

Appendix 1.
LifeFlight of Maine
The treatment of patients with respiratory distress with COVID 19

Supplemental Oxygen Support

1. Goals of therapy:
 - a. Maintain target SPO₂ 92% to 96%
 - i. Target SPO₂ 88% to 94% in patients with oxygen dependent chronic obstructive pulmonary disease.
 - b. Maintain stable work of breathing
 - i. Goal respiratory rate less than 24 breaths per minute
 - ii. Target normal respiratory effort (no sign of accessory muscle use or obvious increased respiratory work).
2. Supplemental oxygen support
 - a. Initial oxygen delivery should be nasal cannula to titrate from 1 L to 6 L per minute to meet goals of therapy.
 - i. A surgical mask should be placed over the nasal cannula
 - b. If goals of therapy are not met at 6 L per minute nasal cannula, then advance to either:
 - i. Oxymer mustache or pendant:
 1. Initiate at 6 L per minute.
 2. Titrate to a maximum of **12 L** per minute to meet goals of therapy.
 3. A surgical mask should be placed over the oxymer to avoid aerosolization.
 - ii. Venturi mask
 1. Initiate at **12 L** per minute and with FiO₂ of 40%
 2. Titrate to a maximum of an FiO₂ of 60%
 3. A surgical mask should be placed over the Venturi Mask
 - iii. Sea Long Non-Invasive Ventilation Helmet
 1. Refer to Appendix 4. Non-invasive oxygen therapies in the suspected or confirmed Covid 19 patient.
3. Considerations during oxygen support escalation
 - a. Clarify goals of care and appropriateness of ICU hospitalization prior to escalating transfer of patient and pursuing definitive airway placement.
 - b. Be aware that clinicians may use a form of awake proning in selected patients.
 - c. Consider the rate of change of oxygen escalation as well as pre-existing cardio-pulmonary disease (i.e. a patient with chronic obstructive pulmonary disease with a baseline supplemental oxygen requirement) prior to initiation of transfer.
 - d. Identify any potential barriers or complications that can be minimized or avoided during interfacility transfer prior to departure.
 - e. **If the SPO₂ is less than 92% or there is unstable work of breathing on an oxymer at 12 L per minute, Venturi mask with an FiO₂ of 60%, or Sea Long NIV Helmet, consider definitive airway management:**
 - i. Discuss with sending and receiving clinicians.
 - ii. If there is any disagreement in the management of the patient in respiratory distress, consider discussion with LifeFlight of Maine Medical Director.
 - iii. Referred to appendix 2: RSI checklist for patients with special respiratory precautions.

Note: Adopted from Brigham and Women's Hospital Covid 19 Management Guidelines. October 2020.