

Management of possible/confirmed Covid-19 in paediatric LTV patients in RHSC

- All long-term ventilation (LTV) patients looked after by the RHSC Respiratory team use ventilators with a single limb circuit with intentional leak – ie NIV users have vented masks and tracheostomy LTV patients have a leak port in the ventilator circuit. Exhaled air exits through the mask/leak port therefore a filter on the circuit does not stop potential aerosolisation of virus.
- **Positive pressure support (either CPAP or bilevel) delivered in this way is considered an aerosol generating procedure.**

In Emergency Department:

- If patient is receiving positive pressure support on their home device, staff should wear full PPE as per HPS IPC guidance.

Transfer from ED to Critical Care:

- *NIV user*
If respiratory support is required during transfer, this should be provided using an anaesthetic t-piece (< 20 kg) or C-circuit (\geq 20kg), with filter, with face mask firmly applied to patient's face.
- *Tracheostomy-ventilated patient:*
Ventilation should be provided using an anaesthetic t-piece (< 20 kg) or C-circuit (\geq 20kg), with filter.
Surgical mask should be placed over patient's face to minimise environmental contamination from coughing.
- Staff performing the transfer will need to wear PPE. Ideally, someone should ensure the route is clear of individuals not wearing PPE.

In Critical Care:

- Patient should be supported on the Servo U ventilator as it has a filtered expiratory port.
- For tracheostomy-ventilated patients this will necessitate changing to a cuffed tracheostomy tube because the Servo U will not cope with the leak round an uncuffed tube.
- For NIV, change to a non-vented mask (ideally oronasal mask or face shield rather than nasal mask).
- If/when the patient is found to be Covid-19 negative, they can be changed to whichever ventilator is clinically considered to be most appropriate.

In Ward 1

- If patient needs admission but is well enough for ward level care, they can be transferred to ward 1 off support as for any other self-ventilating possible case.
- While on the ward, if patient is receiving positive pressure support on their home device, staff should wear full PPE as per HPS IPC guidance.
- For other aerosol generating procedures (eg physiotherapy) see existing guidance.