# Document Control

## Title

Suction via a Tracheostomy & Mini Tracheostomy Standard Operating Procedure

## Author’s job title

Community Respiratory Physiotherapist

<table>
<thead>
<tr>
<th>Version</th>
<th>Date Issued</th>
<th>Status</th>
<th>Comment / Changes / Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1</td>
<td>May 15</td>
<td>Draft</td>
<td>Initial version for consultation</td>
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<tr>
<td>1.0</td>
<td>Jul 15</td>
<td>Final</td>
<td>Approved by Respiratory Therapy Group</td>
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<td>1.0</td>
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<td>Final</td>
<td>Transferred into new Trust format and published on Website</td>
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## Main Contact

Suction Support Therapist  
Barnstaple Health Centre  
Vicarage Street  
Barnstaple EX32 7BH

## Lead Director

Director of Health & Social Care

## Document Class

Standard Operating Procedure

## Target Audience

All Respiratory staff

## Distribution List

Senior Management

## Distribution Method

Trust’s website

## Issue Date

August 2015

## Review Date

August 2018

## Review Cycle

Three years

## Consulted with the following stakeholders

- Ward Managers
- Physiotherapy In Patient Manager
- Physiotherapy Advanced Practitioner
- Infection Control Team
- Assistant Director of Nursing

## Approval and Review Process

- Assistant Director of Nursing
- Respiratory Physiotherapy Specialist Interest Group

## Local Archive Reference

G:\CREADO/Outreach/SUCTION/SOP’s 2015

## Local Path

G:\CREADO/Outreach/SUCTION

## Filename

Suction via a Tracheostomy & Mini Tracheostomy Standard Operating Procedure

## Policy categories for Trust’s internal website (Bob)

- Respiratory
- Physiotherapy
- CREADO

## Tags for Trust’s internal website (Bob)

- Respiratory
- Suction
- Airway
1. **Introduction**

This document sets out Northern Devon Healthcare NHS Trust’s procedure for the use of suction via a tracheostomy or a mini tracheostomy. It provides a clear process to ensure a consistent approach across all clinical areas within the Trust.

2. **Purpose**

The Standard Operating Procedure (SOP) has been written to:

- Support the main Suction Policy and should be used in conjunction with this.
- Identify the procedure to be implemented when the use of Tracheal Suction is required. Please note that this is a guideline only and a clinician’s clinical judgement should be utilised following a thorough assessment of the patient.

3. **Scope**

This Standard Operating Procedure (SOP) relates to the following staff groups who may be involved in the assessment and delivery of tracheal suction on the wards:

- Registered nurses
- Physiotherapists
- Medical staff

4. **Location**

This Standard Operating Procedure ~ Suction via a Tracheostomy and a Mini Tracheostomy can be implemented in all clinical areas where competent staff are available to undertake this role.

Staff undertaking this procedure must be able to demonstrate continued competence as per the organisations policy on assessing and maintaining competence.

5. **Equipment**

- Functional suction unit
- Suction catheters with port incorporated or the addition of a port
- Patient 6’ (ft) tubing
- Sterile water and jug
- Personal protective equipment
6. **Procedure**

- Assess the need for suction.
- This procedure should be performed as a sterile technique.
- Explain the procedure to the patient and gain consent. Explain to the patient how it will feel, why it is necessary, how long it will take and that they may ask for the procedure to stop at any time.
- For patients who are unable to give consent the Mental Capacity and Best Interest Assessment must be completed and reviewed regularly, so that a decision to treat in best interests can be made. The form can be found on BOB.
- Decontaminate your hands and don appropriate personal protective equipment.
- If the patient has a fenestrated tracheostomy tube, ensure a non-fenestrated inner tube is in place.
- Check their observations and monitor them throughout the procedure.
- Have an oxygen mask/tracheal mask and tubing with oxygen flowing close to hand and ready to use.
- Pre oxygenate the patient if they are likely to become hypoxaemic as a result of the procedure or are receiving supplemental oxygen.
- For ventilated patients pre oxygenate with 100% oxygen for 30-60 seconds before suctioning and 100% oxygen for 1 minute post procedure (AARC 2010)
- For patients who are self-ventilating on air but may become hypoxaemic during or after the procedure pre and post oxygenate for 2 minutes.
- For self-ventilating patients who run on a hypoxic drive and may become hypoxaemic during or post procedure raise their oxygen 20% above baseline for between 20-30 seconds.
- Set the suction pressure. Turn on the suction at the unit/machine. Ensure the patient tubing is attached to the unit/machine. Occlude the end of the patient tubing with your thumb. Observe the dial on the suction unit and adjust the pressure using the pressure regulator knob to the desired level (see below).

<table>
<thead>
<tr>
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<th>Suction pressure</th>
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<tbody>
<tr>
<td>Adult</td>
<td>12-20 kPa or 100-150 mm Hg</td>
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<tr>
<td>Infants</td>
<td>11-13 kPa or 80-100 mmHg</td>
</tr>
<tr>
<td>Neonates</td>
<td>8-11 kPa or 60-80 mm Hg</td>
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</tbody>
</table>

- The suction pressure needs to be high enough to clear secretions but low enough to minimise trauma.
- Select an appropriate sized catheter, as a rule the diameter of the catheter should not occlude more than half the inner diameter of the tracheostomy tube.
- For adults with a tracheostomy tube use the following formula:
  Size of catheter = (Size of tracheostomy tube – 2) X 2
- For paediatric patients double the size of the internal diameter (I.D.) of the tracheostomy tube. This can be found on the spare tracheostomy packaging or in the notes.
- For patients with a mini tracheostomy use a size 10fg catheter.
- Open the end of the catheter packaging.
- Attach the catheter, whilst contained within the packaging, to the end of the patient tubing incorporating a port if there isn’t one within the suction catheter.
- Place a sterile glove on your dominant hand and using a sterile technique, remove the suction catheter from its packaging.
- Gently introduce the catheter into the airway, using your sterile hand, with your thumb off the port.
- For paediatric patients pass the catheter to the length of the tracheostomy tube so that the distal and lateral holes in the catheter just pass the tip of the tube. The length of the tracheostomy tube can be found on the spare tracheostomy packaging or in the notes.
• For adults introduce the catheter into the airway until the patient coughs. If resistance is met before the cough if stimulated withdraw the catheter by 1 cm before applying suction.

• Remove the catheter gently whilst applying continuous suction for the following duration

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Adult</strong></td>
<td>Up to 15 seconds</td>
</tr>
<tr>
<td><strong>Children of more than 1 year old</strong></td>
<td>No longer than 10 seconds</td>
</tr>
<tr>
<td><strong>Neonate and infants up to 1 year old</strong></td>
<td>Do not exceed 5 seconds</td>
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</table>

• Once the catheter is fully withdrawn from the tracheostomy/mini tracheostomy tube, discontinue suction and wind the catheter around the gloved hand and remove the glove over the catheter and discard, in accordance with local infection control policy.

• Re-apply oxygen if the patient becomes hypoxaemic following the procedure or if they are already receiving supplemental oxygen.

• Flush through the suction tubing using sterile water in a jug.

• Reassess the patient’s clinical response to the procedure and whether they need further suctioning. Always allow plenty of time for the patient to recover between each suction pass.

7. References


• Knox T, 2011, practical Aspects of oro-nasopharyngeal suction in children, Nursing children and young people vol 20, no 7, pages 14-17)

• Adult, Paediatric and Neonatal Airway Suction Policy, (March 2012) St George’s Healthcare NHS Trust


8. Associated Documentation

Northern Devon Healthcare NHS Trust Policies for :

• Suction Policy
• Single Use Policy
• Consent Policy
• Aseptic Techniques Policy
• Standard Infection Control Precautions Policy
• Mental Capacity Act Policy
• Oxygen Policy