

**Emergency Intubation in the Ambulance Checklist**

**\*\*\*\* CALL THE CONSULTANT ON SPEAKER PHONE/VIDEO CALL AT EARLIEST OPPORTUNITY\*\*\*\***

<b>Ask driver to stop ambulance in a safe place</b>	
<b>Review need for Intubation -&gt; Is it really required?</b>	
<ul style="list-style-type: none"> <li>Review DOPE for cause of desaturation in already intubated baby (Dislodgement/Obstruction/Pneumothorax (<i>pneumothorax equipment box located in cupboard at back of ambulance</i>)/Equipment)</li> <li>Can the baby be managed on escalation of non-invasive ventilation</li> <li>Can an iGel be used as an alternative to intubation?</li> </ul>	
<b>Intubation required-&gt; Set up</b>	
Ventilate the baby with mask or iGel <ul style="list-style-type: none"> <li>Remember Bag Valve Mask/iGel (without gas supply attached) can be used if delay in setting up neopuff/rPAP/iPuff</li> </ul>	
Use intubation drugs if able (dose banding table on reverse)	
Suction ready to be used	
Equipment (found in the blue pouch of the emergency bag) set up in a tray and placed on pull out drawer; <ul style="list-style-type: none"> <li>Laryngoscope/video laryngoscope</li> <li>ETT tube (one appropriate size, and one size below- see BAPM airway table below)</li> <li>Introducer</li> <li>ETCO2 detector</li> <li>Neofit</li> </ul>	
Position of baby <ul style="list-style-type: none"> <li>Open end of transport incubator and pull out tray</li> <li>Intubator position- kneel or sit</li> <li>Consider neck roll</li> </ul>	
NG/OG in situ and stomach emptied	
ECG and sats probe secure	
<b>Intubation-&gt; Team roles</b>	
SPR/ANNP: <ul style="list-style-type: none"> <li>Airway management</li> <li>Intubator</li> </ul> Nurse: <ul style="list-style-type: none"> <li>Give drugs</li> <li>Pass equipment</li> </ul> Driver: <ul style="list-style-type: none"> <li>Aspirate NG/OG</li> <li>Alert team if sats &lt; 80%, HR &lt; 100</li> </ul>	
<b>Unsuccessful intubation?</b>	
<ul style="list-style-type: none"> <li>Do not have repeated attempts if unsuccessful</li> <li>Consider use of iGel</li> <li>Neopuff to maintain saturations</li> <li>Consultant to consider emergency transfer to scene to assist</li> <li>Use videolaryngoscope if available and not used previously</li> <li>Difficult airway box</li> </ul>	

## Intubation drug dose banding:

Fentanyl 12.5mcg/ml *PreTerm 2mcg/kg* (Rounded up)	Weight (grams)	Calculated dose (micrograms)	Volume required (ml)
	<500	1.25	0.1
	500 – 749	1.25	0.1
	750 – 999	2.5	0.2
	1000 – 1249	2.5	0.2
	1250 – 1499	2.5	0.2
	1500 – 1999	3.75	0.3
	2000 – 2499	5	0.4

Fentanyl 12.5mcg/ml *Term 4mcg/kg*	Weight (grams)	Calculated dose (micrograms)	Volume required (ml)
	1000 – 1249	3.75	0.3
	1250 – 1499	5	0.4
	1500 – 1999	6.25	0.5
	2000 – 2499	7.5	0.6
	2500 – 2999	10	0.8
	3000 – 3499	12.5	1
	3500 – 3999	13.75	1.1
4000 – 5000	16.25	1.3	

Atropine 40mcg/ml 20mcg/kg	Weight (grams)	Calculated dose (micrograms)	Volume required (ml)
	<500	8	0.2
	500 – 749	12	0.3
	750 – 999	16	0.4
	1000 – 1249	24	0.6
	1250 – 1499	28	0.7
	1500 – 1999	36	0.9
	2000 – 2499	44	1.1
	2500 – 2999	56	1.4
	3000 – 3499	64	1.6
	3500 – 3999	76	1.9
4000 – 5000	92	2.3	

Suxamethonium 5mg/ml 3mg/kg (rounded down)	Weight (grams)	Calculated dose (milligrams)	Volume required (ml)
	<500	1.5	0.3
	500 – 749	1.5	0.3
	750 – 999	2.5	0.5
	1000 – 1249	3	0.6
	1250 – 1499	3.5	0.7
	1500 – 1999	4.5	0.9
	2000 – 2499	6	1.2
	2500 – 2999	7.5	1.5
	3000 – 3499	9	1.8
	3500 – 3999	10.5	2.1
4000 – 5000	12	2.4	

## Airway Equipment and Initial Respiratory Support Settings

Individual babies vary and clinical assessment and further tests should be used to confirm suitability.



Airway Equipment Size	Gestation (wks)	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41+
	Face Mask Size (mm)		35mm			35mm/42mm		42mm		42/50mm		50mm									
Laryngeal mask size		Not recommended		Consider in extremis		Consider Size 1 igel or size 0.5/00 LMA					Size 1 Laryngeal mask ( igel or LMA)										
Laryngoscope Blade (Miller straight)		size 00					size 0					size 1									
ET Tube size (mm)		2.0-2.5		2.5			3					3.5									
Oral ET depth of insertion at lips (cm)		5	5.5	6	6.5	7	7.5	8	8.5	9											
Initial Respiratory support & Ventilation settings at Delivery	CPAP/HFT	CPAP 6-8 cm H <sub>2</sub> O OR 6-8L/min nHFT																			
	PIP	20-25cm H <sub>2</sub> O										30cm H <sub>2</sub> O									
	PEEP	5-6 cm H <sub>2</sub> O																			
	FiO <sub>2</sub>	0.3					0.21-0.30					0.21									
Weight (kg)		0.5	0.6	0.7	0.8	0.9	1	1.1	1.25	1.4	1.55	1.75	1.95	2.15	2.45	2.65	2.9	3.1	3.3	3.5	3.6

**Predictal SpO<sub>2</sub> Targets**

- 2 mins 65%
- 5 mins 85%
- 10 mins 90%

**Tube Placement Check**

- ✓ Chest Rise
- ✓ Auscultation
- ✓ CO<sub>2</sub> Detection

**Colorimetric ET CO<sub>2</sub> detectors**  
(Neo-StatCO<sub>2</sub> or Pedi-Cap)

**GOLD IS GOOD**

False -ve: low cardiac output

**Capnography Traces**

**GOOD**



**OBSTRUCTION/ BRONCHOSPASM**



**BIG LEAK**



**OESOPHAGEAL INTUBATION**



**Surfactant**

Initial Dose 200mg/kg Curosurf®

**ET surfactant:** ensure insertion length of catheter is shorter than ET

**Surfactant:** ensure 0.5cm black tip is still visible above glottis for babies <27 weeks.