

Peninsula Regional Health System: COVID-19 Patient Algorithm

Mild or Uncomplicated upper resp infection

- No hypoxia
- No shortness of breath

Pneumonia?

No

Yes

Rule-out influenza/RSV
Home quarantine
Full PPE Precautions
F/U (teled) in 3-5 days for possible deterioration

Labs/Imaging:

- Chest x-ray (with bilateral infiltrates)
- CBC with diff, CMP, CRP, CPK, lactate
- Respiratory viral panel / resp smear culture (if productive)
- Procalcitonin (if non-immunocompromised and no AKI)
- Consider Ehrlichia / Anaplasma

Management:

Observe and assess risk for decompensation

- If low risk, discharge with home quarantine F/U (teled) q 24-48 hours until recovery

Full PPE Precautions

If procalcitonin positive: Empiric antibiotics

- If patient improves, discharge ASAP with home quarantine measures

Avoid NSAIDs/corticosteroid use

Moderate

- Pneumonia **WITH** evidence of mild or moderate end-organ damage
- Requires supplemental oxygenation for SpO₂ > 90-93%

Labs/Imaging:

- Chest x-ray (with bilateral infiltrates), ABG
- CBC with diff, CMP, CRP, CPK, lactate
- HIV, G6PD
- SARS COV2 test, Urine Legionella, Respiratory viral panel / resp smear culture (if productive)
- Procalcitonin (if non-immunocompromised and no AKI)
- Blood cultures x 2, UA
- Ehrlichia / Anaplasma PCR

Management:

Admit to COVID Unit; start 5L O₂

Full PPE Precautions

- DO NOT INDUCE SPUTUM

Medications:

- Hydroxychloroquine 400 mg BID x 1 day, then 400 mg daily x 4 days
- Azithromycin 500 mg x 1 day, then 250 mg daily x 4 days
- Avoid NSAIDs/corticosteroids
- If procalcitonin positive: Empiric antibiotics
 - Narrow based on culture/sensitivity; Avoid high-salt antibiotics

Monitor I/O and O₂ saturation

Severe / ARDS – Hemodynamically unstable and multiorgan failure

- Mild ARDS: 200 mmHg < PaO₂/FiO₂ ≤ 300 mmHg (with PEEP or CPAP ≥ 5 cmH₂O, or non-ventilated)
- Moderate ARDS: 100 mmHg < PaO₂/FiO₂ ≤ 200 mmHg (with PEEP ≥ 5 cmH₂O, or non-ventilated) •
- Severe ARDS: PaO₂/FiO₂ ≤ 100 mmHg (with PEEP ≥ 5 cmH₂O, or non-ventilated)

If PaO₂ not available, SpO₂/FiO₂ ≤ 315 suggests ARDS (including non-ventilated)

Labs/Imaging:

- Chest xray/CT/lung ultrasound
- ABG
- SARS COV2 test, Urine Legionella
- CBC with diff, CMP, LDH, CRP CPK, lactate, PT/INR
- Respiratory viral panel / resp smear culture
- HIV, G6PD
- Procalcitonin (if non immunocompromised and no AKI)
- Blood cultures x 2, UA
- EKG

Management:

Admit to COVID Unit; RT/COVID Intensivist Intubation

Full PPE Precautions

IV fluid restriction after initial resuscitation

- Monitor I/O

Medications:

- Hydroxychloroquine 400 mg BID x 1 day, then 400 mg daily x 4 days
- Azithromycin 500 mg x 1 day, then 250 mg daily x 4 days
- Avoid NSAIDs
- Hydrocortisone per Intensivist
- Empiric antibiotics: Discontinue within 24 hours if no evidence of bacterial infection