

UAMS Health Emergency Department Testing Algorithm for SARS-CoV-2 (COVID-19)

APRIL 7, 2020

WHO TO TEST:

Risk for COVID-19	Presentation	COVID-19 Testing ^{1,2}	Isolation ³
Normal Risk	No clinical signs or symptoms suggestive of COVID-19 infection such as fever, cough, myalgias, shortness of breath, leukopenia, lymphopenia, abnormal CXR, anosmia, aguesia	No	Standard Precautions
Low Risk	Respiratory symptoms likely due to: - Non-infectious cause - Infection other than COVID-19 (ie flu or known chronic lung infections)	Clinical Judgement ⁴	If Not Testing: Droplet/Contact Precautions
			If Testing: Droplet/Contact Precautions with Eye Protection (Airborne precautions for aerosolizing procedures ⁵)
Increased Risk	Clinical signs or symptoms consistent with COVID-19 infection such as fever, cough, myalgias, shortness of breath, leukopenia, lymphopenia, abnormal CXR, anosmia, aguesia	Yes	Droplet/Contact Precautions with Eye Protection (Airborne precautions for aerosolizing procedures ⁵)
Confirmed	COVID-19 confirmed by PCR testing	N/A	Droplet/Contact Precautions with Eye Protection (Airborne precautions for aerosolizing procedures ⁵)

1. If patient is unable to provide history (advanced dementia, encephalopathy, seizures, intoxication...) consider testing for COVID-19.
2. For COVID-19 testing on patients to be admitted or already admitted, call Pathology at 501-686-8857 to request in-house testing for rapid turn-around.
3. If patient currently under home quarantine (prior exposure or travel) presents for reasons other than symptoms consistent with viral infection, would place on Droplet/Contact isolation with airborne precautions for aerosolizing procedures⁵. Testing of these patients should be based on clinical judgment.
4. Considerations include: Known exposure to COVID-19 patient, recent out-of-state travel, healthcare workers, risk for disease progression (age ≥ 60 years, immunocompromised individuals (e.g., cancer, solid organ transplant, other immunosuppressive drugs, advanced HIV), heart disease, chronic lung disease, hemodialysis, pregnant women, and people living homeless or in congregant facilities such as dorms, fraternities, sororities, shelters, jail, prison, skilled nursing facilities, adult family homes).
5. For suspected or confirmed COVID-19 patients: Order Droplet/Contact isolation. Airborne isolation is reserved only for aerosolizing procedures such as intubation, non-invasive ventilation, CPR/chest compressions, bronchoscopy, open suction and nasotracheal suction. Collecting nasopharyngeal swabs does not require airborne precautions.

Isolation:

1. Place surgical mask on **any patient** with symptoms of acute respiratory infection or patients undergoing SARS-CoV-2 testing
2. Immediately take patient to an exam room
3. Place patient on droplet and contact isolation with face shield and limit personnel caring for patient
4. Place patient on airborne isolation and move to airborne isolation room during aerosolization procedures such as intubation, non-invasive ventilation, CPR/chest compressions, bronchoscopy, open suction and nasotracheal suction

Orders for diagnostic testing in patients to be tested for SARS-CoV-2 (see flowchart):

1. For patients to be **discharged** from the ED with suspected COVID-19 infection, order the following:
 - A. Send COVID-19 Test
2. For patients to be **admitted** from the ED with suspected COVID-19 infection, order **both** of the following:
 - A. Send Influenza testing OR Respiratory Pathogen Panel (RPP). Can admit to floor with pending test results.
 - i. For immunosuppressed patients, can send RPP instead of influenza.
 - B. Send COVID-19 Test

Specimen Collection and transport:

1. NP swab for Influenza testing: Cepheid collection kit with red top in viral transport media
2. NP swab for RPP: NP swab transported in viral transport media
3. NP swab for COVID-19 testing: NP swab transported in sterile saline or viral transport media (based on availability)
4. All specimens under investigation for SARS-CoV-2 should be collected and hand delivered to the clinical laboratory window. The lab window is located on the ground floor of the main hospital next to sterile processing. Do not send samples through the tube station. For COVID-19 testing on patients to be admitted or already admitted, call Pathology at 501-686-8857 to request in-house testing for rapid turn-around.

Disposition:

1. Any patient discharged home who is being tested for COVID-19 should remain on home isolation until they hear back regarding COVID-19 results **AND** until they are symptom free for 48 hours off of anti-pyretics.
2. Any patient discharged home with respiratory illness not being tested for COVID-19 should remain on home isolation until they are symptom free for 48 hours off of anti-pyretics.
3. Home isolation recommendations can be found at <https://uamshealth.com/coronavirus/home-care-for-patients/>
4. Patient can call UAMS Health Now for further guidance if symptoms progress: 1-800-632-4502