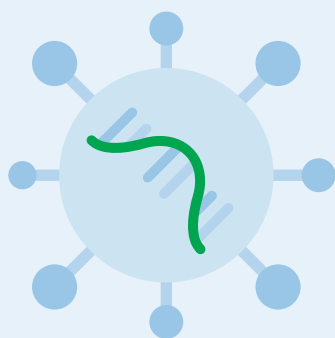


Testing for SARS-CoV-2 infection and immunity

Timely and accurate diagnostic testing for **SARS-CoV-2** using available and approved tests is an essential part of a comprehensive **COVID-19** response strategy.

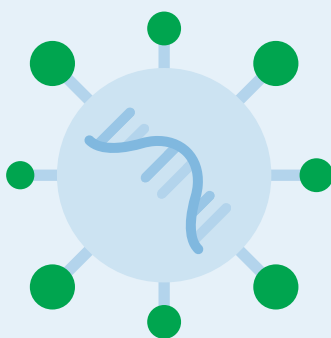
Tests for diagnosing infection:



Nucleic Acid Amplification Testing

*Detects **genetic material** of the virus*

- Uses **upper respiratory specimens*** to diagnose **current SARS-CoV-2 infection**.
- Nucleic acid amplification tests (NAAT), for example RT-PCR, are the **reference method** for detection of current SARS-CoV-2 infection.
- **Results: usually available within 24 hours.** Testing takes 30 minutes to 4 hours (depending on the test), but transport to the testing laboratory can add hours to days.



Antigen Testing

*Detects **viral protein(s)** (e.g. **nucleocapsid**)*

- Uses **upper respiratory specimens*** to diagnose **current SARS-CoV-2 infection**.
- Most often in a lateral flow format, termed antigen-detection rapid diagnostic tests (Ag-RDTs). Available for professional use or self-testing.
- Performance is best within first 5-7 days of symptoms.
- **Results: within 15-30 minutes**, not requiring laboratory infrastructure.



Antibody Testing

*Detects **antibodies** against the virus from prior infection or vaccination*

- Uses **serum/plasma or whole blood specimens** to detect antibodies generated by **prior SARS-CoV-2 infection or vaccination**.
- SARS-CoV-2 antibodies are usually detectable 1-2 weeks after infection or vaccination.
- Antibody testing should not be used as a standalone test to identify current SARS-CoV-2 infection.
- **Results: within 24 hours;** point of care tests within 10-30 minutes.

* NAATs and Ag-RDTs are designed to work using upper respiratory tract samples or saliva
For more information: https://www.youtube.com/watch?v=PhdSdJu_QXI