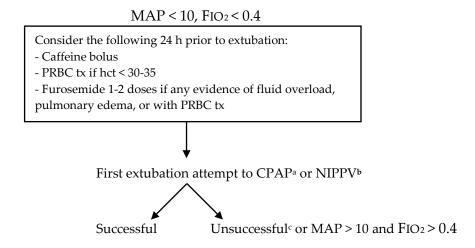
Infants with BPD: Weaning Strategies from Assisted Ventilation

Preterm Infant (> 28 d) with Evolving/Established BPD on Invasive Mechanical Ventilation



- Continue NIPPV or CPAP for 2-3 d
- Transition to bubble CPAP (BCPAP) (7-8 cm H_2O) if FIO₂ < 0.3 and RR < 70-80
- Wean BCPAP by 1 cm H₂O every 3-5 d if FIO₂ $< 0.3^d$
- Trial of RA/LFNC O2 when BCPAP 5 and RA for 3-5 d and PMA > 32 wks^{d, e}
- Transition from BCPAP to HFNC (3-4 lpm) if unable to wean to RA/ LFNC > 36 wks PMA and/or nasal trauma
- Wean HFNC by 1 Lpm every 2-3 d until 2 Lpm, then trial of RA/LFNCO₂^d

- Consider low dose dexamethasone or prednisolone Rx if PMA > 36 wks
- Wean ventilator settings as tolerated and reattempt extubation within 3-4 d

- ^b Suggested initial NIPPV settings [17]:
 - Rate: initial 10, max 40;
 - PIP: initial 10 above PEEP, max 18;
 - PEEP: initial same as when intubated, max 8
- ^c Extubation failure criteria:
 - one episode of apnea requiring bag mask ventilation (BMV) or
 - more than six episodes of apnea requiring stimulation in a 6-h period or
 - more than 100% increase in baseline FiO2 for more than 4-6 h (for example from 30% to 60%) or
 - significantly increased work of breathing and/or RR >80 consistently
- ^d Criteria for failure to wean or discontinue CPAP/HFNC:
 - more than 20% increase in baseline respiratory rate for more than 4-6 h or
 - more than 30% increase in baseline FIO₂ requirement for more than 4-6 h (for example from 30% to 40%) or
 - LFNC O2 requirement > 200 ml for more than 4-6 h

^a Suggested initial CPAP settings, 8-9 cm H₂O; if trial of CPAP fails^d, trial of NIPPV before reintubation

e Return to previous settings if unable to wean based on criteria defined in d