



PROCEDURE	
Nasogastric tube management	
Scope (Staff):	Community health staff
Scope (Area):	CAHS-CH, WACHS
Child Safe Organisation Statement of Commitment The Child and Adolescent Health Service (CAHS) commits to being a child safe organisation by meeting the National Child Safe Principles and National Child Safe Standards. This is a commitment to a strong culture supported by robust policy documents to ensure the safety and wellbeing of children at CAHS.	

This document should be read in conjunction with this [DISCLAIMER](#)

Aim

To provide guidance to nurses working in schools regarding nasogastric tube management, to ensure:

- safe re-insertion of the nasogastric tube (NG) as required
- safe positioning of the nasogastric tube (NG) prior to feeding.

Risk

Client care and safety may be compromised if nasogastric tubes are not managed according to this procedure. Complications to non-adherence may include aspiration pneumonia and an increased risk of infection to the client.

Background

Enteral feeding via a nasogastric tube (NG) is a useful method of ensuring adequate intake of nutrients in patients with a functioning gastrointestinal tract but whom are unable to use the oral route to take sufficient nutrients to maintain growth and development.¹

Administration of enteral feeds, fluids and medication via a NG is indicated for short term support. Longer term enteral feeding usually requires surgical referral for insertion of a gastrostomy or jejunostomy tube.

Key Points

- To be performed only by staff with appropriate training on nasogastric tube management
- Steps 5, 6 and 7a are relevant for re-insertion only and are shaded to reflect they are not relevant when the positioning of an in-situ NG is being verified.
- If acid inhibiting medication is taken by the client, an individualised plan for assessing the position of the NG should be provided by the treating medical team. Nurses should be guided by the student care plan.
- Community health nurses must follow the organisation's overarching Infection Control Policies and perform hand hygiene in accordance with WA Health guidelines at all appropriate stages of the procedure.

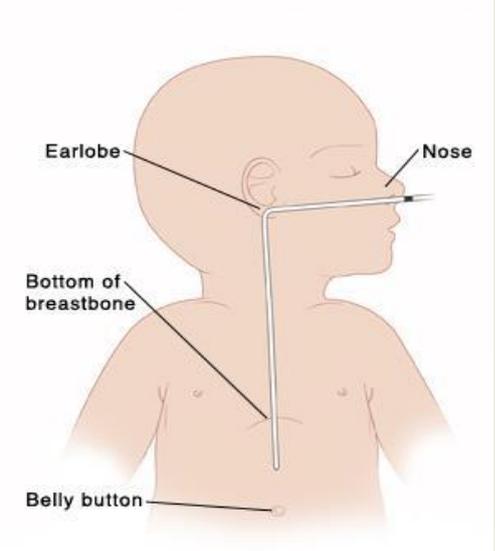
- For guidance on storage of feed; cleaning and storage of equipment and flushing after administering medications refer to Gastrostomy device management procedure.

Equipment

- Nasogastric tube of appropriate size (Re-insertion only)
- Water-based lubricant (Re-insertion only)
- Adhesive tape e.g. fixomul (Re-insertion only)
- Hydrocolloid dressing (Re-insertion only)
- Enteral syringe 20mL and/or 50ml
- pH indicator strips
- Detergent/disinfectant wipe
- Non-sterile gloves (additional personal protective precautions as appropriate to clinical situation).

Procedure

Steps	Additional Information
<p>1. Preparation:</p> <ul style="list-style-type: none"> • Perform hand hygiene • Check client identity • Gain consent • Review the care plan • Position the client • Explain the procedure to the client. 	<ul style="list-style-type: none"> • Consent should be gained prior to all procedures involving a client. • Check identification as per <i>Client identification</i> procedure. • Explain the procedure to the client and position them as appropriate. Position the client upright at minimum 30 degrees to reduce risk of aspiration¹ or as indicated on care plan.
<p>2. Clean the environment/table being used for the procedure.</p>	<ul style="list-style-type: none"> • Clean the area with a detergent/disinfectant wipe and allow it to dry.
<p>3. Perform hand hygiene and don gloves and other personal protective equipment (PPE) if indicated.²</p>	<ul style="list-style-type: none"> • As per CAHS <i>Hand Hygiene and Standard and Transmission Based Precautions</i> policy.
<p>4. Prepare the client to promote optimum comfort.</p>	<ul style="list-style-type: none"> • Clear the client's nostrils of mucous/debris as necessary. • Position the client upright at minimum 30 degrees to reduce risk of aspiration¹ or as indicated on care plan.

Steps	Additional Information
<p>5. Determine length of tube to be inserted.</p> <ul style="list-style-type: none"> • Measure from bridge of nose to ear lobe; then from ear lobe to xiphoid sternum; to the Midline of the Umbilicus. ¹ • Note the measurement markings on the tube. <ul style="list-style-type: none"> ○ If no visible markings indelible ink can be used to mark the tube. 	<p>Note: for weighted tip tubes the weight is not included in the tube insertion measurement.</p> 
<p>6. Insert tube.</p> <ul style="list-style-type: none"> • Lubricate the end of the tube using a single water-based lubricant sachet. • Gently insert the NGT into the nostril and advance along the floor of the nasopharynx to the oropharynx. • Encourage the client to swallow, if able, to assist movement of the tube into the oesophagus. • Advance the tube to the measured length. • If resistance is encountered, slightly adjust direction and reattempt advancement. <ul style="list-style-type: none"> ○ If resistance persists, stop, remove tube and reattempt insertion via other nostril. ○ Check NG tube has not coiled at the back of the throat. ○ Remove the tube immediately if the client develops any symptoms of respiratory distress e.g. coughing, cyanosis, breathing difficulty. 	<ul style="list-style-type: none"> • You may need to demonstrate a swallow. • The absence of such symptoms however does not exclude the tube being in the respiratory tract.³
<p>7. Confirm placement of tube.¹</p> <p>7a) Confirm placement <i>after</i> reinserting</p>	

Steps	Additional Information
<p>NGT:</p> <ul style="list-style-type: none"> • Using a 20 mL syringe aspirate 0.5 to 1mL of fluid of gastric content.1 • If no aspirate, advance tube by 1cm and re-aspirate. • Note colour and appearance of aspirate. • Test aspirate on pH indicator strip: <ul style="list-style-type: none"> ○ If pH 5.5 or below secure the tube in place and commence feed. ○ If pH above 5.5 do not feed and secure tube in place. <ul style="list-style-type: none"> – Wait 30-60 minutes and repeat testing procedure as per flowchart in Appendix 1. 	<ul style="list-style-type: none"> • See Appendix 1 for flowchart illustrating assessment of correct positioning of nasogastric
<p>7b) Secure tube</p>	<ul style="list-style-type: none"> • Place dressing/tape as supplied by parent/caregiver in place to protect the skin and secure tube in place with adhesive tape onto cheek, avoiding pressing against the nostril. • This will help to reduce risk of pressure injury.
<p>8. Confirm placement of <i>in-situ</i> NGT.</p> <ul style="list-style-type: none"> • Using 20mL or 50mL syringe ± adaptor, aspirate 0.5 to 1mL of gastric contents. • Note colour and appearance of aspirate. • Test aspirate on pH indicator strip: <ul style="list-style-type: none"> ○ If pH 5.5 or below commence feed ○ If pH above 5.5 do not feed <ul style="list-style-type: none"> – Wait 30-60 minutes and repeat testing procedure as per flowchart in Appendix 1. 	<ul style="list-style-type: none"> • See Appendix 1 for flowchart illustrating assessment of correct positioning of nasogastric • Measuring the pH of withdrawn fluid is helpful in differentiating between respiratory and gastric placement. • Antacid medication or continuous feeds may raise the gastric pH. • A pH of 5.5 or less indicates the tube tip is in a gastric location.
<p>8b) If unable to aspirate gastric contents:</p> <ul style="list-style-type: none"> • If possible, turn client onto their side. • Inject 1-5mL of air using a 20mL or 50 mL syringe and re-aspirate. 	<ul style="list-style-type: none"> • Injecting air through the tube may move the exit-port of the feeding tube if it has lodged against the gastric mucosa.

Steps	Additional Information
<ul style="list-style-type: none"> If no aspirate obtained, wait for 15-30 minutes. Re-aspirate. If no aspirate obtained, consider replacement/repassing of tube. Notify the parent/caregiver if the tube position is incorrect. 	
<p>8c) If aspirate is above pH 5.5:</p> <ul style="list-style-type: none"> DO NOT FEED Wait 30-60 minutes and repeat testing procedure.¹ Notify the parent/caregiver. 	<ul style="list-style-type: none"> When gastric pH is above 5.5, tube placement is questionable and should not be used until position is verified or as otherwise stated in clients own care plan.

Documentation

Nurses maintain accurate, comprehensive and contemporaneous documentation of assessments, planning, decision making and evaluations according to CAHS-CH and WACHS processes.

References

- Perth Children's Hospital. Nasogastric tube insertion, testing and feeding. Clinical Practice Manual. Perth: Child and Adolescent Health Services; 2020.
- National Clinical Guideline Centre (UK). Enteral feeding: Partial Update of NICE Clinical Guideline 2. [Literature Review]. London; 2012.

Related policies, procedures and guidelines

The following documents can be accessed in the **Clinical Nursing Manual** via the [HealthPoint](#) link, [Internet](#) link or for WACHS staff in the [WACHS Policy](#) link

Gastrostomy Device Management

Student Health Care Plans

The following documents can be accessed in the [CAHS-CH Operational Manual](#)

[Client Identification](#)

The following documents can be accessed in the [CAHS Policy Manual](#)

[Aseptic technique policy](#)

Hand hygiene
Nasogastric Tube Insertion, Testing and Feeding (PCH)
The following documents can be accessed in the Department of Health Policy Frameworks
Clinical Handover Policy (MP0095)
Clinical Incident Management Policy (MP 0122/19)

This document can be made available in alternative formats on request for a person with a disability.

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Reviewer / Team:	Clinical Nursing Policy Team		
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Excellence

Collaboration

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Appendix 1:

This flowchart illustrates the steps to ensure correct positioning of the nasogastric tube for clients not using acid inhibiting medication.

