Decision tree for nasogastric tube placement checks in **CHILDREN** and **INFANTS** (NOT NEONATES)

- Estimate NEX measurement (Place exit port of tube at tip of nose. Extend tube to earlobe, and then to xiphisternum)
- Insert fully radio-opaque nasogastric tube for feeding (follow manufacturer’s instructions for insertion)
- Confirm and document secured NEX measurement
- Aspirate with a syringe using gentle suction

**Aspirate obtained?**

**YES**

Test aspirate on CE marked pH indicator paper for use on human gastric aspirate

**pH between 1 and 5.5**

**PROCEED TO FEED or USE TUBE**

Record result in notes and subsequently on bedside documentation before each feed/medication/flush.

**NO**

Try each of these techniques to help gain aspirate:

- If possible, turn child/infant onto left side
- Inject 1-5 ml air into the tube using a syringe
- Wait for 15-30 minutes before aspirating again
- Advance or withdraw tube by 1-2 cm.
- Give mouth care to patients who are nil by mouth (stimulates gastric secretion of acid)
- Do not use water to flush

**Aspirate obtained?**

**YES**

**pH NOT between 1 and 5.5**

Proceed to x-ray: ensure reason for x-ray documented on request form

Competent clinician (with evidence of training) to document confirmation of nasogastric tube position in stomach

**DO NOT FEED or USE TUBE**

Consider re-siting tube or call for senior advice

**NO**

A pH of between 1 and 5.5 is reliable confirmation that the tube is not in the lung, however it does not confirm gastric placement as there is a small chance the tube tip may sit in the oesophagus where it carries a higher risk of aspiration. If this is any concern, the patient should proceed to x-ray in order to confirm tube position.

Where pH readings fall between 5 and 6 it is recommended that a second competent person checks the reading or retests.