## About this resource



With collaborators & support from multiple institutions, including:



Center for H in Surgery 8



Last updated June 2021

#### Disclaimer

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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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# **Common non-invasive O2 delivery devices**

Nasal Cannula	Face Mask	Venturi Face Mask	Face Mask Reservoir Bag
$0_2^{}$ flow 1-5 L/min $^{\dagger}$	0 <sub>2</sub> flow 5-10 L/min	0 <sub>2</sub> flow 2-15 L/min	0 <sub>2</sub> flow 10-15 L/min
FiO <sub>2</sub> 0.23-0.35*	FiO <sub>2</sub> 0.30-0.50*	FiO <sub>2</sub> 0.24-0.6*	FiO <sub>2</sub> 0.5-0.85*

High Flow Nasal Oxygen	BIPAP / CPAP				
	Oronasal	Nasal	Full face	Helmet	
0 <sub>2</sub> flow 10-60 L/min <sup>†</sup>	$0_2^{flow} \sim 10-80^{**} \text{ L/min}$				
Fi0 <sub>2</sub> 0.21-1.0*	FiO <sub>2</sub> 0.21-1.0*				

\* Delivered 02 concentration depends on multiple factors including the concentration of the oxygen source and the patient's respiratory pattern (e.g. peak inspiratory flow and minute ventilation).

 $^{**}02$  consumption for BIPAP/CPAP is widely variable depending on device used and the leak of the system.

 $\dagger~$  02 flow ranges differ for neonates, children and adults; see figure 6.3 for ranges by age.

BIPAP - bilevel positive airway pressure; CPAP - continuous positive airway pressure; FiO2 - fraction of inspired oxygen (concentration); L/min - liters per minute (flow)



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