HUP guidelines for REPEAT COVID-19 testing for admitted patients with initial negative NP swab testing on admission
Updated: November 2020

While our current in house molecular (PCR) COVID-19 testing is very sensitive in detecting low levels of SARS COV-2 virus in the anterior nares, nasopharynx, and lower respiratory tracts of infected patients, some patients admitted with clinical suspicion for COVID-19 and negative initial testing may warrant repeat testing (either of nasopharynx or lower respiratory tract specimen if applicable). The goal of repeat testing is to try to capture patients who are very early on in their course of illness or who are asymptomatic / pre-symptomatic on admission. We have had a small percentage of admitted patients with repeat COVID-19 testing convert from negative to positive during admission, most with compatible clinical syndromes and/or imaging consistent with respiratory viral infection, or a known exposure. The following should be used to guide inpatient teams when there is a clinical suspicion for COVID-19 on admission or during the inpatient stay, despite prior negative testing.

Inclusion criteria for repeat testing:

1. **ALL inpatients who have clinical emergencies involving respiratory decompensations, codes, and new escalation of O2 requirements beyond 6L NC** should be re-tested for COVID-19 via NP swab (rapid) unless they have had negative COVID-19 testing within the past 24 hours. See Guidance Document for further details on repeat testing, PPE and placement.

   Exception: Patients who have recovered from prior COVID infection and have been cleared from isolation should NOT have repeat testing if within three months of their initial positive test.

2. Admitted patients should have repeat COVID-19 testing via NP swab (or sputum sample if intubated) >24 hours from initial negative testing in the following situations that indicate significant clinical concern for COVID-19 infection:
   a. **Respiratory viral syndrome symptoms:**
      i. Fever and pulmonary infiltrates on imaging not otherwise explained, OR
      ii. Hypoxia, shortness of breath / tachypnea, or respiratory distress not otherwise explained
   b. **CXR or CT chest findings highly typical of COVID infection, including:**
      i. Bilateral pulmonary infiltrates and/or findings consistent with ARDS, OR
      ii. CT chest with multifocal ground glass opacities or other findings with an intermediate or high likelihood of reflecting COVID-19 as per radiology read
   c. **Symptomatic patients with a close contact with confirmed COVID infection (within 14 days of admission), residence in a facility with known COVID cases, or an exposure to a COVID positive HCW or patient during the admission**

   If repeat COVID-19 testing planned at 24 hours from initial negative test:
   - Inpatients should remain on droplet / contact precautions (with N95/PAPR for Aerosol Generating Procedures)
   - "COVID Rule Out" infection flag should remain in place
   - Patients can remain in or be admitted to private rooms on native units (ICU or floor)
   - If high clinical suspicion for COVID, placement should be reviewed by attending of record (floor patient) or ICU arbitrator (ICU patient), with priority given to placement in negative pressure room if available

   When the result of the repeat COVID test(s) are known:
   - If repeat test positive, patient should be kept in or moved to a negative pressure room
   - If repeat test negative and clinical concern still exists for COVID infection, discuss further isolation precaution and other retesting guidance with Infection Control
   - If repeat test negative and clinical concern no longer exists for COVID infection, team can remove "COVID Rule Out" infection flag and de-escalate isolation precautions

Contact the infection control department at 215-662-6995 with any Covid-19 questions or concerns related to staff safety, exposures and appropriate isolation.