COVID-19 CLINICAL ONE-PAGER
Created March 14, 2020

PRECAUTIONS
- Immediately isolate patients +/- neg pressure room
- **Droplet + contact** precautions for most
- Airborne precautions if airway procedures → use N95
  - **Donning**: wash→gown→mask/goggles→gloves
  - **Doffing**: gloves→gown→wash→mask/goggles→wash

COURSE AND PRESENTATION
- Case definition: fever or resp sx + exposure w/in 14 days
- **81% of patients will have very mild illness course**
- Incubation period typically 4 days, up to 14 days
- Day ~4: common symptoms at onset:
  - fever (77–98%), cough (46%–82%)
  - fatigue (11–52%), dyspnea (3-31%)
  - GI symptoms (10%)
- Day ~6: dyspnea
- Day ~8: decompensation
- Day ~10: ventilatory support

HISTORY & PHYSICAL
- Inquire about goals of care, exposures/gatherings
  - **Inquire early – patient may decompensate**
- Respiratory and constitutional symptoms
- Vitals, cardio+resp exam, volume status, perfusion
  - Shock at admission is infreq – consider alt dx
- Sick pts have ARDS picture: fever, ↓BP, ↑HR, ↑RR, ↓O2, dyspnea, abn breath sounds
- High risk comorbidities:
  - Cardiovascular or respiratory disease, chronic organ disease, diabetes, age >60, immunocompromised state
- Ddx: alt viral infxn, pneumonia, CHF, COPD, asthma, ect...
- Complications: cardiomyopathy, sepsis, DIC, vent related

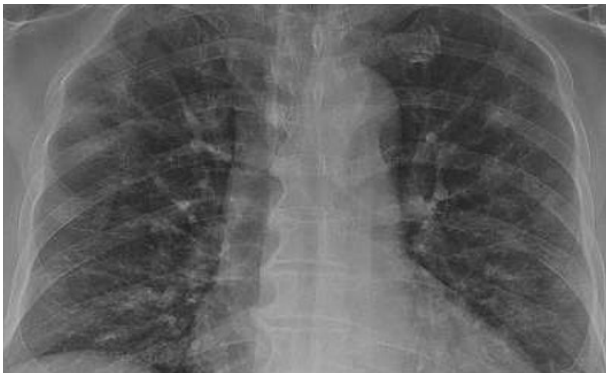
MANAGEMENT FOR WELL PATIENTS
- Isolation 14d +/- NP swab per local guideline (~70% sens)
- Acetaminophen for fever and return precautions

WORKUP FOR UNWELL PATIENTS
- NP swab for COVID, flu, RSV but keep ddx broad
  - NP swab have low sens—CXR if suspicious
- CBC- expect ↓lymphocytes, ↓PLT
- Troponins- often demand ischemia – check ECG
- CRP- ↑'s w/ disease severity, consider alt dx if normal
- ↑LFTs, ↑BUN/Cr, if ill consider DIC labs
- Blood + urine cultures- only if suspected bacterial infxn
- Procal- if available & ↑ consider bacterial pneumonia
- CXR +/- lung POCUS (B-lines), CT unnecessary in most

TREATMENT
- Respiratory support is mainstay of treatment
- VERY conservative fluids- avoid worsening pulm edema
- Consider empiric abx for CAP pending investigations
- Likely no role for steroids or Tamiflu
- Antivirals investigational at some sites– consult ID
- Cardiomyopathy→ cardiogenic shock may be late feature
  - Echo for EF, consult cardiology early, treat CHF
  - Vasopressors and arrhythmics may be needed

RESPIRATORY SUPPORT OPTIONS
- Start with low flow nasal→face mask→venturi→NRB
- Avoid HiFlow, BiPAP, nebs, suctioning d/t aerosolization
  - Use MDI instead of nebulizers where possible
- **Intubate early**- pref no bag RSI, vent w/ARDSnet protocol
  - Negative pressure room with full PPE + N95
  - Full dose paralytic to prevent cough
  - Preox w/ fitted mask+viral filter+PEEP valve
  - Minimize bagging– if critical 2 hand seal+viral filter
  - Video laryngoscopy by experienced provider
  - Prone positioning may help refractory cases

IMAGING FINDINGS
CXR: patchy ground glass opacities



NP SWAB TECHNIQUE
- Tilt pt head slightly back, insert swab straight in, not up
- Once resistance is met, rotate swab for 10-15 seconds

SOURCES:

- https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html
- https://emcrit.org/ibcc/covid19/
- https://www.uptodate.com/contents/coronavirus-disease-2019-covid-19
- https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance
- https://jamanetwork.com/journals/jama/fullarticle/2762996

Continue to follow local guidelines and procedures, this summary of early evolving literature should not be construed as a treatment guideline or medical advice