The following information resources have been selected by the National Health Library and Knowledge Service Evidence Virtual Team in response to your question. The resources are listed in our estimated order of relevance to practicing healthcare professionals confronted with this scenario in an Irish context. In respect of the evolving global situation and rapidly changing evidence base, it is advised to use hyperlinked sources in this document to ensure that the information you are disseminating to the public or applying in clinical practice is the most current, valid and accurate.

**YOUR QUESTION**
When should broader community testing be implemented?

**What does the World Health Organization say?**

**Global Surveillance for Human Infection with Novel Coronavirus Disease**

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 breath; AND who requires hospitalization; AND who has no other etiology that fully explains the clinical presentation

Case definitions from the World Health Organization are found in its Technical Guidance section.


Under Section 4 “Major Recommendations for Countries with Imported Cases and/or Outbreaks of COVID-19” . . .

- 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.

---


What do the Centres for Disease Control and Prevention (United States) say?


Clinicians should use their judgment to determine if a patient has signs and symptoms compatible with COVID-19 and whether the patient should be tested. Most patients with confirmed COVID-19 have developed fever and/or symptoms of acute respiratory illness: eg cough, difficulty breathing. Priorities for testing may include: Hospitalized patients who have signs and symptoms compatible with COVID-19 in order to inform decisions related to infection control. Other symptomatic individuals such as older adults (age ≥ 65 years) and individuals with chronic medical conditions and/or an immunocompromised state that may put them at higher risk for poor outcomes (eg diabetes, heart disease, receiving immunosuppressive medications, chronic lung disease, chronic kidney disease). Any persons including healthcare personnel, who within 14 days of symptom onset had close contact with a suspect or laboratory-confirmed COVID-19 patient, or who have a history of travel from affected geographic areas within 14 days of their symptom onset. There are epidemiologic factors that may also help guide decisions about COVID-19 testing. Documented COVID-19 infections in a jurisdiction and known community transmission may contribute to an epidemiologic risk assessment to inform testing decisions. Clinicians are strongly encouraged to test for other causes of respiratory illness (eg influenza).

What does UpToDate say?

**Coronavirus Disease 2019 (COVID-19)**

… from section “Evaluation and Diagnosis”

Specific case definitions and clinical criteria for pursuing diagnostic evaluation differ slightly between expert groups. 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.

---

3 https://emergency.cdc.gov/han/2020/han00429.asp.
The following PICO(T) was used as a basis for the evidence summary:

<table>
<thead>
<tr>
<th>Population</th>
<th>Intervention</th>
<th>Comparison</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVID-19</td>
<td>TESTING</td>
<td></td>
<td>OPTIMAL PATIENT OUTCOME. CONTAINMENT OF INFECTION. EFFICIENT USE OF HEALTHCARE RESOURCES.</td>
</tr>
</tbody>
</table>

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*