Clinical Presentation and Management of COVID-19

1. Clinical Presentations and findings of COVID-19 from reported cases
   - Clinical findings range from asymptomatic infection to mild illness to severe or fatal illness.
   - Most frequently reported signs/symptoms for hospitalized patients include fever, cough, myalgia, and shortness of breath.
   - For patients with symptomatic illness, estimated median incubation period is 4 days with an interquartile range of 2 to 7 days.
   - Common clinical laboratory findings include leukopenia, leukocytosis, lymphopenia, and elevated alanine aminotransferase and aspartate aminotransferase levels.
   - SARS-CoV-2 RNA has been detected from upper and lower respiratory tract specimens, and the virus has been isolated in cell culture from upper respiratory tract specimens and bronchoalveolar lavage fluid.
   - Radiographic imaging often shows multiple bilateral areas of consolidation with ground glass opacities.
   - Some reports suggest potential for clinical deterioration during the 2nd week of illness.
   - 20-30% of hospitalized patients have required intensive care for respiratory support.
   - 2% overall case-fatality rate has been reported from China, but this includes mostly hospitalized patients so likely overestimates true mortality.

2. Risk Factors for severe illness by COVID-19
   - Risk factors for severe illness include older age and chronic medical conditions:
     - Case-fatality increases with age, including 4% among 60–69 years, 8% among 70–79 years, and 15% in those ≥80 years.
     - Patients who reported no underlying medical conditions had case fatality <1% compared to 6–10% in patients with chronic medical conditions.
   - From limited data, COVID-19 appears to be milder among pediatric patients:
     - Of confirmed cases in China, only 2% were aged <20 year and no deaths were reported among children aged <10 years.

3. Prevention of COVID-19 infections:
   - In the absence of an approved vaccine, community mitigation measures are the primary way to reduce COVID-19 transmission among persons in the community.
   - Adherence to recommended infection prevention and control measures can reduce the risk of COVID-19 spread in healthcare facilities.

4. Treatment of COVID-19
   - No specific treatment for COVID-19 is currently available.
   - There are no antiviral drugs licensed by US FDA to treat patients with COVID-19.
   - There is no available data from randomized controlled trials to support recommending any investigational therapeutics for patients with confirmed or suspected COVID-19.
     - Remdesivir is an investigational antiviral drug that is reported to have in-vitro activity against SARS-CoV-2.
Some patients with COVID-19 have received intravenous remdesivir for compassionate use outside of a clinical trial setting.

NIH is sponsoring a randomized controlled trial to investigate the effectiveness of remdesivir.

Two other clinical trials sponsored by the manufacturer (Gilead) are evaluating the safety of remdesivir in patients with moderate or severe COVID-19 disease.

For more information about the clinical trials or compassionate use contact coronavirus.response@gilead.com or (443) 691-5813.

5. Clinical Management of COVID-19 includes:
   - Prompt implementation of infection prevention and control measures for hospitalized cases.
   - Supportive management of complications, including mechanical ventilation and advanced organ support.
   - Corticosteroids should be avoided, because of the potential for prolonging viral replication as observed in MERS-CoV patients, unless indicated for other reasons (e.g., chronic obstructive pulmonary disease exacerbation or septic shock).

6. Isolation Protocol for patients receiving aerosolizing procedures:
   - Intubation, high-flow oxygen by nasal canula or mask, and non-invasive positive pressure ventilation are all aerosolizing procedures.
   - Patients receiving or undergoing these procedures should be highest priority for use of negative pressure rooms and should be prioritized to receive airborne isolation precautions.

7. Discharge Instructions for patients currently on isolation:
   - Before discharging a patient currently on isolation, please assess the patient’s housing status and ability to isolate at home.
     - If the patient will be discharged to a SNF, assisted living facility, jail, prison, shelter, dormitory, or other congregant setting, you no longer need to notify the Public Health Department prior to discharge.
     - All other discharges may proceed without notifying the Public Health Department.
   - If discharged to a private residence, the patient should be instructed to complete home isolation as per usual guidance, with no follow up testing required to end isolation.
   - If a patient has been cleared for removal of isolation in the hospital, they may be discharged to locations appropriate based on clinical status without consulting the Public Health Department.

8. Get more information on COVID-19
   - Visit the County of Santa Clara Public Health Department webpage: www.sccphd.org/coronavirus
   - Visit the County of Santa Clara Public Health Department Provider webpage: www.sccphd.org/covidproviders
   - Visit the Center of Disease Control & Prevention webpage: www.cdc.gov/coronavirus/2019-ncov)