

COVID-19: AEROSOL-GENERATING PROCEDURES

Revised 02/02/2022

This is regardless of COVID status or COVID test results -

Aerosol –generating procedures (AGPs) should be performed in **negative pressure room if available.**

N95 with eye protection or CAPR, gown and gloves are required for all AGPs

Limit individuals present during AGP

Refer to subsequent pages for Respiratory Procedures Tip Sheet and Equipment Reference





- Airway suctioning
- BiPAP/CPAP
- Bronchoscopy
- Cardiopulmonary resuscitation
- Chest physiotherapy/bronchopulmonary hygiene
- Endotracheal intubation/extubation
- Heated high flow O₂ ≥16 liters
- Nebulizer treatments
- Placement of NG, OG or post-pyloric tube
- Pulmonary Function Tests (PFT)
- Sputum induction
- Tracheostomy/trach care
- Transesophageal Echo (TEE)
- Upper endoscopy/fiberoptic endoscope
- Vapotherm
- Ventilation (manual or mechanical)

These should be considered interim recommendations issued in the interest of prompt and clear instructions that can be used now in the setting of this rapidly growing and changing pandemic. They are based as much as possible on available medical evidence, considering appropriate use of critical resources in limited supply and accommodating where possible professional society guidance.

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This is not an all-inclusive list for respiratory procedures; Facility RTs can assist with any questions.

Oxygen Therapy Devices				
Low Flow Device – Non AGP		Flow Rate	AGP	Recommendations
Nasal Cannula 		Low Flow: 1-6 LPM	No	
Nasal Cannula "Hi Flo" 		Low Flow (Green Tubing): 1-15 LPM	No	
Oxymask 		Low Flow: 1-15 LPM	No	
Simple Mask 		Low Flow: 6-10 LPM	No	


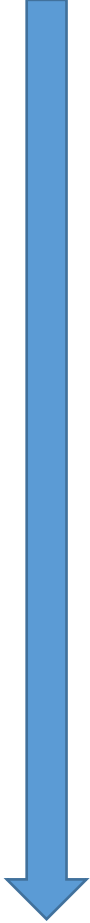



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<p>Non-Rebreather Mask (NRB)</p> 		<p>Low Flow: 10-15 LPM</p>	<p>No</p>	
<p>High Flow Devices and Other AGP</p>		<p>Flow Rate</p>	<p>AGP</p>	<p>Recommendations</p>
<p>Venturi Mask</p> 	<p>All high flow devices should be placed in a negative pressure room, if available.</p> 	<p>Variable; based on patient's needs</p>	<p>Yes</p>	
<p>Heated High Flow Humidity System</p> 		<p>High Flow: Typically use 16 - 60 LPM</p>	<p>Yes</p>	
<p>Hi-VNI</p> 		<p>High Flow: 20 - 40 LPM</p>	<p>Yes</p>	





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<p>Trach collar</p> 		<p>Variable; based on patient's needs</p>	<p>Yes</p>	
<p>Bag Mask Ventilation</p> 		<p>Flowmeter set to 15 LPM</p>	<p>Yes</p>	<p>Add a viral filter between mask and bag or ETT and bag.</p>
<p>Nebulizer</p> 		<p>6-10 LPM</p>	<p>Yes</p>	<p>Use MDI and spacer/ aerochamber for administration. Neb not recommended for use. If MD and RT deem necessary with evaluation of risk, utilize filtered neb, if available.</p>
Ventilation Devices				
<p>Non-Invasive Ventilation (NIV)</p>	<p>Place in a negative pressure room if available</p>	<p>Flow Rate, if applicable</p>	<p>AGP</p>	<p>Recommendations</p>
<p>BiPAP & CPAP (Hospital owned units)</p> 		<p>Variable; based on patient's needs</p>	<p>Yes</p>	<p>Add a viral filter between the mask and circuit or use filtered circuit.</p>



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<p>BiPAP & CPAP (Patient home units)</p> 		Variable; based on patient's needs	Yes	
<p>Invasive Ventilation Ventilator</p> 	Place in a negative pressure room, if available.	Variable; based on patient's needs	Yes	
<p>Bronchopulmonary Hygiene Devices* Also available is the Metaneb and pneumatic compressor. Follow same guidelines listed below.</p>				
			AGP	Recommendations
<p>Aerobika</p> 	<p>A natural cough is not an AGP. If the cough is assisted by a manual thrust or using a cough assist machine, it then becomes an AGP.</p>		Yes	If necessary, add a viral filter to the exhalation side and provide patient with a tissue and/or sputum cup to collect mucus.
<p>CPT Vest</p> 			Yes	If necessary, provide patient with a tissue and/or sputum cup to collect mucus.

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Lung Volume Expansion Devices* Not an all-inclusive list.				
			AGP	Recommendations
Incentive Spirometry 			No	Ask patient to use a tissue when they cough.
EzPAP without nebulizer 			Yes	Add viral filter between mouthpiece and device.
Other Respiratory Procedures* Not an all-inclusive list.				
			AGP	Recommendations
TDP			No	Ask patient to use a tissue when they cough.
ABG			No	
Tracheostomy Care			Yes	
Pulmonary Function Tests (PFT)			Yes	Only perform on negative patients unless approved via Pulmonary Medical Director. If approved, perform bedside PFT in a negative pressure room. Ask all patients to use a tissue when they cough. Utilize an MDI with aerochamber when bronchodilator is needed.