

Situation Summary

Since the Epidemiological Alert on the new coronavirus (2019-nCoV) published on January 16, 2020 (available at: <https://bit.ly/2uxRNfe>) and until January 20, 2020 four countries have reported to the World Organization Health (WHO) confirmed cases: China (198 cases, including three deaths, 2 cases in Beijing and 1 case in Guandong, all imported from Wuhan), Japan (1 case, imported from Wuhan, China), Thailand (two cases imported from Wuhan, China) and Republic of Korea (1 case imported from Wuhan, China) .

Public health response and risk assessment for the Americas

According to the information disclosed by the Chinese authorities, an epidemiological investigation led by a national team of experts began on December 31, 2019 and the following public health measures were implemented: case isolation, identification and follow-up of contacts, environmental sanitation and laboratory research.

To date, continues the uncertainty about the new pathogen and the spectrum of manifestations it may cause, the source of infection, the mode of transmission, the incubation period, the severity of the disease and the specific control measures.

Current evidence suggests that person-to-person transmission is limited, which would be consistent with what is known about other similar pathogens. However, person-to-person transmission, included in the nosocomial environment, has been documented on a recurring basis for other emerging coronaviruses, such as Severe Acute Respiratory Syndrome (SARS) and the Middle East Respiratory Syndrome-causing Coronavirus (MERS-CoV). Therefore, control measures taken for SARS and MERS can guide the response against this new pathogen.

Guidance and recommendations for national authorities

PAHO / WHO encourages Member States to strengthen surveillance activities to detect patients with acute respiratory disease according to an interim case definition (see under point 2 "Surveillance"). Health professionals should be informed about the possibility of the appearance of an infection caused by this new virus and the actions to be taken in case of a suspicious case.

Due to the possible importation of cases of the new coronavirus (2019-nCoV), the Pan American Health Organization / World Health Organization (PAHO / WHO) recommends that Member States, strengthen surveillance to detect unusual respiratory events, ensure that Health workers have access to up-to-date information on this disease, who are familiar with the principles and procedures for managing new coronavirus infections (2019-nCoV) and are trained to consult a patient's travel history to link This information with clinical data.

1.- International travelers

PAHO / WHO does not recommend any screening at the points of entry regarding this event, nor any restrictions on travel or trade. PAHO / WHO closely monitors the epidemiological evolution of the situation and will provide more detailed guidance when available.

To continue to 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 travel.

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 observing the cough etiquette and frequent handwashing (see point 4, Infection prevention and control measures).

Specifically, 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 together with the public and private sector instances that operate at entry points, and the health sector instances in whose jurisdictions the entry points are located, the procedures for handling acute public health events, and the availability of personal protection supplies.

Also taking into account the celebrations of the Chinese New Year on January 25, 2020, which, in addition to significant internal displacements to China, could also imply variations in the flow of international travelers to and from China, it is convenient for national authorities to conduct an analysis historical of the flows of travelers and means of transport coming from the city of Wuhan, identifying the available sources of information, such as the National Civil Aviation Authority, the Ministry of Tourism. While the 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.

2.- Surveillance

WHO has released an interim guidance (<https://bit.ly/2uf6ljW>) to provide orientation regarding which people should be investigated and tested for 2019-nCoV. With respect to this interim guidance, it is important to avoid overburdening respiratory disease surveillance systems and targeting laboratory testing.

These case definitions for surveillance include three groups of people:

- 1) Patients with severe acute respiratory infection (SARI) with no other etiology that fully explains the clinical presentation AND
 - a history of travel to or a person who lived in Wuhan, Hubei Province China in the 14 days prior to symptom onset or,
 - an occupation as health care worker in an environment caring for SARI patients with atypical clinical presentations or unknown etiology.
- 2) A SARI patient develops an unusual or unexpected clinical course, especially sudden deterioration despite appropriate treatment even if another etiology has been identified that fully explains the clinical presentation.
- 3) A patient with acute respiratory illness of any degree of severity who, within 14 days before onset of illness, had a close physical contact with a confirmed case of 2019-nCoV infection, exposure to a healthcare facility in a country where hospital-associated 2019-nCoV infections have been reported, or visited/worked in a live animal market in Wuhan, China.

3. -Laboratory

The collection of cases of pneumonia or unusual 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 has distributed the Provisional Guide to Laboratory Tests for Human Cases of Infection by Nuevo Coronavirus, nCoV (WHO, 2020) to NICs and National and Reference Laboratories, (Available at: <https://bit.ly/2U9zDjV>).

• Sampling

Samples should be collected by trained personnel considering all biosafety instructions and appropriate personal protection equipment for respiratory viruses.

The recommended samples are those of the lower respiratory tract, including sputum, bronchoalveolar lavage and tracheal aspirate (when possible according to medical criteria). However, when it is not possible to take these samples, those of the upper respiratory tract are also useful. In general, it is recommended to take a nasopharyngeal swab combined with an oropharyngeal swab (swabs should be placed and transported in the same tube with viral transport medium). Although sampling of asymptomatic contacts is not recommended routinely, if it is considered necessary in accordance with the guidelines adopted by the country, sampling of the upper respiratory tract can be considered.

• Laboratory algorithm

Laboratories should continue to use the influenza algorithm recommended by PAHO for routine influenza surveillance and cases of SARI and unusual SARI

The tests for 2019-nCoV **should be considered only for patients that fit the case definition**, once influenza and avian influenza have been ruled out.

WHO has made available 2 molecular diagnostic protocols for the new coronavirus (2019-nCoV), available at the following links:

- Diagnostic detection of Wuhan coronavirus 2019 by real-time RT-PCR - Charité, Berlin Germany: <https://bit.ly/3ap38yS>
- Detection of 2019 novel coronavirus (2019-nCoV) in suspected human cases by RT-PCR - Hong Kong University: <https://bit.ly/2NGQG3W>

• Sample submission

The samples should be kept refrigerated (4-8 ° C) and sent to the laboratory (National Influenza Center, National Public Health Laboratory or international Reference Laboratories) where they will be processed within the first 24-72 hours after they have been received. If they cannot be sent within this period, it is recommended to freeze at -70 -80 ° C until shipment, guaranteeing the cold chain. Sending suspicious samples to reference laboratories or collaborating centers outside the country and by air must ensure compliance with all international standards (IATA) for Category B Biological Substances.

Please consult the PAHO regional office before sending suspected 2019-nCoV clinical samples to the reference laboratories (**CDC**, Atlanta, Division of Gastrointestinal and Non-Influenza Respiratory Viruses or Public Health Agency of Canada, **PHAC**, National Laboratory of Microbiology).

4. - Infection Prevention and Control

At the level of infection prevention and control, the following measures are recommended⁸.

- 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 tag
 - safe disposal of sharps
 - adequate management of the environment and hospital waste
 - sterilization and disinfection of medical and hospital devices
- Empirical implementation of additional precautions according to transmission mechanism:
 - institute droplet and contact precautions against suspicious cases
 - institute contact and droplet / aerosol core precautions in case of aerosol generating procedures, such as tracheal intubation, non-invasive ventilation, tracheostomy, cardiopulmonary resuscitation, manual ventilation before intubation and bronchoscopy for suspected cases
- Administrative control:
 - establishment of infrastructure and sustainable infection prevention and control (PCI) activities
 - training and education of health workers
 - guidelines on early recognition of acute respiratory infection potentially due to 2019-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 the hospital environment
 - separation of at least 1-meter distance between patients

Sources of Information

1. Wuhan Municipal Health Commission:
<http://wjw.wuhan.gov.cn/front/web/showDetail/2019123108989>
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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/>
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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>