Surveillance case definitions for human infection with novel coronavirus (nCoV)

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This document summarizes WHO recommendations for surveillance of the novel coronavirus (nCoV) recently identified in Wuhan, China (2019-nCoV). WHO will update these recommendations as new information becomes available on the situation.

This interim guidance was adapted from WHO's guidance materials published for Middle East Respiratory coronavirus (MERS-CoV) and will be updated regularly.

Surveillance

Objectives of surveillance

The primary objectives of surveillance are to:

- 1. Detect cases/clusters of nCoV infection and any evidence of amplified or sustained human-to-human transmission;
- 2. Determine risk factors and the geographic risk area for infection with the virus.

Additional clinical and epidemiological investigations are needed to:

- 1. Determine key clinical characteristics of the illness, such as incubation period, spectrum of disease, and the clinical course of the disease.
- 2. Determine key epidemiological characteristics of nCoV infection, such as exposures that result in infection, risk factors, secondary attack rates, and modes of transmission.

The following people should be investigated and tested for nCoV infection

Case definitions for surveillance

 Severe acute respiratory infection (SARI) in a person, with history of fever and cough requiring admission to hospital, with no other etiology that fully explains the clinical presentation¹ (clinicians should also be alert to the possibility of atypical presentations in patients who are immunocompromised);

AND any of the following:

²Close contact' is defined as:



- a. a history of travel to or a person who lived in Wuhan, Hubei Province China in the 14 days prior to symptom onset; or
- b. the disease occurs in a health care worker who has been working in an environment where patients with severe acute respiratory infections are being cared for, without regard to place of residence or history of travel.
- 2. The person develops an unusual or unexpected clinical course, especially sudden deterioration despite appropriate treatment, without regard to place of residence or history of travel, even if another etiology has been identified that fully explains the clinical presentation.
- 3. A person with acute respiratory illness of any degree of severity who, within 14 days before onset of illness, had any of the following exposures:
 - a. close physical contact² with a confirmed case of nCoV infection; or
 - b. a healthcare facility in a country where hospitalassociated nCoV infections have been reported; or
 - c. visiting or working in a live animal market in Wuhan, China
 - d. [direct contact with animals (if animal source is identified) in countries where the nCoV is known to be circulating in animal populations or where human infections have occurred as a result of presumed zoonotic transmission.]³

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visiting patients or staying in the same close environment of a nCoV patient.

- Working together in close proximity or sharing the same classroom environment with a with nCoV patient
- Traveling together with 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.

³ To be added once/if animal source is identified as a source of infection

¹ Testing should be according to local guidance for management of community-acquired pneumonia. Examples of other etiologies include *Streptococcus pneumoniae, Haemophilus influenzae* type B, *Legionella pneumophila*, other recognized primary bacterial pneumonias, influenza viruses, and respiratory syncytial virus.

Health care associated exposure, including providing direct care for nCoV patients, working with health care workers infected with nCoV,