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With collaborators & support from multiple institutions, including:

USAID FROM THE AMERICAN PEOPLE | STAR | UCSF Center for Health Equity in Surgery & Anesthesia | OC2 Open Critical Care

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How to Use This Document

This is a living document, created by created by nurses, physicians, respiratory therapists and other healthcare providers from multiple institutions and multiple countries via the OpenCriticalCare.org project.

The goal of this document is to provide tools that can be locally modified to help healthcare providers learning to provide respiratory care for hospitalized patients.

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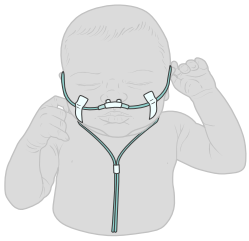
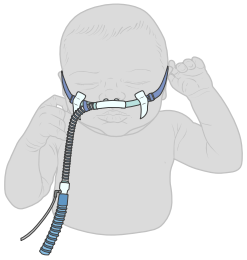
Neonatal oxygen therapy escalation algorithm



- Start **nasal cannula** oxygen at:
  - 0.5-1 LPM neonates
  - 1-2 LPM infants

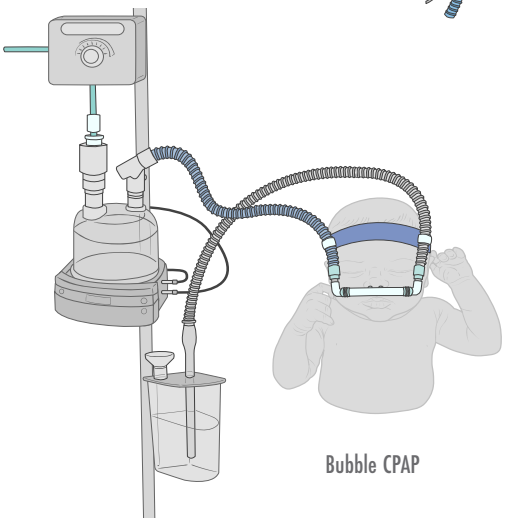
If continued distress or SpO_2 < 90%
(or <94% if emergency signs)

Flow rates higher than 5L will dry mucous membranes and humidification systems should be used.



Find higher level of care & consider one of the following if adequate O2 supply:

HFNO: 0-10kg 2L/kg/min
10-20kg 1L/kg/min



Bubble CPAP

Nasal BIPAP/CPAP

CPAP: 5-10 cmH20

Bubble CPAP: start flow at 5 L/min; immerse expiratory limb (cm depth in H20 equals CPAP 'pressure'; look for bubbles; titrate to 10 L/min if needed to generate bubbles

BIPAP: deltaP 5-15/PEEP (EPAP) 5-15

Wean O_2 flow and avoid SpO_2 100% to avoid ill effects of hyperoxia and excess O_2 consumption. Optimal SpO2 goals may vary based on locally available resources.

CPAP - continuous positive airway pressure; **BIPAP** - bilevel positive airway pressure; **HFNO** - high flow nasal oxygen; **LPM** - liters per minute

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