A medical professional swabs inside your nose to capture a sample containing viral particles.

HOW DO THEY ACTUALLY WORK?

Samples are sent to the lab where machines process them to extract and isolate genetic material.

Once extracted, the RNA is combined with chemical building blocks and an enzyme to copy the RNA into DNA.

The new DNA is copied until there is enough to study. This process is called polymerase chain reaction (PCR).

Primers, enzymes, & other chemicals are added. If the primers don’t match, the DNA can’t be copied.

Some viruses and other organisms carry their genetic code as DNA, instead of RNA, so this step is not always necessary.

The new DNA is copied until there is enough to study. This process is called polymerase chain reaction (PCR).

If DNA is NOT copied, SARS-CoV-2 is NOT present, which means the test is NEGATIVE. Occasionally tests can return a false negative.

If DNA IS copied, SARS-CoV-2 IS present, which means the test is POSITIVE.

Once extracted, the RNA is combined with chemical building blocks and an enzyme to copy the RNA into DNA.

A medical professional swabs inside your nose to capture a sample containing viral particles.

WHAT ELSE COULD THEY TEST YOU FOR?

Doctors can use several types of bodily samples to determine what is making you sick, depending on the type of infection they suspect.

BLOOD
BREAST/MALE URETHRA
STOOL
CEREBROSPINAL FLUID
SPUTUM

Some viruses and other organisms carry their genetic code as DNA, instead of RNA, so this step is not always necessary.

Primers, enzymes, & other chemicals are added. If the primers don’t match, the DNA can’t be copied.

Nucleotides are the chemical building blocks of DNA.

MATCH
NO MATCH

Occasionally tests can return a false negative.

You have a fever and difficulty breathing normally, so you decide to call your doctor. Your doctor suspects you may have COVID-19 and decides to test you for it. What comes next?

Lab technicians communicate the test results to your healthcare provider.