

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

Interim guidance

21 January 2020

[WHO/2019-nCoV/SurveillanceGuidance/2020.3](https://www.who.int/2019-nCoV/surveillance-guidance/2020.3)



## 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/health-topics/coronavirus>

## Purpose of this document

This guidance is for global surveillance of 2019-nCoV for Member States and is intended to:

- help Member States adapt existing surveillance mechanisms or implement new surveillance mechanisms for 2019-nCoV.
- facilitate the reporting of 2019-nCoV cases to WHO for the purpose of global surveillance.

## Objectives

The objectives of this global surveillance guidance are to:

- Provide a mechanism for all Member States to report cases of 2019-nCoV to WHO
- Establish the basic epidemiological parameters of 2019-nCoV infection
  - Person, place, and time of cases
  - Basic clinical presentation (signs and symptoms)
  - Underlying conditions and co-morbidities
  - Patient clinical course, outcome and severity
  - Exposures and travel history

The information obtained for surveillance activities are also expected to inform national risk assessment and response decision making.

<sup>1</sup> clinicians should also be alert to the possibility of atypical presentations in patients who are immunocompromised;

<sup>2</sup>: Close contact<sup>1</sup> is defined as:

- Health care associated exposure, including providing direct care for nCoV patients, working with health care workers infected with novel coronavirus, visiting patients or staying in the same close environment as a nCoV patient.

## Case definitions for surveillance

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

### Suspect case

A. Patients with severe acute respiratory infection (fever, cough, and requiring admission to hospital), **AND** with no other etiology that fully explains the clinical presentation<sup>1</sup> **AND** at least one of the following:

- a history of travel to or residence in the city of Wuhan, Hubei Province, China in the 14 days prior to symptom onset, **or**
- patient is a health care worker who has been working in an environment where severe acute respiratory infections of unknown etiology are being cared for.

B. Patients with any acute respiratory illness **AND** at least one of the following:

- close contact<sup>2</sup> with a confirmed or probable case of 2019-nCoV in the 14 days prior to illness onset, **or**
- visiting or working in a live animal market in Wuhan, Hubei Province, China in the 14 days prior to symptom onset, **or**
- worked or attended a health care facility in the 14 days prior to onset of symptoms where patients with hospital-associated 2019-nCoV infections have been reported.

### Probable case

Probable case: A suspect case for whom testing for 2019-nCoV is inconclusive<sup>3</sup> or for whom testing was positive on a pan-coronavirus assay.

### Confirmed case

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

- Working together in close proximity or sharing the same classroom environment with a nCoV patient
- Traveling together with a nCoV patient in any kind of conveyance
- Living in the same household as a nCoV patient

The epidemiological link may have occurred within a 14-day period before or after the onset of illness in the case under consideration.

<sup>3</sup> Inconclusive being the result of the test reported by the laboratory.

Link for lab page: <https://www.who.int/health-topics/coronavirus/laboratory-diagnostics-for-novel-coronavirus>

## Recommendations for laboratory testing

Any suspected case should be tested. However, depending on the epidemiological situation and laboratory capacity, each country will need to adapt the testing strategy and eventually test more broadly to better assess the full extent of the circulation of the virus.

### 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 if 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.

### Surveillance for human infection with a novel coronavirus: Interim guidance

If initial testing is negative in a patient who is strongly suspected to have 2019-nCoV 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 of 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.

## Public Health Actions

### 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.

© World Health Organization 2020. All rights reserved. This is a draft. The content of this document is not final, and the text may be subject to revisions before publication. The document may not be reviewed, abstracted, quoted, reproduced, transmitted, distributed, translated or adapted, in part or in whole, in any form or by any means without the permission of the World Health Organization.