COVID-19 - guidance for neonatal settings

Health Policy team
This page provides guidance for neonatal settings. It has been produced with the British Association of Perinatal Medicine (BAPM).

Status
Partnership

Last modified
13 July 2020

Post date
8 April 2020

Table of contents

- General principles
- Maternal admissions
- Neonatal team attendance in labour suite
- Term or late preterm baby born in good condition
- Term or late preterm baby requiring additional care
- Transfer to NNU
- Management on NNU
- PPE required for suspected or confirmed cases of COVID-19 being cared for within neonatal services
- Transport
- Testing and isolation of infants
- Postnatal contact on NNU with confirmed COVID-19 case
- Parents and visitors to NNU
- Breastfeeding by COVID-19 suspected or confirmed mothers
- Newborn screening
- Managing neonatal unit capacity
- Neonatal discharge and follow up
- Staff wellbeing
- Notes on this guidance
- Latest updates to this page
- Downloads

General principles
Recent UK data confirm earlier evidence suggesting that vertical transmission of SARS-CoV-2 is probable, although the rate is low.

- In the recent UKOSS study of pregnant women admitted to hospital with confirmed SARS-CoV-2 infection 243/427 women had given birth. 63 (26%) women delivered preterm; 46 of these babies required admission to a NNU of which five (0.02% of all live births) were extremely preterm (< 27 weeks’ gestation).
- The majority of preterm births (79%) were iatrogenic; 58% of these were due to maternal COVID-19, 18% due to fetal compromise and 24% due to other obstetric conditions. Three babies were stillborn and two died in the neonatal period – neither of the neonatal deaths was attributed to SARS-CoV-2.
- Twelve (5%) of the infants tested positive for SARS-CoV-2 RNA, six of these within the first 12 hours of birth. Three infants with serum IgM antibodies detected in cord blood tested negative for SARS-CoV-2 RNA and they were all asymptomatic.

In addition to immediate perinatal acquisition of virus, the newborn may become infected after birth, either from their mother, another family member or within the hospital setting. Infected infants will be potentially infectious, emphasising the importance of infection control measures around the time of birth and during the neonatal period. To date, viral RNA has not been detected in amniotic fluid, vaginal secretions or breast milk.

In older children and adults, the risk of transmitting infection is greatly increased by aerosol generating procedures (AGPs); this has particular relevance in neonatal settings, where CPAP and high flow oxygen therapies are commonly used.

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. Given the rapid increase in prevalence of COVID-19 infection, and understandable concerns expressed by both medical and midwifery staff, RCPCH fully supports the recent national recommendation for use of full personal protective equipment (PPE) (including a FFP3 mask) in resuscitation of newborns born to COVID-19 suspected or confirmed mothers. In some cases, particularly when the prevalence of COVID-19 is high, Trusts may recommend that full PPE is worn by persons attending all deliveries, even if the mother is asymptomatic. There is recent evidence that in high prevalence areas a significant number of pregnant women may have asymptomatic SARS-CoV-2 infection.

We encourage units to participate in ongoing data collection by the BPSU and additionally any relevant research studies, which may include tests to establish whether vertical transmission is significant (e.g. cord blood samples, PCR tests on amniotic fluid, respiratory secretions, urine and faeces, etc.).

**Maternal admissions**

- Women with proven or suspected COVID-19 who require admission for midwifery care should be admitted to a dedicated room in the labour suite or directly to an obstetric theatre if immediate emergency management is required.
- The neonatal team should be informed as soon as possible of this admission and the resuscitaire and room equipment should be checked before the mother enters the room.
Intubation of the mother for a GA Caesarean section is a significant aerosol generating procedure (AGP); the use of Entonox and maternal pushing during labour are not considered AGPs.

Suctioning, bag mask ventilation and intubation of the newborn are AGPs, although the absolute risk to health care workers performing these manoeuvres on newborn infants is thought to be low.

Commonly used equipment for neonatal resuscitation and stabilisation should be readily available (e.g. located in disposable grab bags) to avoid taking the full resuscitation trolley into the room unless required.

A dedicated pulse oximeter should be located on the resuscitaire to avoid moving equipment in and out of the delivery room unnecessarily.

The appropriate Personal Protective Equipment (PPE) must be worn by any person entering the room and only essential staff should be present in the delivery room/theatre.

All women with confirmed or suspected COVID-19 should have continuous cardiotocography monitoring in labour.

There is no evidence to suggest that steroids for fetal lung maturation cause any harm in the context of COVID-19. Steroids should therefore be given to mothers anticipating preterm delivery where indicated and urgent delivery should not be delayed for their administration (as normal practice).

MgSO4 should be given for neuroprotection of infants < 30 weeks’ gestation as per current guidance.

Deferred cord clamping is recommended provided there are no other contraindications.

The baby can be dried as normal while the cord is still intact. In the case of a preterm baby, standard thermoregulatory measures including the use of a plastic bag should be used.

**Neonatal team attendance in labour suite**

- A designated member of the neonatal team should be assigned to attend suspected/confirmed COVID-19 deliveries, if required. It is important that any neonatal staff attending have the required capabilities to deal with anticipated likely complications, to minimise staff exposure. Local units should make their own arrangements for designating staff, but more senior involvement may be required than is usual for the type of delivery.
- PPE should be donned in an adjacent room and the team member should wait outside the delivery room, ready to be called in should the baby require any intervention(s).
- If it is anticipated that the baby will require respiratory support, appropriately skilled neonatal team members should be present at delivery and wearing PPE.
- Neonatal resuscitation/stabilisation should proceed as per current [NLS / ARNI](#) guidance, including their [guidance for newborn infants born to mothers with suspected/confirmed COVID-19](#) and the [European Resuscitation Council COVID-19 guidelines](#).
- If additional equipment is required, this can be passed to the team by a ‘clean’ staff member outside the room.
- [Guidance is available on safe transfers between departments](#), but neonates should be transferred in a closed incubator if on respiratory support. Try to place the CPAP expiratory limb inside the incubator. Where possible, all procedures and investigations should be carried out in the single room with a minimal number of staff present.
**Term or late preterm baby born in good condition**

- Well babies born to suspected/confirmed COVID-19 mothers and who do not require medical intervention should remain with their mother in their designated room. See RCOG guidance for more detail.
- Current guidance is that well babies of COVID-19 positive mothers should only be routinely tested if unwell.
- If the mother needs assistance in caring for her baby this would usually be provided by the attending midwife – when a mother is acutely unwell, an alternative non-quarantined carer/relative should be identified to provide care for the baby at home or in a designated room not in the neonatal unit (NNU). In the latter case the baby should be isolated from their mother.
- Appropriate PPE should be used by all healthcare personnel, both when attending the mother and when examining or caring for the baby.
- NIPE should be completed before discharge – this is not an AGP and visualisation of the soft palate should be performed as usual.
- Where appropriate, early discharge of the baby with a parent or carer, including safety netting advice should be facilitated. This will require close liaison with community midwifery services. The family should be advised to self isolate with the baby for 14 days from birth.

**Term or late preterm baby requiring additional care**

- Well babies born to suspected/confirmed COVID-19 mothers and who require additional care (e.g. intravenous antibiotics) should be assessed in the labour ward and a decision made as to whether additional care can safely be provided at the mother’s bedside. Avoid NNU admission if possible and safe.
- Babies requiring admission to the NNU should be assessed in a designated area in the NNU by an appropriately skilled neonatal team member wearing appropriate PPE.

**Transfer to NNU**

- Public Health England has provided guidance on transfers to other departments.

**Management on NNU**

- For babies born to suspected/confirmed COVID-19 positive mother who require to be admitted to the NNU, clinical investigations should be minimised while maintaining standards of care. Senior input is recommended when deferring routine investigations and in prioritisation of work. Consider ways to reduce unnecessary investigations – e.g. use of point of care testing.
- Although the risk of transmission from AGPs within the first 24 hours after birth is thought to be low, staff should follow guidance regarding use of appropriate PPE, even in an emergency.
- All babies requiring respiratory support should be nursed in an incubator.
- In-line suction with endotracheal tubes should be used when staff are familiar with this.
• The use of a video-laryngoscope should be considered for intubation when available, as this might facilitate keeping the baby within the incubator. Reducing proximity to the baby’s airway may also help to reduce exposure to the virus. Intubation should only be undertaken by staff with appropriate competencies.
• Remember that CPAP and high flow therapies (≥2 l/min) are AGPs and their use will necessitate full PPE including FFP3 masks. The expiratory limb of the CPAP circuit should be placed in the incubator whenever possible.
• With the exception of the need for FFP3 masks, management of the baby’s respiratory illness should be the same as if they were not potentially exposed to COVID-19. The evidence in favour of early intubation is limited to adults and older children.
• All equipment coming out of the isolation room should be cleaned as per Trust COVID-19 cleaning policy.
• A register must be kept of all staff entering the room.

PPE required for suspected or confirmed cases of COVID-19 being cared for within neonatal services

This guidance should be read in conjunction with nationally agreed recommendations for PPE for care of women with known or suspected COVID-19 in labour and for personnel working in intensive care settings.

Appropriate PPE requirements are determined largely by the presence or absence of AGPs.

Within a neonatal context, these would include:

• Intubation, extubation and related procedures, e.g. manual ventilation and open suctioning of the respiratory tract (including the upper respiratory tract). Less invasive administration of surfactant (LISA).
• Tracheotomy/tracheostomy procedures (insertion/open suctioning/removal)
• Non-invasive ventilation (NIV) e.g. Bi-level Positive Airway Pressure Ventilation (BiPAP) and Continuous Positive Airway Pressure (CPAP)
• High Frequency Oscillatory Ventilation (HFOV)
• High flow nasal oxygen (HFNO)

Note: During administration of nebulised medication, the aerosol derives from a non-patient source (the fluid in the nebuliser chamber) and does not carry patient-derived viral particles.

Note: Passing a nasogastic tube is not an AGP.

Note: PHE currently are reviewing the list of AGPs.

Labour ward
Performing a single AGP if suspected or confirmed COVID-19 in mother:

<table>
<thead>
<tr>
<th>Disposable gloves</th>
<th>Disposable plastic apron</th>
<th>Disposable fluid-resistant gown</th>
<th>Fluid-resistant (Type IIR) surgical mask</th>
<th>Filtering face plate (FFP3) respirator</th>
<th>Eye protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single use</td>
<td>Single use</td>
<td>Single use</td>
<td>Single use</td>
<td>Single use</td>
<td>Single use</td>
</tr>
</tbody>
</table>

Attending a delivery to review a newborn not requiring respiratory support and no AGP performed on mother or baby (e.g. counselling mother immediately before delivery or reviewing following delivery):

<table>
<thead>
<tr>
<th>Disposable gloves</th>
<th>Disposable plastic apron</th>
<th>Disposable fluid-resistant gown</th>
<th>Fluid-resistant (Type IIR) surgical mask</th>
<th>Filtering face plate (FFP3) respirator</th>
<th>Eye protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single use</td>
<td>Single use</td>
<td>Single use</td>
<td>Single use</td>
<td>Risk assessed*</td>
<td>Risk assessed*</td>
</tr>
</tbody>
</table>

*likelihood of splashing

**NNU Intensive and High Dependency Care**

Working in intensive care or high dependency areas, where there are suspected or confirmed cases and respiratory support meets the definition of an AGP (e.g. IPPV, CPAP, etc.):  

<table>
<thead>
<tr>
<th>Disposable gloves</th>
<th>Disposable plastic apron</th>
<th>Disposable fluid-resistant gown</th>
<th>Fluid-resistant (Type IIR) surgical mask</th>
<th>Filtering face plate (FFP3) respirator</th>
<th>Eye protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single use</td>
<td>Sessional use</td>
<td>Sessional use</td>
<td>Sessional use</td>
<td>Sessional use</td>
<td>Sessional use</td>
</tr>
</tbody>
</table>

**Notes:**

- **Single use** refers to disposal of PPE or decontamination of reusable items, e.g. eye protection or respirator, after each patient and/or following completion of a procedure, task, or session; dispose of or decontaminate reusable items after each patient contact as per Standard Infection Control Precautions (SICPs).
- **Sessional use** refers to use during a period of time where a health care worker is undertaking duties in a specific care setting/ exposure environment, e.g. on a ward round; providing ongoing care for inpatients. A session ends when the health care worker leaves the care setting / exposure environment. Sessional use should always
be risk assessed and considered where there are high rates of hospital cases. PPE should be disposed of or decontaminated after each session or earlier if damaged, soiled, or uncomfortable.

NNU Low Dependency areas and Post-natal wards

Working in lower dependency inpatient areas (no AGPs) with suspected or confirmed cases - direct patient care (within 2 metres):

<table>
<thead>
<tr>
<th>Disposable gloves</th>
<th>Disposable plastic apron</th>
<th>Disposable fluid-resistant gown</th>
<th>Fluid-resistant (Type IIR) surgical mask</th>
<th>Filtering face plate (FFP3) respirator</th>
<th>Eye protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single use</td>
<td>Single use</td>
<td>Sessional use</td>
<td>Risk assessed**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*if the apron is too small to protect the uniform from splashing, then a full surgical gown should be used - either a fluid resistant gown or a non-fluid resistant gown plus an apron.

**likelihood of splashing

If an infant is in a lower dependency area but their condition deteriorates such that they require respiratory support (AGP), the staff caring for the infant need to don the appropriate PPE (see Intensive and High Dependency areas, above). In the event of acute collapse, requiring urgent airway / respiratory support, full PPE should be donned before undertaking intubation. If the baby does not respond to airway positioning and facial oxygen and is being nursed in an incubator, it would be reasonable to undertake bag mask ventilation wearing a fluid-resistant (Type IIR) surgical mask while waiting for other staff to don full PPE (FFP3).

Infants whose mothers are not suspected of having COVID-19

The PHE guidance allows individual hospitals to set PPE requirements for staff caring for patients who are not suspected of having COVID-19; the requirements will vary between hospitals and is dependent upon the extent of local sustained transmission of COVID-19, taking into account individual risk assessment for this new and emerging pathogen (see Table 4, under ‘NNU Low Dependency areas and Post-natal wards’).

Transport

- Transfers of babies should be limited to a minimum.
- Level 2 units should endeavour to keep the vast majority of their babies as per network escalation policies.
- Exposure to COVID-19 in itself is not a reason to transfer.
- A link to information from the Neonatal Transport Group is available from the BAPM website (see ‘Resources’ > ‘Neonatal Transport during COVID-19’)
Testing and isolation of infants

General principles

- With the increase in testing capacity, it is anticipated that all NHS hospital inpatients will be screened for SARS-CoV-2 on admission. Screening of all mothers on admission to hospital for delivery is intended primarily to inform maternity teams but has implications for clinicians caring for the infant; systems should ensure results are communicated between maternal and neonatal clinical teams.
- Performing nasal swabs on asymptomatic newborn infants may result in false negative results and so applying a blanket screening policy for infants admitted to NNUs is not recommended.
- Depending on the local prevalence of SARS-CoV-2, it may be prudent to screen babies re-admitted to a NNU or transitional care unit from home; testing is essential if the mother is known to be SARS-CoV-2 positive.
- Asymptomatic infants who are SARS-CoV-2 positive, are unlikely to transmit the virus, providing everyone adheres to basic hygiene measures.
- While not necessarily contributing to clinical management, obtaining early viral swabs from the baby of a confirmed or suspected COVID-19 positive mother has potential to help build the evidence base in regards to vertical transmission. An early negative swab should not be considered definitive.
- Viral RNA may be detectable in stools for several weeks, but this does not mean that the faecal material is necessarily infective; providing carers adhere to basic hygiene measures, the risk is not thought to be significant.
- It is anticipated that with the development of reliable IgM/IgG testing, the optimal mode and timing of testing in order to detect or exclude vertical transmission at the earliest opportunity will inform future isolation decisions. Any samples taken and stored for potential testing of IgM/IgG should be done so with written parental consent.
- The ability to isolate many potentially infected infants is likely to be limited. The described approach is therefore risk-based, realising that most risks are inferred, rather than known.

The initial sections of the following guidance on testing and isolation applies to infants born to symptomatic suspected or confirmed COVID-19 positive mothers. The later sections outline the approach to managing infants born to asymptomatic mothers.

NNU admissions (symptomatic mother)

- Infants of COVID-19 infected or suspected mothers should initially be isolated, if they require admission to the NNU.
- There is no clinical indication for routine testing on admission unless they display signs or symptoms fitting the case definition.
- If suspected mother tests negative, the infant can be moved out of isolation and treated as normal – no further testing of the infant is required.
- **Note:** newborn infants may not show all the features of an influenza-like illness, particularly a fever, so clinicians should have a high index of suspicion in all infants admitted to the NNU and monitor for signs of respiratory illness during the admission.
Infant admitted to NNU for reasons other than suspected sepsis or respiratory distress:

- Admit into isolation room (or a cohort room, but not open nursery).
- Nurse in an incubator and observe for signs of respiratory distress or sepsis.
- The infant can be moved out of isolation or cohort room if they remain asymptomatic after 72h but should stay in an incubator for 14 days from birth.
- If the infant becomes unwell, move back into isolation room and test.
- If clinically well at 14 days, infant can be moved into an open cot, if appropriate.
- Infants can be discharged home if their neonatal problem has resolved and they no longer require NNU care (i.e. treat as a well baby).
- Parents should be advised to continue isolation of the infant at home until 14 days from birth.

Infant admitted to NNU for unanticipated respiratory support:

- Admit the infant into an isolation or cohort room and test on admission, at 72 hours and (if previous samples negative) again on day 5.
- The decision to move out of isolation is determined primarily by the clinical status of the infant rather than the test result. Asymptomatic positive infants are unlikely to transmit the virus, providing everyone adheres to basic hygiene measures.
- Infants can therefore be moved out of isolation once their respiratory symptoms settle and they no longer need respiratory support. Infants should however remain in an incubator for the first 14 days, even if asymptomatic, before being nursed in an open cot.

Infant admitted to NNU and requiring respiratory support for an anticipated respiratory condition (e.g. respiratory distress syndrome (RDS) in a preterm infant):

- Admit the infant into an isolation room. If the respiratory condition is following the anticipated clinical course, wait until 72 hours to perform PCR test, repeat the test on day 5 (delaying and repeating the tests may reduce the false negative rate). If the respiratory condition appears atypical, then the infant should be tested earlier, with repeat testing on day 5.
- If the requirement for respiratory support resolves within the first 14 days, infants can be moved out of isolation; they should remain in an incubator for the first 14 days, even if asymptomatic, before being nursed in an open cot.
- In cases where the requirement for respiratory support persists beyond 14 days, providing the respiratory illness was anticipated and following a typical clinical course for a non-COVID-19 pathology (e.g. RDS), the test results will determine when to move out of isolation:
  - If the tests at 72 hours and on day 5 are negative and the requirement for respiratory support continues, infants can be moved out of isolation at 14 days, provided they are following a typical clinical course for a non-COVID-19 pathology.
  - If the tests at 72 hours and on day 5 are positive and the requirement for respiratory support continues beyond 14 days, infants should remain in isolation whilst receiving any respiratory support that is classified an AGP, until they have
had two negative PCR tests, performed at twice-weekly intervals. Following two negative PCR tests, they can be moved out of isolation, but they must remain in an incubator whilst requiring any AGP.

**Infants born to asymptomatic mothers**

Following the implementation of routine screening of all mothers on admission to maternity units, there will be three groups of infants: those whose mothers test positive, those where the maternal test result is awaited and those whose mothers test negative.

**Asymptomatic mothers who test positive**

- The infant should be tested, isolated and managed according to the guidance above for infants born to symptomatic suspected or confirmed COVID-19 positive mothers.

**Asymptomatic mothers whose test is awaited**

- The likelihood of an asymptomatic mother testing positive will be determined by local prevalence of SARS-CoV-2.
- Infants awaiting maternal test results who require NNU admission for reasons other than respiratory distress do not need isolating, although it would be reasonable to place them in a cohort room with other infants whose mothers are awaiting test results, if facilities permit. They should be nursed in an incubator and monitored for signs of COVID-19 (see case definition and note, above). If the infant develops signs, or if the mother’s test result is reported as positive, they should be isolated and tested (see guidance in preceding sections).
- For infants awaiting maternal test results who require respiratory support (AGP) for an anticipated non-COVID-19 respiratory pathology (e.g. RDS), the decision to isolate pending the result of the maternal SARS-CoV-2 test will depend upon the local prevalence of asymptomatic maternal COVID-19 and Trust policy. The infant should be nursed in an incubator and it may be reasonable to place them in a cohort room with other infants awaiting test results on their asymptomatic mothers, if facilities permit. If there is a high local rate of asymptomatic maternal COVID-19 or if the infant’s clinical course is a cause for concern, the infant should be tested and isolated.

**Asymptomatic mothers who test negative**

- Infants of SARS-CoV-2 negative mothers who are admitted for reasons other than respiratory distress do not need isolating, but, as with all admissions, they should be monitored for signs of COVID-19 during their admission. If they develop signs, they should be isolated and tested.
- If infants of SARS-CoV-2 negative mothers meet the case definition only by virtue of requiring early respiratory support for an anticipated non-COVID-19 respiratory pathology (e.g. RDS), the likelihood of the infant being SARS-CoV-2 positive is extremely low. If there is subsequently clinical concern that an infant is not following a typical clinical course for an anticipated non-COVID-19 respiratory pathology, or that the mother has developed symptoms, both the mother and infant should be tested.
- Remember to also investigate and treat for non-COVID-19 pathologies (e.g. sepsis).
Postnatal contact on NNU with confirmed COVID-19 case

- It would be prudent to consider nursing the baby in an incubator and observing for signs of respiratory distress or other features that might suggest neonatal COVID-19 for the next 14 days (or discharge, whichever occurs first). If the baby develops signs, they should be tested and isolated.

Parents and visitors to NNU

- Parents should be able to participate in the care of their child and should be treated as part of the therapeutic team; this includes both NNU and transitional care facilities.
- In order to properly involve parents in decision making about their baby’s care, neonatal units should identify how to facilitate their presence at all times of day, including on ward rounds, while maintaining social distancing within the NNU. The benefits of extended parental contact, including skin to skin care and active involvement in their baby’s care are well documented, as are the long-established advantages of breast feeding. At such a stressful time, it is important for both parents to be able to be present together, at least for part of the day, unless such practice would be clearly detrimental to other babies and/or staff in the NNU or TCU.
  - More information on breastfeeding, as part of a rapid analytic review into optimising mother-baby contact and infant feeding in a pandemic, has been developed by the Royal College of Midwives (RCM) Professional Advisory Group. This document is available to download at the bottom of this page.
- Although incubators do not need to be separated by 2 metres, neonatal units will need to consider how they enable recommended social distancing for both staff and parents. Measures might include parents being asked to wear face coverings, provision of face masks +/- additional PPE, and the spatial configuration of nurseries. There should be readily available hand washing facilities and alcohol gel.
- The risk of SARS-CoV-2 transmission will vary between settings and must be balanced with potential harm to parent-infant relationships and infant development if parents' faces are always covered in the neonatal setting.
  - For example, given that that parents and their baby form one family "bubble", it seems unlikely that parents wearing face coverings at the cot side offers significant additional protection to their baby if they are sufficiently spaced from other parents/visitors and staff.
  - Given incubators do not need to be separated by 2 metres (see above), units may wish to consider limiting the number of visitors from different bubbles at any one time to ensure that there is enough space between them.
- When determining their policies around parents/visitors and PPE, Trusts should also consider the geographical space limitations of the neonatal ward, ward capacity and local transmission rates.
- Parents and other family members facilitating parental attendance should follow national guidance regarding face coverings. NNUs should provide face masks to parents if they are unable to supply their own.
- NNUs may have to restrict visiting in order to reduce risk of infection particularly when there is evidence of sustained local community transmission. Parents should not be viewed as visitors however, and any parental restrictions should be exercised only
when absolutely necessary, as a temporary and proportionate response to a peak in viral transmission.

- It is anticipated that all mothers, whether symptomatic or asymptomatic, will be tested for SARS-CoV-2 when they attend hospital for delivery (see the previous section on infants born to asymptomatic mothers).
- The same arrangements for testing should be offered to parents as are applied to staff, in order to minimise unnecessary separation; this includes testing of parents who develop symptoms and testing of suspected contacts.
- Asymptomatic mothers should be allowed to attend her baby in the nursery, whilst awaiting their SARS-CoV-2 screening test, and to provide skin to skin care (see guidance under testing of asymptomatic mothers).
- If the screening test result for an asymptomatic mother is subsequently found to be positive, the mother and baby should be treated according to the guidance in the previous section (symptomatic mothers). It must be remembered that the risks posed by asymptomatic mothers who are subsequently found to be SARS-CoV-2 positive on screening will probably be similar to the risks posed by NNU healthcare workers, if they are drawn from communities with similar rates of vital transmission.
- SARS-CoV-2 positive parents should not be present with their baby on the NNU until 7 days after the onset of illness / receipt of positive test result and they are asymptomatic.
- Partners of SARS-CoV-2 positive mothers must adhere to current national advice regarding self-isolation.
- Visits from other NHS staff and personnel to the NNU should be kept to a minimum – consider opportunities for remote meetings.
- Units should seek to mitigate loss of family contact with video techniques.
- Parental vulnerability may be heightened by the current pandemic; remember to signpost parents to available resources for support. The importance of working in cooperation with maternity services to ensure maternal well-being cannot be over emphasised.

Breastfeeding by COVID-19 suspected or confirmed mothers

- Viral RNA has not, to date, been detected in breast milk of COVID-19 confirmed mothers. The dataset is, however, small.
- Current national advice for well babies of COVID-19 suspected or confirmed mothers is that the benefits of breast feeding outweigh any theoretical risks. For unwell or preterm babies in the NNU the evidence is less clear.
- Breastfeeding and formula feeding by the mother is permissible, but mothers should be advised regarding hand washing and should wear a fluid-resistant (Type IIR) surgical mask (FRSM) while handling the baby.
- Practitioners need to make a balanced decision around provision of expressed milk to babies in the NNU. This decision should be informed by factors including the gestation and clinical condition of the baby, the availability of donor breast milk and parental choice. Other coronaviruses are destroyed by pasteurisation. Further information is available from the European Milk Bank Association position statement.
- COVID-19 positive mothers who are expressing milk must be facilitated to practise excellent hand hygiene, and care must be taken to ensure that bottles containing EBM
are not externally contaminated. EBM of COVID-19 suspected or positive mothers should not be stored with EBM from non-infected mothers. Mothers should have a designated breast pump for exclusive use. NNUs should have clear guidelines around handling, storage and use of EBM in these circumstances.

- If it is decided to withhold mother’s own breast milk, the mother should be encouraged to express and discard her milk, to maintain lactation until she is likely no longer infectious (7 days after onset of symptoms). Repeat testing of mother is not necessary.
- More information on breastfeeding by COVID-19 suspected or confirmed mothers, as part of a rapid analytic review into optimising mother-baby contact and infant feeding in a pandemic, has been developed by the Royal College of Midwives (RCM) Professional Advisory Group. This document is available to download at the bottom of this page.

**Newborn screening**

- Newborn Infant Physical Examination (NIPE) should be completed prior to discharge for all babies. This is not considered an AGP including, if necessary, use of a tongue depressor to facilitate inspection of the palate.
- Newborn Blood Spot (NBS) screening should take place as usual.
- Audiology screening should continue in maternity units and on the NNU if staffing resources permit.
- The ability to perform investigations and tests once the infant has left hospital will be restricted; for example, newborn hearing screening in the community, bringing infants back for echocardiograms, etc. Thus, where possible, investigations and tests should be performed before discharge from the maternity or neonatal unit. Maternity units should aim to maintain sufficient staffing in order to perform the necessary screening before discharge.

**Managing neonatal unit capacity**

- It is anticipated that NNU capacity may become problematic either due to cot capacity or staff availability. Individual units should have agreed staffing plans when optimal staffing plans cannot be achieved.
- Cohorting of confirmed positive cases may be necessary and should follow local guidance.

**Neonatal discharge and follow up**

- All measures aimed at early discharge from the NNU should be upscaled and visits by community liaison staff to the NNU kept to a minimum.
- Consider telephone / video consultations for neonatal follow up, where possible, to avoid vulnerable infants with chronic lung disease, etc., attending clinics.
- Advice should be provided to parents of those infants at increased risk (e.g. immunocompromised, oxygen dependent chronic lung disease, cardiac disease) about reducing risk of infection (reduce social contact, handwashing) and interventions aimed at preventing other diseases (e.g. immunisations) should be optimised.
- Parents who telephone NNUs for help should receive experienced advice, with the aim of minimising direct contact with either neonatal or paediatric services while ensuring
adequate safety netting.

- You may find it helpful to give new parents the NHS leaflet for new parents in the context of COVID-19. NHS Scotland have also produced a leaflet for new mothers on how to identify COVID-19 in newborns and reduce the risk of their baby catching the virus which is available to download at the bottom of this page.

Staff wellbeing

- There is no need for staff to self-isolate after looking after a suspected or confirmed case of COVID-19 if correct PPE precautions have been taken.
- Any staff concerns regarding contact with a possible case should be discussed with local occupational health departments.
- If/when redeployment of staff is necessary, this must be agreed at senior level and staff appropriately supervised and supported. See supporting doctors guidance and advice from HEE.

Notes on this guidance

This guidance has been produced with the British Association of Perinatal Medicine (BAPM).

An FAQ document from BAPM is available on their resources page; the latest update was published on 24 April. It has been developed according to feedback from perinatal professionals and offers advice on the management of specific situations, supplementing this RCPCH / BAPM guidance. It should be interpreted in conjunction with local and network guidance.

Latest updates to this page

Updates on this version (13 July):

- Neonatal discharge and follow up: Updated information and links on leaflets available for new parents

Updates in version 29 June:

- Parents and visitors to NNU: additional information on face coverings and other PPE
for parents and visitors.

Updates in version 24 June:

- Parents and visitors to NNU: updated RCM breastfeeding review information and download added.
- Breastfeeding by suspected or confirmed COVID-19 mothers: RCM breastfeeding review information added.

Updates in version published 11 June:

- Parents and visitors to NNU: Updated recommendations on face coverings for parents and visitors.

Downloads

- NHS Scotland COVID-19 leaflet for new mothers 993.17 KB
- Optimising Mother Baby Contact and Infant Feeding in a Pandemic v2.pdf 579.65 KB