BIO033 / BIOLOGICAL / Infectious Diseases (Human and Animal)

COVID-19 (SARS-CoV-2) (Human)

Definition

COVID-19 is an infectious disease caused by the SARS Coronavirus 2 (SARS CoC2), a virus first identified in human populations in late 2019. Transmission occurs through droplets containing infectious virus, either by direct face to face contact (splash) generated by speaking, singing, coughing or sneezing; or by aerosolisation for up to 1 metre. Virus-containing aerosols that travel further than 1 metre are defined as airborne. The virus is thought to infect humans through the mucus membranes of the eyes, nose and mouth. Living virus has been isolated from faeces and urine but neither is thought to represent a major means of transmission. Fomites are thought to represent a low risk of transmission, but the risk has not yet been quantified. The risk of transmission is greatest in closed, poorly ventilated spaces where humans are in close proximity for ten to fifteen minutes and do not physically distance or wear a protective face covering (WHO, 2020).

Reference

WHO, 2020. Coronavirus disease (Covid-19). World Health Organization (WHO). www.who.int/ emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19 Accessed 4 May 2021.

Annotations

Synonyms

Coronavirus, SARS-CoV-2, COVID-19.

Additional scientific description

The majority of infections are asymptomatic or cause mild disease with fever or chills, cough, dyspnoea, fatigue, myalgia, headache, anosmia, ageusia, sore throat, nasal congestion, nausea or vomiting and diarrhoea. Infections cause more severe symptoms with increasing age, with the greatest risk of severe illness and death in those aged 85 years or older. Also at greater risk of serious illness and death are those with pre-existing medical conditions including cancer, chronic kidney disease, chronic obstructive pulmonary disease, and cardiovascular disease (WHO, 2020a,b).

The clinical course for severe illness can be long and often requires supplemental oxygen. A number of persons who have been infected develop lasting symptoms including chronic fatigue and damage to vital organs such as the lungs and heart. This phenomenon is generally referred to as long COVID and at present is not completely understood (WHO, 2020a).

Metrics and numeric limits

As of the end of April 2021 over 3 million deaths from COVID-19 had been reported since the beginning of the pandemic (WHO, 2020c).

Key relevant UN convention / multilateral treaty

International Health Regulations (2005), 3rd ed. (WHO, 2016).

N.B. As of 23 October 2020, the World Health Organization (WHO) had published many reports and technical documents on COVID-19, including the references indicated below. The science of the coronavirus disease (COVID-19) and its respective drivers, outcomes and control measures continue to evolve. This understanding will inform the elaboration of a Hazard Information Profile in future.

Examples of drivers, outcomes and risk management

Transmission occurs from close person-to-person contact between infected and non-infected persons, and measures to decrease transmission include physical distancing and wearing a mask to cover the nose and mouth as a means of protecting others. Outbreaks can be contained by rigorous public health measures, including contact tracing (WHO 2020a)

References

WHO, 2016. International Health Regulations (2005), 3rd ed. World Health Organization (WHO). https://apps.who.int/iris/handle/10665/246107 Accessed 4 May 2021.

WHO, 2020a. Coronavirus disease (Covid-19). World Health Organization (WHO). www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19 Accessed 4 May 2021.

WHO, 2020b. Coronavirus. World Health Organization (WHO). www.who.int/health-topics/coronavirus#tab=tab_1 Accessed 4 May 2021.

WHO, 2020c. WHO Coronavirus Disease (COVID-19) Dashboard. World Health Organization (WHO). https://covid19.who.int Accessed 4 May 2021.

Coordinating agency or organisation

World Health Organization.