



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

Pulmonary / Critical Care COVID-19 Guidance

Clinical Presentation

- Fevers 44-88% / cough 46-82% / fatigue 11-52%
- Incubation period 5 days (2-14 days). Expect long courses of care (3-6 weeks)
- 2/3rds need prolonged oxygen therapy; 1/3 quickly develop ARDS over the course of a day
- Watch for rebound episodes of shock – could be sepsis or severe cardiomyopathy (5-10%) which can develop

Diagnostics

- Favor CXR as test of choice - will likely show viral pattern – progressing to ARDS quickly
- CTs may show ground glass infiltrates, but may be difficult to obtain / clean the scanner – try to avoid if possible unless will change decision-making
- Very important to get a broad pathogen array as well, most influenza-like illnesses at this point are still more traditional viruses
- Nasopharyngeal swabs are test of choice – contact your local infection preventionist if case suspected
- Procalcitonin may be useful early to prevent unnecessary antibiotic usage as there is a low incidence of bacterial co-infection at admission
- 40% may have significant transaminitis / 15% acute kidney injury

Hypoxemia / Ventilator management

- Many profoundly hypoxemic with quick progression from room air to high flow oxygen / intubation within 24 hours
- Guidelines suggest avoidance of long trials of NIPPV/HHFNC - there is a high risk of both aerosolization and failure (90%) of these modalities – early intubation may be key
- May need quite elevated PEEP 16-18 cm h20 range
- There appears to be an excellent response to prone positioning for >12 hours per day
- Significant extravascular lung water – avoid aggressive fluid administration from day 1

Airway Management / Intubation:

- See OSF COVID portal for PPE – REVIEW YOUR DONNING/DOFFING
- Minimize staff in room / best airway manager to do airway – use rapid sequence intubation/paralytics to minimize coughing
- Minimize bag-mask ventilation at any time
- Use videolaryngoscopy as preferred first mode of airway management

Therapeutics

- Please avoid nebulizer therapy if possible on non-intubated patients due to aerosolization risk
- Please determine *if* a patient requires bronchodilator therapy for bronchospasm.
- For PUI or suspected or positive COVID-19 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, follow OSF PPE recommendations
- Do not routinely give systemic corticosteroids for treatment of this disease as may prolong viral shedding – this is a preliminary recommendation and will be updated weekly
- Minimize antibiotic usage unless strong suspicion bacterial sepsis / pneumonia
- Ministry-level preparations are underway to vet / ration / stockpile appropriate therapies, which could include immune modulators and antivirals; please consult local infection control / ID physicians for options