimated to have a population of over 0.35 crores^c, which accounts for approximately 2.90 % of India's total population. It is projected that the population would reach around 0.37 crores by 2021^d. As per Census 2011, the State's^e Scheduled caste (SC) population is 0.54 crores (15.62%) and Scheduled Tribe (ST) population is 0.32 crores (9%). In the State, 61.3% of the population constitute the rural population, while the rest constitute the urban population. Top 5 SC dominant districts account for 24.01% of the total SC

Figure 1: Top 5 ST & SC Dominant Districts



^a Including all States & UTs & RHS 2020

^b RHS 2020

^c Census 2011

^d Census Population Projection 2019 Report

^e As provided by the State

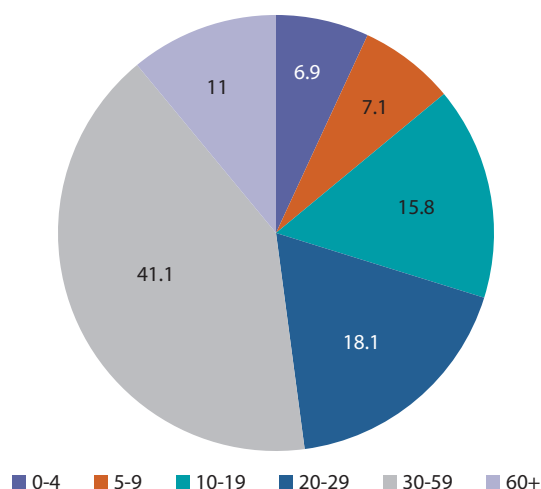
population and top 5 ST dominant districts account for 35.10% of the total ST population. 61.12% of the population reside in rural areas and 38.87% reside in urban areas (Figure 2 and Annexure 1.1). The total length of roads^f in the State is 1,26,135 km (2.52%^g), the length of the national highways is 3455 km (3.0%^h) and state highways is 2553 km (1.45%ⁱ).

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

Out of the 33 districts, 1 district has a population of 30 lakhs and above, 2 districts have a population between 20-30 lakhs, 9 districts have a population between 10-20 lakhs, and 21 districts have a population less than 10 lakhs (Annexure 1.1 State profile). The State's Sex ratio at birth of 901 females for every 1000 males is higher than the national average of 899 (Annexure 12). It is estimated that 15.8% of the total population is in the age group of 10-19 years, 59.2% within 20 to 59 years; and 11% is 60 years and above (Figure 2). The crude birth rate and the crude death rate have declined from 19.1 and 7.3 (2005) to 16.7 & 6.1 (2019), respectively (Annexure 2; Figure 2). As per ESAG 2018 report, the Gross Enrollment Rate (GER)^j is 36.3% for higher education, 61.32% for senior secondary education, 82.53% for secondary education, 97.79% for elementary education, and 103.02% for primary education.

Figure 2: Telangana - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 11% of the Telangana's total population. The life expectancy at 60 years of age is 17.5 and 18.2 for males and females, respectively (2014-2018). In Telangana, 48% of elderly females and 14% elderly males living in rural areas; and 84% of elderly females and 43% elderly males in urban areas are economically fully dependent on others.

^f Basic Road Statistics 2019, MoRTH

^g Percentage of total length of roads in Telangana

^h Percentage of total length of National Highways in the country

ⁱ Percentage of total length of State Highways in the country

^j Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+N^k services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)^l, institutional deliveries, C sections, distribution of IFA^m tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care - have shown substantial improvement since 2005 (NFHS 4 & %). The maternal mortality ratio has significantly declinedⁿ from 134^o (2007-09) to 63 (2016-18). In Telangana, 84.4% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 report- Jagtial, Kamareddy, Khammam, Nizamabad and Peddapalli districts reported high ANC coverage ranging between 54.8% - 64.7%; and Mahabubnagar, Mancherla, Siddipet, Vikarabad and Wanaparthy districts reported low ANC coverage ranging between 76.3% - 81.9%. As reported in HMIS 2019-20, around 99.9% of the deliveries took place in institutions, out of which 47.6% took place in public health facilities. Total percentage of C-sections (48.9%) is higher than the WHO's standard (10-15%); and out of the total reported C-sections, about 53.7% is conducted at private facilities in the State. Around 29.7% of women are tracked for the first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years increased from 56.6% (NFHS-4) to 57.6% (NFHS-5). Anaemia in females of reproductive age group is thrice than that in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 57^p (2005) to 23 (2019), which is exceptionally lower than the national average of 30 (Annexure 2, Figure 1). Similarly, NNMR^q and Still Birth (per 1,000 live births) rates have also significantly decreased from 34.8 and 10.9 (2005) to 19 and 15 (2018) respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth is 69.6 (2014-18), which is above the national average of 69.4 years (Annexure 2, Figure 3). As per NFHS 5- Adilabad, Mahabubnagar, Nagarkurnool, Vikarabad and Warangal Rural districts reported low SRBs^r ranging between 698-789; and Jangoan, Nirmal, Rajanna Sircilla, Sangareddy and Wanaparthy districts reported high SRBs ranging between 987-1138.

Full vaccination^s coverage for children between 12 – 23 months of age has improved from 79.1% (NFHS 4) to 87.4% (NFHS 5). The proportion of under 6-months children exclusively breastfed has decreased from 67.0% (NFHS 4) to 68.2% (NFHS 5). An increase in childhood anaemia from 60.7% to 70.0% in children aged 6-59 months has been reported in NFHS 5 (Annexure 2, Figure 5). As per

^k Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^l Antenatal Check up

^m Iron Folic Acid Tablets

ⁿ SRS MMR Bulletins

^o Inclusive of Andhra

^p Inclusive of Andhra

^q Neonatal Mortality Rate

^r Sex Ratio at Birth

^s NFHS 5 State/UT Factsheet, based on information from vaccination card only

NFHS 5 report, Adilabad, Jogulamba Gadwal, Mahabubnagar, Wanaparthy and Yadadri Bhuvanagiri districts reported high stunting rates ranging from 38.3 to 49.7; and Khammam, Mancherla, Peddapalli, Rajanna Sircilla and Siddipet districts reported low stunting rates ranging from 22.2 to 28.1. For under-5 wasting – Karimnagar, Medchal-Malkajgiri, Ranga Reddy, Wanaparthy and Yadadri Bhuvanagiri districts reported a low burden, ranging from 10.3 to 15.1; and Adilabad, Jayashankar Bhupalapally, Kamareddy, Komaram Bheem Asifabad, Nalgonda districts and Warangal Urban reported a high burden ranging from 29.5 to 35.7.

2.3 Family Planning

As per NFHS 5 report, the total unmet need in the State is 6.4%, and unmet need for spacing is 2.8%. Jagtial district reported the highest total unmet need (13.4%), while Nalgonda reported the lowest (2%). Approximately 66.7% of married women reported to avail any modern method of family planning in the State (NFHS 5); with sterilization acceptance among females being 61.9% and 2.0% for males.

2.4 Communicable Diseases

The State has 33 functional IDSP units in place. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 24.87% of total disease burden (Annexure 1.4). Neonatal preterm birth, diarrheal diseases and dietary iron deficiency are the leading causes of deaths due to CMNND in the State (Annexure 2, Figure 6). The annualized total case notification rate for TB is 201% and NSP^t success rate is 91% as opposed to the national averages of 163% and 79%, respectively. For NLEP^u, the reported prevalence rate of 0.62 per 10,000 population is less than the national average of 0.61. In FY 2019-20, 7 deaths due to Dengue, and none due to Malaria, and Kala Azar are reported in the State.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that 61.6% of total disease burden is from premature deaths and 38.4% is from disability or morbidity^v. Ischemic heart disease, COPD and diabetes type 2 are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 62.68% of DALYs; whereas, injuries contribute to 12.45% of DALYs in the State^w. State is positioned 10th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 5.6% of women and 22.3% of men used any kind of tobacco, while 6.7% of women and 43.3% of men consumed alcohol. Overall, high systolic blood pressure, high fasting plasma glucose, ambient particulate matter pollution, high body mass index and smoking are the major NCD risk factors for DALYs and YLLs (Annexure 2, Figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 7,82,370 crores. The State is positioned 8th out of 32 states in terms of per capita^x of ₹ 2,04,488. According to NHA 2017-18, the per capita

^t New Smear Positive

^u National Leprosy Eradication Programme

^v https://www.healthdata.org/sites/default/files/files/policy_report/2017/India_Health_of_the_Nation%27s_States_Report_2017.pdf

^w <https://vizhub.healthdata.org/gbd-compare/india>

^x Directorate of Economics & Statistics

Government Health Expenditure in the State is estimated as ₹ 1,698, which is more than the national average of ₹ 1,753. On the other hand, the OOPE^y as a share of Total Health Expenditure is estimated as 49.7%, which is more than the national average of 48.8%. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 2,333 in public facilities, ₹ 25,881 in private facilities; whereas for urban areas, it is around ₹ 7,349 in public facilities and ₹ 29,505 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 2,309 in public facilities & ₹ 23,113 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 3,364 in public facilities and ₹ 31,011 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated to be 53% in rural and 88% in urban areas; whereas for diagnostics - it is 20% in rural and 6% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8) and has no shortfall in the required SCs and PHCs (Annexure 2, Figure 9). Currently, there are 4744 SCs, 636 PHCs and 85 CHCs are in place, against the required 4450 SCs, 726 PHCs and 15 CHCs (shortfall of 53%) in rural areas. In urban settings, there are 249 PHCs in place against the required 343, which accounts to a shortfall of 27%. State has 6 DHs, 37 SDHs and 11 government medical colleges. In the State, 100% of DHs, SDHs, and CHCs serve as functional FRUs. In tribal catchments, there are 1,489 SCs, 202 PHCs and 19 CHCs in place, against the required 925 SCs, 138 PHCs and 34 CHCs. Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), 2,837 HWCs are operationalized in the State- as of 27th September 2021^z (Annexure 1.3)

The State has 89% of required ASHAs in position under the NRHM and 60% under the NUHM. The doctor to staff nurse ratio in place is 1:2, with 5 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 1373.15 availed (events) OPD services and 59.80 availed (events) IPD services. As per NSS data (2017-18), 24% of all OPD cases in rural areas and 16% in urban areas; and 24% of all IPD cases in rural areas & 17% in urban areas utilized public health facilities. The public health facility utilization in the State is above the national averages for both (Annexure 1.6).

^y Out of Pocket Expenditure

^z AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^{aa}

Indicator	Telangana 2011 ¹	India
Total Population (In Crore)	3.52	121.08
Rural (%)	61.12	68.85
Urban (%)	38.87	31.14
Scheduled Caste population (SC) (in crore)	0.54 (15.62%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.32 (9%)	10.45 (8.63%)
Total Literacy Rate (%)	66.54	72.99
Male Literacy Rate (%)	75.04	80.89
Female Literacy Rate (%)	57.99	64.64
Number of Districts in the Telangana ²	33	
Number of districts per lakh population in Telangana (Census 2011)	Population¹	Districts¹ (Numbers)
	<10 Lakhs	21
	≥ 10 Lakhs - <20 Lakhs	9
	≥20 Lakhs - <30 lakhs	2
	≥30 Lakhs	1
ST SC Dominant (Top 5) Districts of Telangana ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Mahabubabad (37.80%)	Mancherial (24.72%)	
Bhadradri Kothagudem (36.66%)	Nagarkurnool (21.32%)	
Adilabad (31.68%)	Jangaon (21.15%)	
Kumuram Bheem (25.91%)	Khammam (19.93%)	
Jayashankar (17.37%)	Jogulamba Gadwal (19.78%)	
Top 5 ST dominant district accounts for - 35.10%	Top 5 SC dominant district accounts for - 24.01%	

1.2 Key Health Status & Impact Indicators

Indicators	Telangana	India
Infant Mortality Rate (IMR) ³	23	30
Crude Death Rate (CDR) ³	6.1	6

^{aa} Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	16.7	19.7
Maternal Mortality Ratio (MMR) ³	63	113
Neo Natal Mortality Rate (NNMR) ⁴	19	23
Under Five Mortality Rate (U5MR) ⁴	30	36
Still Birth Rate ⁴	2	4
Total Fertility Rate (TFR) ⁴	1.6	2.2
Life expectancy at birth ⁵	69.6	69.4
Sex Ratio at Birth ⁴	901	899

1.3 Key Health Infrastructure Indicators^{bb}

Indicators	Numbers (Total)			
Number of District Hospitals ²	6			
Number of Sub District Hospital ²	37			
Number of Government (Central + State) Medical College ⁶	11			
Number of Private (Society + Trust) Medical Colleges ⁶	22			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	2185	1456	2803	3702
PHC-HWC	635	643	643	643
UPHC-HWC	224	247	247	247
Total-HWC	3044	2346	3693	4592
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	181	85	53.04	
Number of Primary Health Centres (PHC)	726	636	12.40	
Number of Sub Centres (SC)	4,450	4,744	-6.61	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	6	37	95	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	343	249	27.41	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	34	19	44.12	
Number of PHC	138	202	-46.38	
Number of SC	925	1,489	-60.97	

^{bb} Sources are mentioned at the end of Annexure 1

Patient Service⁹	Telangana	India
IPD per 1000 population	59.80	62.6
OPD per 1000 population	1373.15	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	24.29	36.4

1.4 Major Health Indicator^{cc}

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Telangana	India
% DALY ^{dd} accountable for CMNND ^{ee} s	24.87	27.46
% DALY accountable for NCDs	62.68	61.43
% DALY accountable for Injuries	12.45	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Telangana	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	97.2	92
Percentage of medically certified deaths to total registered deaths (%)	27.7	20.7
RMNCHA+N		
Maternal Health⁹	Telangana	India
% 1st Trimester registration to Total ANC Registrations	71.4	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	84.4	79.4
Total Reported Deliveries	621253	21410780
% Institutional deliveries to Total Reported Deliveries	99.9	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	47.6	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	52.4	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	48.9	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	43.7	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	53.7	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	29.7	53.4
Neonatal⁹	Telangana	India
% live birth to Reported Birth	99.5	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	7.8	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	76.1	89.9

^{cc} Sources are mentioned at the end of Annexure 1

^{dd} Disability Adjusted Life Years

^{ee} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Telangana	India
Sick New Born Care Unit (SNCU)	28	895
New Born Stabilization Unit (NBSU)	49	2418
New Born Care Corner (NBCC)	562	20337
Child Health & Nutrition¹⁰	Telangana (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	7.4	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	56.3	60.6
Children under 5 years who are underweight (weight-for-age) (%)	31.8	32.1
Child Immunization¹⁰	Telangana (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	87.4	83.8
Children age 12-23 months who have received BCG (%)	93.5	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	90.6	87.9
Family Planning¹⁰	Telangana (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	2.8	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Telangana	India
Number of districts with functional IDSP unit	33	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Telangana	India
Annualized total case notification rate (%)	201	163
New Smear Positive (NSP) Success rate (in %)	91	79
National Leprosy Eradication Programme (NLEP)¹¹	Telangana	India
Prevalence Rate/10,000 population	0.62	0.61
Number of new cases detected	4,001	1,14,359
Malaria, Kala Azar, Dengue¹¹	Telangana	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	7	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Telangana (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	30.7	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	30.5	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Telangana (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	13.6	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	18.5	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	5.8	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	6.9	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Telangana (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	5.6	8.9
Men who use any kind of tobacco (%)	22.3	38
Women who consume alcohol (%)	6.7	1.3
Men who consume alcohol (%)	43.3	18.8
Injuries		
Road Traffic Accident¹²	Telangana	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	10	NA
Total number of fatal Road Accidents	6,472	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	32.3	33.7
Number of persons killed in Road Accidents	6964	115113

1.5 Access to Care^{ff}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Telangana	India
Number of Districts equipped with MMU under NRHM	0	506
Number of Districts equipped with MMU/Health Units under NUHM	N/A	31
Number of ERS vehicles operational in the States/UTs Under NHM	Telangana	India
102 Type	299	9955
104 Type	0	605
108 Type	333	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	362	11070

^{ff} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Telangana	India
Total number of ASHA targeted under NRHM	26028	946563
Total number of ASHA in position under NRHM	23258	904211
% of ASHA in position under NRHM	89.35	96
Total number of ASHA targeted under NUHM	5000	75597
Total number of ASHA in position under NUHM	3019	64272
% of ASHA in position under NUHM	60.38	85
Community Process¹¹	Telangana	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	10426	554847
Number of Mahila Arogya Samitis (MAS) formed	8997	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Telangana	India
DH	6	796
CHC	114	6036
PHC	668	20273
UHC	13	126
UPHC	243	3229
Human Resource for Health ¹⁴		
HRH Governance	Telangana	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	47
	Dentists (%)	5
	MO MBBS (%)	36
	Nurse (%)	30
	LT (%)	39
	ANM (%)	15
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:2	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	5 per 10,000	4 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	1:1	1:1

Ranking: Human Resource Index of Telangana¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ⁹⁹	11959	11466	9875	1591	2084	67.12
Staff Nurse	8572	7301	4940	2361	3632	
Lab Technician	2452	1789	1289	500	1163	
Pharmacists	1373	1356	834	522	539	
MO MBBS ^{hh}	3239	2452	2034	418	1205	
Specialist ⁱⁱ	1836	4047	1518	2529	318	

1.6 Healthcare Financing^{jj}

National Health Accounts (NHA) (2017-18)	Telangana		India	
Per Capita Government Health Expenditure (in ₹)	1,698		1,753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	0.8		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	5.7		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	49.7		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Telangana		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	24	16	33	26
IPD - % of hospitalized cases using public facility	24	17	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	357	343	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	715	863	845	915
IPD - Per hospitalized case (in INR) - Public	2,722	8,356	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	30,202	33,549	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	20	6	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	53	88	53	43

⁹⁹ MPW – Multi Purpose Health Worker (Female + Male)

^{hh} MO MBBS (Full Time)

ⁱⁱ Specialist (All Specialist)

^{jj} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	2,695	3,825	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	26,972	35,262	20,692	26,701
State Health Expenditure	Telangana		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	4.2		5 ^{kk}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{kk} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

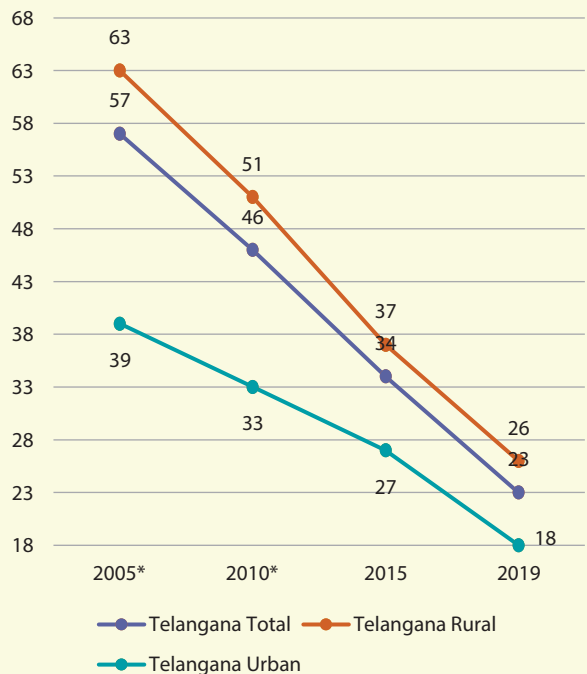


Figure 2: CBR & CDR Trend

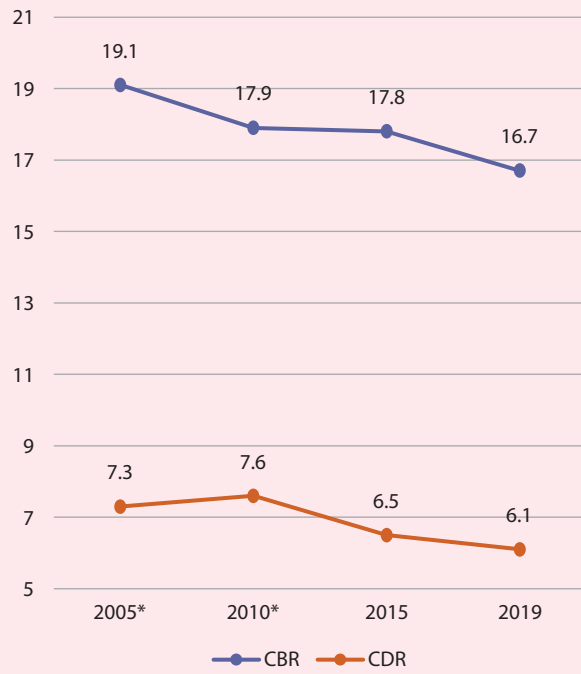


Figure 3: Life Expectancy At Birth Trend

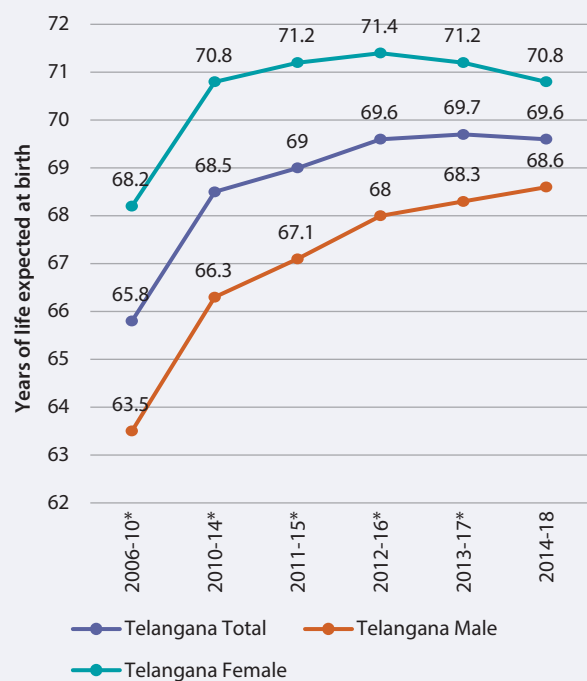
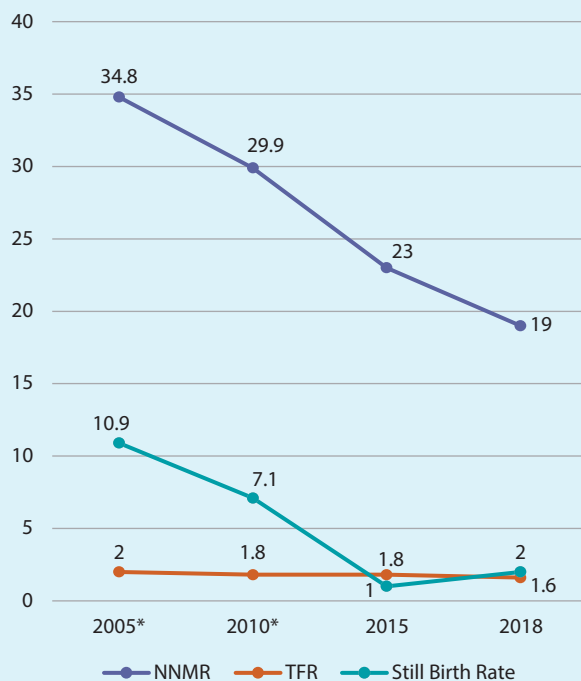


Figure 4: NNMR, TFR & Still Birth Trend



*Telangana emerged from Andhra Pradesh in 2014

Figure 5: Comparison of Key NFHS 5 & 4 Indicators

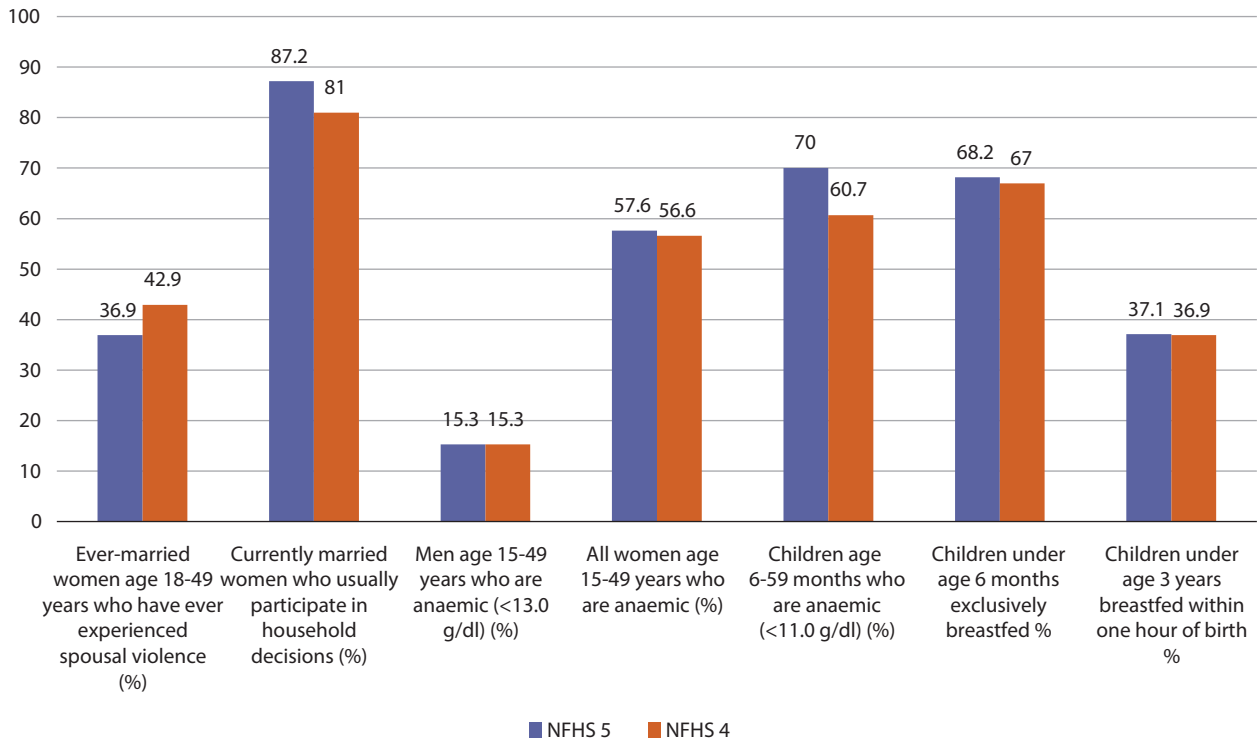


Figure 6: Top 15 causes of DALYs, 1990-2019

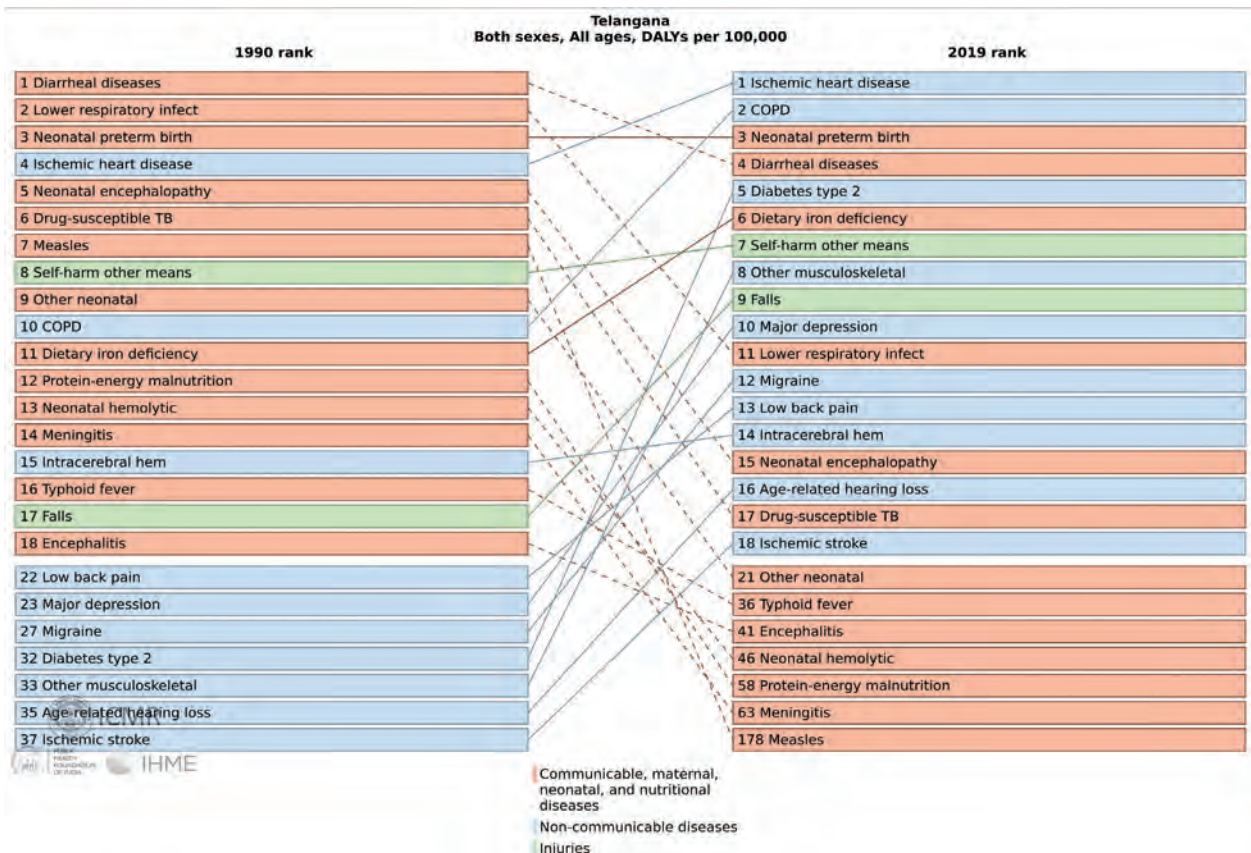


Figure 7: Top 15 risk of DALYs, 1990-2019

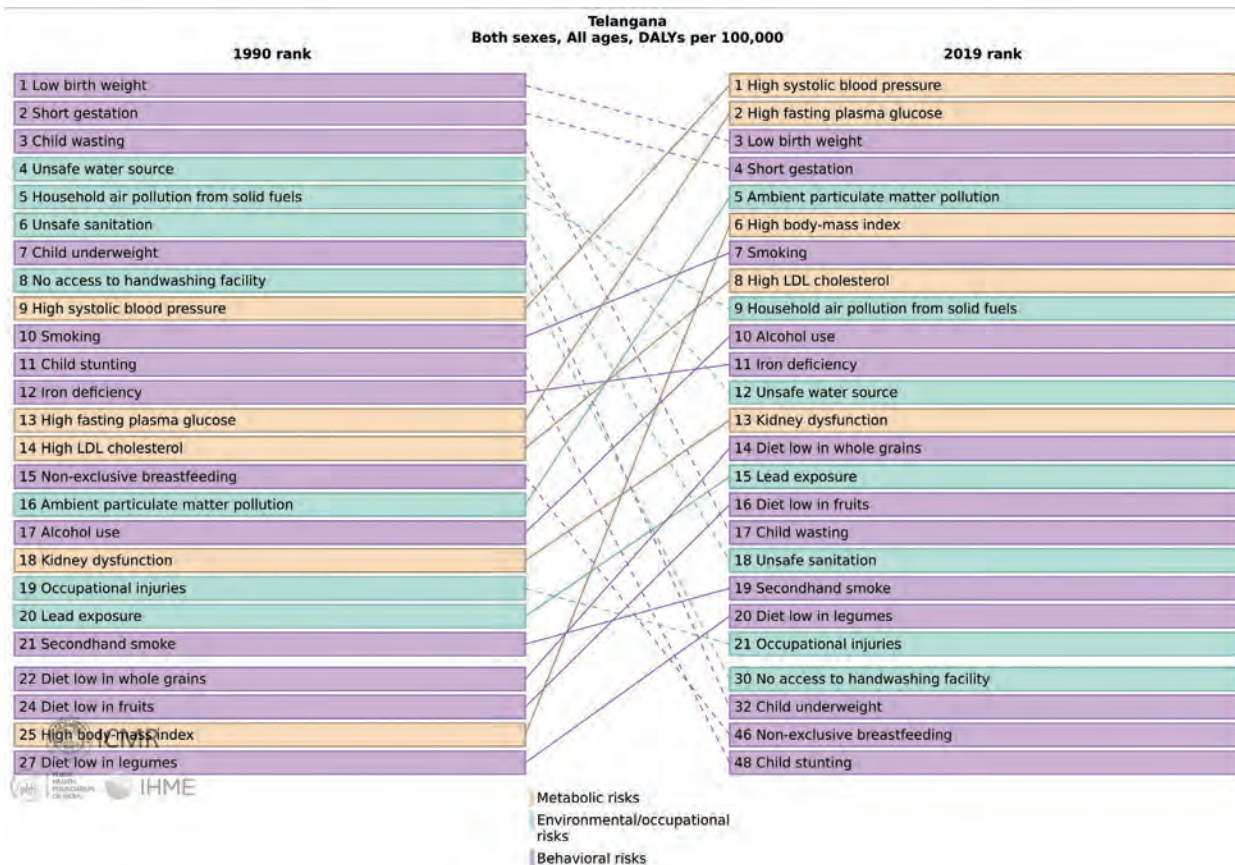
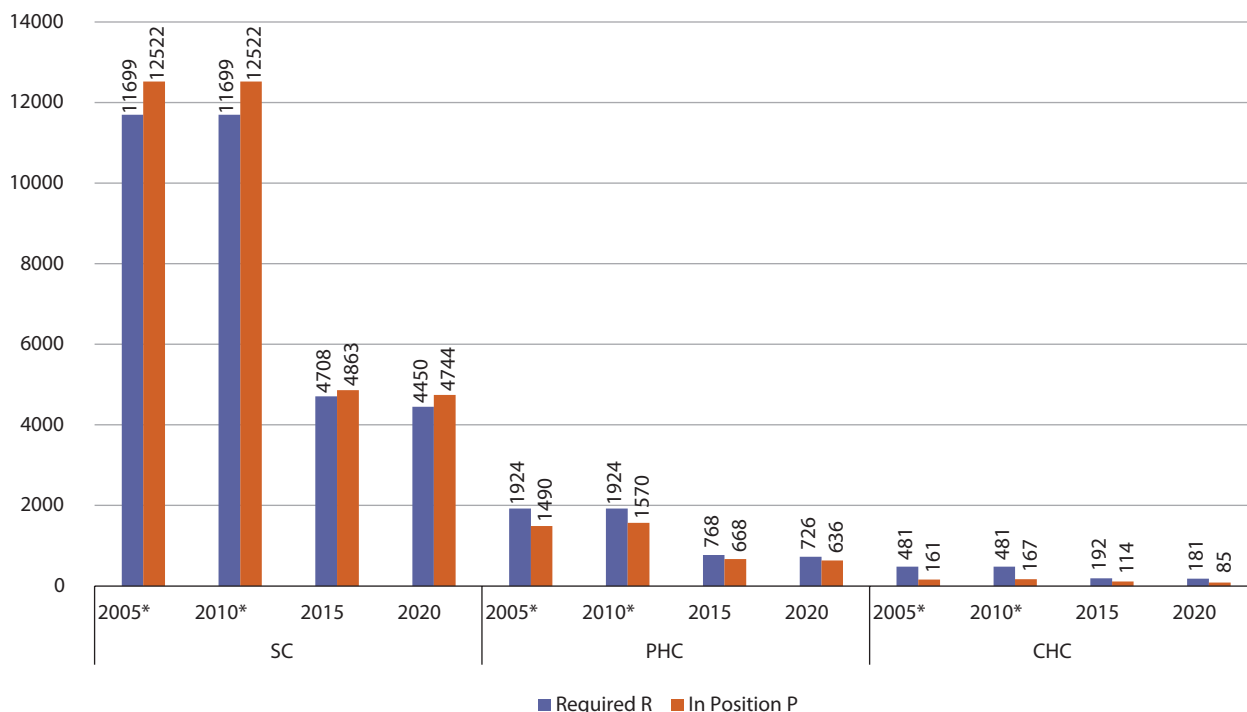


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)***



*** Telangana emerged from Andhra Pradesh in 2014

Figure 9: Year Wise Health Infrastructure Shortfall (%)****

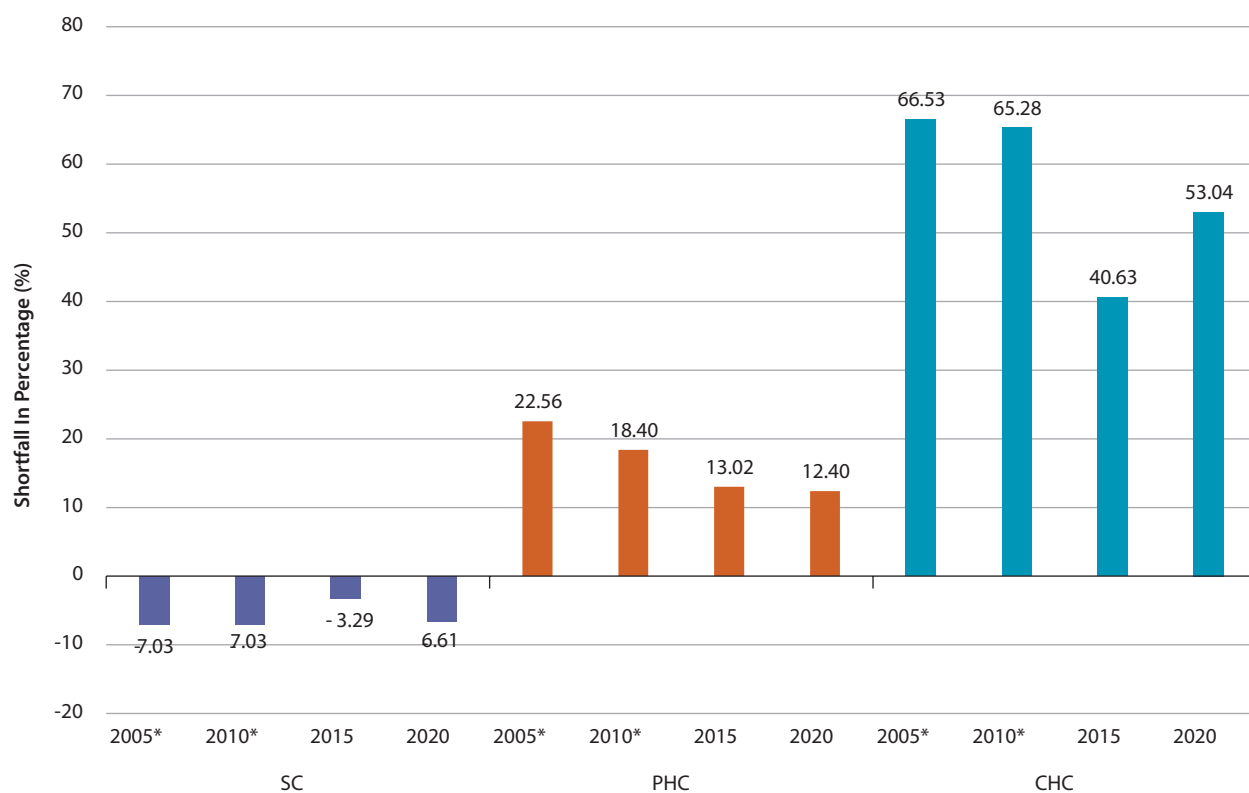
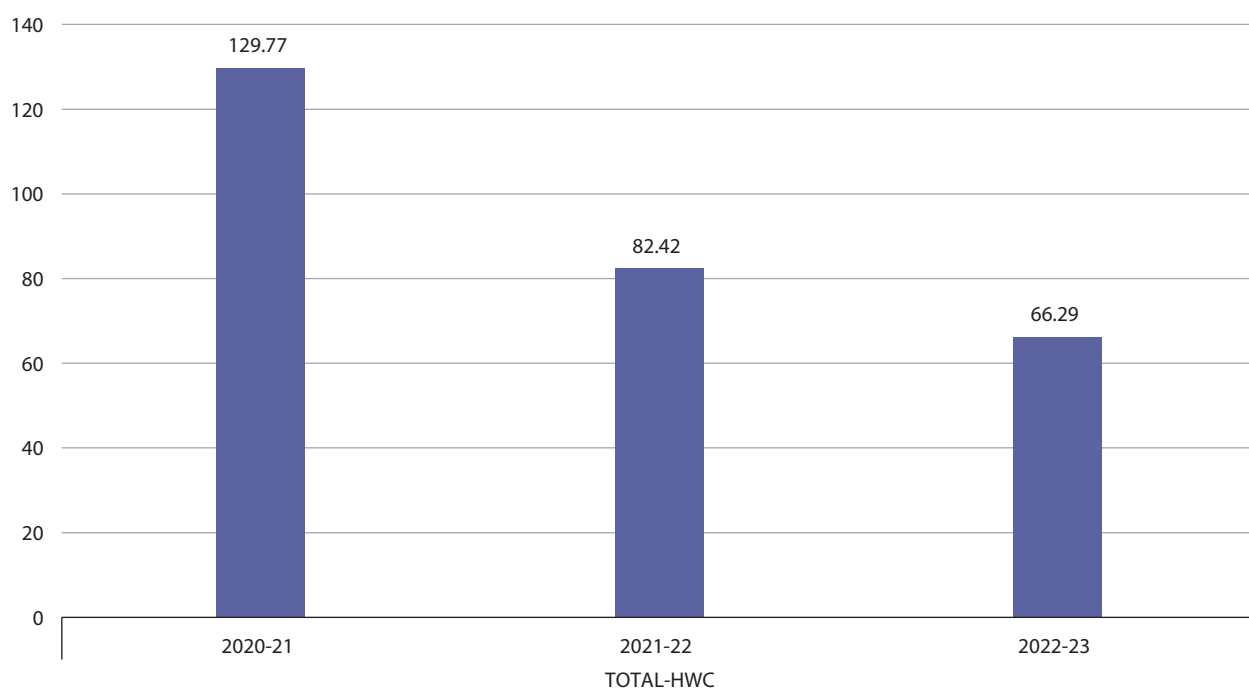


Figure 10: Percentage HWCs progress against target - FY wise (%)

Telangana (% HWCs progress as of 22/Dec/2021 against targets - FY wise)



****Telangana emerged from Andhra Pradesh in 2014

ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

Serial No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)														
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet** # (%)	Children Under 5 Years - Stunted ^Δ (Height For Age) (%)	Children Under 5 Years - Wasted ^Δ (Weight For Height) (%)	
1	Telangana	NFHS 4 Total	872	66.4	N/A	26.2	57.2	0.4	0.5	7.4	74.9	91.5	79.1	10.1	28	18.1	
2	Telangana	NFHS 5 Urban	873	52.9	81	16.7	69	1	1.3	7.1	71.1	97.7	85.7	8.4	28.1	20	
3	Telangana	NFHS 5 Rural	907	65	58.1	27.4	67.6	0.2	0.5	6.1	70	96.6	88.3	9.7	35.7	22.6	
4	Telangana	NFHS 5 Total	894	60.8	66.6	23.5	68.1	0.5	0.8	6.4	70.4	97	87.4	9.2	33.1	21.7	
5	Adilabad	NFHS 5 Total	785	63.6	64.8	21.4	54.3	0	1.5	10.1	74.8	94.1	73.7	9.6	45.7	29.5	
6	Bhadradi Kothagudem	NFHS 5 Total	817	59.4	68.7	20.8	75	0.3	1.4	3.8	70.1	97.4	87	12.4	28.4	21.8	
7	Hyderabad	NFHS 5 Total	844	48.9	83.6	10.6	71.8	1.8	1.1	6.1	69.9	98.3	91.6	4.8	30.4	17.7	
8	Jagtial	NFHS 5 Total	955	59.2	62.4	28.4	57.4	0.8	0.8	13.4	81.9	94.4	94	13.6	29.9	17.5	
9	Jangoan	NFHS 5 Total	1089	71.7	65.5	20.3	71	0.3	0.4	4.6	65.4	99.6	91.2	10.7	33.4	22.9	
10	Jayashankar Bhupalapally	NFHS 5 Total	903	71.5	58.9	24.9	64.8	0	1	7	72.7	99.5	97.2	12.6	32.5	31.8	
11	Jogulamba Gadwal	NFHS 5 Total	853	61.8	45	34.6	75.5	0.5	0.1	2.6	72.9	94.2	92.3	7.2	49.7	17.3	
12	Kamareddy	NFHS 5 Total	870	66.5	58.6	30.8	56.8	0.3	0.3	9.8	79.5	97.1	84.1	11.7	33.4	34.5	
13	Karimnagar	NFHS 5 Total	933	58.6	70.3	11.9	56.8	0.1	0.6	10	69.6	98.4	74.5	10.3	30.3	13.9	
14	Khammam	NFHS 5 Total	905	60.4	66.3	35	78.7	0.2	0.8	3.3	76.3	97.9	94.3	8.7	22.2	24.7	
15	Komaram Bheem Asifabad	NFHS 5 Total	917	63.6	51.7	25	49.4	0.1	0.8	6.8	68.8	82	93.5	9.4	38.1	35.7	
16	Mahabubabad	NFHS 5 Total	885	69.3	58	28.3	75.4	0	0.3	4.7	67.7	97.7	96.8	3.4	33	19.3	
17	Mahabubnagar	NFHS 5 Total	789	70.3	59.6	23.4	72	0.3	0.4	2.7	62.6	98.1	98.1	5.4	42.6	17.8	

18	Mancherial	NFHS 5 Total	909	64.4	69.5	14	55.3	0.2	0	11.3	64.7	90.1	87.4	5.9	25.9	22.1
19	Medak	NFHS 5 Total	848	61.2	57.7	31.8	57.4	0	0.7	7.4	68.5	98.9	91.1	12.3	36.4	21.3
20	Medchal-Malkajgiri	NFHS 5 Total	828	53.8	79.5	10.2	76.4	0.9	1.3	3.7	69.6	98.3	87.6	10.9	33.4	12
21	Nagarkurnool	NFHS 5 Total	771	68.6	57.1	32.1	77.3	0.8	0.6	3.9	75.1	98	98.3	5.4	35.1	27.3
22	Nalgonda	NFHS 5 Total	883	64.8	62.6	28.2	78.5	0.4	0.7	2	65.7	98.3	79.9	7.1	31.7	29.8
23	Nirmal	NFHS 5 Total	1138	49.9	58.6	23.3	59.3	0.6	0.4	6.7	69.7	96.7	77.2	10.5	31.7	18.1
24	Nizamabad	NFHS 5 Total	941	52.3	63.1	23.7	60.3	0	1.5	9.4	78.5	97.3	81.5	18.4	30.5	26.2
25	Peddapalli	NFHS 5 Total	913	59.1	73.7	13.6	66.1	0.1	0.3	8.3	77.9	96.5	79.4	13.8	27.5	28.8
26	Rajanna Sircilla	NFHS 5 Total	1115	62.8	64.7	13.2	60.7	0	1.8	9.9	67.1	97.6	85.1	7.8	22.4	19.4
27	Ranga Reddy	NFHS 5 Total	964	58.3	72.1	29	72.6	0.3	0.7	4.8	75.1	97.2	91.9	7.2	37.8	13.9
28	Sangareddy	NFHS 5 Total	1039	58.1	63.6	30.6	62.3	0.6	1.1	8.5	66.4	93	76.3	6.4	32.9	25
29	Siddipet	NFHS 5 Total	976	60.9	71	19	59.8	0.7	1.3	9.6	62.6	99.7	81.5	14.1	28.1	19.3
30	Suryapet	NFHS 5 Total	980	63.1	63.5	29.5	78.2	0	0.3	4	70.4	95.9	79.3	15.1	29.1	24.9
31	Vikarabad	NFHS 5 Total	775	59.6	59.3	39.8	69.8	0.3	0.4	4.6	54.8	95	88.7	11.1	32.1	20
32	Wanaparthy	NFHS 5 Total	987	70.1	52.1	32.6	77.3	0.2	0.3	3.6	62.8	99	94.7	7.5	40.4	15.1
33	Warangal Rural	NFHS 5 Total	698	72	60.1	22.9	60	0	0.3	9.4	70.4	100	83.6	5.1	36.1	19
34	Warangal Urban	NFHS 5 Total	829	62	76.9	22.7	67.7	0.4	1.2	8.9	71.3	99.7	86.8	9.3	29.5	29.5
35	Yadadri Bhuvanagiri	NFHS 5 Total	954	65.3	68.4	21.6	76.2	0.3	0.7	5	67.2	97.7	84.3	3.9	38.3	10.3

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'; Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' - 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color - Best five performing districts within the districts for a particular indicator

B. Red - Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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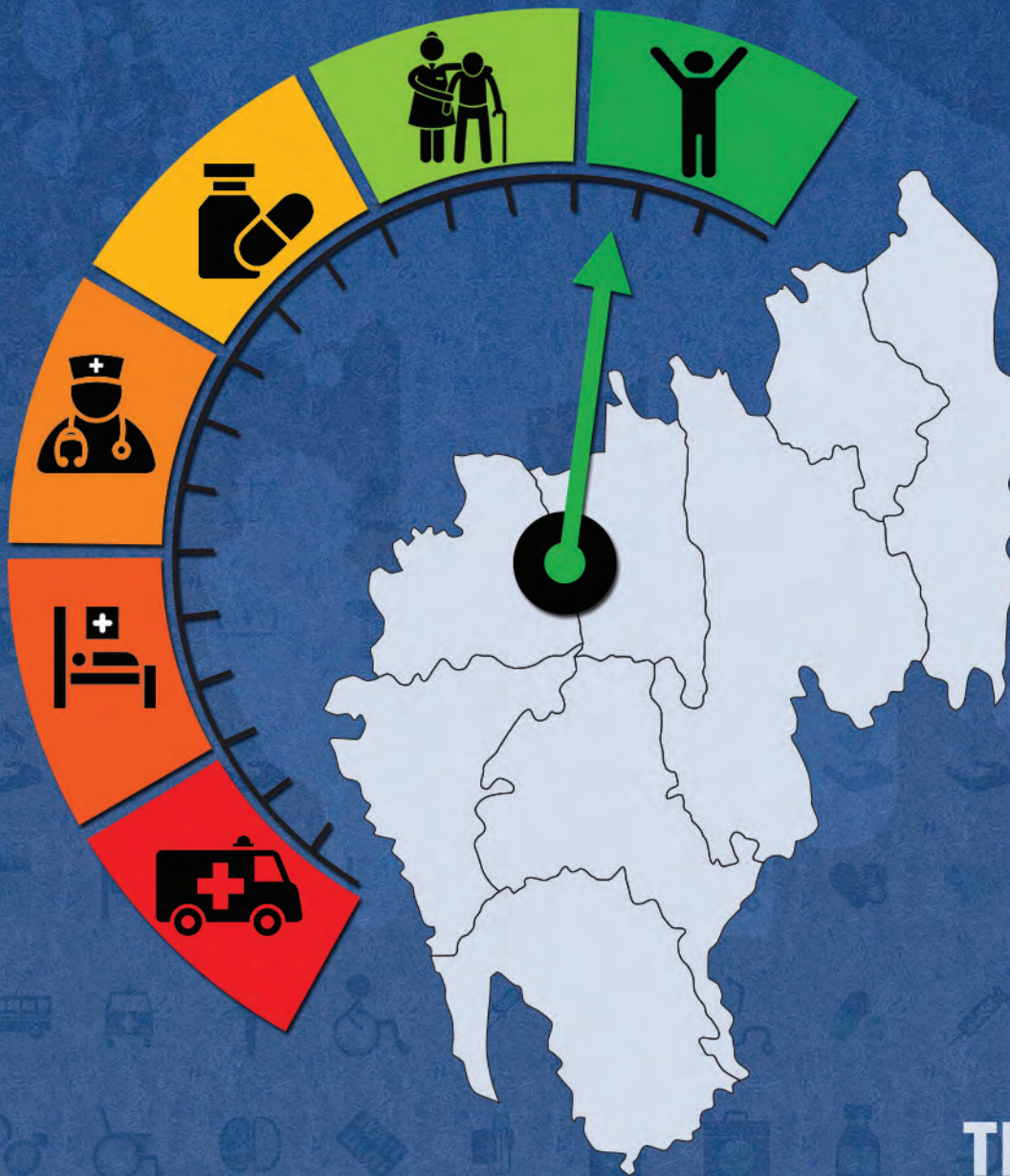
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



DISTRICTS VISITED IN
COMMON REVIEW MISSIONS

CRM	Districts Visited	
1 st	Dhalai, West Tripura & South Tripura	
6 th	North Tripura	South Tripura
10 th	Gomati	Dhalai
12 th	Unakoti, South Tripura & West Tripura	
14 th	Khomai	North Tripura

TRIPURA

1. BACKGROUND

1.1 Tripura Profile

Tripura is positioned 27th in India^a for a geographical spread of 10,486 km² with a population of over 36 lakhs^b. The state is divided into 8 districts as of 2021^c with a projected population increase to 40.71 lakh by 2021^d. As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 0.065 lakh (17.83%) and 20.14 lakh (16.63%), respectively. Around 73.83% of the population reside in rural areas, while the rest constitute the urban population. Agriculture is a major contributor to the State Domestic Product where around 24.06% of the workers in Tripura are engaged as cultivators and Agricultural laborers^e. At present, 3 cities^f are covered under National Urban Health Mission.

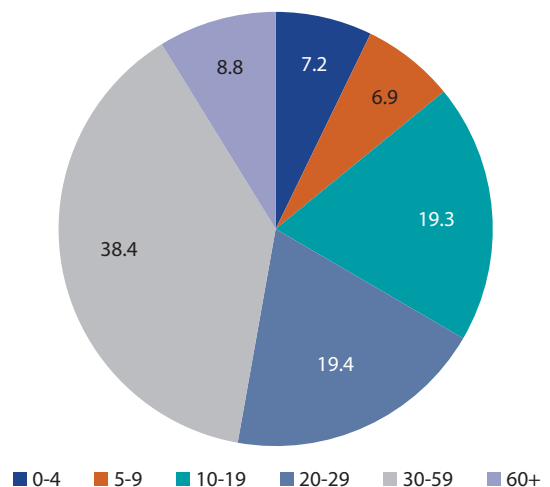
The total length of roads^g in Tripura is 42,925 km (0.85%^h), in which the length of the national highways is 806 km (0.7%ⁱ) and state highways is 329 km (0.19%^j).

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

Overall^k, in North-Eastern States (excluding Assam), it is estimated that 19.3% of the total population is in the 10-19 years age group, 57.8% within 20 to 59 years; and 8.8% is 60 years and above (Figure 1). The literacy rate has increased from 73.2% in 2001 to 87.2% in 2011; with male & female literacy rates being 91.5% and 82.7% respectively. As per ESAG 2018 report, the Gross

Figure 1: North-East States (Excluding Assam) Distribution of estimated Population 2021 (%)



^a Among North-East States; RHS 2019

^b Census 2011

^c RHS 2019

^d Census Population Projection 2019 Report

^e Tripura-At-a-Glance-2020; <https://ecostat.tripura.gov.in/Tripura-At-a-Glance-2020.pdf>

^f QPR NHM MIS Report as on 31 Dec 2020

^g Basic Road Statistics 2019, MoRTH

^h Percentage of total length of roads in State

ⁱ Percentage of total length of National Highways in the country

^j Percentage of total length of State Highways in the country

^k Population projection 2021 for Manipur is not available

Enrollment Rate^l is 16.9% for higher education, 43.46% for senior secondary (XI-XII) education, 118.49% for secondary (IX-X), 114.32% for elementary (I-VIII) education and 107.96% for primary (I-V).

1.3 Elderly

Population aging has profound social, economic, and political implications. Elderly people aged 60 years and above share 8.8% of the state's total population. In Tripura, 70% of elderly females and 17% elderly males living in urban areas; 73% of elderly females and 18% elderly males in rural areas are economically fully dependent on others. The illness (any deviation from the state of physical and mental well-being) perception among the elderly men and women is 28% & 31% respectively which is close to the national average of 31% for both men and women (Elderly in India 2016).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

Tripura has been able to provide RMNCHA+Nm services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)ⁿ, institutional deliveries, C sections, distribution of IFAo tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care have shown substantial improvement since 2005 (NFHS 4 & 5). In Tripura, 69.5% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 (Annexure 3), Unakoti, Gomati, and Khowai reported poor ANC coverage ranging from 24.6% to 41.5%. Whereas South Tripura, West Tripura and North Tripura districts reported relatively better ANC coverage ranging from 58.4% to 67.1%. As reported in HMIS 2019-20, around 93.8% of the deliveries took place in institutions, out of which 90.7% took place in public health facilities. Total percentage of C-sections (26.9%) is higher than WHO's standard (10-15%); and out of the total reported C-sections, about 97.9% is conducted at private facilities in Tripura. Around 66% of women are reported to be given their first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years has increased from 54.5% (NFHS 4) to 67.2% (NFHS 5). Anaemia in females of reproductive age group is more than 1.5 times than in men of similar age group (Annexure 2, figure 3)

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, Tripura has shown a significant decline in IMR from 31 (2005) to 21 (2019), which is lower than the national average of 30 (Annexure 2, Figure 1). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). However, the state has registered an increase in IMR from 20 (2015) to 21 (2019). As per NFHS 5, the low SRB^p

^l Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

^m Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

ⁿ Antenatal Check up

^o Iron Folic Acid Tablets

^p Sex Ratio at Birth

ranging from 913 to 959 are reported in North Tripura, Sepahijala & Khowai districts, while the high ones, ranging from 1048 to 1160 are reported in West Tripura, South Tripura and Dhalai districts.

Full vaccination^q coverage for children between 12 – 23 months of age has shown a marginal decline from 77.3% (NFHS 4) to 77.1% (NFHS 5). The percentage of under 6-months children exclusively breastfed has also declined from 70.7% (NFHS 4) to 62.1% (NFHS 5). An increase in childhood anaemia from 48.3% (NFHS 4) to 64.3% in children aged 6-59 months is reported in NFHS 5 (Annexure 2, Figure 3). As per NFHS 5 report, Gomati, North Tripura & South Tripura districts reported relatively low burden of stunting, ranging from 22.7% to 26.2%; while Sepahijala, Dhalai & Khowai districts reported high burden of stunting ranging from 34.5% to 47%. For under-5 wasting – West Tripura, South Tripura and Sepahijala districts reported relatively low burden, ranging from 11.7% to 15.3%; while Unakoti, Gomati & North Tripura districts reported high burden, ranging from 19.3% to 30%.

2.3 Family Planning

As per NFHS 5 report, the total unmet need in Tripura is 8.2%, and unmet need for spacing is 2.5%. South Tripura district reported the highest total unmet need of 17.3%, and West Tripura reported the lowest (2.5%). Approximately 49.1% of married women reported to avail any modern method of family planning in the State (NFHS 5), with sterilization acceptance being 10.5% among females and nil among males.

2.4 Communicable Diseases

Tripura has 8 IDSP units functional'. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 24.07% of total disease burden (Annexure 1.4). Lower respiratory infection, Neonatal preterm birth & Diarrheal diseases are the leading causes of deaths in Tripura (Annexure 2, Figure 4^s). As per QPR reports, for TB, the annualized total case notification rate is 66% and NSP^t success rate is 81% as opposed to the national averages of 163% and 79%, respectively. For NLEP^u, the reported prevalence rate of 0.14 per 10,000 population is less than the national average of 0.61. In FY 2019-20, 1 death due to Malaria, while none from Dengue, or Kala Azar are reported.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that 66.7% of the total disease burden in the State is from premature deaths and 33.3% is from disability or morbidity. Ischemic heart diseases, COPD and Intracerebral hemorrhage are the leading causes of DALYs (Annexure 2, Figure 4). NCDs contribute to 65.26% of DALYs, whereas injuries contribute to 10.66% of DALYs^v. Tripura is positioned 24th in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). In the recent NFHS 5 report, it is reported that as high as 50.4% of women and 56.9% of men (roughly half of the population) used any kind of tobacco; and 6.2% of women and 33.1% of men consumed alcohol. Overall, high systolic blood pressure, smoking, high fasting blood sugar, low birth weight and ambient particulate matter pollution are found to be the top five major risk factors for all DALYs (Annexure 2, figure 5).

^q NFHS 5 State Factsheet, based on information from vaccination card only

^r QPR NHM MIS Report (status as on 01.03.2020)

^s <https://vizhub.healthdata.org/gbd-compare/india>

^t New Smear Positive

^u National Leprosy Eradication Programme

^v <https://vizhub.healthdata.org/gbd-compare/india>

2.6 Health Care Financing

Tripura's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 44,835 crores. The State is positioned 20th out of 32 states in terms of per capita^w of ₹ 1,12,849. As per NSS 2017-18, the OOPE for IPD care per hospitalized case in rural areas is estimated to be around ₹ 4,324 in public facilities, ₹ 58,091 in private facilities; whereas for urban areas, it is around ₹ 7,543 in public facilities and ₹ 64,065 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 5,712 in public facilities & ₹ 29,720 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 8,647 in public facilities and ₹ 33,735 in private facilities. In public health facilities, the share of expenditure on drugs as a proportion of inpatient medical expenditure is estimated as 72% in rural and 56% in urban areas; whereas for diagnostics, it is 23% in rural and 20% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 6). There is no shortfall in SCs and PHCs, whereas there is a shortfall of 12% CHCs (Annexure 2, Figure 7). Currently, there are 965 SCs, 107 PHCs, and 22 CHCs in place, against the required 656 SCs, 103 PHCs and 25 CHCs in rural areas. Whereas, in urban settings, there are 5 PHCs in place against the required 29, accounting to a shortfall of 82.76%. The State has 7 DHs, 12 SDHs and 1 government medical college. In tribal catchments, there are 439 SCs, 46 PHCs and 8 CHCs in place, against the required 353 SCs, 53 PHCs and 13 CHCs. This accounts to a shortfall of 13.21% of the required PHCs and 38.46% of the required CHCs in the tribal areas.

Under the Government of India flagship Ayushman Bharat program, a total of 324 (256 SHCs, 61 PHCs & 7 UPHCs) primary care facilities have been upgraded and are currently operational as Health & Wellness Centres (HWCs) to deliver Comprehensive Primary Health Care (as on 22nd Dec 2021, Annexure 1.3).

In Tripura, no districts are equipped with MMUs under the NRHM nor under the NUHM. Tripura has 98.07% of required ASHAs in position under both NRHM & 97.82% under the NUHM. The doctor to staff nurse ratio in place is 1:2, with 11 public health providers (MO, specialists, staff nurse & ANM) per 10,000 populations (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 1178.7 availed (events) OPD services and 108.7 availed (events) IPD services. As per the NSSO data (2017-18), 35% of all OPD cases in rural areas and 18% in urban areas; and 96% of all IPD cases in rural areas & 88% in urban areas utilized public health facilities. The public health facility utilization in Tripura is above the national average for rural areas & below for urban areas (Annexure 1.6).

^w Directorate of Economics & Statistics

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^x

Indicator	Tripura 2011 ¹	India
Total Population (In Crore)	0.36	121.08
Rural (%)	73.83	68.85
Urban (%)	26.17	31.14
Scheduled Caste population (SC) (in crore)	0.065 (17.83%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.11 (31.76%)	10.45 (8.63%)
Total Literacy Rate (%)	87.2	72.99
Male Literacy Rate (%)	91.5	80.89
Female Literacy Rate (%)	82.7	64.64
Number of Districts in the Tripura ²	8	
Number of districts per lakh population in Tripura (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<5 Lakhs	1
	≥ 5 Lakhs - <10 Lakhs	2
	≥10 Lakhs - <20 lakhs	1
	≥20 Lakhs	0
ST Dominant Districts (%)	SC Dominant Districts (%)	
Dhalai - 55.62%	West Tripura - 19.59%	
South Tripura - 39.36%	North Tripura - 16.56%	
North Tripura - 25.85%	Dhalai - 16.30%	
West Tripura - 25.02%	South Tripura - 16%	

1.2 Key Health Status & Impact Indicators

Indicators	Tripura	India
Infant Mortality Rate (IMR) ³	21	30
Crude Death Rate (CDR) ³	5.5	6.0
Crude Birth Rate (CBR) ³	12.8	19.7
Maternal Mortality Ratio (MMR) ³ (for other states including Tripura)	85	113

^x Sources are mentioned at the end of Annexure 1

Neo Natal Mortality Rate (NNMR) ⁴	N/A	23
Under Five Mortality Rate (U5MR) ⁴	N/A	36
Still Birth Rate ⁴	N/A	4
Total Fertility Rate (TFR) ⁴	N/A	2.2
Life expectancy at birth ⁵	N/A	69.4
Sex Ratio at Birth ⁴	N/A	899

1.3 Key Health Infrastructure Indicators^y

Indicators	Numbers (Total)			
Number of District Hospitals ²	7			
Number of Sub District Hospital ²	12			
Number of Government Medical College ⁶	1			
Number of Private Medical Colleges ⁶	1			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	256	368	645	830
PHC-HWC	61	108	108	108
UPHC-HWC	7	7	7	7
Total-HWC	324	483	760	945
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	25	22	12.00	
Number of Primary Health Centres (PHC)	103	107	-3.88	
Number of Sub Centres (SC)	656	965	-47.10	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	7	5	1	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	29	5	82.76	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	13	8	38.46	
Number of PHC	53	46	13.21	
Number of SC	353	439	-24.36	

^y Sources are mentioned at the end of Annexure 1

Patient Service⁹	Tripura	India
IPD per 1000 population	108.7	62.6
OPD per 1000 population	1178.7	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	68.6	36.4

1.4 Major Health Indicator^z

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Tripura	India
% DALY ^{aa} accountable for CMNNDs ^{bb}	24.07	27.46
% DALY accountable for NCDs	65.26	61.43
% DALY accountable for Injuries	10.66	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Tripura	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	33.7	20.7
RMNCHA+N		
Maternal Health⁹	Tripura	India
% 1st Trimester registration to Total ANC Registrations	70.4	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	69.5	79.4
Total Reported Deliveries	52158	21410780
% Institutional deliveries to Total Reported Deliveries	93.8	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	90.7	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	9.3	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	26.9	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	19.6	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	97.9	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	66	53.4
Neonatal⁹	Tripura	India
% live birth to Reported Birth	98.4	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	11.9	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	91.6	89.9

^z Sources are mentioned at the end of Annexure 1

^{aa} Disability Adjusted Life Years

^{bb} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Tripura	India
Sick New Born Care Unit (SNCU)	6	895
New Born Stabilization Unit (NBSU)	8	2418
New Born Care Corner (NBCC)	109	20337
Child Health & Nutrition¹⁰	Tripura (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	6.2	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	67.2	60.6
Children under 5 years who are underweight (weight-for-age) (%)	25.6	32.1
Child Immunization¹⁰	Tripura (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	77.1	83.8
Children age 12-23 months who have received BCG (%)	94.7	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	86.3	87.9
Family Planning¹⁰	Tripura (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	2.5	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Tripura	India
Number of districts with functional IDSP unit	8	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Tripura	India
Annualized total case notification rate (%)	66	163
New Smear Positive (NSP) Success rate (in %)	81	79
National Leprosy Eradication Programme (NLEP)¹¹	Tripura	India
Prevalence Rate/10,000 population	0.14	0.61
Number of new cases detected	75	1,14,359
Malaria, Kala Azar, Dengue¹¹	Tripura	India
Deaths due to Malaria ¹¹	1	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Tripura (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	15.4	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	30	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Tripura (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	11	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	13.4	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	8.8	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	9.3	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Tripura (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	50.4	8.9
Men who use any kind of tobacco (%)	56.9	38
Women who consume alcohol (%)	6.2	1.3
Men who consume alcohol (%)	33.1	18.8
Injuries		
Road Traffic Accident¹²	Tripura	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	24	NA
Total number of fatal Road Accidents	224	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	36.5	33.7
Number of persons killed in Road Accidents	239	115113

1.5 Access to Care^{cc}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Tripura	India
Number of Districts equipped with MMU under NRHM	0	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Tripura	India
102 Type	1	9955
104 Type	0	605
108 Type	0	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	50	11070

^{fcc} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Tripura	India
Total number of ASHA targeted under NRHM	7216	946563
Total number of ASHA in position under NRHM	7077	904211
% of ASHA in position under NRHM	98.07	96
Total number of ASHA targeted under NUHM	551	75597
Total number of ASHA in position under NUHM	539	64272
% of ASHA in position under NUHM	97.82	85
Community Process¹¹	Tripura	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	1178	554847
Number of Mahila Arogya Samitis (MAS) formed	96	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Tripura	India
DH	6	796
CHC	22	6036
PHC	108	20273
UCHC	0	126
UPHC	0	3229
Human Resource for Health ¹⁴		
HRH Governance	Tripura	
Specialist Cadre Available in the state (Y/N)	No	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists + MO (MBBS) (%)	33
	Dentists (%)	38
	Nurse (%)	29
	LT (%)	34
	ANM (%)	45
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:2	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	17 per 10,000	11 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	18:1	21:1

Ranking: Human Resource Index of Tripura¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{dd}	2227	2679	1871	808	356	86.83
Staff Nurse	1887	2210	1725	485	162	
Lab Technician	392	394	284	110	108	
Pharmacists	225	797	307	490	0	
MO MBBS ^{ee}	421	1167	892	275	0	
Specialist ^{ff}	467	350	342	8	125	

1.6 Healthcare Financing^{gg}

National Health Accounts (NHA) (2017-18)	Tripura		India	
Per Capita Government Health Expenditure (in ₹)	NA		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	NA		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	NA		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	NA		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Tripura		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	36	19	33	26
IPD - % of hospitalized cases using public facility	96	88	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	550	489	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	2240	3603	845	915
IPD - Per hospitalized case (in INR) - Public	4,324	7,543	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	58,091	64,065	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	23	20	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	72	56	53	43

^{dd} MPW – Multi Purpose Health Worker (Female + Male)

^{ee} MO MBBS (Full Time)

^{ff} Specialist (All Specialist)

^{gg} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	5,712	8,647	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	29,720	33,735	20,692	26,701
State Health Expenditure	Tripura		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	6.3		5 ^{hh}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{hh} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

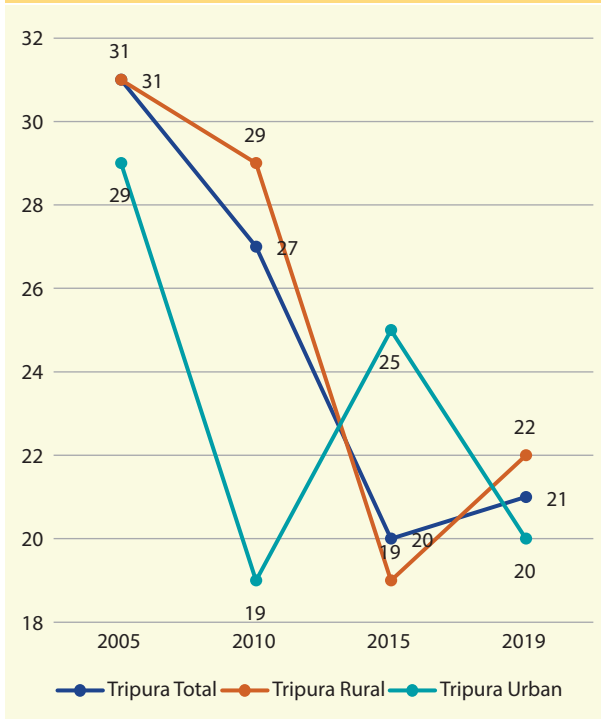


Figure 2: CBR & CDR Trend

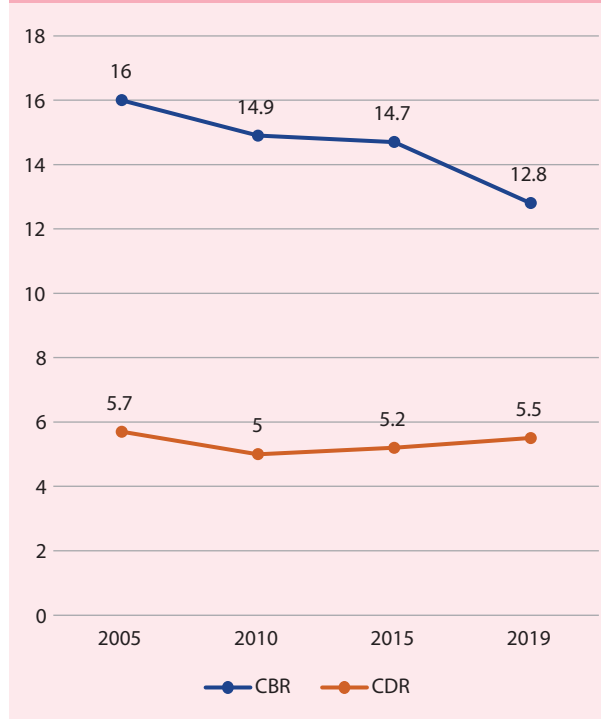


Figure 3: Comparison of Key NFHS 5 & 4 Indicators

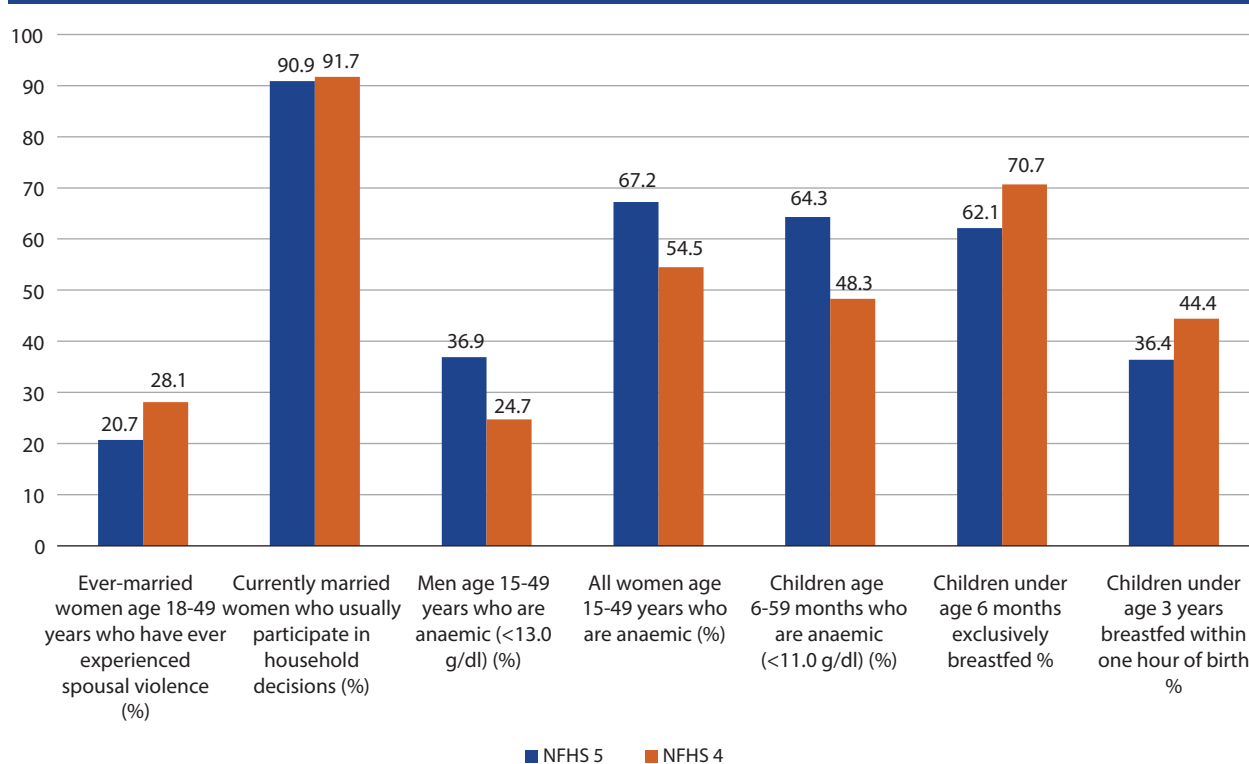


Figure 4: Top 15 causes of DALYs, 1990-2019

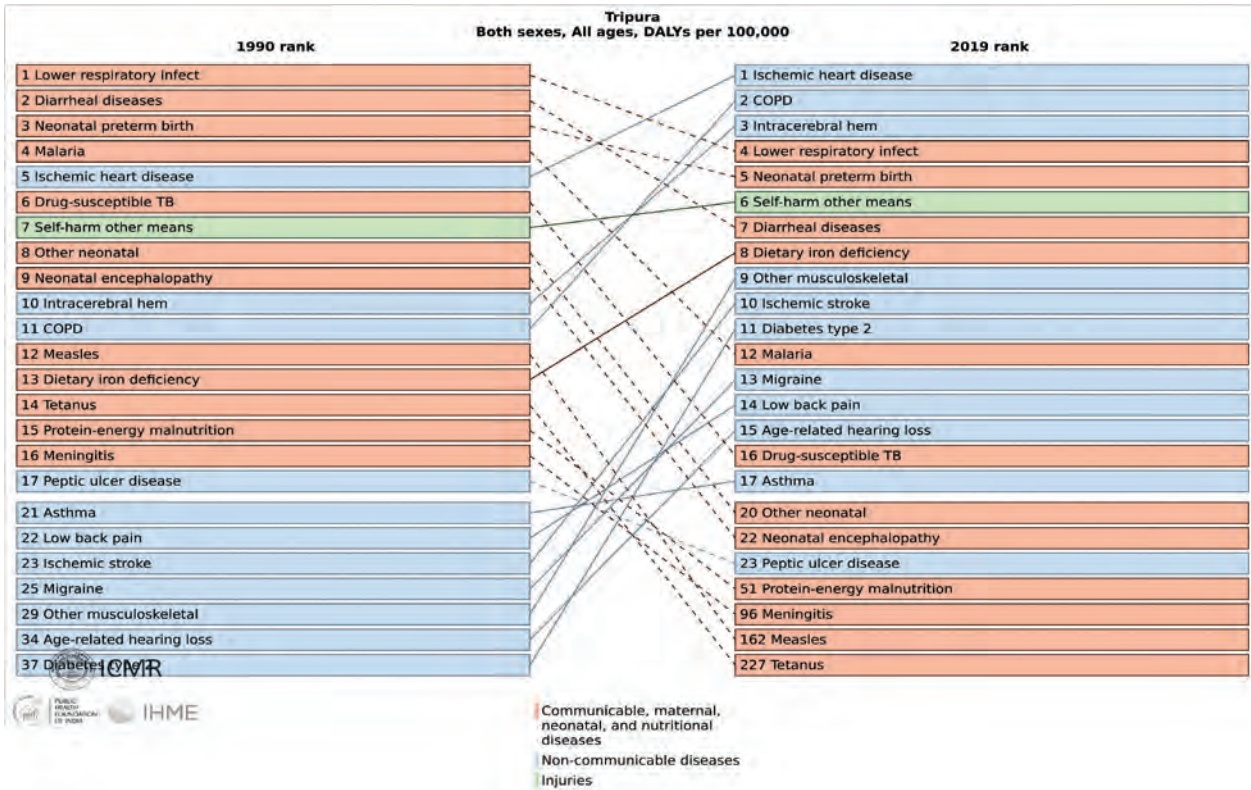


Figure 5: Top 15 risk of DALYs, 1990-2019

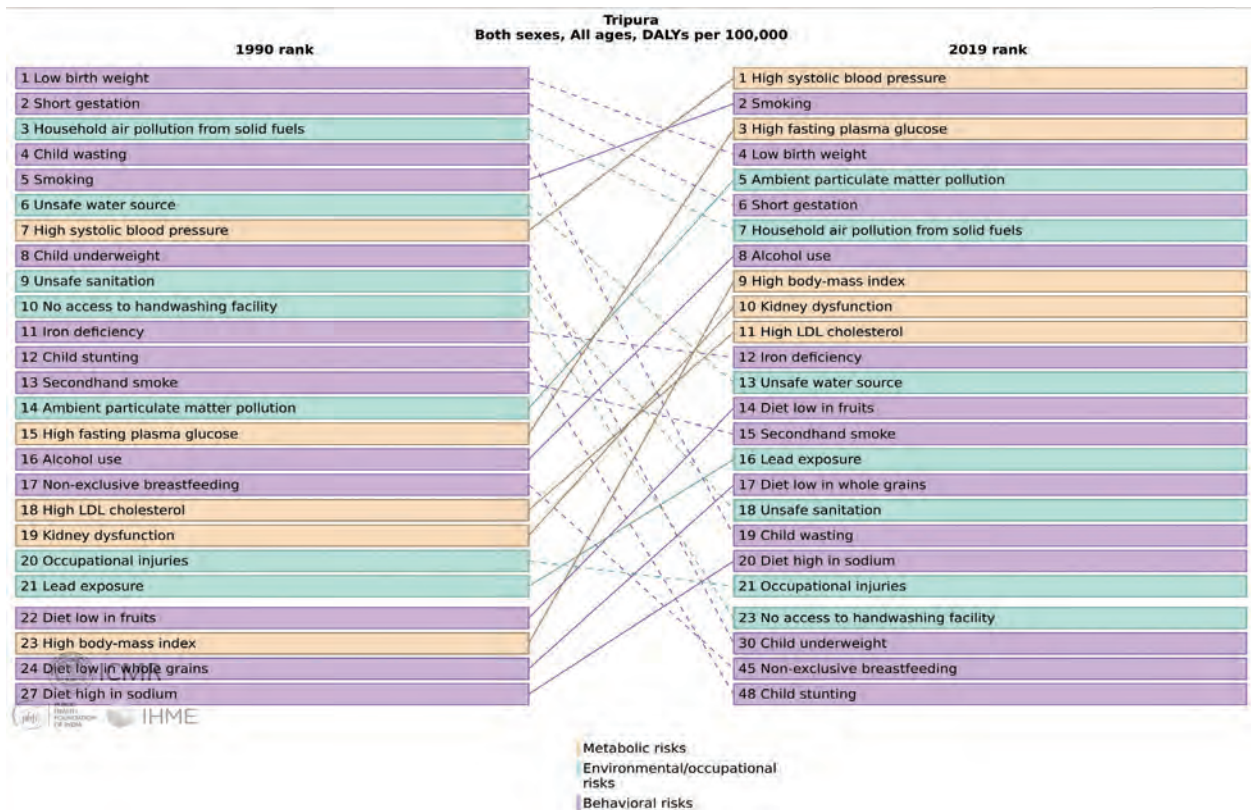


Figure 6: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

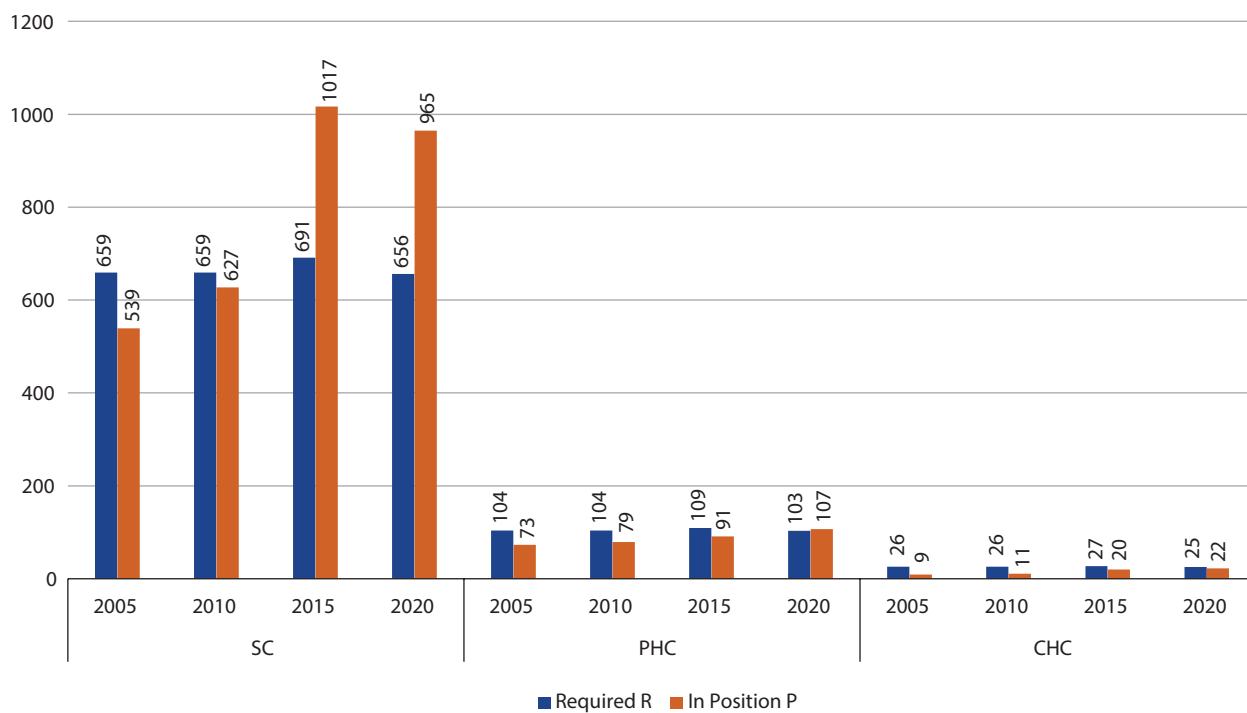


Figure 7: Year Wise Health Infrastructure Shortfall (%)

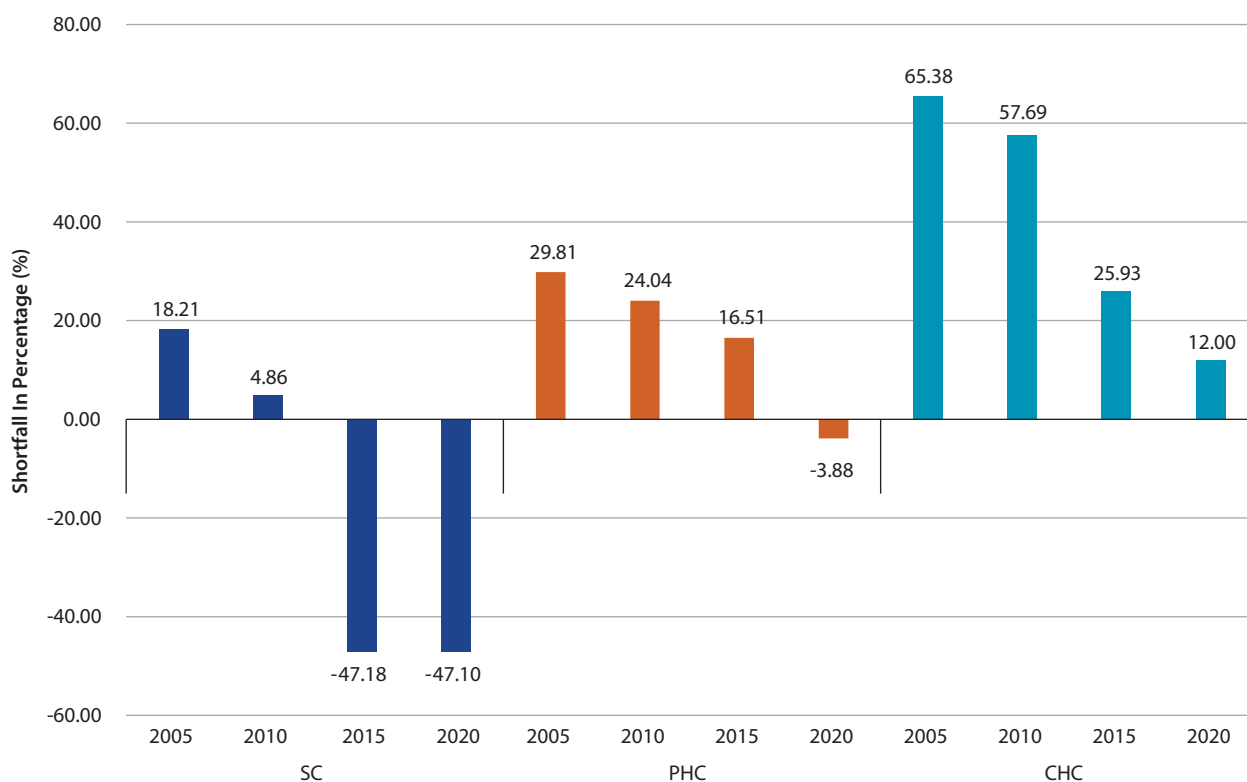
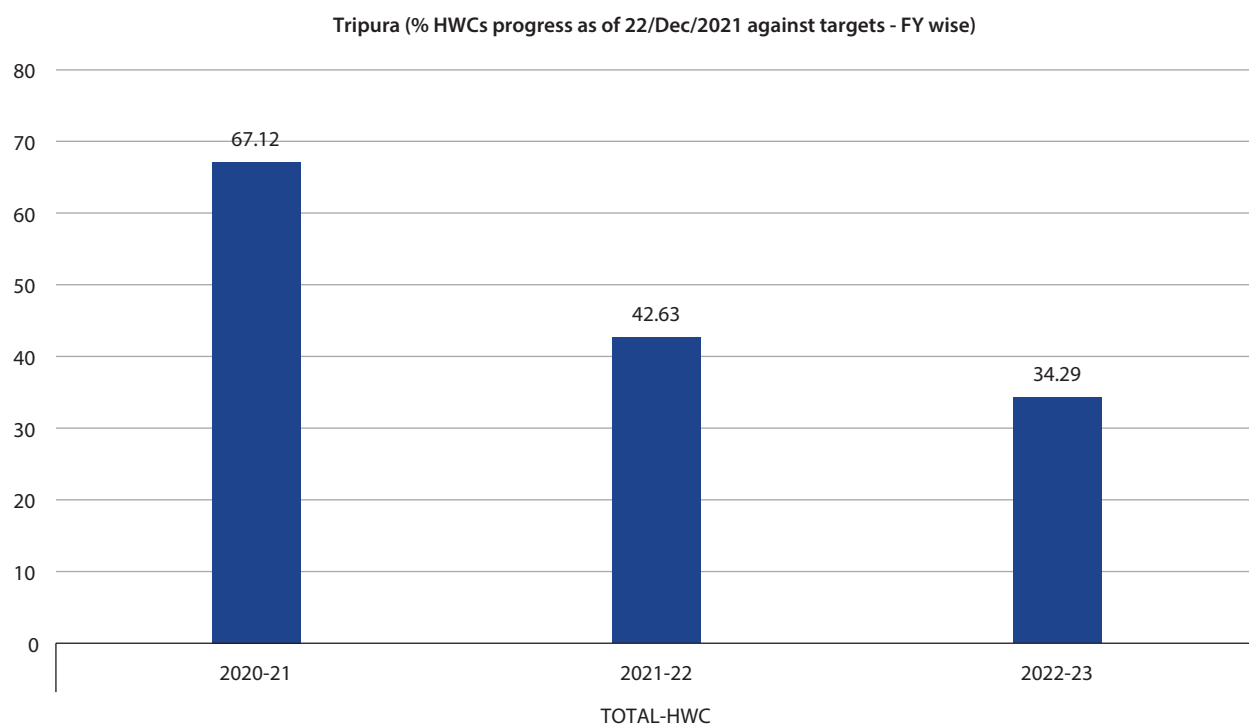


Figure 8: Percentage HWCs progress against target - FY wise (%)



S. No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)													
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted (Height For Age) (%)	Children Under 5 Years - Wasted (Weight For Height) (%)
1	Tripura	NFHS 4 Total	969	58.1	N/A	33.1	64.1	0.6	1.9	10.7	64.3	79.9	77.3	5.9	24.3	16.8
2	Tripura	NFHS 5 Urban	1024	24.9	89.9	33.7	76.9	0	5	4.7	64.2	94.8	88.2	14.7	27.1	17.1
3	Tripura	NFHS 5 Rural	1029	36.5	76.9	42.4	68.9	0.6	2.6	9.6	49.1	87.5	73.5	13.1	33.9	18.6
4	Tripura	NFHS 5 Total	1028	33	80.6	40.1	71.2	0.4	3.3	8.2	52.7	89.2	77.1	13.5	32.3	18.2
5	Dhalai	NFHS 5 Total	1160	44.2	71.6	38.9	80.9	0.3	2.3	4	52	87.3	76.7	14.3	45.7	15.9
6	Gomati	NFHS 5 Total	1043	29.9	77.2	42.8	65.5	0	2.2	12.1	40.6	93.2	85.1	12.6	22.7	27.6
7	Khowai	NFHS 5 Total	959	44.1	80.5	28.3	79.9	0.2	1.8	4.1	41.5	95.7	65.8	12.9	47	16.6
8	North Tripura	NFHS 5 Total	913	28.7	83.1	34.2	78.3	1.1	4.6	6.1	67.1	85.4	67.9	11.8	26.2	30
9	Sepahijala	NFHS 5 Total	930	31.6	79.6	51.9	58.9	0.8	2.7	15.3	52.8	87.7	78.6	12.8	34.5	14.9
10	South Tripura	NFHS 5 Total	1136	37.3	80.3	46.2	50.7	0.4	4	17.3	58.4	89.7	65.6	9.9	25.5	15.3
11	Unakoti	NFHS 5 Total	1036	28	76.4	38	66.8	0.6	1.4	9.7	24.6	71.5	66.7	9.4	31.8	19.3
12	West Tripura	NFHS 5 Total	1048	28.1	86.2	37.1	80.1	0.2	4.6	2.5	61.2	95.3	93.7	18.6	30.3	11.7

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'. Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only', indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below - 2 standard deviations, based on the WHO standard. 13 Below - 3 standard deviations, based on the WHO standard

A. Green Color – Best three performing districts within the districts for a particular indicator

B. Red – Worst three performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below - 2 standard deviations, based on the WHO standard. 13 Below - 3 standard deviations, based on the WHO standard

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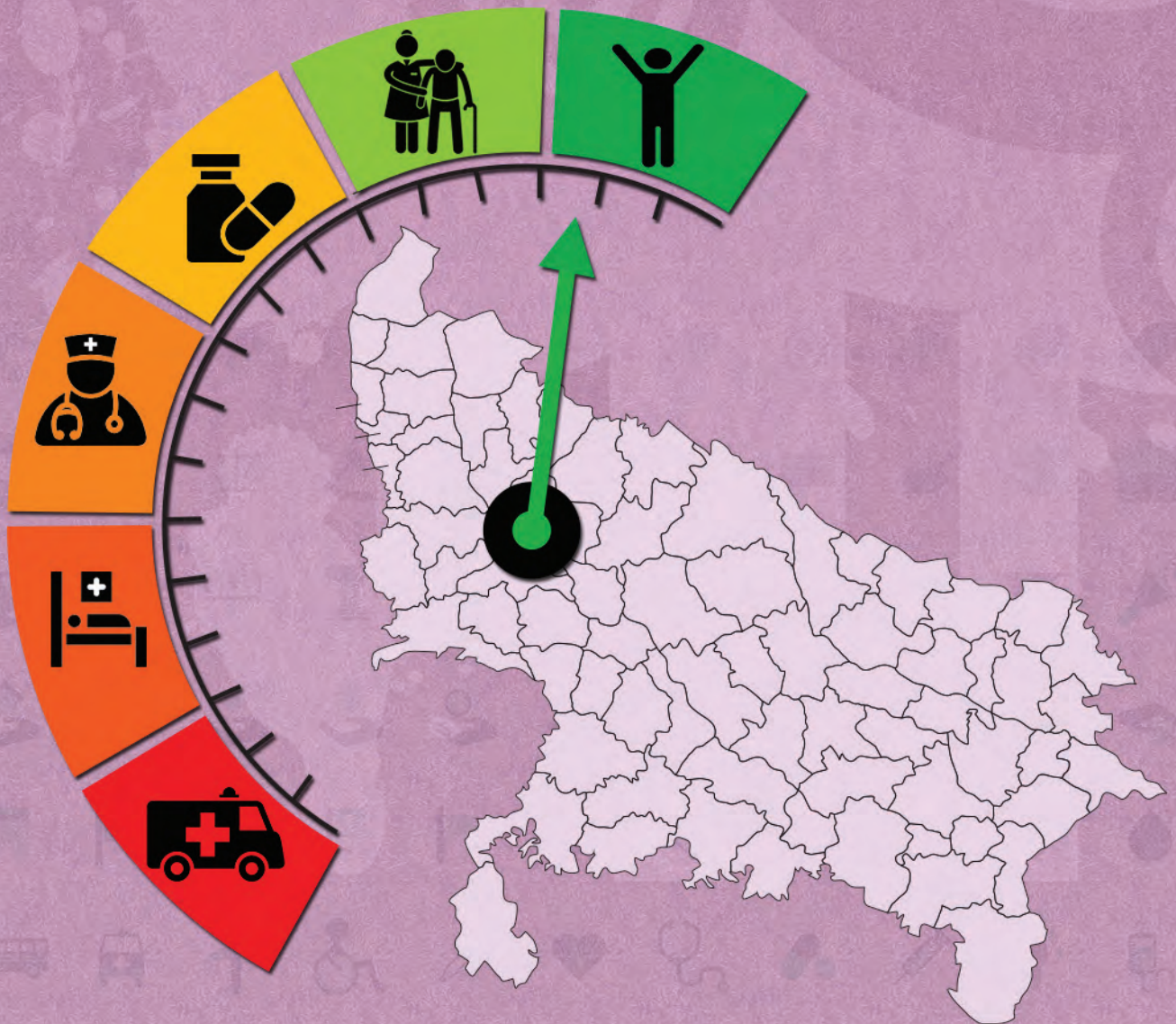
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



UTTAR PRADESH

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
1 st	Rae Bareilly	Jhansi
2 nd	Unnao	Bahraich
3 rd	Kanpur	Allahabad
4 th	Lakhimpur Kheri	Sonbhadra
5 th	Badaun	Jalaun
6 th	Jhansi	Hardoi
7 th	Pratapgarh	Mathura
8 th	Meerut	Shrawasti
9 th	Jalaun	Sitapur
10 th	Firozabad	Gonda
11 th	Kaushambi	Kanpur
12 th	Varanasi	Farukhabad
13 th	Meerut	Bahraich
14 th	Fatehpur	Mahoba

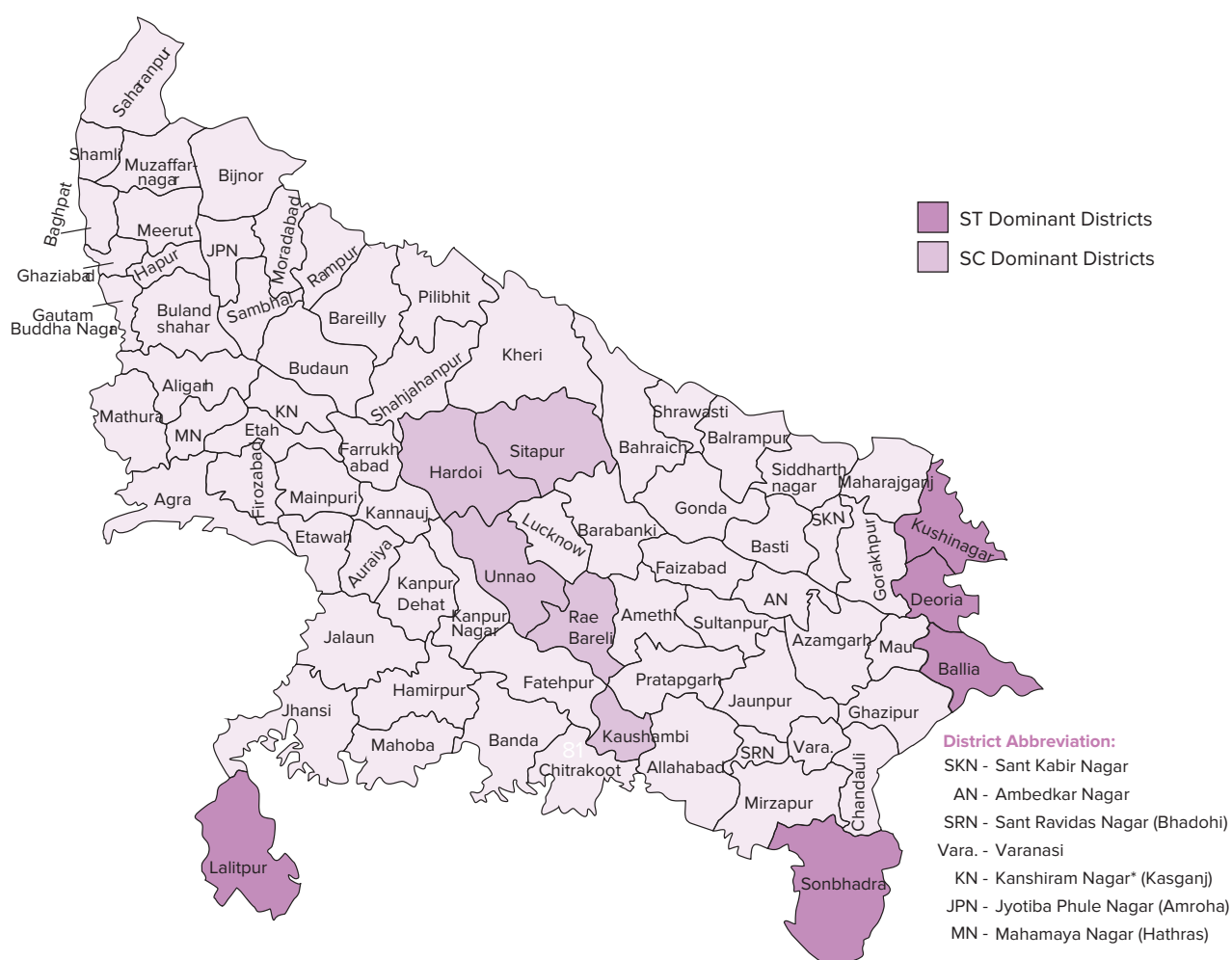
UTTAR PRADESH

1. BACKGROUND

1.1 State Profile

Uttar Pradesh is the 4th largest state in India with a geographical spread of 2,40,928 km² and is divided into 75 districts^a. It is the most populous State in the country with a population of over 19.98 crores^b

Figure 1: Top 5 ST & SC Dominant Districts



^a RHS 2019

^b Census 2011

and is projected to increase over 23 Crores by 2021^c. As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 4.13 crores (20.69%) and 0.11 crores (0.56%) respectively. In the State, 77.73% of the population reside in rural areas, while 22.26% in urban areas. Out of the 75 districts, top five SC & ST dominant districts account for 12.71% of SC & 66.73% of ST population in the State (Annexure 1, State Profile).

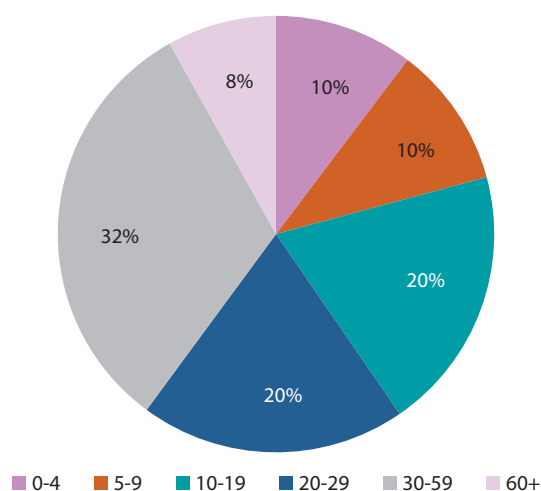
As per the Quarterly Progress Report (2020-21), 131 cities are covered under National Urban Health Mission. There are no Metro cities in the State; however, 7 cities come under the classification of Million plus cities.

The total length of roads^d in the Uttar Pradesh is 4,28,055 km (8.56%^e), the length of national highways is 8,712 km (7.6%^f) and state highways is 7,201 kms (4.1%^g). Agriculture remains the mainstay of the State's economy with 77.73% of the population living in rural areas.

1.2 Demography

In UP, out of the 75 districts, 38 districts have an estimated population of around 30 lakhs and above, 13 districts have a population of around 20-30 lakhs, 22 districts have around 10-20 lakhs population and only 2 districts have less than 10 lakhs population (Annexure 1.1). The State's sex ratio of 880 females per 1000 males is lower than the national average of 899 females per 1000 males (Annexure 1.2). As estimated, in Uttar Pradesh, there are 20% of the total population in the age group of 10-19 years, 52% within 20 to 59 years; and 8% in the age group of 60 years and above (Figure 2). The crude birth and death rates have declined from 30.4 and 8.7 (2005) to 25.4 and 6.5 (2019) respectively (Annexure 2, Figure 2). The literacy rate increased from 56.27% (2001) to 67.68% (2011), with female literacy rate (57.18%) being much lower than the male literacy rate (77.28%). As per ESAG 2018 report, Gross Enrolment Rate^h is 24.5% for higher education, 60.78% for senior secondary education, 67.75% for secondary education, 86.15% for elementary education and 92.15% for primary education.

Figure 2: UP - distribution of estimated population 2021 (%)



1.3 Elderly

Elderly people aged 60 and above share 8% of the State's total population (Figure 2). The life expectancy at 60 years of age is 16.2 years for males and 17.5 years for females (2014-18 SRS

^c Census Population Projection Report 2019

^d Basic Road Statistics 2019, MoRTH

^e Percentage of total length of roads in the State/UT

^f Percentage of total length of National Highways in the country

^g Percentage of total length of State Highways in the country

^h Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

abridged life table). In Uttar Pradesh - 18% of elderly males and 79% of elderly females in urban areas; and 27% of elderly males and 71% of elderly females in rural areas are economically fully dependent on others. The old age dependency ratio is 13.9 in 2011, 13.9 for males, 13.8 for females; 14.8 in rural and 10.9 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is low, where only around 29% of both men and women reported illness which is lower than the national average of 31% for both (Elderly in India 2016).

HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The RMNCHA+Nⁱ services improved with the launch of NHM in the Uttar Pradesh. Indicators for Antenatal care (ANC), institutional deliveries, C sections, distribution of IFA^k tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care have improved since 2005 (NFHS 4 & 5). Maternal mortality ratio has shown a substantial decline from 359^l in 2007-09^m to 197 in 2016-18ⁿ per 1,00,000 live births. In Uttar Pradesh, out of the total ANC registration, 76.5% of pregnant women received 4 ANC check-ups (Annexure 1.4). As per HMIS 2019-20, around 88% of all reported deliveries took place in institutions, out of which 72% took place in public health facilities. Total percentage of reported C-sections (8.6%) is consistent with the WHO's standard (10-15%), and out of which about 19.3% C-sections are conducted at private facilities. Around 51.7% of women are tracked for their first postpartum check-up between 48 hours and 14 days (Annexure 1.4). The prevalence of anaemia in women of reproductive age group decreased from 52.4% (NFHS 4) to 50.4% (NFHS 5). Anemia prevalence among women of reproductive age is more than twice than in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for detailed district wise comparison of NFHS 4.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a remarkable decline in IMR from 73 (2005) to 41 (2019) (Annexure 2, Figure 1). Similarly, NNMR^o and Still Birth (per 1,000 live births) Rates have also decreased from 45.1 and 9.8 (2005) to 32 and 3 (2018), respectively (Annexure 2, Figure 4). The life expectancy at birth improved from 62.7 (2006-10) to 65.3 (2014-18) (Annexure 2, Figure 3). As per NFHS 5 report, Bareilly, Ghaziabad, Hardoi, Kushinagar and Prayagraj districts reported high SRBs ranging from 1084 to 1191, while Etawah, Farrukhabad, Gautam Buddha Nagar, Hapur and Jalaun districts reported low SRBs ranging from 735 to 799. Improvement in the indicators can be attributed to interventions at the State level, including infrastructure strengthening under NHM, such as the establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4).

ⁱ Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^j Antenatal Check up

^k Iron Folic Acid Tablets

^l Including Uttarakhand

^m SRS MMR Bulletin

ⁿ SRS MMR Bulletin

^o Neonatal Mortality Rate

Full immunization for children aged 12–23 months improved from 66.2% (NFHS 4) to 78.4% (NFHS 5). Prevalence of anaemia in children aged 6–59 months increased from 63.2% to 66.4% (Annexure 2, Figure 5). For under-5 stunting - Baghpat, Gautam Buddha Nagar, Ghaziabad, Mau and Shamli districts reported relatively low burden ranging from 25.5%-28.6%; and Bahraich, Balrampur, Banda, Budaun, and Fatehpur reported high burden ranging from 51% to 52.1%. For under-5-wasting, Bijnor, Firozabad, Meerut, Pratapgarh, and Sant Ravidas Nagar (Bhadohi) reported relatively low burden ranging from 9.4% to 10.2%, and Banda, Deoria, Ghazipur, Jhansi, and Sonbhadra districts reported high burden-ranging from 25.2% - 26.8%. The proportion of exclusively breastfed under 6-month children has shown an improvement from 41.6% (NFHS 4) to 66.4% (NFHS 5).

2.3 Family Planning

The TFR^p has reduced from 4.2 (2005) to 2.9 (2018). The total unmet need in the State is reported as 12.9%, and unmet need for spacing as 4.8%. Bahraich reported the highest total unmet need (27.6%), while Budaun and Saharanpur reported the least (4.3%). Around 44.5% of married women availed any modern method of family planning in the State, with sterilization acceptance being 16.9% among females and 0.1% among males.

2.4 Communicable Diseases

Uttar Pradesh has 75 functional IDSP units in place^q. The proportion of Communicable, Maternal, Neonatal, and Nutritional Diseases [CMNND] contribute to 40.5% of total disease burden, in which Diarrheal Diseases, Lower Respiratory Infection, and Tuberculosis remain the major causes of death in Uttar Pradesh (Annexure 2, Figure 6). As per QPR reports, the annualized total case notification rate for TB is 193% and NSP^r success-rate is 7% as opposed to the national averages of 163% and 79% respectively. For NLEP^s- the prevalence rate of 0.41 per 10,000 population is lower than the national average of 0.61. In FY 2019-20, 8 deaths due to dengue, and none due to Kala Azar or Malaria^t are reported in the State.

2.5 Non-Communicable Diseases (NCDs) & Injuries

It is reported that 71.6% of total disease burden is from premature deaths and 28.4% from disability and morbidity. As per GBD^u 2019 report, the leading causes of DALYs are Chronic Obstructive Pulmonary Disease, Ischemic Heart Disease and Diabetes Mellitus Type 2 (Annexure 2, Figure 6). NCDs contribute to 47.9% of DALYs and injuries contribute to around 11.6% of the same (Annexure 1.4). Uttar Pradesh ranks 1st in the country for the total number of fatal road accidents with respect to others (Annexure 1.4). As reported 8.4% of women and 44.1% of men used any kind of tobacco; and 0.3% of women and 14.6% men consumed alcohol in the State. In general, malnutrition, air pollution, tobacco use, WASH^v and dietary risk factors are the major risk factors for DALYs (Annexure 2, Figure 7).

^p Total Fertility Rate

^q QPR NHM MIS Report (status as on 01.03.2020)

^r New Smear Positive

^s National Leprosy Eradication Programme

^t March 2020 QPR report

^u Global Burden of Diseases

^v Water, Sanitation and Hygiene

2.6 Health Care Financing

Uttar Pradesh has a Net State Domestic Product (NSDP) of ₹ 4,91,310.92 crores for the FY 2018-19. The State is positioned only second to last out of 32 States^w for per capita of ₹ 66,512. According to NHA 2017-18, the per capita Government Health Expenditure in the State is ₹ 801, which is less than the national average of ₹ 1,753. On the other hand, the OOPE^x as a share of Total Health Expenditure is at 72.6%, which is substantially higher than the national average of 48.8%. As per the NSS (2017-18), the OOPE for inpatient care per hospitalization in rural areas is estimated to be around ₹ 8,530 in public hospitals and ₹ 31,796 in private hospitals and the same in urban areas is ₹ 11,281 in public hospitals and ₹ 39,332 in private hospitals (Annexure 1.6). For child birth, OOPE in public facilities is estimated to be around ₹ 1,653 in rural areas & ₹ 1,864 in urban areas, whereas in private health facilities, it is around ₹ 21,705 in rural areas and ₹ 20,339 in urban areas. In public health facilities, the share of drugs on expenditure is 51% for inpatient care in rural and 40% in urban areas; whereas for diagnostics it is 15% and 16% in rural and urban areas respectively^y.

2.7 Health Infrastructure

As per recent RHS data, the number of public health facilities have been increasing since 2005 (Annexure 1, Figure 8). Though public health facilities have increased over time, a shortfall of 40.83% in SCs, 50.74% in PHCs and 51.33% in CHCs still remain (Annexure 1, Figure 9). Currently, there are 20,778 SCs, 2,880 PHCs and 711 CHCs in place, against the required 35,115 SCs, 5,846 PHCs and 1461 CHCs. In urban settings, there are only 593 PHCs in place against the required 1,083, thereby amounting to a shortfall of 45.24% (Annexure 1.3). UP has 168 DHs, 26 government medical colleges and 29 private medical colleges. In the State, only 55.3% (93) of DHs and 29.2% (208) of CHCs serve as functional FRUs.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 10,200 HWCs (7518 SHCs, 2205 PHCs & 477 UPHCs) are operationalized in the State as of 22nd December 2021^z.

In the State, 53 districts are equipped with MMUS under NRHM, while none under NUHM. The State has 95% of ASHAs in position under the NRHM and 75% under NUHM, both of which are below the national averages of 96% and 85% respectively. The doctor to staff nurse ratio is 1:1, with 2 public healthcare providers available for every 1000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 672.7 availed (events) OPD services and 30.6 availed (events) IPD services. However, as per the NSS data (2017-2018), 14% of all OPD cases and around 24% of all IPD cases used public health facilities, which are substantially lesser than the national averages for the same (Annexure 1.6).

^w Including 2 UTs with legislative assembly (Delhi and Puducherry); Directorate of Economics & Statistics

^x Out of Pocket Expenditure

^y National Sample Survey Office NSSO Figures

^z AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^{aa}

Indicator	Uttar Pradesh 2011 ¹	India
Total Population (In Crore)	19.98	121.08
Rural (%)	77.73	68.85
Urban (%)	22.26	31.14
Scheduled Caste population (SC) (in crore)	4.13 (20.69%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.11 (0.56%)	10.45 (8.63%)
Total Literacy Rate (%)	67.68	72.99
Male Literacy Rate (%)	77.28	80.89
Female Literacy Rate (%)	57.18	64.64
Number of Districts in the Uttar Pradesh ²	75	
Number of districts per lakh population in Uttar Pradesh (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	2
	≥ 10 Lakhs - <20 Lakhs	22
	≥20 Lakhs - <30 lakhs	13
	≥30 Lakhs	38
ST SC Dominant (Top 5) Districts of Uttar Pradesh ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Sonbhadra - 20.67%	Kaushambi - 34.72%	
Lalitpur - 5.86%	Sitapur - 32.25%	
Deoria - 3.54%	Hardoi - 31.13%	
Ballia - 3.39%	Unnao - 30.51%	
Khushinagar - 2.25%	Rae Bareli - 30.25	
Top 5 ST dominant district accounts for - 66.73%	Top 5 SC dominant district accounts for - 12.71%	

1.2 Key Health Status & Impact Indicators

Indicators	Uttar Pradesh	India
Infant Mortality Rate (IMR) ³	41	30
Crude Death Rate (CDR) ³	6.5	6.0

^{aa} Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	25.4	19.7
Maternal Mortality Ratio (MMR) ³	197	113
Neo Natal Mortality Rate (NNMR) ⁴	32	23
Under Five Mortality Rate (U5MR) ⁴	47	36
Still Birth Rate ⁴	3	4
Total Fertility Rate (TFR) ⁴	2.9	2.2
Life expectancy at birth ⁵	65.3	69.4
Sex Ratio at Birth ⁴	880	899

1.3 Key Health Infrastructure Indicators^{bb}

Indicators	Numbers (Total)			
Number of District Hospitals ²	168			
Number of Sub District Hospital ²	0			
Number of Government Medical College ⁶	26			
Number of Private Medical Colleges ⁶	29			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	7518	5710	11411	15211
PHC-HWC	2205	3621	3621	3621
UPHC-HWC	477	592	592	592
Total-HWC	10,200	9,923	15,624	19,424
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	1461	711	51.33	
Number of Primary Health Centres (PHC)	5,846	2,880	50.74	
Number of Sub Centres (SC)	35,115	20,778	40.83	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	93	0	208	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	1,083	593	45.24	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	14	Not Applicable	Not Applicable	
Number of PHC	58	Not Applicable	Not Applicable	
Number of SC	386	Not Applicable	Not Applicable	

^{bb} Sources are mentioned at the end of Annexure 1

Patient Service⁹	Uttar Pradesh	India
IPD per 1000 population	30.6	62.6
OPD per 1000 population	672.7	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	11.9	36.4

1.4 Major Health Indicator^{cc}

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Uttar Pradesh	India
% DALY ^{dd} accountable for CMNNDs ^{ee}	40.5	33
% DALY accountable for NCDs	47.9	55
% DALY accountable for Injuries	11.6	12
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Uttar Pradesh	India
Level of Birth Registration (%)	88.7	92.7
Level of Death Registration (%)	63.3	92
Percentage of medically certified deaths to total registered deaths (%)	6.5	20.7
RMNCHA+N		
Maternal Health⁹	Uttar Pradesh	India
% 1st Trimester registration to Total ANC Registrations	57.6	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	76.5	79.4
Total Reported Deliveries	4,095,081	21410780
% Institutional deliveries to Total Reported Deliveries	88	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	72	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	28	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	8.6	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	4.4	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	19.3	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	51.7	53.4
Neonatal⁹	Uttar Pradesh	India
% live birth to Reported Birth	98.9	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	11.5	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	90.8	89.9

^{cc} Sources are mentioned at the end of Annexure 1

^{dd} Disability Adjusted Life Years

^{ee} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Uttar Pradesh	India
Sick New Born Care Unit (SNCU)	82	895
New Born Stabilization Unit (NBSU)	180	2418
New Born Care Corner (NBCC)	1820	20337
Child Health & Nutrition¹⁰	Uttar Pradesh (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	5.6	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	50.7	60.6
Children under 5 years who are underweight (weight-for-age) (%)	32.1	32.1
Child Immunization¹⁰	Uttar Pradesh (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	78.4	83.8
Children age 12-23 months who have received BCG (%)	93.2	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	83.3	87.9
Family Planning¹⁰	Uttar Pradesh (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	4.8	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Uttar Pradesh	India
Number of districts with functional IDSP unit	75	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Uttar Pradesh	India
Annualized total case notification rate (%)	193	163
New Smear Positive (NSP) Success rate (in %)	74	79
National Leprosy Eradication Programme (NLEP)¹¹	Uttar Pradesh	India
Prevalence Rate/10,000 population	0.43	0.61
Number of new cases detected	15,484	114,359
Malaria, Kala Azar, Dengue¹¹	Uttar Pradesh	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	8	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	Uttar Pradesh (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	13.1	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	22.1	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Uttar Pradesh (NFHS 5)	India (NFHS 5)
Women - Slightly above normal (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	11.5	12.4
Men - Slightly above normal (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	15.2	15.7
Women - Blood sugar level - high (>140 mg/dl) (%)	4.7	6.1
Men - Blood sugar level - high (>140 mg/dl) (%)	5.8	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Uttar Pradesh (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	8.4	8.9
Men who use any kind of tobacco (%)	44.1	38
Women who consume alcohol (%)	0.3	1.3
Men who consume alcohol (%)	14.6	18.8
Injuries		
Road Traffic Accident¹²	Uttar Pradesh	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	1	NA
Total number of fatal Road Accidents	19,731	137,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	53.2	33.7
Number of persons killed in Road Accidents	22665	115113

1.5 Access to Care^{ff}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Uttar Pradesh	India
Number of Districts equipped with MMU under NRHM	53	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Uttar Pradesh	India
102 Type	2270	9955
104 Type	0	605
108 Type	2200	10993
Others	250	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	0	11070

^{ff} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Uttar Pradesh	India
Total number of ASHA targeted under NRHM	159307	946563
Total number of ASHA in position under NRHM	151213	904211
% of ASHA in position under NRHM	95	96
Total number of ASHA targeted under NUHM	8336	75597
Total number of ASHA in position under NUHM	6281	64272
% of ASHA in position under NUHM	75	85
Community Process¹¹	Uttar Pradesh	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	72880	554847
Number of Mahila Arogya Samitis (MAS) formed	6132	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Uttar Pradesh	India
DH	168	796
CHC	988	6036
PHC	0	20273
UCHC	11	126
UPHC	592	3229
Human Resource for Health ¹⁴		
HRH Governance	Uttar Pradesh	
Specialist Cadre Available in the state (Y/N)	No	
HR Policy available (Y/N)	Yes	
Implementation of HRIS (Y/N)	Yes	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	30
	Dentists (%)	77
	Nurse (%)	21
	LT (%)	24
	ANM (%)	23
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	3 per 10,000	2 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	2:1	1:1

Ranking: Human Resource Index of Uttar Pradesh¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ⁹⁹	76360	49918	36387	13531	39973	57.72
Staff Nurse	49346	24929	18320	6609	31026	
Lab Technician	10399	7579	5056	2523	5343	
Pharmacists	7174	6110	5565	545	1609	
MO MBBS ^{hh}	11234	12208	10193	2015	1041	
Specialist ⁱⁱ	9153	10336	3630	6706	5523	

1.6 Healthcare Financing^{jj}

National Health Accounts (NHA) (2017-18)	Uttar Pradesh		India	
Per Capita Government Health Expenditure (in ₹)	801		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	1.2		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	5.8		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	72.6		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Uttar Pradesh		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	14	14	33	26
IPD - % of hospitalized cases using public facility	28	24	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	1117	1290	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	853	1173	845	915
IPD - Per hospitalized case (in INR) - Public	8530	11281	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	31796	39332	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	15	16	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	51	40	53	43

⁹⁹ MPW – Multi Purpose Health Worker (Female + Male)

^{hh} MO MBBS (Full Time)

ⁱⁱ Specialist (All Specialist)

^{jj} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	1653	1864	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	21705	20339	20,692	26,701
State Health Expenditure	Uttar Pradesh		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	5.3		5	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{kk} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

^{**} RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

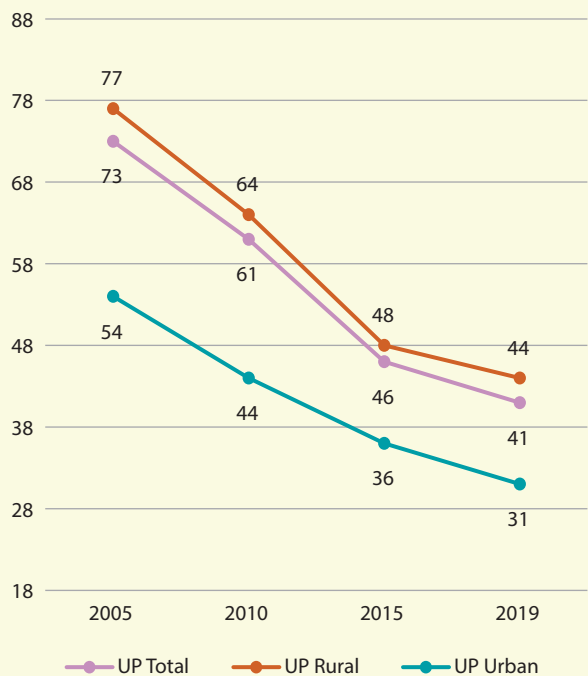


Figure 2: CBR & CDR Trend

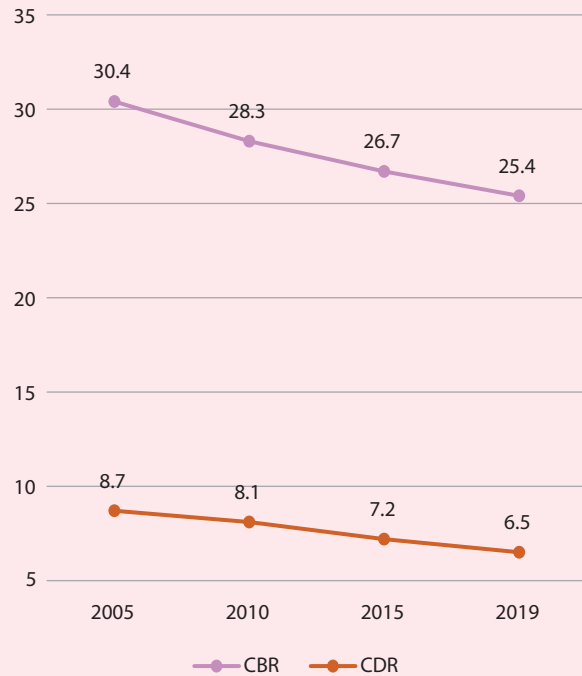


Figure 3: Life Expectancy At Birth Trend

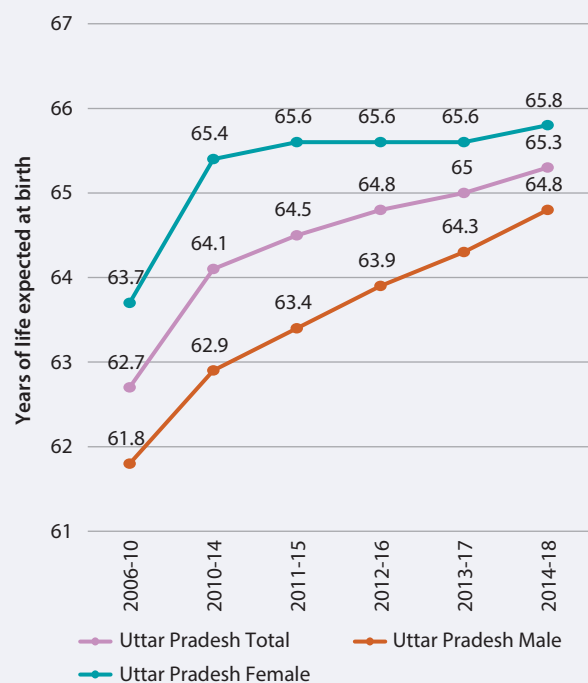


Figure 4: NNMR, TFR & Still Birth Trend

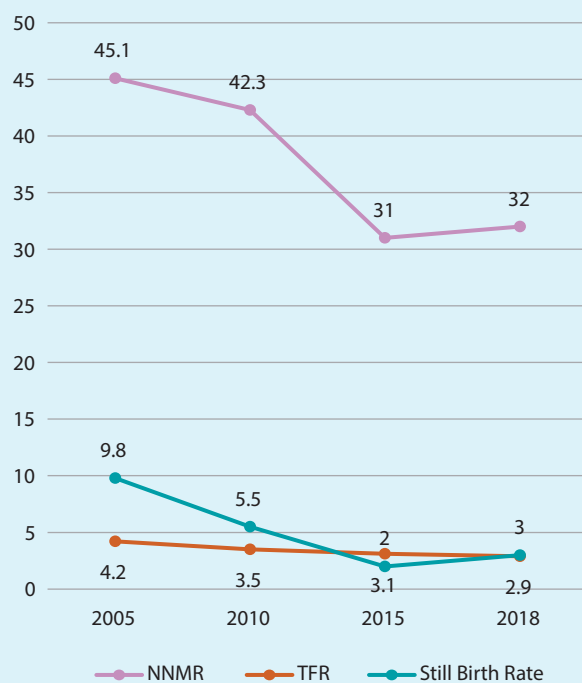


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

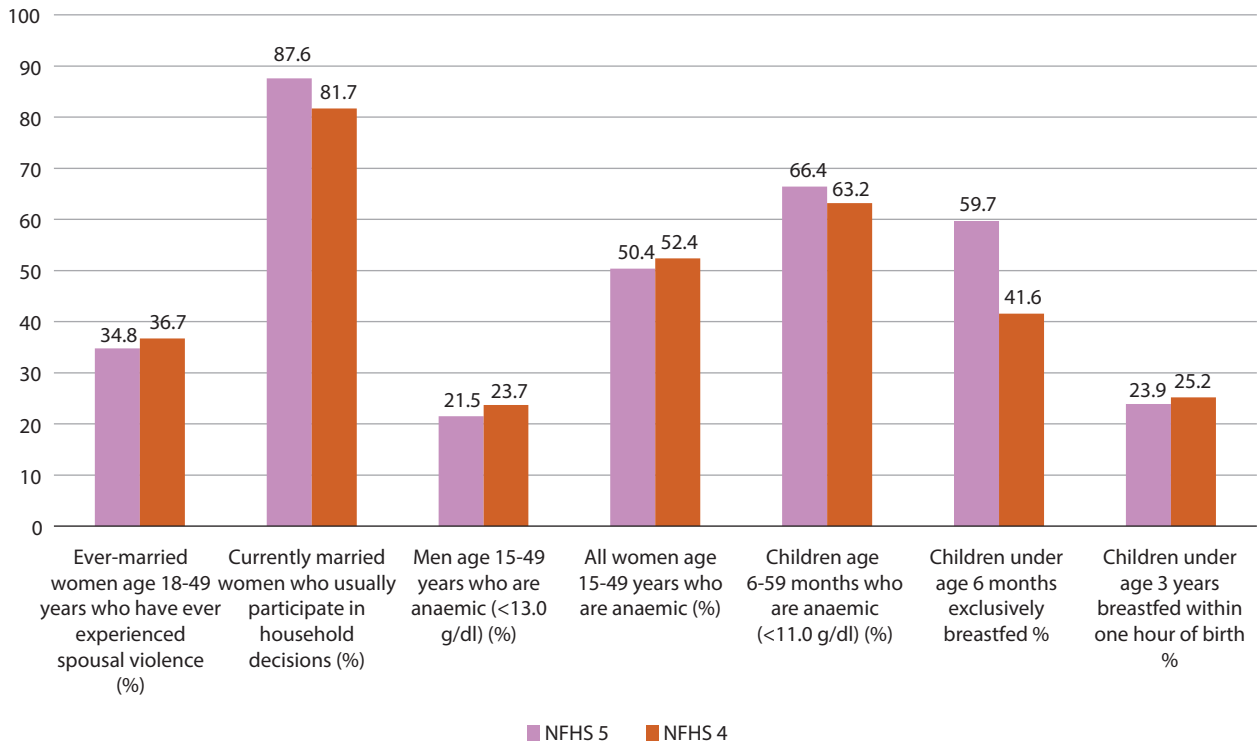


Figure 6: Top 15 causes of DALYs, 1990-2019

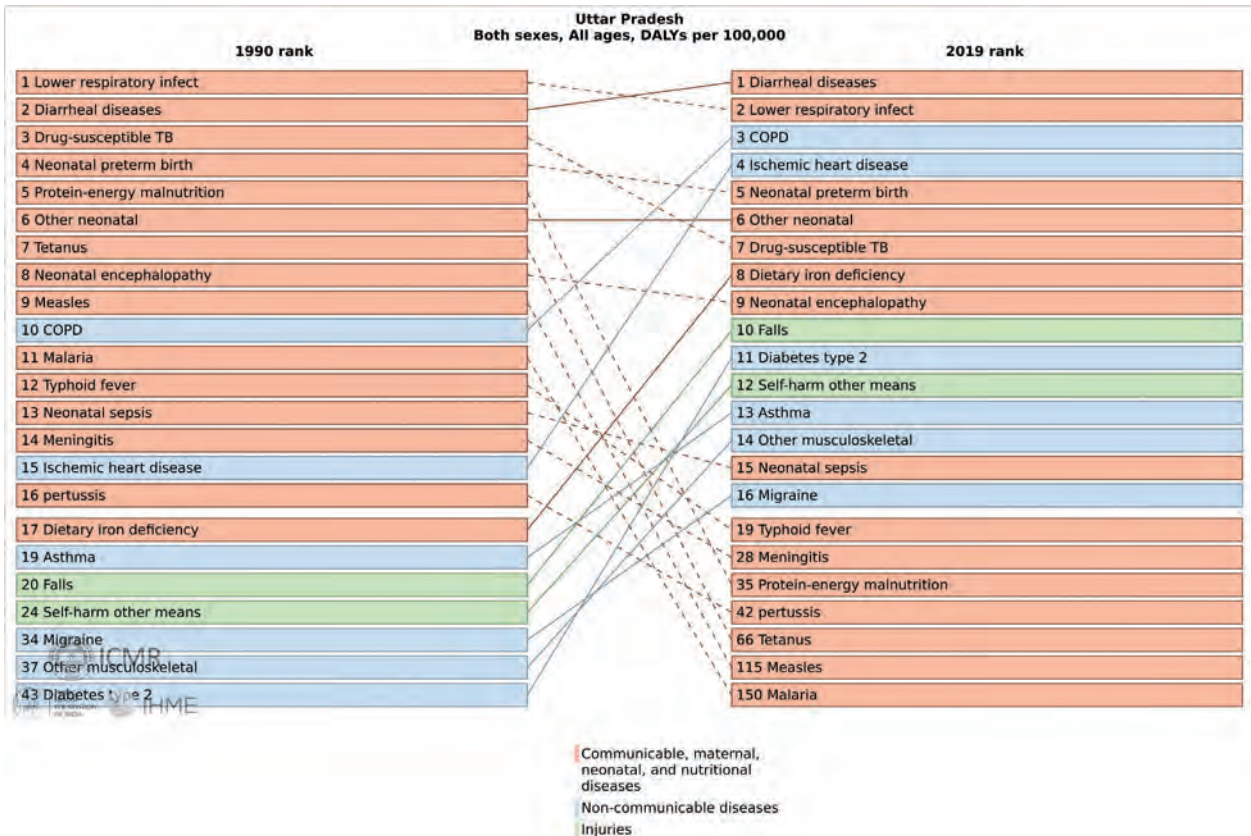


Figure 7: Top 15 risk of DALYs, 1990-2019

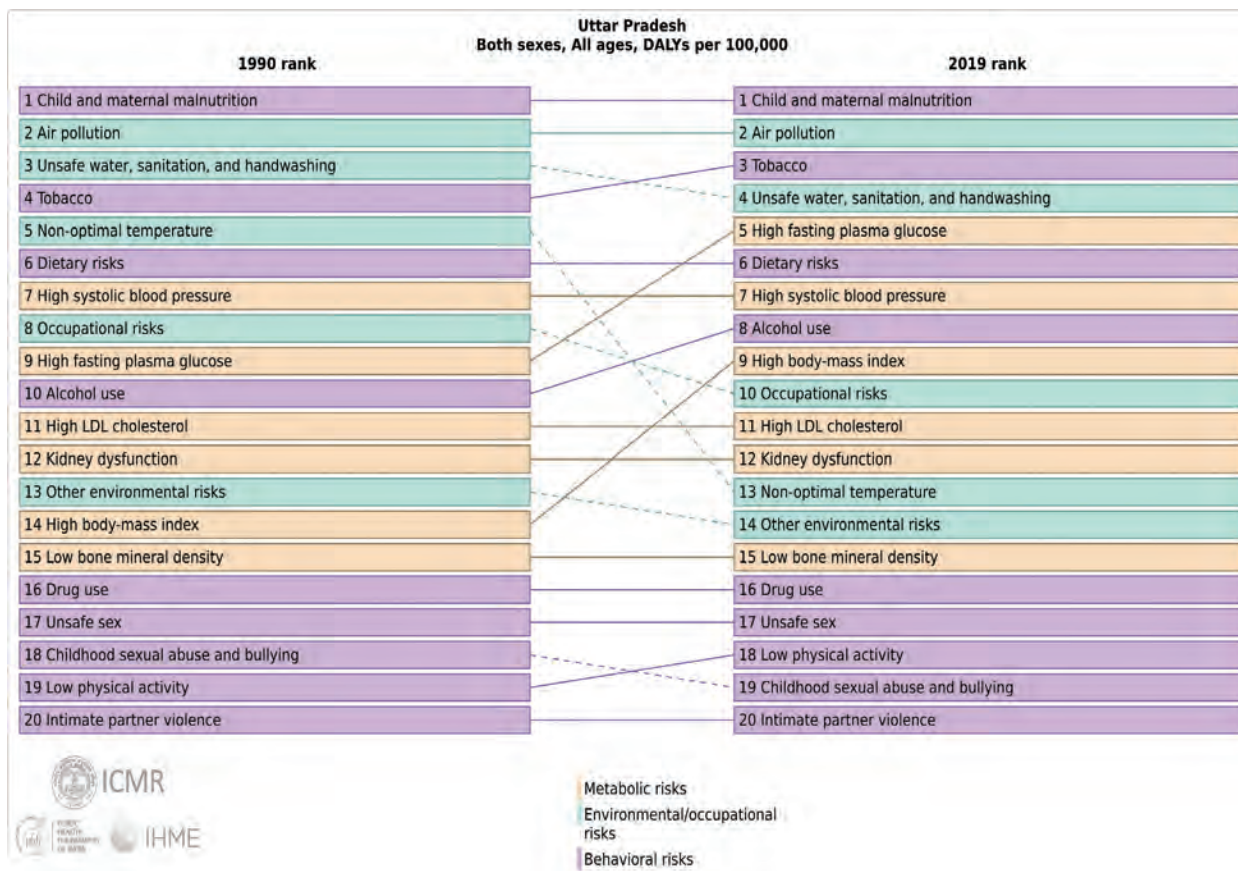


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

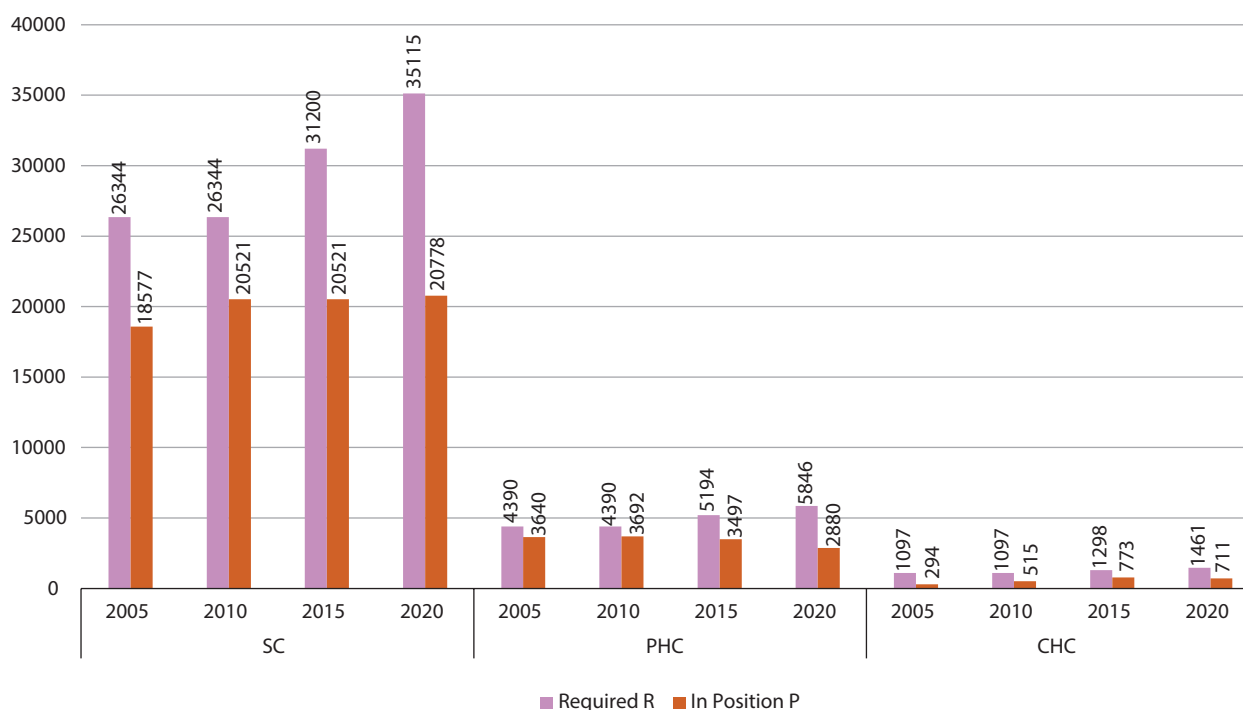


Figure 9: Year Wise Health Infrastructure Shortfall (%)

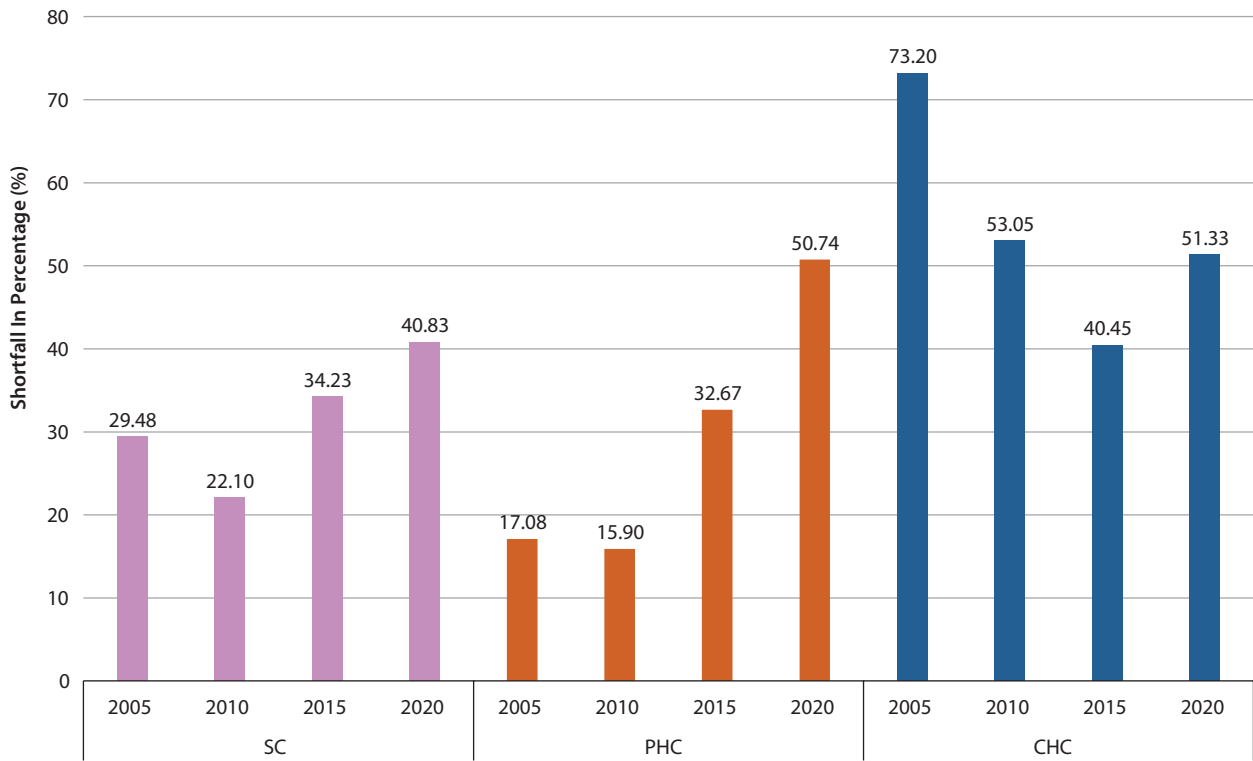
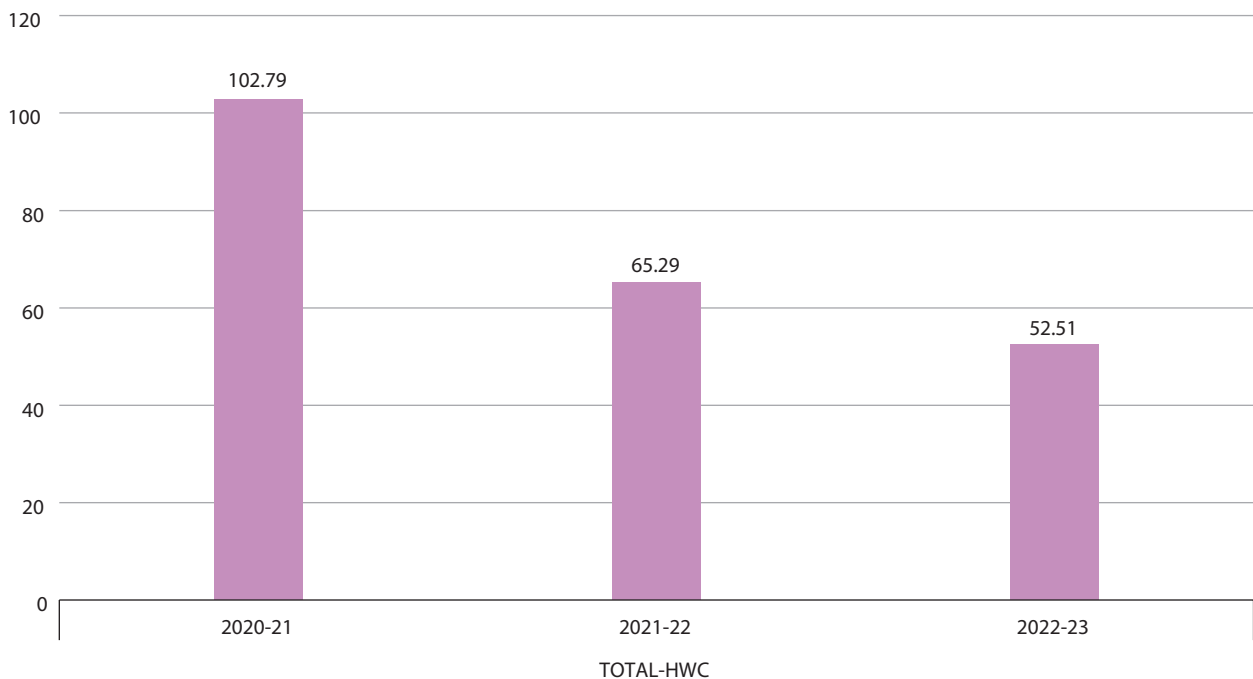


Figure 10: Percentage HWCs progress against target - FY wise (%)

Uttar Pradesh (% HWCs progress as of 22/Dec/2021 against targets - FY wise)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

S. No.	States/Districts	Data Source	Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	(Green - Good Performance, Red - Poor Performance) (District Wise Rural Urban Stats Not Available)			
													Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet** # (%)	Children Under 5 Years - Stunted^ (Height For Age) (%)	Children Under 5 Years - Wasted^ (Weight For Height) (%)
1	Uttar Pradesh	NFHS 4 Total	903	6.1	NA	21.1	45.5	1.2	10.8	18.1	26.4	67.8	66.2	5.3	46.3	17.9
2	Uttar Pradesh	NFHS 5 Urban	933	16.8	77.2	9.6	67.6	2	27.1	9.2	52.3	85.5	76.6	6.8	33	18.7
3	Uttar Pradesh	NFHS 5 Rural	943	15.5	62.4	17.9	60.8	1.3	16.6	14	39.6	82.9	78.8	5.9	41.3	17
4	Uttar Pradesh	NFHS 5 Total	941	15.9	66.1	15.8	62.4	1.5	19.1	12.9	42.4	83.4	78.4	6.1	39.7	17.3
5	Agra	NFHS 5 Total	902	9.4	63.1	17.9	67.7	2.4	18.7	9	42.7	89.1	78.2	10.6	35.9	16.4
6	Aligarh	NFHS 5 Total	1030	17.6	66	15.8	68.2	2.7	20.3	6.4	44.7	82.6	83.9	9.9	35	10.9
7	Ambedkar Nagar	NFHS 5 Total	818	23	76.2	5.5	48.9	0.4	4.6	22.9	44.5	92.2	91.3	5	31.1	17.8
8	Amethi	NFHS 5 Total	844	20.9	63.3	14.9	48.4	0.7	11.7	19.9	31.7	90.8	86.8	5.7	35.8	19.9
9	Auraiya	NFHS 5 Total	880	18.4	74.9	18.1	51.4	0.7	14.3	18.7	50.4	90.1	84.3	6.1	39.7	19.4
10	Azamgarh	NFHS 5 Total	839	9	76.5	12	52.7	0.6	5.9	20.7	38.5	93.2	80.3	0	33.4	14.4
11	Baghpat	NFHS 5 Total	818	12.5	76.3	8.1	71.7	2.3	22.5	5.2	42.4	80.9	93	9.1	25.5	10.3
12	Bahraich	NFHS 5 Total	848	10.1	38.8	37.5	38.4	1.2	14.4	27.6	34.3	67.7	62.2	9.8	52.1	14.4
13	Ballia	NFHS 5 Total	1062	10.6	70	9.9	55.2	1	10.3	20.2	30.5	90	65.7	0.9	43.8	21.9
14	Bairampur	NFHS 5 Total	1034	13	43.2	35	49	2.6	14.3	22.3	41	69.7	67.9	6.9	41.2	24.9
15	Banda	NFHS 5 Total	971	13.3	57	19	62.4	0.6	20	15.3	39	89.8	64.9	9.5	51	25.7
16	Bara Banki	NFHS 5 Total	951	14.6	56.1	20.4	45.4	1.6	19.3	21.4	22.6	76	67.2	6.7	41.9	18.1
17	Bareilly	NFHS 5 Total	1084	18.7	53.9	11.4	68.8	0.8	21.5	5.9	43.1	75.1	91	10.5	45.9	15.4
18	Basti	NFHS 5 Total	895	15.8	63.2	15.9	72	3.3	14.2	11.1	31.5	93.2	77.4	5.7	35.9	24.2
19	Bijnor	NFHS 5 Total	951	18.8	72.8	5.2	68.1	0.7	30.4	5	48.8	83.7	96.7	6.8	36.2	9.4
20	Budaun	NFHS 5 Total	870	13.6	49.7	22.9	76.9	1.2	26.4	4.3	40.6	72.3	74.5	8.6	51.8	18.2
21	Bulandshahr	NFHS 5 Total	841	20.5	69.2	12.8	72.9	1.9	22.3	5.1	47.6	83.5	84.7	8.9	37.6	13.8
22	Chandauli	NFHS 5 Total	877	28.1	70.6	17.2	60.4	0.6	7.4	15.4	32.9	86.2	82.6	3.5	39.5	17.4
23	Chitrakoot	NFHS 5 Total	889	17.4	56.2	21.8	57.1	1.3	8.8	12.7	30.3	81.1	68.9	8.4	47.5	24.8

24	Deoria	NFHS 5 Total	1002	10.5	71.3	13.7	56.2	3.1	16.4	20.4	42.5	93.4	73.2	2.7	36.8	26.5
25	Etah	NFHS 5 Total	1004	12.8	67.8	20.1	73.1	1.8	24.2	7	33.6	76.7	71.9	5	48.8	15
26	Etawah	NFHS 5 Total	799	17.9	77.4	16.3	71	1.1	26.9	8.3	43.7	85.2	87.2	6.2	38.8	13.9
27	Faizabad	NFHS 5 Total	885	19.8	73.8	7.6	46	0.8	7.6	25.9	33.8	89.1	82.9	2.9	30.6	12.4
28	Farrukhabad	NFHS 5 Total	789	13.5	63.1	18.8	67.2	2.3	24.6	7.7	41.5	69.3	83.7	14.8	47.8	14.3
29	Fatehpur	NFHS 5 Total	890	16.8	62.3	10.4	66.2	0.7	38.9	9.7	38.1	81.4	63.5	3.5	51.1	17.8
30	Firozabad	NFHS 5 Total	871	13.4	71.4	24.8	66.9	1.2	14.7	9.2	39.3	80.1	72.9	6.8	46.9	9.5
31	Gautam Buddha Nagar	NFHS 5 Total	735	23.8	79.9	13.5	76.3	3.2	25	5.3	52.7	86.6	90.4	6.9	25.5	12
32	Ghaziabad	NFHS 5 Total	1182	20	80.1	8	72.7	3	31.9	5.3	62	86.4	83.8	6	28.2	17.1
33	Ghazipur	NFHS 5 Total	972	10.6	72.4	13.5	62.9	1.9	12.1	13.4	29.2	88.3	69.9	4.4	39.3	25.7
34	Gonda	NFHS 5 Total	896	13.4	57.7	25.4	41.1	1.7	15.9	24.5	41.7	81.8	66.2	5	45.9	12.1
35	Gorakhpur	NFHS 5 Total	943	17.9	68.8	14.6	63.8	0.8	20.1	14.7	56.3	91.6	69.3	2.3	29.6	23.3
36	Hamirpur	NFHS 5 Total	882	21.9	69.4	10.5	61.3	0.1	19.1	14.4	43.2	96.3	79.8	5.8	48	20.6
37	Hapur	NFHS 5 Total	785	14.9	73.7	7.1	70.3	2.1	26.5	4.8	53.3	83.3	89.1	10.9	30.2	18.5
38	Hardoi	NFHS 5 Total	1097	16	55	19.3	58.3	1.1	31.5	13.4	39.7	73.9	62.4	7.6	44.5	22.3
39	Jalaun	NFHS 5 Total	797	17.6	66.8	16.9	62.4	0.4	12.2	13.5	62.8	85.1	64.7	2.8	45.1	19.5
40	Jaunpur	NFHS 5 Total	898	12	75.9	11.8	62	2.8	18.7	16.2	47.6	88.8	83.6	5.7	40.5	14.8
41	Jhansi	NFHS 5 Total	927	11.4	69.2	25.1	62	0	19.8	13.8	36.6	92.9	53.9	10.7	40.9	25.2
42	Jyotiba Phule Nagar	NFHS 5 Total	860	8.3	61.2	11.6	65.7	0.8	26.7	6.8	43.9	81.1	91.1	16.8	42.2	22.5
43	Kannauj	NFHS 5 Total	1038	15.3	64.8	10.4	69.4	1.5	43.9	7.2	46.4	76.4	56.8	13.5	43	21.5
44	Kanpur Dehat	NFHS 5 Total	1027	17.9	70.8	12.7	60.1	1.2	22.6	15	54.4	84.3	68	5.4	44.1	12.5
45	Kanpur Nagar	NFHS 5 Total	816	16.1	81.3	10.9	73.7	3	33.1	6.8	69.9	86.6	81.2	3.7	34.6	21.4
46	Kanshiram Nagar	NFHS 5 Total	997	15.1	56.4	23.2	65.2	2.3	17.4	11.8	38.1	74.8	74.6	5.6	45.1	19.3
47	Kaushambi	NFHS 5 Total	972	20.2	58.6	17.6	62.5	1.2	13.5	12.5	34	88.6	77.1	6.1	40.2	18.3
48	Kheri	NFHS 5 Total	901	22	57.5	19.7	54.9	1.5	11.2	16.1	48	82.8	76.2	4.4	47.6	15.8
49	Kushinagar	NFHS 5 Total	1080	15.6	62.5	17.7	64.2	2	10.5	14.5	35.8	89.4	82.9	3	32.2	24.3
50	Lalitpur	NFHS 5 Total	998	11.7	55.3	42.5	73.8	0.3	10.9	7.4	45.7	90.8	73	4.8	46.6	18.7
51	Lucknow	NFHS 5 Total	981	15.8	78.4	9.9	56.5	2	18	15.7	53.1	91.3	84.5	2.3	32.1	11.5
52	Mahamaya Nagar	NFHS 5 Total	989	10.9	65.5	28.1	57.5	2.4	15.2	13.8	27.8	80.3	79.5	5.9	39.1	12
53	Mahoba	NFHS 5 Total	933	18.2	62	24.1	62.9	1.1	9.8	13.7	52.5	93.3	82.8	8	40.5	21.8
54	Mahrajganj	NFHS 5 Total	1056	16.2	65.6	20.8	61.6	0.7	15.3	16.6	46.2	96.3	73.9	7.5	42.3	25
55	Mainpuri	NFHS 5 Total	837	16.1	74.2	16	80.1	1.3	29.2	4.4	38.1	82.7	87.7	10.1	44.3	14.6

56	Mathura	NFHS 5 Total	930	10.8	64.4	21.3	58.2	1.8	14	12.9	39.3	79.5	80.5	2.6	31.6	11
57	Mau	NFHS 5 Total	938	16	72	11	54.2	0.4	16.5	16.8	43.2	94.7	63.3	3.2	25.4	21.2
58	Meerut	NFHS 5 Total	926	18.4	79	7.6	72.4	1.8	29.1	5.6	49.9	80.6	92.2	8.7	32.1	10.2
59	Mirzapur	NFHS 5 Total	812	15	70.9	16.6	61.5	1.8	9	14.5	36.5	91.1	83.3	4.6	43.4	12.5
60	Moradabad	NFHS 5 Total	1022	17.1	66.7	9.6	69.8	0.5	30.7	6.9	33.2	80.3	90.6	12.9	34.7	19.1
61	Muzaffarnagar	NFHS 5 Total	865	8.2	72.1	7.3	73.2	1.6	24.7	5	44	87	79.6	16.1	29.8	20.7
62	Pilibhit	NFHS 5 Total	814	21.4	54.7	16.2	74.1	0.8	27.4	4.9	43.6	76.2	90.4	8.9	38.9	20.1
63	Pratapgarh	NFHS 5 Total	1034	14.9	74.8	11	51.9	0.8	6.7	21.9	30.6	90.8	92.1	4.2	35.5	10
64	Prayagraj	NFHS 5 Total	1191	20.6	67.7	13.8	63.1	1.2	8.6	11.9	45.9	83.2	67.8	0	37.9	15.1
65	Rae Bareilly	NFHS 5 Total	871	16.8	62.8	14.3	69.3	2.5	26.2	12.4	43.6	89.5	77.2	3.4	47	13
66	Rampur	NFHS 5 Total	968	13.1	57	10.5	56.8	0.3	17	12	50.4	81	81.9	6.9	40.4	17.6
67	Saharanpur	NFHS 5 Total	1022	11.8	71.2	7	73.7	0.8	32.8	4.3	52.4	81.7	93.4	5.6	28.8	22
68	Sambhal	NFHS 5 Total	940	13.7	51.3	21.1	65.9	0.6	26.2	8.5	32.9	74.2	89.6	5.6	51.6	14.1
69	Sant Kabir Nagar	NFHS 5 Total	835	20.4	61.3	16.8	69.2	4.1	16.2	13	43.2	90.6	82.9	7.5	42.3	19
70	Sant Ravidas Nagar (Bhadohi)	NFHS 5 Total	839	18.8	69.7	19.6	53.8	0.6	6.1	22.4	25.8	90.3	72.1	2.9	42.7	9.1
71	Shahjahanpur	NFHS 5 Total	1064	14.2	56.8	20.9	70.3	2.1	26.1	6.4	35.3	63.3	84.5	6.7	44.5	17
72	Shamli	NFHS 5 Total	1029	14.8	64.2	10.8	71	0.9	27.7	5.6	41	78.3	95.3	1.8	28.6	24.3
73	Shrawasti	NFHS 5 Total	971	13.5	39.1	51.9	49.8	2	13	20.1	42.4	80.4	69.8	3.4	50.9	20.3
74	Siddharthnagar	NFHS 5 Total	852	12.2	48.3	33.9	65	1.9	22.9	14.4	60.9	69.7	68.1	3.5	37.2	24.8
75	Sitapur	NFHS 5 Total	1011	23.2	53.4	20.8	51.1	1.1	12.9	17.9	35.4	84.8	72.2	4.1	47.8	18.2
76	Sonbhadra	NFHS 5 Total	974	19.7	60.9	17.7	67.1	0.8	9.9	11.6	36.4	76.8	82.3	2.5	38.3	26.8
77	Sultanpur	NFHS 5 Total	997	20.7	71.9	7.9	47.6	0.7	7.1	23.9	47	87	92.7	4.4	33.4	10.7
78	Unnao	NFHS 5 Total	960	15.3	64.4	18.9	48.7	1.6	26.7	19.1	19.8	80.8	62.5	5.2	39.2	12.1
79	Varanasi	NFHS 5 Total	885	12.8	79	10.4	72.5	1.5	23.7	8.7	51.4	95.2	78.6	5.8	37.4	21

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'; Out of two indicators with 'either vaccination card or mother's recall' & 'vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color - Best five performing districts within the districts for a particular indicator

B. Red - Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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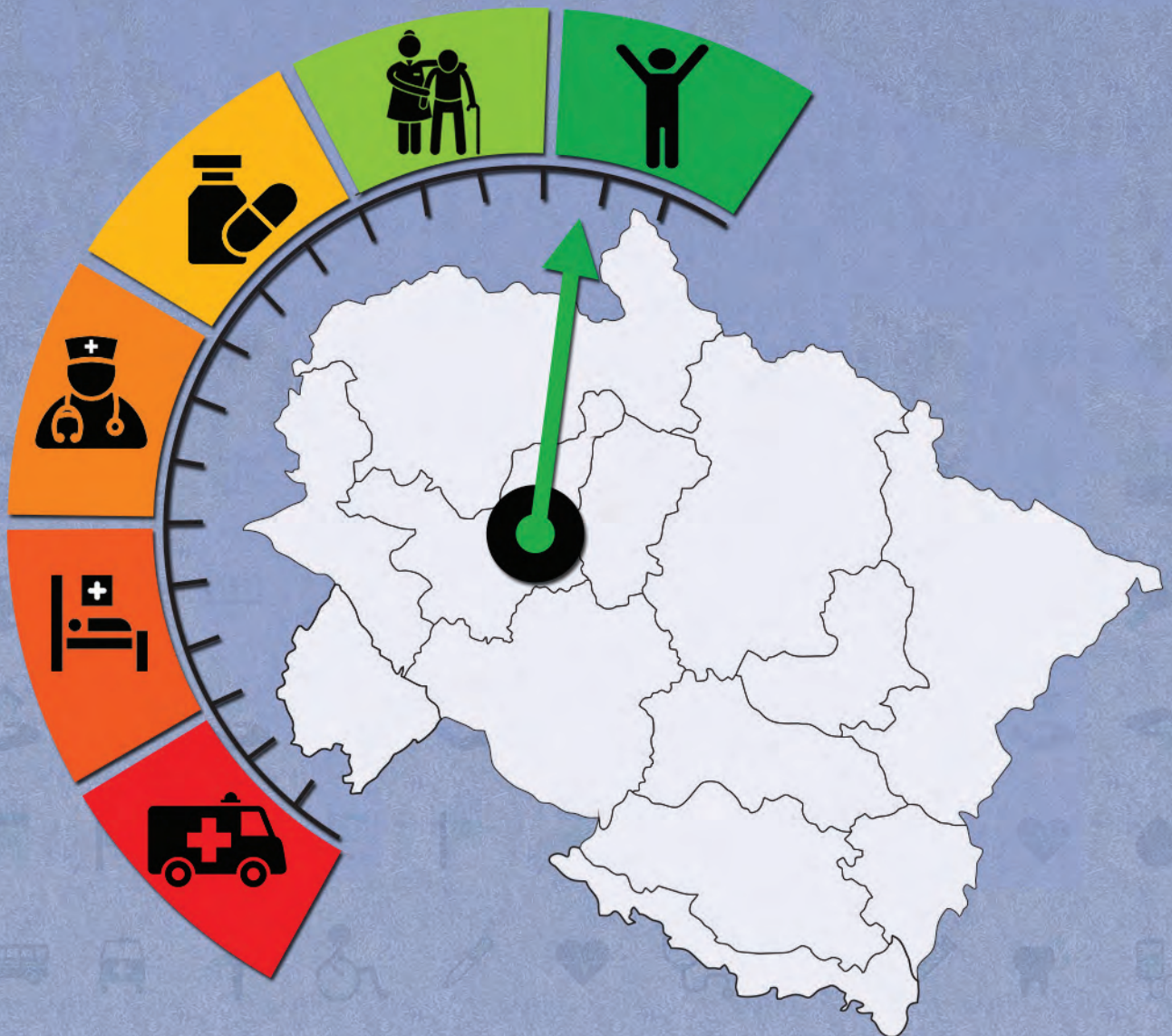
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



UTTARAKHAND

**DISTRICTS VISITED IN
COMMON REVIEW MISSIONS**

CRM	Districts Visited	
3 rd	Tehri Garhwal	Almora
4 th	Chamoli	Uttarkashi
5 th	Pauri Garhwal	Rudraprayag
6 th	Bageshwar	Pithoragarh
8 th	Tehri	Almora
9 th	Dehradun	Nainital
11 th	Champawat	Udham Singh Nagar
12 th	Haridwar	Uttarkashi
13 th	Udham Singh Nagar	Haridwar

UTTARAKHAND

1. BACKGROUND

1.1 State Profile

Uttarakhand is positioned^a 18th in India for a geographical spread of 53,483.00 km². It is divided into 13 districts and is estimated to have a population of over 1crores^b. It is projected that the population would reach around 1.13 crores by 2021 (Census Population Projection 2019). As per Census 2011,

Figure 1: Top 5 ST & SC Dominant Districts



^a Including all States & UTs

^b Census 2011

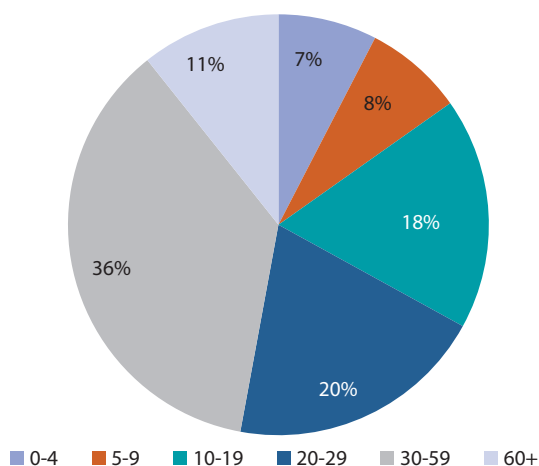
the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 0.18 crores (18.76%) and 0.03 crores (2.89%), respectively. Out of the 13 districts, top five ST & SC dominant districts account for 92.50% of ST & 44.14% of SC population in the State (Figure 1 & Annexure 1, State Profile). Around 69.77% of the population reside in rural areas, while the rest constitute the urban population. The total length of roads^c in the State is 69,777 km (1.39%^d), in which, length of the national highways is 2,713 km (2.4%^e) and state highways is 4,329 km (2.5%^f).

A detail report on the key indicators has been attached as Annexure 1

1.2 Demography

Out of the 13 districts, 3 districts have a population of 10 lakhs and above, 4 districts have a population between 5-10 lakhs, and 6 districts have a population between 1-5 lakhs (Annexure 1.1 State profile). The State's Sex ratio at birth of 840 females for every 1000 males is less than the national average of 899 (Annexure 1.2). It is estimated that 18% of the total population are in the age group of 10-19 years, 56% within 20 to 59 years; while 11% is 60 years and above (Figure 2). The crude birth rate and the crude death rate have declined from 20.9 & 7.4 in 2005 to 17.1 & 6.0 in 2019, respectively (Annexure 2; figure 2). The literacy rate increased from 71.6% in 2001 to 78.8% in 2011, with male & female literacy rates being 87.4% and 70.0%, respectively (Annexure 1.1). As per ESAG 2018 report, the Gross Enrollment Rate (GER)⁹ is 33.3% for higher education, 75.83% for senior secondary education, 85.72% for secondary education, 94.58% for elementary education, and 99.29% for primary education.

Figure 2: Uttarakhand - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged 60 years and above constitute 11% of the State's total population. The life expectancy at 60 years of age is 17.3 and 21.4 for males and females, respectively (2014-2018). In Uttarakhand, 64% of elderly females and 24% elderly males living in urban areas; 69% of elderly females and 15% elderly males in rural areas are economically fully dependent on others. The old age dependency ratio is 14.9 in 2011; which is 14.6 for males and 15.3 for females, 16.6 in rural & 11.4 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly is reported as 20% for men and 14% for women as opposed to the national average of 31% for both (Elderly in India 2016 report).

^c Basic Road Statistics 2019, MoRTH

^d Percentage of total length of roads in Uttarakhand

^e Percentage of total length of National Highways in the country

^f Percentage of total length of State Highways in the country

⁹ Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

The State has been able to provide RMNCHA+N^h services with major focus on primary and secondary care services under the NHM. Indicators for Antenatal care (ANC)ⁱ, institutional deliveries, C sections, distribution of IFA^j tablets, follow up of high-risk pregnancies, provision of postnatal and newborn care have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined from 359 (SRS MMR Bulletin 2007-09) to 99 (SRS MMR Bulletin 2016-18) per 1,00,000 live births. In Uttarakhand, 72.6% of women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5 data, Dehradun, Rudraprayag and Udham Singh Nagar districts reported a relatively good ANC coverage ranging from 75.3% to 76.5%; and Almora, Hardwar and Pauri Garhwal districts reported poor ANC coverage ranging from 39.6% to 48.5%. As reported in HMIS 2019-20, around 88.8% of the deliveries took place in institutions, out of which 66.7% took place in public health facilities. Total percentage of C-sections (14.9%) is on par with the WHO's standard (10-15%); and out of the total reported C-sections, about 17.7% are conducted at private facilities in Uttarakhand. Around 44.9% of women are tracked for their first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia in women aged 15-49 years decreased from 45.2% (NFHS 4) to 42.6% (NFHS 5). Anaemia in females of reproductive age group is almost thrice than in men of similar age group (Annexure 2, figure 5).

Refer Annexure 3 for a detailed district wise comparison.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, Uttarakhand has shown a significant decline in IMR from 42 (2005) to 27 (2019), which is lower than the national average of 30 (Annexure 2, Figure 1). Similarly, NNMR^k and Still Birth (per 1,000 live births) rates have also significantly decreased from 28 and 17 (2015) to 22 and 8 (2018) respectively (Annexure 2, figure 4). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 62.7 (2006-10) to 70.9 (2014-18) (Annexure 2, Figure 3). As per NFHS 5, Dehradun, Tehri Garhwal and Uttarkashi districts reported low SRB^l ranging from 823 to 869, and Almora, Nainital and Pauri Garhwal districts reported high SRBs ranging from 1065 to 1444.

Full vaccination^m coverage for children between 12 – 23 months of age has improved from 71% (NFHS 4) to 88.6% (NFHS 5). The proportion of under 6-months children exclusively breastfed has also increased from 51.2% (NFHS 4) to 52.5% (NFHS 5). A decrease in childhood anaemia from 59.8% (NFHS 4) to 58.8% in children aged 6-59 months is reported in NFHS 5 (Annexure 2, Figure 5). As per NFHS 5 report, Bageshwar, Dehradun and Nainital districts reported relatively low burden of stunting, ranging from 20.9% to 23.6%, while Chamoli, Hardwar and Uttarkashi districts reported considerably higher burden of stunting, ranging from 31.1% to 34.1%. For under-5 wasting – Bageshwar, Dehradun and Rudraprayag

^h Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

ⁱ Antenatal Check up

^j Iron Folic Acid Tablets

^k Neonatal Mortality Rate

^l Sex Ratio at Birth

^m NFHS 5 State/UT Factsheet, based on information from vaccination card only

districts reported relatively low burden, ranging from 7% to 10.1%; while Almora, Chamoli and Hardwar districts reported high burden, ranging from 16.2% to 17%.

2.3 Family Planning

The TFRⁿ has reduced from 2 in 2015 to 1.8 in 2018 (Annexure 2, Figure 4). As per NFHS 5 report, the total unmet need in Uttarakhand is reported as 8.8%, while the unmet need for spacing is 3.2% (NFHS 5). Tehri Garhwal district reported the highest total unmet need of 13.8% while Almora reported the lowest (6.4%). Approximately 57.8% of married women reported to avail any modern method of family planning in the State (NFHS 5); with the sterilization acceptance being 26.0% among females, and 0.7% among males.

2.4 Communicable Diseases

Uttarakhand has 13 districts having functional IDSP units^o. The proportion of communicable, maternal, neonatal, and nutritional diseases [CMNND] contribute to 25.27% of total disease burden (Annexure 1.4). Lower respiratory infection, drug Susceptible TB, and diarrheal diseases are the leading causes of deaths due to CMNND in Uttarakhand (Annexure 2, Figure 6^p). As per QPR report, for TB, the annualized total case notification rate is 207% and NSP^q success rate is 83%, as opposed to the national averages of 163% and 79%, respectively. For NLEP^r, the reported prevalence rate of 0.22 per 10,000 population is less than the national average of 0.61. In FY 2019-20, 26 deaths due to Dengue, and none due to Malaria and Kala Azar are reported in the State.

2.5 Non-Communicable Diseases (NCDs) and Injuries

It is reported that premature deaths account for 68.0% of the total disease burden in the State, while disability or morbidity account for 32.0%. Ischaemic heart diseases, COPD & Diabetes Mellitus Type 2 are the major causes of DALYs in the State (Annexure 2, Figure 6). NCDs contribute to 61.74% of DALYs, whereas injuries contribute to 12.99% of DALYs in the State. The State is positioned 22nd in the country for the total number of fatal road accidents with respect to other States (Annexure 1.4). It is found in the recent NFHS 5 report that 4.6% of women and 33.7% of men used any kind of tobacco, while 0.3% of women and 25.5% of men consumed alcohol. Overall, smoking, high systolic blood pressure, ambient particulate matter pollution, high fasting plasma glucose and low birth weight are the top five major risk factors for all DALYs (Annexure 2, figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 2,21,871 crores. The State is positioned 10th out of 32 states in terms of per capita^s of ₹ 1,98,738. According to NHA 2017-18, the per capita Government Health Expenditure in the Uttarakhand is ₹ 1,625 which is less than the national average of ₹ 1,753. On the other hand, the OOPE^t as a share of Total Health Expenditure was 41.7%, which is less

ⁿ Total Fertility Rate

^o QPR NHM MIS Report

^p <https://vizhub.healthdata.org/gbd-compare/india>

^q New Smear Positive

^r National Leprosy Eradication Programme

^s Directorate of Economics & Statistics

^t Out of Pocket Expenditure

than the national average of 48.8%. As per NSSO 2017-18, the OOPE for IPD care per hospitalized case in rural areas is to be around ₹ 4,440 in public facilities, ₹ 28,980 in private facilities; whereas for urban areas, it is around ₹ 6,195 in public facilities and ₹ 30,922 in private facilities. For childbirth in rural areas, OOPE is estimated to be around ₹ 2,675 in public facilities & ₹ 25,673 in private facilities; whereas in urban areas - OOPE is estimated to be around ₹ 3,289 in public facilities and ₹ 18,293 in private facilities. In public health facilities, the share of expenditure on medicines as a proportion of inpatient medical expenditure is estimated as 58% in rural and 66% in urban areas; whereas for diagnostics, it is 24% in rural and 13% in urban areas (Annexure 1.6).

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). There are additional 21.39% SCs and 2.39% PHCs in the State and a shortfall of 9.68% CHCs (Annexure 2, Figure 9). Currently, there are 1,839 SCs, 257 PHCs, and 56 CHCs in place, against the required 1,515 SCs, 251 PHCs and 62 CHCs in rural areas. In urban settings, there are 38 PHCs in place against the required 78, amounting to a shortfall of 51.28%. The State has 13 DHs, 19 SDHs and 4 government medical colleges. In tribal catchments, there are 146 SCs, 7 PHCs and 5 CHCs in place, against the required 92 SCs, 13 PHCs and 3 CHCs. This accounts to a shortfall of 46.15% of the required PHCs in tribal areas.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 1147 HWCs (715 SHCs, 394 PHCs & 38 UPHCs) are operationalized in the State as of 22nd December 2021^u.

In Uttarakhand, 17 districts are equipped with MMUs under the NRHM while none under the NUHM. Uttarakhand has 99% of required ASHAs in position under the NRHM and 100% under the NUHM. The doctor to staff nurse ratio in place is 1:1, with 4 public health providers (MO, specialists, staff nurse & ANM) per 10,000 population (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 765.94 availed (events) OPD services and 31.79 availed (events) IPD services. As per the NSSO data (2017-18), 52% of all OPD cases in rural areas and 22% in urban areas; and 42% of all IPD cases in rural areas & 24% in urban areas utilized public health facilities. The public health facility utilization in Uttarakhand is more than the national average for OPD & less for IPD (Annexure 1.6).

^u AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^v

Indicator	Uttarakhand 2011 ¹	India
Total Population (In Crore)	1	121.08
Rural (%)	69.77	68.85
Urban (%)	30.23	31.14
Scheduled Caste population (SC) (in crore)	0.18 (18.76%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.03 (2.89%)	10.45 (8.63%)
Total Literacy Rate (%)	78.8	72.99
Male Literacy Rate (%)	87.4	80.89
Female Literacy Rate (%)	70	64.64
Number of Districts in the Assam ²	13	
Number of districts per lakh population in Uttarakhand (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<1 Lakhs	0
	≥ 1 Lakhs - <5 Lakhs	6
	≥5 Lakhs - <10 lakhs	4
	≥10 Lakhs	3
ST SC Dominant (Top 5) Districts of Uttarakhand ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Udham Singh Nagar - 7.46%	Bageshwar - 27.72%	
Dehradun - 6.58%	Pithorgarh - 24.90%	
Pithorgarh - 4.04%	Uttarkashi - 24.40%	
Chamoli - 3.13%	Almora - 24.25%	
Uttarkashi - 1.06%	Haridwar - 21.75%	
Top 5 ST dominant district accounts for - 92.50%	Top 5 SC dominant district accounts for - 44.14%	

1.2 Key Health Status & Impact Indicators

Indicators	Uttarakhand	India
Infant Mortality Rate (IMR) ³	27	30
Crude Death Rate (CDR) ³	6	6

^v Sources are mentioned at the end of Annexure 1

Crude Birth Rate (CBR) ³	17.1	19.7
Maternal Mortality Ratio (MMR) ³	99	113
Neo Natal Mortality Rate (NNMR) ⁴	22	23
Under Five Mortality Rate (U5MR) ⁴	33	36
Still Birth Rate ⁴	8	4
Total Fertility Rate (TFR) ⁴	1.8	2.2
Life expectancy at birth ⁵	70.9	69.4
Sex Ratio at Birth ⁴	840	899

1.3 Key Health Infrastructure Indicators^w

Indicators	Numbers (Total)			
Number of District Hospitals ²	13			
Number of Sub District Hospital ²	19			
Number of Government (Central + State) Medical College ⁶	4			
Number of Private (Society + Trust) Medical Colleges ⁶	2			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	715	590	1100	1439
PHC-HWC	394	257	257	257
UPHC-HWC	38	39	39	39
Total-HWC	1147	886	1396	1735
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	62	56	9.68	
Number of Primary Health Centres (PHC)	251	257	-2.39	
Number of Sub Centres (SC)	1,515	1,839	-21.39	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	8	9	10	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	78	38	51.28	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	3	5	-66.67	
Number of PHC	13	7	46.15	
Number of SC	92	146	-58.70	

^w Sources are mentioned at the end of Annexure 1

Patient Service⁹	Uttarakhand	India
IPD per 1000 population	31.79	62.6
OPD per 1000 population	765.97	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	19.55	36.4

1.4 Major Health Indicator^x

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	Uttarakhand	India
% DALY ^y accountable for CMNNDs ^z	25.27	27.46
% DALY accountable for NCDs	61.74	61.43
% DALY accountable for Injuries	12.99	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	Uttarakhand	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	95.6	92
Percentage of medically certified deaths to total registered deaths (%)	8.9	20.7
RMNCHA+N		
Maternal Health⁹	Uttarakhand	India
% 1st Trimester registration to Total ANC Registrations	70.6	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	72.6	79.4
Total Reported Deliveries	152648	21410780
% Institutional deliveries to Total Reported Deliveries	88.8	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	66.7	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	33.3	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	14.9	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	13.5	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	17.7	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	44.9	53.4
Neonatal⁹	Uttarakhand	India
% live birth to Reported Birth	98.8	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	7.5	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	88.7	89.9

^x Sources are mentioned at the end of Annexure 1

^y Disability Adjusted Life Years

^z Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	Uttarakhand	India
Sick New Born Care Unit (SNCU)	5	895
New Born Stabilization Unit (NBSU)	29	2418
New Born Care Corner (NBCC)	129	20337
Child Health & Nutrition¹⁰	Uttarakhand (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	4.4	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	55.9	60.6
Children under 5 years who are underweight (weight-for-age) (%)	21	32.1
Child Immunization¹⁰	Uttarakhand (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	88.6	83.8
Children age 12-23 months who have received BCG (%)	95.2	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	90.6	87.9
Family Planning¹⁰	Uttarakhand (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	3.2	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	Uttarakhand	India
Number of districts with functional IDSP unit	13	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	Uttarakhand	India
Annualized total case notification rate (%)	207	163
New Smear Positive (NSP) Success rate (in %)	83	79
National Leprosy Eradication Programme (NLEP)¹¹	Uttarakhand	India
Prevalence Rate/10,000 population	0.22	0.61
Number of new cases detected	320	1,14,359
Malaria, Kala Azar, Dengue¹¹	Uttarakhand	India
Deaths due to Malaria ¹¹	0	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	26	168
Number of Kala Azar Cases reported ¹¹	100	3,706
HIV¹⁰	Uttarakhand (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	24.5	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	36.1	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	Uttarakhand (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	13.7	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	20.1	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	4.2	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	5.6	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	Uttarakhand (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	4.6	8.9
Men who use any kind of tobacco (%)	33.7	38
Women who consume alcohol (%)	0.3	1.3
Men who consume alcohol (%)	25.5	18.8
Injuries		
Road Traffic Accident¹²	Uttarakhand	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	22	NA
Total number of fatal Road Accidents	750	1,37,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	64.1	33.7
Number of persons killed in Road Accidents	867	115113

1.5 Access to Care^{aa}

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	Uttarakhand	India
Number of Districts equipped with MMU under NRHM	17	506
Number of Districts equipped with MMU/Health Units under NUHM	0	31
Number of ERS vehicles operational in the States/UTs Under NHM	Uttarakhand	India
102 Type	94	9955
104 Type	0	605
108 Type	140	10993
Others	0	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	160	11070

^{aa} Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA¹³	Uttarakhand	India
Total number of ASHA targeted under NRHM	10470	946563
Total number of ASHA in position under NRHM	10392	904211
% of ASHA in position under NRHM	99.26	96
Total number of ASHA targeted under NUHM	1181	75597
Total number of ASHA in position under NUHM	1181	64272
% of ASHA in position under NUHM	100	85
Community Process¹¹	Uttarakhand	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	15296	554847
Number of Mahila Arogya Samitis (MAS) formed	1036	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total)¹¹	Uttarakhand	India
DH	19	796
CHC	63	6036
PHC	229	20273
UHC	0	126
UPHC	0	3229
Human Resource for Health ¹⁴		
HRH Governance	Uttarakhand	
Specialist Cadre Available in the state (Y/N)	No	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	Yes	
Public Health Cadre available (Y/N)	No	
Overall Vacancies (Regular + contractual)	Specialists (%)	66
	Dentists (%)	45
	MO MBBS (%)	65
	Nurse (%)	32
	LT (%)	50
	ANM (%)	26
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:1	1:1
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	7 per 10,000	4 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	6:1	5:1

Ranking: Human Resource Index of Uttarakhand¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{bb}	4554	3548	1962	1586	2592	58.01
Staff Nurse	5700	3262	1596	1666	4104	
Lab Technician	1290	728	286	442	1004	
Pharmacists	962	1548	1408	140	0	
MO MBBS ^{cc}	1367	1612	1447	165	0	
Specialist ^{dd}	1162	1237	524	713	638	

1.6 Healthcare Financing

National Health Accounts (NHA) (2017-18)	Uttarakhand		India	
Per Capita Government Health Expenditure (in ₹)	1,625		1,753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	0.8		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	5.1		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	41.7		48.8	
National Sample Survey Office (NSSO) (2017-2018)	Uttarakhand		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	52	22	33	26
IPD - % of hospitalized cases using public facility	42	24	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	370	426	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	720	936	845	915
IPD - Per hospitalized case (in INR) - Public	4,440	6,195	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	28,980	30,922	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	24	13	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	58	66	53	43

^{bb} MPW – Multi Purpose Health Worker (Female + Male)

^{cc} MO MBBS (Full Time)

^{dd} Specialist (All Specialist)

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	2,675	3,289	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	25,673	18,293	20,692	26,701
State Health Expenditure	Uttarakhand		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	4.4		5 ^{ee}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{ee} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

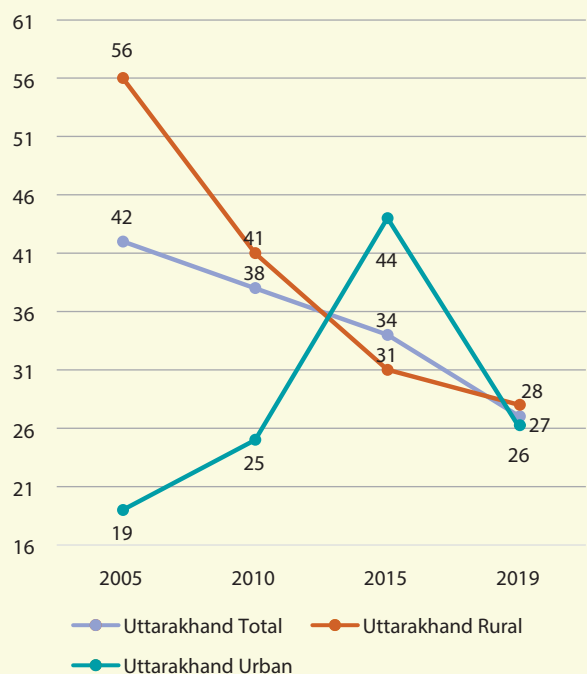


Figure 2: CBR & CDR Trend

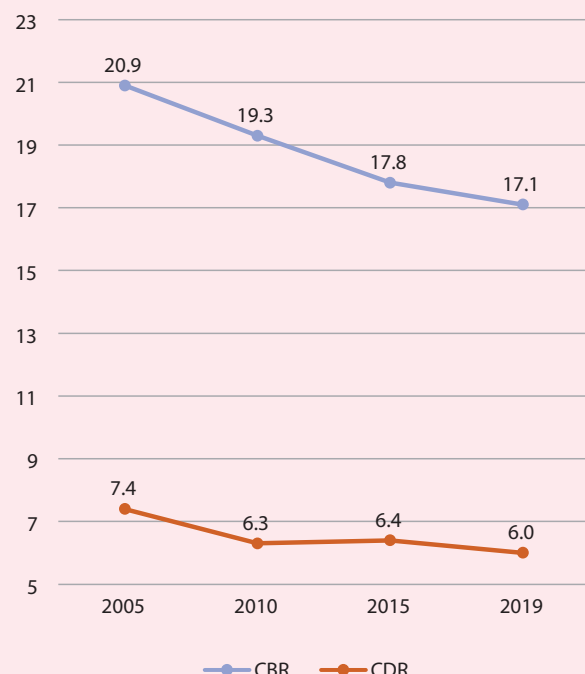


Figure 3: Life Expectancy At Birth Trend^{hh}

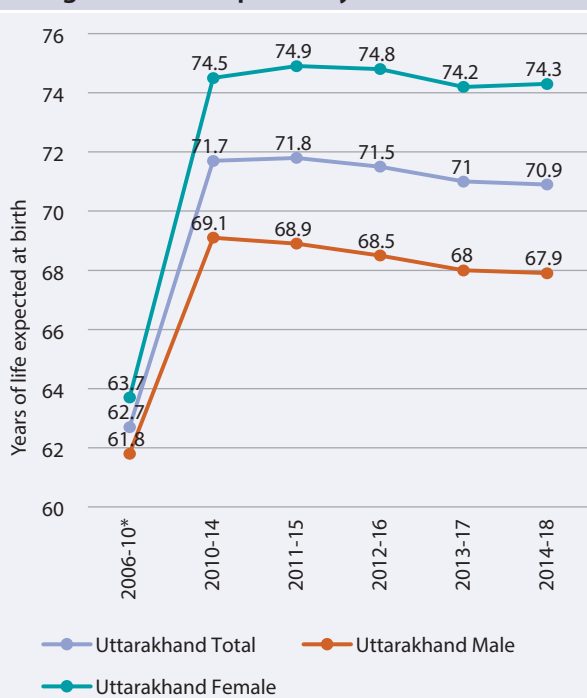
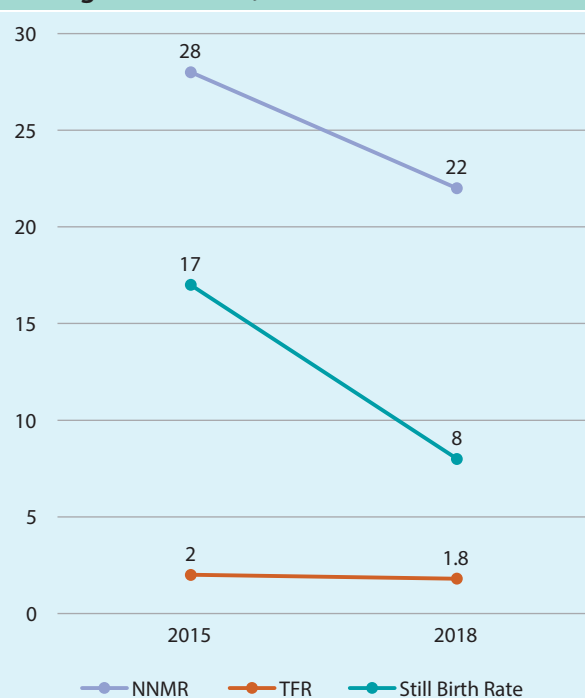


Figure 4: NNMR, TFR & Still Birth Trendⁱⁱ



^{hh} Uttarakhand was formed on the 9th November 2000 as the 27th State of India, when it was carved out of northern Uttar Pradesh; <https://uk.gov.in/pages/display/115-state-profile>

ⁱⁱ Information related to NNMR, TFR & Still Birth rate for year 2005 & 2010 is not available

Figure 5: Comparison of Key NFHS 5 & 4 Indicators

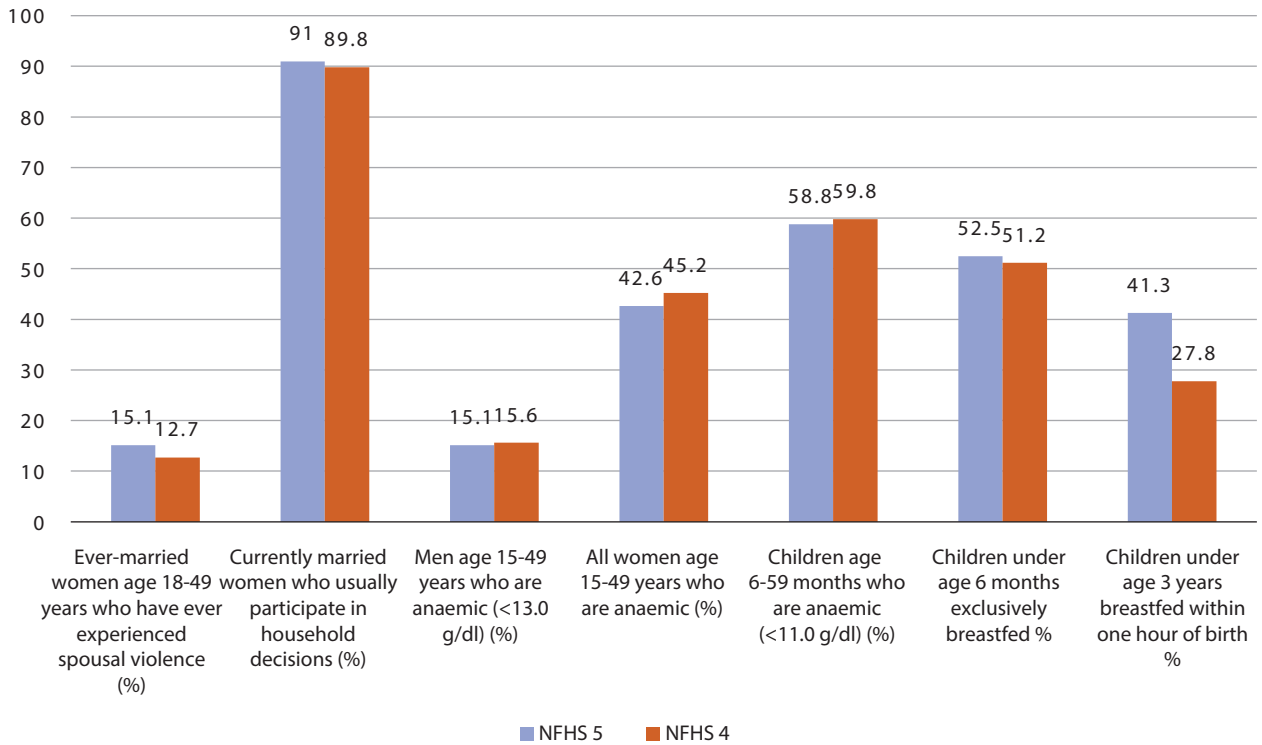


Figure 6: Top 15 causes of DALYs, 1990-2019

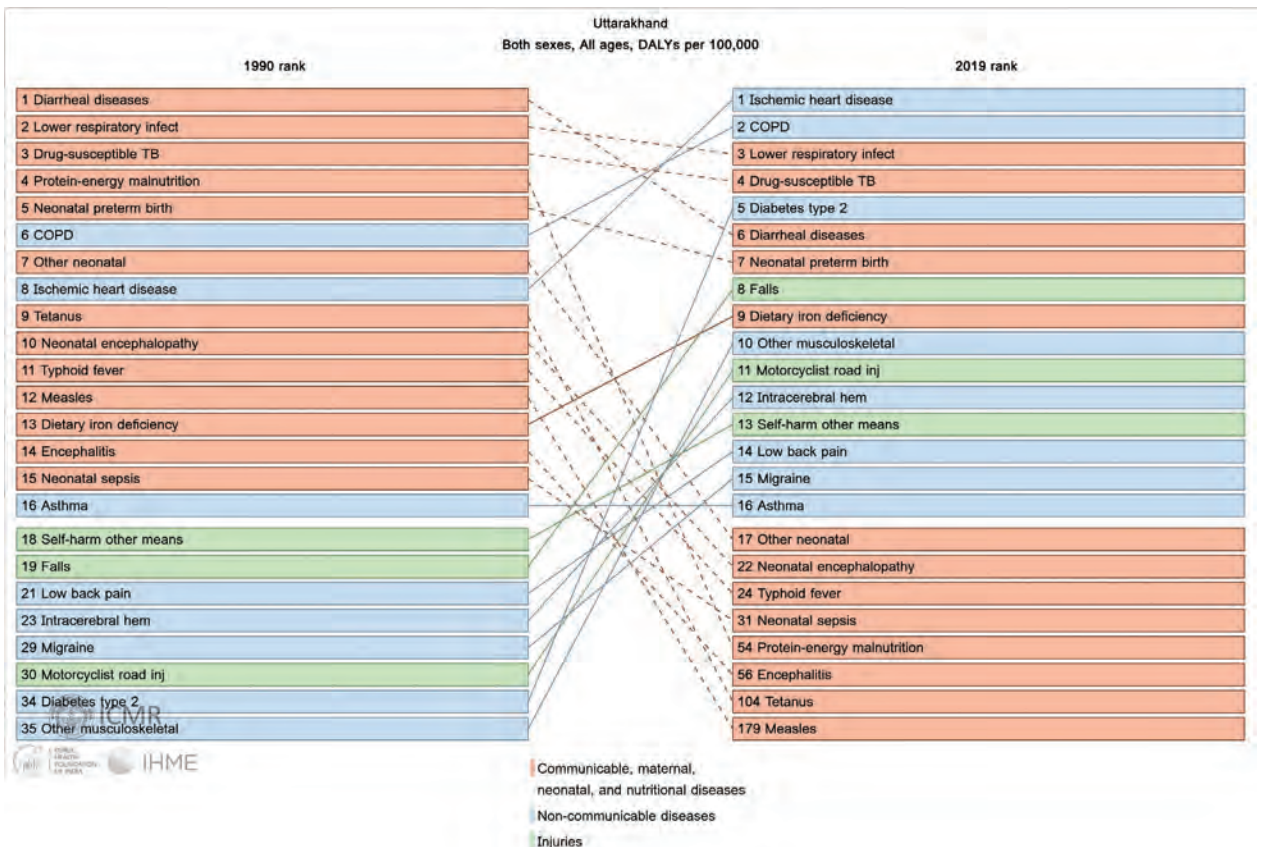


Figure 7: Top 15 risk of DALYs, 1990-2019

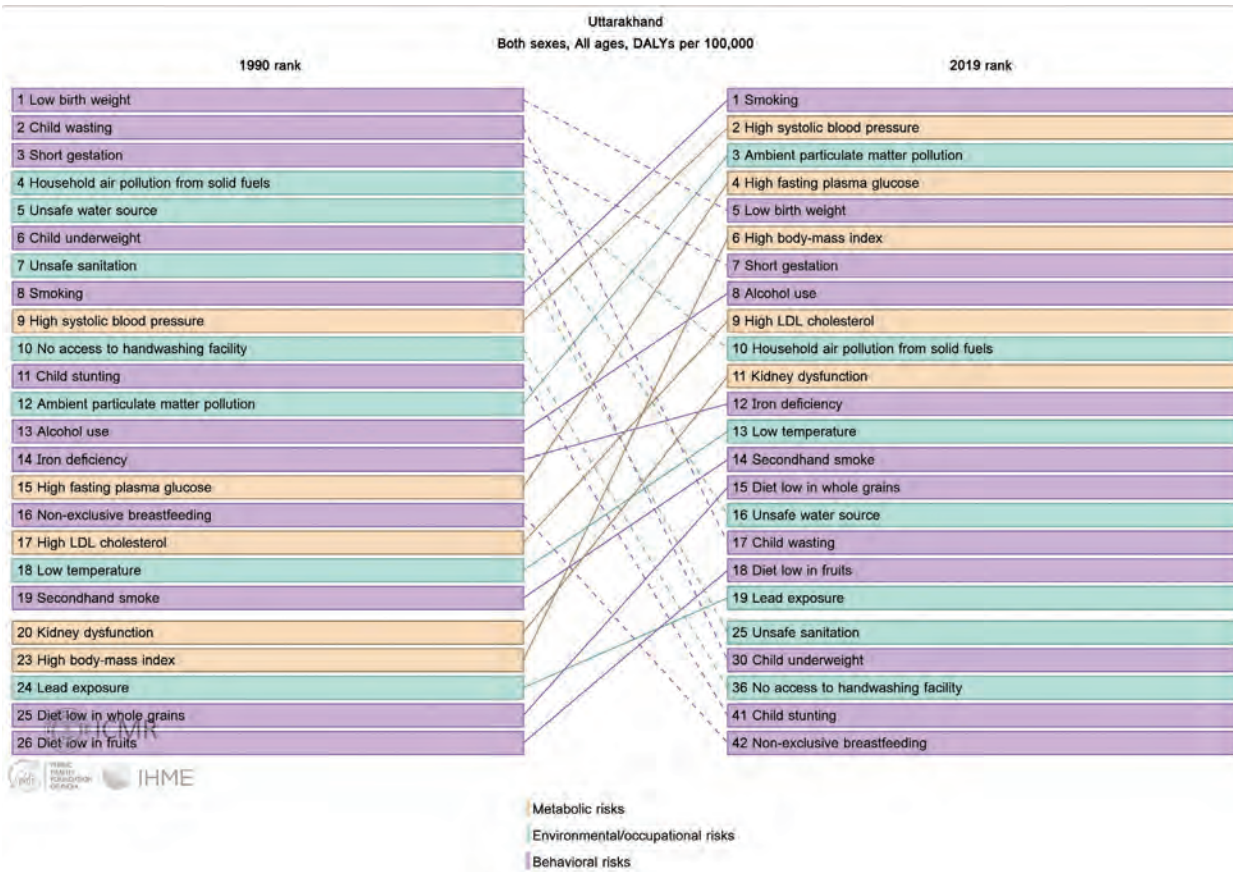


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

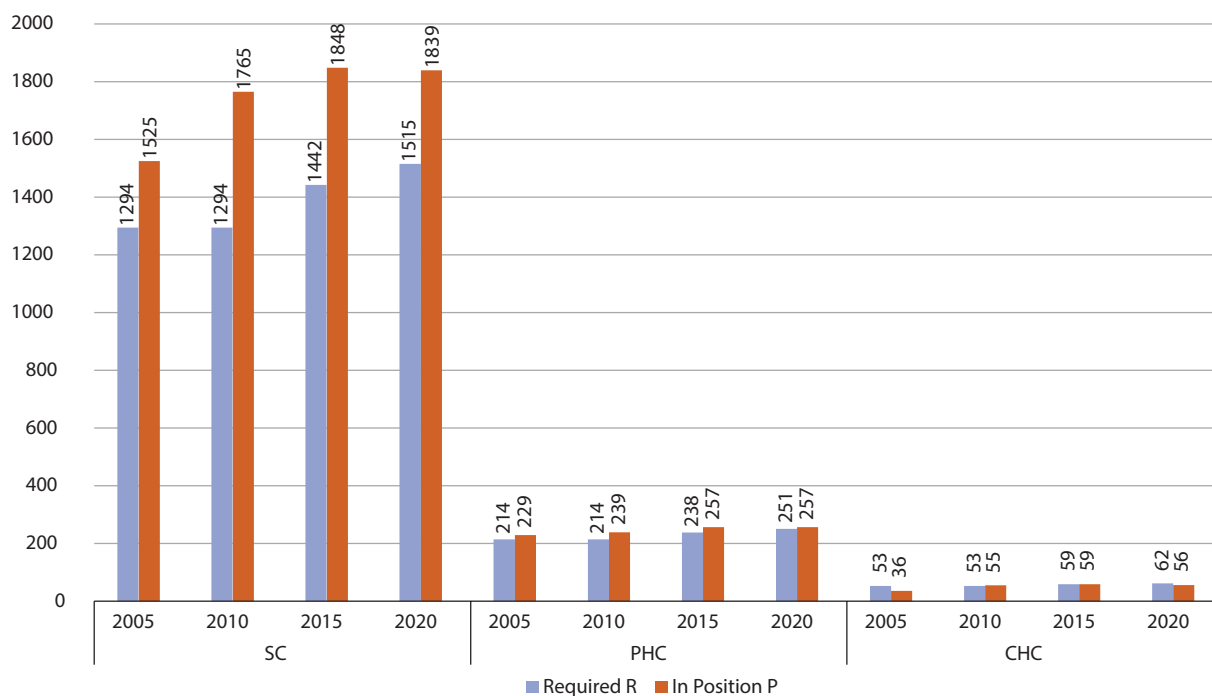


Figure 9: Year Wise Health Infrastructure Shortfall (%)

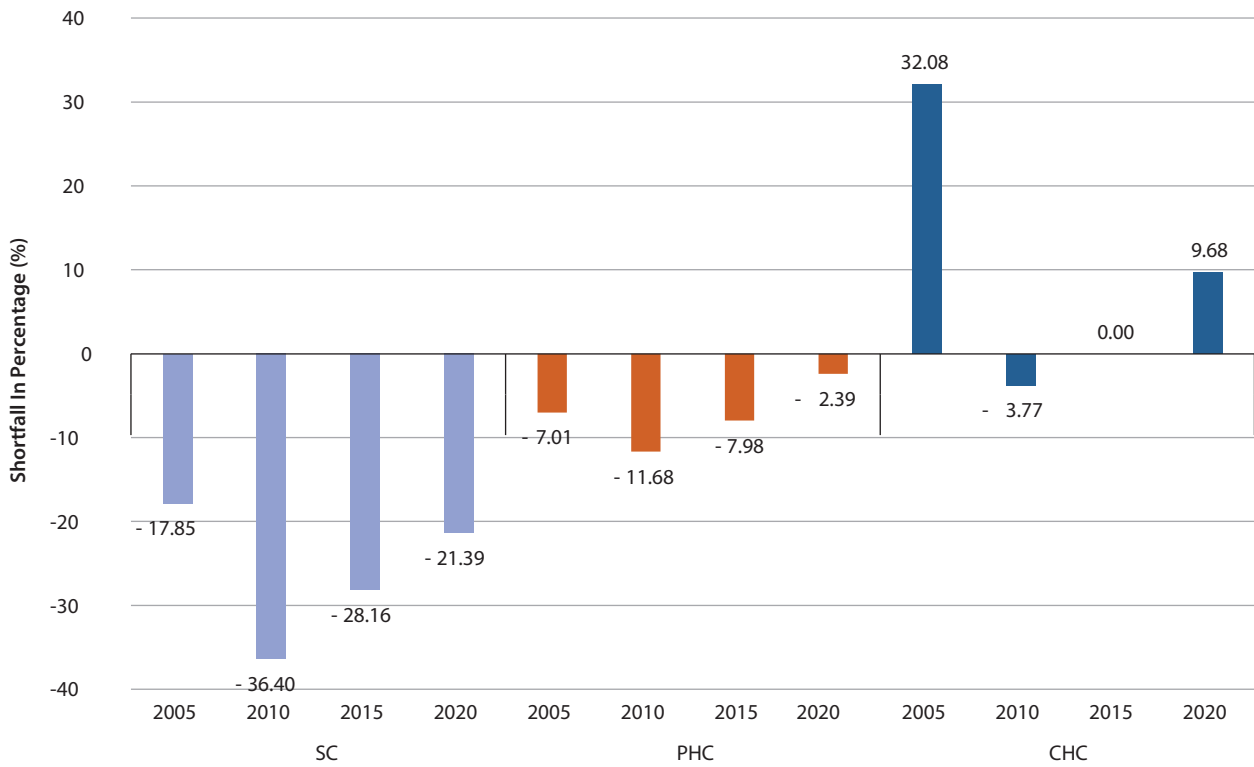
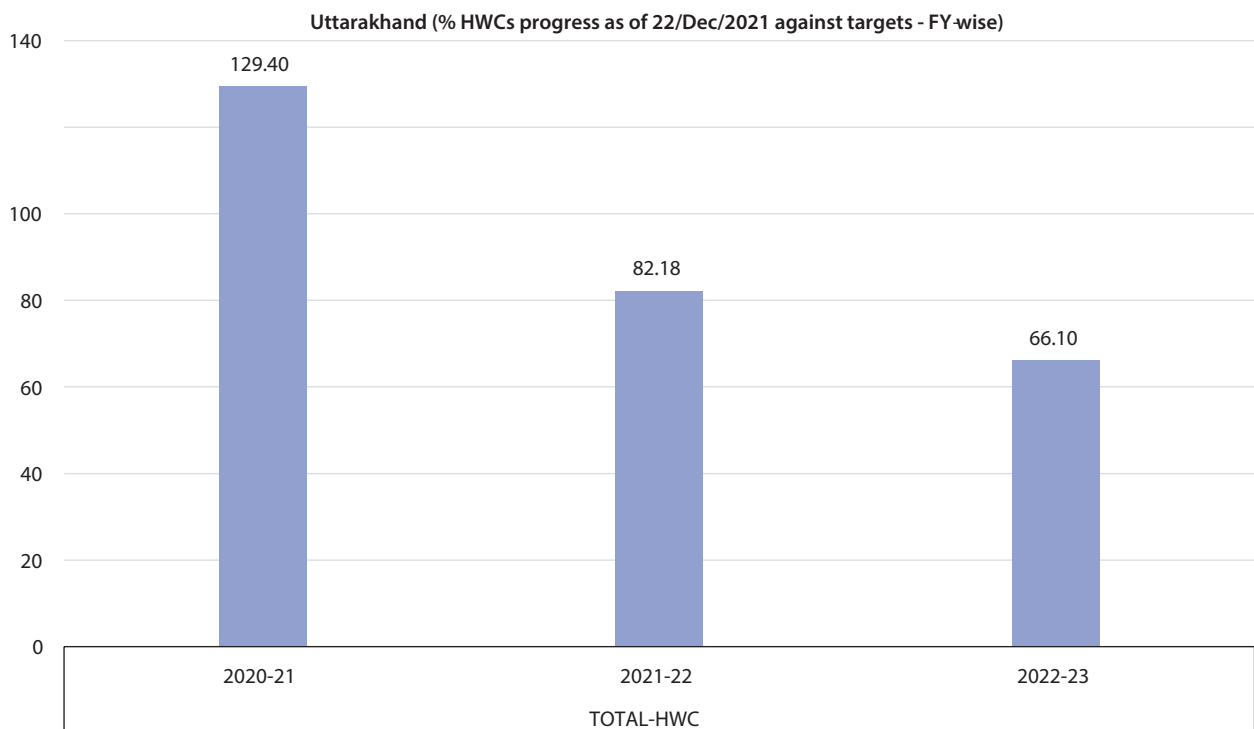


Figure 10: Percentage HWCs progress against target - FY wise (%)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

Serial No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)													
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted^ (Height For Age) (%)	Children Under 5 Years - Wasted^ (Weight For Height) (%)
1	Uttarakhand	NFHS 4 Total	888	19.5	NA	13.8	53.4	1.6	16.1	15.5	30.9	68.6	71	8.5	33.5	19.5
2	Uttarakhand	NFHS 5 Urban	1094	61.6	83.4	10	73.5	2	35.4	6.5	71	89.4	86	13.3	24.3	17.4
3	Uttarakhand	NFHS 5 Rural	937	62.9	78	9.8	69.5	1.3	21	9.9	57.3	80.4	89.9	12.2	28.2	11.3
4	Uttarakhand	NFHS 5 Total	984	62.5	79.8	9.8	70.8	1.5	25.6	8.8	61.8	83.2	88.6	12.5	27	13.2
5	Almora	NFHS 5 Total	1444	66	86.3	1.5	78.6	1.6	22.1	6.4	44.3	80.1	96.3	18.1	26	17
6	Bageshwar	NFHS 5 Total	940	71.9	87.2	12.9	78.8	1.5	23.1	8.4	67.9	82	91	7.2	23.6	7.7
7	Chamoli	NFHS 5 Total	1026	71.1	89.2	3.4	73.7	0.4	10.8	9.3	52.2	73.9	91.1	10.3	34.1	16.2
8	Champawat	NFHS 5 Total	926	65.7	83.8	11.7	66.7	0.6	16.6	10.4	62	79.8	91.6	9	24.9	12.4
9	Dehradun	NFHS 5 Total	823	67.3	85.8	6.6	75	1.9	32.8	6.5	75.3	91.7	83	13.3	20.9	10.1
10	Hardwar	NFHS 5 Total	985	46.6	73.7	9.9	63.6	1.7	30.6	11.8	48.5	79.8	93.7	15.5	31.1	16.4
11	Nainital	NFHS 5 Total	1136	60.8	83.9	11.3	74.7	1.8	29.7	6.5	59.7	81.2	73.5	19.2	23.2	14
12	Pauri Garhwal	NFHS 5 Total	1065	62.7	84	8.6	78	1.5	22.1	9.9	39.6	76	80.4	12.1	30	12
13	Pithoragarh	NFHS 5 Total	911	72.8	87.6	16.2	71.2	2.3	16.9	11.3	58.7	84.9	97	16.9	25.6	12.4
14	Rudrapur	NFHS 5 Total	958	76.6	86.1	8.6	72.1	1.2	10.8	12.2	76.5	86.6	94	10.8	25.2	8

(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)																
Serial No.	States/Districts	Data Source	Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet**, # (%)	Children Under 5 Years - Stunted [^] (Height For Age) (%)	Children Under 5 Years - Wasted [^] (Weight For Height) (%)
15	Tehri Garhwal	NFHS 5 Total	866	71.2	74.9	6.3	67.3	1.1	12.5	13.8	48.9	82.2	77.6	1.5	29.3	12.8
16	Udhham Singh Nagar	NFHS 5 Total	1022	59	70.4	14.6	67.2	1.1	28.4	7.2	75.9	85.1	92.2	9.7	26.8	12.4
17	Uttarkashi	NFHS 5 Total	869	80.3	80.1	5.7	73.8	1.3	11.7	7.7	66.8	85.9	91.5	7.6	34.1	10.6

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'vaccinated'; Out of two indicators with either vaccination card or mother's recall & vaccination card only; -vaccination card only; -vaccination card only; indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best three performing districts within the districts for a particular indicator

B. Red – Worst three performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 infant and young child feeding practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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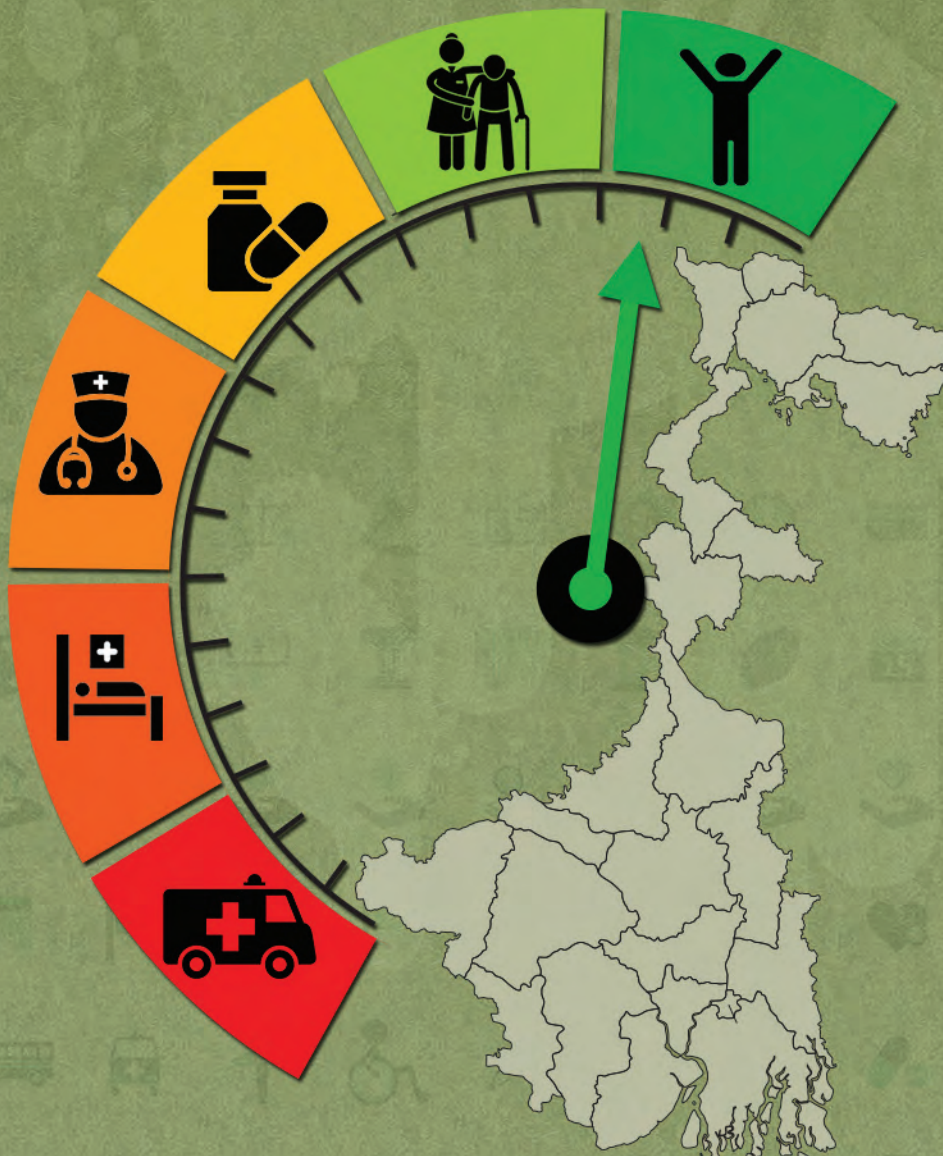
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NATIONAL HEALTH SYSTEMS RESOURCE CENTRE

HEALTH DOSSIER 2021

Reflections on Key Health Indicators



WEST BENGAL

DISTRICTS VISITED IN COMMON REVIEW MISSIONS

CRM	Districts Visited	
1 st	Birbhum	Bankura
3 rd	Purulia	Cooch Behar
6 th	Murshidabad	Paschim Medinipur
8 th	Bankura	Uttar Dinajpur
9 th	Cooch Behar	Medinipur
11 th	Dakshin Dinajpur	Paschim Medinipur
14 th	Nadia	North 24 Pargana

WEST BENGAL

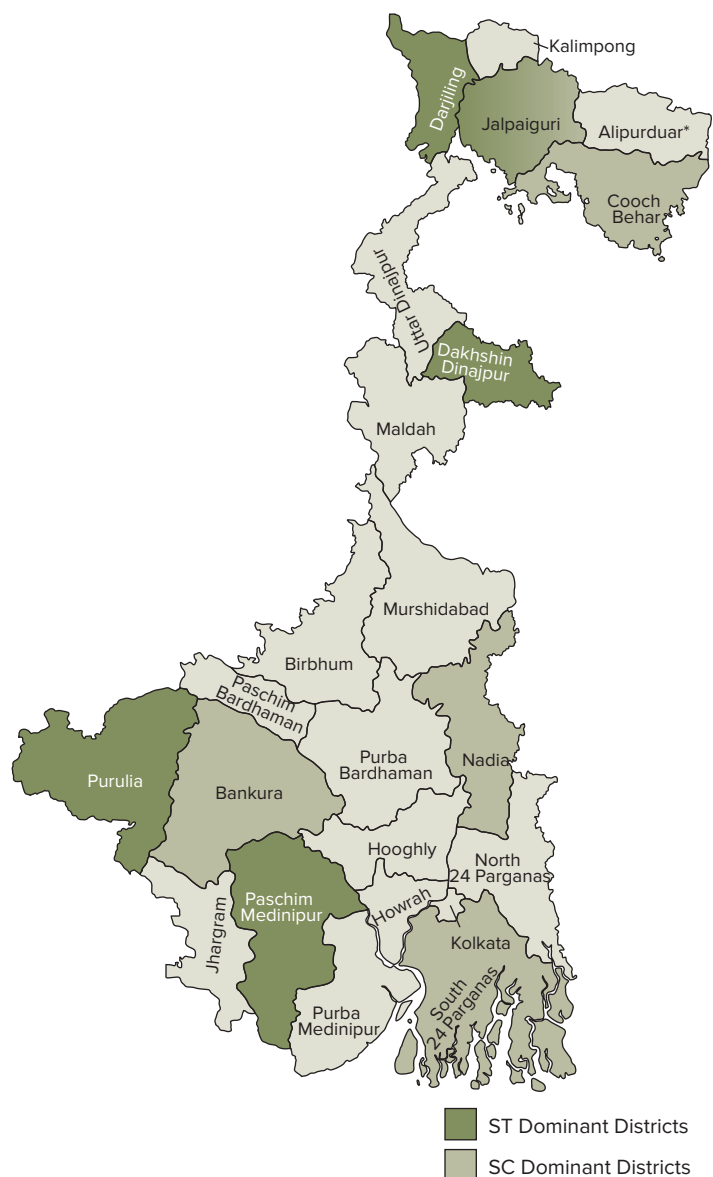
1. BACKGROUND

1.1 State Profile

West Bengal is the 14th largest State (2.72%^a) by area in India^b with a geographical spread of 88,752 km². The State is divided into 23 districts^c and has a population of over 9.1 crores accounting for 7.54% of the country's total population^d. The population is projected to increase over 9.8 crores by 2021^e. As per Census 2011, the Scheduled Caste (SC) and Scheduled Tribe (ST) population is 2.1 crores (23.5%) and 0.52 crores (5.8%) respectively. Around 68.13% live in rural areas, while only 31.87% live in urban areas. Out of the 23 districts, the top five SC & ST dominant districts account for 37.54% of SC & 53.33% of ST population in West Bengal (Figure 1 & Annexure 1.1, State Profile).

The total length of roads^f in West Bengal is 3,22,067 km (6.44%^g), in which, the length of national highways is 2,956 km (2.6%^h) and state highways is 3,262 km (1.86%ⁱ).

Figure 1: Top 5 ST & SC Dominant Districts



^a Percentage of total area in the country

^b Including all States and UTs; RHS 2019

^c RHS 2019

^d Census 2011

^e Census Population Projection 2019

^f Basic Road Statistics 2019, MoRTH

^g Percentage of total length of roads in State/UT

^h Percentage of total length of National Highways in the country

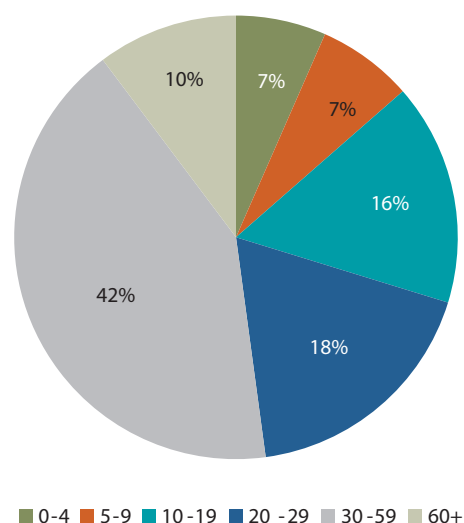
ⁱ Percentage of total length of State Highways in the country

A detail table on the key indicators has been attached as Annexure 1

1.2 Demography

In the State, 16 districts are estimated to have a population of 30 lakhs and above, 2 districts have a population between 20-30 lakhs and 2 districts have a population between 10-20 lakhs (Annexure 1.1). The State's sex ratio of 941 females for every 1000 males is higher than the national average of 889 females for every 1000 males (Annexure 1.2). As estimated, there are 16% of the total population in the age group of 10-19 years, 60% within 20 to 59 years, and 10% in the age group of 60 years and above (Figure 2). The crude birth and death rates have declined from 18.8 and 6.4 (2005) to 14.9 and 5.3 (2019) respectively (Annexure 2, Figure 2). The literacy rate increased from 68.64% in 2001 to 76.26% in 2011, with male & female literacy rates reported as 81.69% and 70.54% respectively. As per ESAG 2018 report, the Gross Enrollment Rate (GER)^j is 17.7% for higher education, 51.54% for senior secondary education, 83.56% for secondary education, 104.16% for elementary school & 103.68% for primary education.

Figure 2: West Bengal - distribution of estimated population 2021 (%)



1.3 Elderly

Population ageing has profound social, economic, and political implications. Elderly people aged over 60 years share 10% of the State's total population. The life expectancy at 60 years of age is 17.9 years for males and 19.2 years for females (2014-2018)^k. In West Bengal, 75% of elderly females and 24% elderly males in urban areas; and 80% of elderly females and 30% elderly males in rural areas are economically fully dependent on others. The old age dependency ratio is 13.2 in 2011, which is 12.7 for males, 13.7 for females, 12.5 in rural areas and 14.5 in urban areas. The illness (any deviation from the state of physical and mental well-being) perception among the elderly men and women is around 41%, which is higher than the national average of 31% for both (Elderly in India 2016).

2. HEALTH STATUS AT A GLANCE

2.1 Maternal Health

West Bengal has been able to provide RMNCHA+N^l services with a major focus on primary and secondary care services under NHM. Indicators for Antenatal care (ANC)^m, institutional deliveries, C sections,

^j Gross Enrolment Rate (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education; senior secondary education is XI-XII, secondary is IX-X, primary is I-V and elementary is I-VIII

^k SRS Based Abridged Life Tables

^l Reproductive, Maternal, Newborn, Child, Adolescent Health & Nutrition

^m Antenatal Check up

distribution of IFAⁿ tablets, follow-up of high-risk pregnancies, provision of postnatal and newborn care, have shown substantial improvement since 2005 (NFHS 4 & 5). The maternal mortality ratio has significantly declined (SRS MMR Bulletin) from 145 in 2007-09 to 98 in 2016-18 per 1,00,000 live births. In West Bengal, out of the total ANC registration, 81.7% of pregnant women received 4 ANC check-ups (Annexure 1.4). As per NFHS 5, Murshidabad, Paschim Bardhaman, Purba Medinipur, Purulia and Uttar Dinajpur districts reported relatively poor ANC coverage ranging from 56.8% to 70.1%, whereas good coverage is reported in Haora, Jalpaiguri, Maldah, North Twenty Four Parganas and South Twenty Four Parganas districts ranging from 82.7% to 89.9%. Around 98.6% of all reported deliveries took place in institutions, out of which 80.1% took place in public health facilities. Total percentage of C-sections (36.2%) is higher than that of the WHO's standard (10-15%); and out of the total reported C-sections, about 79.8% C-sections are conducted at private facilities in the State. Around 82.9% of the women received their first postpartum check-up between 48 hours and 14 days (Annexure 1.4). Prevalence of anaemia has increased from 62.2% to 70.8%. Anaemia in females of reproductive age group is roughly twice than in men of similar age group (Annexure 2, Figure 5).

Refer Annexure 3 for detailed district wise comparison of NFHS 5.

2.2 Newborn, Infant & Child Health

Ever since the inception of NHM in 2005, the State has shown a significant decline in IMR from 38 (2005) to 20 (2019), which is lower than the national average of 30 (Annexure 2, Figure 1). In addition, NNMR^o and Still Birth (per 1,000 live births) Rates have also significantly decreased from 29.5 and 8.6 (2005) to 16 and 5 (2018) respectively (SRS data). Improvement in the indicators can be attributed to several interventions at the State level, including infrastructure strengthening under the NHM, such as establishment of SNCUs, NBSUs and NBCCs (Annexure 1.4). The life expectancy at birth has also improved from 69 in 2006-10 to 71.6 in 2014-18, which is higher than the national average of 69.4 (Annexure 2, Figure 3). As per NFHS 5, Purba Medinipur, Paschim Bardhaman, Kolkata, Purulia & Purba Bardhaman districts reported low SRBs^p ranging from 777-877 and Uttar Dinajpur, South Twenty-Four Parganas, Jalpaiguri, Dakshin Dinajpur & Haora reported high SRBs ranging from 1155 to 1062.

Full vaccination^q coverage for children between 12-23 months slightly decreased from 92.5% (NFHS 4) to 90.8% (NFHS 5). The percentage of under-6 months children exclusively breastfed remains roughly the same. There is a wide variation in the nutritional status across the State. A considerable increase in childhood anaemia from 54.2% to 69% in children aged 6-59 months has been reported (Annexure 2, Figure 5). As per NFHS 5, Purba Medinipur, Nadia, Haora, Kochi Bihar, Jalpaiguri districts reported comparatively low burden of stunting ranging from 25.8% to 28.9% and Uttar Dinajpur, Maldah, Murshidabad, Paschim Bardhaman & Birbhum districts reported high burden ranging from 37% to 44.8%. For under-5 wasting, Paschim Medinipur, Purulia, Kolkata, Bankura & Birbhum districts reported a high burden ranging from 25.5% to 30.3%; while North Twenty-Four Parganas, Purba Medinipur, Uttar Dinajpur, Murshidabad and Koch Bihar districts reported comparatively lower burden ranging from 13.3% to 16.8%.

ⁿ Iron Folic Acid Tablets

^o Neonatal Mortality Rate

^p Sex Ratio at Birth

^q NFHS 5 State/UT Factsheet, based on information from vaccination card only

2.3 Family Planning

The TFR^r reduced from 2.1 (2005) to 1.5 (2018), which is lower than the national average of 2.2 (Annexure 2, Figure 4). The total unmet need in the State is reported as 7%, while the unmet need for spacing is 3.0% (NFHS 5). Highest percentage of total unmet need is reported from Purulia district (16.1%), while lowest is reported from Kolkata (2.2%). Around 60.7% of married women reported to avail any modern method of family planning in the State (NFHS 5), with sterilization acceptance being 29.4% among females and 0.1% among males.

2.4 Communicable Diseases

The State has 27 functional IDSP units in place^s. The proportion of Communicable, Maternal, Neonatal, And Nutritional Diseases [CMNND] contribute to 22.59% of DALYs (GBD 2019) while diarrheal diseases, lower respiratory infections & drug-susceptible TB are the major causes of death in the State (Annexure 2, Figure 6^t). As per QPR reports, the annualized total case notification rate for TB is 99% and NSP^u success rate is 80% as opposed to the national averages of 163% and 79%, respectively. For NLEP^v, the reported prevalence rate of 0.58 per 10,000 population is lower than the national average of 0.61. In FY 2019-20, deaths from vector borne diseases include 6 from malaria, 11 deaths from JE^w, while none from Dengue and Kala Azar.

2.5 Non-Communicable Diseases (NCDs) & Injuries

It is reported that 64.7% of total disease burden in the State is from premature death and 35.3% from disability or morbidity^x. NCDs contribute to around 66.02% of DALYs, while injuries contribute to around 11.39% of DALYs in the State (Annexure 1.4). Ischaemic heart disease, Intracerebral hemorrhage & COPD remain the major causes for DALYs (Annexure 2, Figure 6). The State ranks 11th in the country for the total number of fatal road accidents with respect to others. The recent NFHS 5 report revealed that 10.8% of women and 48.1% of men used any kind of tobacco, while 1.1% of women and 18.1% of men consumed alcohol. In general, high systolic blood pressure, smoking, high fasting plasma glucose, ambient particulate matter pollution & low birth weight remains the major risk factors for all DALYs (Annexure 2, Figure 7).

2.6 Health Care Financing

The State's Net State Domestic Product (NSDP) for FY 2018-19 is ₹ 9,95,502 crores. West Bengal is positioned 22nd out of 32 states in terms of per capita^y of ₹ 1,01,138. According to NHA (2017-18), the per capita Government Health Expenditure in the State is ₹ 1,088, which is lower than the national average of ₹ 1,753. On the other hand, the OOPE^z as a share of Total Health Expenditure is 69.8%, higher than the national average of 48.8%. As per the NSS 2017-18, the OOPE for IPD care in rural areas is ₹ 46,992

^r Total Fertility Rate

^s QPR NHM MIS Report (Status as on 01.03.2020)

^t <https://vizhub.healthdata.org/gbd-compare/india>

^u New Smear Positive

^v National Leprosy Eradication Programme

^w Japanese Encephalitis

^x India: Health of the Nation's States: The India State-Level Disease Burden Initiative

^y Directorate of Economics & Statistics

^z Out of Pocket Expenditure

in private hospitals and ₹ 3,765 in public hospitals; while the same in urban areas is ₹ 42,264 in private hospitals and ₹ 4,993 in public hospitals. For childbirth, OOPE in public facilities is around ₹ 2,559 in rural areas and ₹ 3,109 in urban areas; whereas in private health facilities, it is ₹ 21,005 in rural areas and ₹ 31,708 in urban areas. In public health facilities, the share of medicines on expenditure is 55% for inpatient care in rural and 47% in urban areas; whereas for diagnostics it is 23 % and 21% in rural and urban areas respectively.

2.7 Health Infrastructure

As per the recent RHS data, the number of SCs, PHCs and CHCs have been increasing since 2005 (Annexure 2, Figure 8). Though public health facilities have increased over time, 21.69% shortfall in SC, 58.04% shortfall in PHC and 36.03% shortfall in CHCs still remain in the State (Annexure 2, Figure 9). Currently, there are 10,357 SCs, 913 PHCs, 348 CHCs in place, against the required 13,225 SCs, 2176 PHCs, and 544 CHCs. Similarly, in urban settings, there are 456 UPHCs in place against the required 697, hence, a shortfall of 34.58% exists. However, in tribal areas, there are 2889 SCs, 283 PHCs and 105 CHCs against the required 1635 SCs, 245 PHCs and 61 CHCs, accounting to an excess of 76.70% SCs, 15.51 PHCs and 72.13% CHCs. The State has 18 DHs, 60 SDHs and 19 Government medical colleges. In the State, 100 % (18) of DH, 97 % of SDH (58) and % 13.5 (47) of CHCs serve as functional FRUs.

Under the recently introduced Ayushman Bharat – Health and Wellness Centres (AB-HWCs), a total of 5260 HWCs (4041 SHCs, 783 PHCs & 436 UPHCs) are operationalized in the State as of 22nd December 2021^{aa}.

In the State, only 11 districts are equipped with MMUs under NRHM and 1 district under NUHM. The State has 86% of ASHAs in position under NRHM and 81% under NUHM, which are lower than the national averages of 96% and 85% respectively. The doctor to staff nurse ratio is 1:2, with 12 public health providers available for every 10,000 populations (Annexure 1, Table 1.5).

Recent data (Annexure 1.3) reveals that out of 1000 population who availed services from public health facilities, 1359 availed (events) OPD services and 70 availed (events) IPD services. However, as per the NSS data (2017-18), only 33% of all OPD cases in rural and 22% in urban used public facilities. While the former is on par with the national average, the latter is less than the national average of 26%. At the same time, 74% of all IPD cases in rural and 59% in urban areas utilized public health facilities, which are higher than the national averages of 46% and 35% respectively.

^{aa} AB-HWC Portal

ANNEXURE 1: KEY INDICATORS

1.1 State Profile^{bb}

Indicator	West Bengal 2011 ¹	India
Total Population (In Crore)	9.1	121.08
Rural (%)	68.1	68.85
Urban (%)	31.8	31.14
Scheduled Caste population (SC) (in crore)	2.1 (23.5%)	20.14 (16.63%)
Scheduled Tribe population (ST) (in crore)	0.52 (5.8%)	10.45 (8.63%)
Total Literacy Rate (%)	76.26	72.99
Male Literacy Rate (%)	81.69	80.89
Female Literacy Rate (%)	70.54	64.64
Number of Districts in the West Bengal ²	23	
Number of districts per lakh population in West Bengal (Census 2011)	Population ¹	Districts ¹ (Numbers)
	<10 Lakhs	0
	≥ 10 Lakhs - <20 Lakhs	2
	≥20 Lakhs - <30 lakhs	2
	≥30 Lakhs	16
ST SC Dominant (Top 5) Districts of West Bengal ¹		
ST Dominant Districts (%)	SC Dominant Districts (%)	
Darjeeling - 21.51%	Cooch Bihar - 50.17%	
Jalpaiguri - 18.89%	Jalpaiguri - 37.65%	
Purulia - 18.45%	Bankura - 32.665%	
Dakshin Dinajpur - 16.42%	South Twenty Four Parganas - 30.18%	
Paschim Medinipur -14.88%	Nadia - 29.93%	
Top 5 ST dominant district accounts for - 53.33%	Top 5 SC dominant district accounts for - 37.54%	

1.2 Key Health Status & Impact Indicators

Indicators	West Bengal	India
Infant Mortality Rate (IMR) ³	20	30
Crude Death Rate (CDR) ³	5.3	6.0
Crude Birth Rate (CBR) ³	14.9	19.7

^{bb} Sources are mentioned at the end of Annexure 1

Maternal Mortality Ratio (MMR) ³	98	113
Neo Natal Mortality Rate (NNMR) ⁴	16	23
Under Five Mortality Rate (U5MR) ⁴	26	36
Still Birth Rate ⁴	5	4
Total Fertility Rate (TFR) ⁴	1.5	2.2
Life expectancy at birth ⁵	71.6	69.4
Sex Ratio at Birth ⁴	941	899

1.3 Key Health Infrastructure Indicators^{cc}

Indicators	Numbers (Total)			
Number of District Hospitals ²	18			
Number of Sub District Hospital ²	60			
Number of Government (Central + State) Medical College ⁶	19			
Number of Private (Society + Trust) Medical Colleges ⁶	6			
Number of AB-HWCs functional as of 22 nd December 2021 ¹⁶	Status (Total)	Target FY (2020-21)	Target FY (2021-22)	Target FY (2022-23)
SHC-HWC	4041	3712	6632	8579
PHC-HWC	783	913	913	913
UPHC-HWC	436	459	459	459
Total-HWC	5260	5084	8004	9951
Rural ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of Community Health Centres (CHC)	544	348	36.03	
Number of Primary Health Centres (PHC)	2,176	913	58.04	
Number of Sub Centres (SC)	13,225	10,357	21.69	
Number of functional First Referral Units (FRUs)	DH	SDH	CHC	
	18	58	47	
Urban ²	Required (R)	In place (P)	Shortfall (S) (%)	
Number of PHC	697	456	34.58	
Tribal ²	Required (R)	In place (P)	Shortfall (S)%	
Number of CHC	61	105	-72.13	
Number of PHC	245	283	-15.51	
Number of SC	1,635	2,889	-76.70	

^{cc} Sources are mentioned at the end of Annexure 1

Patient Service⁹	West Bengal	India
IPD per 1000 population	70.00	62.6
OPD per 1000 population	1359.03	1337.1
Operation (surgeries) major (General and Spinal Anaesthesia) per 10000 population	37.05	36.4

1.4 Major Health Indicator^{dd}

% Share of DALYs to Total Disease Burden (GBD 2019)⁷	West Bengal	India
% DALY ^{ee} accountable for CMNNDs ^{ff}	22.59	27.46
% DALY accountable for NCDs	66.02	61.43
% DALY accountable for Injuries	11.39	11.11
Birth, Death Registration & Medical Certification of Cause of Death (MCCD) Indicator⁸	West Bengal	India
Level of Birth Registration (%)	100	92.7
Level of Death Registration (%)	100	92
Percentage of medically certified deaths to total registered deaths (%)	14.1	20.7
RMNCHA+N		
Maternal Health⁹	West Bengal	India
% 1st Trimester registration to Total ANC Registrations	87.6	71.9
% Pregnant Woman received 4 ANC check-ups to Total ANC Registrations	81.7	79.4
Total Reported Deliveries	1266199	21410780
% Institutional deliveries to Total Reported Deliveries	98.6	94.5
% Deliveries conducted at Public Institutions to Total Institutional Deliveries	80.1	67.9
% Deliveries conducted at Private Institutions to Total Institutional Deliveries	19.9	32.1
% C-section deliveries (Public + Pvt.) to reported institutional (Public + Pvt.) deliveries	36.2	20.5
% C-sections conducted at public facilities to Deliveries conducted at public facilities	25.3	14.1
% C-sections conducted at Private facilities to Deliveries conducted at private facilities	79.8	34.2
% Women getting 1st Post-Partum Checkup between 48 hours and 14 days to Total Reported Deliveries	82.9	53.4
Neonatal⁹	West Bengal	India
% live birth to Reported Birth	98.5	98.8
% Newborns having weight less than 2.5 kg to Newborns weighed at birth	21.7	12.4
% Newborns breast fed within 1 hour of birth to Total live birth	81.3	89.9

^{dd} Sources are mentioned at the end of Annexure 1

^{ee} Disability Adjusted Life Years

^{ff} Communicable, Maternal, Neonatal, and Nutritional Diseases

New Born Care Units Established¹¹	West Bengal	India
Sick New Born Care Unit (SNCU)	69	895
New Born Stabilization Unit (NBSU)	307	2418
New Born Care Corner (NBCC)	577	20337
Child Health & Nutrition¹⁰	West Bengal (NFHS 5)	India (NFHS 5)
Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	6.5	7.3
Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	75.3	60.6
Children under 5 years who are underweight (weight-for-age) (%)	32.2	32.1
Child Immunization¹⁰	West Bengal (NFHS 5)	India (NFHS 5)
Children age 12-23 months fully vaccinated based on information from vaccination card only (%)	90.8	83.8
Children age 12-23 months who have received BCG (%)	98.6	95.2
Children age 12-23 months who have received first dose of measles containing vaccine (%)	94.4	87.9
Family Planning¹⁰	West Bengal (NFHS 5)	India (NFHS 5)
Unmet need for spacing (%)	3.0	4
Communicable Diseases		
Integrated Disease Surveillance Programme (IDSP)¹¹	West Bengal	India
Number of districts with functional IDSP unit	27	720
Revised National Tuberculosis Control Programme (RNTCP)¹¹	West Bengal	India
Annualized total case notification rate (%)	99	163
New Smear Positive (NSP) Success rate (in %)	80	79
National Leprosy Eradication Programme (NLEP)¹¹	West Bengal	India
Prevalence Rate/10,000 population	0.58	0.61
Number of new cases detected	6,208	114,359
Malaria, Kala Azar, Dengue¹¹	West Bengal	India
Deaths due to Malaria ¹¹	6	79
Deaths due to Kala azar reported ¹¹	0	0
Deaths due to Dengue reported ¹¹	0	168
Number of Kala Azar Cases reported ¹¹	0	3,706
HIV¹⁰	West Bengal (NFHS 5)	India (NFHS 5)
Women (age 15-49 years) who have comprehensive knowledge of Human Immunodeficiency Virus (HIV)/Acquired immunodeficiency syndrome (AIDS) (%) ¹⁰	18.5	21.6
Men (age 15-49 years) who have comprehensive knowledge of HIV/AIDS (%) ¹⁰	15.5	30.7

Non-Communicable Disease		
Diabetics and Hypertension¹⁰	West Bengal (NFHS 5)	India (NFHS 5)
Women - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	11.5	12.4
Men - Mildly elevated Blood Pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	13.1	15.7
Women - Blood sugar level - high (141-160 mg/dl) (%)	8.9	6.1
Men - Blood sugar level - high (141-160 mg/dl) (%)	10.8	7.3
Tobacco Use and Alcohol Consumption among Adults (age 15 years & above)¹⁰	West Bengal (NFHS 5)	India (NFHS 5)
Women who use any kind of tobacco (%)	10.8	8.9
Men who use any kind of tobacco (%)	48.1	38
Women who consume alcohol (%)	1.1	1.3
Men who consume alcohol (%)	18.1	18.8
Injuries		
Road Traffic Accident¹²	West Bengal	India
Rank (Total number of fatal Road Accidents in State/UT wrt other States/UTs)	11	NA
Total number of fatal Road Accidents	5,120	137,689
Severity (Road accident deaths per 100 accidents) of Road Accidents	54.1	33.7
Number of persons killed in Road Accidents	5500	115113

1.5 Access to Care⁹⁹

Health Systems Strengthening		
Ambulances & Mobile Medical Units (MMU)¹¹	West Bengal	India
Number of Districts equipped with MMU under NRHM	11	506
Number of Districts equipped with MMU/Health Units under NUHM	1	31
Number of ERS vehicles operational in the States/UTs Under NHM	West Bengal	India
102 Type	855	9955
104 Type	0	605
108 Type	0	10993
Others	2534	5129
Number of Ambulances functioning in the State/UTs other than NHM (At PHC/CHC/SDH/DH)	281	11070

⁹⁹ Sources are mentioned at the end of Annexure 1

Key Domain Indicators		
ASHA ¹³	West Bengal	India
Total number of ASHA targeted under NRHM	61008	946563
Total number of ASHA in position under NRHM	52173	904211
% of ASHA in position under NRHM	86	96
Total number of ASHA targeted under NUHM	6072	75597
Total number of ASHA in position under NUHM	4926	64272
% of ASHA in position under NUHM	81	85
Community Process ¹¹	West Bengal	India
Number of Village Health Sanitation and Nutrition Committees (VHSNCs) constituted	48472	554847
Number of Mahila Arogya Samitis (MAS) formed	9727	81134
Number of Rogi Kalyan Samitis (RKS) registered (Total) ¹¹	West Bengal	India
DH	18	796
CHC	281	6036
PHC	716	20273
UHC	0	126
UPHC	0	3229
Human Resource for Health ¹⁴		
HRH Governance	West Bengal	
Specialist Cadre Available in the state (Y/N)	Yes	
HR Policy available (Y/N)	No	
Implementation of HRIS (Y/N)	No	
HR Integration initiated (Y/N)	No	
Public Health Cadre available (Y/N)	Yes	
Overall Vacancies (Regular + contractual)	Specialists (%)	48
	Dentists (%)	13
	MO MBBS (%)	43
	Nurse (%)	36
	LT (%)	34
	ANM (%)	2
HRH Distribution	Sanctioned	In Place
Doctors (MO & specialists) to staff nurse ¹⁴	1:2	1:2
Availability of public healthcare providers (MO, specialists, staff nurse & ANM) in district healthcare system ¹⁴	15 per 10,000	12 per 10,000
Regular to contractual service delivery staff ratio ¹⁴	3:1	3:1

Ranking: Human Resource Index of West Bengal¹⁵

Category	Total (Regular + NHM)					Ranking: HR Gap Index
	Required (R)	Sanctioned (S)	In-Place (P)	Vacancy (V)	Actual Gap# (R-P)	
MPW ^{hh}	30133	19925	19052	873	11081	82.2
Staff Nurse	19043	31022	23305	7717	0	
Lab Technician	5108	4800	3083	1717	2025	
Pharmacists	2183	3317	3020	297	0	
MO MBBS ⁱⁱ	4583	7771	5724	2047	0	
Specialist ^{jj}	3922	3267	2680	587	1242	

1.6 Healthcare Financing^{kk}

National Health Accounts (NHA) (2017-18)	West Bengal		India	
Per Capita Government Health Expenditure (in ₹)	1088		1753	
Government Health expenditure as % of Gross Domestic Product (GSDP)	1		1.35	
Government Health Expenditure as % of General Government Expenditure (GGE)	6.5		5.12	
OOPE as a Share of Total Health Expenditure (THE) %	69.8		48.8	
National Sample Survey Office (NSSO) (2017-2018)	West Bengal		India	
	Rural	Urban	Rural	Urban
OPD - % of non-hospitalized cases using public facility	33	21	33	26
IPD - % of hospitalized cases using public facility	74	59	46	35
Out of Pocket Expenditure (OOPE) (NSSO)*	Rural	Urban	Rural	Urban
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Public	387	417	472	486
OPD - Per non-hospitalized ailing person (in INR) in last 15 days - Private	834	785	845	915
IPD - Per hospitalized case (in INR) - Public	3,765	4,993	5,729	5,939
IPD - Per hospitalized case (in INR) - Private	46,992	42,264	28,816	34,122
IPD - % of diagnostics expenditure as a proportion of inpatient medical expenditure in Public (NSSO)	23	21	18	17
IPD - % of drugs expenditure as a proportion of inpatient medical expenditure – Public (NSSO)	55	47	53	43

^{hh} MPW – Multi Purpose Health Worker (Female + Male)

ⁱⁱ MO MBBS (Full Time)

^{jj} Specialist (All Specialist)

^{kk} Sources are mentioned at the end of Annexure 1

* Estimated by NHSRC using unit level data of NSSO 2017-18, where OOPE = [Total Medical Expenditure + Transportation Cost] – Reimbursement

Childbirth - Average out of pocket expenditure per delivery in public health facility (₹) (NSSO)	2,559	3,109	2,402	3,091
Childbirth - Average out of pocket expenditure per delivery in private health facility (₹)	21,005	31,708	20,692	26,701
State Health Expenditure	West Bengal		All India Average	
State Health Department expenditure as a share of total expenditure (%) (2017-18)**	4.9		5 ^{II}	

Sources used for Annexure 1

- ¹ Census 2011
- ² Rural Health Statistic (RHS) 2019-20
- ³ Sample Registration Survey (SRS) Bulletin 2018 & 2019
- ⁴ Registrar General of India (RGI) Statistical Report (SRS) 2018
- ⁵ SRS Based Abridged Life Tables 2014-18
- ⁶ National Health Profile 2020
- ⁷ Global Burden of Disease Data 2019, <https://vizhub.healthdata.org/gbd-compare/>
- ⁸ Annual Report on Vital Statistics of India based on CRS 2019 & Medical Certification of Cause of Death 2019
- ⁹ HMIS (2019-20)
- ¹⁰ NFHS 4 & 5
- ¹¹ QPR NHM MIS Report [Status as on 01.03.2020 & recent 31.12.2020 (some indicators removed from the recent report have been taken from report released on 01.03.2020)]
- ¹² Ministry of Road Transport & Highways (MoRTH) - Road Accidents in India 2019
- ¹³ Update on ASHA Programme July 2019 (NHSRC Publication)
- ¹⁴ Human Resources for Health in District Public Health Systems of India: State Wise Report 2020
- ¹⁵ HRH Division NHSRC
- ¹⁶ As per HWC Portal

^{II} Represents data for all states and 2 UTs with legislative assembly (Puducherry + Delhi)

** RBI, State Finances: Study of Budgets 2019-20

ANNEXURE 2

Figure 1: IMR Trend

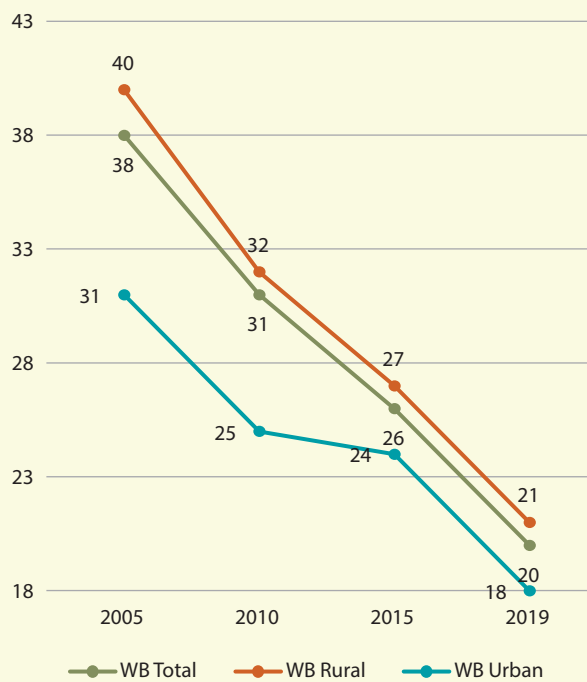


Figure 2: CBR & CDR Trend

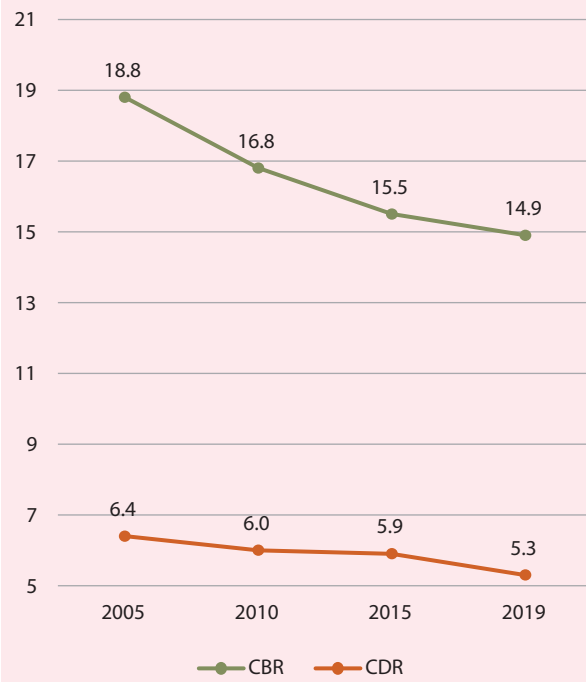


Figure 3: Life Expectancy At Birth Trend

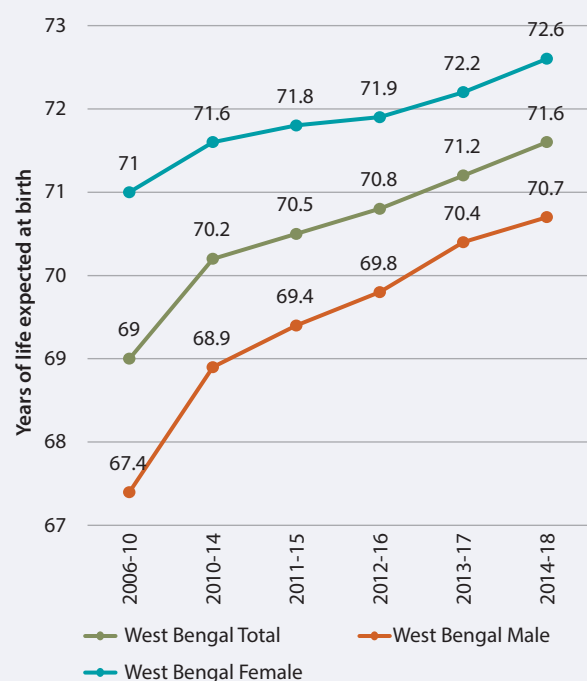


Figure 4: NNMR, TFR & Still Birth Trend

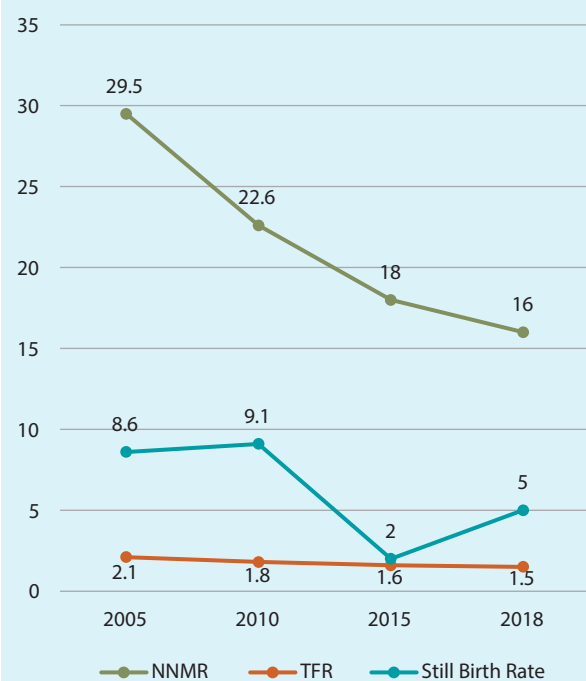


Figure 5: Comparison of Key NFHS 5 & 4 Indicators

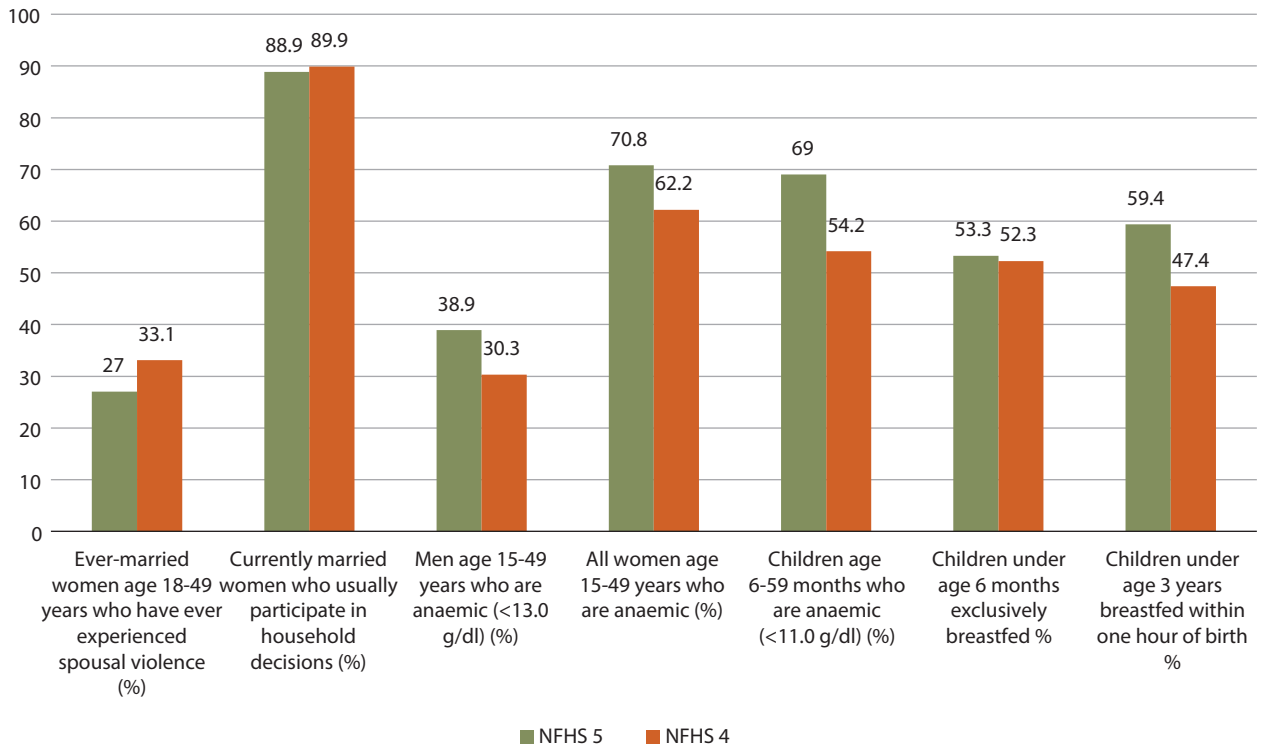


Figure 6: Top 15 causes of DALYs, 1990-2019

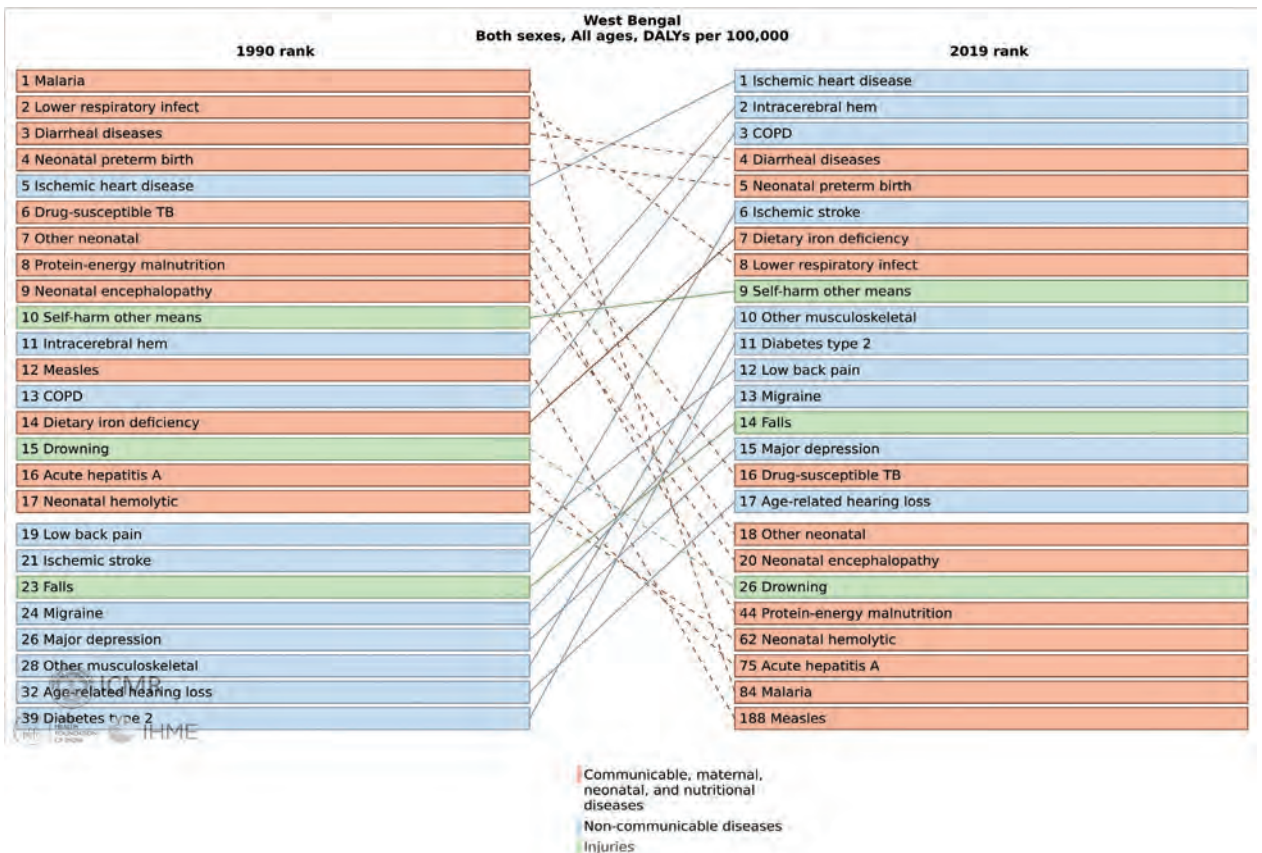


Figure 7: Top 15 risk of DALYs, 1990-2019

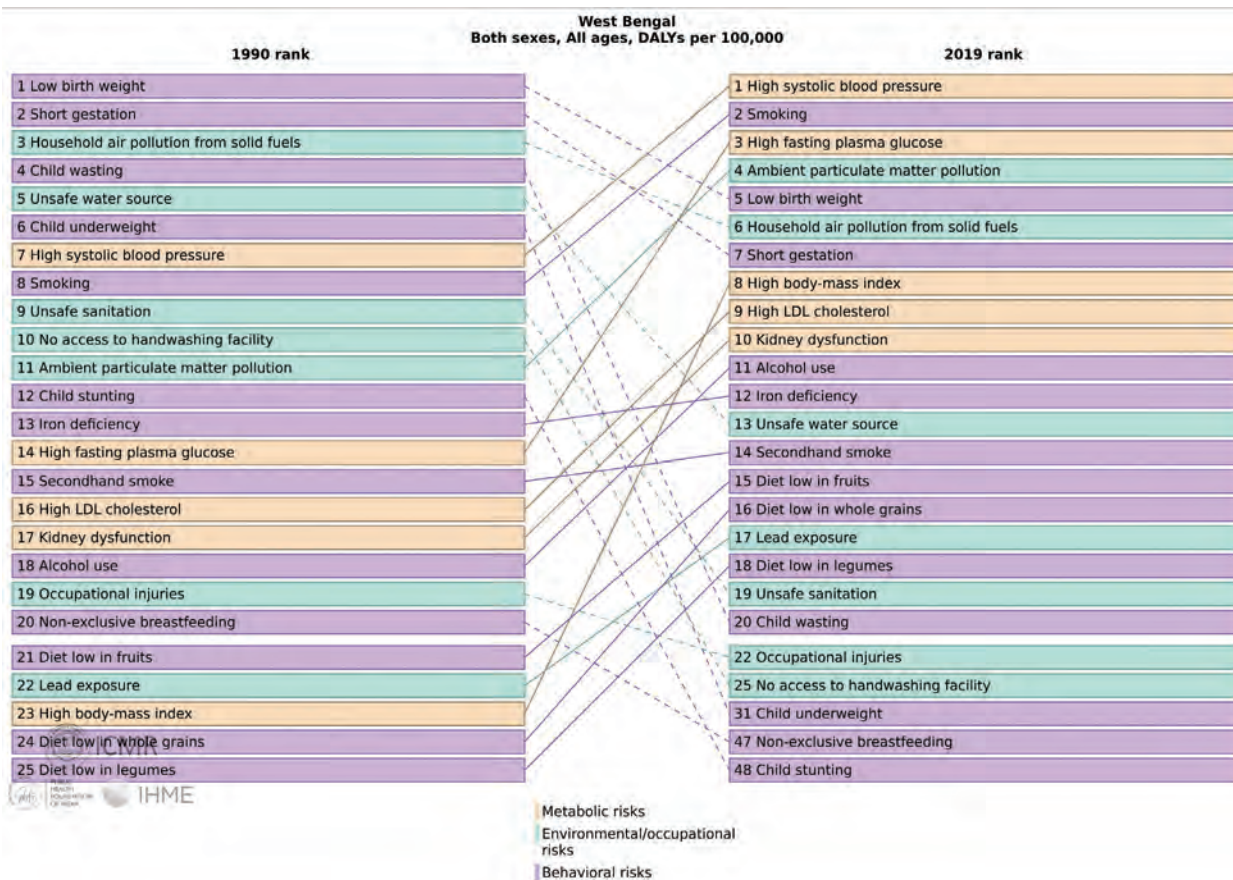


Figure 8: Year Wise Required/In Position Health Infrastructure Status in Rural Area (In numbers)

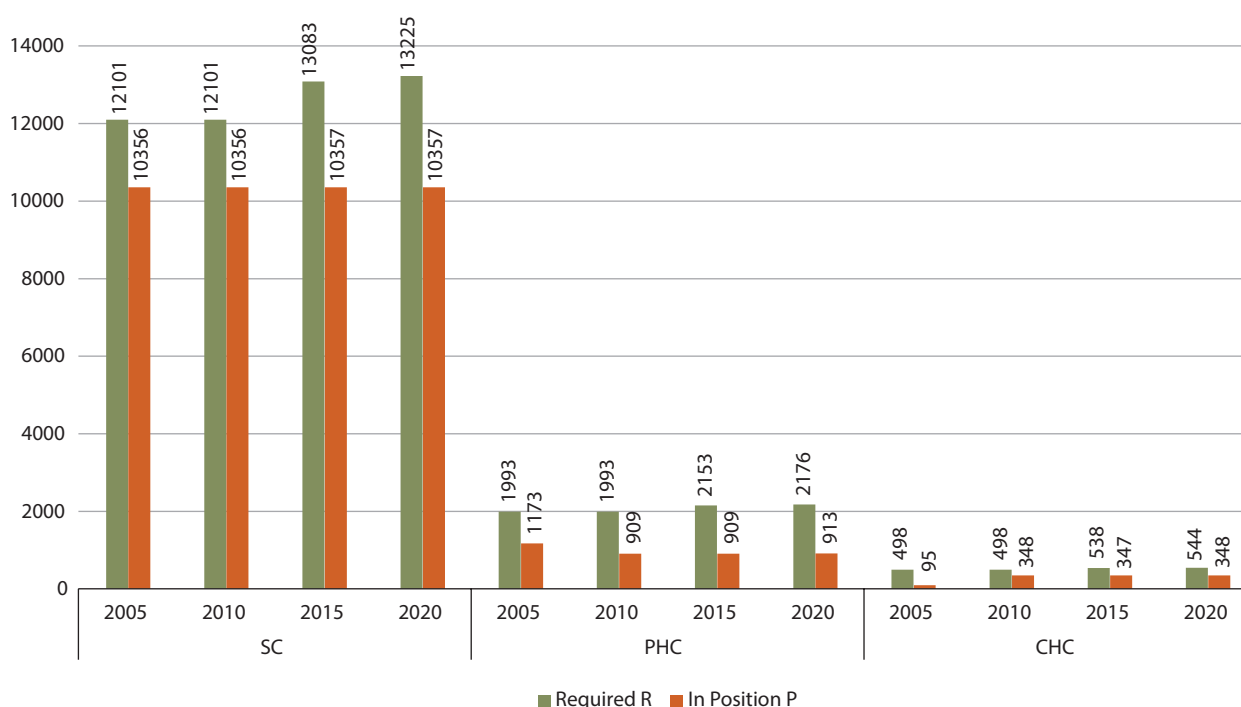


Figure 9: Year Wise Health Infrastructure Shortfall (%)

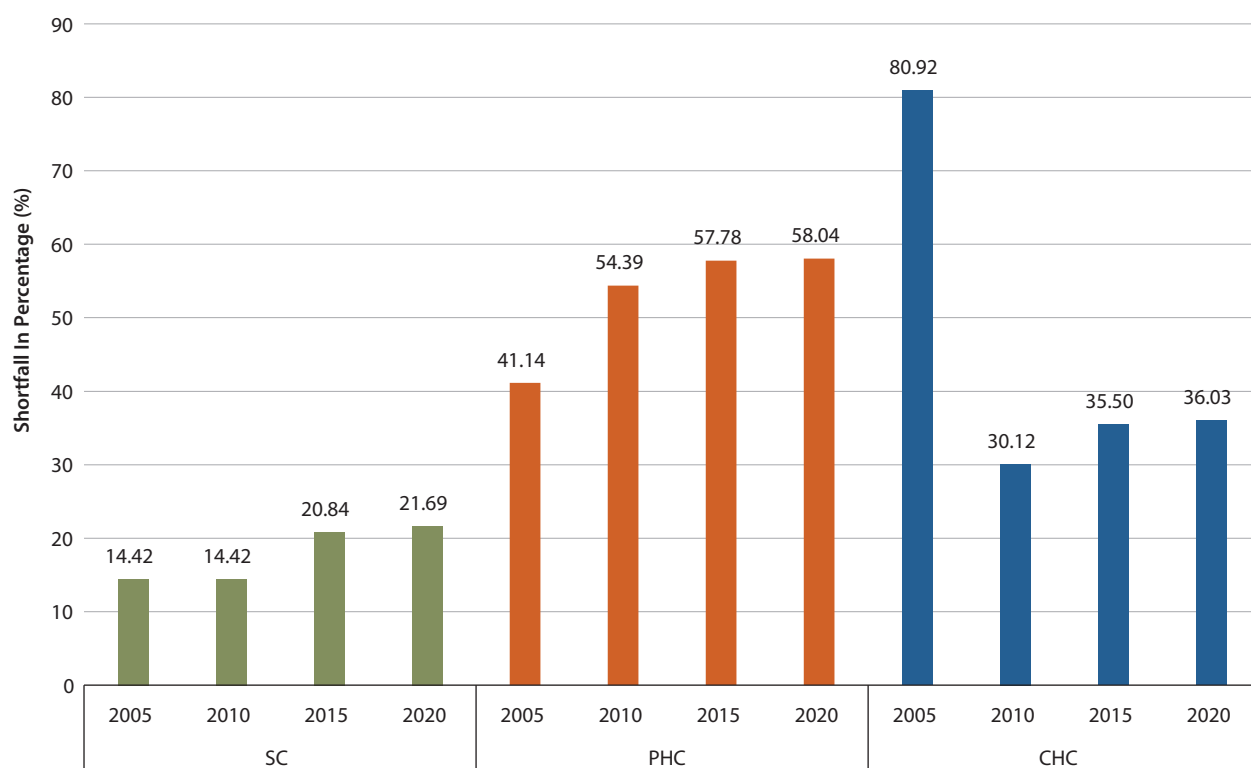
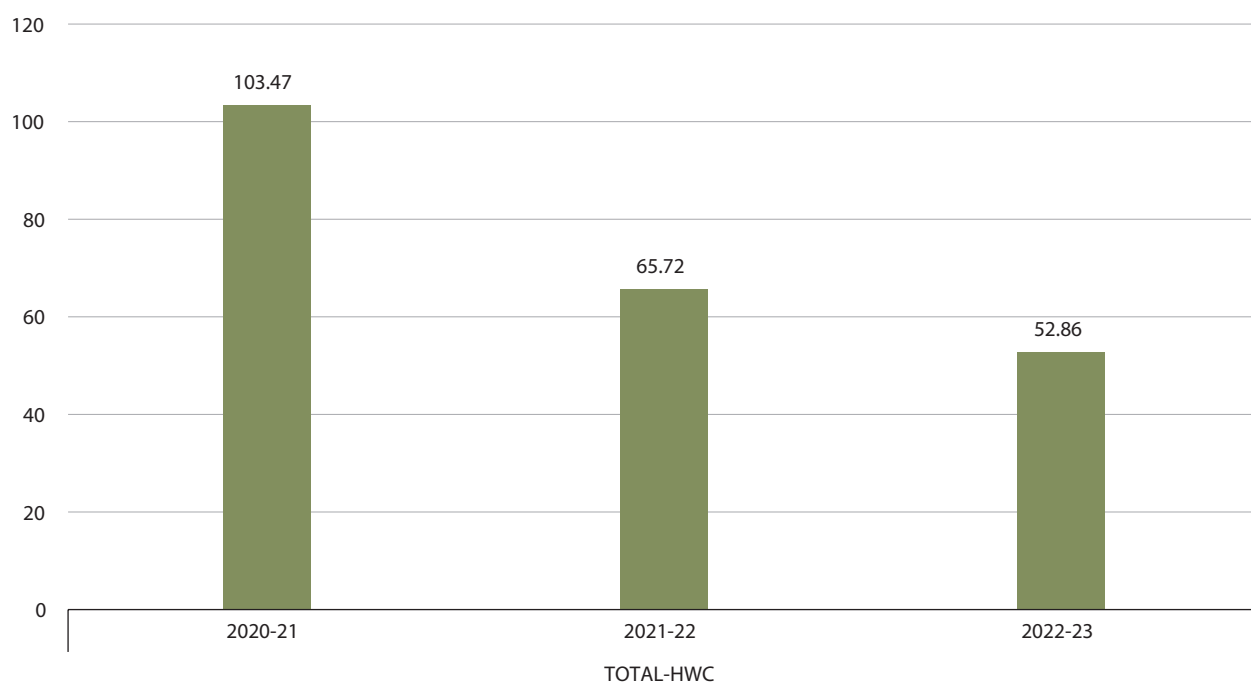


Figure 10: Percentage HWCs progress against target - FY wise (%)

West Bengal (% HWCs progress as of 22/Dec/2021 against targets - FY wise)



ANNEXURE 3: DISTRICT WISE PERFORMANCE WITH RESPECT TO KEY NFHS 5 INDICATORS

Serial No.	States/Districts	Data Source	(Green – Good Performance, Red – Poor Performance) (District Wise Rural Urban Stats Not Available)															
			Sex Ratio At Birth (Females/1000 Males)	Households with any usual member covered under a health insurance/financing scheme (%)	Women Literate 15-49 Age (%)	Women Age 20-24 Years Married Before 18 (%)	Any Method Used For Family Planning By Currently Married Women Age 15-49 years (%)	IUD/PIUD (%)	Condom Use (%)	Total Unmet Need (%)	Mother Who Had At Least 4 Antenatal Care Visits (%)	Institutional Births (%)	Children Age 12-23 Months Fully Vaccinated Based On Information From Vaccination Card Only* (%)	Total Children Age 6-23 Months Receiving Adequate Diet** # (%)	Children Under 5 Years - Stunted^ (Height For Age) (%)	Children Under 5 Years - Wasted^ (Weight For Height) (%)		
1	West Bengal	NFHS 4 Total	960	33.4	76.1	41.6	70.9	1.2	5.9	7.5	76.4	75.2	92.5	19.6	32.5	20.3		
2	West Bengal	NFHS 5 Urban	921	25.9	83.4	26.2	77.5	2	10.1	5.2	81.2	92.3	88.1	24.9	32.1	20.2		
3	West Bengal	NFHS 5 Rural	993	31	72.5	48.1	73	2.3	5.6	7.8	73.8	91.6	91.8	22.9	34.4	20.4		
4	West Bengal	NFHS 5 Total	973	29.3	76.1	41.6	74.4	2.2	7	7	75.8	91.7	90.8	23.4	33.8	20.3		
5	Bankura	NFHS 5 Total	1002	43.4	68.3	45.7	56.7	1.4	3.7	12	75.7	93.3	94.6	23.8	30.3	26		
6	Birbhum	NFHS 5 Total	934	37.7	70.8	49.9	82.2	1.6	5.6	4.8	78.4	90.3	90.9	24.6	37	25.5		
7	Dakshin Dinajpur	NFHS 5 Total	1067	28.3	74.3	45.6	78.6	3.3	9.9	6.1	76.4	91.4	93	34.2	31.9	22.8		
8	Darjeeling	NFHS 5 Total	1059	26.3	77	21.2	82.2	2.2	8.8	5.9	79.2	98.4	94.2	29.4	34.3	20.6		
9	Haora	NFHS 5 Total	1062	20.1	80.5	30.4	84.5	1.9	9.5	3.2	82.7	95.5	90.8	20.6	27.5	21.3		
10	Hugli	NFHS 5 Total	1025	26.5	77.4	40.8	74.9	1.7	7.8	7	72.2	97	95.2	25.3	28.9	20		
11	Jalpaiguri	NFHS 5 Total	1099	35.8	73.6	18.7	82.7	4.6	7.6	4	88.4	95.8	96.3	28.5	28.9	18.3		
12	Koch Bihar	NFHS 5 Total	959	36	79.2	46.7	81.7	2.1	6.4	4.6	77.3	93	97.1	23.2	28.7	16.8		
13	Kolkata	NFHS 5 Total	809	21.1	87.6	16.7	84.7	1.6	15	2.2	71.7	97.5	79	31.6	29.6	29.3		
14	Maldah	NFHS 5 Total	942	29	72.3	49.1	75.3	2.5	8.2	9.2	82.8	87.7	93.1	24.2	40.5	20		

15	Murshidabad	NFHS 5 Total	1054	28.4	67.6	55.4	85.4	1	7.6	3.5	66.9	87	89.7	7.8	39.8	16.3
16	Nadia	NFHS 5 Total	982	23	76.2	39.9	59.9	3.8	6.9	12.9	71.2	97.7	91.8	17.8	26.1	17.6
17	North Twenty Four Parganas	NFHS 5 Total	889	30.7	85.5	33.6	78.8	3.7	8.8	4.4	89.9	97.5	97.1	25.5	32.4	13.3
18	Paschim Barddhaman	NFHS 5 Total	787	21.8	73.5	31.8	65.3	2.1	8.8	12	70.4	89.8	69.7	31.1	39.7	25.5
19	Paschim Medinipur	NFHS 5 Total	1005	25.8	70.9	55.7	60.7	1.4	3.1	11.5	63.1	87.6	86.8	21.8	31.1	30.3
20	Purba Barddhaman	NFHS 5 Total	877	37.2	73.2	50.4	67.9	0.8	3.8	8.6	80.5	96	97.2	34.1	32.7	21.1
21	Purba Medinipur	NFHS 5 Total	777	21.5	77	57.6	59.3	1.2	3.5	12.3	56.8	91.5	74.3	20.9	25.8	15.5
22	Purdulia	NFHS 5 Total	860	35.6	61	37	51	2.4	4	16.1	57.8	89.8	87	24.6	36.9	29.4
23	South Twenty Four Parganas	NFHS 5 Total	1099	36.7	85.6	41.9	82.9	2.8	5.4	3.7	87.5	91	96.3	27.6	36.7	21.2
24	Uttar Dinajpur	NFHS 5 Total	1155	21	65.4	30.3	81.2	1.5	9.5	4.4	70.1	76.9	86.4	20.4	44.8	16

* NFHS5 replaced 'immunized' (word) from NFHS4 to 'Vaccinated'; Out of two indicators with 'either vaccination card or mother's recall & vaccination card only' indicator was used to reduce the recall bias, among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine

** Based on the youngest child living with the mother

Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

A. Green Color – Best five performing districts within the districts for a particular indicator

B. Red – Worst five performing districts within the districts for a particular indicator

C. * Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days

D. ** Based on the youngest child living with the mother

E. # Breastfed children receiving 4 or more food groups, and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group)

F. ^ Below -2 standard deviations, based on the WHO standard. 13 Below -3 standard deviations, based on the WHO standard

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