COVID-19
What we know
Updated: 31 May 2021

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2), a new coronavirus first recognized in Wuhan, Hubei province, China in December 2019.

Transmissibility

TRANSMISSION
SARS-CoV-2 is primarily spread through droplets and aerosols generated when an infected person coughs, sneezes, speaks, sings or exhibits other respiratory or non-respiratory activities. Transmission occurs mainly between people who are in close contact with each other. It is possible to become infected when inadvertently touching eyes, nose or mouth, after having touched surfaces contaminated by the virus.

Infected people appear to be most infectious ≈2 days before developing symptoms. Patients may be infectious up to 8-9 days after symptom onset, and likely longer for people with severe disease. In addition, patients who exhibit symptoms are 3 to 18 times more contagious than those who are infected but never develop symptoms.

TRANSMISSION SCENARIOS
Transmission can be categorized into 4 scenarios from low to very high incidence. Countries could experience one or more of these scenarios, and should define the transmission scenario as well as prepare and implement appropriate response actions.

Transmission scenario 1: No reported cases
Transmission scenario 2: Sporadic cases
Transmission scenario 3: Cluster of cases
Transmission scenario 4: Community transmission

Response
Stop transmission & prevent spread
Slow transmission, reduce mortality & end community outbreaks

Global spread
As of 31 May 2021:

> 170 million COVID-19 cases
> 3.5 million deaths

The disease

COMMON SYMPTOMS
Most common symptoms are fever, dry cough, fatigue, sputum production, shortness of breath, muscle/joint pain, sore throat & headache. Some mild cases present with loss of smell and or loss of taste.

LINGERING SYMPTOMS
While most people with COVID-19 recover and return to normal health, some people can have symptoms that last for weeks or even months after recovery from acute illness. This persistent state of ill health is known as "post COVID condition" or "long COVID."

DISEASE SEVERITY
Most people with COVID-19 experience mild symptoms or moderate illness. Approximately 10%-15% of those who experience symptoms progress to severe disease, and about 5% become critically ill. Typically, people recover from COVID-19 after 2 to 6 weeks.

DISEASE SEVERITY AMONG SYMPTOMATIC PATIENTS

Lower risk
Studies indicate children and young adults are less likely to become seriously ill. Children rarely progress to serious illness.

Higher risk
Risk of severe disease increases with age and in those with underlying conditions such as diabetes, hypertension, cardiovascular disease, chronic lung diseases, obesity and cancer.

Variants
CURRENT VARIANTS OF CONCERN
Mutations of SARS-CoV-2 have occurred globally. Viruses naturally evolve, in particular RNA viruses such as coronaviruses. Most mutations will not have a significant impact, although some mutations develop a selective advantage, such as increased transmissibility.

WHO and its international network of experts are monitoring changes to the virus so that if significant mutations are identified (referred to as variants), WHO can report any modifications to interventions needed by regions, countries, communities or individuals to prevent the spread of variants.

As of May 2021, WHO has identified four variants of concern: Alpha, Beta, Gamma and Delta.

Keep your distance
Wash your hands frequently
Wear a mask
Cough & sneeze into your elbow
Ventilate or open windows

www.who.int/epi-win
Interventions are the public health strategies being implemented to control the spread of COVID-19. Preventative strategies include: diagnostics, public health & social measures, developing therapeutics and vaccines.

**Diagnostics**

- **RT-PCR/NAAT**
  - Detects genetic material of the virus
  - Uses a respiratory tract sample to diagnose SARS-CoV-2 infection
  - Takes approximately 1 day from test to results

- **ANTIGEN RAPID DIAGNOSTIC TEST (RDT)**
  - Detects viral proteins (antigens)
  - Uses respiratory tract sample to diagnose SARS-CoV-2 infection
  - Performance is best within first 5-7 days of symptoms
  - Results are within 30 minutes

- **SEROLOGIC TEST**
  - Detects human antibodies against the virus
  - Uses blood to measure immune response to an infection
  - Reveals whether the body has been infected previously
  - Typically antibodies develop 10-30 days after symptoms appear

**Public health & social measures**

**RECOMMENDED MEASURES**

Public health and social measures (PHSM) are being implemented across the globe to limit transmission and reduce mortality and morbidity from COVID-19. PHSM include individual and societal interventions to help the globe to limit transmission and reduce mortality and morbidity from COVID-19.

**Objectives:**
- Reduce human to human transmission
- Limit amplification (mass gathering)

**IMPACT ON HEALTH SYSTEMS**

It is important for countries to suppress transmission to maintain sustainability. Countries that do not suppress transmission rapidly may overwhelm their health system and increase the risk of poor health outcomes. Countries that suppress transmission early have the opportunity to maintain their health system's ability to deliver other health services and to invest in healthcare infrastructure and capacity to improve health outcomes in the future. Delaying suppression of transmission increases the risk of near collapse of health systems, as well as increased mortality and morbidity from COVID-19.

**Vaccines**

**GLOBAL ACCESS**

After the emergence of SARS-CoV-2, several COVID-19 vaccines were developed through an accelerated process. COVID-19 vaccine campaigns are underway in more than 150 countries. As of 31 May 2021:

- Pfizer/BioNTech
- AstraZeneca-SK BID / Serum Institute of India
- Janssen
- Moderna
- Sinovac
- Sinopharm

**1.5 billion+ COVID-19 vaccine doses administered**

Different vaccines on 3 platforms are currently in use:

- mRNA
- Viral vector
- Inactivated virus

**EMERGENCY USE Listings**

The following COVID-19 vaccines have been listed for emergency use by WHO:

- Pfizer/BioNTech
- AstraZeneca-SK BID / Serum Institute of India
- Janssen
- Moderna
- Sinovac
- Sinopharm

**VACCINE SAFETY**

Safety requirements for COVID-19 vaccines are the same as for any other vaccine. Clinical trials are conducted by manufacturers according to rigorous standards. COVID-19 vaccines are evaluated in tens of thousands of study participants to generate scientific data and other information needed to determine safety and efficacy. After deployment, the vaccine will continue to be carefully monitored for safety and effectiveness. WHO and national regulatory authorities review conclusive data before decisions are made on deployment of vaccines to the general public.

**Infodemic**

**WHAT IS AN INFODEMIC?**

An infodemic is an overabundance of information – good or bad – that makes it difficult for people to make decisions for their health. Misinformation, disinformation and fake news can cause real harm to health, public trust, social cohesion and emergency response. Infodemic Management aims to ensure that people have access to factual information that is easily understood and in a timely manner; so they may rapidly adopt behaviours to protect health during an epidemic.

**Misinformation**

- Inaccurate information

**Disinformation**

- False / inaccurate information
- Intended to mislead

**Therapeutics**

Currently, there are no licensed antiviral drugs for treating COVID-19.

- WHO recommends the immediate administration of supplemental oxygen therapy to any patient with emergency signs such as: obstructed or absent breathing, severe respiratory distress, central cyanosis, shock, coma and/or convulsions.
- For severely and critically COVID-19 patients, WHO recommends corticosteroids (dexamethasone, hydrocortisone or prednisolone) be given orally or intravenously.
- If there is no established indication for higher dose anticoagulation and no contraindications, WHO recommends standard thromboprophylaxis dosing.

**Health systems**

**IMPACT ON HEALTH SYSTEMS**

If many countries, the spread of COVID-19 wants to ‘community transmission’, bringing the health system to near collapse. In some situations, the health system is extremely fragile and may not support the increasing demands due to limited numbers of beds, equipment and/or staff. Therefore, it is critical for countries to suppress transmission to maintain sustainability.

**PROTECT HEALTH SYSTEMS**

It is important for countries to focus on ‘flattening the curve’ in order to protect health systems. This is achieved by facilitating early testing, isolating positive cases, implementing an efficient contact tracing system, as well as public health & social measures.

**Reducing transmission protects health workers**

- Keep your distance
- Wash your hands frequently
- Wear a mask
- Cough & sneeze into your elbow
- Ventilate or open windows