

Outbreak of 2019 Novel Coronavirus (2019-nCoV) in Wuhan, China

Situation Report – No. 2. 25 January 2020

Summary

An outbreak of novel coronavirus causing severe acute respiratory illness has been reported in Wuhan, China since December 21, 2019. The virus has not been previously identified and so, since it is new, there is still little known about it including its origin. There is evidence of human to human transmission among cases both in and outside of China. The objectives of public health response are to interrupt the transmission of the virus from one person to another in China, to prevent exportation of cases from China to other countries and territories, and to prevent further transmission from exported case if they were to happen in countries. CARPHA is working closely with international health partners to respond to this health threat and provide timely advice and assistance to Caribbean Member States.

1. What we currently know

- **Type of virus** - The virus belongs in the same family of coronaviruses as Severe Acute Respiratory Syndrome (SARS), which killed nearly 800 people globally during a 2002/03 outbreak that also started in China ([Reuters](#), [CDC](#)).
- **Clinical picture** – Cases have presented with viral pneumonia of unknown etiology (VPUE), now known as novel coronavirus-infected pneumonia (NCIP). Initial investigation of cases in Wuhan revealed most patients had severe and nonproductive cough following illness onset, some had dyspnea, and almost all had normal or decreased leukocyte counts and radiographic evidence of pneumonia (The 2019-nCoV Outbreak Joint Field Epidemiology Investigation Team, 2020). See Surveillance case definitions under Item 3 below.
- **Known cases** - As of Jan. 25, there were 1354 confirmed cases of patients with pneumonia caused by the new strain of coronavirus. Many of the patients are Wuhan residents or people who recently went to the city (JHU CSSE). Outside of Mainland China, at least thirteen (13) more countries have confirmed at least one case among travelers who visited Wuhan. Reports on 25 Jan indicated there is now one secondary case in a family member of a case in Vietnam. On 21 January, the US CDC announced the first case in the USA. Cases have now been reported in France, England and Australia. See Table below for an update prepared from various sources.
- **Transmission and source** - The outbreak in Wuhan, China was initially linked to Wuhan South China Seafood City (also called the South China Seafood Wholesales Market and the Hua Nan Seafood Market). In addition to seafood, the market sells chickens, bats, cats, marmots, and other wild animals; suggesting a possible zoonotic origin to the outbreak (CDC). However, the WHO has confirmed that based on reports, person-to-person transmission is taking place within communities. The majority of new cases since the 21 January had **no** history of exposure to the Huanan Seafood Wholesale Market; and health care workers (HCWs) caring for ill patients have been confirmed with infection by the novel coronavirus (The 2019-nCoV Outbreak Joint Field Epidemiology Investigation Team, 2020). There is still much more to learn about how the 2019-nCoV virus spreads, severity of associated illness, and other features of the virus.

Table 1:

Countries	Confirmed cases	Suspected cases	Deaths	Recovered
Mainland China <i>30 provinces</i>	1320	123		
Thailand	5			
Singapore	3			
Taiwan	3			
Hong Kong	5	36		
Macau	2			
Vietnam	2			
Japan	2			
South Korea	2			
France	3			
Malaysia	3			
Australia	1			
Nepal	1			
United States <i>(Washington State and Chicago, Illinois)</i>	2			
Total	1334	159	41	38

Source: JHU CSSE 13:00hr. 25 January 2020.

<https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

2. Global actions to date

- The World Health Organization (WHO) sent directives to hospitals around the world on infection, prevention and control. The World Health Organization on 24 January **updated their advice for international traffic** in relation to the outbreak of the novel coronavirus 2019-nCoV. *'WHO advises that measures to limit the risk of exportation or importation of the disease should be implemented, without unnecessary restrictions of international traffic.'*
<https://www.who.int/ith/2020-24-01-outbreak-of-Pneumonia-caused-by-new-coronavirus/en/>
- China: Chinese authorities have imposed travel bans on 8 cities in Hubei - Wuhan, Huanggang, Ezhou, Chibi, Xiantao, Qianjiang, Zhijiang and Lichuan - are now subject to travel bans. Flights, trains, buses and ferries connecting Wuhan to other cities in Hubei have been suspended, according to a report in People's Daily. Hubei authorities also have suspended operations at local travel agencies and ordered all schools to postpone the start of spring semester classes, according to the newspaper. Chinese authorities have also reported that all unnecessary or non-essential large-scale public gatherings will not be approved during the Spring Festival, which starts on 25 January in China (WHO, 2020).
- Globally - Airport authorities in the United States as well as most Asian nations, including Japan, Thailand, Singapore and South Korea, have stepped up temperature screening of passengers from Wuhan – See *WHO Guidance on entry and exit screening* <https://www.who.int/ith/2020-24-01-outbreak-of-Pneumonia-caused-by-new-coronavirus/en/>.
- USA – The US CDC is working with the Department of Homeland Security to funnel all travelers from Wuhan, China to the five airports, to facilitate entry health screening (CDC <https://www.cdc.gov/coronavirus/2019-nCoV/summary.html#cdc-response>). On arrival to the United States, travelers from Wuhan may undergo health

screening, including having their temperature taken and filling out a symptom questionnaire. Travelers with symptoms (fever, cough, or difficulty breathing) will have an additional health assessment.

- US Centers for Disease Control (CDC) - CDC has established an Incident Management System to coordinate a domestic and international public health response. On January 21, 2020, CDC updated the level 1 travel health notice (“practice usual precautions”) for Wuhan City, Hubei Province, China to Level 2: Practice Enhanced Precautions advising travelers that preliminary information suggests that older adults with underlying health conditions may be at increased risk for severe disease. ([CDC](#)). CDC has said that at this time, based on current information, the immediate health risk from 2019-nCoV to the general American public is deemed to be low. However, CDC is taking proactive preparedness precautions ([CDC](#)).
- CARPHA’s aim is to work closely with CMS and Caribbean coordinating partners and mechanisms to respond to the threat and to prepare CMS to prevent further transmission from exported case if they were to happen in countries. Key actions to date:
 - CARPHA has activated their Incident Management Team and is coordinating the Regional response to the incident.
 - CARPHA has distributed a Press Release to the Caribbean Media network that CMS are using as a guide for in-country communications.
 - On 23 January CARPHA’s ED convened a Virtual Meeting with the CARPHA Incident Management Team, Country Medical Officers, National Epidemiologists, and Lab Directors. The virtual meeting addressed well over 57 participants from 24 CMS to give updated information on the spread of the virus and address the concerns expressed by the CMS.
 - CARPHA Guidance for Travellers to and from the Caribbean circulated to CMS

3. Enhanced 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.

The 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 2019nCoV 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.

4. Laboratory update

- WHO has posted two protocols for the detection of the nCoV (Laboratory testing for 2019 novel coronavirus (2019-nCoV) in suspected human cases Interim guidance, 17 January 2020) <https://www.who.int/publications->

[detail/laboratory-testing-for-2019-novel-coronavirus-\(2019-ncov\)-in-suspected-human-cases](#)). Both protocols are in the process of validation. These guidelines contain all the information about specimen collection and shipment, biosafety and biosecurity. Member states are recommended to follow the guidelines and ask the CARPHA Medical Microbiology Laboratory (CMML) for advice.

- Other international public health agencies, like CDC, China CDC, European CDC are working on the design and eventual distribution of diagnostic kits to other countries. In any case, it is expected that a consensus test will potentially be available at least some weeks from now.
- CARPHA Medical Microbiology Laboratory (CMML) in Trinidad is working with PAHO on the development of local laboratory capacity. This is not an immediate process and is likely to take a few weeks, since it requires special reagents and an internal validation procedure. CMML will follow the international recommendation of sending well screened and characterized samples to one of the WHO Collaborative Centers in the region (either CDC or PHAC).

5. Clinical Management

WHO has developed interim protocols for the clinical management of severe acute respiratory infection when novel coronavirus (nCoV) infection is suspected. CARPHA recommends that CMS follow the WHO guidelines for consistency. Once more information becomes available on the nature of the disease, tailored guidelines will be developed by CARPHA to assist CMS.

Current Guidelines available from the WHO website include the following:

- **Clinical management of severe acute respiratory infection when novel coronavirus (nCoV) infection is suspected.** This document is intended for clinicians taking care of hospitalised adult and paediatric patients with severe acute respiratory infection (SARI) when a nCoV infection is suspected. It is not meant to replace clinical judgment or specialist consultation but rather to strengthen clinical management of these patients and provide to up-to-date guidance. Best practices for SARI including infection prevention and control and optimized supportive care for severely ill patients are essential. Document Link [https://www.who.int/internal-publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-\(ncov\)-infection-is-suspected](https://www.who.int/internal-publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-(ncov)-infection-is-suspected).
- **National capacities review tool for a novel coronavirus.** The main aim of the national capacities review tool is to better understand existing capacities in the area of detection and response to a novel coronavirus (nCoV) that is zoonotic and causes respiratory disease. The tool was developed with other coronaviruses, such as SARS-CoV and MERS-CoV, in mind and in consultation with member states. This information will help national authorities to i) identify main gaps ii) perform risk assessments and iii) plan for additional investigations, response and control actions. <https://www.who.int/internal-publications-detail/national-capacities-review-tool-for-a-novelcoronavirus>

6. Recommendations for Caribbean Member States

1. Review national public health emergency preparedness and response plans to ensure these can address respiratory diseases including novel coronaviruses
2. CMS are advised to review their public health emergency contingency plans, to ensure these can be used for potential nCoV events, and that these are available at each designated ports of entry (PoE).
3. CMS are to develop local communications material and are encouraged to use CARPHA's documents as a guide or WHO website depending on availability.

4. CARPHA encourages CMS to follow the WHO guidelines as listed in Box 1, BUT entrance screening (temperature screening) at ports of entry should only be implemented only when the necessary staff, support structures and systems are in place.
5. Member States are recommended to capture information on travel history using the Passenger Arrival Card or surveys, for all new arrivals. Arrivals that have recently traveled to China, especially to the Wuhan area, should be questioned for symptoms and advised to be vigilant for onset of those symptoms and to seek immediate medical attention at a public health facility. Passengers should be advised to seek medical care as soon as symptoms arise (See Item 3. Surveillance).
6. The CMML is working with international partners to procure the appropriate primers to conduct molecular diagnostic tests. An update will be provided as to when countries can initiate sample submission to CARPHA for confirmatory testing.
7. Inform CARPHA immediately, if a suspected case is identified in-country.

CARPHA would like to draw member States attention to the Updated WHO advice for international traffic in relation to the outbreak of the novel coronavirus 2019-nCoV (Box 1).

Box 1: Updated WHO advice for international traffic in relation to the outbreak of the novel coronavirus 2019-nCoV <https://www.who.int/ith/2020-24-01-outbreak-of-Pneumonia-caused-by-new-coronavirus/en/>

I. Advice for entry screening in countries/areas without transmission of the novel coronavirus 2019-nCoV

Evidence shows that temperature screening to detect potential suspect cases at entry may miss travelers incubating the disease or travelers concealing fever during travel and may require substantial investments. However, during the current outbreak with the novel coronavirus 2019-nCoV, the majority of exported cases were detected through entry screening. The risk of importation of the disease may be reduced if temperature screening at entry is associated with early detection of symptomatic passengers and their referral for medical follow up. Temperature screening should always be accompanied by dissemination of risk communication messages at points of entry. This can be done through posters, leaflets, electronic bulletin, etc, aiming at raising awareness among travelers about signs and symptoms of the disease, and encouragement of health care seeking behavior, including when to seek medical care, and report of their travel history.

Counties implementing temperature screening are encouraged to establish proper mechanism for data collection and analysis, e.g .numbers of travelers screened and confirmed cases out of screened passengers, and method of screening. In implementing entry screening, countries should take into account national policies and capacity. Public health authorities should reinforce collaboration with airlines operators for case management on board aircraft and reporting, should a traveler with respiratory disease symptoms is detected, in accordance with the IATA guidance for cabin crew to manage suspected communicable disease on board an aircraft.

II. Advice for exit screening in countries or areas with ongoing transmission of the novel coronavirus 2019-nCoV (currently People's Republic of China)

Conduct exit screening at international airports and ports in the affected areas, with the aims early detection of symptomatic travelers for further evaluation and treatment, and thus prevent exportation of the disease. while minimizing interference with international traffic.

Exit screening includes checking for signs and symptoms (fever above 38°, cough), interview of passengers with respiratory infection symptoms leaving the affected areas with regards to potential exposure to high-risk contacts or to the presumed animal source, directing symptomatic travelers to further medical examination, followed by testing for 2019-nCoV, and keeping confirmed cases under isolation and treatment.

Encourage screening at domestic airports, railway stations, and long-distance bus stations as necessary. Travelers who had contact with confirmed cases or direct exposure to potential source of infection should be placed under medical observation. High-risk contacts should avoid travel for the duration of the incubation period (up to 14 days). Implement health information campaigns at points of entry to raise awareness of reducing the general risk of acute respiratory infections and the measures required, should a traveler develop signs and symptoms suggestive of infection with the 2019-nCoV and how they can obtain assistance.

7. Communications

CARPHA will continue to monitor the situation and provide regular updates via email, on their website and social media. Teleconferences will be scheduled as necessary. The latest media release is available from CARPHA's website <http://carpha.org/Portals/0/articles/CARPHA%20MediaReleaseCoronavirus.pdf>

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