COVID-19

Clinical Presentation:
-Fever > 75% but almost 50% afebrile on admission
-Cough (dry or productive) 45-80%
-Dyspnea (20-50%)
-Myalgias 10-50%
-URI Symptoms (HA, Sore throat, rhinorrhea) <15%
-GI symptoms N/V in <10%, Diarrhea < 25%
-Loss of smell 68%
-Loss of taste 33%

Testing:
COVID-19 Antigen test:
-Rapid TAT (no approval needed) about 2 hours
-Result in powerchart under microbiology tab:COVID Ag
-For use in Symptomatic pts within first 5 days of symptom onset
-Negative tests in symptomatic patients must be confirmed by PCR
-Higher false negative rate in patients with over 5 days of symptoms
-Not for use in patients who are asymptomatic

COVID PCR test (Coronavirus NAA):
-Gold standard
-Most sensitive test for SARS-CoV-2
-Routine tests have around a 48 hour TAT
-Should not be repeated after an initial positive as PCR may remain positive for weeks

SARS-COVID-2 Rapid PCR
-TAT 2 hours
–Limited rapid test access with approval needed to order
-Cannot be ordered in Cerner directly: Place an order for COVID-19 NAA & obtain a specially marked kit for collection and the lab will convert the order–> Rapid test

SARS-CoV-2 IgG antibody test

-Order in Cerner: COVID-19 IgG

-Result- under Labs tab, Serology header: COVID-19 (SARS CoV-2) IgG Antibody

TAT: Same-day, generally

Indications: Not for use in the diagnosis of acute COVID-19. Antibodies indicate past exposure to SARS-CoV-2 but this test will be negative in acute disease.

Positive results on a PCR or antigen test (but not an antibody test) are indicative of acute infection.

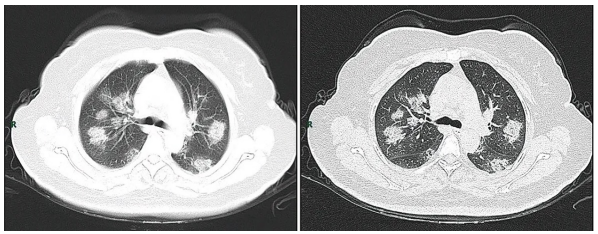
Positive test in Symptomatic individuals:-No confirmatory test is needed.

- Individuals should isolate for at least 10 days post symptom onset, and until at least 24 hours after symptoms have resolved.

Negative test in Symptomatic individuals: confirm with PCR

Asymptomatic individuals:

- Should be tested with PCR only for which no confirmation is necessary
- If tested offsite by Ag test, positives should be confirmed by PCR
- if Positive, Individuals should isolate for at least 10 days after the date the positive test was taken.



Imaging:
-CXR: Abnormal 60%
Severe disease 77%
-CT Chest abnormal
-Most Common chest findings:
-GGO, Patchy consolidation > 50%
-Peripehral distribution > 50%
-Effusions < 10% (except later in course from volume resuscitation)

Laboratory Findings:
-Normal to low wbc
-Leukocytosis <25%
-Lymphopenia 33-85%
-Slight thrombocytopenia <35%
-AST/ALT increase 4-35%
CRP increase 61-86%
-LDH increased 27-75%
-Mild INR increase
-D-Dimer elevation
-Procalcitonin low except in severe cases
-Ferritin: increased

Testing algorithm:

Is the patient symptomatic ?

• **Yes**:

Did symptoms begin within the last 5 days?
• **Yes** –> Order COVID antigen test (Rapid test with unlimited access) and Influenza Ag

o If positive –> dx COVID and/or Influezna
o If negative –> must rule out false negative and send COVID PCR and if suspicion is high send Influezna Ag

■ **No** –> Send a COVID PCR over antigen test; rapid or routine can be sent per indications and approval and send Influenza Ag

If the patient is asymptomatic ?

• Send COVID-19 surveillance PCR

■ **Rapid**- see indications for approval

If a confirmatory PCR test is negative after a positive antigen test, assume the antigen test was a false positive; the individual may be released from isolation unless symptoms develop or the individual was in quarantine for reasons of a known close contact.

Ref: http://lifebridgehealth.org/COVID-19/COVID-19ClinicalResources.aspx

Treatment: