

# MANAGEMENT OF NEONATAL FLOW DURING THE COVID-19 PANDEMIC

A baby requiring admission to a neonatal unit will be delivered from a mother with a known COVID-19 test status, or from a mother awaiting COVID-19 test results. There is still insufficient data to confirm vertical transmission but is thought to be probable. However disease severity has been mild in neonatal cases and a number of reported deaths have been related to usual prematurity challenges.

**NEONATAL CARE SHOULD CONTINUE AS USUAL, WITH THE STAFF TAKING THE APPROPRIATE PRECAUTIONARY MEASURES. DELAYED CORD CLAMPING AND NORMAL RESUSCITATION AT BIRTH SHOULD CONTINUE.**

**BABY BORN TO MOTHER WHO IS COVID POSITIVE OR WHO IS SYMPTOMATIC AND AWAITING PCR TEST RESULT**

<b>TERM OR LATE PRETERM BABY BORN IN GOOD CONDITION</b>	<b>TERM OR LATE PRETERM BABY REQUIRING ADDITIONAL CARE</b> (E.G. IV antibiotics, HGT monitoring)	<b>PRETERM BABY OR SICK TERM BABY</b>
<ul style="list-style-type: none"> <li>• Room-in with mother</li> <li>• Designated nurse to look after mother and baby</li> <li>• Encourage breastfeeding</li> <li>• NO routine COVID-19 test needed unless baby symptomatic</li> <li>• Advise mother to self isolate with her baby for 10 days from birth once home</li> <li>• Isolate baby in an incubator if mother too ill to care for baby (Consider safest place according to staffing and occupancy—can be in the nursery away from other babies)</li> </ul>	<ul style="list-style-type: none"> <li>• Can you do it safely with the mother in isolation with dedicated nurse?</li> <li>• Encourage breastfeeding</li> <li>• Phototherapy in room</li> <li>• Give appropriate care within staffing constraints, and consider each case individually</li> <li>• NO routine COVID-19 testing needed unless baby is symptomatic or not following a normal course</li> <li>• Advise mom and baby to self isolate for 10 days from birth once home</li> </ul>	<ul style="list-style-type: none"> <li>• Isolate baby in a single room if possible</li> <li>• Nurse in closed incubator</li> <li>• Treat all neonatal conditions as per usual</li> <li>• If on CPAP keep expiratory limb inside the incubator</li> <li>• In line suction only if ventilated</li> <li>• Do not break circuit unnecessarily</li> <li>• Encourage mother to express breast milk and have it delivered to the unit</li> <li>• Continue normal neonatal care according to the neonatal condition</li> <li>• Do COVID-19 PCR at 24 hours of age—no repeat required</li> <li>• Isolate for 10 days from birth even if asymptomatic/negative (High risk contact) and then baby can be de-isolated</li> <li>• Parents may not enter neonatal unit for 10 days from admission and they both well.</li> </ul>

Baby born to a mother who is asymptomatic and awaiting routine PCR test result, and requires admission to a neonatal unit, should be isolated and managed as a suspected case in minimum of a closed incubator. Manage with contact and droplet precautions until maternal results are confirmed. Ideally parents should not visit until test results obtained, but if test result turn around time is long consider short visit with a surgical mask. If mother is negative baby can be de-isolated and managed as normal. The test result of the mother, once obtained, will determine how the baby is managed further, and do not routinely test the baby first.

A negative mother must be allowed access to her baby, normal skin to skin and normal care should continue. Parents must wear a cloth facemask for the duration of the visit. A positive mother does not need a negative test if well after 10 days isolation to enter NICU. Daily symptom checking/access control remains important, and all aspects of IPC are important.

<p><b>AEROSOL GENERATING PROCEDURES (AGP)</b></p> <ul style="list-style-type: none"> <li>• Intubation, extubation and all related procedures.</li> <li>• Less invasive administration of surfactant (LISA).</li> <li>• Non-invasive ventilation (NIV) e.g. SIPAP, CPAP</li> <li>• High Frequency Oscillatory Ventilation (HFOV)</li> <li>• High flow nasal oxygen (HFNO) <i>Do not place mask over babies face</i></li> </ul> <p style="text-align: center;"><i>NB Passing a OGT/NGT is not a AGP</i></p>	<p><b>PPE REQUIRED FOR BABY WITH AGP PROCEDURES I.E. CPAP, SIPAP, VENT &amp; HFOV AND HFNC (&gt;2L/KG)</b></p> <ul style="list-style-type: none"> <li>• N95 respirator</li> <li>• Visor</li> <li>• Gown and Apron</li> <li>• Gloves</li> </ul>	<p><b>PPE REQUIRED FOR BABY ON NASAL CANULA AND ALL OTHER NORMAL NEONATAL CARE</b></p> <ul style="list-style-type: none"> <li>• Surgical mask</li> <li>• Visor</li> <li>• Apron</li> <li>• Gloves</li> </ul>
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Due to a combination of likely low or undetectable viral load (even if the baby is infected) and small tidal volumes, resuscitation of the newborn, although an AGP, is not considered to carry a high risk of infection. Newborn life support is very different from adult resuscitation and this guidance is only applicable to newborn babies. (Excerpt from the European Neonatal Resuscitation Guidelines 2020).