Communicable Diseases Series

Coronavirus Disease 2019 (COVID-19)









Causative agent

"Coronavirus disease 2019 (COVID-19)" is the disease caused by a new coronavirus called "SARS-CoV-2".

Clinical features

The most common symptoms of COVID-19 include fever, dry cough and fatigue. Other symptoms include loss of taste or smell, nasal congestion, conjunctivitis, sore throat, headache, muscle or joint pain, skin rash, nausea or vomiting, diarrhea, chills or dizziness. Some people may only have very mild or non-specific symptoms, while some may develop severe symptoms like shortness of breath, chest pain or confusion.

Complications may include respiratory failure, acute respiratory distress syndrome (ARDS), sepsis and septic shock, thromboembolism, and/or multi-organ failure including injury of the heart, liver or kidneys. There are reports that children and adolescents with COVID-19 may develop a rare but serious condition known as multisystem inflammatory syndrome in children (MIS-C), leading to multiorgan failure and shock.

People of older age and those having underlying medical problems (e.g. hypertension, heart and lung problems, diabetes, obesity or cancer) are at higher risk of developing serious illness.

According to the information from the World Health Organization (WHO), approximately 10-20% of people may continue to experience mid- and long-term effects of COVID-19, which are collectively known as "Post COVID-19 condition," or "Long COVID". Common symptoms of long COVID include fatigue, shortness of breath, cognitive dysfunction, headache, pain (e.g. chest pain, joint pain) and may have an impact on everyday functioning. There may be multi-organ effects or autoimmune conditions particularly in children.

Symptoms may be new onset following initial recovery from an acute COVID-19 episode or persist from the initial illness. Symptoms may also fluctuate (change from time to time) or relapse (return of symptoms after period of improvement) over time. Although it is still unclear how long the symptoms may last, current research suggests that patients can improve with time. Some studies reported that long COVID is found more often in people who had severe COVID-19 illness, but anyone (including those with mild illness) can experience this condition after infected with COVID-19. According to WHO, COVID-19 vaccination can reduce incidence of long COVID. Some studies also suggested vaccinated persons are less likely to develop long COVID even they get infected, compared to the unvaccinated.

Mode of transmission and incubation period

Mode of transmission includes through respiratory droplets, contact of contaminated surfaces or objects, short-range aerosol or short-range airborne transmission. The virus can also spread in poorly ventilated and/or crowded indoor settings. Most estimates of the incubation period range from 1 to 14 days, and some variants, such as the Omicron variant, may have even shorter incubation period of around 3 days.

Management

Treatment includes supportive therapy, symptomatic treatment, antiviral agents and Chinese medicine.

Prevention

COVID-19 vaccination

 COVID-19 vaccines are effective to protect people against COVID-19 disease, in particular severe illness and death.

- Vaccination is one of the most effective tools in the overall public health response to COVID-19. The combination of non-pharmaceutical interventions (NPIs) with vaccination will allow for maximum protection against the virus.
- With COVID-19 vaccines deployed, there is a need to continue NPIs, including good hand hygiene, to reduce the risk of virus transmission. NPIs should continue to be followed by vaccinated individuals, as well as those who have not yet been vaccinated.
- For details on COVID-19 vaccination, please refer to thematic website for COVID-19 Vaccination Programme: www.covidvaccine.gov.hk

Health advice

Members of the public are also advised to maintain strict personal and environmental hygiene at all times for personal protection against infection and prevention of the spread of the disease in the community:

- The wearing of mask is advised for the following situations -
- a. any persons with fever or respiratory symptoms;
- b. any persons who are visiting or working in high risk places such as residential care homes for the elderly, residential care homes for persons with disabilities, and clinical areas of healthcare facilities;
- c. high risk persons (e.g. persons with underlying medical conditions or persons who are immunocompromised) who are going to crowded places such as public transport; and
- d. when an increasing trend in activity of respiratory viruses including SARS-CoV-2 virus is expected, high risk persons are recommended to wear a surgical mask when visiting public places, while the public should also wear a surgical mask when taking public transportations or staying at crowded places.

- It is important to wear a mask properly, including hand hygiene before wearing and after removing a mask. For details on proper mask wearing, please visit CHP website at www.chp.gov.hk/files/pdf/use_mask_properly.pdf;
- Avoid touching your eyes, mouth and nose before washing hands;
- Perform hand hygiene frequently, especially before touching one's mouth, nose or eyes; before eating; after using the toilet; after touching public installations such as handrails or door knobs; or when hands are contaminated by respiratory secretions after coughing or sneezing;
- Cover your mouth and nose with tissue paper when sneezing or coughing. Dispose of soiled tissues into a lidded rubbish bin, then wash hands thoroughly;
- Wash hands with liquid soap and water, and rub for at least 20 seconds. Then rinse with water and dry with a disposable paper towel. When the hands are cleaned, do not touch the water tap directly again (for example, using a paper towel to wrap the faucet before turn it off). If hand washing facilities are not available, or when hands are not visibly soiled, performing hand hygiene with 70 to 80% alcohol-based handrub is an effective alternative;
- After using the toilet, put the toilet lid down before flushing to avoid spreading germs;
- Maintain good indoor ventilation;
- Home should be cleaned thoroughly at least once per week with 1 in 99 diluted household bleach (mixing 10 ml of bleach containing 5.25% sodium hypochlorite with 990 ml of water), leave for 15 - 30 minutes and then rinse with water. For metallic surface, disinfect with 70% alcohol;

vomitus or excreta, use strong absorbent disposable towels to clean up the visible matter. Then disinfect the surface and the neighbouring area with appropriate disinfectant. For nonmetallic surface, disinfect with 1 in 49 diluted household bleach (mixture of 10ml of household bleach containing 5.25% sodium hypochlorite solution with 490ml of water), leave for 15 - 30 minutes, and then rinse with water. For metallic surface, disinfect with 70% alcohol;

• If places are contaminated by respiratory secretions,

- Maintain drainage pipes properly and regularly (about once a week) pour about half a litre of water into each drain outlet (U-traps) to ensure environmental hygiene;
- Build up good body resistance and maintain healthy lifestyle. This can be achieved through balanced diet, regular exercise and adequate rest and
- Do not smoke and avoid alcohol consumption.

For the latest travel advice, please visit the thematic website (https://www.coronavirus.gov.hk/eng/index.html).



Centre for Health Protection Website www.chp.gov.hk

Health Education Infoline of the Department of Health

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