



# OSF HEALTHCARE

## Emergency Department Management Guidelines – Suspected or Positive COVID-19 Patients

See COVID Portal for patient placement, PPE, and precaution types

1. Patient suspected or positive COVID-19 infection
2. Evaluate severity of illness

**Low Severity** (~80% of patients) - Patients with uncomplicated nonspecific signs/symptoms: URI, fever, fatigue, cough, anorexia, malaise, sore throat, dyspnea, nasal congestion, headache, nausea, vomiting, diarrhea, and agnosia. Vital signs stable, normal oxygenation (with ambulation/march in place).

1. Diagnostics: Minimal
2. Management: Symptomatic
3. Disposition: Home, with appropriate discharge instructions, including self-quarantine. Emphasize to return to ED if worsening shortness of breath, other symptoms of lower tract disease, particularly those who are older, or have significant comorbidities. Worsening typically occurs in the 2<sup>nd</sup> week of the illness

**Moderate/Severe** (~15-20% of patients) - Patients with hypoxia, pneumonia, Acute Respiratory Distress Syndrome (ARDS), severe sepsis/septic shock.

1. Diagnostics:
  - a. Laboratory tests: CBC (lymphocytopenia in 70-80%), CMP, initial procalcitonin (low in COVID-19) may be helpful to differentiate bacterial infection, cultures, SARSCoV-2 testing as per infection control/public health department. Influenza or RPA often required, however viral co-infection may occur in 6-25% of COVID-19 Patients. Ferritin and lactate dehydrogenase (LDH), if ordered are frequently elevated in COVID-19 patients and may correlate with severity
  - b. Chest imaging: Portable chest x-ray is 1<sup>st</sup> choice. CT scans should not be used for diagnosis of COVID-19. Minimize others if possible.
2. Management:
  - a. Intravenous fluids: Be conservative unless patient in shock
  - b. Norepinephrine is preferred pressor, followed by epinephrine. Dobutamine may be required if cardiogenic shock.
  - c. Empiric antibiotics in cases of sepsis of unclear etiology.
  - d. Avoid corticosteroids. May have place in severe ARDS, but only in consultation with intensivist.
3. Oxygenation:
  - a. Nasal Cannula O<sub>2</sub> if pulse ox <90% if patient stable.
  - b. High Flow Nasal Cannula (HFNC) (initial flow rate of 15-30 liters/min) may be necessary as a trial to avoid intubation with (close door in room), viral filters, and negative pressure (when available)
  - c. HFNC preferred over CPAP. CPAP preferred over BiPaP.
  - d. Avoid aerosol generating procedures if possible (suctioning, nebulizers, BVM with poor seal)
  - e. Determine **\*if\*** a patient requires bronchodilator therapy for bronchospasm. For suspected or COVID-19 positive patients, the recommendation is to use albuterol in MDI, with a spacer in order to conserve supply in a canister reuse program. Nebulized medications can still be used, See COVID Portal for patient placement, PPE, and precaution types
  - f. Prone positioning may improve pulmonary mechanics and oxygenation.
4. Intubation: **THIS IS A HIGH RISK PROCEDURE**
  - a. Minimize care team. See COVID Portal for patient placement, PPE, and precaution types
  - b. Preoxygenate. Avoid bagging if possible (viral filter attached to face mask).
  - c. RSI by most experienced intubator, paralyze well to prevent cough/gag. Video laryngoscopy is preferred.
  - d. Do not bag after the paralytic. If patient is bagged, viral filter must be in place on the bag.
  - e. Try to connect patient directly to ventilator instead of bagging.



# OSF<sup>®</sup> HEALTHCARE

- f. Ventilator settings: Tidal volume of 4-8 ml/kg. Plateau pressure < 30 mmHg. Plateau pressure <30 mmHg. PEEP 8-10 cmH<sub>2</sub>O. Target PaO<sub>2</sub> >60, sat >90%. Permissive hypercapnia with PH>7.20 if needed.
5. Cardiac Arrest: Do not enter room without proper PPE.
6. Disposition: As appropriate per presentation