

Pediatric Intubation Checklist

1: Preparation: Consider Broselow and CONFIRM WEIGHT kg

Medication:

Induction:

(reduce dose if hemodynamically unstable)

- ☐ Ketamine 1 mg/kg

Paralytic:

- ☐ Rocuronium 1 mg/kg

Adjuncts:

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

Respiratory Equipment:

(See sizing on reverse)

- ☐ Video laryngoscope **ON**
- ☐ ETT (+ 0.5 smaller) **stylet**
- ☐ ETT cuff balloon **tested** & syringe ready
- ☐ Capnography **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 **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

- ☐ Bed tilt/Ramp/Roll under shoulders
- ☐ **Dual Pre-oxygenate with 100% O₂**
Under 1 year: 5 L/min
1-7 years: 10 L/min
Over 7 years: 15 L/min
- ☐ **Hemodynamics Optimized**
Consider 10 mL/kg fluid bolus, Pressors

2: Pre-Intubation Pause at Bedside 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
- Secure tube
- 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)
- Hypotension? Consider fluid bolus, then Epinephrine or Norepinephrine infusion.
- Sedation and analgesia infusion (Dexmedetomidine, Midazolam and Morphine)
- Soft restraints

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

Bagger Size	Less than 10 kg	Infant bagger	Correct		Incorrect																																																			
	0 – 30 kg	Pediatric bagger	A: Covers mouth and nose but not eyes		B: Too Large: Covers eyes	C: Too Small: Does not cover mouth and nose																																																		
	30 kg and up	Adult bagger																																																						
	Image Source (right): Elsevier skill “Endotracheal Tube Intubation (Pediatric)”, Nov. 2023																																																							
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><thead><tr><th>Color</th><th>Weight (kg)</th><th>Cuffed OETT*</th><th>Depth (cm)</th><th>Blade</th></tr></thead><tbody><tr><td> Grey</td><td>3 – 5</td><td>3.0</td><td>9.0 – 9.5</td><td>1 Mil, lopro 1</td></tr><tr><td> Pink</td><td>6 – 7</td><td>3.0</td><td>9.0 – 9.5</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>10.5 – 11</td><td>1 Mil, lopro 2</td></tr><tr><td> Yellow</td><td>12 – 14</td><td>4.0</td><td>12</td><td>2 Mac / Mil, lopro 2.5</td></tr><tr><td> White</td><td>15 – 18</td><td>4.5</td><td>13.5</td><td>2 Mac / Mil, lopro 2.5</td></tr><tr><td> Blue</td><td>19 – 23</td><td>5.0</td><td>15</td><td>2 Mac / Mil, lopro 2.5</td></tr><tr><td> Orange</td><td>24 – 29</td><td>5.5</td><td>16.5</td><td>2 Mac / Mil, lopro 2.5</td></tr><tr><td> Green</td><td>30 – 36</td><td>6.0</td><td>18</td><td>3 Mac, lopro 3</td></tr></tbody></table> *Age/4 + 3.5 for cuffed ETT.						Color	Weight (kg)	Cuffed OETT*	Depth (cm)	Blade	 Grey	3 – 5	3.0	9.0 – 9.5	1 Mil, lopro 1	 Pink	6 – 7	3.0	9.0 – 9.5	1 Mil, lopro 2	 Red	8 – 9	3.0	10.5 – 11	1 Mil, lopro 2	 Purple	10 – 11	3.5	10.5 – 11	1 Mil, lopro 2	 Yellow	12 – 14	4.0	12	2 Mac / Mil, lopro 2.5	 White	15 – 18	4.5	13.5	2 Mac / Mil, lopro 2.5	 Blue	19 – 23	5.0	15	2 Mac / Mil, lopro 2.5	 Orange	24 – 29	5.5	16.5	2 Mac / Mil, lopro 2.5	 Green	30 – 36	6.0	18	3 Mac, lopro 3
Color	Weight (kg)	Cuffed OETT*	Depth (cm)	Blade																																																				
 Grey	3 – 5	3.0	9.0 – 9.5	1 Mil, lopro 1																																																				
 Pink	6 – 7	3.0	9.0 – 9.5	1 Mil, lopro 2																																																				
 Red	8 – 9	3.0	10.5 – 11	1 Mil, lopro 2																																																				
 Purple	10 – 11	3.5	10.5 – 11	1 Mil, lopro 2																																																				
 Yellow	12 – 14	4.0	12	2 Mac / Mil, lopro 2.5																																																				
 White	15 – 18	4.5	13.5	2 Mac / Mil, lopro 2.5																																																				
 Blue	19 – 23	5.0	15	2 Mac / Mil, lopro 2.5																																																				
 Orange	24 – 29	5.5	16.5	2 Mac / Mil, lopro 2.5																																																				
 Green	30 – 36	6.0	18	3 Mac, lopro 3																																																				
Inline Suction Size	<table><thead><tr><th>ETT tube size</th><th>Inline suction size*</th></tr></thead><tbody><tr><td>3.0 – 3.5</td><td>6 Fr</td></tr><tr><td>3.5 – 4.5</td><td>8 Fr</td></tr><tr><td>5.0 – 6.0</td><td>10 Fr</td></tr><tr><td>6.0 – 7.0</td><td>12 Fr</td></tr></tbody></table>		ETT tube size	Inline suction size*	3.0 – 3.5	6 Fr	3.5 – 4.5	8 Fr	5.0 – 6.0	10 Fr	6.0 – 7.0	12 Fr	*ETT size × 2. Round down																																											
ETT tube size	Inline suction size*																																																							
3.0 – 3.5	6 Fr																																																							
3.5 – 4.5	8 Fr																																																							
5.0 – 6.0	10 Fr																																																							
6.0 – 7.0	12 Fr																																																							
Settings	Circuit Size (applies to Fisher & Paykel 950 System) Neonatal: < 25 kg Adult: ≥ 25 kg <table><thead><tr><th>Age</th><th>Mode</th><th>RR (brs / min)</th><th>Ti (sec)</th><th>PEEP</th><th>VT (actual body weight)</th></tr></thead><tbody><tr><td>< 1 year</td><td rowspan="3">Volume Guarantee (PRVC, APV CMV) or Pressure Control*</td><td>25 – 35</td><td>0.60 – 0.70</td><td rowspan="5">5 – 8 cm H₂O</td><td rowspan="5">6 – 8 mLs/kg</td></tr><tr><td>1 – 3 years</td><td>20 – 26</td><td>0.70 – 0.75</td></tr><tr><td>4 – 5 years</td><td>18 – 24</td><td>0.75 – 0.80</td></tr><tr><td>6 – 10 years</td><td rowspan="2">*PC if large leak or difficulty ventilating</td><td>16 – 20</td><td>0.80 – 0.90</td></tr><tr><td>> 10 years</td><td>15 – 20</td><td>0.80 – 1.0</td></tr></tbody></table>						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 H ₂ O	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	*PC if large leak or difficulty ventilating	16 – 20	0.80 – 0.90	> 10 years	15 – 20	0.80 – 1.0																									
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 H ₂ O	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	*PC if large leak or difficulty ventilating	16 – 20	0.80 – 0.90																																																					
> 10 years		15 – 20	0.80 – 1.0																																																					