

## Fact sheet: COVID-19

Coronavirus disease-2019 (COVID-19) is a disease caused by severe-acute respiratory syndrome coronavirus-2 (SARS-CoV-2).

### 1. Pathogen

SARS-CoV-2 is an enveloped, positive sense single-stranded RNA virus belonging to family *Coronaviridae* genus *Betacoronavirus*. Other human-pathogenic viruses identified are clustered in this genus, such as middle east respiratory syndrome coronavirus (MERS-CoV) and SARS-CoV-1 which causes MERS and SARS outbreaks, respectively.

### 2. Situation, signs and symptoms

- This disease was identified firstly in Wuhan, China as pneumonia with an unknown cause on December 2019. Following its extensive spread, the World Health Organization (WHO) declared COVID-19 as a pandemic on March 11, 2020.
- As of April 8<sup>th</sup>, more than 1,350,000 positive cases of SARS-CoV-2 were reported worldwide (in more than 170 countries). Most of the affected countries have difficulties to contain the outbreak due to the complexity of social consequences.
- While most COVID-19 patients develop only mild or asymptomatic illness, about 14% develop severe symptoms requiring oxygen support and 5% require the intensive care unit.
- In the early phase, COVID-19 mainly causes fever, cough, fatigue, and shortness of breath. The symptoms may appear around 1-14 days (average 5 days) after exposure. In the late phase, pneumonia is observed in the patients.

- People with symptoms shed a high amount of virus and are the primary source of infection if not isolated and treated. However, some infected people develop no symptoms. These asymptomatic cases may pass on the virus to others accidentally or unknowingly.

### **3. Epidemiology and transmission**

- SARS-CoV-2 is transmitted by direct contact with an infected person or contaminated objects via droplets (sneezing, cough, saliva). Under the experimental conditions, SARS-CoV-2 can remain on the surface of plastic and stainless steel for up to 72 hours.
- To date, the COVID-19 has spread all over the world. Most of the positive cases were reported due to contact tracing with the cases. The disease's transmission depends not only on imported cases, but also on the existence of local transmission.
- In Japan, as of April 8<sup>th</sup>, a total of 4,257 COVID-19 cases have been reported with the highest number of positive cases reported in Tokyo, followed by Osaka, Chiba, Kanagawa, Aichi, Hyogo, Saitama, and Hokkaido.
- The Japanese government declared a state of emergency covering Tokyo, Osaka, Kanagawa, Chiba, Saitama, Hyogo, and Fukuoka until May 6<sup>th</sup>.
- The first case of COVID-19 in Hokkaido was identified in late January in a tourist from Wuhan, China. Since then, Hokkaido had a rapid increase of positive cases. From February 28<sup>th</sup> to March 19<sup>th</sup>, the governor of Hokkaido prefecture declared a state of emergency. During that time, most of people were asked not to leave their homes during weekends, to refrain from visiting crowded places, and to not have any after work parties.
- On April 12, 2020, the governor of Hokkaido prefecture issued another state of emergency until May 6<sup>th</sup>. People are asked to stay inside, only go out if necessary, and to follow these precautions.

English: [http://www.pref.hokkaido.lg.jp/ss/tsk/COVID-19/coronavirus\\_20200407a\\_en.pdf](http://www.pref.hokkaido.lg.jp/ss/tsk/COVID-19/coronavirus_20200407a_en.pdf)

#### **4. Diagnosis**

- The golden method to detect SARS-CoV-2 is quantitative real-time reverse-transcriptase PCR (qRT-PCR) assay. This assay targets viral genome in the swab samples collected from patients or people suspected of being infected.
- By combining this test with chest X-rays, detection efficacy of the patients with symptoms is improved. Several new tests with improved detection ability in a short period are being developed and evaluated.
- Additionally, many nationalities also using serologic test that detect the antibody from blood samples.

#### **5. Treatment**

- Currently, there is no specific antiviral treatment for COVID-19; the COVID-19 patients are receiving supportive care for it. However, there are many ongoing clinical trials testing potential antivirals.
- There are reports of positive tests to the virus after recovery. It is unknown if these cases were reinfection or the viral particles detected were remnants of the previous infection. There is also limited information of the virus neutralizing capacity of antibodies in recovering patients.

#### **6. Prevention and protection**

##### Individual hygiene measures

- Hand hygiene practices using water and soap, hydroalcoholic solution or alcohol to reduce risk of infection from direct contact with contaminated fomites.

- Wear a facemask if you have a cold or cough to limit the risk of being infected or shedding virus by droplets.
- When coughing or sneezing, cover the mouth and nose with a tissue-paper to contain droplets.
- Discard tissue-paper or used facemask in a trash can.
- Don't greet by shaking hands, kissing, or embracing.
- Pay attention to items which are often shared (computers, phones, etc).
- Avoid touching your face, eyes, or nose with your hand.
- If you have a fever or cold, call the toll free call of the Ministry of Health, Labor and Welfare (MHLW) directly (0120-565-653).
- If you have been in contact with somebody who is suspected of having or has tested positive for COVID-19, call the MHLW (0120-565-653) or the Consultation Centre for Returners and Contactees (Health Centre). (Tel. 011-272-7119).

#### Community-based measures

- Avoid close contact to limit virus spread.
- Refrain nonessential services and businesses and stay at home to avoid any contact with any sick person or SARS-CoV-2 healthy carriers. Be sure to stay at home if you are having respiratory symptoms.
- Social distancing; keep distances of at least 2m from other people (especially those with fever, cold, or cough).
- When you have fever, cough, chills and respiratory symptoms, stay at home and report your situation to the MHLW (0120-565-653) for early identification and isolation. If you must go to a hospital or clinic, but sure to wear a mask.
- Report any sick persons in order to help to save lives and identify SARS-CoV-2 carriers.

#### **7. Response at the community level**

- Identification of a new cluster (group of positive cases which emerge at the same time and place) as soon as possible is one of the keys to controlling the local transmission.

- Some countries have locked down their territories to prevent a massive spreading of COVID-19 to improve the health facilities, find the best anti-viral, and develop a good vaccine.
- They quarantine people from the infected area at least for 14 days and isolate all the patients.

## 8. Response at the individual level

- If you meet any of the criteria set by the Japanese government below, contact the Health Centre. (Tel. 011-272-7119)
  - You have a fever above 37.5°C and the fever doesn't go away for 4 days.
  - Feeling tired badly (fatigue) or difficulty in breathing (dyspnea).
  - You are old (65 years or older), have underlying disease (diabetes, heart disease, respiratory disease) or under chemotherapy with fever above 37.5°C for 2 days or with feeling tired badly (fatigue) or difficulty in breathing (dyspnea).
- Non-urgent but important information regarding COVID-19 should be clarified by calling to the MHLW. (Tel. 0120-565-653)

## 9. More information

- Coronavirus disease (COVID-19) Pandemic in WHO  
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- About Coronavirus Disease 2019 (COVID-19) by Ministry of Health, Labor and Welfare, Japan  
[https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/newpage\\_00032.html](https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/newpage_00032.html)

- Information Regarding COVID-19 (From the Hokkaido Government)

[http://www2.hiecc.or.jp/soudan/upload/file/emg/file1\\_en\\_1584325701.pdf](http://www2.hiecc.or.jp/soudan/upload/file/emg/file1_en_1584325701.pdf)

- Hokkaido Foreign resident Support Center

<http://www2.hiecc.or.jp/soudan/emg/index.html?lang=en>

- General Information about COVID-19 in English

<http://www.clair.or.jp/tabunka/portal/info/contents/114517.php>