

Notable Updates for COVID-19

August 2022

FACT SHEET: Rapid COVID-19 Self-Tests

Diagnostic Covid-19 Testing¹²

Timely and accurate diagnostic testing for COVID-19 is an essential part of a comprehensive COVID-19 response. The increasing transmissibility of each COVID-19 variant has led to record outbreaks. Each outbreak puts a new strain on the health care system as more and more people require testing and care.

There are two types of tests currently used to diagnose COVID-19: detection of COVID-19 RNA through RT-PCR (reverse transcription polymerase chain reaction) tests and detection of viral antigens or proteins through lateral flow immunoassays, commonly called Ag-RDTs (rapid diagnostic tests). PCR tests are performed at health care facilities, require a centralized laboratory, and take a few hours to days to result. RDTs have high diagnostic accuracy, are less expensive, are available as point of care tests that can be performed in any location, and typically results in 10-15 minutes.

Self-Testing

Self-tests for COVID-19 are RDTs that can be taken anywhere and without medical personnel. Early, rapid testing gives symptomatic patients the opportunity to seek medical care and start treatment as soon as possible. COVID-19 self-testing uses an Ag-RDT for individuals to collect their own specimen, perform a simple rapid test, and interpret their test results immediately. Self-tests can be used at home or in a clinical setting. Self-testing offers a reliable, fast, decentralized, and less-expensive testing option. This test is most accurate when performed within 5 days of symptom onset.

How to use a Self-Test

There are currently over 10 different COVID RDTs for self testing. Each COVID self-testing kit is slightly different. Please encourage patients to read the manufacturer's instructions for accurate test results.



To use the test, the patient will collect a nasal specimen with a swab and apply it to the testing kit. Typically, they will wait 10-15 minutes before the results should be interpreted.



To communicate accurate test results to health care teams or others, they should take a picture of the test at the specified time.

<https://www.youtube.com/watch?v=oBrf5BXk>

¹ CDC Overview of Testing for SARS-COV-2 <https://www.cdc.gov/coronavirus/2019-ncov/hcp/testing-overview.html>

² WHO Guidelines: Ag-RDT for COVID-19 Self-Testing https://www.who.int/publications/i/item/WHO-2019-nCoV-Ag-RDTs-Self_testing-2022.1

Current Guidance for Positive Self-Test Results:

The WHO currently recommends that patients who test positive with a self-test record their results by taking a picture of the positive test kit and seek care at the closest COVID clinic.

Efficacy of Self Tests

Evidence on the effectiveness of COVID-19 Self-testing was derived from two systematic reviews and additional data from LMIC. COVID Self-testing was found to achieve diagnostic accuracy similar to RDT testing performed by health professionals. Self-testing was also shown to be feasible to implement in a range of settings and would reduce existing inequalities in testing access. The WHO strongly recommends Self-testing as an additional testing approach.

Results Interpretation

RDTs and PCR tests are both highly specific for COVID-19 meaning they have a low rate of false positive results. If someone tests positive on a rapid test, they definitely have COVID and should seek care immediately. If someone presents to a health care facility with a positive Self Test, they **do not** require another confirmatory test but should simply be treated as appropriate for their symptoms and disease severity.

RDTs are slightly less sensitive than PCR tests and have a higher rate of false negative tests. This means negative results on a Self Test should be treated as preliminary results and an active COVID-19 infection has **not** been ruled out. False negative results are more likely in patients who test early and have a low viral load. The WHO recommends any patient who is experiencing symptoms continue standard infection prevention practices and re-test themselves 24-48 hours later. Re-testing can be performed through Self-testing or by a professional. Symptomatic patients who test negative should also be counseled to seek testing for other illnesses and advised on where and how to access care.

RISE Project Overview

Reaching Impact, Saturation, and Epidemic Control (RISE) is a 5-year global project funded by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and the U.S. Agency for International Development (USAID) which works with countries to achieve a shared vision of attaining and maintaining epidemic control, with stronger local partners capable of managing and achieving results through sustainable, self-reliant, and resilient health systems by 2024.

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