



BRUMMANA HIGH SCHOOL
MEDICAL DEPARTMENT

Screening for COVID-19

What are the different types of COVID-19 test?

- Polymerase chain reaction (PCR) test is to diagnose disease.
- Lateral flow test (LFT) can diagnose COVID-19 on the spot.
- Antibody or serology test can't diagnose active infection, but can help to tell if a person has immunity to COVID-19.

What is PCR testing?

- PCR test detect the genetic material from the virus which can help diagnose an active COVID-19 infection. This means the tests can tell whether or not someone has the virus.
- This type of test need to be sent to a lab for analysis, meaning it can take time for people to find out their results.
- During PCR testing, swabs used to take specimen from your nose or your mouth.
- Usually it takes no more than 10 minutes to do the test.
- PCR gives us a good indication of who is infected for they can be isolated and for getting in contact with people they've been in touch with so they can be quarantined. That's the true advantage of the current major diagnostic test; you can break that transmission chain and get a clearer picture of what's happening.
- If you test positive:
Take the following steps to protect others regardless of your COVID-19 vaccination status: Isolate at home and isolate away from others for at least 10 days.
If you do not have any symptoms, you should still isolate at home for at least 10 days.
If you develop symptoms, continue to isolate for at least 10 days after symptoms began as long as symptoms have improved, and no fever is present for at least 24 hours without use of fever reducing medications.
- If you test negative, the virus was not detected.
If you have symptoms of COVID-19: You may have received a false negative test result and still might have COVID-19. You should isolate away from others.
- Contact your doctor about your symptoms, especially if they worsen, about follow-up testing, and how long to isolate.
- False negative can occur with PCR test.
- It can also provide false positive result, as it is so sensitive it can potentially signal a positive result upon detecting dead, deactivated virus still present in the body of someone who has recovered from COVID-19.

While waiting for test results, you should self-quarantine at home and stay away from others, including those living in your household.

How about a rapid lateral flow test?

- LFTs isn't as specific as PCR test, and may provide false negative, which then need to be confirmed through a PCR test. They're both types of antigen test.
- To understand antigen testing, you have to know what an antigen is. An antigen is a substance recognized by the body's immune system, which can then respond by generating proteins called antibodies that specifically recognize that antigen.
- That means, the point of an antigen test is to detect the presence of a protein that is the cause of COVID-19. In that sense, an antigen test basically looks for those fragments of antigens within a person's body to see if they're infected with the virus.
- Antigen test is collected via nasal cavity swabs, then placed into a special solution for virus detection.
- The main advantage of LFT test is the speed at which they can provide results within 15 minutes, they do not need to be sent to a lab for confirmation.
- The downside to increased testing speed may be decreased accuracy.
- Positive results from antigen test is highly accurate.
- A positive antigen test reflects active infection.
- If you test positive, you need to self-isolate.

Ref: CDC Centers for Disease Control and Prevention

Ref: Health.ny.gov