

SUCTIONING THROUGH A NON-ARTIFICIAL AIRWAY – PEDIATRIC (NASAL)

INTENT

The purpose of this procedure is to provide staff with information to make clinical decisions regarding when and how to effectively and safely suction a non-artificial airway in the community setting.

SITE APPLICABILITY

This procedure applies to all Resource Ability and Nursing Solutions staff who are working in the community.

DEFINITIONS

Community – Client’s home, school or other “non-clinical” or public care area.

Non-artificial airway – The anatomical airway composed of the nasal cavity, pharynx and larynx.

Oral cavity –the area from the lips to the back of the molars, including, the hard palate, soft palate, gingiva (gums), buccal mucosa and floor of the mouth.

Oropharynx – the area from the back of the molars (or where the molars would be) and soft palate to the level of the Hyoid bone – including the tonsils.

Nasopharynx – the area from the back of the nasal cavity to the soft palate of the oropharynx.

PRACTICE LEVEL COMPETENCIES

RN – considered a foundational skill. RN’s must maintain their competence in line with BCCNM standards.

LPN – oral, oropharyngeal and nasal suctioning are considered foundational skills. LPN’s must maintain their competence in line with BCCNM standards.

Non-Nurse Care Provider – limited scope, only able to perform skill with extensive training and delegation of task in place.

Staff are responsible for ensuring that their competence in a foundational or advanced skill is maintained.

CONTRA-INDICATIONS

- Thrombocytopenia
- Hemoptysis
- Epistaxis
- Laryngospasm
- Increased intracranial pressure
- Stridor (e.g. caused by Croup)
- Oral/nasal trauma
- Arrhythmia
- Hypoxia

COMPLICATIONS



- Hypoxia
- Soft tissue trauma
- Respiratory distress
- Vomiting and/or aspiration
- Bradycardia

EQUIPMENT AND SUPPLIES

- Appropriate size suction catheter (e.g. Little Sucker with nasal tip or flexible suction catheter)
- Suction tubing
- Portable suction machine
- Normal saline/sterile water
- Non-sterile gloves

PROCEDURE

Step	Rationale
1. Assess the need for nasal suctioning. Indications may include: <ul style="list-style-type: none"> - Unable to clear nasal secretions despite conservative management. - Visible/audible nasal secretions. - Decreased oxygen saturations. - Ineffective cough. 	Ensure that all conservative methods have been unsuccessful before attempting an invasive procedure. Conservative management includes: <ul style="list-style-type: none"> - Position change (e.g. lying to seated, postural drainage side-lying position.) - Encouraging cough - Nebulized saline (if ordered)
2. Explain the procedure to the client/caregiver	Ensure that the client/caregiver is prepared for the procedure.
3. Gather supplies	
4. Perform hand hygiene and don non-sterile gloves.	Nasal suctioning is a clean (non-sterile) procedure.
5. Prepare equipment using clean technique: <ul style="list-style-type: none"> - If available, attach suction machine to a power outlet. - Attach the suction tubing to the suction machine. - Attach the suction catheter to the suction tubing, ensuring that the tip of the suction catheter remains in the packaging. - Test the suction machine to ensure that it is functional and that it is set to an appropriate level of suction (Infants: 80-100mmHg, children/teenagers: 100-120 mmHg) – use the lowest effective pressure to minimize the risk of injury. 	

<p>6. If possible, position the client a semi-fowler or fowler position. If client must be in lying position, move their head to the side to allow for drainage of secretions.</p>	<p>Ensures that the airway is positioned in the ideal position for suctioning and allows the client to clear deeper secretions by coughing, if necessary.</p>
<p>7. Switch the power on the suction machine.</p>	
<p>8. Remove the suction catheter from the packaging. Insert the tip of the catheter 5mm-10mm into the client's nasal cavity without covering the suction control port.</p>  <p>Hold the catheter tip at the desired insertion depth to prevent it from entering the nostril too far.</p>	<p>Reduces the risk of trauma from suctioning during insertion of the catheter.</p> 
<p>9. Cover the suction control port with a thumb and remove the catheter with a twisting motion for 5-10 seconds.</p>	<ul style="list-style-type: none"> - Twisting the catheter ensures effective removal of secretions and reduces the risk of trauma. - During suctioning air entry is reduced, limiting to a maximum of 10 seconds allows the client to maintain adequate air entry.
<p>10. Insert the tip of the suction catheter into the normal saline/sterile water and suction a small amount of fluid.</p>	<p>Clears the suction tubing.</p>
<p>11. Repeat the procedure as necessary in each nostril, to clear secretions.</p> <p>Wait a minimum of 30 seconds between attempts and ensure that client's vital signs have returned to the pre-procedure levels before repeating.</p>	<p>Ensures adequate recovery time before repeating the procedure.</p>
<p>12. Dispose of equipment and remove gloves.</p>	
<p>13. Perform hand hygiene.</p>	
<p>14. Reassure the client if distressed.</p>	
<p>15. Document the procedure, including:</p> <ul style="list-style-type: none"> - Indication for suctioning - Volume, consistency and colour of secretions obtained. - Client response to the procedure. 	<ul style="list-style-type: none"> - Aligns with BCCNM documentation standards. - Communication of care needs. - Indicates trends in client status.

REFERENCES

AboutKidsHealth. (2020). *How to perform nasopharyngeal and oropharyngeal suctioning*. <https://www.aboutkidshealth.ca/article?contentid=3857&language=english> (Accessed 16 August 2021)

AboutKidsHealth. (2020). *How to perform oral suctioning*. <https://www.aboutkidshealth.ca/article?contentid=3856&language=english>

AboutKidsHealth. (2020). *Preparing suctioning equipment and supplies*. <https://www.aboutkidshealth.ca/article?contentid=3852&language=english> (Accessed 16 August 2021)

Association of Paediatric Chartered Physiotherapists Respiratory Committee. (2020) *Guidelines for Nasopharyngeal Suction of a Child or Young Adult*.

BC Children's Hospital. (2020) *Suctioning Through a Non-Artificial Airway: Home and Community Environments*. <http://policyandorders.cw.bc.ca/resource-gallery/Documents/BC%20Children's%20Hospital/C-05-15-60851%20NSS%20Suctioning%20Through%20A%20Non-Artificial%20Airway%20Home%20And%20Community%20Environments.pdf> (Accessed 16 August 2021)

Elsevier, (2019). *Suctioning: Oropharyngeal – CE*. Elsevier Clinical Skills. https://point-of-care.elsevierperformancemanager.com/skills/386/extended-text?skillId=GN_24_1#scrollToTop (Accessed: 16 August 2021)
https://prod.openpediatrics.site/sites/default/files/assets/files/nasopharyngeal_and_oral_suctioning.pdf (Accessed: 16 August 2021)

National Cancer Institute. (2021). *oral cavity*. National Institutes of Health. <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/oral-cavity> (Accessed 16 August 2021)

Potter, P.A., Stockert, P.A., Griffin Perry, A., Hall, A.M., Astle, B.J., Duggleby, W. (2017) *Canadian Fundamentals of Nursing* (6th Ed.). Elsevier.

Rees Doyle, G., McCutcheon, J.A. (2015). *Oral Suctioning*. Clinical Procedures for Safer Patient Care. BCcampus Open Publishing. <https://opentextbc.ca/clinicalskills/chapter/5-7-oral-suctioning/> (Accessed: 16 August 2021)

Rees Doyle, G., McCutcheon, J.A. (2015). *Oropharyngeal Suctioning*. Clinical Procedures for Safer Patient Care. BCcampus Open Publishing. <https://pressbooks.bccampus.ca/clinicalproceduresforsaferpatientcaretrubscn/chapter/5-9-oropharyngeal-suctioning/> (Accessed 16 August 2021)