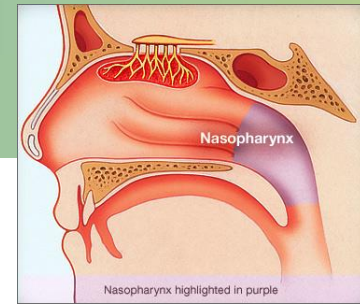


# SARS-CoV-2 Diagnostic Test: Virology aka PCR Test



## Definition:

- Virology testing, sometimes referred to as PCR test which stands for polymerase chain reaction.
- Used to rapidly identify the presence of viral RNA in cells collected using swabs through the nose to the nasopharynx or from saliva in potentially infected people.

## Sample Collection:

- Test can use sample taken by using nasopharyngeal swab to reach the nasopharynx or by collecting saliva
- Sample from nasopharynx has a higher level of accuracy, but may be more difficult to conduct due to limitations in accessing necessary materials, including swabs, to collect the sample

## Interpreting Results

- Considered to be moderately accurate and fast with results available in < 24 hours
- Of every 100 individuals with SARS-CoV-2 present approximately 70 would test positive (Sensitivity of 70%)
- Test shows whether the virus is present, and it may demonstrate the presence of the virus even if the person is not showing symptoms, i.e. is asymptomatic
- Patients continue to shed virus even after they feel they have recovered
- Quarantine should continue until test shows the virus is no longer present or until at least 72 hours have passed since resolution of symptoms and at least 7 days since symptoms first appeared. If asymptomatic at time of diagnosis, it is recommended quarantine lasts for 10 days since diagnosis.
- Quarantine should continue in patients with symptoms even if they have a negative PCR

## Why would this test be used?

- Generally administered if showing symptoms or if have been in contact with someone who has tested positive

# SARS-CoV-2 Diagnostic Test: Serologic Test aka Antibody Test



## Definition:

- Serology test, sometimes referred to as an antibody test.
- Looks for the presence of antibodies which are specific proteins made in response to infections.
- Antibodies can be found in the blood and in other tissues in those who had an immune response to SARS-CoV-2 whether or not they showed symptoms of the virus.

## Sample Collection:

- A blood sample is collected by inserting a needle into a vein and can occur in a doctor's office or laboratory.

## Interpreting Results

- The FDA has approved numerous serologic tests with significant differences in levels of accuracy and reliability.
- The test detects the body's immune response to the infection caused by the virus rather than detecting the virus itself.
- It generally takes one to two weeks after someone becomes sick with SARS-CoV-2 for their body to make antibodies, therefore someone who has a current SARS-CoV-2 infection may not show signs of antibodies.
- It is unknown whether the presence of antibodies signals immunity to the virus that is either durable or long-lasting, meaning that it is unclear whether the presence of antibodies would prevent a recurrence of the disease

## Why would this test be used?

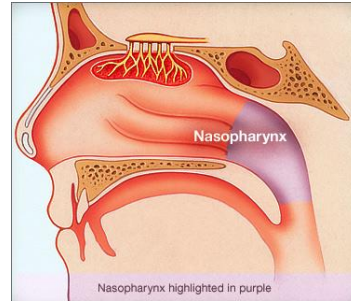
- Administered to gain a better understanding of the presence of the virus in the general population.
- Not enough is known to make determinations about whether having been exposed to the virus will prevent future infections.
- Can aid in determining who may donate a part of their blood called convalescent plasma for potential treatment of others.

# SARS-CoV-2 Diagnostic Tests



## Virology aka PCR Test

- Used to rapidly identify the presence of viral RNA in cells collected using swabs through the nose to the nasopharynx



## Interpreting Results

- Considered to be moderately accurate and fast with results available in < 24 hours
- Test will show whether the virus is present, even if the person is not showing symptoms, i.e. is asymptomatic
- Experience has shown that patients continue to shed virus even after they feel they have recovered

## Why would this test be used?

- Generally administered if showing symptoms or if have been in contact with someone who has tested positive

## Serologic aka Antibody Test

- Looks for the presence of antibodies in the blood and in other tissues in those who had an immune response to SARS-CoV-2 whether or not they showed symptoms of the virus.

## Interpreting Results

- The test detects the body's immune response to the infection caused by the virus rather than detecting the virus itself.
- Antibodies can take 1-2 weeks to form after infection
- It is unknown whether the presence of antibodies signals immunity to the virus

## Why would this test be used?

- Administered to gain a better understanding of the presence of the virus in the general population.
- May be used more often once can detect all antibodies and understand immunity

