National guidance for the management of children with bronchiolitis (2021)

These recommendations on the management of children with bronchiolitis in hospital settings during COVID-19 are for clinicians to support planning in partnership with local infection prevention control teams.

While some recommendations describe organisational structures in England, services in the devolved nations are encouraged to adopt them to fit local models.

Last modified
27 May 2022

Post date
18 September 2020

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Background

With concerns about a potential out of season surge in RSV and other respiratory viruses coinciding with ongoing circulation of SARS-CoV-2, sustaining robust infection prevention and control (IPC) processes is essential to keep patients, parents/carers and staff safe. It is important not to lose the IPC benefits seen during COVID-19 if we are to maintain services and reduce the risk of transmission when faced with a potential RSV / influenza / other respiratory virus surge as well as a potential further wave of COVID-19. This includes retaining measures of segregation, mask wearing, testing for respiratory viruses and physical distancing in the urgent and emergency acute unscheduled care pathway to ensure that we do not spread respiratory viruses within inpatient settings.

However, it also needs to be appreciated that SARS-CoV-2 rarely causes serious illness in children, which makes the application of universal COVID pathways to paediatric settings harder to justify.

In the event of an influx of children with bronchiolitis it is important for both IPC and the operational flow of organisations to work collaboratively to ensure the safety of patients.

The application of this guidance should always be informed by a situational specific local risk assessment, that includes IPC which organisations will have in place as part of their operational systems of escalation and surge planning.
Principles

- The safety of patients and their families, and staff is paramount.
- Recommendations are to be equitable irrespective of socioeconomic status, ethnicity, or geographic location.
- An evidence-based approach is adopted, recognising recommendations will evolve with experience.
- The potential COVID-19 status of an infant or child should not affect the initial approach to assessment and management of the infant or child when they present to a healthcare setting (primary or secondary care). Key features of assessment are oxygenation, hydration and nutrition. If commencement of high flow nasal cannula oxygen (HFNCO) is being considered, a senior decision maker should be involved.
- The personal protective equipment (PPE) recommendations within this guidance are based on the principles outlined in the UK Health Security Agency (UKHSA) Infection control guidance. These principles should be applied for all respiratory viruses:
  - Standard Infection Control Precautions (SICP) must be reliably applied for all patients. Additional Transmission Based Precautions (TBPs) should be applied where suspected or known infection present. Clinical decisions and judgments should be based on:
    - suspected or known infectious agent
    - severity of the illness caused
    - transmission route of the infectious agent
    - care setting and procedures undertaken.
- Staff should adhere to appropriate transmission-based precautions when managing children with bronchiolitis. This includes the use of FFP3 or respirator/hood (respiratory protective equipment, RPE) and eye/face protection for staff looking after children with bronchiolitis requiring continuous AGPs (HFNCO or continuous positive airway pressure, CPAP) (see Appendix 3).
  - If patients are positive for SARS-CoV-2, they should be isolated in a single room and/or managed in a SARS-CoV-2 cohort bay. If AGPs are performed on a SARS-CoV-2 positive patient, staff should adhere to appropriate transmission-based precautions, this includes the use of FFP3 or respirator/hood (RPE) and eye/face protection for children requiring continuous HFNCO or CPAP.
Testing

- Children should have parity with adults in terms of access to point of care molecular tests (PCR and other validated molecular tests) or rapid laboratory based molecular tests for respiratory viruses including SARS-CoV-2. Access to rapid respiratory virus results will facilitate efficient patient flow whilst maintaining robust IPC practices.
- A testing-based approach should be applied to the urgent and emergency acute admission pathway for children being admitted with bronchiolitis, including isolation of all high-risk patients on admission and cohorting of patients once virology results are available.
- Testing should be incorporated into the local organisational risk assessment and should be considered as part of the hierarchy of controls to assist with patient placement in reducing the risk of healthcare associated transmission of respiratory pathogens.
- If a child develops new signs consistent with a respiratory infection during their admission, an urgent respiratory panel test including COVID testing should be undertaken with the patient placed in isolation (single room).
- Weekly SARS-CoV-2 testing should be performed on children requiring extended admissions, especially those requiring ongoing AGPs.
- Although these recommendations provide guidance on good practice, in the event of single room capacity being exceeded or testing capacity being limited, it may not be possible to adhere to them in their entirety. In this situation, a local risk assessment involving dialogue between paediatricians, IPC staff and microbiology/virology staff needs to be conducted. This local risk assessment needs to be regularly reviewed as cases of bronchiolitis increase significantly.
  - If single room capacity is limited / being exceeded, prioritise clinically vulnerable children to a single room. Children with bronchiolitis requiring a continuous AGP (HFNCO or CPAP) should be prioritised to a single room over those not requiring a continuous AGP if possible.
  - Clinical decisions made by staff regarding use/non-use of RPE will depend on a risk assessment which should include factors such as the presenting symptoms, risk of acquisition and the availability of treatment.
Aerosol generating procedures (AGPs)

As per scientific guidance referenced within the 4 nations IPC guidance published by UKHSA, AGPs relevant to this cohort of children include:

- tracheal intubation and extubation
- manual ventilation
- tracheotomy or tracheostomy procedures (insertion or removal)
- bronchoscopy
- non-invasive ventilation (NIV); Bi-level Positive Airway Pressure Ventilation (BiPAP) and Continuous Positive Airway Pressure Ventilation (CPAP)
- high flow nasal cannula oxygen (HFNCO)
- high frequency oscillatory ventilation (HFOV)
- induction of sputum using nebulised saline*
- respiratory tract suctioning*

* Further notes on respiratory tract suctioning and nebulisation is available in guidance from UKHSA. It is the consensus view of the UK IPC cell that only open suctioning beyond the oro-pharynx is currently considered an AGP.

See Appendix 1 for information about indications for HFNCO. Where children require AGPs (HFNCO / CPAP etc.) rapid weaning protocols should be followed to minimise exposure to aerosols (see Appendix 2).

Summary flow chart

Updated 21 July 2021
**Abbreviations**

- **ED** – Emergency Department
- **PICU** - Paediatric Intensive Care Unit
- **HDU** - High Dependency Unit
- **HFNCO** - High-flow nasal cannula oxygen therapy
- **CPAP** - Continuous Positive Airway Pressure
Recommendations - Testing of children with lower respiratory tract infections (including bronchiolitis)

- Only children requiring admission need to be tested for respiratory viruses (including SARS-CoV-2) in hospital. Children being discharged from the emergency department who have symptoms consistent with COVID-19 should be encouraged to access SARS-CoV-2 testing via the UK test and trace system.
- Local protocols should be followed and use of a point of care (POC) molecular test or rapid laboratory based molecular test (SARS-CoV-2 +/- RSV +/- influenza A/B) should be prioritised for children who will benefit from a rapid result (eg for PICU / HDU admission or emergency surgery). POC or rapid molecular testing should also be prioritised for children requiring HFNCO / CPAP and where inpatient cubicle capacity is severely restricted. In the event of a surge in cases of bronchiolitis and severe pressure on patient flow, point of care molecular testing or rapid laboratory based molecular testing should be prioritised in all children being admitted with bronchiolitis. This requires local negotiation and agreement.
- Very few EDs have sufficient capacity to keep large numbers of children in their department awaiting virology results. Transfer of a child from ED to an inpatient setting should not be delayed whilst awaiting a test result. However, testing should be performed in ED where possible and processes should be in place to minimise the turnaround time of results. This is essential in order to step down patients from inpatient cubicles, enabling flow of children from ED.

Recommendations - Prior to presentation at hospital

- Integrated care systems spanning the entire urgent care pathway should be in place to ensure children with mild bronchiolitis and lower respiratory tract infections are managed in primary care settings where possible and to reduce the number of infants and children with respiratory symptoms presenting to hospital. Planning should include the implementation of
locally appropriate models of care enabling secondary care clinicians to support primary care colleagues. The expectation should be that children with mild and moderate bronchiolitis are initially reviewed in primary care settings and guidance is provided to parents about when to seek a healthcare consultation. An example of this includes:

- parent facing resources on difficulty breathing and wheeze.

- Examples of clinical pathways supporting the management of children with shortness of breath by clinicians in primary care settings include the following:
  - bronchiolitis pathway (face to face assessment)
  - cough/breathlessness pathway in child <1 year of age (remote assessment)
  - cough/breathlessness pathway in child ≥1 year of age (remote assessment).

- Access to paediatric oxygen saturation monitor probes in primary care should be prioritised.

- Optimise preventive treatment as per national guidance including influenza vaccines in children and palivizumab for children aged under 23 months that meet the criteria as specified in the Green Book. Children with risk factors for severe influenza outside of the ages of routine immunisation (2-12 years) should be actively identified and influenza vaccination promoted.

**Recommendations - Presentation to ED or Paediatric Assessment Area**

- Although separate pathways / areas are likely to remain in place for both adults and children, ‘respiratory assessment areas’ can be combined within one paediatric ED footprint if single room facilities allows. If such a model is adopted, it is important to ensure that protective isolation can also be offered to clinically extremely vulnerable (CEV) children as well as other children routinely requiring protective isolation.

- Waiting areas should be organised to minimise the risk of nosocomial infection, by prompt triage of patients and allowing adequate physical distancing, respiratory hygiene and hand hygiene. Adherence with face coverings as appropriate should be monitored and regular environmental cleaning performed according to national standards. A local risk assessment is required.
**Recommendations - Admission to paediatric ward / HDU**

- All patients with bronchiolitis should ideally be admitted into a single room until their virology results are available. However, if single room capacity is limited, a risk assessment is required, clinically extremely vulnerable (CEV) children must be prioritised regardless of potential/actual infection status to a single room. The implementation of a cohort area should be underpinned by a local risk assessment that takes into consideration the hierarchy of controls. These include:
  - 2 metre spacing between beds/cots must be maintained (with consideration of tape around the bedspace)
  - use of curtains/screens where possible
  - adherence with IPC procedures by parents/carers (use of face covering, maintaining 2 metre physical distancing and complying with hand hygiene)
  - review of ventilation of the bay and application of findings
  - environmental cleaning as specified within standards of cleanliness.
  - Staff looking after children in this cohort area must apply appropriate PPE to clinical situation.
- It is best practice to cohort children with the same pathogen to minimise risk of nosocomial infection.
- If this is not possible, for example due to single room capacity, then a documented organisational local risk assessment should be undertaken including the hierarchy of controls to minimise and mitigate the risk of healthcare associated (nosocomial) infection.
- **If a child is negative for respiratory viruses** (including SARS-CoV-2), they can be managed in a low risk pathway.
- Clinically extremely vulnerable (CEV) children, as well as other children routinely requiring protective isolation, should not be managed in a bronchiolitis bay irrespective of their virology results. If single room capacity is limited, a risk assessment needs to be conducted.
• Staff should adhere to appropriate transmission-based precautions when managing children with bronchiolitis. This includes the use of FFP3 or respirator/hood (RPE) and eye/face protection for staff looking after children with bronchiolitis requiring continuous AGPs (HFNCO or CPAP) (see Appendix 3).
• If HFNCO is initiated, a clear plan should be in place to promote rapid weaning (see Appendix 2).
• If a child develops new signs consistent with a respiratory infection during their admission, an urgent respiratory panel test including COVID testing should be undertaken with the patient placed in isolation (single room).
• Weekly SARS-CoV-2 testing should be performed in children requiring extended admissions, especially those requiring ongoing AGPs.
• Discharge of children with bronchiolitis from an inpatient setting should be considered if:
  • They are clinically stable
  • They are taking adequate oral fluids
  • They are maintaining oxygen saturation in air at the following levels for 4 hours, including a period of sleep:
    • over 90%, for children aged 6 weeks and over
    • over 92%, for babies under 6 weeks or children of any age with underlying health conditions.
• Discharge from hospital should not be delayed if the SARS-CoV-2 result is not available. The child and family can be advised to continue isolation at home until the result is available.

**Recommendations - Transfer to PICU**

• Virology samples should be sent from the referring hospital / ED, where possible. A point of care molecular test or laboratory based rapid molecular test should be performed in the local hospital if routine laboratory results are not available.
• Members of the retrieval team should adhere to appropriate transmission based precautions / PPE (see Appendix 3).
• **If patients are positive for SARS-CoV-2**, they should be isolated in a single room and/or managed in a SARS-CoV-2 cohort. If AGPs are performed on a SARS-CoV-2 positive patient, staff should adhere to appropriate transmission-based precautions, this includes the use of FFP3 or respirator/hood (RPE)
and eye/face protection for children requiring continuous HFNCO or CPAP
• A child who requires repatriation from PICU to a local hospital should be
given priority over an elective admission to facilitate flow of severely unwell
children into and out of PICU. Patient placement advice should be provided
to the receiving organisation based on the respiratory virus, test results and
other pathologies / clinical conditions.

Recommendations - Parents and carers

• Resident carers must not be in the hospital if they have respiratory
symptoms. If parents/carers are symptomatic, SARS-CoV-2 or respiratory
virus testing may be considered, and a local risk assessment conducted.
• All resident carers should wear a face covering whilst in hospital if away from
their bed-space. Where face covering exemptions are reported a
documented review needs to be completed as part of the patient
placement. Variations in local policy should be considered.
• When children require an inpatient stay, local policy should be followed
regarding resident carers.
• Education and written information for resident carers should be made
available regarding respiratory viruses, local policies, and use of communal
facilities, face coverings, hand hygiene, PPE and physical distancing.
• It is not mandated that molecular testing is performed on asymptomatic
resident parents. Ensuring that resident parent adhere to good infection
prevention and control practices should minimise the risk of transmission
from an asymptomatic parent.

Guidance on escalating infection control processes

Prior to the successful rollout of COVID vaccines to adults in the UK, it was
suggested that infection prevention processes were escalated in the event of high
regional prevalence rates of SARS-CoV-2 (>2%). Due to the success of the vaccine
programme in weakening the link between COVID infection and severe disease in
adults, this recommendation has been removed.

However, in the event of confirmed outbreaks within paediatric units involving
staff, parents or children, one may consider escalation of infection control
processes including some or all of the following:
• Ensure infection control measures in hospital (e.g. use of face coverings by parents/carers, hand washing) are being actively audited
• Consider limiting visiting to one parent/carer for duration of admission (or swapping weekly) or introducing tighter restrictions on visitors, such as limiting the frequency of changeover of resident parents/carers
• Increase the frequency of regular COVID-19 testing in patients undergoing AGPs
• COVID-19 testing of resident parents/carers on admission and regularly during admission
• Daily screening of symptoms in resident parents/carers
• Regular COVID-19 testing of staff.

**Mitigating risk if recommendations cannot be met**

It is acknowledged that there is considerable variation between hospitals in terms of isolation capacity (single rooms), turnaround times for respiratory virus PCR results (including SARS-CoV-2) and access to respiratory virus panels. This may make it extremely challenging to comply with the recommendations made within this document whilst maintaining flow of patients.

In this situation, a local risk assessment needs to be conducted based on IPC principles, the hierarchy of controls and relative risks. Weighing up of various factors including patient factors (extreme vulnerability, continuation of AGPs), staff factors (vulnerability of staff working within cohort areas, rates of vaccine uptake), geographical factors (ventilation of cohort areas, distance between bedspaces), regional prevalence rates and access to testing (turn-around time for respiratory viral PCR testing (including SARS-CoV-2) is required.

It is recommended that a multidisciplinary approach is adopted (including medical, nursing, operations and IPC teams) in order to collaboratively develop clinical pathways and contingencies based on local risk assessments. This risk assessment needs to be regularly reviewed, especially as the number of cases of bronchiolitis increases. In addition, if virology samples are sent to regional virology units, it is recommended that discussions about prioritisation of paediatric samples and access to rapid test results takes place.

**Appendix 1 – Indications and contraindications for**
### HFNCO in children and young people

Courtesy of North and South Thames Paediatric Networks and retrieval services

<table>
<thead>
<tr>
<th>Indications (not exhaustive)</th>
<th>Contraindications</th>
<th>Cautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• High oxygen requirement</td>
<td>• Nasal obstruction or craniofacial abnormalities</td>
<td>• Drained pneumothorax</td>
</tr>
<tr>
<td>• Signs of respiratory distress</td>
<td>• Trauma/surgery to nasopharynx</td>
<td>• Upper airway obstruction</td>
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<td></td>
<td>• Recurrent apnoea</td>
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<td></td>
<td>• Respiratory arrest or peri-arrest state</td>
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<tr>
<td></td>
<td>• Undrained pneumothorax</td>
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</tbody>
</table>

### Appendix 2 – Example guidance on commencing and rapid weaning from HFNCO

Courtesy of North and South Thames Paediatric Networks and retrieval services

**Commencing treatment**
1. **Select interface and equipment** based on local availability and patient age and weight. Interface size should not exceed 50% of nares. If flow rate according to weight cannot be achieved on the correct interface, then use maximum flow for interface.

2. **On initiation** a competent clinician should observe the patient for comfort and compliance. If necessary the flow can be increased to reach the maximum recommended range according to weight, over a five-minute period.

3. **Titrate FiO2** to maintain SpO2 >92% (or alternative patient range).

4. **Escalate or wean.** To avoid rapid deterioration or unnecessary continuation on HFNCO, review response to HFNCO and follow the escalation or weaning criteria below.

<table>
<thead>
<tr>
<th>Weight Range</th>
<th>Flow Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;12 kg</td>
<td>2 l/min/kg</td>
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<tr>
<td>13-15 kg</td>
<td>20-30 l/min</td>
</tr>
<tr>
<td>16-30 kg</td>
<td>25-35 l/min</td>
</tr>
<tr>
<td>31-50 kg</td>
<td>30-40 l/min</td>
</tr>
<tr>
<td>&gt;50 kg</td>
<td>40-50 l/min</td>
</tr>
</tbody>
</table>

**Response to treatment**

<table>
<thead>
<tr>
<th>Sustained response to HFNCO</th>
<th>Response to HFNCO</th>
<th>Unrespon</th>
<th>Sustained response to HFNCO</th>
<th>Response to HFNCO</th>
<th>Unrespon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing ratio 1:4 or 1:3 &lt;2 years</td>
<td>Nursing ratio 1:2 or 1:3 if cohort is ward level</td>
<td>Nursing ratio 1:2 or 1:3 if cohort is ward level</td>
<td>Wean FiO2 to 0.3-0.4 (depending on patient)</td>
<td>Moderate respiratory distress continues and/or FiO2&gt;0.4-0.6</td>
<td>Wean FiO2 to 0.3-0.4 (depending on patient)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>In the first hour</td>
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<tr>
<td>Sustained response to HFNCO</td>
<td>Response to HFNCO</td>
<td>Unresponsive to treatment</td>
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</tr>
<tr>
<td>Nursing ratio 1:4 or 1:3 &lt;2 years</td>
<td>Nursing ratio 1:2 or 1:3 if cohort is ward level</td>
<td>THEN * * Re-assess care considerations and continue on current HFNCO settings until ready to wean</td>
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<tr>
<td>THEN</td>
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<td>THEN</td>
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<tr>
<td>Halve the flow rate</td>
<td>Re-assess essential care considerations** and continue on current HFNCO settings until ready to wean</td>
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<tr>
<td>THEN</td>
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<tr>
<td>If no clinical deterioration is seen after 4 hours, HFNCO can be discontinued (or as soon as 1 hour if paediatric consultant confirms)</td>
<td>Continue to observe for any deterioration or red flags*</td>
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<tr>
<td>THEN</td>
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<tr>
<td>Restart at weaning flow rate if stopping HFNCO is not tolerated</td>
<td></td>
<td></td>
<td>** Red flags for immediate escalation</td>
<td></td>
<td>Immediate reaction</td>
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<td></td>
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<td>**</td>
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<tr>
<td>Red flags for immediate escalation</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Any apnoeic/bradycardiac episodes</td>
<td>• Increase FiO2 to maximum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Increasing respiratory distress after HFNCO commenced</td>
<td>• Call 2222</td>
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</tr>
<tr>
<td>• Clinically tiring</td>
<td>• Prepare for intubation</td>
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</tr>
<tr>
<td>• The Paediatric Early Warning System (PEWS) indicates immediate escalation to resus team</td>
<td>• Liaise with retrieval team or on-site Level 3 paediatric critical care</td>
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<tr>
<td>• FiO2 &gt;0.6</td>
<td>• Communicate with the family</td>
<td></td>
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</tr>
</tbody>
</table>
Monitoring and patient management

(with corresponding patient acuity)

- Continuous oxygen saturations (green, amber, red)
- Observation frequency and escalation according to PEWS (green)
- Minimum hourly observations and escalation according to PEWS (amber, red)
- Consider continuous electrocardiogram (ECG) if required (amber, red)
- 2 hourly mouth and nose care including pressure area check (green, amber, red)
- Hourly documentation of FiO2, flow rate, and temperature as well as equipment specific checks (green, amber, red)

**Essential care considerations**

- Optimised positioning (e.g. head elevation).
- Consider referral for physiotherapy assessment.
- Secretion clearance if indicated and safe to do so.
- Consider feeding regime alteration according to risk and underlying disease:
  - High risk (red) should be nil by mouth (NBM) with intravenous fluids.
  - Medium risk (amber) should be assessed before feeding and fed with caution.
- Psychosocial support, clear communication, play and distraction.
- Minimal handling / cluster cares.
- Blood gas analysis not essential and acidosis is a late sign of failure.

Patient transfer

If patient transfer is required, then a suitable risk assessment tool should be used. Examples include the safe transfer of paediatric patients (STOFF) tool. Where portable HFNCO is not available, a senior clinician should assess the appropriate oxygen delivery based on direct patient assessment.
Appendix 3 – PPE requirements based on the principles of transmission-based precautions for respiratory viruses

Reference: [UKHSA guidance on infection prevention and control](#)

Low Risk Pathway (if child is negative for respiratory viruses (including SARS-CoV-2))

PPE required for standard infection prevention control precautions (SICPs) when following the low risk respiratory paediatric pathway is as follows (see table below).

<table>
<thead>
<tr>
<th>SICPs/PPE (all settings/all patients/individuals)</th>
<th>Disposable gloves</th>
<th>Disposable apron/gown</th>
<th>Face masks</th>
<th>Eye/Face protection (visor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>If contact with blood and/or body fluids is anticipated</td>
<td>Single use</td>
<td>Single use apron (gown if risk of spraying/splashing)</td>
<td>FRSM Type IIR for direct patient care and surgical mask Type II* for extended use.</td>
<td>Risk assess and use if required for care procedure/task where anticipated blood/body fluids spraying/splashes</td>
</tr>
</tbody>
</table>

* sessional extended use of facemasks apply across the UK for HCWs or other care settings

NB: Airborne precautions are NOT required for AGPs on patients/individuals in the low risk paediatric respiratory pathway, providing the patient has no other known or suspected infectious agent transmitted via the droplet or airborne route.

High Risk Pathway (if PCR test results awaited or confirmed respiratory viral infection (including SARS-CoV-2)):

PPE required for transmission based precautions when following the high risk
respiratory paediatric pathway is as follows (see table below).

<table>
<thead>
<tr>
<th>PPE required by type of transmission/exposure</th>
<th>Disposable gloves</th>
<th>Disposable gown</th>
<th>Face masks</th>
<th>Eye/Face protection (visor)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Droplet/Contact PPE for direct patient care &lt; 2 metres</td>
<td>Single use**</td>
<td>Single use apron (gown required if risk of spraying/splashing)</td>
<td>FRSM Type IIR (FRSM can be worn sessionally if providing care for cohorted patients/individuals with or suspected of having a respiratory virus)</td>
<td>Single use or reusable*</td>
</tr>
<tr>
<td>Airborne PPE (when undertaking or if AGPs are likely)</td>
<td>Single use</td>
<td>Single use apron or gown</td>
<td>FFP3 or Respirator/Hood for AGPs (FFP3 can be worn sessionally (includes eye/face protection) in high risk areas where AGPs are undertaken for COVID-19 cohorted patients/individuals)</td>
<td>Single use or reusable</td>
</tr>
</tbody>
</table>
* Risk assess and use if required for care procedure/task where anticipated blood/body fluids spraying/splashes.
**Gloves are not required when undertaking administrative tasks for example using the telephone, using a computer or tablet, writing in the patient chart; giving oral medications; distributing or collecting patient dietary trays.

**Methodology for developing recommendations**

Key stakeholders representing national groups (Royal College of Paediatrics and Child Health, British Paediatric Respiratory Society, Association of Paediatric Emergency Medicine, Paediatric Critical Care Society (formerly the Paediatric Intensive Care Society), British Paediatric Allergy Immunity & Infection Group, NHS England/Improvement Infection Prevention & Control Cell), and professional groups (paediatric infectious diseases, infection control, virology, general paediatrics, PICU) were identified to support the development of these recommendations.

The group met virtually on 21 August 2020 and again on 3 September 2020. Each step in the patient pathway was discussed systematically by the group, in terms of place of admission / patient flow, virus testing, PPE requirements and use of HFNCO, prior to developing the consensus recommendations.

In March 2021 views were sought from the group on any necessary revisions. Some minor amendments to remove references to winter, updates were added that advocate for point of care/rapid PCR test in local hospital prior to PICU transfer if routine SARS-CoV-2 result is not available.

In June and July 2021 views were sought from the group on any necessary revisions to help prepare the system for a potential surge in cases over the summer and autumn.

Recommendations have been reviewed and supported by the NHS England/Improvement Infection Prevention & Control and IPC UK cell.

Final consultation included executive committees from all national groups mentioned above. Publication was approved by the RCPCH Winter Pressures Clinical Advisory Group and Senior Officers.
Steering group

Chair:

• Dr Sanjay Patel, Paediatric Infectious Diseases Consultant, Southampton Children’s Hospital

Clinical Advisors:

• Dr Conor Doherty, Paediatric Infectious Diseases Consultant, NHS Greater Glasgow & Clyde
• Dr Danielle Eddy, Paediatric Specialty Trainee, Gloucestershire Hospitals NHS Foundation Trust
• Helen Dunn, Lead Nurse for Infection Prevention Control, Great Ormond Street Hospital
• Dr Hermione Lyall, Paediatric Infectious Diseases Consultant, Imperial College Healthcare NHS Trust
• Dr Ian Maconochie, Paediatric ED consultant, Imperial College Healthcare NHS Trust
• Dr Ian Sinha, Paediatric Respiratory Consultant, Alder Hey Children’s Hospital
• Dr John Criddle, Paediatric ED Consultant, Evelina London Children’s Hospital
• Dr Julian Legg, Lead for Paediatric Respiratory Medicine, Southampton Children’s Hospital
• Dr Liz Whittaker, Paediatric Infectious Diseases Consultant, Imperial College Healthcare NHS Trust
• Dr Matthew Clarke, NHSE National Specialty Advisor for Children and Young People
• Dr Mike Linney, General Paediatric Consultant and Registrar for RCPCH (until April 2021)
• Dr Padmanabhan Ramnarayan, PICU Consultant, Imperial College Healthcare NHS Trust
• Dr Paul Randell, Consultant Virologist, Imperial College Healthcare NHS Trust
• Dr Poonamallee Govindaraj, Paediatric Consultant, Cwm Taf Morgannwg University Health Board
• Dr Raymond Nethercott, General Paediatric Consultant and RCPCH Officer for Ireland
• Dr Ruchi Sinha, PICU Consultant, Imperial College Healthcare NHS Trust
Samantha Matthews, NHSE/I Infection Prevention & Control National Clinical Lead
• Dr Sean O’Riordan, Paediatric Infectious Diseases Consultant, Leeds Children’s Hospital
• Professor Simon Kenny, NHSE National Clinical Director for Children and Young People

Updates

May 2022 - RCPCH guidance on COVID-19 and clinically extremely vulnerable (CEV) children and young people is unpublished, and this guidance no longer references it.

December 2021 - updated references from PHE to UKHSA.

September 2021 - update to reflect NICE guidance in relation to discharge of children with bronchiolitis from an inpatient setting.

July 2021 – update to reflect revised pathways and importance of local risk assessment in mitigating risk to patient flow in event of a surge.

April 2021 – update to remove references to winter and to advocate for point of care / rapid PCR test in local hospital prior to PICU transfer if routine SARS-CoV-2 result not available.

24 September 2020 - updated to recommendations on admission to paediatric ward / HDU and revised flow chart with clarification on risk assessment and 2nd SARS-CoV-2 PCR testing.


Downloads
Bronchiolitis flow chart 2021 poster.pdf 43.5 KB