

COVID-19 AGMP FAQs

COVID-19 and Aerosol Generating Medical Procedures (AGMP)

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Q: What is the definition of a low flow oxygen therapy device and a high flow oxygen therapy device?

- **Low Flow** systems: the flow rate coming from the device is lower than the patient's inspiratory flow rate
- **High Flow** systems: the flow rate coming from the device exceeds the patient's inspiratory flow rate



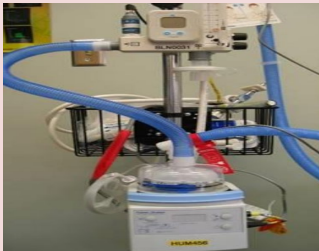

A normal adult's peak inspiratory flow rate is approximately 35 - 40 l/m.

Q: Is oxygen therapy via the following delivery devices an AGMP for suspected and confirmed COVID-19 patients?

Oxygen Therapy Device	Flow Rate	AGMP	Other alternatives
LOW FLOW DEVICES – NON Aerosol Generating Medical Procedures			
Nasal Prongs 	LOW FLOW 1-6 l/m	No	
Simple Mask 	LOW FLOW 6-10 l/m	No	
Non-Rebreather Mask (NRB) 	LOW FLOW 10-15 l/m	No	HiOX Mask or FLO2 Max (NRB with filter) 10-15 l/m 
Oxymask 	LOW FLOW 1-15 l/m	No	
HIGH FLOW DEVICES and Other Aerosol Generating Medical Procedures			


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Oxygen Therapy Device	Flow Rate	AGMP	Other alternatives
Bag mask ventilation (bagger) 	Greater than 15 l/m and positive pressure when the bag is squeezed	YES	
Single and Double Flow via large volume nebulizer to a Face Mask or Tracheostomy Mask 	30-50 l/m	YES	
Heated High Flow Humidity Systems - Optiflow and Airvo  	Greater than 30 l/m	Yes – at this time Optiflow and Airvo are considered AGMP	

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Oxygen Therapy Device	Flow Rate	AGMP	Other alternatives
Nebulizer 	6-10 l/m but aerosolizes bronchodilators	YES	Use MDI and spacer for administration of bronchodilators

Q: What are the options for oxygen delivery for a COVID 19 suspected or positive patients requiring greater than 6 l/m nasal prongs?

- An ICU consult (or consult with MRP at non acute sites) is required for all suspected and positive COVID 19 patients requiring greater than 4-6 l/m nasal prongs to assess for pending deterioration and to prepare for early intubation.
- If the patient is not an ICU candidate and requires greater than 6 l/m Nasal Prongs, Optiflow is preferred for all patients in a private room. Airborne precautions, including N95 mask and eye protection are necessary.
- Other oxygen delivery options include: Simple Mask at 6-10 l/m or Non-Rebreather Mask at 10-15 l/m. These are not AGMP and require droplet and contact precautions.

Q: What do I do for AGMPs for patients without suspected or confirmed COVID-19?

All HCW should perform a point of care risk assessment (PCRA) prior to any AGMP to select the appropriate personal protective equipment (PPE) and environmental controls.

- At minimum, eye protection and a surgical or procedure mask is required for any staff member within two meters of procedures generating aerosols, **regardless of the patient's infection status.**

Q: What about other infection cases?

Only essential AGMP should be performed on the following infection cases.

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- Patients with known or suspected infection transmitted by the airborne route (tuberculosis, varicella zoster virus, measles).
- Patients with known or suspected viral hemorrhagic fever (e.g., Ebola)
- Patients with known or suspected influenza-like illness, novel respiratory pathogen, or for whom status of respiratory infection is unknown (including: novel/pandemic influenza, seasonal influenza, COVID-19, MERS and SARS coronavirus).

At minimum a procedure mask is required for non-influenza respiratory viruses, but an N95 respirator is recommended to reduce aerosol exposure (including but not limited to: RSV, adenovirus, parainfluenza, entero/rhinovirus, human metapneumovirus and bocavirus)

Q: What about nocturnal CPAP and BIPAP – are these AGMPs?

Yes – Nocturnal CPAP and BIPAP are aerosol generating – for all suspected and confirmed COVID-19 patients, airborne precautions including a N95 mask is required when caring for patients when on nocturnal CPAP and BIPAP. Ensure a good mask seal.

Patients ***without*** suspected or confirmed COVID-19 or other infections cases that require nocturnal CPAP or BIPAP:

- At minimum, eye protection and a surgical or procedure mask is required for any staff member within two meters of procedures generating aerosols, regardless of the patient's infection status.

Q: What about other respiratory therapies such as encouraging deep breathing and coughing?

A natural cough is not an AGMP. If the cough is assisted by a manual thrust ([manual cough assist](#)) or using a cough assist machine ([MI-E](#)), it then becomes an AGMP.

Q: What about any therapy which may cause a greater likelihood that the patient will cough, like mobilization, dysphagia assessments, or oral care?

Again, a natural cough is not an AGMP. Droplet and contact precautions are required for all routine care with suspected and confirmed COVID-19 positive patients, including any therapy which may cause the patient to cough.