

# NASOPHARYNGEAL AND OROPHARYNGEAL SUCTIONING - SCH PROCEDURE <sup>®</sup>

## DOCUMENT SUMMARY/KEY POINTS

- This procedure is to assist with airway clearance if the patient is unable to cough, expectorate, swallow or otherwise clear the upper air passages effectively
- During and following suctioning it is important to assess the: patient's colour, pulse rate, respiratory rate and pattern, chest movement, breath sounds, oxygenation, volume and consistency of secretions, presence of bleeding or evidence of physical trauma and subjective responses including pain.
- When suctioning unstable patients, the following monitoring should be in place: ECG monitor and pulse oximetry.
- Risks are increased in a combative or unco-operative patient and staff are advised to utilise additional resources.
- Under no circumstances should the suction port be applied directly to the nostril or into the nose.
- Note potential for adverse event/risks
- Note contraindications
- Document the time of suctioning, the amount, colour, consistency of secretions and any adverse reactions to suctioning.

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

<b>Approved by:</b>	Director of Clinical Governance	
<b>Date Effective:</b>	1 <sup>st</sup> October 2015	<b>Review Period:</b> 3 years
<b>Team Leader:</b>	Clinical Nurse Consultant, Acute Respiratory	<b>Area/Dept:</b> Respiratory, SCH

## CHANGE SUMMARY

- Document due for mandatory review; no change to practice.
- Replaces SCH document C.10.05 of similar title
- Addition under Adverse Reactions- Commence **D**anger, **R**esponse, **S**end for Help, **A**irway, **B**reathing, **C**irculation (DRSABC) assessment and follow the appropriate emergency response and treatment
- Addition of ECG related document

## READ ACKNOWLEDGEMENT

Nursing, medical and allied health staff caring for infants, children and young people in the acute setting should read and acknowledge they understand the contents of this document.

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## Introduction

- A patent airway is provided by removing accumulated secretions, such as blood, vomitus and other foreign material from the nasopharynx and oropharynx that cannot be removed by the patient's spontaneous cough and swallow or by repositioning.
- In most situations, clinicians should not stimulate a cough, as this may also stimulate the patient to vomit and the patient may aspirate the vomitus.
- Currently there is no available evidence to support the routine use of normal saline nasal drops.

### **Adverse Events/Risks associated with suctioning may include:**

- Desaturation (O<sub>2</sub> saturation <90%), hypoxia
- Bradycardia/bradyarrhythmia
- Bronchoconstriction/bronchospasm
- Laryngospasm
- Hypotension
- Mechanical trauma
- Infection
- Coughing episodes
- Retching, gagging, vomiting, aspiration
- Pain
- Misdirection of catheter
- Raised intracranial pressure

### **Adverse Reaction**

1. Stop suctioning immediately should an adverse reaction occur.
2. If hypoxia or desaturation occurs:
  - Administer oxygen via a Hudson face mask, initially 8 - 10 L/min.
  - Perform respiratory assessment.
  - Review by Medical Officer.
  - Monitor patient closely
3. If bradycardia, bradyarrhythmia, laryngospasm or bronchospasm occur:
  - Commence **D**anger, **R**esponse, **S**end for Help, **A**irway, **B**reathing, **C**irculation (DRSABC) assessment and follow the appropriate emergency response and treatment
  - Resuscitation with 100% oxygen and bag-valve-mask ventilation may be required. Oxygen flow in this setting is 10-15L/min.
  - It is a medical emergency: call 777 for immediate emergency assistance.
4. If vomiting occurs:
  - Position patient to allow ease of removal of vomitus
  - If the patient is unable to clear his/her own secretions, gently suction oropharynx.

## Contraindications

- Pertussis
- Skull fractures
- Acute head, facial or neck injury
- Laryngospasm
- Coagulation or bleeding disorders
- Post-operative ear, nose or throat surgery and cleft palate repair due to the risk of interrupting haemostasis.

## Equipment

- Sterile suction catheter - size of catheter chosen will depend on age/size of child's nares and tenacity of secretions. A guide is as follows:
  - Size 6 (FG) neonates
  - Size 6 - 8 (FG) young child (usually up to 5 years of age)
  - Size 8 -10 (FG) older child (usually 6 - 10 years of age)
  - Size 10 - 12 (FG) adolescents
- Wall or portable suction
- Wall or portable oxygen therapy and face mask
- Suction tubing
- Personal protective equipment (PPE) (non-sterile gloves and an eye/face shield)
- Tap water in appropriate container
- Lubricating jelly

## Procedure

1. Perform respiratory assessment.
2. Explain procedure to child (age dependent) and parents/caregiver and give reassurance.
3. Patients receiving supplemental oxygen should be assessed for the need for hyperoxygenation prior to and/or during suctioning to minimise the potential adverse effect of hypoxia during suctioning.
4. Assemble equipment - ensure oxygen therapy with attached face-mask is available prior to commencement of the procedure.
5. Parent/carer or assistant may swaddle (wrap and support) the patient whilst the patient is lying on the bed.
6. Open sterile suction catheter packaging slightly and attach suction catheter to suction tubing.

7. Measure insertion length - appropriate insertion length is determined by measuring the distance from the tip of the nose to the tragus (ear tip) of the ear.
8. Turn suction on at wall. Amount of pressure exerted is not dependent on the degree to which the black dial is turned on. If a pressure gauge is available recommended suction pressures 80-150 mmHg.
9. Perform basic hand hygiene.
10. Apply PPE (non-sterile gloves and eye/faceshield). Without touching the tip of the catheter, remove sterile suction catheter from packaging.
11. May apply lubricating jelly to end of suction catheter for the nasopharyngeal route if the mucosa is dry.
12. Suction the nasopharynx first, as it is considered cleaner than the oropharynx, and then if necessary suction the oropharynx.
13. Insert catheter next to the nasal septum and advance to the back of the nose - do not occlude suction port.
14. Occlude suction port continuously only on removal of catheter. Do not rotate catheter - it does not increase amount of fluid obtained.
15. The procedure should only take a maximum of 5 seconds for infants or 10 seconds for an older child to perform.
16. Assess the need to repeat the procedure. Allow the patient to rest between each pass of the suction catheter and provide reassurance to the patient. It is recommended that no more than three suction passes be made during any one suctioning episode.
17. Disconnect suction catheter from tubing. Rinse suction tubing using tap water enclosed in a fluid container to prevent contamination from the environment.
18. Dispose of gloves and suction catheter into clinical waste container. Remove PPE and clean the eye/faceshield
19. Perform basic hand hygiene.
20. Check patient is comfortable and reassess respiratory status.
21. Document the time of suctioning, the amount, colour, consistency of secretions and any adverse reactions to suctioning.

## Outcomes

- Audible and visible secretions are removed.
- The patient's airway is clear and the effort of breathing is improved.
- The patient is comfortable, pain free from the procedure and the patient's emotional and psychological well being are assessed as optimal.
- No adverse reaction has occurred. If an adverse event has occurred, the appropriate nursing and medical interventions have been implemented.

## Related Documents

- Pulse Oximetry  
<http://chw.schn.health.nsw.gov.au/o/documents/policies/guidelines/2015-9055.pdf>
  - Oxygen Therapy and Delivery Devices – SCH  
<http://chw.schn.health.nsw.gov.au/o/documents/policies/guidelines/2013-7019.pdf>
- Continuous Electrocardiography (ECG) Monitoring – SCH:  
<http://chw.schn.health.nsw.gov.au/o/documents/policies/guidelines/2013-7006.pdf>

## References

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4. Day, T., Farnell, S., Wilson-Barnett, J. (2002) Suctioning: a review of current research recommendations. Intensive and Critical care Nursing, 18, 79-89.
5. Dean, B. (1997) Evidence-based suction management in accident and emergency: a vital component of airway management. Accident and Emergency Nursing, 5, 92-98.
6. Macmillan, C. (1995) Nasopharyngeal suction study reveals knowledge deficit. Nursing Times, 91, (50), 28-30
7. NSW Health PD2007\_036 "Infection Control Policy"

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