

Respiratory Distress at 27 Weeks or Greater

RECOMMENDATIONS:

1. Infants with respiratory distress or oxygen need beyond the 4 hour transition period following birth should have a CXR.
2. Infants requiring > 1 lpm high flow nasal cannula after the 4 hour transition period who are not improving should be considered for CPAP or intubation and surfactant.
3. Infants requiring > 30% oxygen after the 4 hour transition period who are not improving should be considered for CPAP or intubation and surfactant.

LITERATURE REVIEW Physiologic Principles:

1. Early initiation with CPAP may lead to reduction in duration of mechanical ventilation
2. Any preterm infant with significant RDS should receive surfactant
3. RDS Definition:
 - Traditional**- Infant with retractions, grunting, flaring, need for supplemental oxygen and CXR with diffuse haziness and air bronchograms
 - NICHD Neonatal Research Network**- Oxygen use for ≥ 6 hours for the first 24 hours after birth, with or without ventilator support and without the need for radiologic findings
4. There is insufficient evidence to establish the safety or effectiveness of HFNC as a form of respiratory support in preterm infants.
5. Weaning preterm infants from NCPAP to HFNC is associated with increased exposure to oxygen and longer duration of respiratory support.