

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

- These guidelines differ from those of the adult patient because pediatric patients are not developmentally or cognitively capable of assuming primary responsibility of their therapies.
- Please refer to the Adult COVID-19 practice guidelines if your patient is sized or cognitively more appropriate to be treated as an adult.

### 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 face mask covering their nose and mouth.
- Patients on NIV must be transitioned to non-pressurized oxygen supplementation such as nasal cannula, 100% NRB or be intubated for transport.
- A bacterial-viral filter can be placed on the tracheostomy tube directly, allowing for venturi masks during transport or ambulation.
- If a child is unable to tolerate a surgical mask or 100% NRB, AND is not intubated, would consider sedating with dexmedetomidine to improve tolerance of the mask for transport.

### Oxygen Therapy

- Nasal Cannula flows should be limited to 5 LPM or less.
- Patients requiring higher FiO<sub>2</sub> should be transitioned to an alternate oxygen (100% NRB, HFNC, NIV, intubate).

### High Flow Nasal Cannula (HFNC)

- Maximum setting is 50 LPM and 100% FiO<sub>2</sub>. If pt remains hypoxemic, consider alternate oxygen (100% NRB, NIV, intubate).
- Use of HFNC with minimal leak is preferable to NIV.
- Nasal prongs **must** be well seated in the nares with **minimal leak**. If more than minimal leaking occurs, respiratory supervisor and provider must be notified to use alternate oxygen (100% NRB, NIV, intubate)

### Non-Invasive Ventilation (NIPPV/BIPAP/CPAP)

- Acute Hypercarbic Respiratory Failure - consider intubation if unable to stabilize at maximum settings
- Acute Hypoxemic Respiratory Failure –consider intubation if unable to stabilize at maximum settings
- **Maximum Settings:** IPAP 18 cm H<sub>2</sub>O and EPAP 8 cm H<sub>2</sub>O.
- Chronic Respiratory Failure on NIV at home.
  - If COVID Positive / PUI initiate NIV at sick home settings. If pt fails home settings, intubate.
- **ALL patients on BIPAP are required** to have a **clinical assessment** within 2 hrs to determine either continuance of NIV or advancement to intubation.  
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## Non-Invasive Ventilation (NIPPV/BIPAP/CPAP)

- **Good mask seal** must be ensured. Consider sedation to improve mask tolerance. Consider alternate mask interfaces (full face mask) Leaks >20% should be reported to respiratory supervisor and provider.
- ALL NIV will be set up with a **filtered circuit on the expire valve**
- NIPPV – Avea ventilators are in high demand. Please transition to alternate device as soon as able (CPAP bubble, HFNC, NRB, NC)

## Treatments/ Therapy

- MDI treatments are preferred. May use up to 12-16 puffs Q1hr
- Avoid use of small volume nebulizers (bronchodilators, corticosteroids). Permissible when strongly indicated or patient fails MDI.
- Continuous nebulizers should have clinical evaluation Q4h with aim to transition to small volume nebulizers as soon as clinically feasible.
- Chest Physiotherapy (vest or manual percussor), Cough assist device and OPEP (Acapella/ Aerobika) are high risk aerosol generating procedures. For patients that do not have cystic fibrosis or bronchiectasis, application of these therapies should be reserved for patients with clinically significant indications. Please see the Respiratory Care Guidelines for Cystic Fibrosis for guidance on the safe practice of these high risk AGP.
- Nasotracheal/open suctioning should be avoided during the rule out testing. If positive, failure to manage secretions may be an indication for intubation.

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