

## Considerations for SARS-CoV-2 PCR diagnostic testing

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Polymerase chain reaction (PCR) diagnostic testing for SARS-CoV-2, the virus that causes COVID-19, has been fraught with challenges since the current pandemic reached the United States.

Supply chain issues have persisted in various degrees of severity since March 2020 and continue to impact the ability to increase testing capacity. While shortages of items such as swabs have improved, laboratories nationwide continue to struggle with shortages of reagents, viral transport media and are seeing increased issues accessing plastic components such as pipette tips.

These shortages are unlikely to improve throughout the remainder of this year. In addition to continued shortages of critical testing components, demand for testing services has significantly increased, driven by a surge in cases of COVID-19 nationwide and by asymptomatic individuals wishing to resume certain activities. Testing services are now in high demand for those seeking to return to work, return to school and engage in social gatherings and non-essential travel.

Exceptionally high demand coupled with a struggling supply chain, shortages of personal protective equipment (PPE) and laboratory staffing shortages has resulted in significant delays for the return of PCR testing results. It has also hampered the ability of laboratories at hospitals and academic centers to meet the needs of patients, both COVID-19 patients and those requiring non-COVID treatment and procedures.

Additionally, the demand for SARS-CoV-2 testing and the accompanying shortage issues are beginning to impact the availability of other testing services, such as testing for other infectious diseases running on the same platforms and other molecular testing services. Laboratories nationwide are reporting that without supply chain improvements, current testing capacity will not be able to continue to meet all demands.

PCR diagnostic testing is the most widely available and highest performing type of diagnostic testing for the presence of SARS-CoV-2. Other tests, such as rapid antigen testing, have been authorized for use by the Food and Drug Administration (FDA), but are not widely available and do not share the same performance characteristics as many of the available PCR tests.

Until some form of rapid point-of-care or home-based screening tests with acceptable performance characteristics become available, demand for PCR testing is expected to be exceptionally high.

## **Learn more about the considerations for physicians and the general public on PCR diagnostic testing**

### **Considerations for physicians ordering SARS-CoV-2 PCR diagnostic testing**

Learn more about the considerations for physicians ordering PCR diagnostic testing for SARS-CoV-2.

### **Considerations for the general public seeking SARS-CoV-2 PCR diagnostic testing**

Learn more about the considerations for the general public seeking PCR diagnostic testing for SARS-CoV-2.

## **Key considerations and recommendations from the AMA**

### **For physician ordering**

- | Physicians consider prioritizing testing services for those individuals with a medically indicated need for diagnostic testing.
- | Patients identified as part of public health surveillance efforts should be considered as prioritized for testing.
- | Where there is no medically indicated need for testing, we encourage physicians to consider recommending at-home quarantine in lieu of testing.
- | If a patient presents with symptoms of COVID-19 or a known exposure to COVID-19, it is critical that providers counsel patients on the importance of at-home quarantine until test results are received.

Those with negative test results must continue to follow all public health protocols, including physical distancing, employing good hand hygiene practice and wearing face masks in public and/or where physical distancing is not possible.

## **For the general public**

Individuals should seek testing for SARS-CoV-2 when they have a medical need for that test, meaning that they are demonstrating symptoms of COVID-19, they have a known exposure to COVID-19, they need a test before seeing a physician or getting a procedure or they are a health care professional that may have had exposure or risks exposing others. It is critical that you quarantine at home until you receive your test results. It is critical that you continue to follow all public health guidelines and protocols to limit the spread of COVID-19, even if you have a negative SARS-CoV-2 test result.