

Nasopharyngeal Suctioning

Nasopharyngeal suctioning is a safe method of removing secretions from the nose and nasopharynx in those who are unable to effectively cough, expectorate, swallow or otherwise clear the upper air passages. It is commonly used in infants with bronchiolitis.

Before, during and following suctioning it is important to assess the infant or child's colour, pulse rate, respirations and oxygenation. If there are any clinical concerns of hypoxia, bradycardia or apnoea, immediately abort the procedure, provide airway support and oxygen as required and seek urgent medical attention.

1 GATHER EQUIPMENT

Gather equipment pictured below



2 PREPARE

Explain the procedure and gain verbal consent.



3

Attend to hand hygiene and don PPE as required.



4

PROCEDURE

Position supine with access to the nose. Ensure SpO₂ monitoring is attached.



5

Ask assistant to hold as seen in the picture below.



6

Attach the suction catheter to the suction tubing and set the suction to an appropriate level (refer to table).



7

Measure the depth of insertion from the nare to the tragus of the ear. If required, to loosen secretions, add a few drops of Normal Saline in each nostril pre suction. This can be done using a 1 mL syringe.



8

Insert the suction catheter gently into the nasal passage to the predetermined length (do not apply suction during insertion). Do not force suction catheter, if you are unable to gently pass catheter abort procedure and seek senior nursing or medical advice.



ALERT

Nasopharyngeal suctioning is contraindicated in children with known coagulation or bleeding disorders, or children with a suspected base of skull fracture.



9

Occlude the suction port as the catheter is removed. A suction attempt should only take 5-10 seconds.



10

Repeat the procedure with a maximum of 2 attempts, allowing the infant / child time to recover between suction, a minimum of 20 -30 second intervals between suctioning.



11

Assess effectiveness and document the time of suctioning, the amount, colour and consistency of secretions.



Tips in children

- Water soluble lubrication may be used if the mucosa is dry.
- A few drops of nasal saline dropped into the nares can be used for some infants and children to loosen sections.
- If permitted, use sucrose in infants, to minimise procedural discomfort. A medical order is required, and parental consent is required prior to use. Please note at selected sites sucrose may be classified as a nurse initiated medication. Check your local policy or procedure for more information.

Guide to suction catheter sizing and maximum suction pressures:

Age	 < 1 year	 1-2 years	 2-6 years	 6 -9 years	 > 10 years
Suction Catheter Size	6F	6-8F	6-8F	8-10F	10-12F
Maximum Suction Pressures	60-90cm H2o (10 kPa)	90-110cm H2o (10-15 kPa)	90-110cm H2o (10-15 kPa)	110 – 150cm H2o (15-20 kPa)	110 – 150cm H2o (15-20kPa)



ALERT

Be aware that the suction procedure may elicit a vaso-vagal response potentially causing bradycardia with +/- apnoea. Should this occur cease suctioning immediately, provide airway manoeuvres, gentle stimulation, oxygen via face mask, (if spontaneously ventilating), and consider the need to assist with breathing.

Always have a functioning oxygen supply, oxygen meter, oxygen tubing and face mask available before suctioning in case of a hypoxic event.

Seek prompt senior nursing/medical advice for any child suffering any adverse effects of nasopharyngeal suctioning such as hypoxia, bradycardia or vomiting.



For further information:

[Suctioning - Oro-pharyngeal and Nasopharyngeal \(QH only\)](#)

[CHQ Procedure: Procedural Pain - Non-Pharmacological Management \(QH Only\)](#)

Video:

[Optimus Pulse Mini Skill Station - Suction](#)

References:

This Queensland Paediatric Emergency Nursing Skill Sheet was developed by the Emergency Care of Children working group (funded by the Queensland Emergency Department Strategic Advisory Panel) with the help of the following resources:

Children's Health Queensland Hospital and Health Service. (2016, June 6). Suctioning - Oro-pharyngeal and Nasopharyngeal. https://qheps.health.qld.gov.au/_data/assets/pdf_file/0032/726539/ns_01409.pdf

Cairns and Hinterland Hospital and Health Service. (2020, February 25). Supporting Children during Basic Clinical Procedures (Including pre-procedural preparation and clinical holding). https://qheps.health.qld.gov.au/_data/assets/pdf_file/0031/646627/pro-paed-clin-holding.pdf

Queensland Health State wide ED Nurse Educator Committee, Pearson, N., Cole, T., & Carney, S. (Eds.). (2016). Unit 5 Respiratory. In Queensland Health: Transition Support Program - Emergency. Module 3 - Paediatric Care in the Emergency Department (4th ed., pp. 63–64). State of Queensland (Queensland Health).

Nursing Skill Sheet Legal Disclaimer

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- Providing care within the context of locally available resources, expertise, and scope of practice.
- Supporting consumer rights and informed decision making in partnership with healthcare practitioners including the right to decline intervention or ongoing management.

- Advising consumers of their choices in an environment that is culturally appropriate and which enables comfortable and confidential discussion. This includes the use of interpreter services where necessary.
- Ensuring informed consent is obtained prior to delivering care.
- Meeting all legislative requirements and professional standards.
- Applying standard precautions, and additional precautions as necessary, when delivering care.
- Documenting all care in accordance with mandatory and local requirements.

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