

The Pan American Health Organization / World Health Organization (PAHO/WHO) recommends that Member States, in light of the possible occurrence of events related to the novel coronavirus (nCoV), ensure that health care workers have access to up to date information on the illness, be familiar with the principles and procedures for handling nCoV infections, and be trained to inquire about a patient's travel history in order to connect this information with clinical data. PAHO/WHO closely monitors the epidemiological evolution of the situation and will provide more detailed guidance when available.

PAHO/WHO does not recommend any screening at entry points regarding this event, nor any restrictions on travel or trade.

Situation Summary

On 31 December 2019, the Wuhan Municipal Health Commission in Hubei Province, People's Republic of China, reported a conglomerate of 27 cases of acute respiratory syndrome of unknown etiology among people linked to a wet market (of marine products) in Wuhan City (population of 19 million), capital of Hubei Province (population of 58 million), southeast of China; of which 7 were reported as severe.¹

The clinical picture of the cases presented with fever, with some patients presenting dyspnea and pneumonic changes on the chest x-rays (infiltrative lesions of the bilateral lung).

The affected market is the largest wholesale market for marine products for consumption in Wuhan, with more than 600 cages and 1,500 workers, and it was closed on 1 January 2020.

On 7 January 2020, the authorities of China reported that a novel coronavirus (nCoV) was identified as a possible etiology. Other tests have ruled out severe acute respiratory syndrome coronavirus (SARS-CoV), Middle East respiratory syndrome coronavirus (MERS-CoV), influenza, avian influenza, adenovirus, and other common viral or bacterial respiratory infections.²

As of 12 January 2020, 41 cases with nCoV infection have been preliminarily diagnosed in Wuhan City. Of the 41 cases reported, seven are seriously ill. On that date a death was reported in a patient with other underlying health conditions. Six patients have been discharged from the hospital. The onset of symptoms of the 41 confirmed cases of nCoV ranges between 8 December 2019 and 2 January 2020. No additional cases have been detected since 3 January 2020 in this area.³

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According to available information, there is no clear evidence of transmission from person to person. However, additional research is necessary to determine the modes of transmission, the common source of exposure, and the presence of asymptomatic or mildly symptomatic cases that are not detected. It is critical to review all available information to fully understand the possible transmissibility between humans.⁴

On 13 January 2020, the Thailand Ministry of Public Health reported the first laboratory confirmed nCoV case in the country related with Wuhan City, China. The case is a 61-year-old female resident of Wuhan City, Hubei Province, China, with the onset of symptoms (fever, chills, sore throat, and headache) on 5 January 2020, who traveled on a direct flight to Bangkok, Thailand from Wuhan.⁵ The case source of infection is being investigated.

On January 14, a medical institution in Kanagawa Prefecture, Japan reported a case of pneumonia in a person with history of travel to Wuhan City, Hubei Province, China. The patient sample was examined at the National Institute of Infectious Diseases (Murayama government office), identifying nCoV. It is the first time that domestic cases of pneumonia related to the new coronavirus have been confirmed in Japan.⁶

Public health response and risk assessment for the Americas

According to information released by the authorities of The People's Republic of China, an investigation led by a national team of experts began on 31 December 2019. Case isolation, identification, and follow-up of contacts and environmental sanitation were implemented according to the national protocol and laboratory research is ongoing.

There is uncertainty on the transmissibility and severity of the new pathogen, its epidemiology, laboratory tests, and control measures to allow a comprehensive risk assessment.

The World Health Organization (WHO) has prepared a series of technical documents on nCoV to support Member States. The information is available at: <https://www.who.int/health-topics/coronavirus>

Reports indicate that there is no evidence to suggest that person-to-person transmission occurs easily. This finding would be consistent with an animal reservoir pathogen. However, human-to-human transmission, included in the nosocomial environment, has been documented on a recurring basis for other emerging coronaviruses, such as SARS CoV and MERS-CoV.

It is probable that the information available to date shared by WHO about the appearance of this new coronavirus, will raise concerns in our Region. At the level of preparations, national authorities could review the actions considered in response to the spread of SARS CoV in 2003, adapting and / or adopting those that are proportionate to the current risk.

Recommendations

In light of this situation, PAHO/WHO encouraging Member States to strengthen surveillance activities to detect any unusual respiratory health event. Health professionals should be informed about the possibility of the occurrence of infection caused by this virus and the actions to be implemented in case of a suspected case.

International travelers

On 10 January 2020, WHO defined Wuhan City, Hubei Province, China as a nCoV affected area^{i,7} and currently, only a greater state of alert in the community of health professionals is warranted about patients presenting with acute respiratory syndrome and having: (i) a history of travel specifically to the city of Wuhan, and (ii) with a possible link to the marine products market in that city, or contact with patients with a link to the marine products market. While laboratory tests to identify nCoV infection would be warranted for such patients, in all other patients, including those with a history of travel to any place in China outside the city of Wuhan, influenza or other respiratory pathogens must first be ruled out (see laboratory recommendations).

Health practitioners and public health authorities should provide travelers, who arrive and leave the country, with information to promote and facilitate seeking medical attention in the event of an illness before, during, or after an international trip.

Promote, among travelers arriving and leaving the country, good practices and behavior to reduce the overall risk of acute respiratory infections during travel, such as following cough etiquette and frequent handwashing (see infection prevention and control).

For travelers to the city of Wuhan, promote avoiding close contact with people suffering from acute respiratory infections, as well as avoiding places where farm or wild animals are present, alive or dead.

Identify and mobilize, in a coordinated manner, both the public sector actors (for example, those that operate at points of entry, Ministry of Tourism, Ministry of Foreign Affairs), and private sector entities (for example, tourism operators, transportation operators, operators of entry points, companies that carry out commercial activities with the City of Wuhan and that involve trips to those cities, or stationing of staff there).

Take the opportunity to review in a coordinated manner with the public and private sector entities that operate at entry points, and the health sector entities in whose jurisdictions the entry points are located, the procedures for handling acute public health events, and the availability of personal protection equipment.

Also taking into account the celebrations of the Chinese New Year, 25 January 2020, which, in addition to significant internal movement within China, could also imply variations in the flow of international travelers to/from China, identify the corresponding sources (for example, National Authority of Civil Aviation, Ministry of Tourism) and proceed with the historical analysis of the flows of travelers and means of transport coming from the city of Wuhan. While the

ⁱ International Health Regulations (2005): *Article 1 – Definitions* – “affected area” means a geographical location specifically for which health measures have been recommended by WHO under [the IHR].

accuracy of this exercise could be limited, it is considered that access, management, and familiarization with this type of data and information are critical for the evaluation of any type of public health risk.

Infection prevention and control measures

The following measures are recommended for infection prevention and control (IPC)⁸:
Early recognition and control of the possible source of infection in the hospital environment;

Application of standard precautions for all patients:

- hand hygiene,
- use of personal protective equipment according to risk assessment
- respiratory hygiene and cough etiquette
- safe disposal of sharp objects
- proper environmental and hospital waste management
- sterilization and disinfection of medical and hospital devices

Empirical implementation of additional precautions according to transmission mechanism:

- institute contact and droplet precautions with suspected cases
- institute contact and aerosol nucleus droplet precautions where procedures may be performed, such as tracheal intubation, non-invasive ventilation, tracheostomy, cardiopulmonary resuscitation, manual ventilation before intubation, and bronchoscopy for suspected cases;

Administrative control:

- establishment of sustainable IPC infrastructure and activities
- training and education of health care workers
- guidelines on early recognition of acute respiratory infection potentially due to nCoV
- access to rapid laboratory tests for the identification of the etiologic agent
- overcrowding prevention, especially in emergency services
- provision of specific waiting areas for symptomatic patients and adequate disposition of hospitalized patients that promote an adequate patient-personal health relationship

Environmental and engineering control:

- adequate environmental ventilation in areas within health facilities
- cleanliness of hospital environment
- separation of at least 1-meter distance between patients must be respected

Laboratory

Sample collection of unusual or unexpected cases of pneumonia or severe acute respiratory infections (SARI) should be strengthened, ensuring adequate collection and timely delivery of samples to the National Influenza Centers (NICs) or National Laboratories in charge of surveillance and detection of respiratory viruses.

PAHO/WHO has distributed the Provisional Guide to Laboratory Tests for Human Cases of New Coronavirus Infection, nCoV (WHO, 2020) to national influenza centers (NICs) and National and Reference Laboratories, (available at: <https://apps.who.int/iris/bitstream/handle/10665/330374/WHO-2019-nCoV-laboratory-2020.1-eng.pdf>).

Although it is not yet a protocol for specific detection for this agent, it is recommended that before any suspicious case (according to case definitions) the laboratories first rule out influenza (seasonal and avian) and then follow the algorithms established for other respiratory viruses.

Considering the epidemiological history and clinical suspicion, other Coronaviruses should be considered within the differential diagnosis, particularly MERS-CoV.

Suspicious samples (complying with case definition) in which it is not possible to detect any etiologic agent, should be referred to the reference laboratory (United States Centers for Disease Control and Prevention (CDC), Atlanta, Division of Gastrointestinal and Non-Influenza Respiratory Viruses) after consultation with the PAHO/WHO Regional Office.

Once there are technical guidelines for the specific diagnosis of nCoV, those protocols and guidelines will be communicated.

All samples collected must be considered as potentially infectious, thus the biosafety guidelines and national and international regulations for the transport of dangerous goods and laboratory processing must be complied with.

Sources of Information

1. Wuhan Municipal Health Commission:
<http://wjw.wuhan.gov.cn/front/web/showDetail/2019123108989>
2. WHO. Surveillance case definitions for human infection with novel coronavirus (nCoV). 10 January 2020, Toolkit. [https://www.who.int/publications-detail/surveillance-case-definitions-for-human-infection-with-novel-coronavirus-\(ncov\)](https://www.who.int/publications-detail/surveillance-case-definitions-for-human-infection-with-novel-coronavirus-(ncov))
3. WHO. Disease Outbreak News. Novel Coronavirus – China. 12 January 2020. <https://www.who.int/csr/don/12-january-2020-novel-coronavirus-china/en/>
4. WHO. Disease Outbreak News. Novel Coronavirus – Thailand (ex- China). 14 January 2020. <https://www.who.int/csr/don/14-january-2020-novel-coronavirus-thailand-ex-china/en/>
5. WHO. Disease Outbreak News. Novel Coronavirus – Thailand (ex- China). 14 January 2020. <https://www.who.int/csr/don/14-january-2020-novel-coronavirus-thailand-ex-china/en/>
6. https://www.mhlw.go.jp/stf/newpage_08906.html
7. WHO International travel and health. WHO advice for international travel and travel and trade in relation to the outbreak of pneumonia caused by new coronavirus in China. 10 January 2020. Available at: https://www.who.int/ith/2020-0901_outbreak_of_Pneumonia_caused_by_a_new_coronavirus_in_C/en/
8. WHO. Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected. Interim guidance. (WHO/2019-nCoV/IPC/v2020.1). Geneva, 2020. Available at: <https://apps.who.int/iris/bitstream/handle/10665/330375/WHO-2019-nCoV-IPC-v2020.1-eng.pdf>