Patient Name: *(attach sticker if available)*
Hospital Number:
Date of Birth:

Thames Valley and Wessex
PAEDIATRIC CRITICAL CARE
Operational Delivery Network

Paediatric Non-Invasive Long-Term Ventilation Bedside Checklist

Check once per shift/staff change: Date/Time																														
Check face for pressure areas and carry out mouth care (Check each time the mask is removed)																														
Wash and air-dry mask every morning or during cares if ventilated during daytime																														
Each morning, empty water from humidifier chamber and refill with sterile water OR (if not in use) leave chamber empty and turn off humidifier																														
Ensure oxygen connector is attached to ventilator or in the circuit. Ensure oxygen turned off when not in use																														
Check patient ventilator settings and alarms																														
Ensure ventilator is plugged into mains power																														
Check circuit integrity for leaks and cracks																														
Damp dust equipment																														
Patient's respiratory action plan is available and visible to the clinical teams																														

Weekly checks	Date changed			
Circuit change including bacterial filter				
Wash whole mask and head gear and air-dry				
Check ventilator filter and change if needed				

Check humidifier water hourly when child on wet circuit

On admission	Do any non-stock consumables need ordering for inpatient stay?		**For discharge**	Does patient have sufficient equipment for discharge home? Has the HOOF form been completed and accepted?	

Adapted from Southampton Children's Hospital Daily Checklist with thanks.

Approved Sept 2026

Alarm Trouble Shooting

Always take a patient to ventilator approach to troubleshooting.

The two main alarms that sound on any ventilator are present to alert you of a blockage or a leak which is affecting the delivery of ventilation. This may be on the circuit or the mask.

Blockage

Alert message:

Nippy4+/Nippy Junior – low flow/obstruction/rebreathe
Stellar/Astral – non-vented mask/blocked tube
Trilogy 100/Evo – Low Circuit leak/obstruction

- Ensure the airway is patent.
- Check child mask, is the leak/expiratory port covered or blocked? Are the child's nostrils occluded by the mask or secretions?
- Follow the circuit and check for blockages or kinks within the circuit.
- Ensure there is no water in the tubing.
- If a nebulizer is running the extra oxygen flow may cause the ventilator to alarm.

Leak

Alert message:

Nippy4+/Nippy Junior – High flow/circuit disconnect
Stellar/Astral – High leak/circuit disconnect
Trilogy 100/Evo – Low inspiratory pressure/ Circuit disconnect

- Check the mask fit for leaks and ensure head gear is on correctly
- Is there a large leak from the child's mouth?
- Follow circuit to ensure everything is connected correctly.

Interface Trouble Shooting

Where possible fit mask first then start ventilation once good placement of mask has been achieved

Fit the mask correctly

To fit the mask well, ensure the nostrils are not occluded and the mask is not in the eyes.

Nasal mask: place the mask at the tip of top lip and roll up to the nasal bridge
Full face mask: start with base at the crease of the chin and roll up to sit below the eye.

You must check the mask visually

Is the headgear on the right way round?

Can you feel exhalation port?

The exhalation port must be always kept clear as this is where the child is able to breathe out their CO2. It must be checked by visually ensuring the port is clean and clear and by waving your hand over the port at the front of the mask to ensure you can feel pressure release.

Make sure nostrils are not blocked either by secretions or the mask

Is the mask on too tight or lose?

Check position of the headgear straps using 2 finger-tension that the straps are not too tight.

Do you have a good seal?

Once the mask has been fitted, start pressure, and use hands to check for leak around the eyes, nasal bridge and below mask, if there is still a large leak and the child is using a nasal mask check for oral leak using hands. If oral leak is noted, assist to close jaw or use a dummy, alert the NIC for advice on local escalation if the leak is affecting the child's ventilation and consider seeking support from practice educators, local respiratory team or local ITU team.

Pressure sore prevention.

Wipe the inside of the mask every day and ensure the mask is dry when going on the face. Wash whole mask and headgear once a week with warm soapy water and rinse with clear water and leave to air dry. A wet and dirty mask is one of the major causes of pressure ulcer.

HUMIDIFIER

ENSURE THE WATER LEVEL IN THE CHAMBER IS CHECKED REGULARLY THROUGHOUT YOUR SHIFT. A DRY/EMPTY HUMIDIFIER CAN HAVE SERIOUS CLINICAL CONSEQUENCES.

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