Diagnosing COVID-19

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Two Kinds of Tests

- ***Diagnostic tests*** identify virus in the body
  - These are polymerase chain reaction (PCR) tests (also called molecular tests)
  - These tests give a sign that the virus is reproducing in your cells

- ***Antibody tests*** identify antibodies to the virus, usually in blood
  - Antibodies are made by your immune system to fight off viruses or bacteria
  - Some antibodies (IgG) begin to develop when you are sick and can be identified after you recover

- Remember that no tests are perfect!

IgG = immunoglobulin G.

How We Test for Active Infection

- The PCR test is usually done to test people with signs and symptoms
- It detects the RNA (genetic material) of the virus
- Swab is taken from nose, throat, or mouth
  - Specimen typically comes from somewhere in the respiratory tract
  - Saliva can also be tested

- A positive PCR test …
  - Shows that there are virus particles in the sample
  - Means there is active infection
- There are sometimes false negative results
  - Not all people with infection will have RNA in their sample

How We Test for Past Infection

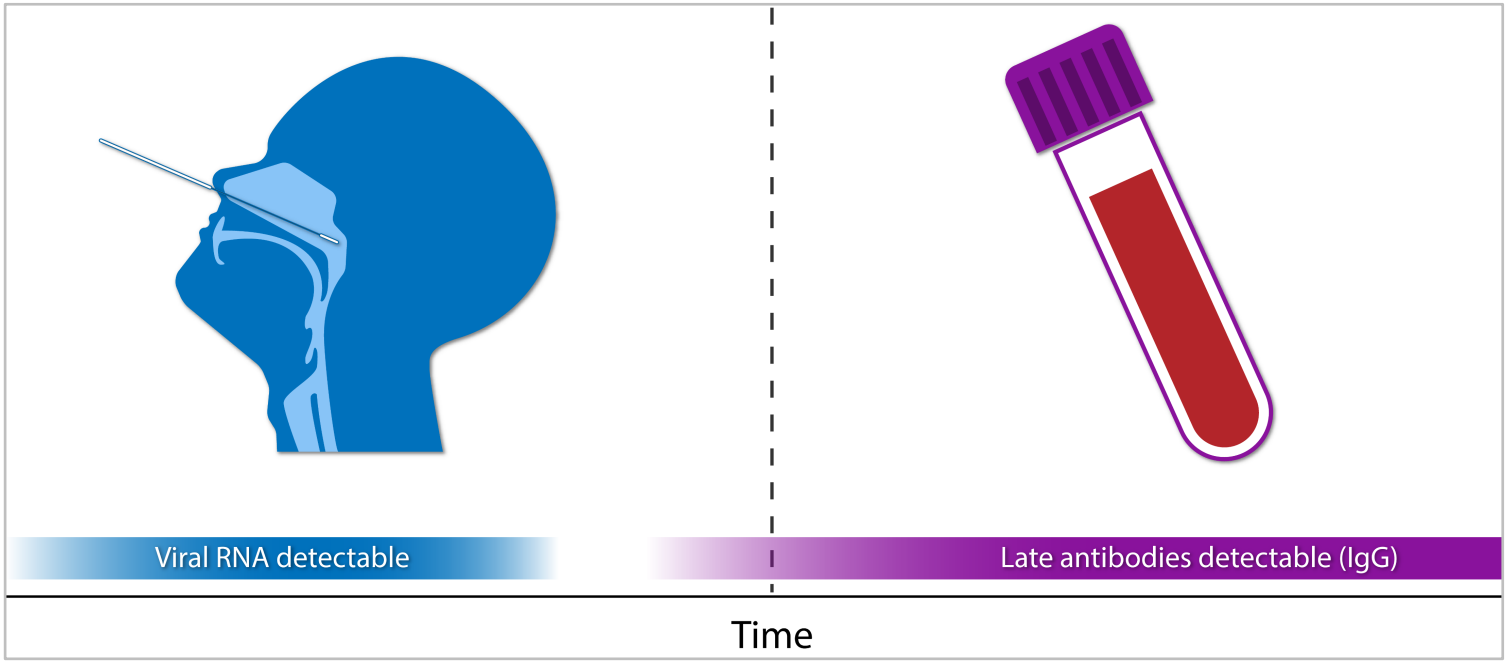
- IgG antibody is the most common antibody test
- The body starts to produce IgG antibodies 10 to 14 days after infection
- Antibody tests are usually performed on blood
- They can be performed after someone recovers or in people who never had symptoms

- A positive IgG antibody test …
  - Shows that you were infected with the virus in the past
  - Does not tell you when you were infected
  - Could mean that you have some protection from future SARS-CoV-2 infection (we are not sure yet)

Timeline of Testing

Diagnostic test—viral RNA detectable in respiratory tract

Past infection—antibodies to virus detectable in blood



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