

Global surveillance for COVID-19 disease caused by human infection with the 2019 novel coronavirus

Interim guidance
27 February 2020



Background

This document summarizes WHO's revised guidance for global surveillance of COVID-19 disease caused by infection with the 2019 novel coronavirus. WHO will continue to update this guidance as new information about COVID-19 disease becomes available.

Updated information about COVID-19 disease and other guidance documents can be found at <https://www.who.int/health-topics/coronavirus>.

Purpose of this document

This document provides guidance to Member States on implementing global surveillance for COVID-19 disease.

Objectives of the surveillance

The objectives of this global surveillance are to:

1. monitor trends in the disease where human-to-human transmission occurs;
2. rapidly detect new cases in countries where the virus is not circulating;
3. provide epidemiological information to conduct risk assessments at the national, regional and global levels;
4. provide epidemiological information to guide preparedness and response measures.

Case definitions for surveillance

The case definitions are based on current information and will be revised as new information is collected. Countries may need to adapt case definitions depending on their own epidemiological situation.

Suspected case

A suspected case is:

A. a patient with acute respiratory illness (that is, fever and at least one sign or symptom of respiratory disease, for example, 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 (for updated reporting, see the situation reports at <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/>);

OR

B. 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 (see the definition of contact below);

OR

C. a patient with severe acute respiratory infection (that is, fever and at least one sign or symptom of respiratory disease, for example, cough or shortness breath) **AND** who requires hospitalization **AND** who has no other etiology that fully explains the clinical presentation.

Probable case

A probable case is a suspected case for whom the report from laboratory testing for the COVID-19 virus is inconclusive.

Confirmed case

A confirmed case is a person with laboratory confirmation of infection with the COVID-19 virus, irrespective of clinical signs and symptoms.

Technical guidance for laboratory testing can be found at <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/laboratory-guidance>.

Recommendations for follow-up of contacts

Definition of contact

A contact is a person who is involved in any of the following within 14 days after the onset of symptoms in the patient:

- providing direct care for patients with COVID-19 disease without using proper personal protective equipment;¹
- staying in the same close environment as a COVID-19 patient (including sharing a workplace, classroom or household or being at the same gathering);
- travelling in close proximity with (that is, having less than 1 m separation from) a COVID-19 patient in any kind of conveyance.

Recommendations for laboratory testing

Any suspected case should be tested for infection with the COVID-19 virus using a molecular test. However, it is possible to test only a subset of suspected cases, depending on the intensity of the transmission, the number of cases and laboratory capacity.

If resources allow, testing may be done more broadly (for instance, through sentinel surveillance) to better assess the full extent of the circulation of the virus.

Based on clinical judgment, clinicians may opt to order a test for the COVID-19 virus in a patient who does not strictly meet the case definition, for example, if there is acute respiratory illness among a cluster of health care workers or severe acute respiratory infection or pneumonia in families, workplaces or social networks.

Recommendations for reporting surveillance data to WHO

Case-based reporting

WHO requests that national authorities report probable and confirmed cases of novel coronavirus infection (COVID-19 disease) **within 48 hours** of identification by providing the minimum data set outlined in the [revised case report form for confirmed novel coronavirus COVID-19](#) through their National Focal Point and the Regional Contact Point for International Health Regulations (2005) at the appropriate WHO regional office. [A template for the revised line listing in Excel format](#) and the [data dictionary](#), which suggests names for the variables and their specifications, are available.

If the patient's outcome is not available at the time of the first report, an **update of the report** should be provided as soon as outcome information is available, and this should be **within 30 days** of the first report, at the latest.

¹ For information about infection prevention and control and the use of personal protective equipment, see <https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-%28ncov%29-infection-is-suspected-20200125>.

Case-based data reporting is requested as long as it is feasible for the country. When it is not feasible to report case-based data, countries are requested to provide daily and weekly aggregated data.

Daily aggregated data

WHO requests reporting of the number of new confirmed cases and deaths by the first administrative level (for example, region, province, state, municipality).

Weekly aggregated data

The aggregated data to be reported weekly are the:

- number of new confirmed cases, that is, patients who tested positive for infection with the COVID-19 virus;
- number of new probable cases, that is, patients with an inconclusive laboratory test result;
- number of new deaths due to COVID-19 disease;
- number of new COVID-19 cases that were hospitalized;
- number of new COVID-19 cases treated with mechanical ventilation or extracorporeal membrane oxygenation or admitted to an intensive care unit;
- number of new cases and new deaths by age group in years using the groups 0 to <2, 2 to <5, 5 to <15, 15 to <50, 50 to <65 and ≥65 years, or similar;
- cumulative sex ratios of confirmed cases and deaths;
- total number of laboratory tests conducted;
- total number of tests that were positive for the virus that causes COVID-19; and
- if possible, the number of contacts being followed up and the number of newly identified contacts.

Procedures to report these data to WHO are similar to those implemented for case-based reporting.

Recommendations for specimen collection

Specimens from the lower respiratory tract likely have a higher diagnostic value for detecting COVID-19 infection than those from the upper respiratory tract. WHO recommends that specimens from the lower respiratory tract, such as sputum, endotracheal aspirate, or from bronchoalveolar lavage, be collected for testing when possible. If patients do not have signs or symptoms of lower respiratory tract disease or if specimen collection for lower respiratory tract disease is clinically indicated but collection is not possible, upper respiratory tract specimens, such as a nasopharyngeal aspirate or combined nasopharyngeal and oropharyngeal swabs, should be collected.

If initial testing is negative in a patient who is strongly suspected to have COVID-19 infection, specimens should be collected again from multiple respiratory tract sites (such as the nose) and should also include sputum and endotracheal aspirate. Additional specimens may be collected, such as blood, urine and stool, to monitor the presence of virus and shedding of virus from different body compartments.

Full details about laboratory testing for the COVID-19 virus can be found at <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/laboratory-guidance>.

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WHO reference number: [WHO/2019-nCoV/SurveillanceGuidance/2020.4](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/laboratory-guidance)