



YOUR QUESTION

When should broader community testing be implemented?

What is the best evidence currently?

Any suspected case should be tested for infection with COVID-19. A suspected case is:

- a patient with acute respiratory illness — that is, fever and at least one sign or symptom of respiratory disease: eg cough or shortness of breath; AND with no other etiology that fully explains the clinical presentation; AND a history of travel to or residence in a country, area or territory that has reported local transmission of COVID-19 disease during the 14 days prior to symptom onset
- a patient with any acute respiratory illness; AND who has been a contact of a confirmed or probable case of COVID-19 disease during the 14 days prior to the onset of symptoms
- a patient with severe acute respiratory infection — that is, fever and at least one sign or symptom of respiratory disease: eg cough or shortness of breath; AND who requires hospitalization; AND who has no other etiology that fully explains the clinical presentation

Major recommendations for countries with imported cases and/or outbreaks of COVID-19 include:

- Immediately activate the highest level of national response management protocols to ensure the all-of-government and all-of-society approach needed to contain COVID-19 with non-pharmaceutical public health measures
- Prioritize active, exhaustive case finding and immediate testing and isolation, painstaking contact tracing and rigorous quarantine of close contacts
- Fully educate the general public on the seriousness of COVID-19 and their role in preventing its spread
- Immediately expand surveillance to detect COVID-19 transmission chains, by testing all patients with atypical pneumonias, conducting screening in some patients with upper respiratory illnesses and/or recent COVID-19 exposure, and adding testing for the COVID-19 virus to existing surveillance systems (eg systems for influenza-like illness and SARI);
- Conduct multi-sector scenario planning and simulations for the deployment of even more stringent measures to interrupt transmission chains as needed: eg the suspension of large-scale gatherings and the closure of schools and workplaces.

The CDC notes that the decision to test for SARS-CoV-2 should be based on clinical judgment and reminds clinicians that most patients with confirmed COVID-19 have fever and/or symptoms of acute respiratory illness: eg cough, dyspnoea. This guidance expands its previous criteria to potentially include a wider group of symptomatic patients. In areas where testing capacity is limited, public health officials can guide prioritization of testing. The CDC suggests prioritizing hospitalized patients to inform infection control decisions, symptomatic individuals who have a higher risk of poor outcomes – eg age ≥ 65 years, chronic medical condition, immunocompromising conditions – and those with high exposure risk: eg recent travel to specific locations, contact with patients with COVID-19, or being a health care worker.



SOURCES^{1*}

Produced by the members of the National Health Library and Knowledge Service Evidence Team.[†] Current as at 23 March 2020. This rapid evidence review collates the best available evidence at the time of writing. Emerging literature or subsequent developments in respect of COVID-19 may require amendment to the information or sources listed in the document. Although all reasonable care has been taken in the compilation of content, the National Health Library and Knowledge Service Evidence Team makes no representations or warranties expressed or implied as to the accuracy or suitability of the information or sources listed in the document. This evidence summary is the property of the National Health Library and Knowledge Service and subsequent re-use or distribution in whole or in part should include acknowledgement of the service.

The following PICO(T) was used as a basis for the evidence summary:

P Population person location condition/patient characteristic	COVID-19
I Intervention length location type	COMMUNITY TESTING
C Comparison another intervention no intervention location of the intervention	
O Outcome	DIAGNOSIS. INFECTION CONTROL. EFFICIENT USE OF HEALTHCARE RESOURCES.

The following search strategy was used:

(COVID-19 OR coronavirus OR "corona virus" OR "Wuhan virus" OR "2019-nCoV" OR "2019 nCoV" OR "SARS-CoV2") AND test*

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* World Health Organization. [https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-\(2019-ncov\)](https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov)). World Health Organization. <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf>. Centres for Disease Control and Prevention. <https://emergency.cdc.gov/han/2020/han00429.asp>. UpToDate. <https://www.uptodate.com/contents/coronavirus-disease-2019-covid-19>.