



## CLINICAL GUIDELINE

**MANDATORY TRACHEOSTOMY EQUIPMENT &  
EMERGENCY TRACHEOSTOMY MANAGEMENT POSTER****Staff this document applies to:**

- Nurses, Medical Staff, Speech Pathologists, Physiotherapists on all campuses, including the Intensive Care Unit (ICU).
- Does not apply to the community.

**State any related Austin Health policies, procedures or guidelines:**

- [Tracheostomy - Stoma Care](#)
- [Tracheostomy - Emergency Response to Accidental Tracheostomy Decannulation](#)
- [Tracheostomy - Humidification of Inspired Gases in Patients with a Tracheostomy](#)
- [Tracheostomy - Management of Patients with Tracheostomy](#)
- [Tracheostomy - Planned Tracheostomy Decannulation Procedure](#)
- [Tracheostomy - Recognising and Clearing a Blocked Tracheostomy Tube](#)
- [Tracheostomy - Suctioning via the Tracheostomy Tube](#)
- [Tracheostomy - The Suctionaide Tube, use of](#)
- [Tracheostomy - Changing a Tracheostomy Tube](#)

**Key points:**

- [Emergency Tracheostomy Management Poster](#)

**Definitions**

1. **Mandatory Bedside Tracheostomy Equipment:** This is essential equipment that is present and accessible at the bedside and is available for routine and emergency care of patients with a tracheostomy tube.
2. **Mandatory Transport Tracheostomy Equipment:** This is the equipment which must accompany a patient who has a tracheostomy during all transfers within Austin Health or to another hospital.
3. **Emergency Tracheostomy Management Poster:** This poster provides important information to assist in the management of tracheostomy emergencies. The front of the poster outlines the immediate response required by ward clinicians. The reverse side of the poster is for Specialist Airway Responders following escalation to CODE BLUE.

**Purpose:**

All safety information and equipment for tracheostomy care and emergency management must be immediately available for tracheostomy care and emergencies. This document outlines the procedures and equipment required to manage a tracheostomy safely and in an emergency.

## Clinical Alert:

The patient with a tracheostomy in situ is at risk of respiratory failure and/or arrest in the event of complications or emergencies.

### Mandatory Tracheostomy Equipment

- The primary nurse caring for the patient is responsible for ensuring that mandatory tracheostomy equipment is present at the bedside and during transport of the patient.
- The mandatory equipment must be set up prior to receiving a tracheostomy patient.
- Tracheal dilators must only be used by staff trained in use of tracheal dilators

### Emergency Tracheostomy Management Poster

- The [Emergency Tracheostomy Management Poster](#) (Front side) is to assist ward level management of tracheostomy emergencies
- The [Emergency Tracheostomy Management Poster](#) (Reverse side) is to assist the Secondary Responders in an emergency following escalation to CODE BLUE.
- The [Emergency Tracheostomy Management Poster](#) (Front side) must be clearly visible and placed above the patient's bed

## Expected Outcome:

- All mandatory equipment will be readily available and visible at the patient's bedside at all times and prior to the patient arriving to the ward.
- When a patient who has a tracheostomy tube is transported anywhere in the hospital or to another hospital, the tracheostomy mandatory equipment and poster must be taken with them.
- Any mandatory equipment that is used is to be replaced immediately.
- The [Emergency Tracheostomy Management Poster](#) will be filled in by:
  - Primary Nurse for patients located in ICU
  - The anaesthetist and/or surgeon responsible for forming new tracheostomies in theatre prior to the patient leaving theatre. (The poster will be located in the theatre tracheostomy box).
  - TRAMS for all ward patients except Ear Nose & Throat (ENT) Acute and readmitted Victorian Respiratory Support Service (VRSS) patients
  - Primary Nurse where ENT or VRSS is the primary unit
- The Emergency Tracheostomy Management Poster is clearly displayed, with complete and current patient related information.

## Equipment:

### 1. Mandatory Bedside Tracheostomy Equipment

- Tracheostomy checklist (available via SMR: M31.43)
- Humidifier set at 37° C. This can be sourced from CSSD Level 3, Ext 5503
- Clean gloves
- Suction catheters: standard size 12fg (If a mini tracheostomy tube is in situ, size 8 or 10fg will be required)
- Yankauer sucker
- Cuff manometer. This can be sourced from TRAMS during business hours (Ext: 3095) or from the transferring ward after hours.
- Tracheal dilators, for use by trained staff only. (Sterile Stores Level 2, Ext: 3860)

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- Bag mask ventilator (disposable or reusable) with tracheostomy connector and face mask. (Sterile Stores Level 2 Ext: 3860)
- 10mL syringe
- 2 spare cuffed tracheostomy tubes (one the same size as the tube in situ and another one a size smaller). (Sterile Stores Level 2 Ext: 3860 or contact TRAMS for advice on Ext 5503)
- Water for cleaning suction tubing
- Waste disposal bag
- Suction canister, tubing and tracheal suction device.
- Tracheostomy dressings (pre-cut by the manufacturer)
- Tracheostomy tapes
- Protective eyewear

## 2. Mandatory Transport Tracheostomy Equipment

- All items listed in 'Mandatory Bedside Equipment'
- Portable battery operated suction unit

## 3. Emergency Tracheostomy Management Poster

- Laminated colour version in A3 preferable
- Front side clearly displayed
- 'Specialist Airway Responders' section completed including following details (if known)
  - Patient Name and UR
  - Insertion date and method
  - Tracheostomy size
  - Airway grade

### Procedure:

- At the commencement of each shift ensure the above mandatory equipment is available at the patient's bedside and is in working order.
- If a patient is being transported, ensure the mandatory transport tracheostomy equipment and poster is sent with the patient.
- Source Emergency Tracheostomy Management Poster from TRAMS Mon - Fri 8.30am-5pm or print copy from attached document
- Display 'Front' side of the Emergency Tracheostomy Management Poster above the patient's bed.

### Author/Contributors:

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## In Consultation with

- TRAMS Team and Tracheostomy Review Committee
- Austin Airway Group
- Dr Jon Graham, Consultant Anaesthesia
- Dr Naomi Atkins, Consultant Respiratory and Sleep Medicine, TRAMS Medical Liaison

## Legislation/References/Supporting Documents:

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## Authorised/endorsed by:

Clinical Nursing Standards Committee

TRAMS Policy and Procedure Committee

Deteriorating Patient Committee – (Emergency Tracheostomy Management Poster)

Austin Health Airway Group

## Primary Person/Department Responsible for Document:

Tracheostomy Review and Management Service (TRAMS)

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# Emergency Tracheostomy Management

## A. Blocked Tracheostomy

- Remove inner cannula (if present)
- Deflate the cuff
- Call a **CODE BLUE**
- Apply oxygen via nose/mouth and tracheostomy
- Instil 5mls saline into tracheostomy and suction



### If tracheostomy remains blocked:

- > 7 days post initial insertion, consider tracheostomy change (if trained)
- < 7 days post initial insertion, do **NOT** change the tracheostomy. Wait for **CODE BLUE** team
- Apply saline nebuliser and suction prn

## B. Accidental Decannulation

- Call a **CODE BLUE**
- > 7 days post initial insertion, experienced staff can reinsert the tracheostomy
- < 7 days post initial insertion, do **NOT** reinsert tube. If long blue stay sutures present, pull anteriorly to keep stoma open while waiting for **CODE BLUE** team
- Apply oxygen via nose/mouth and tracheostomy stoma if required

## Specialist Airway Responders

### Tracheostomy Information

Patient \_\_\_\_\_ UR \_\_\_\_\_

Insertion method      Surgical      Percutaneous

Date of insertion \_\_\_\_\_ Last TT change \_\_\_\_\_

Tracheostomy size \_\_\_\_\_ Cuff      Yes      No

Laryngoscopy grade on intubation \_\_\_\_\_ Unknown

Obstructed upper airway      Yes      No      Unknown

Comment \_\_\_\_\_

A Specialist Airway Responder is a physician or surgeon with an advanced airway skill level e.g. Anaesthetist, Intensivist, ENT specialist, Thoracic Surgeon or Maxillofacial Surgeon.

**CODE BLUE:** If Anaesthesia not present call Anaesthesia Senior in Charge (SIC) on ext 3186.

## C. Bleeding From Tracheostomy

- Inflate cuff
- Sit patient up
- Apply oxygen via tracheostomy
- <10mls bright blood activate **Urgent Clinical Review**
- >10mls bright blood call a **MET** and notify surgeon responsible for inserting tracheostomy
- If major bleeding/ resp. distress **CODE BLUE**



- **Alert:** Hyperinflation of tracheostomy cuff +/- direct digital compression may help in the event of catastrophic bleeding
- **NOTE:** A CT angiogram neck is recommended to exclude possibility of a tracheo-arterial fistula



# Specialist Airway Responders

## IMMEDIATE MEASURES

- Apply oxygen via tracheostomy and face mask at high flow
- Use capnography as soon as available

## CONFIRM

- Tracheostomy not laryngectomy?
- Difficult upper airway? (Consider normal upper airway management)
- When was tracheostomy done?
- Surgical or percutaneous?

## REMEMBER

- ABC approach
- Minimal intervention to achieve oxygenation until skilled help arrives
- Is there a surgeon available?

## A. Apparently 'Blocked' Tracheostomy Tube

**START and PROCEED** until patient is improving, then await/consult skilled help  
(Consider but don't fixate on possible patient causes)

- 1 Remove HME, Speaking valve and inner cannula**
- 2 Suction down tracheostomy tube well beyond tube end (check length of spare tube at bedside)**
  - If able to pass suction, patient may be able to breathe through tracheostomy tube.
  - If able to pass suction and patient is not breathing adequately then ventilate with air viva connected directly to the tracheostomy tube. *Cease immediately if it feels obstructed.*
- 3 Deflate cuff and repeat suction of tracheostomy tube**
  - Patient may be able to breathe around tracheostomy tube through mouth
  - If the patient is not breathing adequately then manage the upper airway with bag mask/LMA/intubation (If intubating – the tracheostomy tube may need to be removed to allow passage of the endotracheal tube)
- 4 If the patient is not improving, remove tracheostomy tube and proceed to B. 'ACCIDENTAL DECANNULATION' (Tube Out) in A Tracheostomy**
  - Consider immediate fiberoptic examination before tube removal if there is a difficult upper airway

## B. 'Accidental Decannulation' (Tube Out) in a Tracheostomy

**START and PROCEED** until patient is improving, then await/consult skilled help

- 1 Is the patient breathing adequately via tracheostomy stoma or upper airway?**
- 2 If tracheostomy stoma appears patent, briefly attempt to replace tracheostomy with a tracheostomy tube the same size or one size smaller**
- 3 Manage the upper airway with bag mask/LMA/ intubation**
- 4 Access the airway via tracheostomy AND simultaneously continue to manage the upper airway with bag mask/LMA or intubation**
  - a. Primary measures**
    - Apply LMA or pediatric face mask over stoma and hand ventilate
  - b. Secondary measures: reopen tract and insert ETT or tracheostomy tube**
    - If stay sutures present, pull anteriorly to keep stoma open
    - Tracheal dilators
    - Fiberoptic bronchoscope loaded with an ETT
    - Bougie or airway exchange catheter
    - A guidewire, dilator and ETT from Melker® kit
- 5 Consider performing alternative surgical airway**

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