

# GET TO KNOW ANTIGEN TESTING

Antigen tests rapidly detect the **presence of an infectious agent** in a patient.



A protein on the surface of a pathogen (bacteria, virus, etc.) that causes the immune system to produce antibodies, protecting the body from future infections.

## WHAT CAN ANTIGEN TESTS TELL US?

Whether a specific pathogen is present in a patient sample.



Results are faster than molecular diagnostics, but **generally less sensitive**—interpretation is critical.

## WHEN CAN AN ANTIGEN TEST BE USED?

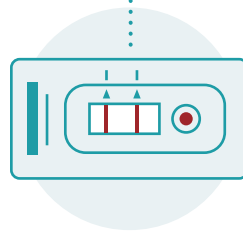


When **bringing tests to people** expands access.



When **quickly screening people** for infections supports care.

- Underserved and/or rural/remote communities or clinics
- Point-of-care detection, such as at airports or urgent care centers



- High-risk populations who may need further confirmatory testing
- Health departments tasked with tracking diseases in communities

## WHAT ARE THE LIMITATIONS OF ANTIGEN TESTS?

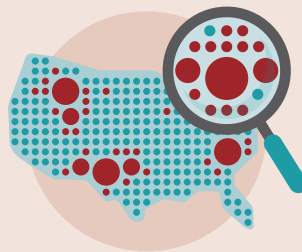
Sensitivity of the test may be low so higher chance of false negative results, especially in asymptomatic people.

### Antigen tests must be understood in context



#### Individual contexts

Exposure history, symptoms



#### Community context

Frequency of the target condition in a population



#### Situational context

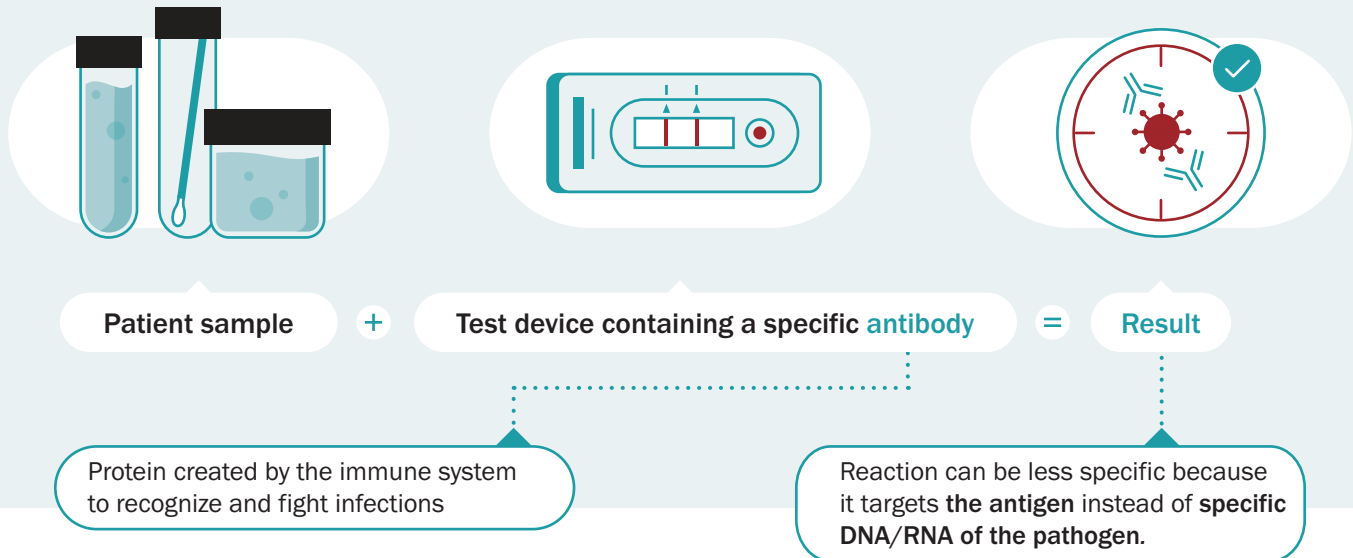
Time of year, time from illness onset

**A POSITIVE ANTIGEN RESULT ALLOWS FOR QUICK INTERVENTION AND LIKELY DOES NOT REQUIRE FURTHER TESTING, BUT IN HIGH-RISK SCENARIOS NEGATIVE RESULTS LIKELY WARRANT CONFIRMATORY TESTING.**

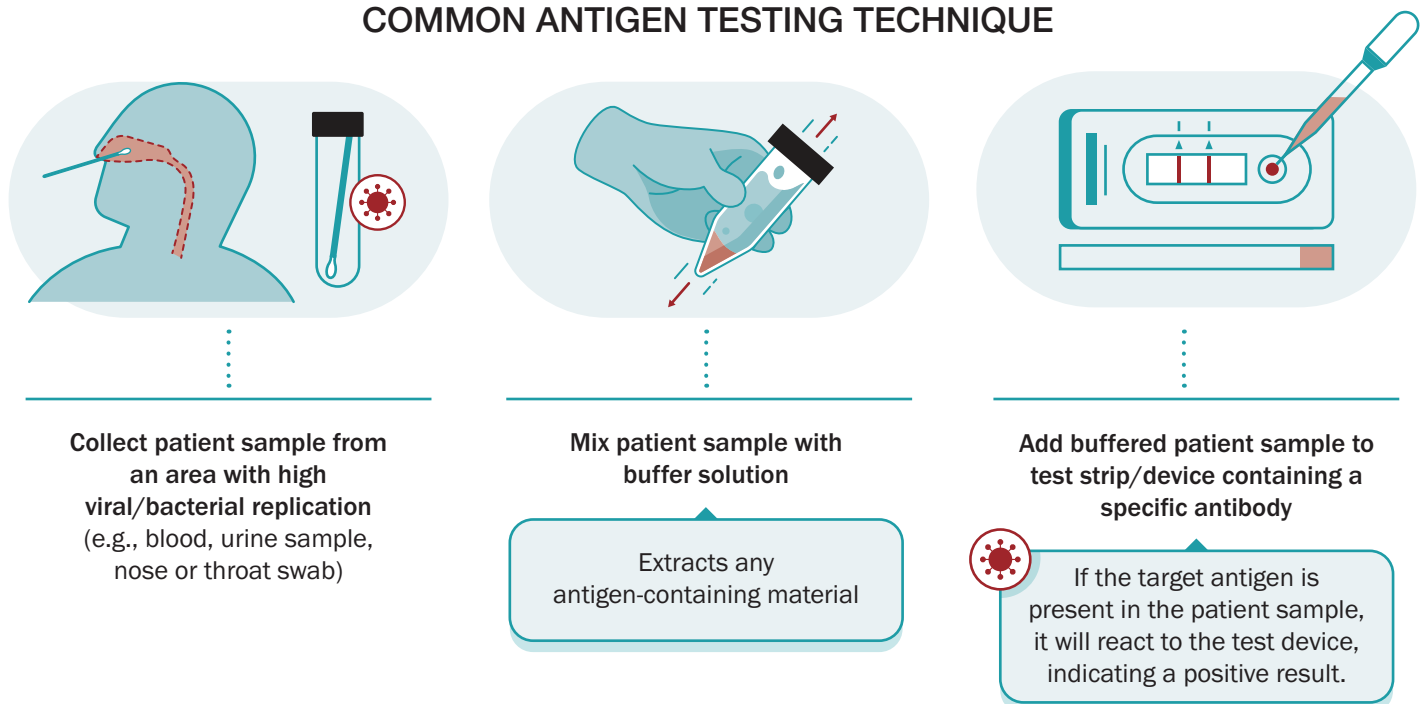
# A CLOSER LOOK: HOW ANTIGEN TESTS WORK

Antigen tests use a test device to quickly detect pathogens (e.g., bacteria, viruses, parasites, fungi) in a patient sample.

## THESE TESTS MIMIC AN IMMUNE RESPONSE TO SHOW WHETHER A PATHOGEN IS PRESENT



## COMMON ANTIGEN TESTING TECHNIQUE



### ASSOCIATION OF PUBLIC HEALTH LABORATORIES

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#### Sources:

- Roche: <https://diagnostics.roche.com/us/en/article-listing/how-are-pcr-antigen-covid19-tests-different.html>
- World Health Organization: [www.who.int/srilanka/news/detail/09-11-2020-who-supplies-rapid-antigen-detection-tests-for-covid-19-response](http://www.who.int/srilanka/news/detail/09-11-2020-who-supplies-rapid-antigen-detection-tests-for-covid-19-response)

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