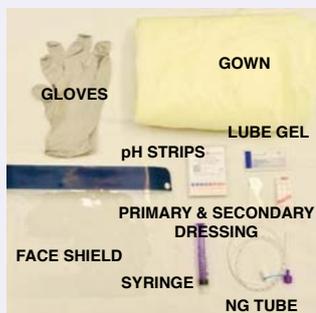


Nasogastric Tube insertion in children

A nasogastric tube passes through the nose, past the nasopharynx and oesophagus into the stomach. They are used to deliver enteral nutrition, medications or where necessary, provide gastric decompression.

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 the patient to facilitate insertion and comfort. Assess the need for clinical holding. See Paediatric positioning box on page 2.



5

Determine the length of the tube

Step 1: Find the NGT exit port (where fluid leaves the tube into the stomach)



6

Step 2: Place the exit port at the nare and measure from the tip of the nose to the corner of the ear lobe.
Step 3: Measure from ear lobe to the xiphoid process.
Step 4: Then measure from the xiphoid process, halfway to the umbilicus.



7

Attach an appropriate syringe to the end of NGT.

Lubricate the tip of the tube for nasal insertion.



8

Insert the tube into the nostril, gently guiding towards the back of the nasopharynx and down the back of the oropharynx into the oesophagus. Continue insertion up to the measured length. Do not force the tube, pause if the child starts to cry. Continue insertion as they swallow.



10

Once inserted to pre-determined length, Secure the tube, using a primary dressing to protect the skin followed by a secondary dressing to secure the tube



11

Using the syringe aspirate enough gastric contents (1mL) to perform a pH test to confirm placement.



12

Document the tube size, tube length and pH, in the patient's clinical record.



Paediatric NGT sizing guide

The size, type and length of the tube depend on age / size of the child as well as the intended use or viscosity of fluid i.e. drainage, decompression, and administration of medications or feeding.

Age	 < 4 months	 4 months to 2 years	 2-4 years	 4-8 years	 > 8 years
Tube for medication and feeding	5-6F	6-8F	8F	8-10F	10-12F
Tube for decompression	6-8F	8-10F	10F	10-12F	10-14F

Paediatric Positioning & Clinical Holding for a NGT

- Lying supine.
- Lying with the bed head elevate 30-40°.
- Older children may feel more comfortable sitting upright.
- Infants and younger children will need holding with parental consent. Please review your local paediatric clinical holding procedure or the CHQ procedure "[Procedural Pain - Non-pharmacological Management](#)" found under 'For Further information' on this document. Lying supine on parent's lap is an ideal position if parents are willing to help hold.

Tips in children

- If permitted, use sucrose in infants, to encourage sucking and swallowing during the procedure. It may also assist with 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.
- If you are unable to pass the tube down one nostril, try the alternate nostril.
- Long term Corflo Enteral Feeding Tube should be primed with sterile water, allowing the guide wire to be easily removed once inserted. Prior to use refer to your local policy/procedure or the product manual for more information.
- Older children will need to have the procedure explained for optimal compliance.



ALERT

Insertion of Naso gastric / orogastric tubes should **NEVER** be attempted in children with known oesophageal varices, oesophageal abnormalities such as atresia or trauma, or children with a suspected base of skull fracture without medical consultation and/or supervision.

Clinical signs such as coughing, choking, cyanosis may indicate incorrect tube placement

Seek prompt senior nursing/medical advice for any child suffering any adverse effects of nasogastric insertion such as respiratory distress or excessive vomiting.



For further information:

[Enteral Feeding Tubes: Insertion, care and management \(QH only\)](#)

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

Video:

[Video: Core Nasogastric Tube Insertion](#)

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. (2018, July 30). Enteral Feeding Tubes: Insertion, care and management. https://qheps.health.qld.gov.au/_data/assets/pdf_file/0041/697487/ns-04800.pdf

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Queensland Health State wide ED Nurse Educator Committee, Pearson, N., Cole, T., & Carney, S. (Eds.). (2016). Unit 9 Gastrointestinal and Endocrine. In Queensland Health: Transition Support Program - Emergency. Module 3 - Paediatric Care in the Emergency Department (4th ed., pp. 167–170). 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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