

IPCRG practice driven answers on COVID-19 and respiratory questions



What is the most appropriate test to diagnose COVID-19 in an individual presenting with suggestive symptoms?

What the research says

Diagnostic testing for COVID-19 includes:

Clinical situation	Appropriate test	Testing for	Sensitivity (to identify disease)	Specificity (to identify no disease)	Clinical sample	Time to result
Symptomatic individual	Laboratory-based DNA amplification	Presence of viral RNA	High	High	Nasopharyngeal/ oropharyngeal swab	15 minutes to >2 days*
	Laboratory-based antigen testing	Presence of viral antigens	Moderate	High	Nasopharyngeal/ oropharyngeal swab	15 minutes to >2 days*
	Lateral flow (point-of-care) test	Presence of viral antigens	Low to moderate**	High	Nasopharyngeal/ oropharyngeal swab or finger prick blood sample	15–30 minutes

*Dependent on local laboratory capacity

**Dependent on factors such as for how long somebody has been infected

Antibody testing can be used to indicate past infection, but is not an indicator of current infection.

What this means for your clinical practice

- Confirmation of a suspected diagnosis of COVID-19 infection requires a positive laboratory-based DNA- or antigen-based test. Where laboratory testing is not an option, point-of-care testing can be utilised using a lateral flow test although there is a higher risk of a false negative result.

WHO. Advice on the use of point-of-care immunodiagnostic tests for COVID-19.

Available at: <https://www.who.int/news-room/commentaries/detail/advice-on-the-use-of-point-of-care-immunodiagnostic-tests-for-covid-19>. Accessed October 2020.

Useful links and supporting references

Centers for Disease Control and Prevention. Using Antigen Tests. December 2020.

Available at:

<https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/antigen-tests-guidelines.html>. Accessed August 2021.

European Centre for Disease Prevention and Control. Diagnostic testing and screening for SARS-CoV-2. Available at:

<https://www.ecdc.europa.eu/en/covid-19/latest-evidence/diagnostic-testing>.

Accessed October 2020.

Green K, et al. What tests could potentially be used for the screening, diagnosis and monitoring of COVID-19 and what are their advantages and disadvantages. Available at:

<https://www.cebm.net/covid-19/what-tests-could-potentially-be-used-for-the-screening-diagnosis-and-monitoring-of-covid-19-and-what-are-their-advantages-and-disadvantages/>. Accessed August 2021.

Last reviewed: 09 Feb 2021

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