

COVID Testing FAQ

For each question, a sample patient script is included in italics.

Can you clear me for work?

CHA providers are unable to clear patients for work in setting of COVID. CHA follows the CDC symptom-based guidelines, namely that people with COVID should self isolate for at least 10 days *and* until they have had no fever and have not needed to use anti-pyretics for 3 days *and* until their respiratory symptoms (cough, shortness of breath) have improved. However, individual employers must make decisions about the timing of employees' return to work.

We recommend that people with COVID or suspected follow CDC guidance to self isolate at home for at least 10 days and until they have had no fevers and their other symptoms have been improving for at least 3 days. However, even after that time has passed, we cannot clear people for work. Please contact your employer to ask about their specific policies.

I heard I had to get two negative tests to show I don't have COVID. Can you order me another test?

The CDC recommends two different possible strategies and does not prefer one option to the other. CHA follows the CDC symptom-based guidelines, namely that people with COVID should self isolate for at least 10 days and until they have had no fever and have not needed to use anti-pyretics for 3 days and until their other symptoms (like cough and shortness of breath) are improving. The second strategy, a test-based strategy, requires that patients have two negative PCR (nasal swab) results collected at least 24 hours apart and resolution of fever without use of anti-pyretics and improvement of respiratory symptoms (cough, shortness of breath). CHA does not provide testing for this purpose both as a test conservation strategy and because there have been reports of prolonged viral RNA detection without direct correlation to viral culture, suggesting that people can continue to have positive PCR tests without any evidence of being contagious. Note that the Massachusetts Medical Society specifically recommends against a test-based strategy for return to work: ""Employers should not require a COVID-19 test result or a healthcare provider's note for employees who are sick to validate their illness, qualify for sick leave, or to return to work."

There are two ways the CDC recommends to determine whether someone is still contagious after having COVID. CHA follows the CDC guidance that patients should self isolate at home for at least 10 days and until they have had no fevers and their other symptoms have been improving for at least 3 days. Using two negative tests is also an option, but not one that CHA offers at this time. There is evidence that sometimes people will still have detectable virus on



the swab but not actually be contagious, and vice versa. We do know that when it has been at least 10 days and symptoms have started to improve, people are unlikely to be contagious. So, we do not recommend that patients get additional tests.

PCR (Nasopharyngeal) Testing

I had symptoms that ended two weeks ago. I was tested again yesterday and it came back positive. What does this mean?

CHA follows the CDC symptom-based guidelines, namely that people with COVID should self isolate for at least 10 days *and* until they have had no fever and have not needed to use anti-pyretics for 3 days *and* until their respiratory symptoms (cough, shortness of breath) have improved. After 10 days, there is little chance that people are still contagious, and the chance of being contagious is likely even lower if patients have no remaining symptoms. There is evidence of prolonged viral RNA detection without direct correlation to viral culture, suggesting that people can continue to have positive PCR tests without any evidence of being contagious. Please see additionally "Can you clear me for work?" (above).

We recommend that people with COVID or suspected follow CDC guidance to self isolate at home for at least 10 days and until they have had no fevers and their other symptoms have been improving for at least 3 days. After this, it is unlikely that people remain contagious, <u>even if they still have evidence of the virus on a swab</u>. We do not recommend that patients test again for this reason.

I was hospitalized for a month and now I'm still having symptoms like cough or fatigue. Do I need to continue self isolating?

CHA follows the CDC symptom-based guidelines, namely that people with COVID should self isolate for at least 10 days *and* until they have had no fever and have not needed to use anti-pyretics for 3 days *and* until their respiratory symptoms (cough, shortness of breath) have improved. Post-COVID cough, fatigue, and many other symptoms can continue sometimes for more than a month after illness, particularly in hospitalized patients.

If it has been more than 10 days since your first day of symptoms and you have not needed to use anti-fever medicines like ibuprofen or acetaminophen for 3 days and your other symptoms (like cough and shortness of breath) are improving, there is little chance that you are contagious and you no longer need to self-isolate. You may still have symptoms like cough for a while. It is important to get rest and contact us if you begin to feel worse.

I had COVID and recovered but then my public housing complex tested me and I'm positive. Do I need to quarantine?



The decision to guarantine a patient in this type of case depends on 1) when the patient had COVID; 2) whether the COVID was test-confirmed; and 3) how long ago the patient had COVID. If the patient's COVID was not test-confirmed, we cannot know definitively whether the original presentation was COVID. In that case, if the patient is asymptomatic, the patient should quarantine for 14 days from the time of the positive test. If, however, the patient had testconfirmed COVID in the past, the decision to guarantine should be based on time since symptoms. We believe that it is unlikely that patients can be infected with COVID twice, particularly in the short term, but this has not been conclusively demonstrated. There are therefore two scenarios. If the patient had lab-confirmed COVID and it has been less than a month since the original test, it is likely that the repeat positive test simply represents prolonged presence of viral RNA in the nasopharynx and we would recommend an isolation strategy (10 days and until they have had no fever and have not needed to use anti-pyretics for 3 days and until their respiratory symptoms (cough, shortness of breath) have improved, with Day 1 being the day of the original onset of symptoms). If, however, it has been months since the original positive test, the patient should, out of an abundance of precaution, isolate again, this time for 10 days per the CDC (and longer potentially if the patient develops symptoms).

No prior positive test: If you had symptoms in the past that may have been COVID but never had a positive confirmatory test, we recommend that you self-isolate based on this test. You should stay home for 10 days from the date of the positive test, and if you develop symptoms, you should stay home for a minimum of 10 days and until you have had no fevers and your other symptoms have been improving for at least 3 days.

Recent prior positive test: It is not uncommon for patients to have more than one positive swab if they are tested too soon after they develop COVID. You should stay home for 10 days since the date of the positive test, and if you develop symptoms, you should stay home for a minimum of 10 days and until you have had no fevers and your other symptoms have been improving for at least 3 days. After this, it is unlikely that people remain contagious, even if they still have evidence of the virus on a swab.

Distal prior positive test: We believe that it is unlikely that patients can get COVID twice in a short period of time, but we do not definitively know this. Since your last positive test was quite some time ago, we recommend treating this positive test as a second positive test. You should stay home for 10 days from the date of this positive test, and if you develop symptoms, you should stay home for a minimum of 10 days and until you have had no fevers and your other symptoms have been improving for at least 3 days.



Serology (antibody/blood) testing

Can you order antibody testing for me?

There has been considerable interest in the development of COVID antibody testing from both a public health and patient perspective. Public health authorities would use antibody testing to assess overall population exposure to SARS-CoV-2 (the virus that causes COVID), which would, among other things, permit authorities to better model a safe "reopening" strategy. From a clinical perspective, among other things, antibody testing gives us a different way of determining whether a patient has previously had COVID especially in cases where patients were not tested by PCR testing (performed as a nasopharyngeal swab as CHA) or whose test was negative. For patients, of course, there is understandable interest in knowing whether they have been previously exposed to the virus. However, we are being cautious about deploying this test for our patients because there are nuances in interpreting the results right now.

At this time, several serologic tests are available and different developers have used different methodologies to develop these tests. There are benefits and drawbacks to each type of test. The Labcorp test used by CHA is a qualitative test, meaning that it does not provide information about quantity of antibody, which is relevant to predicting the robustness of any immune response.

There are some other current limitations to interpretation of serologic tests.

- Immunity: We do not know the clinical meaning of antibody testing in COVID. We can
 extrapolate from the available data about other types of infections and other
 coronaviruses.
 - a) Development of protective immunity: Based on information about other non-SARS coronaviruses that humans do develop protective immunity, and that in the case of SARS and MERS they have developed antigen-specific immune memory, though there have not been definitive data demonstrating a protective immunity in the setting of SARS and MERS. There has been one animal study demonstrating that previous exposure to Sars-COV-2 predicts apparent immunity to re-infection at 28 days.
 - b) Duration of immunity: Presuming that antibodies do represent protective immunity, we do not know the duration of this immunity. There are data suggesting that immunity likely wanes; how quickly it wanes may additionally depend on individual patient characteristics and severity of disease.
- 2) <u>Test characteristics</u>: As these tests are new, our understanding of exactly how accurate they are is limited. We do not have precise information on sensitivity and specificity, and particularly not in vivo. Results are also affected amongst other things by the time at which serologic testing is performed, as patients further out from disease onset are more likely to have developed antibodies.



We know that many patients are excited about the possibility of getting tested to see if they have been exposed to the coronavirus, or to see if the symptoms they have or had are signs that they had coronavirus. We are also excited about the possibility of these new tests and how they can help patients and public health in the future.

Antibody testing can tell us if a person has been previously exposed to a disease. Right now, though, there are many things we don't know about previous exposure to coronavirus. Most importantly, we don't know whether evidence of exposure means you're immune -- this means we don't know whether having had coronavirus means you won't have it again. Even if it makes you immune, we don't know how long that immunity lasts. Finally, we don't know when the best time is to test patients for antibodies, as testing early after disease might miss antibodies even though a patient was exposed.

Right now, we do not know enough about the test or its results to recommend this test to patients. We think that this is likely to change when we know more information about these tests, but at this time we do not recommend antibody testing for patients. Like other health care institutions, CHA is following the data carefully to make sure that our recommendations to patients are up to date.

I had a positive PCR test and a negative antibody test. Why?

A positive PCR test is evidence of active presence of viral RNA in the nasopharynx. An antibody test is evidence of prior exposure to COVID. Discordant tests can happen for a few reasons: 1) both the PCR test and the serology test have false negative and false positive rates, and either could be true in this type of case; 2) the antibody test may have been obtained too early after the acute illness to demonstrate immune response; 3) it is possible some patients with mild disease may mount an insufficient antibody-mediated immune response to be detected on testing (this is speculative).

A PCR test (nasal swab) looks for presence of the virus that causes COVID at that time. The antibody test tells us whether a person has evidence of being exposed to COVID at some point in the past. If you did not have antibodies on your antibody test, there are a few possible reasons: 1) your body didn't build a big immune response to COVID and did not produce antibodies; 2) we tested you for antibodies too early (antibodies do not develop right away); or 3) the antibody test was a "false negative" or the swab (PCR) test was a "false positive."

I had a negative PCR test and a positive antibody test. Why?

A positive PCR test is evidence of active presence of viral RNA in the nasopharynx. An antibody test is evidence of prior exposure to COVID. Discordant tests can happen for a few reasons: 1) both the PCR test and the serology test have false negative and false positive rates, and either could be true in this type of case; 2) the PCR test may have been obtained at a time in the



clinical course when there was not sufficient nasopharyngeal colonization; 3) the PCR test may have been obtained during a non-COVID illness and the patient *actually* had COVID at some other time in the past.

A PCR test (nasal swab) looks for presence of the virus that causes COVID at that time. The antibody test tells us whether a person has evidence of being exposed to COVID at some point in the past. There are a few possible reasons for this: 1) the antibody test was a "false positive" or the swab (PCR) test was a "false negative" or 2) you really didn't have COVID at the time you had the nasal swab, but you did actually have COVID at some other time in the past.