



PROCEDURE	
<b>Tracheostomy Resuscitation</b>	
<b>Scope (Staff):</b>	Medical, Nursing, Allied Health
<b>Scope (Area):</b>	PMH (valid PCH)

This document should be read in conjunction with this [DISCLAIMER](#)

## Aim

This document provides an outline of the emergency management and resuscitation procedure for patients with a tracheostomy tube.

## Background

Children with a tracheostomy tube are dependent on the tube as their primary airway. Cardiorespiratory arrest in this population may result from tracheostomy obstruction or accidental dislodgement of the tracheostomy tube from the airway. Early warning signs of obstruction include sudden increased work of breathing, cyanosis, abnormal breath sounds (stridor/whistling), louder than usual voice, reduced air entry, difficulty or inability to pass a suction catheter, and a decrease in oxygen saturation levels.

## Risk

Failure to recognise the early warning signs of tracheostomy tube blockage, tube dislodgement and respiratory compromise and a delay in responding to an emergency situation can lead to a life threatening event.

## Scope

All staff accepting care of a patient with a tracheostomy tube must be able to demonstrate sound knowledge and skills in respiratory assessment, tracheostomy care and emergency management and must have up to date Hospital Paediatric Life Support Training (HPLS).

It is imperative that the clinician caring for the patient knows:

- The reason for the tracheostomy,
- Patency of the patients airway above the tracheostomy and
- Patient's ability to breathe for a period without the tracheostomy tube in situ.

## Key points

- All inpatients with a tracheostomy must have a current [Airway Profile](#) displayed at the head of the cot or bed.
- All patients who have a tracheostomy tube must have an emergency kit with them at all times and mandatory equipment at the bedside as listed in [Appendix 1](#).

- It is the responsibility of each staff member taking over the care of a patient with a tracheostomy to ensure all of the emergency equipment is present, checked and in functional working order.

## Indications

Airway impairment in the child with a tracheostomy tube can occur due to:

- **Blocked Tracheostomy Tube** and therefore airway occlusion.
  - A blocked tube is a medical emergency.
  - Refer to: [Tracheostomy Recognising and Clearing a Blocked Tube](#).
- **Accidental Decannulation** and potential loss of airway.
  - Refer to [Tracheostomy Tube Change](#).
- Inability to reinsert a tracheostomy tube.
- Insertion into a **False Passage** during change of tracheostomy tube.

Respiratory deterioration may be indicated by desaturation and may be related to lower airway plugging, infection or granulation tissue.

**Emphasis is on *early* recognition of any change in the patient's respiratory status and tube patency to avoid an emergency event.**

**Late signs of impending respiratory collapse include cyanosis, bradycardia and apnoea - do not wait for these to develop before intervening.**

**In the event of an emergency, follow the Tracheostomy Resuscitation Algorithm in [Appendix 2](#)**

### ***Following a resuscitation/emergency event:***

- Assist the emergency response team with transferring the patient to the Critical Care Unit if required.
- Ensure the patient's family, primary consultant and ENT team have all been informed of the event.
- Document in the medical records +/- Code Blue data sheet +/- clinical Incident report via Datix CIMS if indicated.
- Consider staff debriefing session following the event.

### **Related internal policies, procedures and guidelines**

[Tracheostomy Procedures](#) - Clinical Practice Manual

[Resuscitation Procedures](#) – Clinical Practice Manual


## Bibliography

1. Australian Resuscitation Council. Resuscitation guidelines: Section 12 – Paediatric Advanced Life Support (Guideline 12.2). 2016. Accessed Feb 2016 from: <http://www.resus.org.au/>
2. Australian Resuscitation Council. Resuscitation guidelines: Section 4 (Airway), Section 5 (Breathing), Section 6 (Circulation) & Section 8 (Cardiopulmonary Resuscitation). Accessed Feb 2016 from: <http://www.resus.org.au/>
3. Royal Children’s Hospital, Melbourne. Tracheostomy Management. Clinical Guideline. 2014. Accessed February 2016 from: [http://www.rch.org.au/rchcpg/hospital\\_clinical\\_guideline\\_index/Tracheostomy\\_Management\\_Guidelines/](http://www.rch.org.au/rchcpg/hospital_clinical_guideline_index/Tracheostomy_Management_Guidelines/)
4. Dr Geoff Knight (Intensive Care Physician). Personal Communication [Expert Opinion]. Paediatric Critical Care, Princess Margaret Hospital, Perth WA; 2016.
5. Dr Shyan Vijayasekaran (Head and Neck Surgeon). Personal Communication [Expert Opinion]. Head of Department, ENT, Princess Margaret Hospital, Perth WA; 2016.Mr.
6. Russell C. Providing the nurse with a guide to tracheostomy care and management. [Expert opinion]. Brit J Nursing.14(8):428-433; 2005.
7. National Tracheostomy Safety Project UK. Emergency Paediatric Tracheostomy Management. 2014. Accessed 15 March 2016. Available from <http://www.tracheostomy.org.uk/>

## Useful Resources

Australian Resuscitation Council. Website: <http://resus.org.au/>

This document can be made available in alternative formats on request for a person with a disability.

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## Appendix 1: Tracheostomy Mandatory Equipment

Equipment	Additional Information
<b>Tracheostomy tubes:</b> Tracheostomy tube of the same size	Check size of tube inside the box correlates to the size indicated on the box. Never leave empty boxes at the bedside.
Tracheostomy tube one size smaller. (contact ENT doctor within 24 hours if used).	Marked ' <i>for emergency use only.</i> '
<a href="#">Airway Profile</a>	Ensure it is the most current
<b>OTHER REQUIREMENTS</b> Pulse Oximeter.	
Introducer for the tube in situ.	May be required to reinsert the current tube.
Self-inflating bag and face mask. (+ neonatal facemask for patients with non-patent upper airway)	Correct size; check function See <a href="#">Resuscitation Trolley</a> & Checking
High flow oxygen meter (0-15L).	
Suction equipment with gauge.	up to 150mmHg/ 20kPa
Suction catheters.	
Stethoscope	
Normal saline ampoules and 2mL syringes	
Humidification; Heat Moisture Exchange (HME) - with & without oxygen attachment	Both must be readily available at bedside even if the child is not receiving oxygen. Correct size HME or humidified air/oxygen circuit.
Spare tracheostomy tapes or bead chains.	Correct size.
Scissors or wire cutters.	To cut tape/chain in an emergency.
Water soluble lubricant.	
Roll	For under shoulders.
Container of water.	To flush suction tubing.
Equipment required for routine tracheostomy care.	Nebuliser pot and tubing, stoma care, dressings etc.
Tracheostomy Dilators ( <i>in hospital only</i> ) Paediatric < 8yr; Adult >8yr	For the first 3 weeks after stoma formation and for children with Non Patent Upper Airway.
Personal Protective Equipment.	Disposable non sterile gloves, goggles.
<b>Note:</b> Tegaderm is available on Resuscitation trolley.	For children with Patent Upper Airway, provided to parents on discharge.

## Appendix 2: Tracheostomy Resuscitation Algorithm

