

# Neonatal Resuscitation Protocol

- American Academy of Pediatrics Oct 2015
- 10% of neonates need some resuscitation
- < 1% need chest compression & medicine

Antenatal counselling  
 • team briefing  
 • Equipment check

## Routine care

Birth  
 • Term gest?  
 • Good muscle tone  
 • Breathing or crying?

Yes

Provide warmth (25°C at delivery room)  
 • clear airway  
 Dry  
 • ongoing evaluation

NO

• Provide warmth  
 • Position  
 • clear airway  
 • Dry  
 • stimulatory

Labored breathing or persistent cyanosis

clear airway  
 check SpO<sub>2</sub>  
 consider CPAP  
 supplement O<sub>2</sub> if req

NO

HR < 100/min or  
 Apnea / Gasping

Yes

• start PPV  
 • check SpO<sub>2</sub>  
 • consider cardiac monitoring

Post-resuscitation  
 Then debriefing

30sec  
 HR < 100/min

NO

check chest movement  
 ventilation corrective step  
 may intubate baby

NO HR < 60/min

Yes

• start chest compression, coordinate PPV  
 • use 100% O<sub>2</sub>  
 • Use cardiac monitor  
 • Intubation  
 • consider UVC

HR < 60/min  
 NO Yes

Inj: Adrenaline

If after 3 time dose → NO improvement

Give - Normal saline  
 - O<sub>2</sub> 100% Rh-ve Blood  
 • Not ringers  
 lactate

infant pos  
 poor perfusion  
 feeble pulses

consider  
 • Hypovolemia  
 • Pneumothorax

then use drugs to increase the tissue perfusion.

Following drugs are commonly used:

IV → 4VC

Epinephrine: (1: 10,000). Indicated when heart rate is not improving in spite of adequate effective ventilation and chest compressions. Dose is 0.1–0.3 ml/kg I/V or intra-tracheally. Dose can be repeated in 3–5 min.

Volume expanders: (Normal saline, Ringer lactate or 5% albumin). These are indicated where there is evidence or suspicion of hypovolemia e.g. pallor persisting after oxygenation, weak pulses with good heart rate, poor response to resuscitation. Dose is 10 ml/kg I/V in 5–10 min.

Sodium bicarbonate: It is indicated in prolonged cardiac arrest that does not respond to other therapy. It should be used only after ventilation is established. Dose is 1–2 mEq/kg I/V slow diluted over 2 min. NOW NOT RECOMMEND

Naloxone hydrochloride. It is indicated when there is H/O maternal narcotic administration within past 4 hours. Dose is 0.1 mg/kg through endotracheal tube, I/V, I/M or S/C.