

**COVID-19 Outbreak Control and Prevention State Cell**  
**Health & Family Welfare Department**  
**Government of Kerala**

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**Preparedness for management of surge of COVID-19 in children**  
No 33/31/ F2/2020/ H&FW dated 2<sup>nd</sup> June 2021

SARS COV 2 infection in children is often asymptomatic or mildly symptomatic. But of the proportion of children who get admitted with Covid 19, 1 in 3 requires ICU care. Fever and gastrointestinal symptoms are seen in a higher proportion of children compared to adults. Covid 19 related Multisystem inflammatory syndrome (MIS-C) is a dreaded complication of Covid 19 infection which often manifests 3 to 4 weeks after acute infection. Prompt identification and appropriate management is of paramount importance for optimal outcome.

These guidelines are issued superseding all previous guidelines. It has been developed to streamline the treatment of SARS COV2 infection and MIS-C in children. It is a dynamic document and will be updated based on evolving evidence.

This document consists of Treatment and referral protocol for children with COVID-19 and MIS-C cases including patient triage and Drug therapy, which will ease patient management and improve quality of care.

**The Annexure -1** is Treatment and Referral Protocol for acute COVID-19 & MIS-C which tells about the case triage and management of individual case in different settings including PICU.

**Annexure-2** is the protocol for Management of Neonate with COVID-19 in Special Newborn Care Units and Newborn ICU and care of Newborn delivered to COVID-19 mothers in Hospital settings.

**The Annexure-3** is the Guidelines for field level officers and staff on case management of both COVID-19 & MIS-C.

  
**Principal Secretary**

**Annexure I**

**Triage Policy for children with COVID**

Children tested positive but asymptomatic and those with mild or Category A symptoms may be cared at Home.

If children with category A symptoms have persistent fever or worsening cough beyond five days of illness without danger signs they should be referred to Hospitals with Pediatric Ward (Taluk Hospital or District Level Hospitals).

If children with mild disease develop any danger signs like inability to feed, increased somnolence, lethargy, decreased urine output, breathlessness, chest in drawing, cold extremity, bluish discoloration, seizures, etc. they should be referred to District Level Hospital/Tertiary Centers with HDU/PICU.

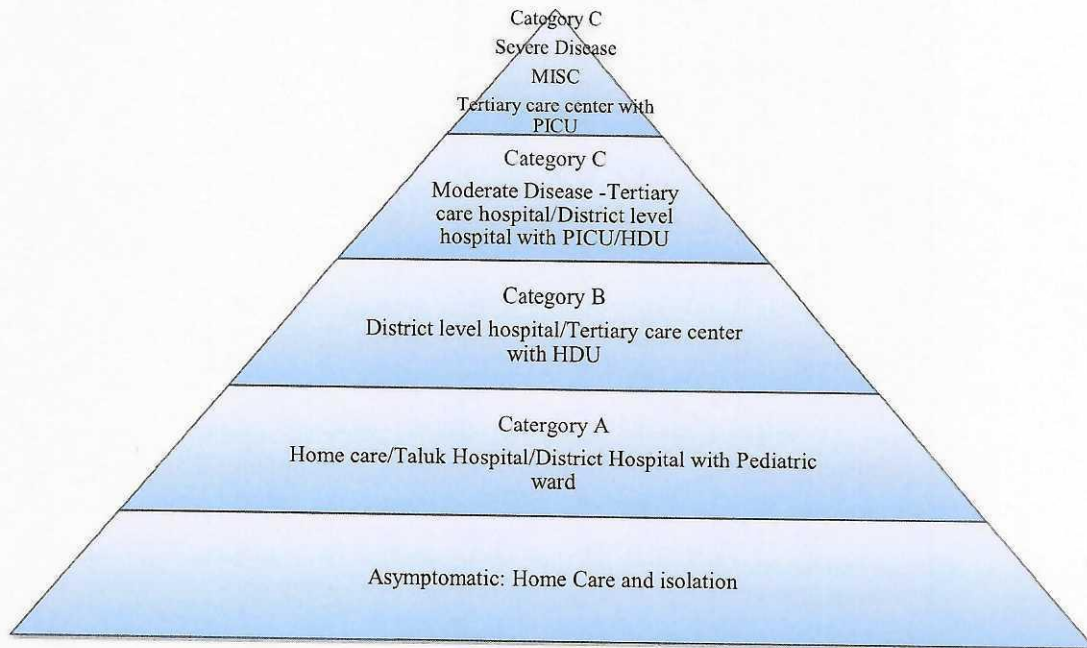
Children with moderate and severe disease (cat C) should be cared for in District Level Hospital/ Tertiary Center with HDU/PICU.

Severe/critically ill children with organ dysfunction, shock, ARDS should be cared in a Tertiary Care Hospital with PICU facility.

\*HDU- a facility with provision for 24 hours monitoring and Oxygen delivery using nasal prongs or Face Mask or C PAP or HFNC and monitoring using Pulse Oxymeter.

\*\*PICU – Facility with multipara monitors, non invasive and invasive ventilators, infusion pumps for accurate delivery of fluids and drugs.

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**Risk categorisation of patients with acute Covid 19 infection**

Category A	Category B	Category C
Mild sore throat, cough, Rhinorrhea, Diarrhoea, Vomiting	Fever, severe sore throat, increasing cough. Category A patients with comorbidities like Chronic heart, kidney, lung , neurological or liver diseases, obesity*, children on long term steroids, congenital or acquired immunosuppression.	Breathlessness, inability to feed, reduced activity / lethargy, altered sensorium, seizures , breathlessness, cyanosis, hypotension, Respiratory distress, spo2 < 94%,
*Adolescents with obesity are at higher risk of having severe disease.		

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Clinical categorisation based on severity of illness		
Mild	Moderate	Severe
Category A & B	Category C	Category C
<b>Uncomplicated URI</b> fever, sore throat, rhinorrhea etc <b>Without hypoxia or breathlessness.</b>	<b>Tachypnea (RR)*</b> < 2 months: $\geq 60/mt$ 2–11 months: $\geq 50/mt$ 1–5 years: $\geq 40/mt$ > 5 years: $>30/mt$ <b>Spo2 90- 94%</b>	<b>Spo2 &lt; 90%,</b> <b>Danger signs</b> like inability to feed, grunting, lower chest in drawings, altered sensorium, lethargy, seizures, somnolence, hypotension, ARDS, MODS
*RR- Respiratory rate		

**TREATMENT OF ACUTE COVID 19 INFECTION**

Mild Disease	Moderate Disease	Severe Disease
Home care / CFLTC / CSLTC	Designated district level hospital/ tertiary care center	Designated Covid hospital / tertiary care center
Symptomatic treatment Paracetamol 10 -15 mg/kg/dose may repeat 6 hourly (Avoid other NSAIDS) ORS and Zn for Diarrhea	Paracetamol 10 -15 mg/kg/dose may repeat 6 hourly (Avoid other NSAIDS) Maintain fluid and electrolyte balance. Encourage Oral / NG feeds. If not tolerating IV fluids Salbutamol by MDI and face mask with spacer (only if wheeze present) ORS and Zn for Diarrhea Spo2< 94% - Oxygen by prongs, venturi or face mask (Target Spo2 between 94 – 98%) Consider awake prone position in older children	Admit in ICU / HDU If spo2 < 90% on nasal prongs with minimal work of breathing options include : Face mask at > 5LPM flow (Fio2 40-60%) Oxygen hood at > 5LPM flow (Fio2 30 -90%) Venturi mask (28-60%Fio2) Non rebreathing mask at 10 -15LPM (Fio2 80-90%) High flow nasal cannula
No antivirals or other drugs	Amoxycillin in children < 5 years or clinical suspicion of bacterial infection.	Empiric antibiotics Parenteral Steroids for 5 to 14 days

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<p>No Investigations</p>		<p>Steroids if rapid progression and beyond 5 days from onset (any one):</p> <p>Methyl prednisolone 0.5mg/kg/dose BD or Dexamethasone 0.15mg per kg per day OD or prednisolone 1mg/kg/day oral in patients with hypoxia</p> <p>If symptoms persist / hypoxia develops</p> <p>CBC, Chest X ray, RFT, LFT, CRP, D Dimer, Ferritin (if available)</p>	<p>Methyl prednisolone 1mg/kg/dose BD or Dexamethasone 0.15mg per kg per dose twice daily.</p> <p>+/- Inj. Remdesivir*</p> <p>Restrictive fluid strategy</p> <p>Consider awake prone position in older children</p> <p>CBC, RFT, LFT, CRP, D Dimer, Ferritin</p> <p>Chest imaging</p> <p>Echo</p> <p>Assess for Thrombosis / HLH / organ failure</p>
<p>Bring to hospital if any one present:</p>		<p>If any of these develops</p>	<p>If no response to HFNC in 1 hour/ increased work of breathing<sup>#</sup></p>
<p>Fever lasting for more than 5 days / worsening cough</p> <p>Look for alternate cause</p> <p>Send CBC, CRP, RUE</p>	<p>Poor feeding, fast breathing, bluish discoloration, chest indrawing, altered sensorium, seizure</p>	<p>Increased work of breathing</p> <p>Saturation less than 94% inspite of oxygen support</p> <p>Hemodynamic compromise</p> <p>Multi organ dysfunction</p> <p>Altered sensorium</p>	<p>Non invasive ventilation (if no response in 1 hour)</p> <p>↓</p> <p>Invasive ventilation ((Low Tidal Volume, Optimal PEEP, Cuffed ET tube, Fluid restriction)</p>
<p>↓</p> <p>Refer to Taluk Hospital with pediatric ward</p>	<p>↓</p> <p>Refer to district level hospital /tertiary care hospital with HDU</p>	<p>↓</p> <p>Refer to tertiary care Hospital with PICU</p>	<p>If no response -</p> <p>ECMO</p> <p>Manage shock with isotonic crystalloid boluses (NS/ RL/PL) of 10 -20ml/kg over 30 -60 minutes</p> <p>Titrate inotropes if shock uncorrected</p>

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\* Remdesivir has no mortality benefit hence no more recommended by WHO. It was found to decrease duration of hospital stay. Being an antiviral drug has role only early in disease. Preferable to start within 5 days. Not recommended beyond 10 days of disease onset. Dose 5mg/kg on day 1 (max.200mg) followed by 2.5mg/kg OD for 4 days. Avoid in those with renal or liver dysfunction.

Surgical mask over nasal canula for older children and hood with side ports covered with surgical mask for children on oxygen support to decrease aerosolization and droplet spread.

# Refer to Kerala state guidelines for more detailed discussion regarding critical care in COVID 19 in children.

<b>Model monitoring chart for patients in primary care facilities</b>			
	Morning	Evening	Bedtime
<b>Breathing Rate</b>			
<b>Feeding (well / decreased / poor)</b>			
<b>Urine output</b>			
<b>Any danger sign</b>			
<b>SPO2</b>			

### **COVID 19 RELATED MULTISYSTEM INFLAMMATORY SYNDROME IN CHILDREN (MIS-C)**

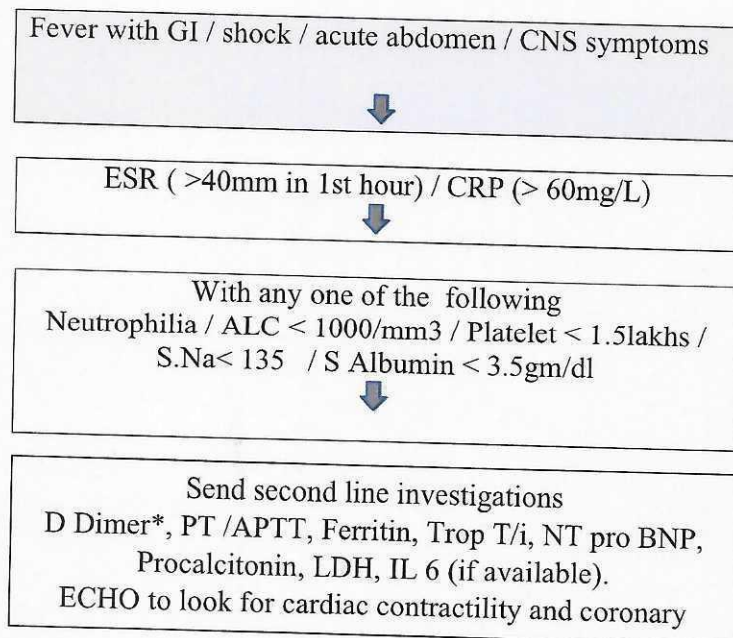
This is a life threatening complication of SARS COV 2 infection in children which often manifests 3 – 4 weeks after a symptomatic or asymptomatic Covid – 19 infection. Early identification and appropriate treatment is of paramount importance for an optimal outcome. It should be suspected in children presenting with short febrile illness with skin rash, congested mucous membrane, conjunctival congestion or haemorrhage, acute abdomen, shock with evidence of 2 or more organ involvement.

<b>Diagnostic Criteria for COVID 19 related MIS-C</b> (All of the below needed for diagnosis with no alternate plausible diagnosis)	
Age group	0-19years
Fever	≥38.0°C for ≥24 hours or report of subjective fever lasting ≥24 hours

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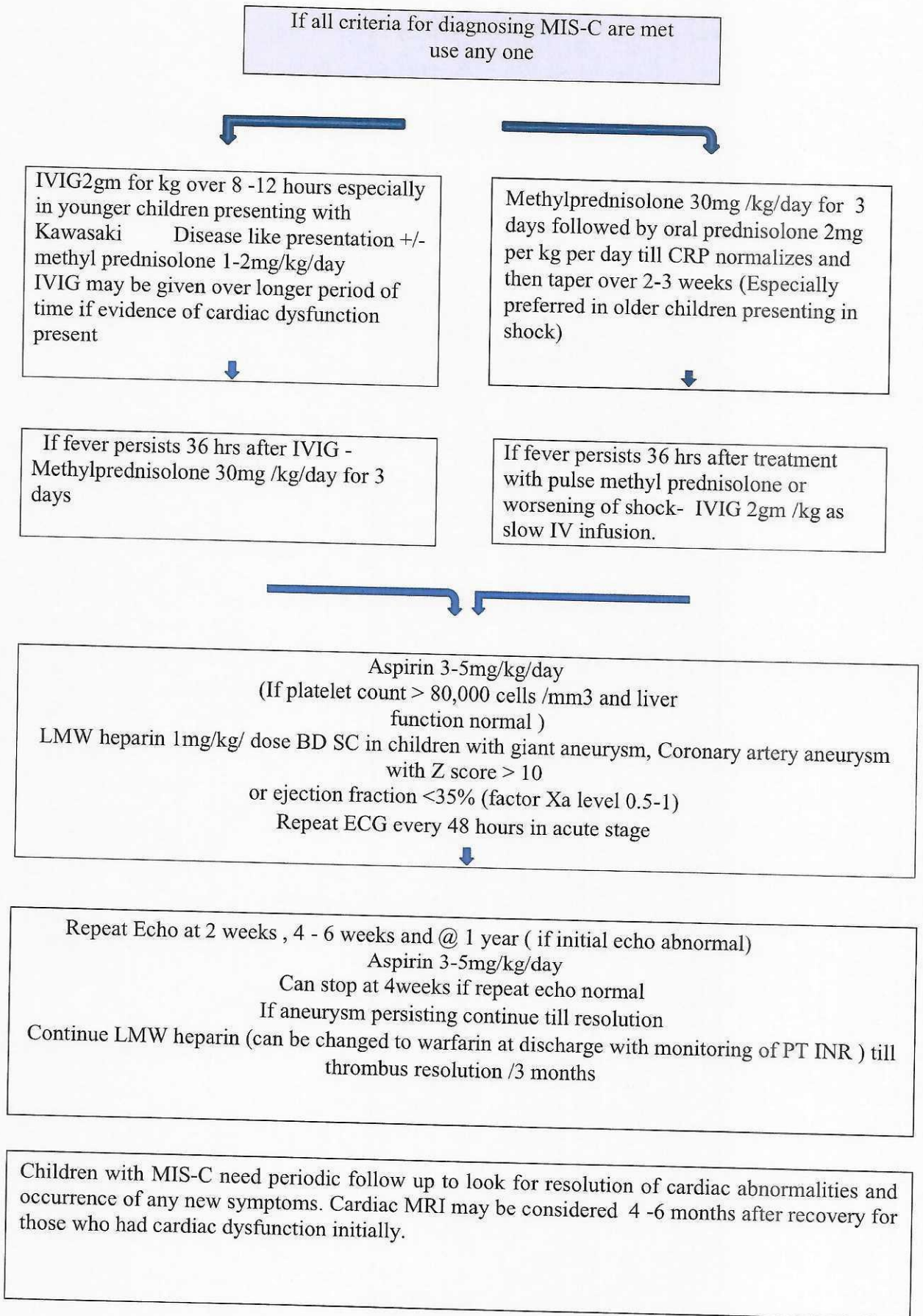
Symptoms	<p><b>Any 2 of the following</b></p> <ol style="list-style-type: none"> <li>1. Rash / non-purulent conjunctivitis or <b>muco-cutaneous</b> inflammation signs (oral, hands or feet).</li> <li>2. Hypotension or <b>shock</b>.</li> <li>3. Features of <b>myocardial</b> dysfunction, pericarditis, valvulitis, or coronary abnormalities (including ECHO findings or elevated Troponin/NTproBNP),</li> <li>4. Evidence of <b>coagulopathy</b> (by PT, PTT, elevated d-Dimers).</li> <li>5. Acute <b>gastrointestinal</b> problems (diarrhoea, vomiting, or abdominal pain).</li> </ol>
Inflammatory markers one or more	Elevated CRP or ESR or Procalcitonin
Evidence of COVID -19 infection	RT-PCR, antigen test or serology positive or likely contact with COVID-19

**Management pathway for COVID-19 related Multisystem Inflammatory syndrome in children (MIS-C)**



*\*Among the second line investigations D dimer is found to be elevated in most patients with MIS-C.*

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### Discharge policy for Children

Children may be discharged once afebrile and asymptomatic for 72 hours.  
No need for routine retesting at discharge for children with mild and moderate disease.  
Children with severe disease may be retested with Rapid Antigen Test at discharge.  
Home isolation should be continued after discharge as per state protocol.

### References

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7. CDC. Multisystem Inflammatory Syndrome in Children (MIS-C) [Internet]. Centers for Disease Control and Prevention. 2020 [cited 2021 Feb 3]. Available from: <https://www.cdc.gov/mis-c/hcp/>
8. World Health Organization. Multisystem inflammatory syndrome in children and adolescents temporally related to COVID-19. Accessed August 27, 2020. Available from: <https://www.who.int/newsroom/commentaries/detail/multisystem-inflammatory-syndrome-in-children-and-adolescents-with-covid-19>

## Annexure II

### Management of COVID 19 Infection in Neonates

#### **Neonate suspect to have COVID 19 Infection**

- Born to the mothers with a history of COVID-19 infection diagnosed 14 days before delivery or 28 days after delivery, or
- Directly exposed to close contacts with COVID-19 infection (including family members, caregivers, medical staff, and visitors)

#### **Baby born to Mother (suspect/confirmed COVID 19)**

##### **Labour Room management**

- Continuous electronic fetal monitoring in labour.
- Separate designated delivery room and operation theatres are required.
- No evidence to favour one mode of delivery (Normal Vs CS) over the other

##### **Resuscitation room**

Can be in a room just adjacent to delivery area or the resuscitation warmer should be physically separated from the mother's delivery area by a distance of at least 2 meters. A curtain can be used between the two areas to minimize opportunities for close contact.

To keep separate Neonatal Resuscitation Kit in Delivery area/OT

- Personnel attending to baby to Don PPE and follow all Airborne, Droplet, and Contact Precautions
- Neonatal resuscitation should follow standard guidelines.
- The baby can be transported ideally in transport incubator or transport bassinette covered with cling wrap. The incubator/ bassinette to be disinfected as per the standard protocol after transporting.

#### **Asymptomatic baby born to mother with suspect COVID 19 infection**

If baby is stable with no risk factors, routine care is given and may be shifted along with mother in Isolation area. Mothers and healthy neonates may be kept together.

### **Babies born to mother with confirmed COVID 19 infection**

If mother is asymptomatic, then baby can be cared for in mother's room by asymptomatic caregiver. Maintain at least 6 feet distance, (if possible) between mother and baby in times other than breastfeeding. Mother to wear N 95 mask.

If mother is unwell baby can be kept along with a healthy caregiver (< 60 years and without comorbidities) in an area separate from COVID positive mother except during breastfeeding.

If mother or baby is sick, baby may be shifted to separate Neonatal Care area in Designated COVID ICU.

All babies born to COVID-19 positive mothers should have appropriate close monitoring and early involvement of neonatal care personnel, where necessary.

### **Breastfeeding**

There is no evidence of transmission through breast milk at present .

It is advised that the benefits of breastfeeding outweigh any potential risks of transmission of the virus through breast milk.

The main risk for infants of breastfeeding is the close contact with the mother, who is likely to share infective airborne droplets.

For women wishing to breastfeed, precautions should be taken to limit viral spread to the baby:

- Hand washing before touching the baby, breast pump or gokarnum.
- Avoid coughing or sneezing on your baby while feeding at the breast.
- Wear a N95 face mask while breastfeeding.
- Consider asking a healthy caregiver to feed expressed milk to the baby if mother is sick.
- Formula feeding may be considered if mother is sick or unable to express.

Where sick mothers are expressing breast milk in hospital, a dedicated breast pump should be used.

For sick mothers feeding with formula or expressed milk, strict adherence to sterile precautions is recommended.

Strict adherence to the following in all cases;

- Hand and respiratory hygiene
- Daily cleaning and disinfection of equipment and surroundings
- PPE for all caregiving staff
- Breastfeeding after counseling and following all aseptic precautions.

- Medical waste to be disposed as per hospital protocol.

### **Testing of babies**

All babies of women who are **COVID-19 positive** need to be tested for COVID-19 by nasopharyngeal swab .

RT PCR testing should be done by 24- 48 hours after birth for looking for intrapartum transmission.

- Insert a swab into nostril parallel to the palate. Swab should reach depth equal to distance from nostrils to outer opening of the ear. Leave swab in place for several seconds to absorb secretions. Slowly remove swab while rotating it. Place swab immediately into sterile tube containing 2-3 ml of viral transport media.
- If intubated can send tracheal aspirate also.

### **Actions to be taken as per Test Results**

- If **test is positive** , and baby is sick, those needing intensive care will be shifted to Paediatric/ Neonatal COVID ICU
- If test is positive and baby is stable/ asymptomatic ,keep along with mother or a healthy care taker if mother is sick. No routine repeat testing. Will be asked to be in home quarantine till 17 days from test positivity date.
- If test is negative, stable baby may be cared for by healthy care giver or by positive non sick mother after following all respiratory precautions.
- If the **initial test is negative** , repeat test will be done if baby turns symptomatic.
- Even if the initial test is negative, a documented negative test results done by 7-14 days should be available before shifting to a common neonatal care area.
- If a neonate before identification as covid positive, was sharing a ward with other babies, all these babies must be kept in isolation/ home isolation for 14 days. If these babies become symptomatic during isolation period they should be advised to seek medical care.

### **Neonatal COVID 19 Infection**

The confirmed diagnosis of Neonatal COVID 19 infection requires positive swab result by RT PCR.

In the following circumstances Neonatal COVID 19 infection may be suspected.

- One of clinical symptoms like temperature instability, poor activity/ feeding or tachypnea
- Abnormal Chest XRay findings- ground glass opacity/multilobar or subsegmental areas of consolidation
- One or more close contact family member / caregiver with probable or confirmed COVID 19 infection.

### **Isolation facilities**

- All probable or lab confirmed symptomatic cases to be admitted to isolation NICUs.
- For symptomatic babies, single patient room or NICU with the potential for negative room pressure are preferred for patients requiring aerosolization procedures (respiratory support, suction, and nebulization).
- If this is not available, or if the COVID- exposed/ suspect infant requires cohorting, infants should be maintained at least 6 feet apart and/or placed in air temperature-controlled incubator or radiant warmers with cling wrap on top.
- If not available, negative pressure could also be created by 2-4 exhaust fans driving air out of the room.
- The isolation area should not be part of central air conditioning.

Babies requiring NICU care to be kept in designated isolation area with facilities for NICU care and Monitoring. Dedicated Nursing staff and Paediatrician to be assigned on duty. The staff should be provided with adequate supplies of PPE.

### **Investigations for symptomatic positive newborn**

Includes CBC, CRP, LFT, Blood gas and Chest Xray.

In COVID positive sick neonates on a case to case basis:  
D-Dimer, S.Fibrinogen, PT, APTT, INR,  
LDH, S.Ferritin, Blood culture.

For sick neonates all existing NICU protocols to be followed.

### **Respiratory support**

- Oxy hood, low flow nasal prongs or Continuous positive airway pressure (CPAP) can be used with minimal required flow (Target SPO<sub>2</sub> is 91-95 %).
- Intubation in case of worsening respiratory distress.
- Limit aerosol generating procedures like open suction and Nebulisation.

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- Due to high potential for aerosol generation, High Flow Nasal cannulas (HFNC) may be preferred over non-invasive positive pressure ventilation (NIPPV) and should be limited.

### Medications

- At present, specific anti-COVID-19 treatment – antivirals, chloroquine/hydroxychloroquine, IVIG or steroids - is **NOT** routinely recommended in symptomatic or asymptomatic neonates with confirmed or suspected COVID-19.
- In neonates with severe covid pneumonia and MIS-C like features, by extrapolating evidence from Paediatrics , IVIG / Steroids are being tried in some case reports after the phase of viraemia( after 5 days of illness) and can be decided on a case to case basis.

IVIG ( 1g/ Kg) as slow infusion over 8-12 hours

Dexamethasone 0.15 mg/kg OD x maximum 10 days.

(or equivalent doses of prednisolone/methyl prednisolone /hydrocortisone).

In preterms, till CGA <40 weeks ,hydrocortisone is preferable. ( 0.5mg/kg BD x 7 days and followed by OD X 3 days)

### How long to maintain COVID Prevention protocol by COVID Positive Mothers

Mother with mild disease: afebrile for 72 hours without use of antipyretics, *and has completed* 17 days from onset of symptoms.

Mother with severe disease: afebrile for 72 hours without use of antipyretics, *and has completed* 21 days from onset of symptoms.

### Pre Discharge Screening in case of babies born to suspect/ confirmed mothers

Cord sample for TSH taken at birth.

Pulse oximetry screening at 24 hours. Will need a dedicated pulse oximeter for suspect/ confirmed cases.

Newborn Metabolic screen (NBS) by filter paper and OAE Hearing screening may be postponed till after 2 weeks or till the completion of isolation (as it being done in a common area).

Follow routine immunization policy in healthy neonates. BCG, OPV and Birth dose Hepatitis B vaccine can be given.

If baby symptomatic or sick Hepatitis B Vaccine should be given within 24 hours itself and

BCG/OPV can be delayed for 2 weeks.

### **Discharge policy**

Symptomatic COVID 19 positive neonates can be discharged 72 hours after resolution of symptoms. (No retesting required)

Critically ill Neonates can have re testing by Rapid Antigen Test before hospital discharge.

Asymptomatic babies may be discharged as per routine protocol and cared at home and followed up on case to case basis.

If mother is symptomatic, baby may be discharged to the care of a healthy caretaker.

Prior to discharge ensure that feeding is established, look for evidence of jaundice and explain the danger signs.

Give a phone number to contact for clearing doubts.

### *Reference:*

- Perinatal-Neonatal Management of COVID-19 Infection – Guidelines of the Federation of Obstetric and Gynaecological Societies of India (FOGSI), National Neonatology Forum of India (NNF), and Indian Academy of Pediatrics (IAP)
- *RCOG guidelines*
- *Contingency plan for the management of 2019 novel corona virus outbreak in neonatal intensive care units. (Lancet, Feb, 2020)*

### Annexure III

#### Guidelines for field functionaries to ensure all protection and prevention activities ( Paediatric age-specific)

When it comes to COVID Management, the list of field functionaries among children when attempted to list will be very long. It will start with ASHA Workers, Anganwadi Workers, Junior Public Health Nurses, Teachers from Kindergarten and schools, Doctors, Staff Nurses and Paramedical Staff from Primary Health Centers and other hospitals up to the level of Medical colleges and those working in OPDs and Emergency Department to ICUs and Operation Theaters all across all Specialties. Parents and other caretakers also will have to be addressed as they are primarily involved in the care of even sick children and otherwise in children with comorbidities. The guideline attempted will focus on general principles to be followed while on their field and hospitals' duties to prevent contracting infection and spread infection. Different settings considered are Home visits as part of routine follow up visits for newborn care, Young child care, promotion of Immunisation, Growth monitoring by ICDS, Immunisation sessions, Newborn screening at delivery points, RBSK screening in the field, etc.

#### **General Guidelines**

1. Healthcare workers and frontline workers should strictly follow and promote all COVID protocols at all possible instances while on duties and otherwise.
2. Whenever in contact with COVID positive patients, they should wear full PPE and in all other healthcare delivery settings should use appropriate protective equipment as instructed in earlier guidelines.
3. Strict infection control practices and COVID protocol should be observed in Immunisation clinics and follow the particular guidelines issued in this regard.
4. Field visits to see Newborn and Young child shall be done only following the Government instructions for activities allowed at different situations prevailing.
5. Newborn screening in delivery points shall be continued following COVID guidelines, avoiding crowding in screening corners, deferring screening for children of mothers who were positive for fourteen days and educating the family to follow COVID related guidelines.
6. Functioning of Anganwadies will follow the Government directions in this regard and will modify the functioning as per the guidelines issued by the Department and considering the local situation. Efforts will be taken to maintain the nutrition support program and identify any malnutrition cases through close follow-up with families.
7. RBSK screening in Anganwadi Centers and Schools will be carried out, observing strict COVID protocol following instruction issued by Government.
8. COVID Management guidelines, including Triage, referrals and management in different levels of facilities (Primary care Settings, FLTCs, Secondary and Tertiary care facilities) and Domiciliary care, will be issued by the Government. The management guidelines will include close primary contacts and suspected children with comorbid conditions awaiting test results.
9. The field level functionaries and Healthcare Workers should follow strict COVID protocols, including double masks in their houses while dealing with children to prevent contracting infections, especially when they happen to have suspected



contacts. Children in their homes should be encouraged to use masks and sanitize hands with soap and water or sanitizer regularly.

10. All care settings should have all prescribed commodities like Masks, Gloves, Sanitisers, PPE, Face shield, etc., in adequate quantities. It is the responsibility of supervisors like PHN, PHNS, Head Nurses and Doctors to ensure the stock through maintaining stock registers and to place genuine intend based on anticipated quantity to provide the services.

### **Guidelines for Field Staff**

1. JPHNs should carry out all regular activities like in-house or outreach immunisation sessions based on prior planning only. The schedule should be intimated to all concerned stakeholders well in advance for proper planning. Any change in schedule due to any inevitable situation also should be intimated.
2. All healthcare staff and Frontline workers should use appropriate protective equipment while in the field or institutions for the session. All are encouraged to use double masking if N 95 masks are not available.
3. ASHA Workers and AWW should take all efforts to intimate beneficiaries in advance and provide a schedule to prevent crowding at immunisation sessions. Connect with the families frequently and educate them on the protocols to be followed at the vaccination session site. Social distancing, Sanitisation, etc., should be ensured in vaccination sites, and caretakers should be encouraged to wear double masks when they come for the session. ASHAworkers should sanitise equipment used for growth monitoring after every use.
4. While on-field visit, special precautions to avoid contact with tested positive beneficiaries during the infective period or those on quarantine as per government guidelines without using adequate protective equipment. Service delivery may be ensured through higher centres by connecting them through the control room in the district.
5. Any danger signs identified among newborns or children should be escalated to appropriate centres without delay as briefed in the treatment guidelines issued by the Government to ensure the proper treatment.
6. Parents of those children on domiciliary care should be connected over the phone at least once a day, and the caretaker should be encouraged to communicate with area JPHN in case of any emergencies. The caretaker should be taught to pick early warning signs of complications or advanced symptoms by providing short videos and voice clips.
7. All those high-risk children with comorbidities like those with CKD and on dialysis, Congenital Heart diseases, Chronic Lung diseases, etc., should be under strict surveillance, and parents should be sensitised on preventive measures to adhere to.
8. A line list of children from those families where cases are reported may be prepared and kept for follow-up of patients if necessary. Families should be encouraged to early report in case of signs and symptoms of acute COVID infection or MIS-C.
9. Track the contacts of acute positive child cases from community, AWC, Schools, etc., and maintain a line list by each ASHA and subcenter for their population.
10. RBSK follow up for children with birth defects, Developmental delay, Chronic diseases and Disability shall focus on signs and symptoms of acute COVID infections

and MISC. The parents should be sensitised on the signs, symptoms and early warning signs by RBSK Nurses and maintain telephone communication at least on a biweekly basis and maintain records. The parents should be encouraged to follow COVID protocol strictly in their residence and outside.

11. While screening for RBSK conditions (4 Ds) during Immunisation sessions, RBSK Nurses should strictly adhere to all infection control practices and use appropriate personal protective equipment.
12. Growth and Development of all those children tested positive for COVID-19 may be closely monitored for next one year.
13. There should be a coordinated efforts with Panchayath level and district level Help Desks for patient referrals and addressing the concerns of family on case management, referral and psychosocial support.

### **Hospital Settings**

1. All hospitals should maintain surveillance of all children presenting with symptoms similar to acute COVID and follow the state guidelines for management. The information shall be forwarded to field level functionaries to empower them to do field follow up, contact tracing of other children if involved, etc. This should be done from both OPD and IPD.
2. All staff, including nursing, paramedical and auxiliary staff should be periodically trained to follow the state guidelines to ensure infection control practised in the pediatric wards and Intensive care facilities. Strict infection control practices should be followed especially while doing nebulisation and other sorts of aerosol-generating procedure, which may be very frequent and unavoidable in pediatric care settings.
3. All measures should be taken in hospitals to prevent mixing of children tested positive for COVID, suspected to have COVID and Primary contacts of COVID tested positive or suspected cases with children attending OPD, Laboratory or Pharmacy. Beds in wards should not be shared for such children in the general wards.
4. Specific directions to be issued to all concerned on rational use of antibiotics, Steroids and other drugs and based on the state issued guidelines only. There should be a system for monitoring the adherence to the protocol and treatment guidelines, especially on admission and referrals.

### **DEIC based care of Special Children**

1. Children who are on regular follow up through DEIC and requiring continuous therapy should be provided with therapy over available platforms like eSanjeevani through the designated OPD.
2. All consultations to DEICs should be based on prior appointment only and there should be a system established to get appointments to all those in need of services.
3. Parents should be encouraged to follow state protocols on reverse quarantine, social distancing, etc. and to avoid social gatherings.
4. DEIC staff should ensure strict COVID protocol within DEIC and outside as they are dealing with high risk vulnerable children and anyone with symptoms should avoid attending DEIC services and shall continue providing services through eSanjeevani portal.

**District Level and Block Level Field Officers**

1. Ensure that all guidelines and protocols are available to all field level functionaries and establish systems to monitor adherence to the systems and protocols for case management, referral, etc.
2. Arrange training and capacity building efforts and follow the instructions of State Training division on ensuring sensitisation and appropriate level of training to individual stakeholders carrying out different tasks.
3. Take appropriate corrective measures at the earliest possible point if any deviation from protocol is noticed and appropriate training to the staff in need. Proper planning for effective utilisation of resources in discussion with field level functionaries.