Respiratory Care – Adult COVID-19 Practice Guidelines

Yale NewHaven Health

To ensure all Respiratory Care staff are familiar with practice recommendations when caring for **Adult patients suspected or diagnosed** with COVID-19, the following guidelines will be implemented.

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. If a negative pressure room is not available, patient should have a private room, door closed with isolation sign.
- 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.
- Patients requiring higher FiO2 should be transistioned to an alternate oxygen (100% NRB, HFNC, NIV, intubate).

High Flow Nasal Cannula (HFNC)

- Maximum setting is 30LPM and 100% FiO2. If Sat <93%, consider intubation.
- 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)

- 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.
- **Good mask seal** *must* be ensured. Leaks >20% should be reported to respiratory supervisor and provider.
- Patients who require NIV for Obstructive Sleep Apnea/Obesity Hypoventilation Syndrome
    - Patient will have an 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**

Treatments/ Physiotherapy

- Use of continuous nebulizers is not permitted.
- Avoid use of small volume nebulizers (bronchodilators, corticosteroids). Permissible when strongly indicated or patient fails MDI.
- MDI treatments are preferred for non-intubated patients.
- Chest PT should be avoided
- Nasotracheal/open suctioning should be avoided. Failure to manage secretions is reason for intubation.

Extubation

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

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