Tracking COVID-19 Testing Technology

Widespread availability of accurate and efficient diagnostic testing has been cited as a key requirement to getting the COVID-19 pandemic under control and our lives back to normal. To meet that need researchers are racing to optimize testing technology for scalable, rapid testing that meets the unique requirements of personal, clinical and institutional settings.

200+ different COVID-19 tests currently in use

Home collection

Key characteristics and benefits:

- Ease of use
- Convenient
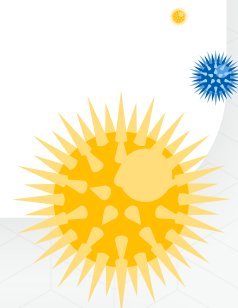- Minimal exposure to others
- Durable

Leading Assay Technologies in Use:

Virus detection:

RT-PCR

Antibody detection:

None currently available

Pharmacies & Doctor's Offices

Key characteristics and benefits:

- Samples collected by skilled staff
- Professional advice available
- Limited exposure to others

Leading Assay Technologies in Use:

Virus detection:

RT-PCR

Antigen detection:

Lateral flow immunoassay

Hospitals and Health Departments

Key characteristics and benefits:

- Analysis of multiple sample types
- Samples collected by skilled staff
- Highest quality equipment
- Greater reliability
- High throughput

Leading Assay Technologies in Use:

Virus detection:

RT-PCR

Isothermal amplification

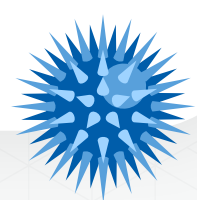**CRISPR based assay**

Antibody detection:

ELISA

Lateral flow immunoassay

Chemiluminescent immunoassay

Antigen detection:

Lateral flow immunoassay

Virus and antibody tests listed are those approved by the FDA as of 5/4/20.