COVID-19 - guidance for paediatric services

Health Policy team

This guidance has been prepared to provide members / health professionals working in paediatrics and child health with advice around the ongoing outbreak of COVID-19. It also provides signposts and links to further information developed by national bodies.

We will update this guidance on a regular basis as new data becomes available. We'll work with others to bring together the best available information. Advice and guidance should be used alongside local operational policies developed by your organisation.

Last modified
1 April 2020

Post date
13 March 2020

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We are reviewing this content each weekday, and will publish any updated guidance.

Updates in this version (published 1 April):

- Community settings: Link to QI Central page with telemedicine resources.
- Acute paediatrics: links added to resources from BAPN, NHS England on remote consultations, managing cough and high temperature, and care for patients; NHS Scotland plans for people at high risk; and information regarding parents visiting children that require inpatient care.

Updates in version published 31 March:

- New guidance for community settings section
- Child protection and vulnerable children: Added guide to parental consent for vulnerable children

Updates in version published 30 March:

- Tonsillar examination guidance – pdf removed and guidance embedded in text
- Safeguarding: added link to Tonsillar examination guidance and advice that well children and young people should not be admitted to hospital as a place of safety unless there is no other option
- Acute paediatrics - added link to PHE guidance on testing priorities; new link to NHS guidance on ED & front door streaming; new link to NHS England guidance on paediatric critical care

If you need to know what updates occurred on days prior to those specified above, contact us on health.policy@rcpch.ac.uk.

To get an email notification of each update, you can log in and select the pink button in the grey box 'Notify me when updated'.

Resilience and self-care

As a healthcare professional, the COVID-19 outbreak is likely to add to your workload and heighten stress levels. We encourage you to try and look after yourself during this uncertain and busy time:

- A lack of sleep lowers your ability to concentrate, impedes your potential to make effective decisions and compromises your immune system. The only way to remedy this is to get more sleep. The NHS has more information on the impact of not getting enough sleep, and advice on sleep and shift work is available from the BMJ.
- Take regular breaks before you feel that you’re getting tired or burned out. This might feel counterintuitive but it will build your resilience to stressful situations.
- Ask colleagues for help if you feel overwhelmed or that your ability to care for your patients is being compromised.
- Try and do as many things as you usually would, such as talking with family and friends.
- Take a break from social media and the news as much as you are able to. The constant COVID-19 news cycle and commentary can have a negative impact on your mental health, especially for those that work in the healthcare sector.

NHS Employers (part of the NHS Confederation) has also published guidance on supporting the physical and mental wellbeing of staff. This includes guidance on occupational health, staff wellbeing and support, mental wellbeing and fatigue.

If you are an RCPCH member you can sign up to receive email alerts when this guidance updates every weekday, so that you are better able to take a break from Twitter and still stay informed. Log in and follow instructions at the top of this page.

Preparing for COVID-19

- Understand the current advice from Public Health England (PHE) on which patients should go to hospital, and who should stay at home and advise accordingly.
- Understand the Clinical guide for the management of paediatric patients during the coronavirus pandemic document, published by the NHS.
- Ensure that staff are familiar with local operational procedures and are appropriately trained. For example:
    - Staff should be aware of the location where possible cases will be isolated and who to contact in their organisation to discuss possible cases.
    - Guidelines on the use of Personal and Protective Equipment (PPE) are changing frequently and health professionals should regularly review updated guidance.
    - Staff involved in assessing or caring for confirmed cases of COVID-19 should be trained in using a respiratory mask and that fit testing has been undertaken before this equipment is used.
    - Staff caring for children with confirmed COVID-19 or undertaking aerosol generating procedures should be trained in the safe donning and removal of PPE.
    - Planning for cohorting should be undertaken as soon as possible to ensure criteria for groups are established. Cohorting should be for established diagnosis.
- NHS Inform in Scotland has produced information for professionals advising the public.
- There is a child-friendly poster explaining COVID-19, available to download at the bottom of this page, shared with permission and thanks to University Hospitals Southampton NHSFT.
- RCPCH statement on use of ibuprofen: Experts at the RCPCH have recommended that parents treat symptoms of fever or pain related to COVID-19 with paracetamol, rather than ibuprofen. While there is no significant scientific evidence that ibuprofen is associated with worse outcomes in COVID-19 infection, this advice is offered as a precaution.

Tonsillar examination - infection control implications

For asymptomatically infected children

This guidance is produced by RCPCH and the British Paediatric Allergy Immunity & Infection Group.

BPAIIG British Paediatric Allergy Immunity & Infection Group

Context

Our priority is to keep ourselves and our colleagues safe while maintaining a pragmatic approach, and being mindful that PPE is potentially in limited supply.

While the COVID-19 narrative has focused predominantly on adults, there is growing concern about the role played by asymptomatic children in the spread of infection.[1] Transmission from the upper airway has been raised as a particular concern by ear, nose and throat (ENT) specialists,[2] with viral replication shown to take place in the upper airway as well as the lower airway. This may explain why a number of paediatric and ENT healthcare professionals have developed disease in the absence of exposure to children with currently defined risk factors.

Clinical recommendations

- We recommend that the oropharynx of children should only be examined if essential.
- If the throat needs to be examined, personal protective equipment (fluid resistant surgical face mask, plastic apron and gloves) should be worn, irrespective of whether the child has symptoms consistent with COVID-19 or not.
- If a child is being tested for COVID-19, staff should routinely wear PPE (surgical face mask and apron) to collect the combined nose/throat sample.

Suspected tonsillitis in primary care or emergency departments

- During the COVID-19 pandemic, if a diagnosis of tonsillitis is suspected based on clinical history, the default becomes not examining the throat unless absolutely necessary.
- If using the feverpain scoring system to decide if antibiotics are indicated (validated in children 3 years and older),[3] we suggest that a pragmatic approach is adopted, and automatically starting with a score of 2 in lieu of an examination seems reasonable.
- Antibiotics should be considered in children with a total feverpain score of 4 or 5 (we suggest children with a score of 3 or less receive safety netting advice alone).
- Although this is likely to result in a temporary increase in antibiotic prescribing in children, we feel that this is preferable to healthcare staff being unnecessary exposed to COVID-19. Antibiotics rarely confer a benefit in children under 3 years with tonsillitis and should only be prescribed in exceptional circumstances or if a diagnosis of scarlet fever is strongly considered.

Occupational health

- Information about workforce, including the vulnerable workforce, is available from our guidance for paediatric staffing and rotas.
- It is important that health professionals do not attend a healthcare setting if there is a risk they could spread COVID-19, in line with current PHE guidelines. This guidance

also includes a chart that illustrates how long household contacts need to self-isolate.
- The Government has produced guidance on what to do when health workers, patients or visitors have come into contact with a confirmed case of COVID-19 while not wearing personal protective equipment (PPE).
- All staff should be aware of who to contact within their organisation if they develop COVID-19 compatible symptoms.
- NHS Employers (part of the NHS Confederation) have published guidance on supporting the physical and mental wellbeing of staff. This includes guidance on occupational health, staff wellbeing and support, mental wellbeing and fatigue.
- The Scottish Government has published guidance for NHS Scotland staff.
- Health professionals should seek advice from occupational health if they are pregnant or concerned that they are vulnerable to COVID-19 - see RCOG guidance on pregnancy. Older people, and people with pre-existing medical conditions (such as asthma, diabetes, heart disease) are more likely to become severely ill with the virus. Recommendations regarding possible adjustment for staff at increased risk are included in this letter from the NHS Chief Executive and Chief Operating Officer (PDF). There is also guidance from NHS employers on supporting vulnerable staff.
- Information for the vulnerable workforce, including pregnant staff members, is available from the RCPCH COVID-19 guidance for planning paediatric staffing and rotas.
- Public Health England have published guidance on protecting people who are extremely vulnerable to COVID-19.
- Health Protection Scotland has produced COVID-19 guidance for Social or Community Care and Residential Settings including occupational exposure.
- The guidance for health professionals in England, Scotland, Wales and Northern Ireland is being reviewed on a regular basis.

Safeguarding, looked after children and vulnerable children processes in England, Wales and Northern Ireland

Preparations

- Throughout these exceptional times, all professionals who look after children and young people, must continue to base their judgments on the best interests of the child or children that they are caring for. This fundamental of good paediatric practice is the constant that must not alter however much the circumstances change around us.
- Paediatricians and other colleagues involved in safeguarding children, looked after children (LAC), adoption, child death and children with special education needs (SEN) work may already be part of, or be drafted back into, providing acute lifesaving medical services or support of those services.
- The result of this will be a reduction in paediatricians and other colleagues' ability to contribute fully to the multi- agency processes and these problems will be mirrored by workforce and safety issues within partner agencies. We do not yet know whether or when certain statutory processes may be suspended and how long this may last.
- Paediatricians and other colleagues should ensure safeguarding arrangements are considered in the context of an influx of young adults into children's hospitals and wards. Every reasonable effort should be made to separate different age groups.
- It should be discouraged to admit well children and young people to hospital because

this is deemed to be a place of safety, unless no other alternative arrangements can be made.
- Key vulnerable children professionals should contribute to the discussions for contingency planning with regard to what will happen when parents, foster carers, connected carers and residential home workers become unwell and can't look after children in their care.
- Key vulnerable children professionals should contribute to discussions for contingency planning with regards to how food and medicines will be supplied to vulnerable children and families in households in self-isolation.
- Public Health England have published guidance on the provisions being made for vulnerable children and young people.

Good practice for paediatricians

- Designated and named professionals, or their equivalents, should meet with colleagues in social care and the police to discuss what the different levels of support may be, which are likely to vary in a step wise manner as local health resources change.
- Only clinically essential face-to-face meetings should occur.
- Telephone or video conferencing facilities should be used wherever possible in place of face-to-face meetings whether they be strategic or for individual case management purposes.
- Telephone or video conferencing may also be utilised when available to carry out consultations with patients and their families when clinically necessary.
- Paediatricians should wear correct PPE as per PHE guidance for examining children and in particular for examining the tonsils. Examination of the tonsils is considered an aerolising procedure. It is therefore best not to examine the throat unless there is a high suspicion of injury to the throat and to only do so using the appropriate precautions. You can read our full guidance on tonsillar examination and infection control implications.
- NHSE published new requirements on how providers of community services can release capacity to support the COVID-19 preparedness and response. You can read guidance for LAC teams, safeguarding and sexual assault services (PDF). This document advises which services should currently be prioritised.
- Public Health England has updated the NHS entitlements: migrant health guide to state that no charge can be made to an overseas visitor for the diagnosis or treatment of COVID-19.
- Consent issues for vulnerable children can be complex. A guide to this produced by Nottingham Children's Hospital is available to download at the bottom of the page.

During the peak of the pandemic paediatricians and other colleagues may only be able to:

- Treat injured children where there is no option but to admit to hospital. This group of children are likely to have already presented to emergency departments with fractures, burns and head injuries, etc.
- Attend to the essential health needs of sexually assaulted children, eg supply Post-Exposure Prophylaxis following Sexual Exposure (PEPSE), Hepatitis B vaccine, pregnancy testing and sexually transmitted infections (STI) screening. Where possible this should be via liaison with primary care or other non-hospital services, by developing local risk assessment and care pathways with social care and the police. The Faculty of Forensic and Legal Medicine has produced guidance on Sexual Assault Referral Centres (SARC) requests for Forensic Medical Examination

based on the current situation.
- Provide health based telephone advice to social care and the police about urgent child protection, LAC, adoption, and child death matters. This advice service may be arranged on a rota basis within existing health networks.
- Paediatricians and other colleagues should remain mindful of contextual safeguarding issues. This advice will be based on their best clinical judgement and on resources available at the time.

The Royal College of Nursing, NHS England and the National Network of Designated Healthcare Professionals (NNDHP) are supportive of the above guidance for professionals working in safeguarding and looked after children's areas of practice. We remind all concerned to ensure they also follow local operational policies developed by their organisation.

Child protection, looked after children and vulnerable children processes in Scotland

Preparations

- Throughout these exceptional times, all professionals who look after children and young people, must continue to base their judgements on the best interests of the child or children that they are caring for. This fundamental of good paediatric practice is the constant that must not alter, however much the circumstances change around us.
- Paediatric child protection services should be seen as a critical service, that is adequately staffed and rotas maintained. This may mean that fewer child protection doctors cover the rotas in order to allow paediatricians with a range of skills to be deployed to other areas.
- Robust rotas of paediatricians with expertise in child protection need to be available to multi-agency colleagues to ensure medicals can still take place but IRD (initial referral discussion) and case conference is likely to be affected as workload increases and human resource depletes. Face to face medical assessments should proceed, if risk assessed as essential.
- The clinical leadership of the lead paediatrician in child protection should be protected to ensure that clinical and multi-agency staff have appropriate clinical advice, but other strategic roles of this post will not be maintained during this period of crisis.
- Paediatricians and other colleagues should ensure safeguarding arrangements are considered in the context of an influx of young adults into children's hospitals and wards. Every reasonable effort should be made to separate different age groups.
- It should be discouraged to admit well children and young people to hospital because this is deemed to be a place of safety, unless no other alternative arrangements can be made.
- Key vulnerable children professionals should contribute to discussions for contingency planning with regards to how food and medicines will be supplied to vulnerable children and families in self-isolation.
- Scottish Government have published guidance on critical childcare for key workers. All Scottish Government guidance related to child protection during the COVID period will be published here.

Good practice for paediatricians

- Lead paediatricians for child protection and Paediatricians with a Special Interest in Child Protection, should meet with colleagues in social care and the police to discuss what the different levels of support may be, which are likely to vary in a step wise manner as local health resources change.
- Only clinically essential face-to-face meetings should occur.
- Telephone or video conferencing facilities should be used wherever possible in place of face-to-face meetings, whether they be strategic or for individual case management purposes.
- Telephone or video conferencing may also be utilised when available to carry out consultations with patients and their families when clinically necessary.
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- NHSE published new requirements on how providers of community services can release capacity to support COVID-19 preparedness and response. You can read guidance for LAC teams, safeguarding and sexual assault services. This document advises which services should currently be prioritised.
- NHS Inform has changed its guidance to state that no charge can be made to an overseas visitor for the diagnosis or treatment of COVID-19.

During the peak of the pandemic paediatricians and other colleagues may only be able to:

- Treat injured children where there is no option but to admit to hospital. This group of children are likely to have already presented to emergency departments with fractures, burns and head injuries etc.
- Attend to the essential health needs of sexually assaulted children, eg supply Post-Exposure Prophylaxis following Sexual Exposure (PEPSE), Hepatitis B vaccine, pregnancy testing and sexually transmitted infections (STI) screening. Where possible this should be via liaison with primary care or other non-hospital services, by developing local risk assessment and care pathways with social care and the police. The Faculty of Forensic and Legal Medicine has produced guidance on Sexual Assault Referral Centres (SARC) requests for Forensic Medical Examination based on the current situation.
- Provide health-based telephone advice to social care and the police about urgent child protection, LAC, adoption, and child death matters. This advice service may be arranged on a rota basis within existing networks.
- Paediatricians and other colleagues should remain mindful of contextual safeguarding issues. This advice will be based on their best clinical judgement and on resources available at the time.

We would like to remind all concerned to ensure they also follow local operational polices developed by their organisation.

Working in community paediatrics

This section has been produced with the British Association for Community Child Health (BACCH).

The section covers operational and clinical guidance for community settings. The operational guidance includes minimising potential exposure to COVID-19 for patient and practitioner while keeping patients safe, and the role of community care in supporting the NHS response to COVID-19 (England only). The clinical guidance includes the isolation of children from household members and other health professionals, and how to manage suspected cases in the clinic, educational settings and residential settings and during home visits.

Note: given the poor availability of testing and lag between testing and receiving results, 'suspected cases' must be considered to be 'suspected and proven'.

Work is ongoing to ensure national guidance is applicable to children and young people. We encourage members to take a pragmatic approach to interpreting guidance so that it meets the needs of children in local areas.

Where available, existing guidance is signposted from Scotland, Wales and/or Northern Ireland.

While hospice settings are outside the scope of this section, we recognise that some community paediatricians may lead on this work. Clinicians are advised to make appropriate policies in conjunction with others in their locality, such as hospice staff and the local authority.

Some of the services provided to children and young people by community paediatricians, especially those delivered in schools, will pause during the COVID-19 outbreak. Appendix 1 in this section offers ideas on how community paediatricians could work to support the COVID-19 response in light of service suspension. The work of community paediatricians varies greatly, and services are encouraged to use these ideas to develop their own guidance that is suitable for their context.

‘Where possible, community?paediatric?doctors should be deployed to support acute? paediatric?services and?paediatric?Emergency Departments, although essential community services that keep children safe and?well at home should?continue’ (NHSE/I guidance on redeploying the medical workforce, p12).?

Operational guidance for community settings

Minimising potential exposure to COVID-19 for patient and practitioner, while keeping patients safe

Community clinics

- As in home visits, clinicians should consider whether appointments are necessary and, if so, use telemedicine tools as much as possible. This may include telephone consultations or similar, depending on the resources available. RCPCH QI Central features online resources for setting up and running successful video consultations.
- The GMC flowchart is helpful to determine whether remote consultation is appropriate. It is geared towards adults so some points should be re-interpreted when working with children and young people. It must also be considered in the context of risks posed by COVID-19 and on a case by case basis.
- A relatively small number of community clinic appointments will continue throughout the COVID-19 outbreak (see 'Priorities for community health services' below). Service providers in a locality should consider consolidating remaining face-to-face services into one or a small number of centres. The centre(s) should have adequate space for social distancing in waiting rooms with appointments timed to facilitate this. The centre should be cleaned to a standard that minimises infection and have hand sanitisers or hand washing facilities for patients.

Home visits

- PHE guidance on home care provision includes steps for home care providers to maintain delivery of care. This includes: reviewing client lists and sharing this information with local partners as appropriate and necessary, working with local authorities to establish plans for mutual aid; and noting arrangements by local authorities, CCGs and NHS111 to refer vulnerable people that are self-isolating to volunteers that can provide support.
- Clinicians should consider whether visits are necessary and, if so, use telemedicine tools as much as possible. This may include telephone consultations or similar, depending on the resources available. RCPCH QI Central features online resources for setting up and running successful video consultations.
- The GMC flowchart is helpful to determine whether remote consultation is appropriate. It is geared towards adults so some points should be re-interpreted when working with children and young people. It must also be considered in the context of risks posed by COVID-19 and on a case by case basis.
- When considering whether visits should be conducted as planned, clinicians should also consider their own safety and the safety of the other children that they provide care for.
- For Scotland, guidance is available from HPS COVID-19 Information and Guidance for Social or Community Care and Residential Settings. Section 1.7 'Home visits/care at home' notes that health and social care staff should defer visits to self-isolating people if possible. If visits are essential, staff must comply with all infection control procedures and the use of bank/agency staff must be avoided wherever possible. The guidance also covers PPE and suggests that assigning a dedicated team of staff to care for a

case load of individuals could help to further prevent onward spread of infection.

Educational settings

- For children and young people with education, health and care plans (EHCPs), PHE guidance on vulnerable children and young people states that these should be risk-assessed by the school/college to decide whether children and young people need to be offered a school place to meet their needs, or if they can safely have their needs met at home. If necessary, this could include carers, therapists or clinicians visiting the home to provide essential services.
- There is further information regarding special schools and colleges in the guidance.
- For children in alternative provision (AP) settings, guidance states that AP settings are staying open throughout the COVID-19 outbreak, as significant numbers of children in AP meet their definition of vulnerable (having a social worker and/or an EHCP).
- Clinicians working in AP settings should work with management to minimise infection risk to children and young people while ensuring that their needs are met.
- Guidance for Scotland concerning COVID-19 school closures similarly notes that school, early learning and childcare (ELC) settings may stay open for children of key workers and vulnerable children (defined as those in receipt of free school meals, children with additional support needs and at-risk children).
- The Northern Ireland Department for Education has advised that special schools will stay open, as these children fall within the definition of vulnerable children.

The role of community care in supporting the NHS response to COVID-19 (England only)

Priorities for community health services

- On 19 March 2020, NHSE/I published COVID-19 Prioritisation within community health services guidance. Current general priorities for providers of community services during this pandemic are to:
    - Support home discharge of patients from acute and community beds, as mandated in the COVID-19 hospital discharge service requirements
    - Use digital technology wherever possible
    - Prioritise support for high-risk individuals who will be advised to self-isolate for 12 weeks
    - Apply the principle of mutual aid within health and social care partners, as decided through your local resilience forum
- These general priorities are for all community services providers and are therefore not specific to children and young people (CYP) community services. Providers of CYP services should be mindful of this when implementing them.
- The Prioritisation document recommends that services that should continue include emotional health and wellbeing/mental health support, with urgent care prioritised.
- Mental health, learning disabilities and autism are the focus of a COVID-19 response cell that is not specific to CYP (see sub-section: ‘Mental health, learning disabilities and autism’).
- NHS?guidance on redeploying the secondary care medical workforce is available. While?the entire document is?not specific to?care for?children?and young people, it does?have a section on?paediatrics?which notes that ‘where possible, community?

paediatric?doctors should be deployed to support acute?paediatric?services and? paediatric?EDs, although essential community services that keep children safe and? would should?continue' (p12).

Mental health, learning disabilities and autism

- Guidance for clinicians who have had limited?contact with people with a learning disability or autism?has been published by NHSE/I. It outlines an approach to supporting people with a learning disability and people with autism throughout the COVID-19 outbreak, and links to further resources.?
- The national mental health and learning disability and autism teams and NHSE/I have set up a COVID-19 response cell. The cell has limited relevance to CYP but may be useful to be aware of. More information is available in their update published 15 March 2020 (PDF).
- The?cell?have?now published guidance:?Managing capacity and demand within inpatient and community mental health, learning disabilities and autism services for all ages (PDF), published on 25 March 2020.??
- The guidance outlines general principles. These are?that:?people with mental health needs, a learning disability or autism should receive the same degree of protection and support?as other members of the population;?providers may need to make difficult decisions in the context of reduces capacity and increasing demand;?providers should consider both physical and mental vulnerability;?partnership working is crucial; digital technology is an essential tool to?maximise?delivery; and providers should bear the longer-term impact of the COVID-19 outbreak in mind, and seek to?minimise?changes that impact on the capacity of the system in the long term.?
- The guidance then discusses a range of considerations, such as funding,?cohorting? and additional considerations for community-based teams.?

Clinical management of suspected cases

Isolation of children from household members and other child health professionals

- Community paediatricians should consider the entire care package when thinking about isolation, in partnership with those involved; parents and other carers that work with the child, for example. RCPCH guidance on children with increased risk of COVID-19 should be taken into account to ensure that risk to the child or young person does not outweigh the benefit of maximising isolation against COVID-19 (see 'children with increased risk of COVID-19, below).
- Complex care packages may pose a risk to the child, as they necessitate many individuals entering and leaving the home. Risk to the child must be considered against the need for all of their care, or aspects of it, to continue during the COVID-19 outbreak.
- A coordinated approach should be taken to minimise risk. This necessitates a case by case approach to manage risk/benefit for the child and carers/clinicians.
- PHE advice should be taken regarding self-isolation with children; PHE acknowledges that some advice may be difficult to apply if the person isolated is a young child or a child requiring lots of support due to complex medical needs or disability. Clinicians should use their professional judgement in deciding whether the recommendations are appropriate on a case by case basis.

- Individuals with an intellectual disability/learning disability may have difficulty comprehending public health precautions, such as social distancing or hand washing. Those involved in their care should consider how best to communicate these important messages.

Community clinics

- If a clinician working in a community clinic suspects that a patient has COVID-19, they should follow the PHE guidance for primary care clinicians as much as practicable and possible. This includes avoiding physical examination of a suspected case.
- In Scotland, they should follow HPS information and guidance for social or community care and residential settings section 1.4. This states that the individual should be returned home, via a private vehicle if possible, unless they require emergency medical attention. In this case, 999 should be called. Environmental decontamination should then take place.

Home visits

- If a clinician is in a patient's home and suspects COVID-19 infection among the patient or a member of the household, they should follow PHE guidance concerning PPE and safe working procedures to minimise the risk of transmission.
- If a clinician believes they may have become infected with COVID-19, they should self-isolate and follow NHS advice.

Educational settings

- Schools are now closed in the UK for all children and young people, except those of key workers and for vulnerable children and young people (see Department for Education guidance for further information).
- Where schools are still open for these children, if a clinician suspects that a patient has COVID-19, they should follow the PHE guidance for educational settings as much as practicable and possible.
- Guidance from PHE on residential care provision may also be relevant to some educational settings.
- The clinician should discuss the case with relevant staff members, such as the headteacher, and call NHS 111, NHS 24 in Scotland, NHS Direct in Wales and GP out of hours in Northern Ireland.
- The clinician should direct staff members to the guidance for educational settings for further information about decontamination, school closure and other measures.

Residential settings

- PHE and the Department for Education have published guidance on isolation for residential educational settings, including children's homes and residential special schools.
- The guidance recommends that infection control measures are taken within settings, which would apply to clinicians providing healthcare, and asks that staff rotas minimise the number of staff entering and leaving the premises.
- HPS has guidance for caring for someone with possible COVID-19 in residential

settings (section 1.6), as part of their COVID-19 information and guidance for social or community care and residential settings.

Medical transport for suspected or confirmed COVID-19 cases

- If a clinician advises a parent or child/young person to seek medical attention, they must signpost to local medical transport services. The clinician must caution against the parent or child/young person using other transport options, because this risks contamination and infection of others.
- For Scotland, there is further information about transfer from community settings and transfer from hospital as part of HPS COVID-19 information and guidance for social or community care and residential settings (section 1.6).

Appendix 1, guidance for community settings: ideas for community paediatricians to support the COVID-19 response

Community paediatricians have different skills that they use in a variety of contexts.

As part of the COVID-19 response they could continue their usual activities. These may include:

- Working with colleagues from other teams to cover more safeguarding work, including for children admitted to hospital
- Discharge planning for CYP with complex health needs
- Reviewing personal care plans for those who have them, in line with PHE COVID-19 guidance on vulnerable children and young people
- Supporting vulnerable children to remain at home by home visits/telephone support in lieu of hospital attendance
- General paediatric outpatient support: prioritisation of referrals and triage of who can be safely postponed completely; offering advice to referrers on management without referral; deciding who needs to be seen face to face or by video/telephone. This may require rapid refresher training for the community paediatrician and, if so, training must be supplied before the clinician commences this activity
- Looked after children (LAC) health assessments
- Palliative and end of life care

As stated in the NHS clinical guide for the management of paediatric patients during the coronavirus pandemic (PDF), clinicians may need to work outside of their specified areas of training and expertise during the outbreak. Clinicians should only work outside their usual activities where they have the appropriate competencies and feel confident in doing so.

Community paediatricians could undertake many activities if appropriate training is supplied and cross-organisational discussions allow. For example, these activities could include:

- Working in the emergency department/assessment unit
- Acting as a mid-grade trainee alongside acute consultant colleagues to backfill for trainees that have been redeployed to other acute areas or adults
- Seeing/speaking to urgent general paediatric outpatients
- Carrying out neonatal examinations (NIPE)

- Assessment and follow-up of neonatal jaundice
- Supporting GPs with their triage of children

Pregnancy

Information for the vulnerable workforce, including pregnant staff members, is available from the RCPCH COVID-19 guidance for planning paediatric staffing and rotas.

Guidance from the Royal College of Obstetricians, Royal College of Midwives, RCPCH, Public Health England and Health Protection Scotland covers COVID-19 infection and pregnancy, information for pregnant women and their families, and occupational health advice for employers and pregnant women.

NHS England has produced guidance on use of PPE for care of women with known or suspected COVID-19 in labour (PDF).

PHE guidance for households with possible coronavirus infection would indicate that if a mother and baby leave hospital and return to share a home with someone with symptoms of COVID-19 infection they should self-isolate.

Working in neonatal settings

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

It covers: maternal admissions, neonatal management in labour suite; baby born in good condition; baby requiring additional care; transfer to NNU; management on NNU; transport; testing and isolation of infants, and NICU admissions; moving out of isolation; breastfeeding; newborn screening; managing NNU capacity; parents and visitors; discharge and follow up; and staff wellbeing.

Clinical presentation: Pregnant women, unborn children and neonates

There are a limited number of cases reported to date where pregnant women have contracted COVID-19, all in the late third trimester and nearly all delivered ?7 (less than or equal to) days after symptom onset; most will only experience mild or moderate cold/flu like symptoms. At present, expert opinion is that the fetus is unlikely to be exposed during

pregnancy. Only one case of possible vertical transmission caused by intrauterine infection has been identified as at 13 March 2020.

Transmission of the virus is therefore most likely to occur post birth. Guidance on caring for pregnant women with suspected or confirmed COVID-19 and their babies is published. Guidance may change as knowledge evolves; you are strongly encouraged to conduct a risk/benefit discussion with neonatologists and families to individualise care in babies that may be more susceptible to COVID-19 infection.

NHS England has produced guidance on use of PPE for care of women with known or suspected COVID-19 in labour.

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 is not considered an AGP.
- Intubation of the newborn and positive pressure ventilation are both AGPs; however, there is no evidence of vertical transmission and the 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 (eg 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) determined locally must be worn by any person entering the room. Follow local guidelines regarding donning and doffing PPE.
- In order to minimise staff exposure, 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.
- Deferred cord clamping is recommended provided there are no other contraindications.
- The baby can dried as normal, while the cord is still intact. Or in the case of a pre term baby, standard thermoregulatory measures including the use of a plastic bag.
- Breastfeeding and formula feeding by the mother is permissible, but mothers should be advised regarding hand washing and wearing a mask is advised while handling the baby.

Neonatal management in labour suite

- A designated member of the neonatal team should be assigned to attend suspected/confirmed COVID-19 deliveries. It is important that the most senior person

likely to be required attends in the first instance, to minimise staff exposure. Local units should make their own arrangements for designating staff, but senior involvement is expected.
- 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.
- 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. Where possible, all procedures and investigations should be carried out in the single room with a minimal number of staff present.
- 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.

Baby born in good condition

- Well babies not requiring 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 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.
- 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.
- PPE should continue to be used according to local guidance.

Baby requiring additional care

- Babies requiring additional care (eg 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 at all 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 PPE.

Transfer to NNU

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

Management on NNU

- All staff must adhere to the locally recommended PPE guidelines before entering the isolation room.
- Clinical investigations should be minimised whilst maintaining standards of care. Senior input is recommended when deferring routine investigations and in prioritisation of work. Consider ways to reduce unnecessary investigations – eg use of (point of care testing) POCT.
- Intubation/LISA are aerosol generating procedures (AGP), although the risk of transmission soon after birth is thought to be low, and it is recommended that staff follow their local guidance regarding use of appropriate PPE, even in an emergency. In-line suction with endotracheal tubes should be used, where possible.
- Where possible, use of a video-laryngoscope should be considered for intubation, which might facilitate keeping the baby within the incubator. By reducing proximity to the baby's airway this may help to reduce exposure to the virus. Intubation should only be undertaken by staff with appropriate competencies.
- CPAP and high flow therapies are also associated with aerolisation, and staff caring for infants receiving these therapies must also adhere to their local guidance regarding use of appropriate PPE.
- 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. The evidence in favour of early intubation is limited to adults and older children.
- All babies requiring respiratory support should be nursed in an incubator.
- 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.

Transport

- Limit transfers to a minimum.
- Level 2 units to keep majority of babies as per network escalation policies.
- Neonatal Transport Group are considering guidance.
- Exposure to COVID-19 in itself is not a reason to transfer.

Testing and isolation of infants – general principles

- Performing nasal swabs on asymptomatic infants may result in false negatives, and the optimal timing of testing is unclear.
- Asymptomatic patients, including infants, even if positive, are unlikely to transmit the virus, providing everyone adheres to basic hygiene measures.
- 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.
- Symptomatic infants could still pose a significant risk to health care workers when they undertake an AGP (eg intubation) and therefore health care staff must adhere to the current guidance relating to PPE for AGPs.
- The ability to test and the ability to isolate potentially infected infants are likely to be limited. The described approach is therefore risk-based, realising that many risks are inferred, rather than known. Recommendations may change as testing capacity

increases and we have more precision around estimating risks of transmission.

Testing and isolation of well infants

- There is currently no clinical indication to test any well infant born to a COVID-19 positive mother.
- Well term/near-term infants to stay with mother, if at all possible.
- When infant and mother are ready for discharge, they should be provided with written advice regarding what to look out for, in terms of respiratory symptoms, lethargy or poor feeding, and from whom to seek further advice should they have concerns. They should be advised to self-isolate for 14 days.

Testing and isolation of NICU admissions

- Infants of COVID-19 infected or suspected mothers should not be routinely tested on admission, but they should be isolated if their symptoms fit the case definition. Note: case definition: 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 NICU and monitor for signs of respiratory illness during the admission.
- Infants admitted for reasons other than respiratory distress do not need isolating, but they must be monitored for signs of COVID-19 during their admission (see case definition and note, above). If they develop signs, they should then be isolated and tested.
- Infants meeting the case definition should be tested. If they meet the definition only by virtue of requiring respiratory support for an anticipated non-COVID-19 respiratory pathology (eg RDS (respiratory distress syndrome)), they should be tested after 72 hours of age – to avoid potential early false negative results. We suggest testing again on day 5 before declaring non-infected.
- If there is clinical concern that an infant who meets the case definition is not following a typical clinical course for an anticipated non-COVID-19 respiratory pathology, they should be tested that day.
- Remember to also investigate and treat for non-COVID-19 pathologies (eg sepsis, etc.).
- Infants awaiting test results and <7 days of age can be cohorted in the same isolation room, provided they remain in incubators, as airborne transmission is not currently thought to be a major mechanism of transmission in this clinical context.

When to move out of isolation on NICU

- Infants can come out of isolation despite continuing need for respiratory support, providing the tests on day 3 and 5 are negative, and the infant is following the projected clinical course (eg expected for RDS, etc.).

- Continue to isolate known COVID-19 positive infants until their symptoms resolve and they no longer need respiratory support; they can then be allowed out of isolation but must remain in an incubator and monitored for respiratory signs and symptoms for a further 14 days. During this period, they should be barrier nursed (gloves and aprons).

If they subsequently require respiratory support, they should return into isolation and be retested.

- Preterm infants can require lengthy respiratory support by virtue of their prematurity. If they are also COVID-19 positive, it would be permissible to move them out of isolation despite needing continued respiratory support, providing they are stable, with a clinical time course consistent with a non-COVID-19 respiratory pathology (eg RDS). The reliability of repeatedly testing for COVID-19 has not been established. If they are moved out of isolation, they must remain in an incubator whilst on respiratory support. During this period, they should be barrier nursed (gloves and aprons). If they deteriorate and require increasing levels of respiratory support, they should return into isolation and be retested.

Breastfeeding

- Breastfeeding will be encouraged through supporting mothers who have been separated from their baby to express milk (EBM). Mothers should have a designated breast pump for exclusive use and local infection control policies should be consulted in the cleansing of this.
- It is not yet clear whether COVID-19 can be transferred via breast milk.
- Other coronaviruses are destroyed by pasteurisation but there is no evidence to inform whether COVID-19 (if present) would be similarly destroyed.
- Further information is available from in the European Milk Bank Association position statement.

Newborn screening

- Newborn Infant Physical Examination (NIPE) – where possible this should be completed in hospital, prior to discharge.
- Newborn Blood Spot (NBS) screening should take place as usual
- Audiology screening should continue in maternity units and on the NNU.
- The ability to perform investigations and tests once the infant has left hospital will be restricted - eg 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.

Parents and visitors to NNU

- COVID-19 positive parents should not visit their baby on the NNU, until they are asymptomatic.
- Partners of COVID-19 positive mothers must still adhere to the current advice from PHE regarding self-isolation, and the hospital policy regarding visiting the maternity wards and NNU, except under exceptional circumstances, to be discussed with local infection control
- No other visitors (including siblings) should be allowed to visit infants in NNUs, except under exceptional circumstances, to be discussed with local infection control. NHS England has produced guidance on visitors to inpatients, outpatients and diagnostics.
- 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.

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 (eg immunocompromised, chronic lung disease, cardiac disease) about reducing risk of infection (reduce social contact, handwashing) and interventions aimed at preventing other diseases (eg 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.

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 supportive doctors guidance and advice from HEE.

Working in acute paediatrics and emergency departments

This section has been produced with the Association of Paediatric Emergency Medicine (APEM) and the British Paediatric Allergy, Immunity and Infection Group (BPAIIG).

It covers preparations, good practice tips, infection control, management of suspected cases in ED and as inpatients, plus advice and guidance on critical care scenarios.

Association of Paediatric Emergency Medicine

BPAIIG British Paediatric Allergy Immunity & Infection Group

Preparations for the COVID-19 pandemic

- PHE guidance on preparedness emphasises that staff should be familiar with local operational procedures and appropriately trained. For example, staff should be aware of where possible cases will be isolated and who to contact in their organisation to discuss possible cases.
- Staff involved in assessing or caring for confirmed cases of COVID-19 should be trained in using PPE and fit testing should be undertaken before this equipment is used. All staff in high risk areas such as emergency departments and urgent care, and other areas as agreed locally must be trained in the use of PPE.
- Staff caring for children with confirmed COVID-19 or undertaking aerosol generating procedures (AGP) should be trained in the safe donning and removal of PPE.
- Health Protection Scotland has provided advice for management of COVID-19 cases in inpatient settings in Scotland.
- NHS England has published guidance to assist managers and estates teams in the rapid conversion of existing wards into facilities for COVID-19 patients, including bed layouts, infrastructure prompts, and oxygen advice.
- NHS charging guidance for COVID-19 states that there can be no charge made to an overseas visitor for diagnosis or treatment of COVID-19. Further details are available from NHS England and NHS Scotland.
- There is guidance from RCPCH to support planning paediatric staffing and rotas, which provides advice across a range of areas to support workforce decisions during the pandemic.
- Many local factors will determine how medical staff are redeployed - including staff skill mix, staff availability, services on site, patient population and the impact of coronavirus. In England NHS guidance is available to support local decision making on redeployment of medical staff. This covers supervision, principles for staff redeployment, front door streaming, and speciality specific advice, including emergency medicine, trauma & injuries, paediatrics, and critical care.

Good practice for paediatrics

NHS England has produced a guide for management of paediatric patients that also describes the role that paediatric services will play during the pandemic. This guidance lists the following principles for running paediatric services during this time:

- Follow Public Health England guidance.
- Keep children out of the healthcare system, unless essential.

- Use telemedicine and other non-direct care, when appropriate.
- Plan for stopping elective procedures and treatments that may consume critical care and ward resources.
- Plan for increasing capacity for provision of oxygen and ventilators.
- Plan for admitting young adults up to 25 years of age and make contingency plans for admitting older adults.
- Comply with infection-control measures and ensure all staff have access to, and are trained in, appropriate personal protection equipment (PPE). Training should include simulation.
- Design shifts that are practical and sustainable for staff wearing full PPE.
- Use visual alerts to inform staff of symptoms on registration and reminders about respiratory hygiene and cough etiquette.
- Collaborate with hospitals and health systems on local response and to prepare for surges.
- Coordinate with regional and national networks of care to ensure that resources are used equitably, consistently and effectively.

NHS England has produced guidance for secondary care on management of remote consultations during the pandemic (PDF).

Note: NHS Guidance is clear that a parent/appropriate adult is permitted to visit a child requiring inpatient medical care during the COVID-19 pandemic. Wards and departments should prepare for this, and make appropriate arrangements so that no child dies alone.

Consider the following:

- How will you deal with calls from concerned parents of children with and without risk?
- Where are your quarantine areas and isolation areas for walk-in patients? Are they child-friendly as well as suitable for decontamination?
- Is your designated COVID-19 area for isolation and treatment at presentation of unwell suspected COVID-19 patients suitable for children's care?
- How will you manage family members of suspected cases in the Emergency Department (ED) area during this time? See isolation plans for parent-child combinations

You should identify:

- Your lead clinician / lead nurse to lead on policies and procedures for COVID-19 (this may be a paediatrician in ED or ED link paediatrician
- Your paediatric cardiac arrest team and management of infectious risk team
- Your paediatric ward isolation cubicles
- Your ward cohorting areas, if needed
- Your hospital's negative pressure cubicles, and prepare for use for children
- Suitable areas for donning and doffing PPE and its disposal in paediatric areas
- Staff to maintain isolation rooms and ensure quarantine areas remain clean, stocked and ready for use

And ensure that:

- If there is no ensuite toilet in the isolation room, a dedicated commode (which should

be cleaned as per local cleaning schedule) should be used with arrangement in place for the safe removal of the bedpan to an appropriate disposal point
- In emergency departments, barrier signs and infection control precaution signs are in place
- Access to isolation cubicles is only via one entrance

And:

- Establish a process for communicating positive results from swabs taken in the quarantine area. Including repeat risk assessment by telephone triage if positive
- Ensure families and patients have advice on self-isolation (stay at home)
- Have your suite of patient information ready specifically written for parents and children, including written information for admitted patients and posters in waiting areas

Infection control

- PHE has provided extensive guidance on infection prevention and control for inpatient settings that should be used alongside local operational policies. Note this guidance is issued jointly by public health agencies across the UK.
- The guidance covers:
  - isolation
  - staff considerations
  - visitors
  - PPE and hand hygiene
  - decontamination
  - mobile equipment
  - critical care, and
  - transfers.
- 23 March – new guidance has been produced by PHE on use of PPE for non-aerosol generating procedures.
- NHS England has produced advice on supply and use of PPE, including FAQs on using FFP 3 Respiratory Protective Equipment (RPE)
- Guidance on the infection control implications of tonsillar examination, produced by the RCPCH and BPAIIG, is available. The guidance gives clinical recommendations to minimise the risk of transmission from asymptomatic children to ear, nose and throat (ENT) healthcare professionals.

Case management

- The Government has produced stay at home guidance.
- Children will be told to remain at home unless the child unwell and requires urgent hospital review.
- There is current advice for the public on NHS111 testing.

Managing suspected cases - initial investigation and management

- PHE guidance on the investigation and initial management of potential cases defines a possible COVID-19 case as an individual that requires admission to hospital and has: either clinical or radiological evidence of pneumonia; or acute respiratory distress

syndrome; or flu-like illness regardless of epidemiological links.
- PHE has produced guidance on steps to take when a patient suspected COVID-19 presents to ED
- PHE has published guidance on the action required when a case was not diagnosed on admission
- PHE has issued guidance providing a priority order of testing for periods when triaging of requests is required. It also advises on priorities for repeat testing given demand for testing

NHS England guidance describes approaches to streaming at the 'front door', with rapid assessment and triage, to help ensure safe management of increased patient numbers. For example, streaming of patients by directing: well COVID-potential patients home to access services via NHS 111 online/remote primary care; well non-COVID presentations to primary care services/home as appropriate (including all minor illness presentations traditionally seen by UCC and GPCOOPs); COVID-potential patients to ‘hot assessment’ zones; non-COVID patients to ‘cold assessment’ zones; and patients being seen directly by the specialty, without prior ED assessment (other than rapid assessment and triage).

Presentation of possible COVID-19 at ED

- If a child with possible COVID-19 presents directly to ED, they should be redirected to your COVID-19 quarantine area. See PHE guidance on managing infection control risks in ED.
- NHS England has produced a clinical guide on managing patient with cough and temperature (PDF).
- If the child has severe respiratory compromise, they will need to be transferred immediately to your designated isolation cubicle for management. In most hospitals this will be in your ED areas, other solutions may exist.
- Any cases phoned in by Ambulance services as “sick” and likely to require resuscitation will be managed in your designated isolation room. The Resuscitation Council have published guidance.
- Complete your COVID screening documentation as per guidance.
- A record should be kept of all staff in contact with a possible case, and this record should be accessible to occupational health should the need arise.
- Healthcare staff should wear PPE as per PHE guidance
- PPE should be disposed of in line with infection control procedures

Making the diagnosis

- Follow PHE’s guidance on sample requirements for laboratory investigations.
- Follow HPS guidance for Scotland.
- The sample sets required for diagnostic testing are listed here.

Parents/carers

- Ideally only one parent / carer should accompany child to isolation cubicle. Decide who that will be and manage other members appropriately to reduce risk of infection and request they self isolate.
- NHS England has produced guidance on visitors to inpatients, outpatients and diagnostics

.
- HSC NI has guidance on visiting in Northern Ireland (PDF).
- Follow isolation plans for admitted patients - see isolation plans for parent-child combinations
- The attending parent must wear PPE equipment defined by PHE at all times within the hospital buildings and grounds

Internal transfers

- It is not advisable to move suspected patients and their families internally until an infectious risk assessment is performed. This covers absolute risk of family members being infected, risk to family members themselves of being secondarily infected by case, risk of family members infecting others within the hospital (ie not wearing PPE/ poor compliance to infection risk reduction measures), including management of asymptomatic parent / carer who themselves be a potential infection risk when entering or exiting the unit. The risk assessment needs to be standardised and recorded.

Note: guidance is available from NHS England on clinical management of emergency department patients during the pandemic. As at 18 March, this does not discuss paediatric emergency care specifically but outlines different categories of patients and clinical presentations not requiring admission.

Further guidance and advice can be found on the Royal College of Emergency Medicine website.

Management of admitted cases

- Many people with confirmed COVID-19 may be managed at home as per PHE guidance.
- Follow isolation plans for admitted patients - see isolation plans for parent-child combinations
- Visitors should be restricted to essential visitors only, such as parents of a paediatric patient or an affected patient's main carer. It is recommended that only one parent is in attendance.
- NHS England has produced guidance on visitors to inpatients.
- HSC NI has guidance on visiting in Northern Ireland.
- NICE is producing rapid guidelines and evidence reviews around COVID-19.
- British Association for Paediatric Nephrology is issuing updates for renal specialists working in paediatrics.
- NHS England has issued guidance on care for people with learning disability and autism aimed at clinicians working in other fields (PDF).

Children admitted to hospital: good practice principles

(with thanks to Alder Hey Hospital)

- Reassure: Most children will have much milder illness than is seen in adults. Reassure children and parents, as they are likely to be concerned from information (and misinformation) in mainstream and social media. They might know an adult with the

infection who may was treated in a different way or may have been severely unwell.
- Involve parents: The way healthcare professionals communicate with families is important. Reinforce that active monitoring and supportive therapy is the best strategy. When parents feel disempowered they may become anxious and feel that their child is not being managed properly.
- Be vigilant: some children with COVID-19 will develop complications and comorbidities. Be aware of local sepsis guidelines, acute kidney injury guidelines, and respiratory failure guidelines. You must adhere to guidance around infection control. Be aware that these may change over time.
- Teamwork: the whole multidisciplinary team must work together to ensure the best outcome for the child. Parents and children want to see healthcare professionals adhere to the same guiding principles of practice. Deviation is undermining to other professionals, and parents and children will pick up on differences in practice (however subtle). Written and verbal communication between professionals is crucial to prevent this.
- Minimising spread of the virus in hospital is crucial. Be aware of local and national recommendations for doing this.

Alder Hey Children's Hospital and the British Paediatric Respiratory Society have developed guidance for the clinical management of children admitted to hospital with suspected COVID-19, for general paediatrics, available to download at the bottom of this page. It outlines key principles for the medical management of children admitted to hospital with COVID-19, including:

- Radiology
- Fluids
- Antipyretics
- Respiratory support
- Antibiotics
- Antivirals
- Bronchodilators and treatment of children with asthma attacks
- Systemic steroids
- Liver dysfunction
- Hydroxychloroquine

This guidance is based on literature review of published and unpublished data, expert opinion, and national/international guidelines, and is subject to updates as evidence becomes available.

Discharging patients from hospital

- NHS England has provided guidance on discharge of patients with suspected COVID-19 that covers: discharge criteria; stay at home guidance; and discharge advice to patients.
- For other inpatients, on 19 March 2020, NHS England issued guidance and requirements on discharge arrangements, with the aim of freeing up inpatient capacity. The default pathway will be 'discharge home today'.
    - The COVID-19 Hospital Discharge Service Requirements outline all the details.
    - Acute providers need to rapidly update their processes and ways of working to

deliver a discharge-to-assess model.
    - There should be at least twice daily review of all patients in acute beds to agree who is not required to be in hospital, and will therefore be discharged.
    - NHSE has published criteria to aid decision making (see Annex B on p.32 of this PDF).
    - Based on these criteria, acute and community hospitals must discharge all patients as soon as they are clinically safe to do so. Transfer from the ward should happen within one hour of that decision being made to a designated discharge area. Discharge from hospital should happen as soon after that as possible, normally within two hours.
- Health Protection Scotland have produced guidance on discharge arrangements in Scotland.

Guidance for Paediatric Intensive Care Services (PICS)

NHS England has published guidance for care of paediatric critical care patients. This clinical and operational guidance is for paediatric intensive care units (PICUs; level 3) and paediatric high-dependency units (HDUs; level 2). It is also relevant to children's wards with high dependency capabilities (level 1).

The Paediatric Intensive Care Society (PICS) is working with the RCPCH, NHS England, the HCID network and other agencies to ensure that members are provided up to date and relevant guidance to support management of critically ill children with COVID-19 infection. The PICS guidance includes:

- Referral and transport of critically ill children with suspected and confirmed COVID-19 infection.
- Flow diagram for the management of critically ill children with suspected and confirmed COVID-19 infection.
- PICS and ICS joint position statement on planning for the pandemic.
- Management of high risk aerosol-generating procedures.
- Checklist for intubation.
- Transport of children with suspected and confirmed COVID-19

NHS England has produced guidance on management of paediatric patients during the pandemic. This includes actions for team leadership, emergency paediatric surgery and

service reconfiguration. The guidance notes that there may be a role for PICU in admitting young adults under 25 years of age.

The Faculty of Intensive Care Medicine, Intensive Care Society, Association of Anaesthetists and Royal College of Anaesthetists have developed a website to provide information, guidance and resources on understanding of and management of COVID-19 for the UK intensive care and anaesthetic community.

Isolation plans for parent-child combinations

This section has a single parent and child meeting COVID-19 case definition - isolation plan while waiting for virology results.

(For specific guidance on isolation plans in the NNU, see our section, Working in neonatal settings.)

Child	Parent	Management
Well*	Well*	Child – home isolation Parent – home isolation
Well*	Level 1	Child – home isolation – support from social care Parent – adult ward **
Well*	Level 2/3	Child – home isolation – support from social care. Parent – adult ward ** Escalate to HDU/ITU as per usual pathway
Level 1	Well*	Child – paediatric cubicle ** Parent – with child.
Level 1	Level 1	Child – paediatric cubicle ** Parent – adult ward ** Note this may alter over time – local decisions to collocate parent and child may be necessary
Level 1	Level 2/3	Child – paediatric cubicle ** If necessary need to plan locally for a child without available carer Parent - adult ward ** Escalate to HDU/ITU as per usual pathway
Level 2/3	Well*	Child – paeds ward cubicle ** Transfer to PICU as per usual pathway if deteriorates Parent – home isolation / PICU***
Level 2/3	Level 1	Child - paeds ward cubicle ** Transfer to PICU as per usual pathway if deteriorates Parent – adult ward **

Child	Parent	Management
Level 2/3	Level 2/3	Child - paeds ward cubicle ** Transfer to PICU as per usual pathway if deteriorates Parent – adult ward ** Escalate to HDU/ITU as per usual pathway

* deemed clinically stable and suitable to be managed as an outpatient

** ideally negative pressure, could use cubicle with lobby our cubicle without lobby only as a last resort

*** parents who are admitted with their child to PICU are then quarantined in isolation with their child and cannot come and go freely

Paediatric scenarios

This section gives guidance on care and management for different groups of children as inpatients. It also advises on specific groups of children - those with febrile neutropenia, and those at increased risk of COVID-19.

Suspected child – mildly-moderately symptomatic requiring admission (level 0–1)

Level 0 is a standard ward paediatric patient.

Level 1 refers to level 1 paediatric critical care.

- Children with mild to moderate symptoms and are admitted for observation/feeding support. This advice may change for those with mild symptoms during a pandemic stage.
- Possible interventions:
    - Nasogastric feeding
    - Supplemental oxygen to maintain saturations over local criteria (90– 92%)
    - IV fluids
    - Humidified high flow nasal cannulae oxygen (HHFNCO) – note this is a high risk procedure only if absolutely necessary and appropriate infection control measures in place see PHE guidance PICS revised guidance
    - Monitoring as required by level of care.
- These children should be nursed in a single side room. A parent/carer who is admitted with the child must stay in the room at all times until discharge or confirmed negative screening test. Both child and parent should wear surgical mask for transfer from ED to the designated room and if leaving for any reason.
- Staff should minimise time in the room as far as possible.
- The process must be explained to families requesting their compliance to infection control procedures. Ways of doing this but minimising contact need to be identified.
- Aerosol generating procedures (HHFNCO, suctioning, performing NPAs) should be avoided unless absolutely essential. NPAs are also aerosol generating procedures but may be clinically helpful.

    - Where AGPs are medically necessary, they should be undertaken in a negative-pressure room, if available, or in a single room with the door closed.
- Waste should be managed appropriately. If there is no en-suite toilet in the side room, a dedicated commode (which should be cleaned as per local cleaning schedule) should be used with arrangements in place for the safe removal of the bedpan to an appropriate disposal point.
- Room will need chlorine clean following discharge if screening results pending or confirmed positive.

Suspected child - requiring moderate intervention (level 2 critical care eg CPAP)

- Children who require respiratory support should be discussed with PICU. If they are undergoing high risk procedures (suction, HHFNCO, CPAP, etc.) they should be managed in a single side room and should take priority over other inpatients.
- All attending staff should wear appropriate PPE.
- If subsequently confirmed to have COVID-19, the patient may warrant transfer to an appropriate paediatric HCID centre if there are concerns regarding clinical deterioration; these decisions will be made on a case by case basis depending on capacity within the designated paediatric HCID centres.
- The parent/carer who is admitted with the child must stay in the room at all times until discharge or confirmed negative screening test.
- Room will need chlorine clean following discharge if screening results pending or confirmed positive.

Suspected child – requiring PICU level 3 care

- The Paediatric Intensive Care Society (PICS) have put together detailed practical guidance specific to the management of critically ill children, including flow diagrams for suspected and confirmed cases of COVID-19 infection
- Details regarding the levels of paediatric critical care can be found here.
- Level 3 care includes intubation and ongoing ventilation. Management and referral pathways for level 2 and 3 patients are described in PICs guidance, along with intubation guidance if a child needs intubating in a DGH due to respiratory failure.
- Children requiring level 3 care should be referred to PICU as per normal protocol, highlighting on referral that there is a suspicion of COVID-19.
- All staff involved in their care prior to transfer to intensive care should wear appropriate PPE.
- If the child is confirmed to have COVID-19, assuming that we are still in the containment phase, they should ideally be transferred to an HCID PICU centre.
- Following transfer, the room should be chlorine cleaned.

Special cases: children with febrile neutropenia and suspected COVID-19

- Children should initially be assessed and tested in ED not the wards.
- Prompt administration of broad-spectrum antibiotics for the management of febrile neutropenia is essential.
- In the Oncology wards may wish to designate specific cubicles for patients with suspected COVID-19.

- All infectious disease precautions must be followed as for other COVID-19 patients as well as specific cautions for that patient group otherwise the child should be admitted into a cubicle within the suspected coronavirus area.

Children at increased risk of COVID-19

On 16 March Public Health England published advice for groups who are at an increased risk of severe coronavirus disease (COVID-19) to follow advice on social distancing measures. These include significantly limiting face to face contact with friends and family for several weeks. The groups at increased risk included in this advice are pregnant women, those aged over 70, and those with a list of specific comorbidities.

On 21 March PHE published advice on shielding and protecting extremely vulnerable people from COVID-19. Extremely vulnerable people are strongly advised to stay at home at all times and avoid any face-to-face contact, for at least 12 weeks.

How to best to apply this to children (including infants and young people) in the UK is complex. Although in adults these comorbidities are associated with increased mortality risk, the evidence for this among children is very limited, and the disease appears to take a milder form in younger age groups. Applying stringent social distancing to all children with this list of comorbidities may also be associated with potential harms and at times may not be possible. PHE guidance has been published on managing self-isolation with children.

All children who fall into the vulnerable group should follow social distancing guidance, however there are certain children identified in the PHE guidance who are at a significantly increased risk from COVID-19 and should take the most stringent measures to shield themselves to reduce their risk. Our current advice is for all children with the following comorbidities to follow stringent shielding measures outlined by Public Health England:

1. Long term respiratory conditions, including:

- Chronic lung disease of prematurity with oxygen dependency
- Cystic fibrosis with significant respiratory problems
- Childhood interstitial lung disease
- Severe asthma (see below for Asthma UK's guidance on children with severe asthma)
- Respiratory complications of neurodisability

2. Immunocompromise (disease or treatment), including:

- Treatment for malignancy
- Congenital immunodeficiency
- Immunosuppressive medication including long term (>28 consecutive days) of daily oral or IV steroids (not alternate day low dose steroid or hydrocortisone maintenance)
- Post-transplant patients (solid organ or stem cell)
- Asplenia (functional or surgical)

3. Haemodynamically significant and/or cyanotic heart disease

4. Chronic Kidney Disease stages 4, 5 or on dialysis

Asthma UK have developed guidance for children with severe asthma.

There is no evidence that children and young people with type 1 diabetes are at increased risk from COVID-19 above the increased risk of infection inherent in poor control of diabetes. The International Society of Paediatric & Adolescent Diabetes (ISPAD) has advised that colleagues in Italy and the Middle East report that children and adolescents with diabetes have not been adversely affected by COVID-19.

The evidence around which groups are at increased risk to COVID-19 is rapidly evolving. As further evidence emerges, our advice around which children and young people should follow more stringent social isolation measures is likely to change. We plan to update these recommendations with more detailed criteria as new data become available.

Please refer to the UK CF Medical Association statement on coronavirus.

Healthcare arrangements for people who are shielding

In England, a letter to trusts regarding patients at increased risk was issued by NHS England on 21 March. This provides some further information on matters such as

- ongoing care arrangements
- support with medical supplies
- and when and how to seek urgent medical attention

PHE also issued advice for patients at increased risk on their GP and hospital appointments, to:

- access medical assistance remotely, wherever possible.
- talk to their GP or specialist if there is a scheduled hospital or other medical appointment during this 12-week shielding period, to ensure that they continue to receive the care they need and determine which of these are absolutely essential
- contact their hospital or clinic to confirm appointments, as they may be postponed or cancelled.

In Wales, the Government will be writing to all GPs and people at increased risk with details of shielding arrangements. On 26 March, the CMO in Scotland outlined the approach to managing people at high risk (PDF). We will update with further information as it becomes available.

- 1. Kam KQ, Yung CF, Cui L et al. A Well Infant with Coronavirus Disease 2019 (COVID-19) with High Viral Load. Clin Infect Dis 2020
- 2. Lu D, Wang H, Yu R et al. Integrated infection control strategy to minimize nosocomial infection of corona virus disease 2019 among ENT healthcare workers. J Hosp Infect 2020
- 3. Little P, Hobbs FDR, Moore M et al. Clinical score and rapid antigen detection test to guide antibiotic use for sore throats: randomised controlled trial of PRISM (primary care streptococcal management). 2013; 347: f5806

Downloads

Guidance for the clinical management of children admitted to hospital with suspected COVID-19 (BPRS)344.8 KB
COVID-19 child friendly poster472.64 KB
Nottingham Children's Hospital guide to parental consent831.38 KB