

## NETWORK GUIDELINE

<b>Guideline:</b>	<b>Management of Neonatal Patients with Suspected or Confirmed COVID-19 Infection within the Midlands Neonatal ODNs</b>
<b>Version:</b>	<b>Version 5</b>
<b>Date:</b>	<b>December 2020</b>
<b>Review Date:</b>	<b>Ongoing. This will be reviewed as and when new National guidance is provided</b>
<b>Approval:</b>	<b>Circulated for immediate use due to National escalating situation</b>
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<b>Consultation:</b>	<b>Required for immediate use. Taken from National guidance</b>
<b>Distribution:</b>	<b>Neonatal Units within EMNODN and WMNODN</b>
<b>Risk Managed:</b>	<b>To ensure that neonatal capacity is managed as effectively as possible, and that safety for each neonate in the EMNODN and WMNODN units is maintained during the National viral outbreak</b>

**This document is a guideline. Its interpretation and application remains the responsibility of the individual clinician, particularly in view of its applicability across the different Trusts in the East and West Midlands Neonatal Operational Delivery Networks. Please also consult any local policy/guideline document where appropriate and if in doubt contact a senior colleague.**

**Caution is advised when using guidelines after a review date.**

## REVIEW AND AMENDMENT LOG

Version	Type of Change	Date	Description of Change
1	-	18 Mar 2020	-
2	Moderate	26 Mar 2020	Updated in accordance with most recent RCPCH information. Also expanded to become a Midlands wide document
3	Moderate	20 April 2020	Updated in accordance with most recent RCPCH information. Guidance on use of PPE added. Guidance on parental access and visiting added. Guidance on screening and isolation updated. Guidance on Safety netting after discharge and links to parent information leaflets added. Flow charts added.
4	Minor	01 July 2020	Updated in accordance with update from BAPM on screening and parent access
5	Moderate	December 2020	Updated in accordance with most recent RCPCH, BAPM and BLISS guidance New section on categories of risk inserted Changes to screening guidance Subsequent sections re-ordered New section on Infant Feeding added Parental Access and Visiting updated References to Covid Mailbox removed as this has been hibernated

## 1. Key Points

- 1.1. National advice and recommendations are being updated frequently – units should ensure the most up to date information is used in the development and maintenance of local SOPs.

RCPCH information is available at:

<https://www.rcpch.ac.uk/resources/COVID-19-guidance-paediatric-services>

BAPM information is available at:

<https://www.rcpch.ac.uk/sites/default/files/generated-pdf/document/BAPM---COVID-19%253A-Frequently-asked-questions-within-neonatal-services.pdf>

ODN information is available at:

<https://www.emnodn.nhs.uk/health-professionals/COVID-19-network-updates/>

- 1.2. Any case of confirmed COVID-19 in neonates should be escalated at the earliest opportunity by telephone or email to the ODN Director, Lead Nurse or Deputy Lead Nurse see [Section 3](#)
- 1.3. Any capacity issues or potential unit closures should be discussed with the relevant ODN leads prior to closure. Refer to section 3 for contact details.
- 1.4. There should be early discussion with the designated Consultant at the lead NICU about any case of suspected or confirmed COVID-19 requiring any respiratory support and any decisions taken about caring for infants outside ODN pathways.
- 1.5. Exposure to COVID-19 is not, in itself, a reason for transfer unless uplift of care is required. The transfer of infants with suspected or confirmed COVID-19 should be minimised where possible. The decision to transfer or defer transfer will be made jointly between the referring unit, NICU and the transport service. Any cases where transfer is delayed due to suspected or confirmed COVID-19 should be notified by telephone or email to ODN Director, Lead Nurse or Deputy Lead Nurse see [Section 3](#). Any baby confirmed as COVID-19 positive, and transferred, should remain at the receiving hospital until discharge unless there are exceptional circumstances. In the event that delayed repatriation is having an impact on critical care capacity then this should be discussed with the Service Consultant, Transport Management Team, Transport Consultant and a member of Network Management Team. Early and regular communication between the SCU, LNU, NICU and relevant transport team is essential.
- 1.6. CPAP and high flow therapies are associated with significant aerosolisation and must therefore be considered as high risk. However, in the absence of evidence, it is reasonable to treat the baby's respiratory illness in the same way as if they were not potentially exposed to COVID-19.
- 1.7. Intubation or LISA must involve the use of appropriate PPE, even in an emergency situation and should be undertaken only by staff with appropriate competencies. A video laryngoscope reduces aerosolisation risk and would be the preferred method of doing this if available
- 1.8. Infants will be managed on a risk versus benefit basis and this may necessitate derogation from existing ODN patient pathways. Regular discussion between

senior medical staff in the lead NICU, LNU, and where applicable SCU, will be essential to ensuring that infants are cared for in the most appropriate place

- 1.9. Staff must continue to use clinical guidelines to manage the suspected and usual pathologies that occur in neonatal infants e.g. NEC, sepsis etc.
- 1.10. A minimum 24 hourly telephone discussion is required with the lead NICU where care deviates from the service specification i.e. prolonged ventilation in an LNU.

## 2. Introduction

- 2.1. This guidance has been prepared to support health service staff working in neonates with advice during the ongoing outbreak of COVID-19. Neonates are seen as high risk for complications if infected with COVID-19. However evidence indicates that perinatal transmission of COVID-19 is unlikely if correct hygiene precautions are taken and to date there have been no published reports of COVID-19 transmission in a NNU setting.

[https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642\(20\)30342-4/fulltext](https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(20)30342-4/fulltext)

- 2.2. It is recognised that it is not the role of the ODN to provide Infection Prevention and Control (IPC) advice, or to direct local processes around the management of neonatal patients with suspected or confirmed COVID-19 infection. However, this document aims to set out the approach agreed across the East and West Midlands Neonatal ODN's based on the latest available guidance from British Association of Perinatal Medicine (BAPM), Royal College of Paediatric and Child Health (RCPCH), NHS England (NHSE) and Public Health England (PHE). The document will also identify key pathway issues which may occur as a result of COVID-19 and suggest how these might be managed.
- 2.3. National advice and guidance is being released all the time and any changes to the overall practice within this paper will be disseminated accordingly. Local neonatal services also have a responsibility to ensure that the most up to date information available is used to inform service planning.

## 3. Contact Details

### 3.1. In hours contacts:

#### EMNODN

Linda Hunn, Director/Lead Nurse; 07500 976640 [linda.hunn@nhs.net](mailto:linda.hunn@nhs.net)  
Judith Foxon, Deputy Lead Nurse; 07526 920312 [judith.foxon@nhs.net](mailto:judith.foxon@nhs.net)

#### WMNODN

Sarah Tranter, Director; 07468716249 [sarahtranter@nhs.net](mailto:sarahtranter@nhs.net)  
Lynsey Clarke, Lead Nurse; 07785722588 [lynseyclarke@nhs.net](mailto:lynseyclarke@nhs.net)

### 3.2. **Out of hours contacts:**

EMNODN

On Call Consultant for Nottingham for the North hub and Leicester for the South hub

WMNODN

On Call Consultant for the Level 3 within the unit's network pathway.

### 3.3. **Transport:**

For EMNODN, UHCW, Nuneaton and Warwick:

- CenTre: 0300 300 0038

For WMNODN

- KIDS/NTS: 0300 200 1100

## 4. **General Principles**

- 4.1. This is a summary of the guidance currently available and collated for the use of neonatal services in the Midlands. Full guidance on the general principles for maternal admissions and caring for neonates are available at the addresses below and this should be used in the development of local plans.

<https://www.rcpch.ac.uk/resources/COVID-19-guidance-paediatric-services>

<https://www.rcpch.ac.uk/sites/default/files/generated-pdf/document/BAPM---COVID-19%253A-Frequently-asked-questions-within-neonatal-services.pdf>

<https://www.bliss.org.uk/parents/support/coronavirus-COVID-19-information>

- 4.2 To limit nosocomial spread of infection ensure all staff pay meticulous attention to handwashing, wear appropriate PPE and follow social distancing guidance where possible.

<https://www.rcpch.ac.uk/sites/default/files/generated-pdf/document/COVID-19---guidance-for-neonatal-settings.pdf>

- 4.3 Ensure staff are familiar with local operational procedures for isolation and cohorts of suspected and confirmed COVID-19 infants.

- 4.4 Ensure staff are aware of the communication and escalation processes to be followed when a neonate with (or born to a mother with) suspected or confirmed COVID-19 infection is identified.

- 4.5 Ensure staff assessing or caring for a neonatal patient with suspected or confirmed COVID-19 infection have been appropriately trained in the use of Personal Protective Equipment (PPE), including the correct procedure for safely putting on and removing PPE. Advice on the use of PPE is changing frequently and so resources such as [www.gov.uk](http://www.gov.uk) and local IPC teams should be consulted regularly for the most up to date recommendations.

- 4.6 All units should be aware of, and make local plans with maternity and neonatal teams following the RCOG advice regarding the management of COVID-19 in pregnancy, labour and delivery.  
<https://www.rcog.org.uk/globalassets/documents/guidelines/2020-10-14-coronavirus-COVID-19-infection-in-pregnancy-v12.pdf>
- 4.7 Identify a senior member of neonatal staff on each shift to attend any, and ONLY, suspected or confirmed COVID-19 deliveries. Different individuals should be identified to attend all other deliveries where there is no suspected or confirmed COVID-19.
- 4.8 During resuscitation on delivery suite, or PNW, identify a clean runner to pass equipment to minimise contamination of equipment (such as resus bags).
- 4.9 Any neonate born to a mother with suspected or confirmed COVID-19 infection requiring transfer from delivery suite to NNU should be transported in a closed incubator.
- 4.10 All infants requiring respiratory support should be nursed in an incubator.
- 4.11 CPAP and high flow therapies are associated with significant aerosolisation and must therefore be considered as high risk. However, in the absence of evidence, it is reasonable to treat the baby's respiratory illness in the same way as if they were not potentially exposed to COVID-19.
- 4.12 Intubation or LISA must involve the use of appropriate PPE, even in an emergency situation and should be undertaken only by staff with appropriate competencies.
- 4.13 A record should be maintained of all staff involved with the care of the baby and where in the unit the baby was cared for in order to enable easy contact tracing if required.
- 4.14 Where possible babies should not be moved between different rooms on the neonatal unit unless clinically indicated
- 4.15. A unit should not automatically close if they have a suspected or confirmed case of COVID-19. Any proposed unit closures should be discussed with the relevant ODN **Clinical Lead prior to closure**. Contact details are available in [Section 3](#).
- 4.16 Plans to cohort patients should be made in advance, in case this becomes necessary.
- 4.17 Infant feeding should continue as the baby's clinical condition permits. Breastfeeding should be encouraged and supported with EBM where separation of mother and baby is necessary. There are no reports of transmission of COVID-19 via breast milk. Mothers must have a breast pump designated for their exclusive use and local IPC policies should be followed for the cleaning and storage of the equipment. Further information on infant feeding is available at: <https://www.rcm.org.uk/media/4142/optimising-mother-baby-contact-and-infant-feeding-in-a-pandemic-version-2-final-24th-june-2020.pdf>

- 4.18 For guidance on access for parents, staff should refer to local policy which will have been developed in accordance with most recent advice available at:  
RCPCH; <https://www.rcpch.ac.uk/>  
Bliss; <https://www.bliss.org.uk/parents/support/coronavirus-COVID-19-information>
- 4.19 Parents/carers who have tested positive for and/or are symptomatic with, COVID-19 should not visit for 10 days. Visiting can resume after 10 days only if they are asymptomatic. Any household member regardless of whether they display any symptoms should self-isolate and not visit for 14 days as per current government advice. Any parents/carers who have been contacted by the National Track and Trace System should self-isolate for 10 days as per Government guidance, and should not visit the unit regardless of whether they develop any symptoms. This is rapidly changing and up-to-date guidance can be found at: <https://www.nhs.uk/conditions/coronavirus-COVID-19/self-isolation-and-treatment/>

## 5. Categorising Risk

National guidance recommends that COVID-19 risk pathways are stratified and that aerosol PPE should be worn for medium and high risk patients;

### 5.1. National Risk Stratification;

High Risk	Patients who are / are likely to be, infected with COVID-19
Medium Risk	Patients who are unlikely to be infected but who have not yet had a negative PCR test
Low Risk	Patients who are confirmed negative

National guidance is available in full at:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/910885/COVID-19\\_Infection\\_prevention\\_and\\_control\\_guidance\\_FINAL\\_PDF\\_20082020.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/910885/COVID-19_Infection_prevention_and_control_guidance_FINAL_PDF_20082020.pdf)

### 5.2. Neonatal Risk Stratification:

<b>Mother</b>	<b>Baby</b>	<b>Risk status of BABY</b>
Confirmed negative	Not tested / swab result pending / swab negative	LOW
Suspected or confirmed COVID-19 positive	Swab negative	LOW
Asymptomatic and swab result pending	Not tested / swab result pending	MEDIUM
Clinically suspected of COVID-19 and swab result pending	Not tested / swab result pending	MEDIUM
Confirmed positive	Not tested / swab result pending	MEDIUM
Confirmed negative / suspected or confirmed COVID-19 positive	Swab positive	HIGH

Neonatal Guidance is available at:

[https://hubble-live-assets.s3.amazonaws.com/bapm/redactor2\\_assets/files/652/Categorising\\_COVID\\_19\\_Risk\\_for\\_the\\_Newborn\\_-\\_Statement\\_7-9-20.docx.pdf](https://hubble-live-assets.s3.amazonaws.com/bapm/redactor2_assets/files/652/Categorising_COVID_19_Risk_for_the_Newborn_-_Statement_7-9-20.docx.pdf)

- 5.3. A majority of maternity services currently test all women admitted in labour but routine testing of neonates is not standard practice. BAPM does not recommend routine testing of babies admitted to NNU.
- 5.4. Due to the negligible risk of perinatal transmission and small respiratory volumes in babies, it is recommended that neonates should be considered **Low Risk** during the first 72 hours of life unless mother is confirmed or clinically suspected as being COVID-19 positive  
<https://www.rcpch.ac.uk/sites/default/files/generated-pdf/document/BAPM---COVID-19%253A-Frequently-asked-questions-within-neonatal-services.pdf>

## 6. Aerosol Generating Procedures (AGPs) in Neonates

- 6.1. Appropriate PPE requirements should be determined primarily by the presence or absence of AGPs. Within a neonatal context, these 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).
  - 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)

**N.B:** Insertion of a naso-gastric tube (NGT) in a neonate is not considered an AGP.

## 7. Personal Protective Equipment (PPE)

- 7.1. Baby's risk status and need for respiratory support and AGPs will determine the use of PPE on Delivery Suite and NNU. See [Appendix 4](#).
- 7.2. PPE practices will be agreed at local Trust level. However, to support decisions on PPE use on neonatal units (NNU) there is up to date guidance available at;  
<https://www.rcpch.ac.uk/sites/default/files/generated-pdf/document/COVID-19---guidance-for-neonatal-settings.pdf>  
<https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control>

## 8. Screening

NHSE have recommended COVID-19 testing for all patients requiring an overnight stay, including those that are asymptomatic. BAPM in conjunction with RCPCH have interpreted this to include all mothers admitted in labour but not all neonates admitted to

Neonatal Units. Guidance on the testing and isolation of infants available on the RCPCH and BAPM websites:

<https://www.rcpch.ac.uk/resources/COVID-19-guidance-paediatric-services#neonatal-settings>

<https://www.rcpch.ac.uk/resources/bapm-COVID-19-frequently-asked-questions-within-neonatal-services>

Screening regimes will be determined at local trust level, however, the following has been agreed across the Midlands region;

8.1. Babies admitted to the neonatal unit will need screening for COVID-19 for one or more of the following reasons;

- A mother who has presumed or proven COVID-19 infection
- A baby who is admitted to the neonatal unit from the postnatal ward from a mother with COVID-19 infection
- A baby who deteriorates on the neonatal unit with respiratory symptoms +/- fever which is felt to be infective in origin rather than a worsening of background lung disease.
- Readmission to a NNU or Transitional Care Unit from home

See [Appendix 1](#) and [Appendix 2](#)

8.2. Babies who are admitted to NNU at birth should have a sample sent after 48 to 72 hours. This is because of the time lapse before the infant is likely to produce the virus in secretions. Yield is best from endotracheal (ET) secretions or a nasopharyngeal (NP) aspirate in a non-ventilated baby. If this is not possible then a throat swab should be sent. A further screen on day 5 could be considered as per local microbiology policy, this is unlikely to change management but may help information gathering around the natural history of COVID-19 in infants.

See [Appendix 1](#) and [Appendix 2](#)

8.3. Any baby testing positive for COVID-19 must be reported by telephone or email to the ODN Director, Lead Nurse or Deputy Lead Nurse see [Section 3](#)

8.4. Well babies who are cared for on the postnatal ward **do not require screening**, however appropriate infection prevention precautions including PPE should be used.

8.5. Asymptomatic babies who have been screened because mother is Covid positive should be treated as medium risk pending the result see [5.2](#). Systems should be in place to ensure that the results are communicated between maternity and neonatal teams.

8.6. Routine screening should not delay transfer. A low risk, asymptomatic baby who has been screened prior to elective transfer should be presumed negative pending the result.

8.7. Babies may still be admitted with other pathology unrelated to COVID-19 for example congenital anomalies. Although there are not any reported cases of vertical transmission, little is currently understood around the presentation of

COVID-19 in the newborn, so pragmatically these babies should also be isolated and screened as per the symptomatic newborn.

- 8.8. Babies who deteriorate on the neonatal unit or postnatal wards should have screens sent immediately. Whilst horizontal transmission has been reported it is important to remember that the usual neonatal pathologies including GBS sepsis, duct dependent cardiac disease etc. are also possible and these babies should be managed along usual treatment pathways.
- 8.9. False negative swab rates have been reported in adults even in those who show typical clinical features of COVID-19. A negative result should be interpreted with the clinical picture and if there are ongoing concerns around the baby having COVID-19 infection this should be discussed with the local microbiology team on a case by case basis.

## 9. Isolation:

- 9.1. Guidance (see [Appendix 3](#)) states 'Infant incubators and cots do not need to be separated by 2 metres'.
- 9.2. Babies of COVID-19 infected or suspected mothers, who require admission to NNU should initially be treated as suspected COVID-19 cases. The baby should be isolated and appropriate infection prevention precautions followed including PPE (See PPE guidelines). If the infant has clinical symptoms, then an isolation side room if available, is preferable to a cohort patients.
- 9.3. Babies who are symptomatic with confirmed COVID-19 infection should be cared for in an incubator in the isolation area for at least 10 days and until they are asymptomatic. They should not be isolated in the same clinical area as babies awaiting screening results for suspected COVID-19
- 9.4. If the requirement for respiratory support continues beyond 14 days, the infant should remain in isolation whilst receiving any respiratory support which is classed as an AGP until they have had 2 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 AGPs
- 9.5. Once respiratory symptoms have settled, the infant can be moved out of the isolation area, but must remain in an incubator for 14 days before being moved into a cot
- 9.6. If the swab is negative and the baby is following a clinical course that is well recognised in neonatology (such as a preterm baby with improving RDS), then they may be able to come out of isolation sooner given the low vertical transmission rates. However, they still need to be nursed in an incubator for 14 days and barrier precautions of gloves and aprons as well as usual hand hygiene should be used. Some of these babies will improve sufficiently to be transferred to the care of midwives on the postnatal wards; they do not need to be monitored on the neonatal unit for the 14 days and can be discharged when clinically appropriate.
- 9.7. Whilst the baby is on the neonatal unit they should remain monitored and closely observed. Should they deteriorate within the 14 day period then there should be further consideration as to whether this could be COVID-19

## 10. Parental Access and Visiting

Many Trusts and NNUs have reduced visiting during the current situation and ensuring the safety of vulnerable babies and staff on NNU's during the COVID-19 pandemic is paramount. However, parents are not deemed to be visitors but partners in the care and decision making for their baby in line with the Network approach on family integrated care. Local decisions regarding parental contact must take into account the wealth of evidence which shows the benefits of involving parents in the care of their baby. There is currently no guidance or evidence that restricting contact time is necessary. The RCPCH state the benefits of extended parental presence at all times and the active involvement in the care of their baby is well documented and if parents cannot visit due to self-isolation guidance every effort should be made to facilitate remote contact by use of video conferencing or social media.

Further guidance on parental access during COVID-19 is available from RCPCH at: <https://www.rcpch.ac.uk/resources/COVID-19-guidance-neonatal-settings>

BLISS at: <https://s3.eu-west-2.amazonaws.com/files.bliss.org.uk/images/Bliss-Statement-parental-access-and-involvement-during-COVID-19.pdf?mtime=20200408164022>

- 10.1. BLISS recommend that both parents are supported to be involved with their baby's care and that policies stipulating access for a nominated parent or mothers only are avoided. It is recognised that arrangements for parental access may differ across the Network depending upon Trust policies and/or unit layout and that parents may have to access the unit separately due to social distancing issues. When transferring babies, units should ensure they update parents and make them aware that visiting policies may vary.

For twins (or other multiples) most units within the regional ODNs have agreed that one parent can be present per cot. The majority of units are also not permitting access more than once in a day i.e. once a parent has left the hospital premises they should not return until the following day.

- 10.2. For families of the most critically ill babies, and those receiving end of life care, arrangements for access should be risk assessed and any limitations should be based on evidence.
- 10.3. Programmes for parent testing have been introduced in some local Trusts and these should be followed where in place.
- 10.4. Parents who are suspected or confirmed COVID-19 positive, or have been contacted via the Track and Trace System, should not have access to the unit until they have tested negative, or until 10 days after the onset of symptoms and they are asymptomatic.
- 10.5. In line with current PHE guidance if a parent or anyone in the parents' household is suspected or confirmed COVID-19 positive they must self-isolate for 14 days even if they have no symptoms. During this time, they will not be allowed access to the neonatal unit.
- 10.6. Consideration must be given to how to facilitate parents who are shielding to visit and care for their baby.

- 10.7. No other visitors (including siblings) should visit (unless there are exceptional circumstances)
- 10.8. There is no evidence that skin to skin care should not be given by COVID-19 negative parents.
- 10.9. Where social distancing with other parents and staff can be achieved consideration should be given to allowing parents to remove facemasks when interacting with their baby.
- 10.10. Parents who are unable to be on the unit should have access to their baby and ability to speak to staff through the use of video link.
- 10.11. Parents should be provided with clear information about hand hygiene procedures, following PHE guidance and arrangements for parental access during this time. Policies on PPE for parents will be agreed at local Trust level.
- 10.12. Where / when it is not possible to maintain social distancing guidance then face coverings must be worn by parents. The type of facial covering will be agreed at local Trust level. Other mitigating actions should also be considered such as, parent led visiting schedules, use of screens to create physical barrier between cots.
- 10.13. Bliss have written a set of Best Practice Points <https://www.bliss.org.uk/health-professionals/information-and-resources/parental-access-covid19> which neonatal units should consider. These include;
  - Staff who are shielding and working from home or office to contact parents via telephone to check in and offer support
  - Allowing parents who are unable to visit due to self-isolation guidance to nominate another family member to visit in their place
  - Allow a nominated carer to access the unit when there is only one parent
  - Enabling parents to remove masks at the cotside
  - Arranging virtual coffee mornings for current and newly discharged parents to access for peer support
  - Infant feeding teams to use video conferencing to offer extra support to breastfeeding mothers
  - Access to food/parking vouchers

## 11. Infant Feeding

Although there is only a small amount of data available, the presence of viral RNA has rarely been reported in fresh breast milk of confirmed COVID-19 positive mothers. The risk of a baby contracting COVID-19 from breast feeding is therefore perceived to be from close contact with the mother.

Current guidance for well babies is that the benefits of breast feeding outweigh the risks. However, the evidence is less clear in relation to unwell or preterm babies.

National advice is available at

[https://www.rcog.org.uk/globalassets/documents/guidelines/2020-10-14\\_coronavirus-COVID-19-infection-in-pregnancy-v12.pdf](https://www.rcog.org.uk/globalassets/documents/guidelines/2020-10-14_coronavirus-COVID-19-infection-in-pregnancy-v12.pdf)

- 11.1. Parents should be supported to make decisions, jointly with clinicians, about the provision of EBM for their baby, following explanation and discussion of the risks and benefits.
- 11.2. Containers of EBM from mothers who are suspected / confirmed COVID-19 positive should be decontaminated and stored separately from EBM from COVID-19 negative mothers, in line with local IPC guidelines and national recommendations
- 11.3. Mothers must have a breast pump designated for their exclusive use and local IPC policies should be followed for the cleaning and storage of the equipment.
- 11.4. Further information on infant feeding is available at:  
<https://www.rcm.org.uk/media/4142/optimising-mother-baby-contact-and-infant-feeding-in-a-pandemic-version-2-final-24th-june-2020.pdf>

## **12. Discharge and safety netting advice**

- 12.1. Babies born to mothers testing positive for COVID-19 may need neonatal follow-up and on-going surveillance after discharge. Arrangements for safety netting advice should be facilitated when required, and this will require close liaison with midwifery services.
- 12.2. When ready for discharge parents/carers should be provided with written advice on what to look for and where to seek further advice if there are concerns. Parent information leaflets are available at:  
[https://www.rcpch.ac.uk/sites/default/files/2020-04/coronavirus\\_parent\\_information\\_for\\_newborn\\_babies\\_leaflet\\_final\\_070420.pdf](https://www.rcpch.ac.uk/sites/default/files/2020-04/coronavirus_parent_information_for_newborn_babies_leaflet_final_070420.pdf)  
[https://www.rcpch.ac.uk/sites/default/files/2020-04/illness\\_in\\_newborn\\_babies\\_leaflet\\_final\\_070420.pdf](https://www.rcpch.ac.uk/sites/default/files/2020-04/illness_in_newborn_babies_leaflet_final_070420.pdf)
- 12.3. Mother and baby should self-isolate for 14 days.
- 12.4. Babies may potentially catch coronavirus after birth from anyone who is infected with the virus, although these risks are felt to be low. More commonly babies may have issues with feeding and jaundice unrelated to coronavirus infection. There have been some parent information leaflets produced by NHSE which guide parents to the symptoms and signs to watch out for and to signpost where to seek advice should these occur. Parents should be encouraged to actively seek help and advice if their baby is unwell. See link to parent information leaflets above.

## **13. Managing Capacity and Staffing**

This will be a challenging time for acute services in the NHS. We recommend that units risk assess their medical and nurse staffing on a shift by shift basis to make decisions on safe staffing and available resources.

- 13.1. Units should review escalation policies for identifying and ensuring that minimum safe levels of medical and nursing staff are available; this may deviate from recognised national standards as an exceptional circumstance in this time.

Guidance on planning medical staffing and rotas is available at: [www.rcpch.ac.uk/resources/COVID-19-guidance-planning-paediatric-staffing-rotas](http://www.rcpch.ac.uk/resources/COVID-19-guidance-planning-paediatric-staffing-rotas)

- 13.2. If staffing ratios fall below the minimum identified within the regional surge plan this must be reported by telephone or email to ODN Director, Lead Nurse or Deputy Lead Nurse see [Section 3](#)
- 13.3. Capacity planning should be proactive. Admission to NNU should be avoided unless clinically indicated. **Exposure to COVID-19 in itself is not a reason for admission to NNU.**
- 13.4. Cot status must be recorded at least twice daily on the BadgerNet Cot Bureau.
- 13.5. Requirements to cohort or isolate babies may impact on capacity, if this is the case this should be reported by telephone or email to ODN Director, Lead Nurse or Deputy Lead Nurse see [Section 3](#)
- 13.6. Early discharge from NNU should be facilitated as appropriate. Advice for community (outreach) staff on home visits is available on the RCPCH website at: <https://www.rcpch.ac.uk/resources/COVID-19-guidance-paediatric-services>
- 13.7. If capacity across the Network becomes problematic, it may be necessary for units to care for infants outside their pathway where it is safe to do so. This will be discussed by senior medical staff on a case by case, and risks versus benefits, basis. All discussions and decisions will be documented in the patient record and these infants should be discussed with the tertiary units on a daily basis. An exception report should be completed as per normal ODN practice when a baby is cared for outside of the pathway. Capacity issues must be reported by telephone or email to ODN Director, Lead Nurse or Deputy Lead Nurse, see [Section 3](#)
- 13.8. Staff members who have cared for a neonate with suspected/confirmed COVID-19 infection do not need to self-isolate if correct PPE precautions have been taken.
- 13.9. The situation in relation to the self-isolation of healthcare workers is evolving and advice is being updated frequently. Trusts should keep up to date with the most current national guidance.

## 14. Staff Wellbeing

Advice for maintaining and supporting staff resilience and wellbeing is included in the RCPCH guidance and also available at: [www.nhsemployers.org/covid19/health-safety-and-wellbeing](http://www.nhsemployers.org/covid19/health-safety-and-wellbeing)

- 14.1. Staff should contact local occupational health departments with any concerns regarding contact with a possible case or their health and wellbeing.
- 14.2. Staff should be 'signposted' to all Trust support systems, such as counseling services.

## 15. Local Trust/Neonatal Service Actions

- 15.1. All providers within the EMNODN and WMNODN with neonatal services should have met with their local IPC teams and have a local SOP for the management of

neonatal patients with suspected or confirmed COVID-19 infection. This should include the local escalation plan and facilities for isolation or cohort of any suspected or confirmed COVID-19 cases.

- 15.2. Providers and their local IPC teams are responsible for training staff in the appropriate PPE as per national guidance.
- 15.3. Any case of confirmed COVID-19 in neonates should be escalated at the earliest opportunity by telephone or email to ODN Director, Lead Nurse or Deputy Lead Nurse and copied to the relevant ODN clinical leads (see [Section 3](#))

#### **15.4. Neonatal Intensive Care Unit**

- 15.4.1 Include in local SOP provision, the process for acceptance of suspected or confirmed COVID-19 from other hospitals, where transfer is deemed necessary.
- 15.4.2 Identify a senior member of medical team each day to be the designated point of contact. For queries from EMNODN units within North and South Hubs this should be a Clinical Lead from NUH and UHL respectively. For queries from WMNODN units this should be NICU Service Consultant /Lead. If further clarification is needed contact the WMNODN SMT team. This person will be responsible for contacting each unit within their hub on a daily basis to discuss any patients with suspected or confirmed COVID-19, and the on-going management on a case by case basis.

#### **15.5. Local Neonatal Unit**

- 15.5.1 Any case of suspected or confirmed COVID-19 requiring any respiratory support should be discussed at the earliest opportunity with the NICU senior clinician designated for COVID-19 and the relevant transport service.
- 15.5.2 LNUs should be prepared to continue to provide care for COVID-19 positive infants unless the treatment required is not available locally. Exposure to COVID-19 is not in itself a reason for transfer.
- 15.5.3 Transfer, even in those cases requiring intubation, will be based on a risks versus benefit approach, but it is essential that early and regular communication is maintained between the LNU, NICU and the relevant transport service.
- 15.5.4 Derogation from the service specification, for example regarding prolonged ventilation in an LNU, should again be supported by regular (minimum 24 hourly) discussion with the local NICU.

#### **15.6. Special Care Unit**

- 15.6.1 Any case of suspected or confirmed COVID-19 requiring any respiratory support should be discussed at the earliest opportunity with the lead NICU and the relevant transport service. If transfer from a SCU is required, this should be to a NICU if at all possible and capacity permits. This is to minimise the risk of subsequent transfer to the NICU if the baby's condition deteriorates.

- 15.6.2 Where possible SCUs should continue to care for any infants delivered in the local unit. Exposure to COVID-19 is not in itself a reason for transfer.
- 15.6.3 If necessitated, transfer for any infant requiring ventilation should be organised via the relevant transport service. For contact details see [Section 3](#). This may require additional resource and so referral should be at the earliest opportunity.

## 16. Transport

This section should be read in conjunction with the Neonatal transport pathway in cases of suspected/confirmed COVID-19 infection

- 16.1 Exposure to COVID-19 is not, in itself, a reason for transfer.
- 16.2 **Where possible, transfer from one hospital to another in patients with suspected or confirmed COVID-19 should be avoided.** This includes avoiding repatriation of infants with suspected or confirmed COVID-19 where possible.
- 16.3 Liaise with the relevant transport service and the ODN Management Team regarding any cases requiring isolation and the impact this has on cot availability.
- 16.4 NHSE guidance for ambulance services should be adhered to regarding PPE and the relevant transport service should work closely with the relevant ambulance service to support local processes.
- 16.5 Any infant with suspected or confirmed COVID-19 requiring transfer will require careful planning with the relevant transport service, the receiving NICU, and the LNU teams – including the IPC teams from both providers. This will be managed via conference call organised by the relevant transport service.
- 16.6 Capacity within NICU/LNU services may mean that transfers outside of the normal pathways will be required.
- 16.7 Elective/planned transfers may have to be delayed if a transfer of a COVID-19 patient is required.

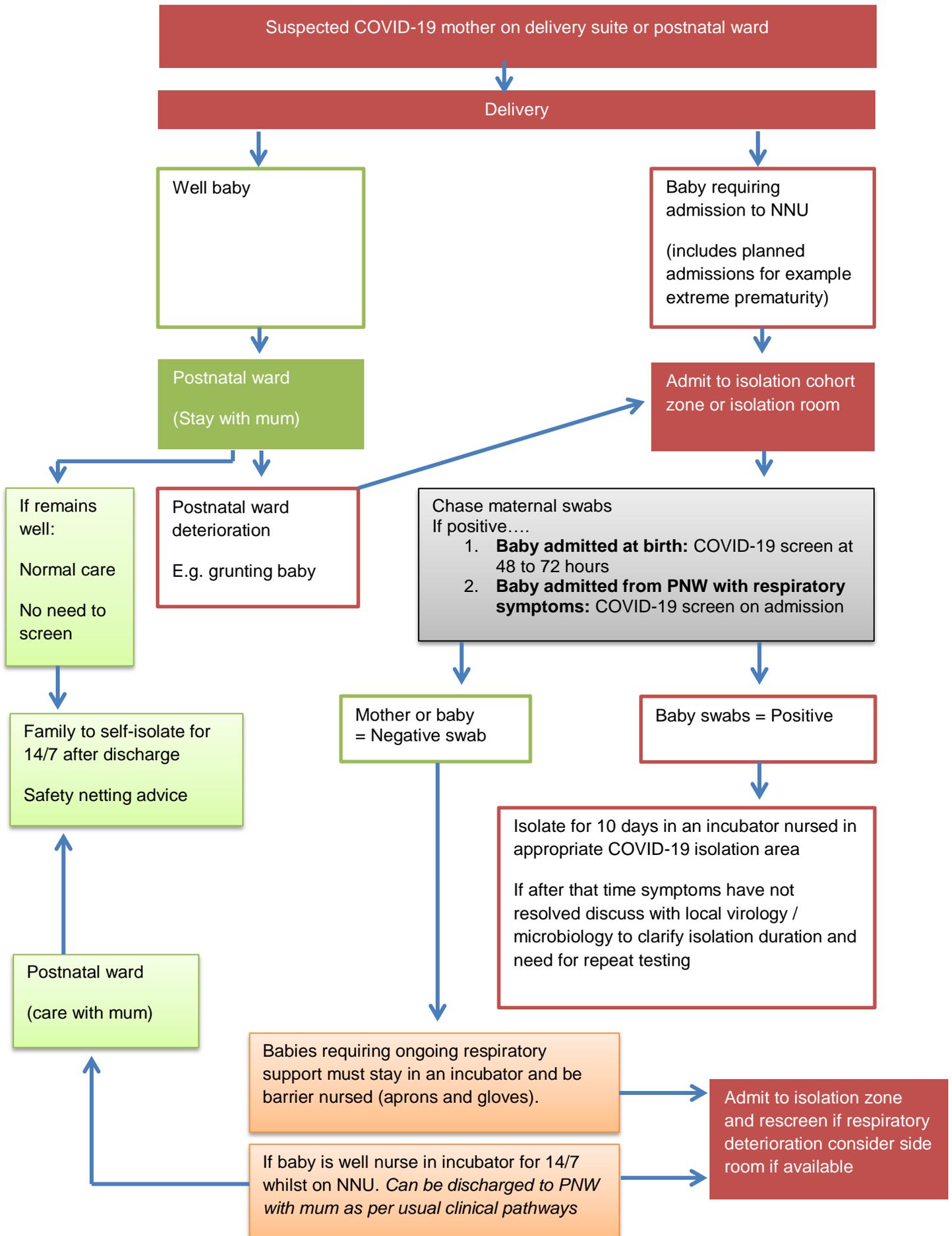
## 17. ODN Pathways

- 17.1 Infants will be managed on a risk versus benefit basis and this may necessitate variation to existing ODN patient pathways such as for ROP laser treatment and Congenital Heart Disease. Regular discussion between senior medical staff in the lead NICU, LNU and where applicable SCU, will be essential to ensuring that infants are cared for in the most appropriate place.
- 17.2. Any delays in treatment should be reported by telephone or email to ODN Director, Lead Nurse or Deputy Lead Nurse, see [Section 3](#)
- 17.3. Due to the strict isolation requirement for patients with suspected or confirmed COVID-19 there may be an impact on the management of patients requiring ROP

Laser treatment at the tertiary centres.

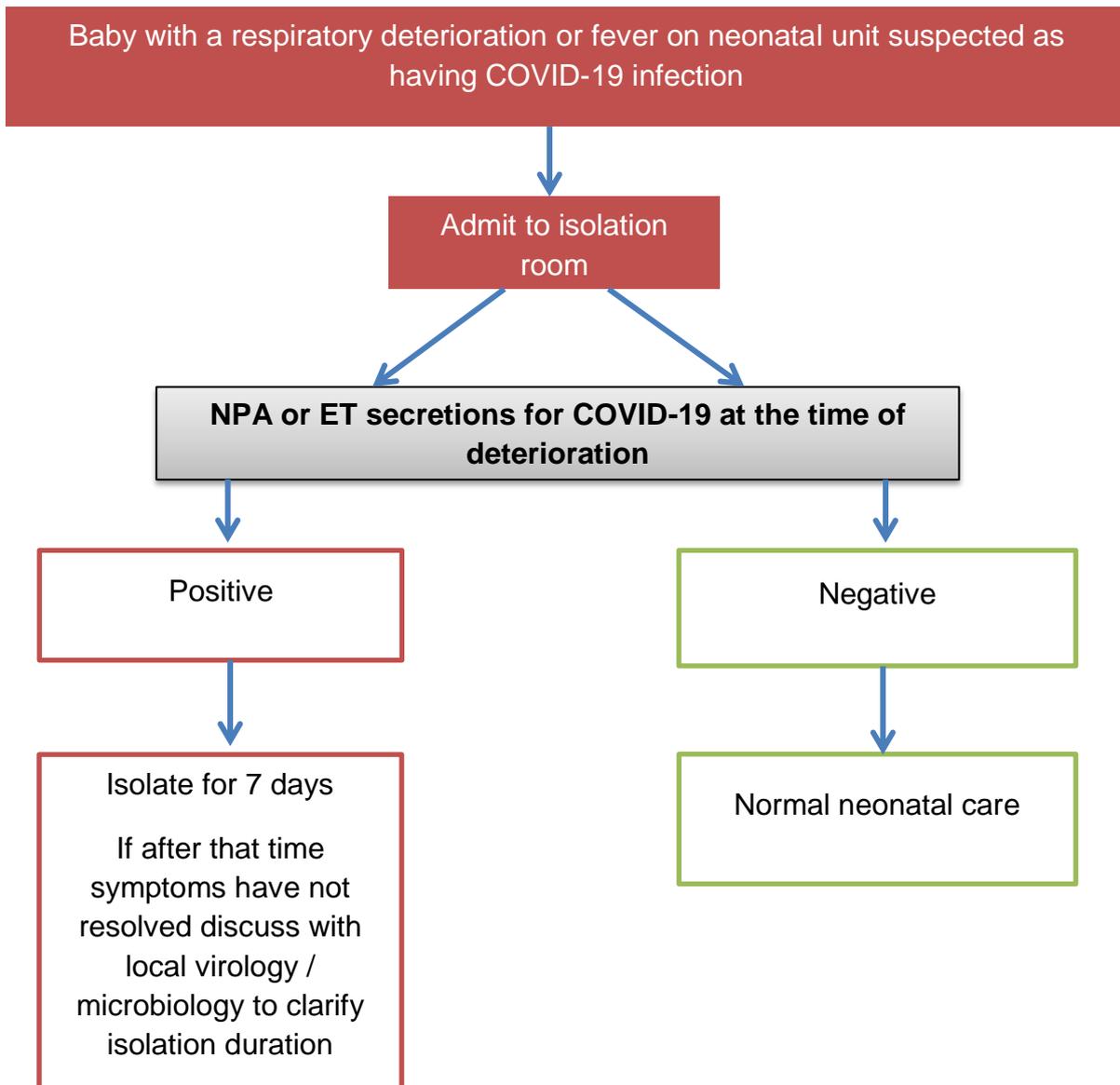
- 17.4. Local units should make their ophthalmology colleagues aware of this, and early discussion with the ROP coordinator is essential to ensure the timely and safe transfer of infants for their treatment.
- 17.5. Treatment at the local centre for ROP may not, however, be possible.

**Appendix 1**  
**Management of suspected COVID-19 positive Mother on delivery Suite or Postnatal Ward**



## Appendix 2

### Management of Baby on NNU with deterioration or fever suspected as having COVID-19



## Briefing Note

### Spacing of Cots in Neonatal Units During COVID-19 Outbreak

#### Background:

The Health Building Note 09-03 Neonatal Units (2013) gives “best practice” guidance on the design and planning of new healthcare buildings and on the adaptation/extension of existing facilities. The NHSE Quality Surveillance Team peer review process found that some older neonatal units do not meet the guidance. Where neonatal units are located in new-build facilities the guidance is more likely to be met.

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/147879/HBN\\_09-03\\_Final.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/147879/HBN_09-03_Final.pdf)

Current national PHE IPC Guidance seeks to ensure a consistent and resilient UK wide approach to IPC. In the case of neonatal critical care it is being applied to the minimum spacing that should exist between cots in an individual neonatal unit.

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/886668/COVID-19\\_Infection\\_prevention\\_and\\_control\\_guidance\\_complete.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/886668/COVID-19_Infection_prevention_and_control_guidance_complete.pdf)

Recent COVID-19 IPC guidance published by the RCPCH and BAPM has advised that 2 metre spacing in neonatal units is not necessary.

<https://www.rcpch.ac.uk/resources/covid-19-guidance-neonatal-settings#parents-andvisitors-to-nnu>

The guidance states:

‘NNUs and maternity units will need to consider how they might enable social distancing for both staff and attending parents, such measures might include provision of face masks, alcohol gel, washing facilities, and the spatial configuration of nurseries. Infant incubators and cots do not need to be separated by 2 metres.’

#### Issue:

A number of regions have identified an issue in trying to reconcile the recommendations in the various guidance.

In particular in the Midlands region the Regional IPC Team supported by the National IPC cell have determined that 2 metre spacing is necessary based on the PHE IPC guidance. The 2013 national buildings guidance has been used as the example of how a unit can meet this requirement, in particular quoting the following from the buildings guidance:

‘Ensure that there is adequate cot spacing as recommended in Health Building Note 09-03 and that there is no clutter around, or overcrowding of, incubators/cots in the unit.’

The recommended space allowance in HBN 09-03 for intensive care and high dependency units is:

- 13.5sqm for the 'clinical space envelope' in multi-cot/incubator areas;
- 20sqm in single rooms and when access space and shared space for core support (pharmacy, storage etc.) is included in multi-cot/incubator areas space allowance.

The recommended space allowance in special care units is:

- 9sqm for the 'clinical space envelope' in multi-cot/incubator areas;
- 11.5sqm in single rooms and when access space and shared space for core support (pharmacy, storage etc.) is included in multi-cot/incubator areas space allowance

The Midlands Specialised Commissioning Team and the Midlands Neonatal ODN have modelled the impact of implementing 2 metre distancing between cots in the units within their region. Capacity would be affected across the Midlands region (12% reduction in West Mids and 13% reduction in East Mids). Almost all units in the region already run above the ideal 80% occupancy with some units regularly getting to 100% occupancy.

### **Considerations:**

- Individual Trusts are responsible for infection prevention and control within their organisations and Trust Executive Directors for IPC are accountable for decisions made by the organisation.
- Buildings guidance has been in place since 2013 and where buildings are redeveloped or new facilities are built these regulations can be used to guide the design of new neonatal facilities.
- Many neonatal units across the country exist in old estate which did not meet the buildings regulations prior to the outbreak.
- In the longer term the neonatal transformation programme will be able to consider issues with capacity and facilities and incorporate proposals for solutions in ODN transformation planning.
- The impact of implementing 2 metre cot spacing on neonatal capacity will vary across England.

### **Recommendations:**

- Individual provider Trusts to consider risk assessment, involving clinical staff (including neonatal and maternity unit staff) and taking into account national guidance on social distancing, ICP and PPE.
- Risk assessment should include consideration of the associated risks for the neonatal and maternity services if capacity is reduced e.g. the increased requirement for transfer of mothers and babies across and potentially out of region.
- Local decision making will be necessary in regard to results of risk assessments and the mitigating action required in response to risks identified which take account of pressures within the unit, across the network and the region.

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**Completed by:** Daniel Eve National Programme of Care Manager

**Date:** 22<sup>nd</sup> May 2020

## Appendix 4

**Table 1; COVID-19 Neonatal Categories of Risk, Screening and Isolation**

Mother: Routine screen on admission to hospital	Baby:	Risk status of BABY	Respiratory Support / AGPs	PPE for baby	Isolation of baby	Screening of baby																			
Confirmed negative	Swab result pending / swab negative	LOW	NO	<ul style="list-style-type: none"> <li>Surgical mask</li> <li>Apron</li> <li>Gloves</li> </ul>	<ul style="list-style-type: none"> <li>Not required</li> </ul>	<ul style="list-style-type: none"> <li>Regular screening not required unless local Trust policy</li> <li>Test weekly to maintain LOW status if require ongoing ventilator / high flow oxygen support</li> </ul>																			
Suspected or confirmed COVID-19 positive	Swab negative		YES				Asymptomatic and swab result pending	Swab result pending	MEDIUM	NO	<ul style="list-style-type: none"> <li>Surgical mask</li> <li>Apron</li> <li>Gloves</li> </ul>	<ul style="list-style-type: none"> <li>Incubator</li> <li>Can be cohorted with other MEDIUM risk babies NOT requiring respiratory support</li> </ul>	<ul style="list-style-type: none"> <li>Screen in line with local Trust policy</li> </ul>	Clinically suspected of COVID-19 and swab result pending	Swab result pending	YES	<ul style="list-style-type: none"> <li>FFP3 (or equivalent) mask</li> <li>Full gown</li> <li>Gloves</li> <li>Eye protection</li> </ul>	<ul style="list-style-type: none"> <li>Incubator (for 14 days if mother confirmed positive)</li> <li>Should not be cohorted with other MEDIUM risk babies</li> </ul>	Confirmed positive	Swab result pending	Confirmed negative / suspected or confirmed COVID-19 positive	Swab positive	HIGH	NO	<ul style="list-style-type: none"> <li>Surgical Mask</li> <li>Apron</li> <li>Gloves</li> <li>Eye protection</li> </ul>
Asymptomatic and swab result pending	Swab result pending	MEDIUM	NO	<ul style="list-style-type: none"> <li>Surgical mask</li> <li>Apron</li> <li>Gloves</li> </ul>	<ul style="list-style-type: none"> <li>Incubator</li> <li>Can be cohorted with other MEDIUM risk babies NOT requiring respiratory support</li> </ul>	<ul style="list-style-type: none"> <li>Screen in line with local Trust policy</li> </ul>																			
Clinically suspected of COVID-19 and swab result pending	Swab result pending		YES	<ul style="list-style-type: none"> <li>FFP3 (or equivalent) mask</li> <li>Full gown</li> <li>Gloves</li> <li>Eye protection</li> </ul>			<ul style="list-style-type: none"> <li>Incubator (for 14 days if mother confirmed positive)</li> <li>Should not be cohorted with other MEDIUM risk babies</li> </ul>																		
Confirmed positive	Swab result pending																								
Confirmed negative / suspected or confirmed COVID-19 positive	Swab positive	HIGH	NO	<ul style="list-style-type: none"> <li>Surgical Mask</li> <li>Apron</li> <li>Gloves</li> <li>Eye protection</li> </ul>	<ul style="list-style-type: none"> <li>Incubator</li> <li>Admit to cohort area / isolation cubicle.</li> </ul>	<ul style="list-style-type: none"> <li>Screen in line with local Trust policy</li> </ul>																			
			YES	<ul style="list-style-type: none"> <li>FFP3 (or equivalent) mask</li> <li>Full gown</li> <li>Gloves</li> <li>Eye protection</li> </ul>																					