

COVID-19 Respiratory Care Procedures for Adult Services

Proposed modifications to Respiratory Care Procedures during the COVID-19 pandemic outline indications for the use and precautions required for different oxygen delivery/ventilatory assist devices (nasal cannula and face mask oxygen, non-invasive positive pressure ventilation (NIV) and mechanical ventilation) and standard procedures performed by Respiratory Therapy for patients in the following contact precautions categories:

1. Modified Contact/Droplet Precautions: COVID-19 **positive** patients and PUIs
2. Droplet, Contact/Droplet or Airborne Precautions: COVID-19 **negative** patients or COVID-19 not part of differential diagnosis who require droplet, contact/droplet or airborne precautions for other reasons
3. Contact Precautions and Standard Care (no precautions): COVID-19 **negative** patients or COVID-19 not part of differential diagnosis who require contact precautions or no precautions

Recommended conversion from nebulized to MDI delivery systems are outlined in detail in a separate reference (COVID 19 Inhaled Medication Emergency Response Tiered Plan According to Metered Dose Inhaler Availability)

PPE for PUIs and COVID-19 positive patients

- Aerosol generating procedures: **N95 and a face shield. If available, a CAPR may be used.**

Aerosol generating procedures outlined in this document include - intubation, extubation, non-invasive positive pressure ventilation, bag mask valve ventilation high flow nasal cannula > 6L/min, NT suctioning.

- NON-aerosol generating procedures: **Surgical face mask and a face shield**

Current Practice	Pandemic Modifications
Modified Contact/Droplet Precautions (PUI and COVID-19 Positive)	
Nebulized Medication	- MDI/DPI treatments only, non-intubated patients - No continuous nebs - Aerogen nebs for vented patients on <u>Critical Care ventilators</u> only*
Oxygen Administration – NC, face mask	- Standard NC oxygen may be used - No Standard Nebulizers - NRB mask may be used short term but consider intubation N95/face shield or CAPR must be worn
NIV, including transport on NIV	- Circuit with filter only – N95/face shield
Vents	- Dry (if possible) with HMEF or appropriate expiratory filter - Heated Wire - Travel vents with HMEF
Bag Mask Ventilation	If Bag MASK cannot be avoided, a filter <u>MUST</u> be attached to the BVM.
Intubation / Extubation	- CAPR if Available <u>OR</u> N95/ face shield must be worn
HFNC	- Consult with practitioner for necessity - Over 6L/min - N95/face shield
Sputum Induction	- NONE
Ventilator Suctioning	- In-line only
NT Suction	- Consult with practitioner for necessity, N95/face shield

Chest Physiotherapy / Vibratory Device	- Consult with practitioner for necessity - N95/face shield
MetaNeb / Cough Assist	- NONE
Bedside PFT	- NONE

Current Practice	Pandemic Modifications
Droplet, Contact/Droplet or Airborne Precautions for all other Differential Diagnosis's	
Handheld Medication Nebulizers	- MDI/DPI only, non-intubated patients - HHN with Filter - No Continuous Nebs - Aerogen nebs for vented patients only*
Oxygen Administration – NC, NRB	- No Standard Nebulizers - Standard Practice
NIV, including transport on NIV	- Circuit with Filter only
Vents	- Standard Practice
Intubation / Extubation	- Standard Practice
HFNC	- Standard Practice
Sputum Induction	- NONE – appeals can be reviewed by the Medical Director of RT and allowed on a case-by-case basis
Ventilator Suctioning	- In-line only
NT Suction	- Standard Practice
Chest Physiotherapy / Vibratory Device	- Consult with practitioner for necessity
MetaNeb / Cough Assist	- NONE – appeals can be reviewed by the Medical Director of RT and allowed on a case-by-case basis
Bedside PFT	- Consult with practitioner for necessity

Current Practice	Pandemic Modifications
Contact Precautions and Standard Care for all other Differential Diagnosis's	
Handheld Medication Nebulizers	- MDI DPI if available - Filtered Nebulizers only – use with care - No Continuous Nebs
Oxygen Administration – NC, NRB	- No Standard Nebulizers - Standard Practice
NIV, including transport on NIV	- Standard Practice
Vents	- Standard Practice
Intubation / Extubation	- Standard Practice
HFNC	- Standard Practice
Sputum Induction	- NONE – appeals can be reviewed by the Medical Director of RT and allowed on a case-by-case basis
Ventilator Suctioning	- In-line only

NT Suction	- Standard Practice
Chest Physiotherapy / Vibratory Device	- Consult with practitioner for necessity
MetaNeb / Cough Assist	- NONE – appeals can be reviewed by the Medical Director of RT and allowed on a case-by-case basis
Bedside PFT	- Consult with practitioner for necessity

Pandemic Modifications

Other Nebulized Medications for Specific Patient Populations (nebulized medications deemed ESSENTIAL to care plan)

1. PH patients (medications including Tyvaso, inhaled epoprostenol, inhaled nitric oxide)
2. CF patients (medications include inhaled antibiotics, pulmozyme, hypertonic saline)
3. Massive hemoptysis (inhaled tranexamic acid)

CF and PH patients requiring nebulized medications MUST be tested for COVID-19 upon admission (ED or Floor)

- If Negative – Standard Practice
- If Positive OR results not available when medication is due – **N95/face shield, negative pressure room if available. If not, portable HEPA filter in the room if available**

Tranexamic acid administration:

- If Negative – Standard Practice
- If Positive OR results not available when medication is due – **N95/face shield, negative pressure room if available. If not, portable HEPA filter in the room if available**

*Nebs may be used in mechanically ventilated patients depending on ventilator compatibility and availability of the proper delivery device (Aerogen neb delivery system). This can be determined by the Respiratory Therapy Supervisor on call

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