

# Different tests

There are three types of Covid-19 tests currently available. Each of them serves a different purpose.

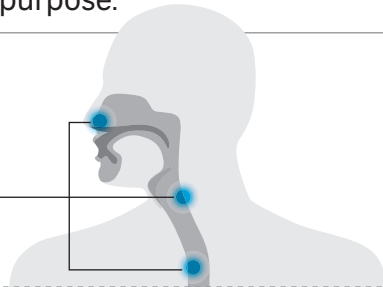
## RT-PCR TEST

### Looks for:

Genetic sequences specific to Covid-19.

### Sample:

Swab test from nose or back of throat, or from sputum.



### How long?

It takes around one to two hours to get results and requires the use of specialised machines. If samples need to be transported, the turnaround time is longer.

### At the lab:

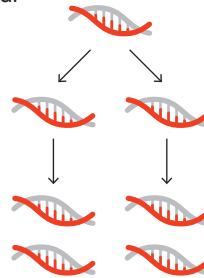
- Viral RNA from the samples are extracted and converted to DNA in a method known as reverse transcription (RT).

- This conversion is required so that the genetic material is compatible with the polymerase chain reaction (PCR) process that can identify the virus.



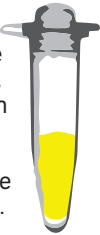
- The PCR technique amplifies the genetic material of the virus so that it can be easily detected and analysed.

- This amplification is required to increase the presence of the genetic material targeted, which is usually present in small amounts.



- If the targeted genetic material is detected, it is highlighted via a dye that fluoresces in the presence of DNA.

- The more viral bits there are, the brighter the glow, creating a pattern of light that tells the technicians whether they have found Sars-CoV-2.



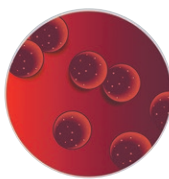
## SEROLOGY TEST

### Looks for:

Antibodies produced by the immune system against the virus.

### Sample:

Taken from blood.



- Patients have antibodies around two weeks after they recover from the infection and will not have them at the point of infection.

- It remains inconclusive whether antibodies are always protective, or how long immune memory would last against Covid-19.

- Therefore an antibody test cannot be used to make clinical decisions for individual patients.



## ANTIGEN TEST KITS

### Looks for:

Proteins on the surface of the virus, called antigens.

### Sample:

Nasal or nasopharyngeal swab samples. Tests using other sample types, like saliva, are also being developed.