

7th Designated Infectious Disease

Novel coronavirus infection caused by beta-coronavirus has been reported by China to WHO in January 2020, with human to human transmission, has been officially designated as an infectious disease with the case reporting requirements as detailed in the law: "Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases Act", Article 12, paragraph 1.

(1) Definition

An acute respiratory syndrome caused by a beta-coronavirus in the Coronaviridae family has been reported by China to WHO in January 2020, with human to human transmission. This will henceforth be referred to as novel coronavirus.

(2) Clinical characteristics (as of February 2, 2020)

The source of the novel coronavirus, such as an animal host or reservoir, is currently unknown. Human to human transmission has been reported to occur due to contact, such as between family members or healthcare workers and patients. The first reported case in the novel coronavirus outbreak occurred in Wuhan city, Hubei Province in China in December 2019. Wuhan city is the center of the outbreak with the majority of cases reported from and originating from there since December 2019 to the present day. There has also been an increase in cases of novel coronavirus reported globally.

The clinical symptoms of novel coronavirus are:

- Incubation period is 2-10 days, followed by the onset of cold-like symptoms such as fever, cough, and general malaise.
- Additional symptoms include dyspnea or other severe symptoms that may present in 5-14 days after the initial infection occurred. This may present as an infiltrative shadow seen in chest x-rays and CT.
- Elderly patients and individuals who develop novel coronavirus infection with a comorbidity have a higher risk for severe complications.

(3) Reporting criteria

A) Symptomatic, lab-confirmed case:

Suspected cases of novel coronavirus with clinical symptoms, as described in section 2, should be tested based on the methods described in Table 1.

Physicians are advised to use Table 1 to collect the appropriate specimen type to be sent for laboratory testing. If a suspected symptomatic case is confirmed positive for novel coronavirus, the physician should immediately report the case to their designated Public Health Center, under the provisions of the “Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases Act”, Article 12, paragraph 1.

B) Asymptomatic, lab-confirmed case:

Suspected cases or cases under investigation for novel coronavirus without the clinical symptoms, as described in section 2, should be tested based on the methods described in Table 1. Physicians are advised to use Table 1 to collect the appropriate specimen type to be sent for laboratory testing. If a suspected asymptomatic case is confirmed positive for novel coronavirus, the physician should immediately report the case to their designated Public Health Center, under the provisions of the “Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases Act”, Article 12, paragraph 1.

C) Suspected Case, without laboratory confirmation:

If a suspected case of novel coronavirus meets the criteria found in section 2, as well as criteria found in section 4, physicians should immediately report the case to their designated Public Health Center, under the provisions of the “Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases Act”, Article 12, paragraph 1, even without laboratory confirmation.

D) Cause of Death: Infectious Disease, laboratory confirmed:

If the cause of death of a patient is suspected to be due to novel coronavirus infection, the physician is advised to use Table 1 to collect the appropriate specimen type to be sent for laboratory testing. If cause of death is laboratory confirmed to be due to novel coronavirus, the physician should immediately report the case to their designated Public Health Center, under the provisions of the “Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases Act”, Article 12, paragraph 1.

E) Suspected Cause of Death, without laboratory confirmation:

If the cause of death of a patient is suspected to be due to novel coronavirus infection, based on criteria found in section 2, as well as criteria found in section 4, physicians should immediately report the case to their designated Public Health Center, under the provisions of the “Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases Act”, Article 12, paragraph 1, even without laboratory confirmation.

Table 1: Recommended Laboratory Testing Methods for Novel Coronavirus

Laboratory Testing Method	Specimen Type
Confirmation of novel coronavirus based on virus isolation and identification	At least one of the following should be collected: <ul style="list-style-type: none"> • Sputum • Airway aspirate • Alveolar lavage • Pharyngeal swab • Nasal aspirate • Nasal swab • Autopsy material
PCR-based genetic confirmation of novel coronavirus from specimen	

(4) Clinical criteria for suspect case identification

Based on differential diagnosis, physicians can categorize a patient as a suspect case of novel coronavirus based on any one of the following criteria (A, B, C, or D), as long as other disease causes have been ruled out. If a physician strongly suspects a case of novel coronavirus, they are advised to report the case even if the criteria are not met.

A) Patient presents with a fever or respiratory symptoms (mild to severe), as well as a history of close contact with a confirmed novel coronavirus case.

- B) Patient presents with a fever ($\geq 37.5^{\circ}\text{C}$) and acute respiratory symptoms, in addition to having a history of travel to or residence near a WHO-reported outbreak area of novel coronavirus within 14 days before onset of symptoms.
- C) Patient presents with a fever ($\geq 37.5^{\circ}\text{C}$), acute respiratory symptoms, and a history of close contact with a person who traveled to or has residence near a WHO-reported outbreak area of novel coronavirus within 14 days before onset of symptoms.
- D) Patient presents with severe fever and respiratory symptoms that require ICU or ICU-like treatment, resulting in an inability for clear patient diagnosis, the physician should consider the patient a possible suspect case of coronavirus without laboratory confirmation, the suspected cases specified by Order of the Ministry of Health, Labour and Welfare under the provisions of the "Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases Act", Article 12, paragraph 1.

※ Criteria for close contact are as follows:

1. Contact with a suspected case of novel coronavirus such as sharing a residence or shared contact over a long period of time (ex. Travel by car, airplane)
2. Contact with a suspected case of novel coronavirus by a healthcare worker without the use of recommended protective measures (ex. Unprotected examination or provision of health care)
3. High possibility of having had direct contact with the body fluids of a suspected case of novel coronavirus without protective gear (ex. respiratory secretions)