

CLINICAL PRACTICE GUIDELINE

Guideline coverage includes NICU KEMH, NICU PMH and NETS WA




Cuffed Endotracheal Tube (ETT) Management




This document should be read in conjunction with the [Disclaimer](#)

Cuffed endotracheal tubes for term/near term neonates are routinely used by anaesthetists and PICU team at PMH. NICU at PMH routinely uses uncuffed ETTs. However, if a baby returns from theatre with a cuffed ETT to ward 6B, the NICU (6B) staff should be able to manage it. The purpose of this guideline is to help manage the cuffed ETT in such infants.

- The instructions below are for managing cuffed ETT which have been inserted by anaesthetists in theatre. Cuffed ETTs are not to be routinely inserted by the neonatal team at this stage.
- Nursing staff are to document the ventilator leak on admission and once every hour thereafter.
- Nursing staff are to check the cuff pressures and document on admission and 8 hourly thereafter.


Procedure to Carry out Cuff Pressure Check

	<p>Step 1: Attach manometer setup to the ETT balloon with 3-way tap off to everything (i.e. off to manometer, off to ETT balloon and off to the syringe).</p>
	<p>Step 2: Press the red button on the back of manometer until the needle comes to zero.</p>
	<p>Step 3: Turn on the 3-way tap to open it to everything (ETT, syringe and the manometer).</p>

	Step 4: Record the manometer reading (cuff pressure).
Step 4: Scenarios and actions	
	<p>Scenario 1 in step 4: The needle is in the Green Zone. Action: Nil. Turn the three way tap off to everything, remove the manometer set up and document the pressure.</p>
	<p>Scenario 2 in step 4: The manometer needle is above the green zone or in red zone. It means cuff pressure is too high. Notify the doctor. Action: Gently aspirate air from the cuff, while noting the position of the manometer needle. As you aspirate, you will notice that the needle will slowly come down into the green zone. Once it reaches green zone, turn the 3-way tap off to everything, remove the manometer set up document the cuff pressure.</p>
	<p>Scenario 3 in step 4: The needle is below the green zone (ie. less than 5 cm H₂O). Action: Check the ventilator leak from the screen. A. Leak is less than 25%: No need to do anything. Turn the 3-way tap off to everything, remove the manometer set up and document the cuff pressure. B. Leak is more than 25% and there are difficulties with ventilation: Inform the doctor. Gently inject air into the cuff while looking at the manometer needle. As you inject air, you will notice that the needle will move up into the green zone. Stop once it enters green zone. Once it reaches green zone, turn the 3-way tap off to everything, remove the manometer set up and document the cuff pressure. C. Leak is more than 25%, but there are no difficulties with ventilation: Nil action Turn the 3-way tap off to everything, remove the manometer set up and document the cuff pressure.</p>

Note: It is important **not** to have Zero leak on the ventilator screen when there is air in the cuff. If you notice persistently zero leaks on the ventilator screen when the balloon is inflated with air, please discuss with the doctor. The air may have to be gently aspirated, as described in scenario 2 of step 4.

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