

Queensland Paediatric Emergency Care

Emergency Airway Management**1 Prepare Team & Optimise Patient**

Anticipated Difficult Intubation	Consider anatomical/physiological condition of patient and skillset of team +/- Contact RSQ Activate local emergency response system. Identify most experienced intubator Assess landmarks for Can't Intubate, Can't Oxygenation (CICO) and consider double set up
Location	Consider move to Resus/OT/ICU
People	Allocate roles to prepare for intubation, don PPE & Lead
Patient Positioning	Airway opening techniques, check position: ear-sternal notch, face parallel to ceiling Provide manual in-line immobilisation if suspected cervical spine injury Consider NGT/OGT insertion to manage gastric distension
Apply Pre-Oxygenation (2x sources for 3min)	Apply apnoeic oxygenation via nasal prongs or high flow Passive Pre-Oxygenation: Non-rebreather mask or Nasal high flow therapy Positive Pressure Pre-Oxygenation: Neo-puff, Bag-valve mask, or T-piece
Haemodynamics	Anticipate hypotension: Prepare fluid bolus and adrenaline push dose pressor Anticipate arrest: Allocate pulse checker and first CPR provider

2 Time Out Checklist (This is a challenge-response checklist, please read out and tick item as completed)

Role Confirmation	Is monitoring applied?	Is IV/IO access patent?
☐ Medical Team Leader	☐ SpO2 ☐ EtCO2 ☐ BP (cycle minutely) ☐ Telemetry	☐ 2x IV/IO access
☐ Nursing Team Leader	Are patient's position and preoxygenation optimal?	Have drug doses been confirmed?
☐ First Intubator	☐ Position ☐ Apnoeic oxygen ☐ Pre-oxygenation for 3 min	☐ Induction agent: Ketamine
☐ Second Intubator	Has equipment been sized, checked & ready on shadow board?	☐ Paralytic agent: Rocuronium
☐ Airway Assistant	☐ BVM with PEEP valve or T-piece with manometer	☐ Adrenaline Push dose & CPR dose
☐ Drugs Team	☐ 2x Suction on ☐ Tapes or ETAD to secure	☐ Fluid bolus
☐ Pulse checker	☐ Adjuncts: NPA/OPA/LMA ☐ Syringe	☐ Sedative infusions
☐ CPR provider	☐ Video laryngoscope ☐ Ventilator settings checked	Refer to <u>CREDD</u> for guide
☐ Scribe	☐ 2 x Laryngoscope blades ☐ Nasogastric tube	Are patient's haemodynamics optimal?
☐ Runner	☐ 2 x ETT with alternative size ☐ Magill's forceps	☐ Consider giving fluids / pressors
	☐ Stylet or bougie ☐ CICO Kit	

3 Verbalise Airway Plan & Call Out Rules (adjust according to the patient in front of you)

Plan A: Intubate Video / Direct Laryngoscopy Max of 2x attempts per intubator 30secs per attempt	Successful	Confirm via EtCO2 Proceed to post intubation cares
	Unsuccessful	Recommence bag mask ventilation & maintain oxygenation Use two-person technique & consider airway adjuncts Change device, position, or intubator before next attempt
Plan B: Can't Intubate, Insert LMA	Able to oxygenate	Call for most experienced intubator & prepare for final attempt, or wake patient if possible
	Unable to oxygenate	Recommence bag mask ventilation, two-person technique Prepare CICO kit and proceed to Plan C
Plan C: Can't Intubate, Can't Oxygenate	Proceed to emergency cricothyroidotomy	<8yo Video Cannula  >8yo Video Scalpel 

**CALL OUT**

If you see it, say it - notify airway doctor to reassess and reoptimise
If desaturation $>10\%$ from initial / baseline oxygen saturation
If significant haemodynamic compromise

4 Proceed to Induction, Paralysis & Intubation

Team ready to proceed, administer induction and paralytic agents and start timer

5 Post Intubation Cares

☐ Confirm ETT position and secure, document depth at teeth/gum	☐ Commence sedation infusions
☐ Connect to ventilator	☐ Check VBG and optimise ventilation
☐ Cycle BP, continuous cardiorespiratory monitoring, capnography	☐ Insert NGT/OGT if not done prior



Paediatric Airway Equipment Size Guide

This sizing chart was adapted from a piece of work originally created by the Hervey Bay Emergency Department.

Age	Weight	Laryngoscope	ETT	ETT Depth	ETT Suction	Stylet	Bougie	LMA*	NG/OG	Face Mask*	BVM*	T-Piece Bag *	Magill's		
0-1m	2-4	0-1	3.0-3.5	7-10	5-6F	6F	5F	1	5-6F	00, 0	Infant	500mL	Paediatric		
1-6m	4-8	1	3.5-4.0	9-10	6F	6F	5F	1.5	6F	0/1					
1	8-10	1	4.0	11	6-8F	6F	5F	1.5	8F	1	Paediatric	1L		Paediatric - Adult	
2	12	2	4.5	12	8F	6F	10F	2	8F	2					
3	14	2	4.5	13	8F	6F	10F	2	10F	2					
4	16	2	5.0	14	8F	10F	10F	2	10F	3					
5	18	2	5.0	14	8F	10F	10F	2	10F	3					
6	20	2	5.5	15	10F	10F	10F	2	10F	3					
7	22	2-3	5.5	15	10F	10F	10F	2.5	10-12F	3	Adult				2L
8	25	2-3	6.0	16	10F	10F	10F	2.5	10-12F	4-5					
9	28	2-3	6.0	16	10F	10F	10F	2.5	12F	4-5					
10	30	2-3	6.5	17	12F	14F	15F	3	12F	4-5					
11	35	2-3	6.5	17	12F	14F	15F	3	12F	4-5					
12	40	3-4	7.0	17	12F	14F	15F	3	12F	4-5					
13	45	3-4	7.0	19	12F	14F	15F	3	12-14F	5					
Use Adult Sizes >45kg		3-4	7.0-9.0	19-23	14F	14F	15F	4-5	14F	5-6					

*These are a guide only. Please refer to manufacturer's instructions for sizing recommendations.

