

# NEWBORN RESUSCITATION ALGORITHM

BIRTH

Term gestation?  
Breathing?  
Good Tone?

Cry/breathe well & good tone

**Routine Care with Mother**

Provide warmth  
Clear airway if necessary  
Dry and stimulate  
(Don't dry if <30 weeks - Wrap preterm baby's torso in plastic bag)  
Note the time

Assess breathing/crying  
and/or heart rate

If ongoing Respiratory  
Distress – consider CPAP

Gasping, apnoeic or HR <100

Start ventilating with room air (Rate: 30 - 40/min)  
Use oxygen if preterm starting at 30 - 40%  
Connect to pulse oximeter if available, avoid hyperoxia  
Ensure chest rise with each breath

**Oxygen Administration**  
Use blended O<sub>2</sub> if available  
to achieve targeted  
pre-ductal sats (see below)

Alternatively:

- Bag with no O<sub>2</sub> ≈ 21%
- Bag with O<sub>2</sub> ≈ 40%
- Bag with O<sub>2</sub> + Reservoir ≈ 100%

Assess breathing, heart rate  
and sats /colour  
every 30 - 60 seconds

HR <100

Ventilate with supplemental oxygen as required

**Normal pre-ductal  
sats after birth**  
(right hand or ear)

- 1 min: > 60%
- 2 min: > 65%
- 3 min: > 70%
- 4 min: > 75%
- 5 min: > 80%
- > 10 min: 90 - 95%

Assess breathing, heart rate  
and sats /colour  
every 30-60 seconds

HR <60

Continue ventilating with supplemental oxygen as required  
Consider intubation  
Start chest compressions with coordinated ventilation  
(3 compressions : 1 breath)  
Each cycle should take 2 seconds

**Post Resuscitation Care**

- Maintain normothermia  
36.5° - 37.5°C
- Consider Induced  
Hypothermia where available  
according to protocol
- If ongoing respiratory  
distress – consider nasal  
CPAP and surfactant as  
required according to protocol
- Maintain sats 90 - 95%

Assess breathing, heart rate  
and sats /colour

HR <60

Continue compressions and ventilation  
Give 0.1 - 0.3 ml/kg Adrenaline IV (1:10 000 dilution)  
(1 ml/kg Adrenaline ETT (1:10 000 dilution) only if no IV access)  
May repeat Adrenaline IV after 3 – 5 min  
Correct hypovolaemia if necessary  
(10 ml/kg NS IV over 5 - 10 min)  
Consider pneumothorax / Check glucose

GOLDEN MINUTE - 60 seconds

MAINTAIN NORMOTHERMIA