

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

### Situation Report – No. 4. January 29, 2020

#### Summary

This is an update to the Situation Report in relation to the outbreak of the novel coronavirus nCoV, published on 28 January 2020. 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. As of 28, January 2020, there is evidence of human to human transmission among cases both in and outside of Wuhan City, China and internationally. Human-to-human transmission has been confirmed largely in Wuhan city, but also some other places in China and internationally. The objectives of the 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 cases if they were to happen in other countries. CARPHA is working closely with international health partners to respond to this public health threat and provide timely advice and assistance to Member States and other regional partners and stakeholders.

#### 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 ([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 January 28, there were 6057 confirmed cases of patients with the new strain of coronavirus. Outside of China, at least fourteen (14) more countries have confirmed at least one case among travelers exposed in China and/or person-to-person contact. On 21 January, the US CDC announced the first case in the USA with four additional cases being confirmed to date. Cases have now been reported in Germany, Cambodia and Sri Lanka. See Table 1 below for more details 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). As of 27 January 2020, there is evidence of human-to-human transmission among cases both in and outside of Wuhan City, China and internationally. At this time, not enough is known about the epidemiology of 2019-nCoV to define the full clinical features of the disease, the intensity of the human-to-human transmission, and the original source of the outbreak. WHO reported that at least three of the confirmed cases outside of China were asymptomatic at the time of detection. ([https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200128-sitrep-8-ncov-cleared.pdf?sfvrsn=8b671ce5\\_2](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200128-sitrep-8-ncov-cleared.pdf?sfvrsn=8b671ce5_2))

**Table 1: Countries or Territories with reported confirmed cases of 2019-nCoV, 28 January 2020**

| Region        | Countries                  | Confirmed cases | Suspected cases | Deaths | Recovered |
|---------------|----------------------------|-----------------|-----------------|--------|-----------|
| Asia          | China*                     | 5993            |                 | 132    | 104       |
|               | Thailand                   | 14              |                 |        | 5         |
|               | Japan                      | 7               |                 |        | 1         |
|               | Malaysia                   | 7               |                 |        |           |
|               | Singapore                  | 7               |                 |        |           |
|               | South Korea                | 4               |                 |        |           |
|               | Vietnam                    | 2               |                 |        |           |
|               | Nepal                      | 1               |                 |        |           |
|               | Cambodia                   | 1               |                 |        |           |
|               | Sri Lanka                  | 1               |                 |        |           |
| Oceania       | Australia                  | 5               |                 |        |           |
| Europe        | France                     | 4               |                 |        |           |
|               | Germany                    | 4               |                 |        |           |
| North America | United States of America** | 5               |                 |        |           |
|               | Canada                     | 2               |                 |        |           |
|               | Total                      | 6057            |                 | 132    | 110       |

\*Confirmed cases in China include Mainland China (5970), Hong Kong (8), Macau (7) and Taiwan (8)

\*\* Confirmed cases in the United States of America were reported in the states of California (2), Washington (1), Illinois (1) and Arizona (1)

Source: Johns Hopkins University's Centre for Science and Engineering 23:00hr EST. 28 January 2020.  
<https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

## 2. Global Actions to date

- **WHO** - The World Health Organization (WHO) sent directives to hospitals around the world on infection, prevention and control. The World Health Organization on 27 January **updated their advice for international traffic** in relation to the outbreak of the novel coronavirus 2019-nCoV. **'WHO advises against the application of any restrictions of international traffic based on the information currently available on this event'**  
<https://www.who.int/ith/2020-27-01-outbreak-of-Pneumonia-caused-by-new-coronavirus/en/>
- **WHO/IHR-EC** - The Emergency Committee under the International Health Regulations (IHR) (2005) was convened by WHO on 23 January and have declined to declare the current situation a Public Health Emergency of International Concern (PHEIC). The Committee will meet again in the coming week to re-assess the situation. An update will be provided once the outcomes are known.
- **China** - Chinese authorities have imposed travel bans in Hubei Province and 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) <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 and Prevention (CDC)** – CDC has established an Incident Management System to coordinate a domestic and international public health response. On January 27, 2020, CDC updated the travel alert to Level 3 (“Avoid Nonessential Travel”) to China as the outbreak continues to grow. CDC is taking proactive preparedness precautions ([CDC](https://wwwnc.cdc.gov/travel/destinations/traveler/none/china#travel-notice)). <https://wwwnc.cdc.gov/travel/destinations/traveler/none/china#travel-notice>

## CARPHA’s Response

CARPHA is working closely with its international health partners, 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 by CARPHA to date:

- Activation of its Incident Management Team (IMT) and coordination of Regional response.
- Convened technical updates with Chief Medical Officers and other officials from Member States
- Issued Situation Reports (SITREPS) to CARPHA Member States (CMS), and these have shared with CDEMA, CARICOM, OECS, CTO, CHTA and other regional stakeholders.
- Travellers Guidelines for Travellers and Algorithm for Management of a suspected case
- Press releases and shared with CMS, CDEMA, CARICOM CTO, CHTA and other regional stakeholders
- Met with Professor Fergusson, Imperial College of London, Public Health England and Public Health England, Dutch and French Health Authorities to discuss preparedness and response.
- Coordination with CDEMA: CDEMA in association with CARPHA convened a joint briefing of National Disaster Coordinators on 28 January 2020.
- Convened a virtual meeting with the Regional Health Communications Network on 28 January 2020.
- Convened the Regional Coordinating Mechanism for Health Security on 29 January 2020, consisting of Member States, regional and international agencies (including CDEMA, CARICOM, OECS, PAHO, CDC, PHE, PHAC, RIVM, ARS), with agreement on regional response
- Developing ports of entry (air and seaport guidelines) for dissemination
- Procuring the appropriate primers to conduct molecular diagnostic tests for nCoV.

## 3. Enhanced Surveillance

WHO has released an interim guidance ([https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-\(2019-ncov\)](https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov))) 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. Case definitions to guide surveillance are presented in Table 2.

**Table 2: Updated Case Definitions for surveillance include confirmed, probable and suspected cases (WHO, 2020).**

| Type of Cases          | Definition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Confirmed cases</b> | A person with laboratory confirmation of 2019-nCoV infection, irrespective of clinical signs and symptoms.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Probable cases</b>  | A suspect case for whom testing for 2019nCoV is inconclusive or for whom testing was positive on a pan-coronavirus assay.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Suspected cases</b> | <p>1) Patients with severe acute respiratory infection (SARI) with no other etiology that fully explains the clinical presentation AND at least one of the following:</p> <ul style="list-style-type: none"> <li>• a history of travel to or a person who lived in Wuhan, Hubei Province China in the 14 days prior to symptom onset or,</li> <li>• is a health care worker in an environment where SARI patients of unknown etiology are being cared for.</li> </ul> <p>2) Patient with any acute respiratory illness AND at least one of the following:</p> <ul style="list-style-type: none"> <li>• close contact with a confirmed or probable case of 2019-nCoV in the 14 days prior to illness onset, or</li> <li>• visiting or working in a live animal market in Wuhan, Hubei Province, China in the 14 days prior to symptom onset, or worked or attended a health care facility in the 14 days prior to onset of symptoms where patients with hospital-associated 2019-nCov infections have been reported</li> </ul> |

#### 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](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 hospitalized adult and pediatric 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/docs/default-source/coronaviruse/clinical-management-of-novel-cov.pdf?sfvrsn=bc7da517\\_2](https://www.who.int/docs/default-source/coronaviruse/clinical-management-of-novel-cov.pdf?sfvrsn=bc7da517_2)
- **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 CARPHA Member States (CMS)

- Review national public health emergency preparedness and response plans to ensure these can address respiratory diseases including novel coronaviruses
- Review 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)
- Develop local communications material and are encouraged to use CARPHA's documents or WHO website as a guide depending on availability.
- 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.
- 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).
- 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, most 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.

Countries 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 consider 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 aim of 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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