COVID-19 DISTRICT PREPAREDNESS & READINESS
FOR DISTRICT MAGISTRATE / DISTRICT MEDICAL OFFICER (FOR PAEDIATRIC COVID CARE)

What should District Administration Do
- Prepare District action plan (DAP) and mobilise resources for implementation of DAP.
- Promote IEC/BCC activities on Paediatric COVID care from community to facility level.
- Explore options for containment and control of COVID based on district specific context.
- Institute a mechanism for real-time data flow from the community and institutional based Paediatric COVID care for rapid response.

Action points for District Chief Medical Officer (CMO/CS) for Paediatric COVID Preparedness

District Assessment
- Total Paediatric population of the district.
- Active cases in urban and rural areas.
- Facility readiness in terms of Paediatric beds, ventilators, drugs, consumables, lab capacity with sufficient holding, and triage area as well as adequacy of referral services (BLS & ALS) as per the "Guidelines on Operationalization of COVID Care Services for Children and Adolescents".

COVID surge
- Surge calculation: Estimated number of confirmed cases in < 20 years of age are 12%, 5% of children and Adolescent with COVID have been estimated to be requiring hospitalisation.

Identification and Mapping
- Use of Rapid Antigen Test (RAT tests) for surveillance.
- Map the hotspots and have dedicated resources available.
- Use of red signals for early identification and referral.

Human Resource
- Carry out gap analysis and address the shortage of Human resource by deputation of staff within the district wherever required.
- Ensure availability of specialists (Paediatrician)/ Medical Officers in the healthcare facility.
- Hiring and incentivizing of staff including nurse, doctors, specialists, when needed.

Training
- Ensure training and Capacity building of physicians, para medical and other Healthcare staff.
- Promote online short courses and trainings on Paediatric COVID Care.

Drugs and Vaccine
- Assessment of Paediatric drugs, consumables, PPE and ensured supply chain management to meet the forecasted surge.
- Monitor stock outs with alternate plans for quick gap fillings. Maintain buffer stock for essential drugs required for Paediatric Cases.
IEC/BCC
- For the Community - Social distancing, avoid gathering, Vaccination, use of face masks & hygiene practices.
- Early reporting, testing, isolation and follow advise of healthcare workers.
- For Healthcare facility - covid protocols, hand hygiene, Infection prevention, use of PPE.

COVID Grievance
- Analyse the grievances for any health system gaps & ensure its response/gap.

District Control Room
- Ensure control rooms are functional round the clock, data from community & facility are received, real-time analysis is done.
- Technical manpower like pediatricians, physicians are linked for data analysis, forecasting & preparedness required for the district.
- The data is shared with State & National level functionaries for guidance.

Quality Assurance
- Work together with the facility’s administration and doctors to ensure standards of care are of the highest possible quality.
- Adhere to the NQAS and Kayakalp Quality standards.
- Technical & administrative rounds are taken to ensure adherence.
- Infection prevention practices & BMW management of highest quality & standards is to be maintained.

Reporting
- Daily reporting of all the active Paediatric COVID cases, recovered cases and deaths.
- Ensure reporting of Oxygen supported beds, ventilator beds, bed occupancy for Paediatric COVID cases in the district.

Monitoring of Active Cases in Home Isolation
- Daily follow-ups for Paediatric patients under isolation/quarantine through telephone/household visits by a frontline worker/volunteers/teacher.
- Monitor adherence to infection prevention practices by healthcare worker visiting homes.
Infrastructure
- Mapping of public and private hostels, hotels, schools, stadiums, etc. for the establishment of makeshift facilities in the Districts.
- Keep list of builders/contractors with capacity to build/renovate infrastructure at short notice.
- Constituted task force to manage and periodically monitor these facilities.
- Preparation of a contingency plan to expand these facilities in case of an emergency.

Funding
- Budgeting and micro-planning for upgrading/procuring infrastructure, logistics and regular supplies.
- Approval of Budget and financial provision of proposed activities.
- Utilizing resources like CSR and other resources available with DM for containment & control of COVID.
- Supporting district CMO in hiring of specialists by provision of non-monetary incentives like housing, transport, food & other such logistics.

Vaccination
- Mapping human resources across departments that could be deployed for verification of beneficiaries, crowd management and overall coordination at session site.
- Monitor the roll-out of COVID-19 vaccine in the district for progress made and resolving bottlenecks.

Inter-sectoral Coordination
- Sensitizing the PRIs and ULBs regarding preparedness for any future sudden surge of COVID cases in the pediatric age group.
- Involving the private sector, medical colleges, NGOs and CSOs, etc. seeking their participation and support.
- To coordinate with Army, Airforce, ITBP, BSF or any other hospitals in the district.
- Inter-departmental meetings for collaboration & coordination particularly in the area like infrastructure augmentation, cleanliness, BMW disposal, strengthening referral transport. Utilizing grass-root workers for surveillance & monitoring, provision of diet & other necessary supplies to those under who are under isolation & quarantine.

Community Engagement
- Awareness on timely identification, testing & treating.
- Managing the infodemic by countering misinformation and disinformation.
- Confidence building measures like regular and proactive communication with the public can help to reduce stigma, build trust and increase access to basic needs for affected people and their families.

Monitoring
- Monitoring the functioning of control room, data reporting analysis & preparedness.
- Identification of gaps in service provision.
- Monitor the activities of all the line departments.
- Implementing quarantine and lockdown provisions as per GoI/State/district specific rules/conditions.
### Bed Projections for Paediatric cases

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>Peak cases per day</td>
<td>10000</td>
</tr>
<tr>
<td>B</td>
<td>Estimated number of confirmed cases in &lt; 20 yr* at peak of the wave (@12% of A)</td>
<td>1200</td>
</tr>
<tr>
<td>C</td>
<td>Percentage of children needing admission</td>
<td>5</td>
</tr>
<tr>
<td>D</td>
<td>Numbers of children needing admission daily at peak of wave (5% of B)</td>
<td>60</td>
</tr>
<tr>
<td>D1</td>
<td>Numbers needing ward admission (60% of all admissions)</td>
<td>36</td>
</tr>
<tr>
<td>D2</td>
<td>Numbers needing HDU admission (25% of all admissions)</td>
<td>15</td>
</tr>
<tr>
<td>D3</td>
<td>Numbers needing ICU admission (15% of all admissions)</td>
<td>9</td>
</tr>
<tr>
<td>E</td>
<td>Average length of stay of admitted child (days)</td>
<td>10</td>
</tr>
<tr>
<td>F</td>
<td>Total Beds required for pediatric care for managing at the peak of the surge (D X E)</td>
<td>600</td>
</tr>
<tr>
<td>G</td>
<td>Total Ward Beds required for pediatric care for managing at the peak of the surge (D1 X E)</td>
<td>360</td>
</tr>
<tr>
<td>H</td>
<td>HDU beds required for pediatric care for managing severe disease at the peak of the surge (D2 X E)</td>
<td>150</td>
</tr>
<tr>
<td>I</td>
<td>ICU beds required for pediatric care for managing severe disease at the peak of the surge (D3 X E)</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Oxygen requirements for Paediatric facilities</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>Total Beds required for pediatric care for managing at the peak of the surge (D X E) 600</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>Total Ward Beds required for pediatric care for managing at the peak of the surge (D1 X E) 360</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>HDU beds required for pediatric care for managing severe disease at the peak of the surge (D2 X E) 150</td>
<td></td>
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<tr>
<td>M</td>
<td>ICU beds required for pediatric care for managing severe disease at the peak of the surge (D3 X E) 90</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>Oxygen requirements</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>4 l/min for ward beds</td>
<td>1440</td>
</tr>
<tr>
<td>P</td>
<td>12 l/min for HDU+ICU beds</td>
<td>2880</td>
</tr>
<tr>
<td>Q</td>
<td>Total needed: L/min</td>
<td>4320</td>
</tr>
<tr>
<td>R</td>
<td>KL/day</td>
<td>6220.8</td>
</tr>
<tr>
<td>S</td>
<td>Add 20% for leakages, etc; Total required KL/d</td>
<td>7464.96</td>
</tr>
<tr>
<td>T</td>
<td><strong>Tonnes of liquid oxygen per day</strong> 10.67</td>
<td></td>
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