

Invasive and Non-Invasive Ventilation For VLBW Infant (<1500 g) with Respiratory Distress Syndrome

The following is recommended to promote consistent FRC and minimize lung injury from micro-atelectasis, volutrauma, and oxygen toxicity in infants with suspected respiratory distress syndrome (RDS). CPAP specifically means Aladdin or Viasys machine, not RAM cannula. Non-synchronized ventilation, i.e. NIPPV, is not part of routine management.

Individual circumstances may preclude the following approach. Ultimate clinical management remains at the discretion of the attending neonatologist.

A. Ventilated Patient

1. Surfactant as clinically indicated
2. Extubate to either CPAP6 or SiPAP 10/6
3. Leave on CPAP until FiO₂ 21% or 32 weeks CGA
4. After 32 weeks CGA may use RAM cannula or HFNC

B. Non-Ventilated Patient

1. For CPAP support use either CPAP of 6 or SiPAP 10/6
2. Leave on CPAP until FiO₂ 21% or 32 weeks CGA
3. After 32 weeks CGA may use RAM cannula or HFNC

C. Room Air Patient

1. Heated Humidified Nasal Cannula (HFNC) may be used for apnea as long as the patient does not require oxygen.
2. RAM cannula may be used for apnea as long as the patient does not require oxygen.