

ASCP COVID-19 Recommendations

1. Do not use serology testing for evaluating patients with upper or lower respiratory tract symptoms of acute COVID-19 infections, instead use nucleic acid amplification or antigen testing.

Commentary: Access to testing for COVID-19 is critically important to accurately diagnose the disease present, to inform infection prevention decisions (e.g., isolation and quarantine), and to direct contact tracing. Three categories of tests are available for the direct detection of SAR-CoV-2. These are highly sensitive nucleic acid amplification tests, moderately sensitive nucleic acid amplification tests, and antigen detection tests. When considering which test is optimal for a patient the healthcare provider should consider the test performance characteristics (i.e. sensitivity & specificity) and the pre-test probability of infection, in conjunction with the risk to the patient and others of obtaining a false negative or false positive test result. The highly sensitive nucleic acid amplification tests are the gold standard for test comparisons, but both the moderately sensitive nucleic acid amplification tests and the antigen detection tests perform well in symptomatic patients with COVID-19.

Reference:

1. Hanson KE, Caliendo AM, Arias CA, et al. Infectious Diseases Society of America Guidelines on the Diagnosis of COVID-19: Serologic Testing [published online ahead of print, 2020 Sep 12]. Clin Infect Dis. 2020;c1aa1343. doi:10.1093/cid/ciaa1343

**Access to testing for COVID-19 is critically important. Be aware some tests have limited use. Be tested and get the best test available.*

2. For symptomatic patients with a negative antigen test, confirm with a more sensitive test (i.e., PCR) if clinically indicated.

Commentary: Antigen tests, when positive, are an excellent, timely and cost-effective way to confirm the diagnosis of COVID in a patient with the signs and symptoms consistent with this disease. Antigen tests, however, are less sensitive than nucleic acid amplification, so if the patient appears to have COVID, but the antigen test is negative, then a follow-up COVID PCR is strongly recommended.

Reference:

1. Procop G. On Antigen Testing for COVID-19. Ascp.org. <https://www.ascp.org/content/news-archive/news-detail/2020/11/11/on-antigen-testing-for-covid-19>. Published 2020. Accessed January 7, 2021.
2. Coronavirus Disease 2019 (COVID-19). Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/antigen-tests-guidelines.html>. Published 2020. Accessed January 7, 2021.

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3. When antigen tests are used to evaluate an asymptomatic population, positive results should be confirmed using a RT-PCR method.

Commentary: Although the specificity of an antigen test may be high, the positive predictive value is low when these are used to test asymptomatic patients. Otherwise stated, when the pretest probability of infection is low, then false positives will represent a higher percentage of all positive results, so confirmation of positive results using RT-PCR is recommended.

Reference:

1. Coronavirus Disease 2019 (COVID-19). Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/antigen-tests-guidelines.html>. Last updated December 16, 2020. Accessed January 14, 2021A.

4. Do not order a respiratory viral panel (i.e., SARS-CoV-2 and other pathogens) for COVID-19 screening to evaluate asymptomatic patients following possible exposure or for return to work/school. Instead, order just the appropriate SARS-CoV-2 (COVID-19) PCR or antigen test.

Commentary: Limited respiratory pathogen panels (eg, SARS-CoV-2, influenza) have recently become available to evaluate symptomatic patients for possible COVID-19 infection. These panels are appropriate for evaluating symptomatic patients when the pathogens in the panel are part of the differential diagnosis. However, when evaluating asymptomatic patients specifically for COVID-19 reasons (e.g., exposure, return to work, pre-flight), only the SARS-CoV-2 antigen or nucleic acid amplification test is medically necessary.

Reference:

1. Novitas Solutions, Inc. Proposed Local Coverage Determination (LCD): Respiratory Pathogen Panel Testing (DL38916). January 14, 2021. Accessed online at: <https://www.cms.gov/medicare-coverage-database/new-search/search.aspx> March 20, 2021.