

Global surveillance for COVID-19 caused by human infection with COVID-19 virus

Interim guidance
20 March 2020



Background

This document summarises current WHO guidance on global surveillance for COVID-19 in humans, caused by infection with COVID-19 virus. This guidance should be read in conjunction with WHO's guidance on [preparedness, readiness and response activities](#), which strongly recommends active case finding and testing as well as contact tracing in all transmission scenarios. Aggregate reporting should be considered a temporary stop-gap measure only when individual case reporting is not possible. WHO will continue to update this guidance as new information about COVID-19 becomes available.

Updated information and other guidance on COVID-19 can be found on the WHO [COVID-19 website](#).

What is new:

- Updated case definition for a probable case
- Definition of transmission pattern
- Revision of the definition of a contact
- Update on global surveillance with aggregated data reporting

Purpose of this document

This document provides guidance to Member States on implementation of global surveillance for COVID-19.

Objectives of the surveillance

The objectives of the global surveillance are to:

1. Monitor trends in COVID-19 disease at national and global levels.
2. Rapidly detect new cases in countries where the virus is not circulating, and monitor cases in countries where the virus has started to circulate.
3. Provide epidemiological information to conduct risk assessments at the national, regional and global level.
4. Provide epidemiological information to guide preparedness and response measures.

Case definitions for surveillance

Case and contact definitions are based on the current available information and are regularly revised as new information accumulates. Countries may need to adapt case definitions depending on their local epidemiological situation and other factors. All countries are encouraged to publish definitions used online and in regular situation reports, and to document periodic updates to definitions which may affect the interpretation of surveillance data.

Suspect case

A. A patient with acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath), AND a history of travel to or residence in a location reporting community transmission of COVID-19 disease during the 14 days prior to symptom onset;

OR

B. A patient with any acute respiratory illness AND having been in contact with a confirmed or probable COVID-19 case (see definition of contact) in the last 14 days prior to symptom onset;

OR

C. A patient with severe acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath; AND requiring hospitalization) AND in the absence of an alternative diagnosis that fully explains the clinical presentation.

Probable case

A. A suspect case for whom testing for the COVID-19 virus is inconclusive.¹

OR

B. A suspect case for whom testing could not be performed for any reason.

Confirmed case

A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

See laboratory guidance for details: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/laboratory-guidance>

Contact

A contact is a person who experienced any one of the following exposures during the 2 days before and the 14 days after the onset of symptoms of a probable or confirmed case:

1. Face-to-face contact with a probable or confirmed case within 1 meter and for more than 15 minutes;
2. Direct physical contact with a probable or confirmed case;
3. Direct care for a patient with probable or confirmed COVID-19 disease without using proper personal protective equipment; ²OR
4. Other situations as indicated by local risk assessments.

Note: for confirmed asymptomatic cases, the period of contact is measured as the 2 days before through the 14 days after the *date on which the sample was taken* which led to confirmation.

Classification of transmission scenarios

WHO recommends using the following categories to describe transmission patterns at national and sub-national levels (wherever possible) to guide decisions for [preparedness, readiness and response activities](#).

Table 1: Definition of the categories for transmission pattern

Category number	Category name	Definition
1	No cases	Countries/territories/areas with no cases
2	Sporadic cases	Countries/territories/areas with one or more cases, imported or locally detected
3	Clusters of cases	Countries/territories/areas experiencing cases, clustered in time, geographic location and/or by common exposures
4	Community transmission	Countries/area/territories experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: <ul style="list-style-type: none"> - Large numbers of cases not linkable to transmission chains - Large numbers of cases from sentinel lab surveillance - Multiple unrelated clusters in several areas of the country/territory/area

Recommendations for laboratory testing

Any persons meeting the criteria for testing should be tested for COVID-19 infection using [available molecular tests](#). However, depending on the intensity of the transmission, the number of cases and the laboratory capacity, only a subset of the suspect cases may be prioritized for testing.

¹ Inconclusive being the result of the test reported by the laboratory.

² World Health Organization. Infection prevention and control during health care when COVID-19 is suspected

During community transmission WHO recommends prioritizing persons to be tested as indicated in the WHO [global testing strategy for COVID-19](#).

To monitor the full extent of the circulation of the virus in the general population, WHO recommends implementing testing for COVID-19 via existing national sentinel surveillance sites for influenza-like illness (ILI) and severe acute respiratory infection (SARI). Guidance will be made available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/surveillance-and-case-definitions>

Recommendations for reporting surveillance data to WHO

National authorities may use either case-based reporting or aggregate reporting. In some circumstances, such as countries with areas experiencing different transmission patterns, a combination of both case-based and aggregate reporting could be considered. The decision to use case-based or aggregate reporting should be based on the capacity of health authorities and the number of cases. National authorities may move from case-based to aggregate reporting as the number of cases increases, and then back to case-based as the number of cases decreases.

Case-based reporting:

WHO requests that national authorities report probable and confirmed cases of COVID-19 infection within 48 hours of identification, by providing the minimum data set outlined in the “Revised case reporting form for 2019 Novel Coronavirus of confirmed and probable cases” through the National Focal Point and the Regional Contact Point for International Health Regulations at the appropriate WHO regional office. A template for the revised line listing in Excel format with a data dictionary is available. If the outcome of the patient is not yet available at first reporting, an update of the line list should be provided as soon as outcome data becomes available, within 30 days of the first report.

Reporting of case-based data through the case report form is requested while the Ministry of Health is maintaining a case-based surveillance. When it is no longer feasible to report case-based data, countries are requested to provide aggregated data for surveillance.

Aggregated reporting

For all countries to understand the epidemiology and trends of COVID-19, all Member States are requested to provide the following minimum set of aggregate counts, once weekly.

At national level:

- Weekly number of new confirmed cases
- Weekly number of new confirmed case deaths from COVID-19
- Weekly number of new confirmed cases hospitalised due to COVID-19 disease
- Weekly number of confirmed cases discharged
- Weekly number of persons tested for COVID-19
- Weekly number of new confirmed cases by age-group in years (using: 0-<5, 5-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, 85 and above, age missing)
- Proportion of males among the new confirmed cases – calculated as the number of new confirmed cases in males, divided by the total new confirmed cases for which sex is known
- Weekly number of new confirmed case deaths by age-group in years (using: 0-<5, 5-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, 85 and above, age missing)
- Proportion of males among the new confirmed case deaths – calculated as the number of new confirmed case deaths in males, divided by the total new confirmed case deaths for which sex is known

At subnational level:

- Transmission pattern by administrative level 1 as self-assessed by the Member State

Note: if it is not possible to assess transmission classification at administrative level 1, Member States should assign their highest level of transmission classification in any one area to the entire country.

Country meta-data:

Member States are encouraged to provide two types of meta-data:

1. Case definitions used by the country, provided once at start of reporting. Countries are further requested to notify any changes to case definitions, and the date these definitions came into effect.
2. The Epidemiological reporting week used by the country (i.e. Monday to Sunday, Sunday to Saturday, or Sunday to Thursday).

Countries are additionally requested to share national situation reports at whatever frequency they are produced.

Member State Self-Reporting Platform

The designated national authority is asked to provide data directly to the self-reporting platform, which will be publicly available without editing or filtering by WHO. Aggregate data will be made available to all Member States and the wider general public through the WHO website, may be pooled with other data to inform international response operations, and periodically published in WHO situation updates and other formats for the benefit of all Member States. Member states can self-report their data in two ways:

- Upload an Excel file directly into the system
- Manually enter data using the submission platform provided

All tools and further instructions for data submission are available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/surveillance-and-case-definitions>

WHO continues to monitor the situation closely for any changes that may affect this interim guidance. Should any factors change, WHO will issue a further update. Otherwise, this interim guidance document will expire 2 years after the date of publication.

© World Health Organization 2020. Some rights reserved. This work is available under the [CC BY-NC-SA 3.0 IGO](https://creativecommons.org/licenses/by-nc-sa/3.0/) licence.

WHO reference number: WHO/2019-nCoV/SurveillanceGuidance/2020.6