**Respiratory distress**

**Signs of respiratory distress**
- Increased work of breathing
- O₂ requirement > 30%

**Work of breathing**
- Tachypnoea
- Chest recession (sternal, intercostal, lower costal)
- Nasal flaring
- Audible expiratory grunt

**O₂ saturations**
- Target:
  - Preterm 91–96%
  - Term > 96%
- Measure predactally—right hand

**Signs of respiratory distress?**
- Yes
- No

**Commence CPAP**
- MAP: 8 cm H₂O
- Check capillary blood gas
- Observe for CPAP failure
- O₂ to maintain oxygen saturations
- O₂/air:
  - Flow 8–10 L/minute
  - Humidified/warm (37 ºC)
- Refer to QCG:
  - Neonatal respiratory distress including CPAP
  - Neonatal resuscitation

**Assess and monitor clinical condition**

**Commence IPPV**
- ETT size and insertion depth—refer to QCG: *Neonatal resuscitation*
- Pressures:
  - PIP 18–20 cm H₂O
  - PEEP 7–8 cm H₂O
  - O₂ to maintain oxygen saturations
- Flow: 6–8 L/minute
- IT: 0.3–0.4 seconds
- Rate: 40–60 bpm

**Surfactant indicated/available?**
- Yes
- No

**Surfactant**
- Baby with HMD requiring intubation and ventilation from birth
- Up to 24 hours of age
- Continue IPPV

**Wait for retrieval**
- Continue ongoing care as indicated
- Discuss changes in condition with RSQ

**Abbreviations:**
- <: less than; >: more than; bpm: breaths per minute; cm H₂O: centimetres of water; CPAP: continuous positive airway pressure; ETT: endotracheal tube; HMD: Hyaline membrane disease; IPPV: intermittent positive pressure ventilation; MAP: mean airway pressure; IT: inspiratory time, O₂: oxygen; PaCO₂: partial pressure of carbon dioxide; PEEP: positive end expiratory pressure; PIP: peak inspiratory pressure; QCG: Queensland Clinical Guidelines; RSQ: Retrieval Services Queensland