



Considerations for the General Public Seeking SARS-CoV-2 PCR Diagnostic Testing

Diagnostic Testing for SARS-CoV-2 in the United States

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.

Considerations for the General Public

The AMA encourages the general public to help be good stewards of limited testing resources and help reduce wait times for results. **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 healthcare professional that may have had**

exposure or risks exposing others. Those that do not have a medical need for a test should consider alternatives to limit virus transmission, such as quarantining at home, rather than seeking testing services. Non-medical needs for a test includes seeking testing before traveling for non-essential purposes, participating in social gatherings, participating in large gatherings, and returning to work and school, among others. In many of these instances, quarantining at home per CDC recommendations prior to engaging in these behaviors would ensure you do not transmit the virus to others.

After you are tested, **it is critical that you quarantine at home until you receive your test results.** Engaging with friends, family, or the general public during the time between getting your test and receiving your results carries the risk of exposure to these individuals.

Individuals should also be aware that a negative SARS-CoV-2 diagnostic test means only that you were SARS-CoV-2 negative at the time your test was taken or were tested too early during the course of illness. It is possible that you could become infected in the immediate hours or days following your test. **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.** These include practicing physical distance, employing good hand hygiene, and wearing face coverings in public and/or when physical distancing is not possible.