

SARS-CoV-2 (COVID-19)

Adult Testing Guidance & FAQs for Clinicians

General Recommendations for Testing of Adults:

- Test patients with acute onset lower respiratory tract infection symptoms (e.g. cough, shortness of breath, fever, or new loss of smell).
- Presence of isolated upper respiratory symptoms (sore throat, congestion, runny nose) alone should not lead to testing, even if patient has contact with a confirmed COVID-19 case.
- **Do not test** asymptomatic patients.
- Assess for other respiratory virus infections (such as influenza).
- The Tennessee Department of Health recommends testing patients even if other viral tests are positive.

Recommendations for Adult Inpatients Who Develop Symptoms After Admission:

1. Only consider COVID-19 in inpatients with a new onset cough, dyspnea, or loss of smell.
 - Most patients will develop fever during the course of their illness, but fever may not be present at the onset of cough/dyspnea.
2. Check a CBC with differential.
 - Many patients with COVID-19 have leukopenia (~1/3) or lymphopenia (~2/3).
3. Obtain a Chest X-ray.
 - Most patients (~2/3) will have findings consistent with a viral pneumonia, including patchy infiltrates.
4. Assess the available data.
 - If a patient has other clinical reasons for their new cough or dyspnea, in the absence of concerning findings on CBC with diff or Chest X-ray, proceed with current standard of care.
 - If a patient does not have other clinical reasons for their new cough or dyspnea or has concerning findings on CBC with diff or Chest X-ray, place patient on precautions (Droplet + Contact + Eye Protection) and proceed with testing for SARS-CoV-2 PCR.
5. Do not test asymptomatic patients, even if they report exposure to a COVID-19 patient.
 - Testing of only symptomatic patients is standard of care and helps to preserve available testing materials/PPE and improves overall test turnaround time.

Recommendations for Repeat COVID-19 Testing in Adults:

- Inpatients:
 - Repeat testing of COVID-19 negative inpatients should be reserved for patients who the clinician has a continued high index of suspicion in the presence of a negative COVID-19 test result, a negative respiratory pathogen panel (RRP), and a lack of alternative diagnosis. Examples include the following:
 - Patient has developed additional or worsening symptoms since the time of initial testing, such as a development of a new fever in a patient with a persistent cough.
 - Patient has persistent symptoms, such as cough, AND consistent chest imaging or lab results (e.g. lymphopenia).
 - Checking additional COVID-19 tests from a nasopharyngeal source for a patient who has already had two negative tests is not recommended, unless the patient clearly develops new symptoms which may indicate a *newly acquired* COVID-19 infection.
 - Before repeat COVID-19 testing, consider ID or pulmonary consult for additional consideration of other possible causes of the patients concerning symptoms.
 - Contact infection prevention if there are questions about continuing inpatient isolation after a negative COVID-19 test result.
- Outpatients: Repeat COVID-19 testing of outpatients should be avoided unless patients develop new symptoms concerning for newly acquired infection or worsening symptoms which may indicate need for admission.

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How is the test ordered?

Testing does not require approval by Infection Prevention. Please note, all providers can order the test; however, not all locations may be approved to collect the specimen. Approved locations include Ambulatory Assessment Sites, Inpatient Units, and Emergency Departments. The name of the test in eStar is "SARS-CoV-2 PCR."

How should a swab for COVID-19 testing be collected?

Nasopharyngeal swabs are preferred. Insert a swab into the nostril parallel to the palate. For a best practice video visit <https://www.youtube.com/watch?v=DVJNWefmHjE>. Leave the swab in place for a few seconds to absorb secretions. Those collecting the swab should wear the recommended PPE for COVID-19 suspects (gown, gloves, surgical mask and eye protection).

How should the specimen be transported to lab?

Seal the closed specimen-container within a 95kPa biohazard transport bag. If such as bag is unavailable, double-bag the specimen within traditional specimen transport bags. Place the bagged specimen within a hard styrofoam container and refrigerated cold pack or in a bag of ice (do not freeze).

For patients on-site at VUMC, hand deliver the specimen to the Clinical Microbiology Laboratory in 4524 TVC.

For off-site clinic patients, specimens should be delivered directly to 4524 TVC by courier. The clinics should store the specimen in a refrigerator until the courier arrives.

How is SARS-CoV-2 testing performed at VUMC?

This qualitative test is based upon PCR amplification and detection of viral nucleic acid. The reagents and methods of the SARS-CoV-2 test at VUMC specifically emulate the assay developed by the CDC for US public health laboratories.

Can we send tests for other respiratory viruses, like the respiratory pathogen panel?

Yes, the same swab collected for COVID-19 testing can be used for the Respiratory Pathogen Panel (RPP) testing (you do not need to send separate swabs).