TOP MESSAGES



- Delayed cord clamping can optimise condition
 especially in the preterm infant
- Effective thermal care is vitalDry wrap and stimulate
- 3. Assess breathing & heart rate A fast heart rate indicates adequate oxygenation
- 4. Simple steps to support airway and breathing manage most problems
- Chest compressions only once effective ventilation is established and if the heart rate remains very slow



CORD CLAMPING

KEY EVIDENCE



Delayed cord clamping improves survival and haematological and circulatory stability especially in preterm infants

KEY RECOMMENDATIONS



If resuscitation is not required then delaying cord clamping for at least >60 seconds is recommended, ideally until breathing has commenced



Where delayed cord clamping is not possible, cord milking should be considered but only in infants >28 weeks gestation

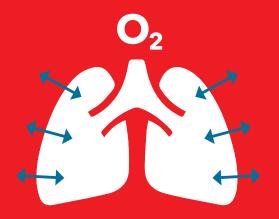


KEEP WARM & STIMULATE

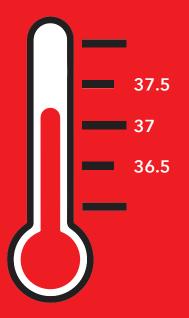
KEY EVIDENCE



Mortality and morbidity are increased if babies get cold



Stimulation improves breathing effort and oxygen saturation



- Term/Late preterm infants: Dry, wrap, keep warm. Place skin to skin
- Preterm <32 weeks: place undried in plastic wrap or bag, use radiant heat
- Aim for a temperature of 36.5 37.5 °C
- Use repeated gentle stimulation to promote breathing

EUROPEAN RESUSCITATION COUNCIL

ASSESSMENT OF BREATHING & HEART RATE

KEY EVIDENCE

O₂

Apnoea/Gasping indicate inadequate breathing

Heart rate (HR) is the best indicator of oxygenation

Oximetry +/- ECG provide reliable information on HR and oxygenation



- Start respiratory support if breathing is inadequate
- Use HR and SpO₂ monitoring to obtain continuous information
- Frequently reassess HR, chest movement and breathing to guide interventions



- Target HR > 100min-¹ and saturations >85% at 5 minutes, >90% at 10 minutes
- Call for help early if required

NLS 2021

AIRWAY & BREATHING SUPPORT



KEY EVIDENCE

Most babies receiving help only require airway and breathing support

Correct airway position is more important than clearing physical obstruction



Most term/late preterm babies only require air

CPAP may help preterm breathing



- Head in the neutral position with jaw lift
- Consider CPAP if preterm & breathing
- If not breathing effectively give 5 mask inflations
 - Up to 2-3 seconds, 30 cm H₂O (<32 weeks 25 cm H₂O)
 - Start in 21% O₂
 (if 28-31 weeks 21-30%, <28 weeks 30%)
- If no increase in HR /chest movement
 - Check mask seal, head and jaw position
- Consider other manouevres:
 - 2 person technique
 - Suction
 - Laryngeal mask or tracheal tube
 - Gradual increase in inflation pressure
- Then repeat inflation
- Once chest movement is achieved ventilate 30min⁻¹

CHEST COMPRESSIONS & DRUGS



KEY EVIDENCE



Chest compressions are only effective after the lungs are aerated, and effective ventilation is established

Drugs should be delivered centrally (umbilical vein or intraosseous)





- If despite 30 seconds of effective ventilation the HR remains very slow/absent, commence synchronised chest compressions
- 3 compressions : 1 ventilation, 30 cycles min-1
- Increase the inspired oxygen to 100%
- Reassess HR every 30 seconds continue chest compressions if still very slow
- Intubate if able and not done already otherwise consider a laryngeal mask.
- Secure vascular access (UVC/IO) for drugs: (e.g. Adrenaline, Volume, Glucose)