

Pediatric Intubation Checklist

Consider Broselow and CONFIRM WEIGHT kg

1: Preparation

Medication:

Induction:

(reduce dose if hemodynamically unstable)

- ☐ Ketamine 1 mg/kg IV

Paralytic:

- ☐ Rocuronium 1 mg/kg IV

Adjuncts:

- ☐ Low dose push epinephrine: 10mcg/ mL IV Administer 1 mcg/kg IV for low blood pressure
- ☐ Sedation/analgesia and vasopressor infusions prepared

Respiratory Equipment:

(See sizing on reverse)

- ☐ Video laryngoscope **ON**
- ☐ ETT (+ 0.5 smaller size)
- ☐ Stylet
- ☐ ETT cuff balloon **TESTED** & syringe
- ☐ Capnography (EtCO₂) **on BVM**
- ☐ BVM + mask (appropriate size) +/- PEEP with O₂ flow **ON**
- ☐ Suction **ON**

Rescue Equipment:

- ☐ OPA/NPA **ready**
- ☐ Direct laryngoscopy, LMA /iGel and front of neck access (FONA) **ready**

Patient Preparation:

- ☐ Vitals **checked**
- ☐ Telemetry **ON** (+/- defib pads)
- ☐ BP cuff **cycling q2min**
- ☐ IV Fluids running **opposite** BP cuff
- ☐ 2nd IV in place & flushed

Positioning Optimized:

- ☐ Younger Children: Head tilt > Shoulder Roll > Head rest
- ☐ Older Children/Teens: Head tilt > Head rest > Ramp
- ☐ **Dual Pre-oxygenate with 100% O₂**
 - Under 1 year: 5 L/min
 - 1 to 7 year: 10 L/min
 - Over 7 years: 15 L/min
- Hemodynamics Optimized:**
 - ☐ Consider 10mL /kg fluid bolus, vasopressors

2: Pre-Intubation (Pause at Bedside to VERBALIZE)

Risk Assessment:

- ☐ Anatomically difficult airway?
- ☐ Physiologically difficult airway?
- ☐ Risk of hypotension or cardiac arrest?



**If ANY of the above,
CALL FOR BACKUP**

Plan:

- ☐ Pre-oxygenation
- ☐ Meds & Doses - checked
- ☐ Passive apneic-oxygenation
- ☐ Gentle bagging during apneic phase
- ☐ Airway Plan A, B, C, D
- ☐ Threshold to abort and backup plan

Discuss:

- ☐ Questions?
- ☐ Concerns?

**READY TO
INTUBATE**

3: Post-Intubation

Airway Management:

- ☐ Inflate ETT cuff (check cuff pressure)
- ☐ Confirm EtCO₂ waveform
- ☐ Bilateral breath sounds confirmed
- ☐ Secure ETT
- ☐ Connect ETT to ventilator
- ☐ Specify ventilator settings (See reverse)
- ☐ NG or OG tube insertion
- ☐ CXR confirmation

Patient Management:

- ☐ Repeat vital signs
- ☐ Hypertension & Tachycardia: possible inadequate sedation under paralysis. Consider bolus sedation (i.e. 1 mg/kg ketamine IV)
- ☐ Hypotension? Consider fluid bolus, then epinephrine or norepinephrine infusion
- ☐ Sedation and analgesia infusion (consider dexmedetomidine, midazolam, morphine)
- ☐ Consider soft restraints

Pediatric Invasive Ventilation Size Guide (1 month – 17 years minus a day)

Bagger Size	Less than 10 kg	Infant bagger																																																					
	0 – 30 kg	Pediatric bagger																																																					
	30 kg and up	Adult bagger																																																					
	Image Source (right): Elsevier skill “Endotracheal Tube Intubation (Pediatric)”, Nov. 2023																																																						
			Correct	Incorrect																																																			
			A: Covers mouth and nose but not eyes	B: Too Large: Covers eyes	C: Too Small: Does not cover mouth and nose																																																		
																																																							
EtCO2	ETT > 4.0: Adult/Pediatric ETT ≤ 4.0: Neonatal/Infant																																																						
ETT Securing	Neobar (to be used on ETT < 5.0. For greater than 5.0, consider alternative securing device) Measure from tragus to mid-line under the nose. Position NeoBar® across center of mouth between upper and lower lip. It should not contact lips. Tabs must be just in front of ear. Wrap cloth tape completely around NeoBar platform, then tape ETT to NeoBar spiraling tape towards ETT connector.																																																						
Intubation	<table><tr><th>Color</th><th>Weight (kg)</th><th>Cuffed OETT*</th><th>Depth (cm)</th><th>Blade</th></tr><tr><td>Grey</td><td>3 – 5</td><td>3.0</td><td>9.0 - 10.5</td><td>1 Mil, lopro 1</td></tr><tr><td>Pink</td><td>6 – 7</td><td>3.0</td><td>10.5 - 11</td><td>1 Mil, lopro 2</td></tr><tr><td>Red</td><td>8 – 9</td><td>3.0</td><td>10.5 - 11</td><td>1 Mil, lopro 2</td></tr><tr><td>Purple</td><td>10 – 11</td><td>3.5</td><td>11 - 12</td><td>1 Mil, lopro 2</td></tr><tr><td>Yellow</td><td>12 – 14</td><td>4.0</td><td>13.5</td><td>2 Mac/Mil, lopro 2.5</td></tr><tr><td>White</td><td>15 – 18</td><td>4.5</td><td>14 - 15</td><td>2 Mac/Mil, lopro 2.5</td></tr><tr><td>Blue</td><td>19 – 23</td><td>5.0</td><td>16.5</td><td>2 Mac/Mil, lopro 2.5</td></tr><tr><td>Orange</td><td>24 – 29</td><td>6.0</td><td>17 - 18</td><td>2 Mac/Mil, lopro 2.5</td></tr><tr><td>Green</td><td>30 – 36</td><td>6.5</td><td>18.5 - 19.5</td><td>3 Mac, lopro 3</td></tr></table>					Color	Weight (kg)	Cuffed OETT*	Depth (cm)	Blade	Grey	3 – 5	3.0	9.0 - 10.5	1 Mil, lopro 1	Pink	6 – 7	3.0	10.5 - 11	1 Mil, lopro 2	Red	8 – 9	3.0	10.5 - 11	1 Mil, lopro 2	Purple	10 – 11	3.5	11 - 12	1 Mil, lopro 2	Yellow	12 – 14	4.0	13.5	2 Mac/Mil, lopro 2.5	White	15 – 18	4.5	14 - 15	2 Mac/Mil, lopro 2.5	Blue	19 – 23	5.0	16.5	2 Mac/Mil, lopro 2.5	Orange	24 – 29	6.0	17 - 18	2 Mac/Mil, lopro 2.5	Green	30 – 36	6.5	18.5 - 19.5	3 Mac, lopro 3
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*Age/4 + 3.5 for cuffed ETT.																																																							
Inline Suction Size	ETT tube size		Inline suction size*		*ETT size × 2. Round down																																																		
	3.0 – 3.5		6 Fr																																																				
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Settings	Circuit Size (applies to Fisher & Paykel 950 System) Neonatal: < 25 kg Adult: ≥ 25 kg																																																						
	Age	Mode	RR (brs / min)	Ti (sec)	PEEP	VT (actual body weight)																																																	
	< 1 year	Volume Guarantee (PRVC, APV CMV) or Pressure Control*	25 – 35	0.60 – 0.70	5 – 8 cm H2O	6 – 8 mLs/kg																																																	
	1 – 3 years		20 – 26	0.70 – 0.75																																																			
	4 – 5 years		18 – 24	0.75 – 0.80																																																			
	6 – 10 years		16 – 20	0.80 – 0.90																																																			
	> 10 years	*PC if large leak or difficulty ventilating	15 – 20	0.80 – 1.0																																																			

ETT: Endotracheal Tube; RR: Respiratory Rate; Ti: Inspiratory Time; PEEP: Positive End Expiratory Pressure; VT: Tidal Volume; PRVC: Pressure Regulated Volume Control; APV: Adaptive Pressure Ventilation; CMV: Controlled Mandatory Ventilation

The Pediatric Critical Care Outreach project would like to recognize the work of Dr Neil Long KGH Emerg, Dr Rebecca Munk KGH Anaesthesia, Renee Faubert IH RRT on the early iterations of this document.