

CDH/MGB Outpatient SARS-CoV-2 Serology Testing Guidance

SECTION I: COVID-19 (SARS-CoV-2) Serologic Test Guidance and Ordering

1. **Guidance for providers ordering outpatient COVID-19 (SARS-CoV-2) serologic tests:**
 - i. SARS-CoV-2 antibody tests should be used 1) as an aid to diagnosis in patients with syndromes compatible with COVID-19 after negative PCR testing or 2) to test asymptomatic patients for evidence of prior infection. Individuals who develop antibodies typically start to do so between 7 and 21 days after symptom onset.
 - ii. There is currently no role for serological testing in patients with prior PCR-confirmed infection.
 - iii. It is unknown if the presence of COVID-19 antibodies indicates protection from future infection or whether a person with evidence of antibodies could still be contagious.
 - iv. Serologic assays for COVID-19 are subject to both false negative and false positive results. False positives test results are more common in individuals with a low probability of current or prior infection.
 - v. If serologic testing is performed on a patient with symptoms in the past 7 days and the result is positive, the patient will have a CoV-Presumed infection status applied to their record. [Click here for more information about SARS-CoV-2 Infection Status and Resolution Criteria](#)
2. **EPIC ordering: The following prompts will be available in Epic for ordering outpatient serology tests:**
 - i. **Prompt 1: Evidence of acute COVID-19 infection**
 - i. **Prompt 1 (COVID-19 symptom/sign screen):** In the past seven days, has this patient had symptoms (e.g., new cough, fever, rhinorrhea, shortness of breath, sore throat, myalgias, loss of taste or smell) or signs (e.g., COVID toes) of COVID-19 infection?
 - ii. **If yes to symptom question:** Enter date of symptom onset.
 - a. Serology cannot be ordered in a patient with recent (past 7 days) signs or symptoms of COVID-19 unless there is at least one negative or indeterminate PCR test since the date of symptom onset
 - iii. **If no to symptom question:** proceed with testing

SECTION II: COVID-19 (SARS-CoV-2) Serologic Test Reporting

1. A positive COVID-19 serologic test result suggests prior infection with SARS-CoV-2. A negative test result can mean that no infection occurred, or that the patient did not develop antibodies in response to infection. Therefore, a negative serologic test cannot definitively be used to rule out prior COVID-19 infection.
2. It is unknown if the presence of COVID-19 antibodies indicates protection from future infection or whether a person with evidence of antibodies could still be contagious.
3. Serologic assays for COVID-19 are subject to both false negative and false positive results. There is a chance that a positive antibody test in a patient who does not have a prior history of a compatible syndrome is a false positive.
4. There is considerable variability in the sensitivity and specificity of serologic assays, and it is important to be familiar with the specific assay being performed and its testing characteristics. The Roche SARS-CoV-2 total antibody test that is used at

MGH, BWH and many other MGB laboratories has a sensitivity of >90% for symptomatic patients by 14 days after symptom onset, and a specificity of >99%. The performance of other assays may be different.

5. Regardless of serologic test results, all individuals should continue workplace and government regulations regarding symptom screening and reporting, social distancing, use of face masks in public places, appropriate personal protective equipment, and other protective measures as otherwise indicated.
6. Occupational Health Services will be notified of a positive test result in all MGB employees.
7. If serologic testing is performed on a patient with symptoms in the past 7 days and the result is positive, the patient will have a CoV-Presumed infection status applied to their record.

[Click here for more information about SARS-CoV-2 Infection Status and Resolution Criteria](#)