

Conventional ventilation in newborn infants Summary Clinical Guideline Derby & Burton

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Summary guideline

1. Indications for use
 - **Lung disease** such as respiratory distress syndrome (RDS), meconium aspiration syndrome, persistent pulmonary hypertension of the newborn, pneumonia, congenital malformations such as congenital diaphragmatic hernia
 - **Poor respiratory drive** or effort such as in apnoea of prematurity, systemic illness such as sepsis, cardiovascular compromise needing inotropic support, hypoxic ischaemic encephalopathy (HIE), neuromuscular disease
 - **Maintenance of a safe airway** such as in airway disease, undergoing surgery or imaging procedures requiring sedation
2. Preterm babies should have volume targeted ventilation in combination with synchronised ventilation.
3. On-going adjustments for optimise oxygenation and CO₂ exchange should be made while the baby is ventilated.
4. Babies should be monitored using continuous oxygen saturation recording and capillary blood gas monitoring.
5. The readiness for extubation and its exact timing must be individualised for each infant and their specific need for respiratory support.
6. In general, the infant should
 - Have adequate respiratory drive and be off sedation
 - Premature infants (<34 weeks' gestation) should have received caffeine
 - Stable on minimal ventilatory support