**Respiratory Care – Adult COVID-19 Practice Guidelines**

**Exposure Limitations**
- All care should be coordinated with nursing; including treatments, therapies and ventilator-patient assessments.

**Transport through the hospital**
- Patients on nasal cannula must **wear a surgical mask** covering their nose and mouth.
- Patients on NIV or HFNC must transition to either 100% NRB or be intubated during transport.

**The following aerosol generating applications increase risk of COVID transmission.**
- Initiation, continuence and manipulation of these devices should occur within a negative pressure room.
- Providers must wear N95, face shield or goggles, gown and gloves.

**Oxygen Nasal Cannula**
- Nasal Cannula flows should be limited to 5 LPM or less. **Do not use aerosol/Venturi masks** to deliver oxygen.
- Patients requiring higher FiO2 should be transitioned to an alternate oxygen (100% NRB, HFNC, NIV, intubate).
- If a negative pressure room is not available, patient must have a private room, wear a mask, door closed with isolation sign.

**High Flow Nasal Cannula (HFNC)**
- Maximum setting is 30LPM and 100% FiO2. If Sat <93%, consider intubation.
- Negative Pressure Room is required. Ask patient to wear a surgical mask.
- Nasal prongs must be well seated in the nares with minimal leak. If more than minimal leaking occurs, must use alternate oxygen (100% NRB, NIV, intubate)

**Non-Invasive Ventilation (NIV=BIPAP or CPAP)**
- Negative Pressure Room is required. NIV use is discouraged in the setting of COVID infection due to risk for health care providers.
- Acute Hypercarbic Respiratory Failure - if PCO2 > 65 consider intubation
- Acute Hypoxemic Respiratory Failure - Mild ARDS with PaO2/FiO2 >200, otherwise consider intubation
- Maximum Settings: IPAP 12 cm H2O and EPAP 8 cm H2O.
- ALL patients on BiPAP are required to have an ABG AND clinical assessment within 2 hrs to determine either continuance of NIV or advancement to Intubation.
- Chronic Respiratory Failure on NIV at home.
  - If COVID PUI initiate NIV at home settings only until test results. If pt fails home settings, intubate.
  - If COVID positive, pt is unlikely to improve, and early safe intubation preferred.
- Obstructive Sleep Apnea/Obesity Hypoventilation Syndrome on NIV QHS
  - ABG on admission.
    - If PCO2 <45, 2L NC can be given QHS and ABG will be done in the morning.
    - If PCO2 >45, sleep or pulmonary consult should be ordered.
- ALL NIV will be set up with a filtered circuit on the expire valve.
- **Good mask seal must** be ensured. Leaks >20% should be reported to respiratory supervisor and provider.

**Treatments/ Physiotherapy**
- MDI treatments are preferred. May use higher doses (i.e. 6-12 puffs) with spacer.
- Use of continuous nebulizers is not permitted.
- Avoid use of small volume nebulizers (bronchodilators, corticosteroids). Permissible when strongly indicated or patient fails MDI. **Negative pressure room** is required with filtered nebulizer.
- Chest PT is restricted. **Negative pressure room** is required with use of a tent with HEPA filter.
- Nasotracheal/open suctioning should be avoided. Failure to manage secretions is reason for intubation.
Tracheostomy tube
- Chronic respiratory failure on a home ventilator. Most home ventilators do NOT allow for filters on the exhale valve resulting in large exposure to aerosolized virus. All patients are preferentially placed on hospital ventilators (with filter).
- Suctioning should be done in-line. Open suctioning results in aerosolization of virus.
- A speaking valve should cap the tracheostomy tube with a surgical mask covering the patient’s mouth, or a surgical mask should cover the tracheostomy tube while another one covers the patient’s mouth.
- A respiratory therapist should be consulted to advise the management of tracheostomy tubes in the setting of COVID PUI/positive patients, in order to minimize the risk of aerosol generation and transmission of the virus.

Extubation
- PPE (see above) AND protective footwear recommended.
- Do NOT stand directly in front of the patient. Position yourself optimally to avoid path of coughing.
- Double glove. Immediately after disposing of dirty materials the outside gloves should be removed, inside out.

References:


Please contact Respiratory Care or ICU leadership with any questions related to these practice guidelines.