British Association of Perinatal Medicine

Covid-19 Pandemic Frequently Asked Questions within Neonatal Services

Updated January 2022

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Note 10/1/22:

Because of the rapidly changing guidance around self-isolation and differences between the devolved nations, the sections on self-isolation have been highlighted but not revised and we advise that the FAQs should be read in conjunction with current national and local Trust advice around testing and self-isolation.

An addendum on key new developments has been added to the front of the document.

All feedback to the BAPM Office is warmly welcomed.

January 2022 Version Updates:

Date	Page	Changes made
13/01/22	4, 7	Acknowledgement of neonatal deaths in Delta wave
	7	Amendment to BPSU surveillance criteria
	10	Update to recommended period of self-isolation for an asymptomatic positive mother who remains in hospital
	18	Text removed that said lateral flow tests should be administered and recorded by a trained personnel.
	19	Immunisation advice added
10/01/22	3	Addendum Added
	20	Reference 10 updated to Reflect December 2021 Guidance
	Throughout document	Previously agreed specific periods of isolation may have been amended – please check current local and national guidance

Previous Version: September 2021

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Addendum 10/1/22

Amendments to rules for self-isolation

National guidance around self-isolation, both following confirmed SARS-CoV-2 infection and following contact with a confirmed case, is currently not aligned throughout the UK and is changing frequently as the implications of the Omicron variant are better understood. We have therefore not updated this advice within the FAQs and refer you to current relevant local and national guidance. It remains our stance that parents are partners in their baby's care and should be treated in the same way as neonatal staff in terms of testing and self-isolation.

In the rare event of an asymptomatic SARS-CoV-2 positive mother remaining in hospital for an extended period after delivery, national guidance at the time of publication is for a 14-day period of isolation. Evidence, including data obtained during the pandemic, has shown that separation of mother and baby is harmful. The risk of the mother attending the NNU after the standard period of isolation (currently 7 or 10 days) should be weighed against the risk of keeping the baby separated from their mother.

Illness in the neonate

While significant illness directly attributable to SARS-CoV-2 infection in the neonate remains extremely uncommon, there are now four UK reports of neonatal death attributable to either neonatal infection alone or a combination of neonatal and maternal infection. These were all during the Delta variant wave.

Infant vaccine guidance

Babies born to mothers who have received immuno-modulation therapy for the treatment of Covid in pregnancy should not be offered live vaccines (BCG and/or rotavirus) during the first six months of life. Relevant maternal treatments include tocilizumab and sarilumab, but not Ronapreve.

Staffing issues

BAPM recognises the extreme staffing pressures across many services, resultant upon the pandemic, particularly short notice staff absence. We thank all dedicated perinatal staff who have come together to continue to provide first class neonatal care across the UK throughout the past two years and urge managers to be as supportive as possible, particularly when recommended nurse staffing ratios simply cannot be met. Where difficult decisions have to be made, our existing guidance on cot capacity may be helpful.

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Introduction

This document and all previous versions were compiled by consensus, considering feedback from perinatal professionals and guidance from both RCPCH and RCOG, as well as national guidance on dealing with the COVID pandemic. We offer advice on management of specific situations which should be interpreted in conjunction with local and network guidance relevant to current societal restrictions. The evidence base around SARS-CoV-2 in the newborn has increased significantly in the past year and a half; while there are now some data to indicate the possibility of perinatal transmission and four UK reports of neonatal death attributable to SARS-CoV-2 during the Delta wave, severe illness in the newborn remains very rare. Maternal COVID is, however, associated with increased risk of stillbirth and preterm birth and there is very clear evidence that pregnant and breast feeding women should be encouraged to accept immunisation. Data are emerging regarding the negative impact on both babies and families of access and PPE restrictions imposed during the pandemic, which must be balanced against the changing risk of infection with SARS-CoV-2.

We are grateful for input from many colleagues across the UK including the RCPCH Expert Group, established early in the pandemic to provide COVID-19 guidance for all paediatric services. We have worked closely with the team at Bliss and are particularly appreciative of their support in facilitating parental presence in the neonatal unit (NNU). Thanks are due to Liz Pilling for providing the flow charts and to those neonatal practitioners who have provided feedback.

This latest amendment includes an update on published evidence and advice on COVID vaccination in pregnancy. We highlight the risk of collateral damage from policies adversely impacting on parental and extended family presence in the NNU, including the wearing of face coverings. As partners in care, parents should be treated in the same way as NNU staff in terms of testing and self-isolation; national guidance on self-isolation is quoted as of August 2021 but you are advised to ensure that this has not been amended. Any potential risk to patients of fully immunised neonatal staff returning to work within 10 days of potential contact with SARS-CoV-2 must be weighed against the risks of suboptimal NNU staffing numbers and increased *in utero* and/or neonatal transfers.

Our advice is aligned to the 4 nations' IPC guidance; membership of the IPC cell includes Scottish Government HAI policy Unit, National ARHAI Unit Scotland, Public Health Wales, Public Health Agency Northern Ireland, Public Health England and National Ambulance Service.

We hope that you will find this updated document and associated flowcharts useful as you continue to care for babies and families in the "new normal" following the peak of the COVID-19 pandemic; please continue to feedback suggestions for amendments. This document supersedes all previous versions of BAPM COVID-19 FAQs and other RCPCH guidance.

Dr Helen Mactier, on behalf of the BAPM Executive Committee, September 2021

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Background

Perinatal transmission of SARS-CoV-2 is very rare [1-2]. Affected pregnancies are, however, more likely to result in stillbirth or preterm birth (adjusted odds ratios 2.21; 95% confidence interval 1.58-3.11 and 2.17; 95% confidence interval 1.96-2.42 respectively) [3-4].

COVID-19 seems generally to be a fairly minor illness in young infants and may be asymptomatic. Infected infants will however be potentially infectious. Concerns that illness might be more severe in preterm or otherwise immune compromised babies have not been realised to date, with no deaths attributable to SARS-CoV-2 reported in neonates in the UK between March and April 2020 [5-6]. Four neonatal deaths attributable to either neonatal or a combination of maternal and neonatal SARS-CoV-2 infection have been reported in the Delta wave. The risk of staff and/or babies becoming infected within the neonatal unit (NNU) is extremely rare if appropriate hygiene precautions are practised [7,8].

The risk of transmitting SARS-CoV-2 infection is increased by aerosol generating procedures (AGPs); this has particular relevance in neonatal settings, where CPAP and high flow oxygen therapies are commonly used. It is generally accepted that the combination of low or undetectable viral load and small tidal volumes makes AGPs in the first day of life very low risk, even for babies born to a symptomatic mother with suspected or confirmed COVID-19. Use of aerosol PPE by the neonatal team at delivery when the mother is symptomatic with suspected or confirmed COVID-19 will depend upon maternal anaesthesia and the predicted need for resuscitation of the baby. Upper airway suctioning is not an AGP.

As the prevalence of infection changes, individual Trusts' policies for PPE, self-isolation and/or testing may change – you are advised to follow local and/or network guidance.

Remember to report via the BPSU all babies who test positive for SARS-CoV-2 within the first 28 days of life and receive inpatient neonatal care. You are also encouraged to consider participating in any of the other COVID-19 studies currently underway.

For an up to date summary of evidence, visit the RCPCH website.

1. Aerosol generating procedures (AGPs) in neonates:

1.1 What are considered AGPs?

- All means of respiratory support, including bag mask ventilation, CPAP, high flow oxygen therapy and suctioning of the lower respiratory tract [9].

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1.2 What are not considered AGPs?

- Suctioning of the mouth and upper pharynx only (*i.e.* above the vocal cords).
- Low flow oxygen therapy.
- 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.
- Insertion of a nasogastric or orogastric tube.
- Visual inspection of the palate during routine newborn examination.
- Frenotomy

2 Risk stratification

- National guidance (*COVID-19: Guidance for the remobilisation of services within health and care settings. Infection prevention and control* recommendations) recommends the following COVID-19 risk pathways, with aerosol PPE (including FFP3 mask) required for AGPs for both medium and high risk patients:

* includes patients or individuals who are part of a regular formal NHS testing plan.

High risk – patients/individuals who are, or are likely to be, infected with SARS-CoV-2.

Medium risk – patients/individuals who are awaiting the result of a SARS-CoV-2 PCR test and are asymptomatic, or who are asymptomatic with COVID-19 exposure.

Low risk – patients/individuals confirmed negative*.

- Given the negligible risk of perinatal transmission and small tidal volumes in the newborn, infants in the first 72 hours of life can reasonably be considered low risk unless their mother is confirmed or clinically suspected to be infected with SARS-CoV-2 (*i.e.* high risk*)*.

3 General issues

- Stabilisation and/or resuscitation at birth should follow current NLS / ARNI guidance, including their guidance for newborn infants of mothers with suspected/confirmed COVID-19, and the European Resuscitation Council COVID-19 guidelines.

- Guidance is available on safe transfers between departments, but when maternal COVID-19 is clinically suspected or confirmed neonates should be transferred in a closed incubator if on respiratory support. Where possible, all procedures and investigations should be carried out in the single room with a minimal number of staff present.

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- Healthy babies born to suspected/confirmed COVID-19 mothers and who do not require medical intervention should remain with their mother in the postnatal ward. See RCOG guidance for more detail.
- For SARS-CoV-2 positive, suspected or at-risk babies requiring assisted ventilation, in-line suction with endotracheal tubes should be used when staff are familiar with this and the use of a video-laryngoscope should be considered for intubation when available, to reduce proximity to the baby's airway. Intubation should only be undertaken by staff with appropriate competencies.
- Neonatal units must consider how they enable social distancing for both staff and parents. Measures might include spatial configuration of nurseries but every effort must be made to maintain existing cot capacity.

4 Testing of the neonate

- As of 27th April 2020, NHSE recommended testing all non-elective admissions to hospitals – in conjunction with RCPCH, we interpreted this to include all mothers admitted in labour, but not all newborns admitted to NNUs. This position has not changed. The validity of testing the newborn remains unclear, with a significant risk of false positive as well as false negative results, and nasopharygeal swabs are relatively invasive. For further information see RCPCH guidance. Depending on local prevalence of SARS-CoV-2, it is reasonable to consider testing any baby > 72 hours of age readmitted from home, even with a non-respiratory condition (*e.g.* jaundice requiring phototherapy), although the risk of infection from an asymptomatic infant is likely to be very low if appropriate hygiene measures are adopted.
- Clinical indications for testing and management of babies within hospital settings are outlined below. Early negative samples cannot be considered definitive (this should be explained to parents at testing) and positive samples will require repeat, confirmatory testing.
- Babies requiring respiratory support (AGP) and who have not previously tested positive should be screened weekly for SARS-CoV-2, to maintain "green" status. Otherwise, routine testing of asymptomatic babies is not recommended.
- We advocate the use of oropharyngeal swabs (or ET secretions if an endotracheal tube is *in situ*) for the newborn pending validation of salivary testing.
- Management of the baby at birth and/or following admission to the neonatal unit depends upon maternal symptomatology and/or the result of maternal SARS-CoV-2 testing.

5 Mother with clinically suspected or confirmed COVID-19 at birth

- If the mother is under general anaesthesia, aerosol PPE (FFP3 mask, surgical gown, gloves and eye protection) must be worn.

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- If the mother is not undergoing any AGPs, droplet PPE (fluid resistant surgical mask (FRSM), gown, gloves and eye protection) is sufficient for airway positioning and/or oropharyngeal suctioning of the baby.
- FFP3 mask required for any other neonatal airway procedures.
- If there is any risk of the baby being compromised at delivery, the attending paediatric/midwifery team should don aerosol PPE in anticipation of delivery.
- For COVID-19 suspected mothers, rapid/urgent maternal SARS-CoV-2 testing (PCR) should be undertaken.

6 How do I manage a baby born to a mother clinically suspected or confirmed COVID-19 and who requires respiratory support (AGP)?

- Admit to an isolation cubicle or a cohorted area and nurse in an incubator.
- Don aerosol PPE when directly caring for the baby.
- Test for SARS-CoV-2 (PCR) at 72 hours and again on day 5, whether or not a sample was obtained soon after birth*. If the baby's condition deteriorates, or the respiratory disease is considered atypical after 24 hours of life, the baby should be screened earlier for SARS-CoV-2.

  * a SARS-CoV-2 test taken soon after birth may not be reliable and is therefore not clinically indicated.

- Send oropharygeal swab or ET secretions.
- Consider methods to reduce viral spread into the NNU including placing the expiratory limb of the CPAP into the incubator.
- The baby should be considered potentially infectious, although the risk is very low. It would be prudent to nurse the baby in an incubator for 10 days if the mother is confirmed positive; this period may need to be extended if the baby becomes symptomatic. Once the baby no longer requires AGPs, droplet PPE would be appropriate in the absence of a positive test. A decision to keep the baby in an isolation cubicle must balance the (low) risk of the baby being infectious with implications for nurse staffing, particularly when nurse staffing is problematic.

6.1 Mother

- The mother should not attend the NNU until she has tested negative (clinically suspected COVID-19) or, in the case of symptomatic confirmed infection, until 14 days after the onset of her symptoms and she is symptom free [10]. Asymptomatic mothers who test positive on admission swabs need only self-isolate for 10 days if discharged but the recommended period of self-isolation is 14 days for an asymptomatic mother who remains in hospital. Mothers who test positive for SARS-CoV-2 after they have been discharged from the maternity unit, and who do not require to be readmitted with COVID-19 need only self-isolate for 10 days from the onset of symptoms or (if asymptomatic) from the date of their positive

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test. Extended periods of self-isolation for symptom-free mothers must balance the (low) risk of her infecting either her baby or other parents/staff members and the risks of mother/baby separation.

Staff/parents must test and/or self-isolate in line with current guidance, please see addendum (page 2) for more information.

6.2 Partner

- If the mother tests positive her partner and other family members do not necessarily need to self-isolate if they have received two doses of a COVID vaccination [10,11]. Noting that there may be some variation in guidance between the devolved nations, we recommend that self-isolation and/or testing for parents is consistent with advice for NNU staff. Consideration should be given to allowing other family members to visit the NNU if the mother wishes, while she is unable to attend.

6.3 Skin to skin contact on respiratory support

- This should generally not be permitted while the infant requires on-going respiratory support and is still potentially infectious but may be considered in exceptional circumstances. In this case, unless more than 14 days have elapsed since the onset of symptoms and she is now symptom free, the mother will require to wear a FRSM, to protect both the baby and staff members. The baby should be cared for in an isolation cubicle and attending staff members should wear aerosol PPE. For end of life care, other family members should be offered the opportunity to wear a FFP3 mask after fitting and appropriate training, to protect themselves while the baby and/or mother is still potentially infectious. Where other family members are known or suspected SARS-CoV-2 positive or self-isolating they should not visit the NNU.

7 How do I manage a baby born to a mother with clinically suspected or confirmed COVID-19 who requires admission to NNU but does not require respiratory support?

- Admit to an isolation cubicle or a cohorted area and nurse in an incubator.
- If the mother tests negative, the baby should be nursed thereafter as normal.
- If the mother is confirmed positive or while her tests are outstanding, the baby should be tested at 72 hours and again on day 5 (oropharygeal swab).
- Use droplet PPE for routine baby cares. Eye protection if risk of splashing.
- If the baby is asymptomatic at 72 hours, they can be moved out of an isolation room; in the absence of evidence, it seems prudent for the baby to remain in an incubator for 10 days or until discharge,

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whichever is sooner. If there is a deterioration, include SARS-CoV-2 respiratory PCR testing and consider isolation if respiratory support is required.

7.1 Skin to skin contact (no respiratory support)

- Skin to skin contact can be undertaken once the recommended period of isolation has been completed, and the mother (or father) is well. The isolation period is 10 days if the mother was asymptomatic at testing and/or tested positive for SARS-CoV-2 after discharge from the maternity hospital and she is no longer an inpatient.

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7.2 Discharge

- If the baby is well enough to be discharged from the NNU, they may be accommodated in an isolation room in the postnatal ward with their mother or sent home to continue isolation as clinically appropriate and with appropriate safety netting advice.

8 Asymptomatic mother who has undergone routine testing

8.1. Mother tests positive

- The infant should be isolated, tested and managed according to the guidance above for infants born to clinically suspected or confirmed COVID-19 positive mothers (*cf. 5. Mother with clinically suspected or confirmed COVID-19 at birth*).
- Consider the possibility of a false positive test for the mother and discuss with the local virology team.

8.2. Mother's test is awaited

8.2.1. At birth

- Droplet PPE (FRSM, gown, gloves, and eye protection) for *all* airway procedures. FFP3 mask is not required.

8.2.2. Baby requires NNU admission

- Baby without respiratory distress – no need to isolate, but if facilities permit, it would be reasonable to place them in a cohort room with other infants whose mothers are awaiting test results. Nurse in an incubator and monitor for signs of COVID-19. 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).
- Baby who requires respiratory support (AGP) < 72 hours of age
    - In the view of the UK IPC cell, the risk of the baby being infected/infectious is very low. Weighing up the risks/benefits, it is reasonable not to isolate the baby, but simply to nurse in an incubator and to use droplet PPE.
    - Every effort should be made to ascertain the maternal test result with rapid SARS-CoV-2 PCR testing.

8.3. Mother tests negative

- No need to isolate.

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- Even if baby meets the case definition by virtue of requiring early respiratory support for an anticipated non-COVID-19 respiratory pathology (e.g. RDS), there is no need to test and isolate. Use droplet PPE for non-COVID-19 suspected patient as per Trust guidelines.
- If there is subsequent 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 and the baby isolated.
- Remember to also investigate and treat for non-COVID-19 pathologies (*e.g.* sepsis).

9 How do I manage a baby confirmed SARS-CoV-2 positive, regardless of respiratory status?

- Admit to an isolation cubicle or a cohorted area and nurse in an incubator.
- For babies not receiving respiratory support, droplet PPE with eye protection if risk of splashing of any body fluids; minimise handling as far as possible with clustered cares.
- Aerosol PPE for AGPs (includes CPAP and high flow therapy).
- In the event of acute collapse, aerosol PPE should be donned before undertaking intubation. If the baby does not respond to airway positioning manoeuvres, oral suctioning and facial oxygen it would be reasonable to undertake bag mask ventilation wearing droplet PPE with the baby in the incubator, whilst waiting for other staff to don aerosol PPE.
- The value of retesting in the neonate has not been fully assessed – if the baby is asymptomatic and at least 10 days from onset of symptoms it would be reasonable to move out of an isolation room, but the baby should be kept in an incubator for 4 days more (*i.e.* a total of 14 days) with use of droplet PPE.
- If the tests on day 3 and 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.

9.1. Skin to skin contact (baby SARS-CoV-2 positive, parents well)

- Early in the pandemic, we advised that skin to skin contact should generally be avoided while the infant requires ongoing respiratory support but that it may be considered in exceptional circumstances – see under “baby born to a mother with clinically suspected or confirmed COVID-19”. There is no published evidence to change this cautionary advice, but if the mother and/or her partner have received two doses of a COVID-19 vaccine, consideration may be given to offering skin to skin contact, having explained potential risks. Either a FRSM or aerosol PPE should be worn, noting that staff caring for the baby will be using aerosol PPE.

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9.2. Discharge:

- If the baby is well enough to be discharged from the NNU, they may be accommodated in an isolation room in the postnatal ward with their mother or sent home to continue isolation as clinically appropriate and with appropriate safety netting advice.

10 How do I manage a baby in the NNU who requires ongoing ventilatory support (> 72 hours of age) but has not tested positive for SARS-CoV-2?

- Babies who require ongoing ventilatory support (including high flow oxygen) should be tested weekly for SARS-CoV-2 to maintain their green risk status.
- Those babies whose symptoms started prior to 72 hours of age or who have tested negative can be managed by staff wearing droplet PPE unless subsequent tests prove positive for SARS-CoV-2.

11 How do I manage a baby in the NNU who has had postnatal contact with a clinically suspected or confirmed case of COVID-19?

- Postnatal contact is defined as physical contact (within 2 m) of at least 15 minutes' duration with any person who develops suspected or confirmed COVID-19 within the following 48 hours.
- Test potential source for SARS-CoV-2 – if negative, no further action (as long as baby is asymptomatic). If symptoms persist and likely to represent COVID-19, consider a repeat test.
- If source is positive and the infant is asymptomatic (on NNU for non-respiratory reasons or improving respiratory status with anticipated non-COVID-19 pathology), they do not require to be tested, but they should be isolated (incubator care) and observed for signs of respiratory distress or other features that might suggest neonatal COVID-19 for the next 10 days (or discharge, whichever occurs first). If the baby develops signs, they should be tested for SARS-CoV-2.
- If one or other parent is the contact, and they have not been admitted to hospital with COVID-19, they will be required to isolate for at least 10 days. See 6.1 for further details. The other parent/partner may not need to self-isolate if he/she has received two doses of a COVID vaccine [(11)]*.

  * you are advised to follow relevant local/national guidance. The same advice, including PCR and/or lateral flow testing should be applied to parents as to neonatal unit staff.

11.1 Skin to skin contact

- Skin to skin contact is permissible with either parent (or both parents) if they are not the suspected or confirmed contact and should be encouraged in the usual way.

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12 When should I consider COVID-19 in a baby who deteriorates whilst receiving neonatal care?

- Many of the signs of COVID-19 such as temperature instability, increase in oxygen requirement or respiratory distress are similar to signs which might be seen in preterm or sick term babies on neonatal units and screening all babies with these signs could create significant problems trying to isolate or segregate babies. We suggest considering screening for SARS-CoV-2 any symptomatic baby who has a known contact with someone who has or may have COVID-19, or any baby who displays a clinical course which is unusual or different from that normally seen.
- Screen and isolate as per baby of a mother with suspected or confirmed COVID-19.

13 What about a baby in the postnatal ward with a mother with clinically suspected or confirmed COVID-19?

13.1. Asymptomatic baby

- If the baby is asymptomatic, droplet PPE.
- The NIPE is not an AGP (including inspection of the palate). Full visualisation of the palate should be undertaken as normal, using a tongue depressor if required.
- Mother should be advised to wear an apron and a mask when feeding baby, and to practise good hand hygiene. Breast feeding is not contraindicated. If the mother is coughing, she should be wearing a FRSM.
- The management will be the same for a well baby born to an asymptomatic mother whose test result is not known – droplet PPE and no need to test the baby.
- If the baby becomes symptomatic, manage as per 12 – *baby who deteriorates while receiving neonatal care*.

13.2. Discharge early if the mother is well

- Ensure as many routine procedures as possible are undertaken before discharge, and/or that mechanisms are in place for prompt review in the community. Provide good safety-netting advice. The baby should be considered potentially infectious for 10 days from birth.

14 What about older ex-preterm babies with Chronic Lung Disease?

- While there is no evidence to inform practice, it seems prudent that these babies should be nursed in an incubator, or in an isolation cubicle if possible. It may not, however, be practical to nurse a larger baby in an incubator. Parents should be encouraged to practise the strictest hand hygiene, to report any possible symptoms of COVID-19 and to self-isolate immediately in the event of symptoms developing.
- There is no reason to defer discharge on home oxygen with good safety-netting advice.
- Follow national guidance on administration of palivizumab.

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15 How do we manage provision of expressed breast milk (EBM) in the NNU when mother is SARS-Co-V positive?

- To date viral RNA has been reported only very rarely in fresh breast milk of COVID-19 confirmed mothers [12,13]. The database is, however, small. The main risk of breastfeeding for the infant is the close contact with the mother, who is likely to share infective airborne droplets. 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.
- Practitioners should discuss with parents the pros and cons of provision of EBM to babies in the NNU, noting the current uncertainty. A joint decision should be informed by factors including the gestation and clinical condition of the baby, transfer of protective maternal antibodies, the availability of donor breast milk and parental choice. Other coronaviruses are destroyed by pasteurisation.
- SARS-CoV-2 positive mothers who are expressing milk must be facilitated to practise excellent hand hygiene, and care taken to ensure that bottles containing EBM are not externally contaminated. The virus is deactivated by chlorine disinfectants. EBM of COVID-19 suspected or positive mothers should be stored in a separate fridge or freezer from that of non- suspected or negative mothers. NNUs should have clear guidelines around handling, storage and use of EBM in these circumstances and suspected/infected mothers should have exclusive use of a breast pump.
- 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 no longer considered infectious (10 days after onset of symptoms). Repeat testing of mother is not necessary. Parents should be signposted to appropriate feeding and emotional support during this period and reassured that breastfeeding can still take place after a period of using donor breast milk / formula if lactation is maintained.
- Consider testing a sample of EBM for SARS-CoV-2 once lactation is established as this may help with future understanding of this virus.
- Lactation is not a contra-indication to COVID-19 vaccination and breastfeeding mothers should be advised to continue breastfeeding after receiving vaccine [14].

16 How should we manage parents and visitors to the Neonatal Unit and/or Transitional Care Unit (TCU)?

- Of necessity, all Trusts and NNUs reduced visiting in the pandemic, reflecting a need to protect staff as well as babies and families in our care. This situation has changed as we adapt to reduced societal restrictions with a largely vaccinated adult population. It is essential that neonatal services balance the risks of COVID-19 against potential harms of ongoing restrictions, including reduced breastfeeding rates and worse parental mental health [15, 16].

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- Neonatal services present a unique situation in terms of "visitors" and it is essential that the mother and her partner are *never* considered to be visitors within the neonatal unit – they are partners in their baby's care, and their presence should be encouraged (See Bliss statement.) The mother and her newborn are a biological entity and should have unrestricted contact when admission to a NNU is unavoidable.
- A Bliss survey of parents whose baby, or babies, spent time in neonatal care during the height of the pandemic reports significant concerns around both restricted visiting and the wearing of PPE, with 65% of parents reporting worsening of their mental health as a result of their neonatal experience [(15)].
  Following removal of mandatory restrictions across the UK, it is essential that all NNUs undertake appropriate risk assessment and review their policies around routine testing of parents, extended family visiting and the wearing of PPE.
- In order properly to involve parents in decision making about their baby's care, NNUs should identify how to safely facilitate parental 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 as often and for as long as practicable, unless such practice would be clearly detrimental to other babies and/or staff in the NNU or TCU. Policies for parental presence should be consistent across different departments within Trusts and across networks.
- Parental vulnerability may be heightened; 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.
- It would generally not be appropriate for SARS-CoV-2 positive or self-isolating parents to attend the NNU or TCU – in such circumstances every effort should be made to facilitate remote contact by use of video technology and/or social media.
- The same arrangements for testing should be offered to parents as are applied to staff, in order to minimise unnecessary separation and reduce risk to other parents and members of staff. This includes routine surveillance testing as well as testing of symptomatic parents and suspected contacts.
- An asymptomatic mother who is awaiting the result of routine SARS-CoV-2 admission screening should usually be allowed to attend her baby in the NNU and to provide skin to skin care (see guidance under testing of asymptomatic mothers).
- Units should have clear policies on the use of PPE for both parents and staff, and this should include consideration of aerosol PPE for parents (with appropriate training) in some situations such as unstable ventilated babies or during end of life care when the baby has tested positive. While SARS-CoV-2 negative parents should be offered the same PPE as staff caring for their baby, they should also be

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offered the opportunity to spend time at the cotside with their own baby without wearing a face covering (see below).

- For babies critically ill or receiving palliative or end-of-life care, everything possible should be done to achieve parental presence and participation in cares, even for SARS-CoV-2 positive parents. For end-of-life care, consideration should be given to allow other close family members to visit.

16.1 Face masks

FRSMs should be worn by all parents within the NNU when away from the cotside in line with national guidance. However, the following points should be noted:

- Consideration should be given to allowing removal of facemasks for asymptomatic parents during periods of skin to skin care and when providing close care to their baby (*e.g.* feeding and changing). While there is a paucity of evidence to guide practice, it is widely acknowledged that parental facial recognition is critical in early infant development [(17)]. Bliss reports evidence of the negative impact of always wearing a mask on a parent's ability to bond with their baby – for example not being able to kiss their baby – that is detrimental to family bonding and attachment [(15)].
- Wearing a facemask inhibits communication for parents and staff who are hearing impaired. Services should take steps to ensure all parents and staff are able to communicate with one another clearly and equitably; options may include use of approved clear face coverings and/or temporary removal of facemasks at the cotside.

17 What advice should I give to parents taking their baby home?

- Both NHS England and the Scottish Government have published parental information leaflets which should be offered to parents before they leave the NNU or postnatal ward. These are available online.
- It is important to reassure parents that their baby is extremely unlikely to become unwell, even if they become SARS-CoV-2, but that they could become unwell for a host of other reasons. Parents should be encouraged to seek advice early if they have any concerns whatsoever; in the case of a baby recently discharged from the NNU this advice would probably best come from the NNU team in the first instance.
- All pregnant and breastfeeding mothers should be strongly advised that they should receive COVID-19 vaccination and (where relevant) continue to breastfeed as normal.
- Babies born to mothers who have received immuno-modulation therapy for the treatment of Covid in pregnancy should not be offered live vaccines (BCG and/or rotavirus) during the first six months of life. Relevant maternal treatments include tocilizumab and sarilumab, but not *Ronapreve*.
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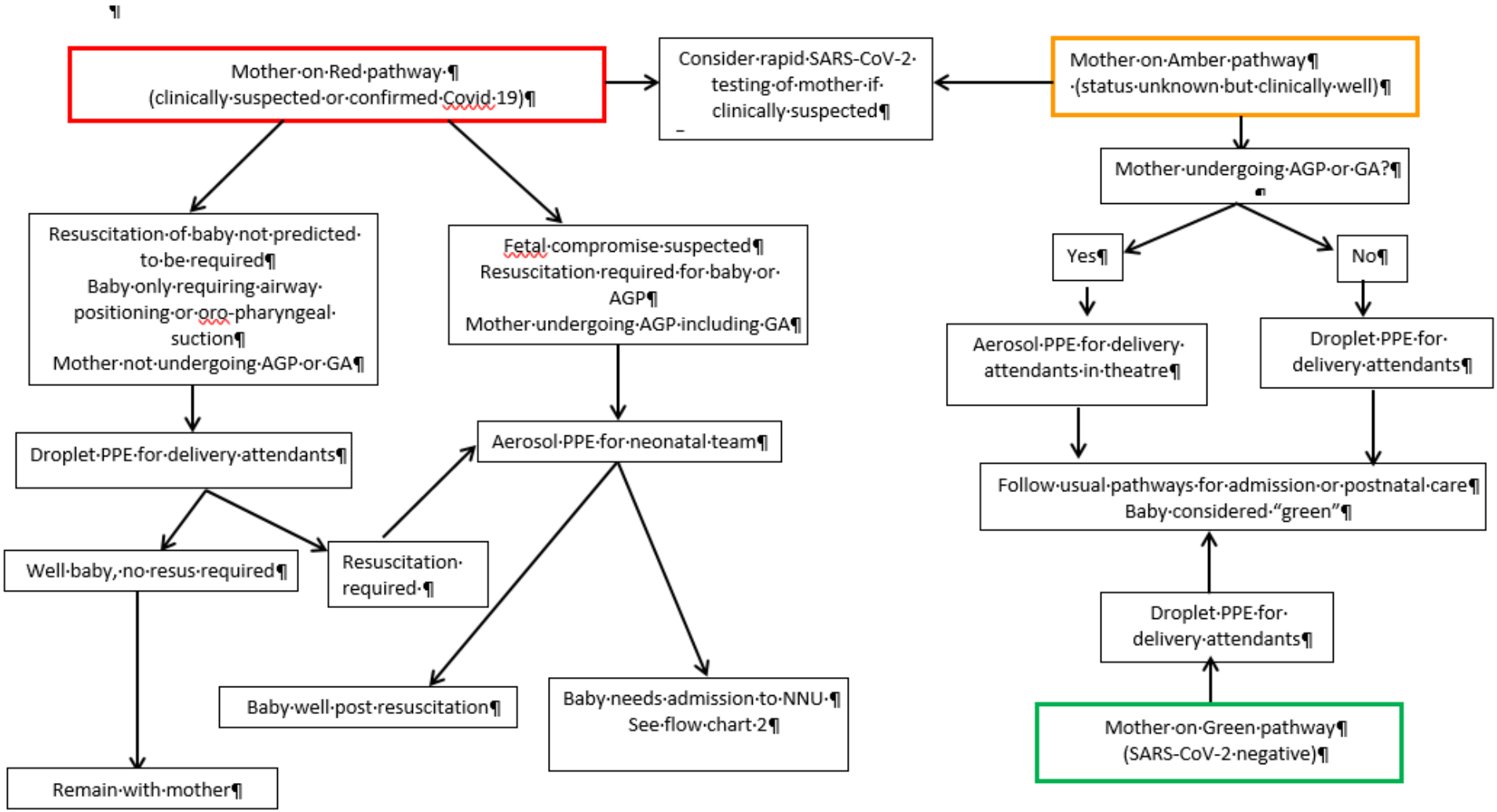
Appendix 1 – Flow Chart 1- Management of the baby at delivery



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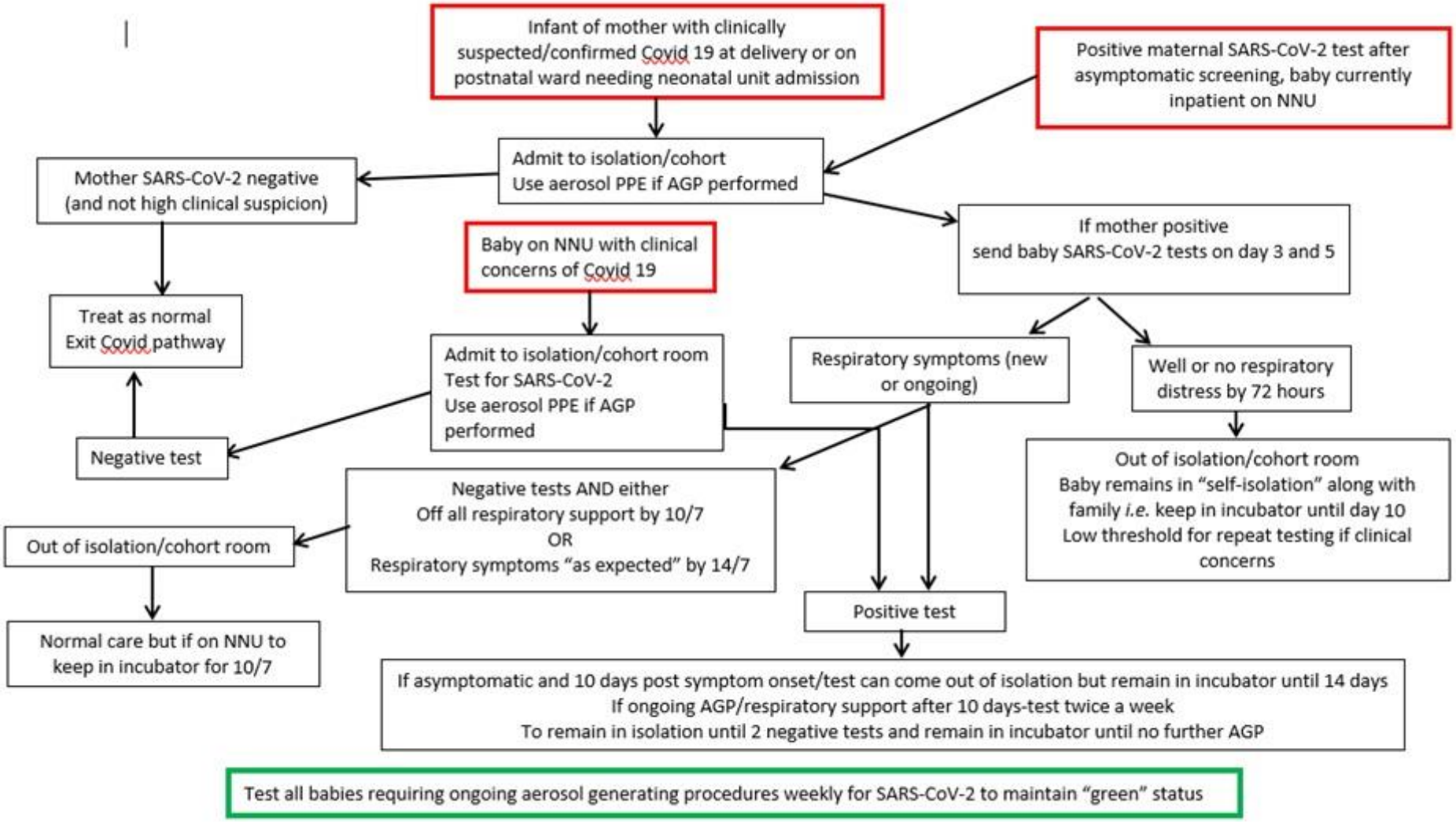
Appendix 2 – Flow Chart 2 – Neonatal Unit Admission



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