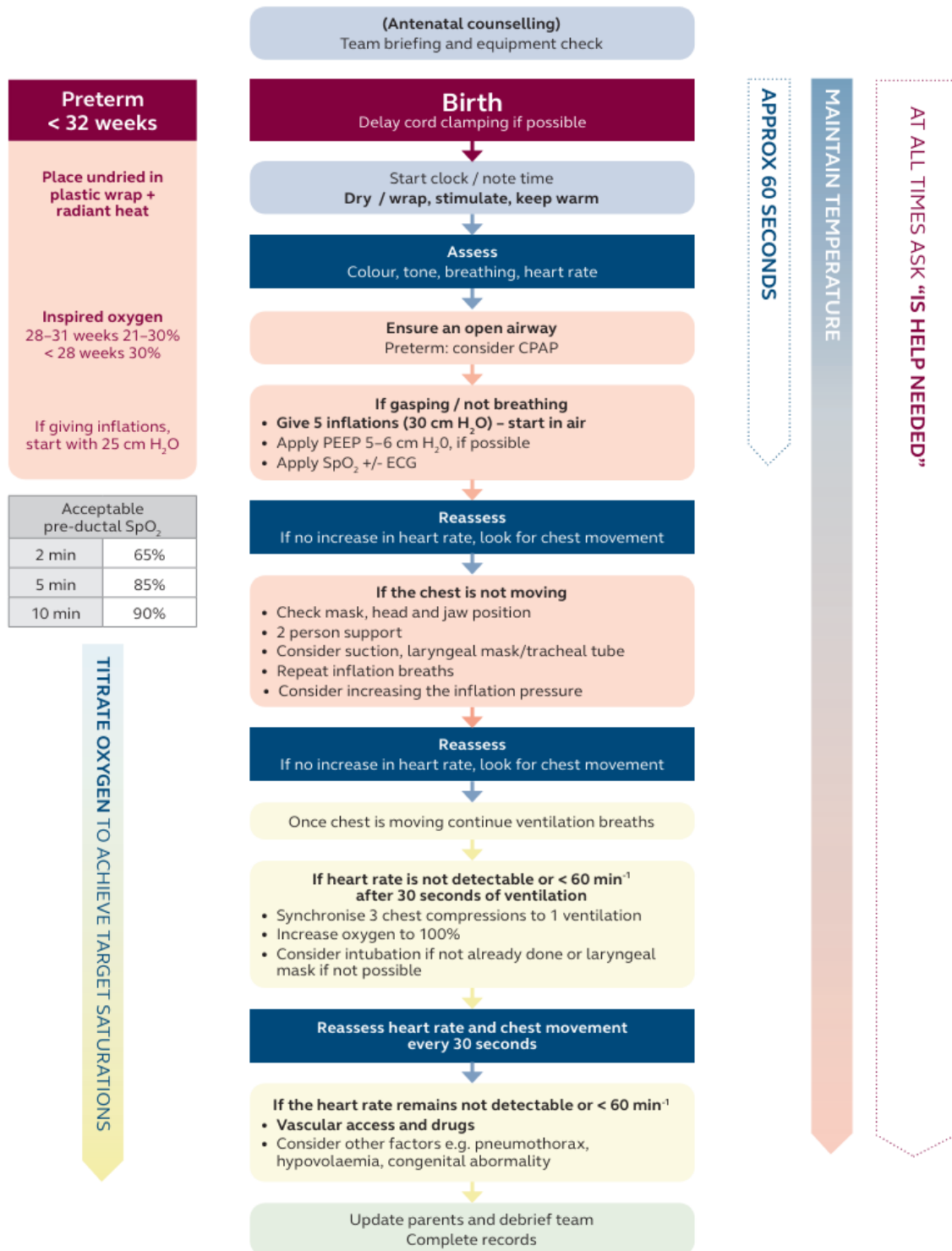


## Newborn life support



### Difficult Intubation?

- Video laryngoscopy
- LMA/ i-gel
- Guedel

### Tube Placement

- Chest rise ✓
- Auscultation ✓
- Capnography +ve ✓  
(Neo-StatCO<sub>2</sub> or Pedi-Cap):

**GOLD is GOOD**

**False -ve**

Low cardiac output

**False +ve**

contamination - gastric content/  
adrenaline

### Delivery of surfactant via ET

- 2.0 = 17 cm
- 2.5 = 18 cm
- 3.0 = 19 cm
- 3.5 = 20 cm

### SURFACTANT TREATMENT

**On Delivery Suite:** 1x 120mg vial Curosurf® ventilated preterms, FiO<sub>2</sub> >0.6 at 10 mins  
**Early Rescue / Rescue:** 200mg/kg Curosurf®

**Emergency access: UVC length in cm = (weight x 1.5) + 5.5, use 3.5F (<1.5kg) or 5F**  
**If unable to obtain access via UVC consider intraosseous insertion**

Baby's weight	Adrenaline* 1:10,000	Sodium Bicarbonate 4.2%	Glucose 10%	Volume** Blood or N/Saline 0.9%
	<b>20 mcg/kg</b>	<b>1-2mmol/kg</b>	<b>2.5 ml/kg</b>	<b>10ml/kg</b>
<b>1kg</b>	0.2 ml	2-4 ml	2.5 ml	10 ml
<b>2kg</b>	0.4 ml	4-8 ml	5 ml	20ml
<b>3kg</b>	0.6 ml	6-12 ml	7.5 ml	30ml
<b>4kg</b>	0.8 ml	8-16 ml	10 ml	40ml

\*If no vascular access Adrenaline can be given via ETT. ETT dose 100 mcg/kg (1 ml/kg). Repeat Adrenaline every 3-5 minutes if HR < 60 bpm. ETT adrenaline \*\*if required, repeat volume dose

# 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

**Preductal 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**

<b>GOOD</b>	<b>BIG LEAK</b>
	
<b>OBSTRUCTION/ BRONCHOSPASM</b>	<b>OESPHAGEAL INTUBATION</b>
	

**Surfactant**

Initial Dose 200mg/kg Curosurf®

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

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