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

01 TRANSMISSION

SARS-CoV-2 is primarily spread through droplets and aerosols generated when an infected person coughs, sneezes, speaks, sings or exhales. 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 remain 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.

Patients may be infectious up to **8-9 days** after symptom onset

Patients with symptoms are **3 to 18X** more contagious

03 TRANMISSION SCENARIOS

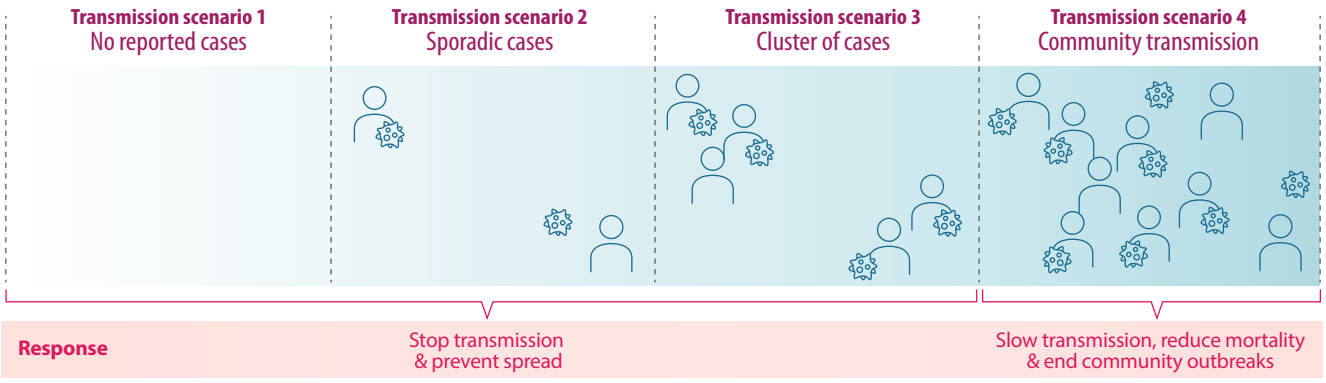
Transmission can be categorized into 4 scenarios from low incidence to very high incidence. Countries could experience one or more of these scenarios; and should define the transmission scenario as well as prepare and implement appropriate response actions.

02 HIGH-RISK SETTINGS

A high-risk setting is any place where SARS-CoV-2 might spread more easily. **Location, proximity,** and **duration** are all factors that affect risk of transmission. **Intensity** of droplet dispersion (whether singing, shouting or exercising) also plays a role.

The virus spreads more easily in poorly ventilated areas/or crowded indoor settings, where people tend to spend longer periods of time.





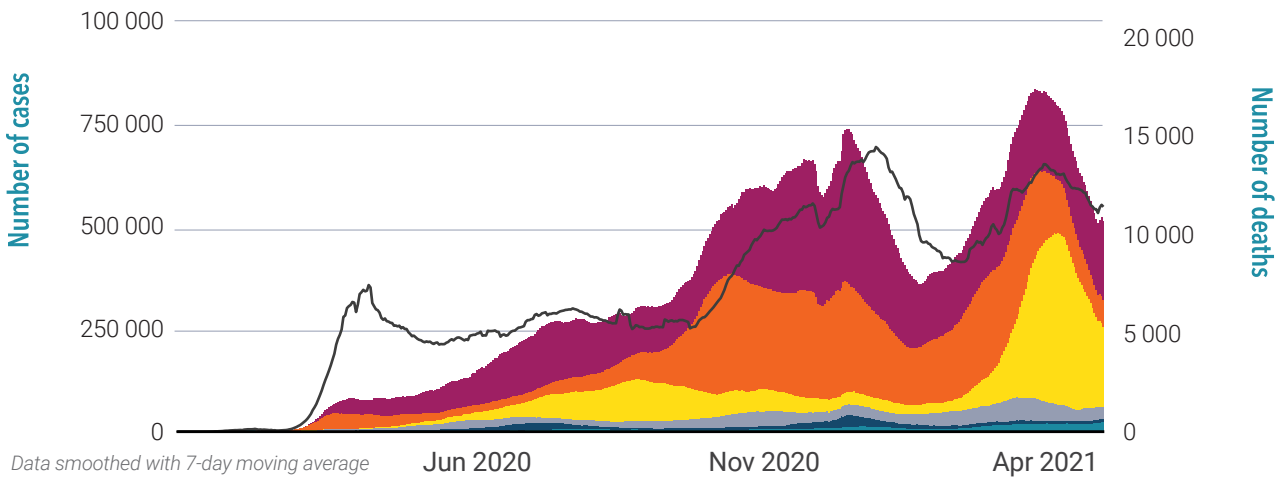
Global spread

- Region of the Americas
- European Region
- African Region
- Western Pacific Region
- Eastern Mediterranean Region
- South-East Asia Region
- Deaths

As of 31 May 2021:

> 170 million COVID-19 cases

> 3.5 million deaths

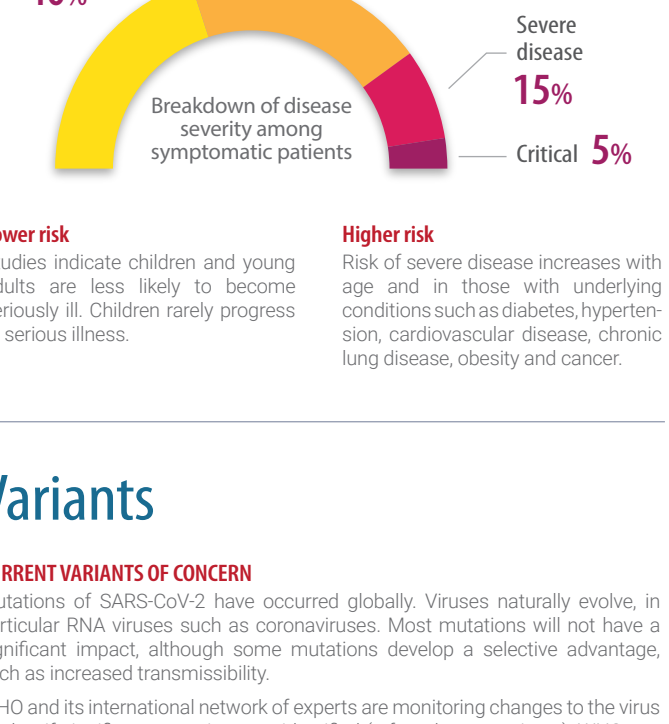


Data smoothed with 7-day moving average

The disease

01 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.



02 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.'

03 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.



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 disease, obesity and cancer.

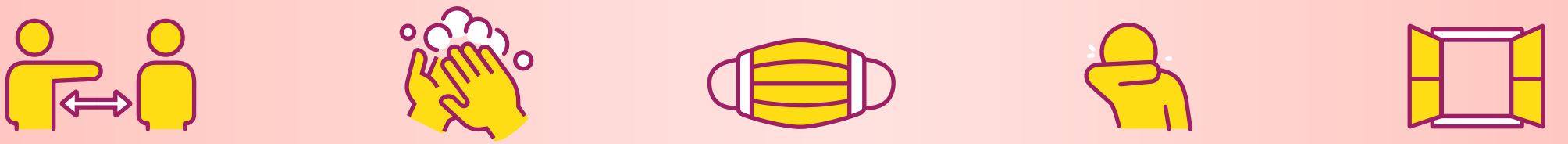
Variants

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.

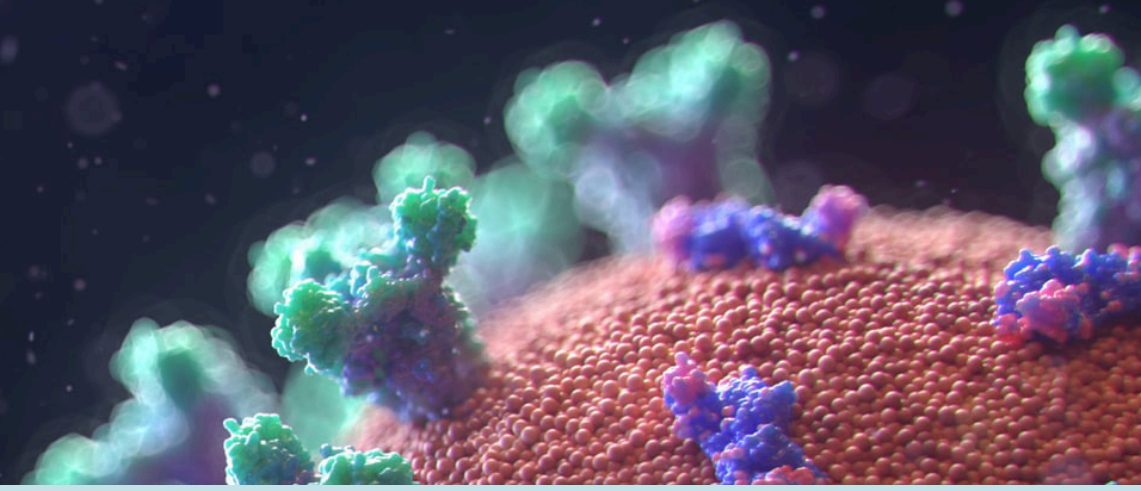
WHO and its international network of experts are monitoring changes to the virus so that if significant mutations are identified (referred to as variants), WHO can report any modifications to interventions needed by regions, countries, communities or individuals to prevent the spread of variants.

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



COVID-19 Interventions

Updated: 31 May 2021



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 MOLECULAR TEST**
Detects genetic material of the virus
Uses a respiratory tract sample to diagnose SARS-CoV-2 infection. This test 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.

* RT-PCR: real-time reverse-transcription polymerase chain reaction ** NAAT: Nucleic acid amplification tests

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 control COVID-19.

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

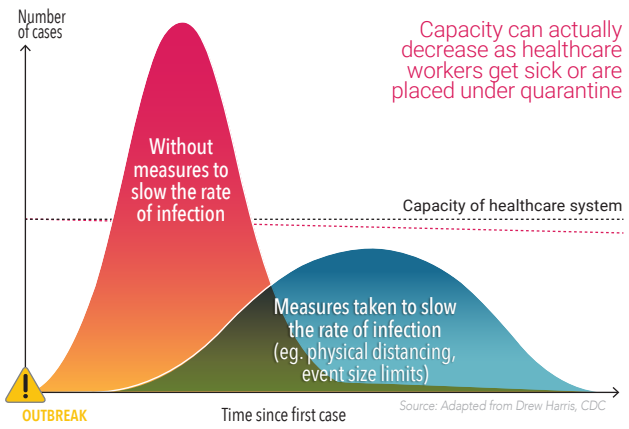
Personal protective
Hand hygiene, respiratory etiquette, face masks

Isolate & quarantine
Isolate infected individuals; supported quarantine for contacts

Social measures
Limit physical contacts & gathering; avoid crowds; physical distancing

Travel
Travel / mobility restrictions

Environmental
Surface & object cleaning; improve ventilation indoors



Health systems

01 IMPACT ON HEALTH SYSTEMS

In many countries, the spread of COVID-19 leads 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.

02 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

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, server respiratory distress, central cyanosis, shock, coma and/or convulsions.

> For severe and critical 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.

Vaccines

01 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 31st May 2021:

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 BIO / Serum Institute of India
- Janssen
- Moderna
- Sinovac
- Sinopharm

02 COVAX – GLOBAL ACCESS FOR COVID-19 VACCINES

COVAX is a world-wide initiative co-led by Gavi, the Coalition for Epidemic Preparedness Innovations (CEPI) and WHO. Its aim is to accelerate the development and manufacture of COVID-19 vaccines, and to **ensure fair and equitable access for every country in the world**. A global equitable access to a vaccine, particularly protecting health care workers and those most-at-risk is the only way to mitigate the public health and economic impact of the pandemic.

03 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 vaccines 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

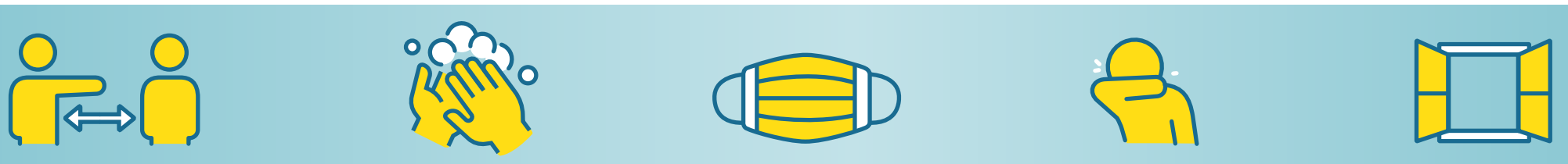
WHAT IS AN INFODEMIC?

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



www.who.int/epi-win

World Health Organization | infodemic MANAGEMENT