

Global Surveillance for human infection with novel coronavirus (2019-nCoV)

Interim guidance

31 January 2020



Background

This document summarizes WHO's interim guidance for global surveillance of novel coronavirus infection (2019-nCoV). WHO will continue to update this guidance as new information about 2019-nCoV becomes available.

Updated information about 2019-nCoV can be found here along with other guidance documents:

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>, and surveillance-related tools at [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))

Purpose of this document

This document provides guidance to Member States on implementation of global surveillance of 2019-nCoV.

Objectives of the surveillance

The objectives of this global surveillance are:

1. Monitor trends of the disease where human to human and/or zoonotic transmission occurs
2. Rapidly detect new cases in countries where the virus is not circulating
3. Provide epidemiological information to conduct risk assessment at the national, regional and global level
4. Provide epidemiological information to guide response measures

Case definitions for surveillance

The case definitions are based on the current information available and might be revised as new information accumulates. Countries may need to adapt case definitions depending on their own epidemiologic situation.

Suspect case

A. Patient with severe acute respiratory infection (fever, cough, and requiring admission to hospital), AND with no other etiology that fully explains the clinical presentation AND a history of travel to or residence in China during the 14 days prior to symptom onset,

OR

B. Patient with any acute respiratory illness AND at least one of the following during the 14 days prior to symptom onset:

- a) contact with a confirmed or probable case of 2019-nCoV infection, **or**
- b) worked in or attended a health care facility where patients with confirmed or probable 2019-nCoV acute respiratory disease patients were being treated.

Probable case

Probable case: A suspect case for whom testing for 2019-nCoV is inconclusive¹ or is tested positive using a pan-coronavirus assay and without laboratory evidence of other respiratory pathogens.

Confirmed case

A person with laboratory confirmation of 2019-nCoV infection, irrespective of clinical signs and symptoms.

WHO Laboratory guidance is available:

<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 involved in any of the following:

- Providing direct care for 2019-nCoV patients, working with health care workers infected with novel coronavirus, visiting patients or staying in the same close environment of a 2019-nCoV patient.
- Working together in close proximity or sharing the same classroom environment with a 2019-nCoV patient
- Traveling together with 2019-nCoV patient in any kind of conveyance
- Living in the same household as a 2019-nCoV patient within a 14-day period after the onset of symptoms in the case under consideration.

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

Monitoring of contacts of probable and confirmed cases (annex 1)

- Contacts should be monitored for 14 days from the last unprotected contact.
- Contacts should self-limit travel and movements. Monitoring by public health authorities can be done through household or virtual visits or by telephone to check for symptoms.
- Any contact who becomes ill and meets the case definition becomes a suspect case and should be tested.
- Any newly identified probable or confirmed cases should have their own contacts identified and monitored.

Recommendations for laboratory testing

Any suspected case should be tested. However, depending on the intensity of the transmission, the number of cases and the laboratory capacity, only a randomly selected sample of the suspect cases may be tested.

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 in a patient not strictly meeting the case definition, such as for a cluster of acute respiratory illness among healthcare workers.

Recommendations for reporting surveillance data to WHO

Minimum Reporting:

WHO requests that national authorities report probable and confirmed cases of novel coronavirus infection **within 24 hours** of identification, by providing the minimum data set outlined in the "[Interim 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 line listing in Excel format](#) with the [data dictionary](#), which suggests the name of the variables and their specifications is available.

Countries with extensive importation or human-to-human transmission:

Daily aggregated data

WHO requests reporting of the number of new confirmed and probable cases and deaths by first administrative level (e.g. region, province, state, municipalities) if possible.

In order to monitor closely the epidemiology of the 2019-nCoV infections, such as the severity of the disease over time and among age -groups, MS are requested to share weekly the following information:

Weekly aggregated data:

- Cumulative number of cases and deaths since onset of outbreak;
- Weekly number of reported cases, deaths, hospitalized and severe cases;
- Weekly number of cases, death, hospitalised, severe cases by age-group in year (using: 0-4, 5-14, 15-24, 25-59 and greater to or equal 60; or similar) and sex.
- Total number of laboratory tests conducted and that are positive for 2019-nCoV
- If possible, number of contacts under follow-up and number of new identified contacts

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

Recommendations for specimen collection

Lower respiratory specimens likely have a higher diagnostic value than upper respiratory tract specimens for detecting 2019-nCoV infection. WHO recommends that lower respiratory specimens such as sputum, endotracheal aspirate, or bronchoalveolar lavage be collected for 2019-nCoV testing where possible. If patients do not have signs or symptoms of lower respiratory tract disease or specimen collection for lower respiratory tract disease is clinically indicated but the 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 novel coronavirus infection, the patient should be resampled and specimens collected from multiple respiratory tract sites (nose, sputum, endotracheal aspirate). Additional specimen may be collected such as blood, urine, and stool, to monitor the presence of virus and shedding of virus from different body compartments.

When serological assays become available, WHO recommends that a paired acute and convalescent sera for antibody detection should also be collected where possible.

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