

COVID-19 Testing Guidance (Nucleic Acid Amplification / PCR Testing)

11/2/2020 Updates from Prior Version

1. Added three additional COVID-19 symptoms to guide testing: new onset fatigue, headache, and congestion/runny nose
2. For patients with new COVID-19 symptoms following initial recovery of COVID-19 illness, re-testing for COVID-19 is reasonable, especially if more than 90 days since original illness

General Principles

1. COVID-19 testing should only be performed if it changes patient management
 - a. Example of over-testing: Patients who are transferred in with an existing positive COVID-19 test from an outside hospital
2. Point-of-care ('Rapid') COVID-19 testing on *inpatients* is discouraged as it is resource intensive. Order routine COVID-19 testing for most patients, with turnaround time of 1 day.
3. For inpatients, repeat COVID-19 testing (i.e., ordering a 2nd COVID-19 test if 1st test is negative) to make an initial COVID-19 diagnosis may be considered in any of the following situations:
 - a. High clinical suspicion with no alternative diagnosis, worsening respiratory status, clinical deterioration, **or** admission to ICU (endotracheal sample or bronchoalveolar lavage after intubation preferred)
4. "Presumptive COVID-19" patient status
 - a. *Even if all COVID-19 testing is negative* (regardless of number of tests), if the patient has clinical features concerning for COVID-19, then admit to COVID-19 unit with COVID-19 infection precautions and add EPIC infection status for "Presumptive COVID-19".
 - i. COVID-19 clinical features include compatible symptoms, chest X-ray/CT findings, or undifferentiated respiratory illness

Whom to test for COVID-19

1. A patient with symptoms or signs consistent with COVID-19 (emphasis on new or unexpected symptoms):
 - a. Symptoms include:
 - Fever (including *subjective fever and chills*)
 - Cough
 - Shortness of breath
 - Sore throat
 - Body aches
 - New loss of taste / smell
 - Fatigue
 - New headache
 - Congestion/runny nose
2. Patients for whom universal COVID-19 testing is currently considered (this list will change over time based on community COVID-19 prevalence, indication, and testing availability):
 - a. Patients admitted with any of the following risk factors: homelessness, congregate settings (e.g., nursing home, homeless shelters, jail/prison)
 - b. Pregnant women admitted for Labor and Delivery
 - c. Patients undergoing transplant (solid organ or hematologic transplant) or chemotherapy treatment
 - d. Patients prior to qualifying OR/IR/endoscopy procedures or prior to any aerosol-generating procedure of the airway / upper digestive tract (for specific list of qualifying procedures, see “Pre-procedure, Pre-surgical COVID Testing Protocols” in Clinical Resources section of [Rush COVID-19 intranet](#) page)
3. For asymptomatic patients (i.e., no COVID-19 symptoms), testing may be considered for the following groups. *Note: Rush does not currently provide asymptomatic testing for these following categories; these asymptomatic patients may seek testing at an alternative test center (e.g., Illinois Dept. of Public Health testing site) if they meet the following criteria:*
 - a. Unprotected close contacts of persons with COVID-19 infection, within 14 days of exposure.
 - i. [Per Illinois Department of Public Health](#), a close contact is defined as someone who was within 6 feet of an infected person for a total of 15 minutes or more starting from 48 hours before illness onset until the time the COVID-infected person is isolated
 - ii. Testing of close contacts is optional, as a negative COVID-19 test does not preclude a positive test on a subsequent day within the incubation period and does not affect length of quarantine

- b. Patients or healthcare workers instructed by public health / infection control to undergo testing because they are part of a COVID-19 cluster investigation.
4. Testing of asymptomatic patients (i.e., no COVID-19 symptoms) is *discouraged* for:
- a. Patients who want to undergo periodic ‘surveillance’ of infection because of on-going risk (e.g., workplace risk).
 - i. Rationale: A negative COVID-19 test on any given day does not preclude a positive test on a subsequent day.
 - ii. Rush healthcare personnel may undergo [asymptomatic surveillance testing](#) at Rush.
 - iii. For all other asymptomatic patients, Illinois Department of Public Health’s [State-Operated Community-Based Test Sites](#) may offer additional COVID testing opportunities with no restriction or cost.

Considerations for Outpatient Re-Testing (e.g., return visit to emergency room or primary care setting)

Prior COVID-19 Test Result	Current Outpatient Symptoms	COVID-19 Re-Test?
Positive	Continued symptoms, not improving	<p>No: COVID-19 infection already established.</p> <p>Assess for symptoms/signs of severe COVID-19 disease.</p> <p>Search for other causes of symptoms.</p>
	New episode of COVID-19-like symptoms	<p>Yes: to diagnose potential re-infection, especially if >90 days from initial COVID-19 infection.</p> <p>Per CDC, re-infection within 90 days of initial infection is rare, and prolonged (12 weeks) shedding of COVID-19 RNA remnants can occur <i>without live virus</i>.</p>
Negative	Continued symptoms, not improving	<p>Consider re-testing if symptoms consistent with COVID-19</p> <p>Search for other causes of symptoms.</p>
	New episode of COVID-19-like symptoms	<p>Yes</p> <p>Search for other causes of symptoms.</p>