Acacium Group

Emergency Tracheostomy Tube Change (Child)

Procedure Reference | SOP VENT 25

Version | V4.1

Procedure Name	Emergency Tracheostomy Tube Change (Child)
Purpose of Document	To ensure that the correct preparation, procedure & outcome are achieved by implementing a consistent and systematic approach to Emergency Tracheostomy Tube Changes
Target Audience	All Nurses & appropriately trained carers
Version	V4.1
Author	Karen Matthews-Shard
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Lead Director	Karen Matthews-Shard
Review Frequency	2 yearly or when clinical or operation guidelines change
Last Reviewed	June 2024
Next Review Date	June 2026
Equality Impact Assessment (EIA) Form	Acacium Group is committed to Equality, Diversity and Inclusion and in line with our values, we strive to ensure that everyone that is part of the Acacium community is not disadvantaged or discriminated against given their individual need or characteristics. To support this, an Equality Impact Assessment has been undertaken on this policy/procedure. This information is held centrally and can be requested from the Clinical Governance Team.
About Acacium Group	Details of all Acacium Group trading companies that this policy applies to are detailed within Appendix A

Document History			
Version	**Date**	**Changes made/comments**	**By whom**
V1	Apr 2017	Draft	KNF
V1.1	Apr 2019	Review and update	KMS/SJ/PL
V1.2	Mar 2020	Update to new Community template	CCR/CC
V2	Jul 2020	Review and Updated	Clinical Advisory Group
V2.1	Oct 2020	Updated re rebrand	CC
V3	Jul 2022	Review and update	Clinical Advisory Group
V4	Jan 2024	Rebrand	Clinical Advisory Group

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1. Introduction

A tracheostomy is the surgical creation of an opening into the trachea through the neck. Once formed the tracheostomy opening is kept patent with a tube that is curved to accommodate the anatomy of the trachea. Changing the tracheostomy is a routine procedure for any Service user that has a tracheostomy. The frequency of a routine tracheostomy change can be different for each Service user – please check the Service user's care plan. There are situations where an emergency tracheostomy change is required. (ICS (2008)

The SOP links to Acacium Group policy on assisted ventilation and should be followed by all Acacium Group staff.

Competence against the policy and SOP will be assessed and reviewed on a regular basis.

Some service users will require an emergency tracheostomy change.

All service users with a tracheostomy must have an emergency tracheostomy box which must be checked on a daily / shift by shift basis.

Please note that this SOP is for emergency tracheostomy changes only, for any routine changes please refer to SOP Vent 07.

2. General

Check the consent of the Service user or the parent/guardian has been obtained and is recorded in the care plan, check the Service user or the parent/guardian is happy for you to proceed and understand what you are about to do.

NB: Obtaining consent in children and young people – See Acacium Group Consent Policy.

Young people aged 16 and 17 are presumed to have the competence to give consent for themselves. Younger children who understand fully what is involved in the proposed procedure can also give consent (although their parents will ideally be involved). In other cases, someone with parental responsibility must give consent on the child's behalf.

In emergency situations, gaining consent should not delay the procedure.

Emergency changes outside routine may be required if the tube becomes, partially or fully blocked, dislodged, or removed completely and in situations that are detailed in the clients care plan.

If clinically indicated that the tube is blocked, there should be no delay in inserting a new tracheostomy tube.

One person can carry out the emergency tracheostomy tube insertion if two people are not available.

If there is no improvement or you are unable to replace the tracheostomy tube, follow resuscitation guidelines and call 999.

Service users should be observed closely throughout the procedure and their vital signs monitored if possible. Respiratory assessment should include respiratory rate, depth, regularity, signs of respiratory distress (including but not limited to: sub costal or intercostal recession and/or tracheal tug and/or nasal flaring and in young infants head bobbing). Chest movement should be symmetrical and equal. (Samuels and Wieteska (2016).

3. Aim

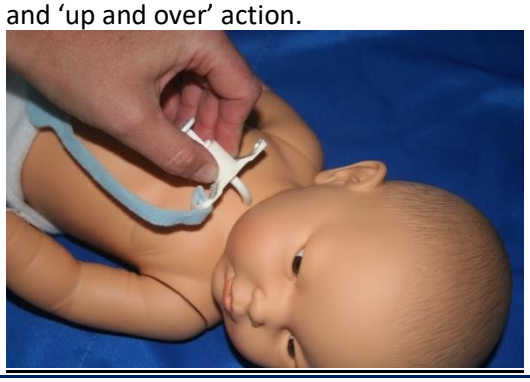
To ensure that emergency tracheostomy tube changes are effective and completed in a safe manner whilst minimising the child's discomfort and distress.

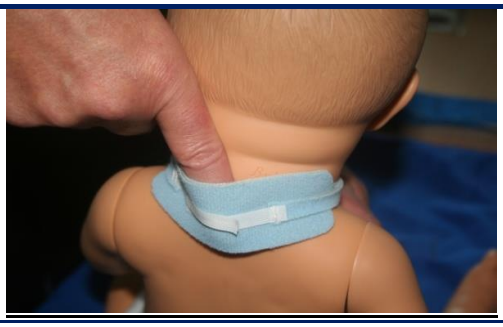
4. Equipment

- Emergency tracheostomy box with full contents
- Oxygen therapy if prescribed/available
- Bag Valve Mask
- Functioning suction unit and appropriately sized suction catheters
- Hand rub
- Appropriate PPE in line with current guidance

5. Procedure

	Action	Rationale
1.	Summon help from another person, if no one available proceed alone	Procedure is safer with an assistant
2.	Explain the procedure to the child and parents/carers – if appropriate in the emergency situation	To ensure the child, parents and carers have a good understanding and valid consent is achieved.
3.	Locate emergency equipment	To perform the emergency procedure
4.	Position the child – swaddle if appropriate consider a blanket roll under the child if under 1 year	To ensure they are in the best possible position for the change **To support the neck**
5.	Apply hand rub, if time allows put on gloves and apron	To minimise the risk of infection during the procedure.
6.	Always ensure the tracheostomy is checked prior to changing the tracheostomy. Remove the inner cannula if the tracheotomy has one and replace checking this can be done easily, remove the inner cannula again and place on the sterile field, insert the obturator/introducer, ready to insert into the stoma site. If the tracheostomy has a cuff, deflate and re-inflate with air Check the flange on the tracheostomy is intact and not broken. Complete final check of the size of the tracheostomy usually printed on the flange.	To ensure the tracheostomy is intact and final safety checks so there is not a problem upon changing the tracheostomy.
7.	If the old tube is cuffed, suction before deflating the cuff if required. Remove ventilator tubing if ventilated.	Pooled secretions above the cuff may enter the lungs when the cuff is deflated (Clotworthy et al. 2006).
8.	Remove one side of the Velcro tape or cut the ties on the old tracheostomy	To allow effective removal of the tracheostomy
9.	Remove the tracheostomy from the child whilst asking the child to breathe out – (if age appropriate)	Can reduce the likelihood of the child coughing

10.	Remove one side of the Velcro tape or cut the ties on the old tracheostomy	To allow effective removal of the tracheostomy
11.	Hold the new tracheostomy in your dominant hand, remove the old tracheostomy from the child 	To safely change the tracheostomy tube, maintaining the child's comfort as much as possible.
12.	Immediately insert the new tracheostomy using and 'up and over' action. 	To safely change the tracheostomy tube, maintaining the child's comfort as much as possible.
13	IMMEDIATELY REMOVE THE INTRODUCER 	The child will not be able to breathe with the introducer in place.
If reinsertion of tracheostomy tube unsuccessful		
14.	Insert the smaller tracheostomy tube following steps 8-10	
15.	Hold the new tracheostomy tube in place, while it is secured (either with cotton ties or Velcro tapes) inflate the cuff if applicable If the child is ventilated re-connect to the ventilator prior to securing the tracheostomy with tapes/ties.	To secure the tube and maintain a safe airway. Ensure Ventilator is switched on and working before re-connecting
16.	Check the tapes/cotton ties are the correct tightness by placing your finger behind the tapes/ties with the child sitting	The tracheostomy has a safe and secure fit.

		
17.	Check the child's condition (colour, respiratory rate), provide suction as appropriate and ensure they are comfortable and settled.	To ensure a clear airway has been established.
18.	Apply the stoma dressing as per normal, replace the Swedish nose	To minimise risk of infection and commence humidification.
19.	comfort the child if required.	To comfort and reassure the child.
20.	Dispose of the rubbish in appropriate waste receptacle as per Acacium Group waste policy	To maintain a safe environment.
21.	Wash hands thoroughly using anti-bactericidal soap and water and dry.	To minimise risk of infection.
22.	Document procedure in the child's care plan/record of respiratory management.	To maintain accurate records and provide a point of reference.
23.	Re-stock the emergency tracheostomy box and escalate any issue with availability of consumables.	To ensure availability in the case of an emergency.
If re-insertion of the smaller tube is unsuccessful		
23.	Call 999 for medical assistance	For clinical support
24.	If patent upper airway cover stoma with dressing. If upper airway is not patent, then use the Bag Valve Mask over the stoma until assistance arrives	To prevent air leaking out
23.	Commence BLS using Bag Valve Mask	To attempt to maintain the service user's airway
24.	Once care handed over to paramedics or the child is stable document events	To maintain accurate records
25.	If the tube change is successful and the ties are secure, follow the SOP for dressing changes and the service users individual care plan. As a lone worker ensure safety of service user is paramount. In a lone worker situation do not loosen tracheostomy ties until you are ready to change the tube as one worker will always be vulnerable loosening ties on their own as the tracheotomy may dislodge,	To provide service user comfort.
26.	Escalate to Clinical Lead or out of hours services	To ensure relevant follow up can be completed as needed.

NB

If a child has specific interventions detailed in their care plan in the event of an unsuccessful tube change, follow these if you are trained and competent to proceed

Examples of other interventions:

- Placing a suction catheter into the stoma to maintain patency
- BMV with a neonatal mask over the stoma site

Seldinger Technique

6. Associated Policies / SOPs

Policies
CLIN 02 Assisted Ventilation Policy
CLIN 06 Consent Policy
CLIN 12 Safe Use of Medical Devices Policy
CLIN 08 Safeguarding Children and Young Adults Policy
CLIN 14 Health Records Management Policy
CLIN 12 Infection Prevention Policy

SOPs
SOP VENT 01 Tracheostomy Dressing Change (Adult & Child)
SOP VENT 02 Tracheostomy Care General Guidelines
SOP VENT 03 Humidification of a Client's Tracheostomy
SOP VENT 04 Tracheal Suctioning (Adult & Child)
SOP VENT 05 Tracheostomy Tube Care (Adult)
SOP VENT 06 Tracheostomy Tube Change (Adult)
SOP VENT 07 Tracheostomy Tube Change (Child)
SOP VENT 08 Administration of a Nebuliser through a Ventilator Circuit
SOP VENT 09 Assembling a Ventilator Circuit
SOP VENT 10 Cleaning the Ventilator Equipment
SOP VENT 11 Safe Management of a Ventilated Service User During Outings
SOP VENT 12 Safe Management of a Ventilated Service User During Power Cuts
SOP VENT 13 Safe Use of Battery Packs
SOP VENT 14 Assisted Airway Maintenance and Cough (Adult)
SOP VENT 15 BiPAP
SOP VENT 16 Oral and Nasal Suctioning
SOP VENT 18 CPAP
SOP VENT 19 Mechanical Cough Assist
SOP VENT 20 Changing Tracheostomy Cotton Ties (Child)
SOP VENT 21 Changing Tracheostomy Velcro Tapes (Child)
SOP VENT 22 Phrenic Nerve Pacing
SOP VENT 23 Laryngectomy Care General Guidelines
SOP VENT 24 Emergency Tracheostomy Tube Change (Adult)
SOP VENT 26 Nasopharyngeal Airway Management (Adult & Child)
SOP VENT 27 Nebuliser Therapy

7. References

- Clotworthy, N. (2006) suctioning, in Guidelines for the Care of Patients with Tracheostomy Tubes. St George's healthcare NHS Trust, London.
- ICS (2008) standards for the Care for Adult Patients with a Temporary Tracheostomy. Intensive Care Society, London.
- National Tracheostomy Safety Project. (2022). Basic Care (Child). Available: https://www.tracheostomy.org.uk/healthcare-staff/paediatric. Last accessed 7th July 2022.
- Nursing & Midwifery Council (2008*). The code: Standards of conduct, performance and ethics for nurses and midwives. London: NMC*
- Martin Samuels, Sue Wieteska (2016). Advanced Paediatric Life Support: A Practical Approach to Emergencies. 6th ed. London: John Wiley & Sons, Ltd. Pages 33-48.
- https://kids.bwc.nhs.uk/wp-content/uploads/2021/02/NTSP-teaching-slides-20141127.pdf

Appendix A: About Acacium Group

Acacium Group consists of a number of trading companies, each providing services within core niche areas of the health and social care industries. Therefore, as this document is a Group Policy, the Policy herein applies to all trading companies detailed below:

pulse Part of Acacium Group	Thornbury Nursing Services Part of Acacium Group
Thornbury Community Services Part of Acacium Group	Scottish Nursing Guild Part of Acacium Group

Appendix B: Respiratory Care - Tracheostomy in Infants and Children

https://www.tracheostomy.org.uk/NTSP-Algorithms-and-Bedheads