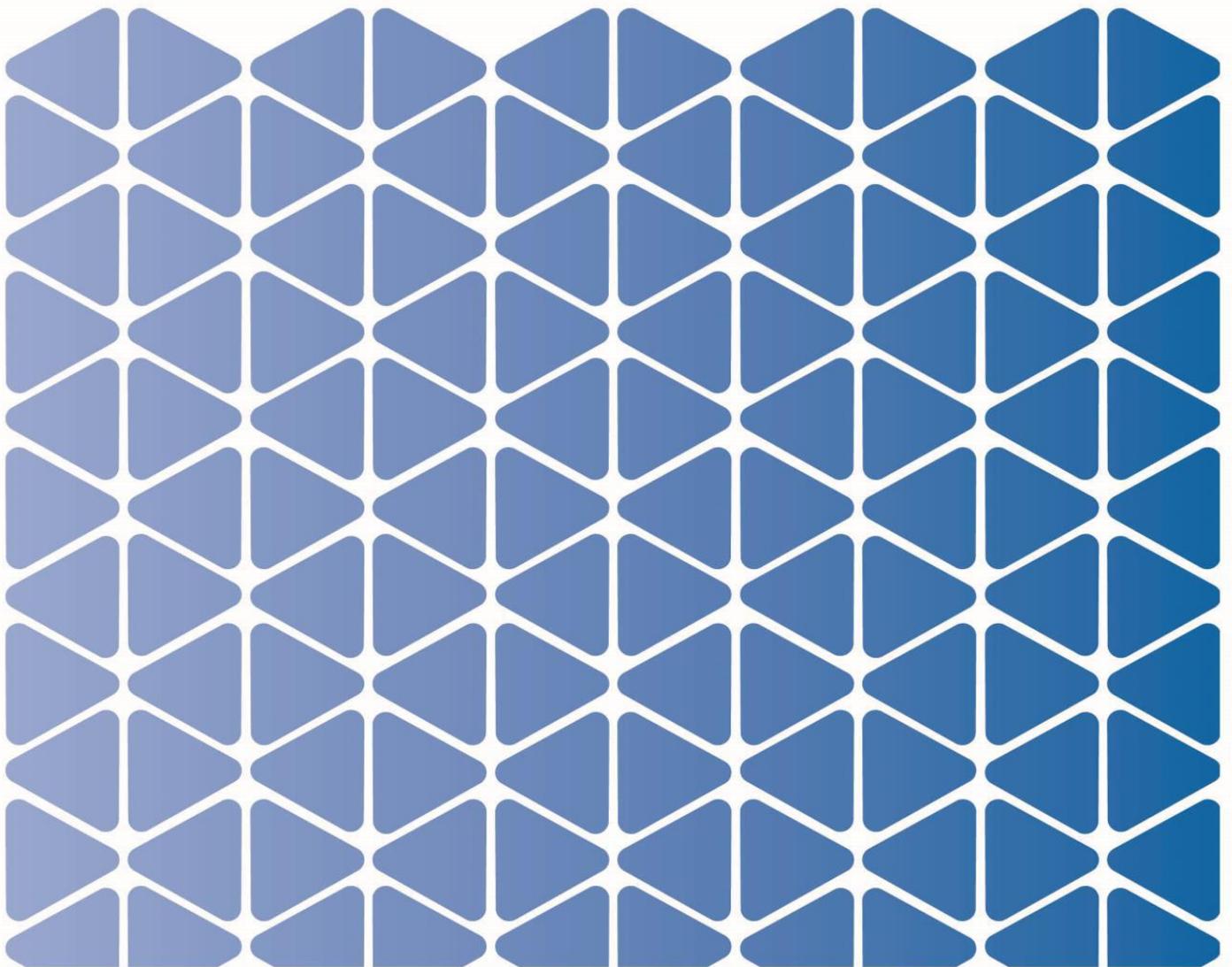




PATIENT INFORMATION

**PAEDIATRIC SUCTION**  
**(Yankeur / soft catheter – OP or NP)**



## **What is Airway suctioning?**

Airway suctioning is a way of removing excess mucus from the back of the throat and upper airway by insertion of a catheter via the nose or mouth or Yankeur via the mouth, and application of suction to clear the secretions. Many problems can cause too much mucus to collect in the airway and clearing these may help your child to breathe better.

## **When to suction**

- Where there are signs of excessive secretions in the upper airway which cannot be cleared by coughing alone
- Where secretions are causing respiratory distress and making breathing difficult

## **When not to suction**

- Altered clotting/ Active bleeding from airway
- Severe wheeze

## **Potential Hazards/Complications**

- Trauma and damage to the lining of the airway/wind pipe
- Introduction of Infection through poor hand hygiene/technique
- Decreased blood oxygen levels – ('Sats')
- Plugging off -secretions blocking airway
- Altered Heart rate - normally increased from stimulation of child
- Changes in blood pressure
- Vomiting/gagging
- Prolonged coughing leading to rise in Blood Pressure/Heart Rate
- Collapse of small areas of the lung
- Patient distress/anxiety
- Loose teeth – extra care should be taken not to dislodge/aspiration risk

## **Assessment of Child**

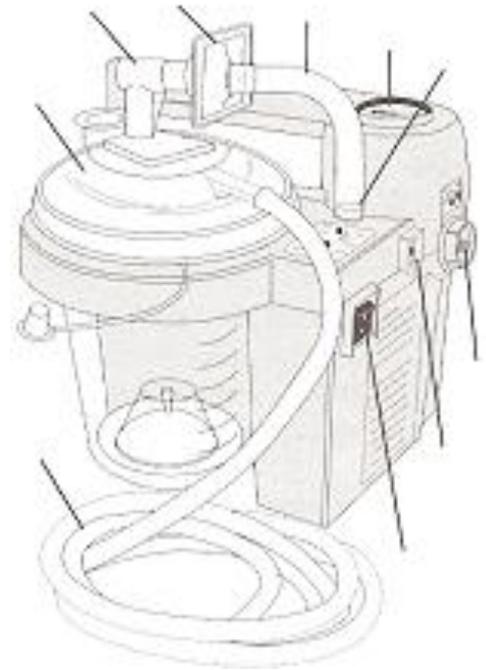
- Knowledge of Childs 'Normal'
- Recent secretions – volume and colour
- Breathing rate
- Breathing effort
- Palpation – feeling their chest for presence of secretions
- Colour of face and lips - pale/red/blue
- Irritability/discomfort/pain
- Colour of body/limbs
- Oxygen saturations – 'sats' (if available)
- Is oxygen needed?

## Pre Suction

- Allow at least 1 hour after feed if possible
- Postural drainage/percussion if required
- Nebulisers if needed
- Pre oxygenation if needed

## Equipment

- Suction machine – working, clean, pressures checked
- Oxygen available
- Catheters
- Hand washing and gloves
- Tissues



## Preparation for suction

- Position child comfortably with neck extended slightly beyond neutral. Use a side lying position if possible
- Swaddle the child if needed
- Give oxygen if needed.
- Turn the suction unit on at the switch.
- Check that the suction pump is working well, by occluding the end of the suction tubing with your thumb to ensure you feeling a suction pressure. If not see: Suction unit 'Trouble shooting' section.
- Ensure suction pressure is set correctly - **See box at end of this section**
- Hand Hygiene – wash hands if necessary and apply alcohol gel to hands
- Oral suction can be performed with either a 'soft catheter' or a 'yankeur'
- Nasal suction is performed with a soft catheter

## Suction Techniques

- **Oral - Yankeur suction:**
  - Open the appropriate size sterile yankeur and connect to the end of the suction tubing
  - Apply a pair of clean gloves
  - Using a clean technique remove the yankeur from the cover, try to avoid letting the end of the yankeur touch the surrounding environment to ensure as clean a technique as possible
  - Slide the yankeur gently into the mouth, over the back of the tongue to the top of the airway. Please note when using a yankeur, suction will be automatically applied

- Withdraw the yankeur slowly, making sure that available secretions are cleared effectively
- Once the yankeur is out, flush it through with cooled boiled water to remove secretions and place the packaging back on to keep clean
  
- **Oral - Soft Catheter:**
  - Open the appropriate size sterile catheter and connect to the end of the suction tubing
  - Apply a pair of clean gloves
  - Using a clean technique and double glove, remove the catheter from the cover, try to avoid letting the end of the suction catheter touch the surrounding environment to ensure as clean a technique as possible
  - With NO suction applied, slide the catheter gently into the mouth, over the back of the tongue into the top of the airway
  - Apply suction by putting your thumb over the suction catheter hole. If child coughs before this, apply suction straight away
  - Keeping suction applied, withdraw the suction catheter slowly, making sure that available secretions are cleared effectively, without rotating the catheter
  - If a block is felt when sliding out, take off the suction and withdraw slightly before reapplying
  - Once catheter is out, Remove glove over catheter and dispose of correctly
  
- **Nasal – Soft Catheter**
  - Monitor oxygen saturations before, during and after procedure
  - Open the appropriate sized sterile catheter and connect to the suction tubing
  - Using a clean or sterile technique, remove the catheter from the cover
  - With NO suction applied, slide the catheter into the nostril towards the base of the skull, rotating and repositioning slightly if resistance is felt
  - Gently slide the catheter down on inspiration only to avoid entering the oesophagus. If the child swallows, withdraw slightly and try again
  - When the catheter stops, withdraw slightly and then apply suction If child coughs before this, apply suction straight away
  - Keeping suction applied, withdraw the catheter slowly, making sure that available secretions are cleared effectively
  - If a block is felt when sliding out, take off the suction and withdraw slightly before reapplying
  - At any time, the vacuum can be removed with the catheter in situ to give the patient a rest
  - Generally, suction on withdrawal should be applied continuously and without rotation of the catheter, as both intermittent suction and catheter rotation have been shown to increase mucosal damage

- Remove glove over catheter and dispose of correctly
- monitor the child . Apply oxygen as needed

### **After all techniques**

- Reassess the child – as above, plus observation of secretions removed
- Apply oxygen as needed.
- Wash Hands and flush/clean equipment once finished with

### **Evaluate/modify**

Was your suction technique effective?

Do you need to repeat it?

Do you need to change your technique?

What else could you do to make the treatment more effective?

- Further chest clearance techniques
- Positioning
- Alter vacuum pressure if necessary
- Think about catheter size
- Consider humidification

### **Type of Secretions**

Secretions can be an indicator that the child may have a chest infection. It is important to keep an eye on what is **NORMAL** for the child.

If you notice any changes in their secretions e.g:

- Thicker/harder to clear secretions
- More secretions – increased need for suction
- A change in colour – darker/green/orange/yellow
- Smelly secretions

....Normally coupled with a change in the child e.g:

- Irritable
- Sleepy
- Temperature
- Flushed
- Coughing

....it may mean that a sputum specimen should be sent to your GP to see if antibiotics are required.

You can obtain a sputum specimen by attaching a sputum 'trap' in between the suction tubing and the suction catheter and suctioning as normal.

## Cleaning the Suction Unit

- Use disinfectant to wash the cylinder of the suction unit, and let it dry naturally after use

## Troubleshooting – Suction unit:

<b>Problem</b>	<b>Action</b>
Unit does not turn on	Ensure battery charged Check power connections if running from wall outlet
Pump runs, but no vacuum	Check that the tubing is connected properly Check tubing connections for breaks or leaks Check for leaks or cracks in the bottle assembly Ensure bottle is not full
Low vacuum pressure	Check system for leaks Use vacuum adjustment knob to increase vacuum level Push vacuum adjustment knob and then release

## Suction Pressures:

<b>Age of child (approx)</b>	<b>Size of tracheostomy / nasopharyngeal airway</b>	<b>Size of catheter</b>	<b>Hospital Unit Suction pressures mmHg (Kpa)</b>	<b>Laerdal Portable suction pressures mmHg (kpa)</b>
<b>Premature</b>	2.5-3.0	5-6	60-75 (8-10)	80 (11)
<b>0-3 years</b>	3.0-4.5	5-8	75-90 (10-12)	80 (11)
<b>3-9 years</b>	5.0-5.5	8-10	90-112 (12-15)	120 (16)
<b>9-14 years</b>	6.0-7.0	10-14	112-140 (15-18)	120 (16)

**IN THE EVENT OF ACUTE DETERIORATION PLEASE CONTACT THE EMERGENCY SERVICES FOR ASSISTANCE**

I certify that the named person below has been instructed and observed in carrying out these procedures safely and effectively as detailed in this information booklet

Signed.....

Name.....

Role ..... Date.....

**Carer/Parent/Relative**

I the BELOW named carer/relative/parent am happy to carry out suctioning as detailed in this information booklet.

I understand the scope of these skills and will only use them with the patient named on this form. I will seek further training if I have any concerns about my skills.

I know to follow the individual advice given to me by the Physiotherapist and to stop treatment immediately and seek medical assistance should I have any concerns.

Signed.....

Name.....

Date.....

**If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.**

## **Patient Experience**

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

## **Feedback**

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

## **Patient Advice and Liaison Service (PALS)**

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

## **How to contact PALS:**

**Telephone Patient Services: 0300 123 1732 or via email at: [wah-tr.PET@nhs.net](mailto:wah-tr.PET@nhs.net)**

## **Opening times:**

The PALS telephone lines are open Monday to Thursday from 8.30am to 4.30pm and Friday: 8.30am to 4.00pm. Please be aware that a voicemail service is in use at busy times, but messages will be returned as quickly as possible.

If you are unable to understand this leaflet, please communicate with a member of staff.