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Global situation of the SARS-CoV-2



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DCNAustria
Disaster Competence Network Austria

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Part I

A global view of the Covid-19 situation

Corona - what is it?

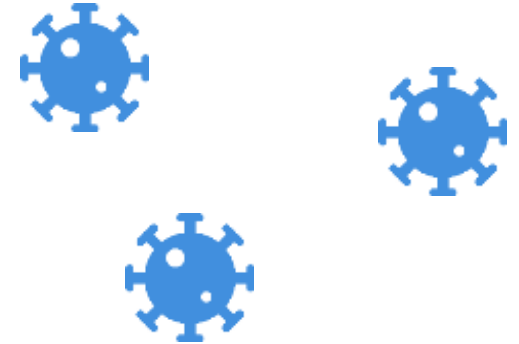
A virus with the scientific name: SARS-CoV-2 (severe acute respiratory syndrome coronavirus type 2)

SARS-CoV, MERS-CoV (Middle East respiratory syndrome coronavirus) and also „common cold viruses“ are coronaviruses

Coronaviruses are widespread among mammals and birds

SARS-CoV-2 causes severe pneumonias

SARS-CoV-2 was first detected in China (Wuhan)



Watch the video, which describes where the virus comes from:



What is a pandemic?



A global spread of a disease

Pathogens cause severe diseases and spread rapidly from person to person

High number of infected people at the same time and high mortality rates

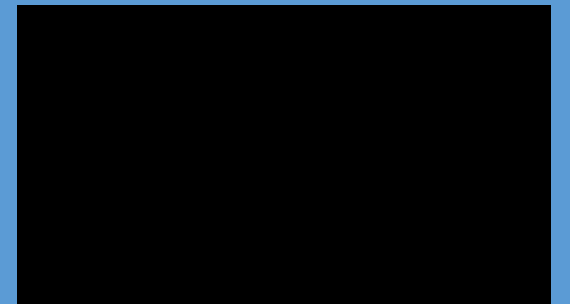
Pandemic pathogens overburden a country's health system

11th of March 2020: WHO (World Health Organisation) declares Corona-pandemic

Other important pandemics:

- Black death (1347–1352) approx. 25 million dead
- Third plague pandemic (1894-1911) approx. 12 million dead
- Spanish flue (1918-1920) approx. 50 million dead

Watch the video, explaining the difference between a pandemic and an epidemic:



Facts and figures

Cases and deaths in December 2021: 276 Mio. total cases; 5.37 Mio. deaths worldwide

Vaccination in December 2021: 8.47 billions doses administered; 3.63 billion people fully vaccinated (\cong 46.6% of the population)

Mental health: UNICEF conducted a study with 8,444 adolescents and young people between the ages of 13 and 29 \rightarrow 27% feel anxiety and 15% depression

Check tests, cases and deaths for your country by following this link:
<https://ourworldindata.org/coronavirus-data>
Scroll to „country-by-country data on the pandemic“ and enter your country to receive the respective data



The screenshot shows the 'Our World in Data' website. The main heading is 'Coronavirus Pandemic (COVID-19) - the data'. Below the heading, it lists the research and data sources: 'Research and data: Hannah Ritchie, Edouard Mathieu, Lucas Rod s-Guirao, Cameron Appel, Charlie Giattino, Esteban Ortiz-Ospina, Joe Hasell, Bobbie MacDonald, Dilana Beltekian, Saloni Dattani and Max Roser'. It also lists the web development team: 'Web development: Lars Yencken, Daniel Bachler, Errol van Woerden, Daniel Gavrilov, Marcel Gerber, Matthieu Bergele, and Jason Crawford'. At the bottom, there is a footer with the text: 'The data on the coronavirus pandemic is updated daily. Last update: an hour ago.' and social media links for 'Follow our work on Twitter' and 'Check this research!'. There are also 'Subscribe' and 'Feedback' buttons.

Preventive measures (according to WHO)

Get vaccinated

Keep physical distance (at least 1 m)

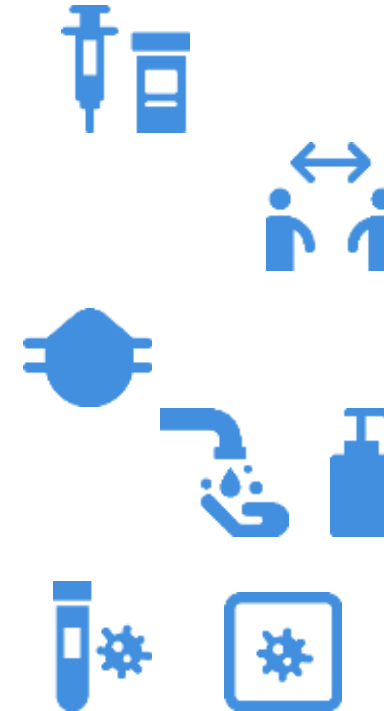
Wear a properly fitted mask

Clean your hands frequently

If you develop symptoms or test positive for COVID-19, self-isolate until you recover

Find detailed videos and advices here:

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/videos>





Part II

National pandemic plans

What is a pandemic plan?



It is a strategic document, which defines a clear course of action with clearly defined competencies in case of a pandemic situation

It helps to react adequately to the pandemic situation without any delays

It is based on guidelines of the WHO

2 main parts:

(1) Measures to protect the public

(2) Scientific basis to support the protecting measures

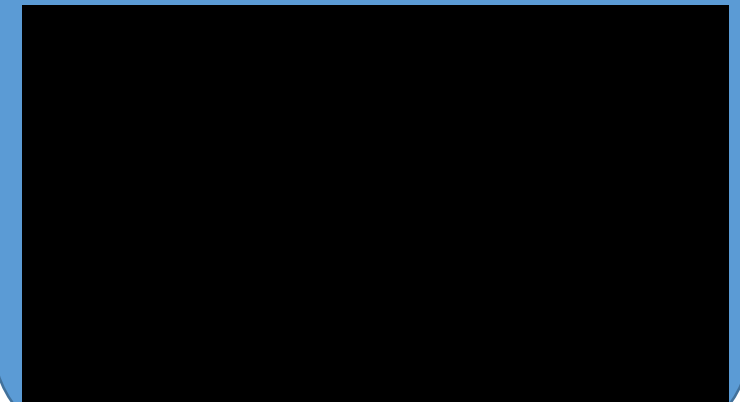
Find a list and links of European influenza pandemic plans here:

<https://www.ecdc.europa.eu/en/seasonal-influenza/preparedness/influenza-pandemic-preparedness-plans>

Or here:

<https://www.euro.who.int/en/health-topics/communicable-diseases/influenza/pandemic-influenza/pandemic-preparedness/national-preparedness-plans>

Watch the video, explaining the role of HERA* in a pandemic:



Pandemic phases

1 low risk of human infections through animal pathogenic influenza viruses

2 high risk of human infections by circulating animal pathogenic influenza viruses

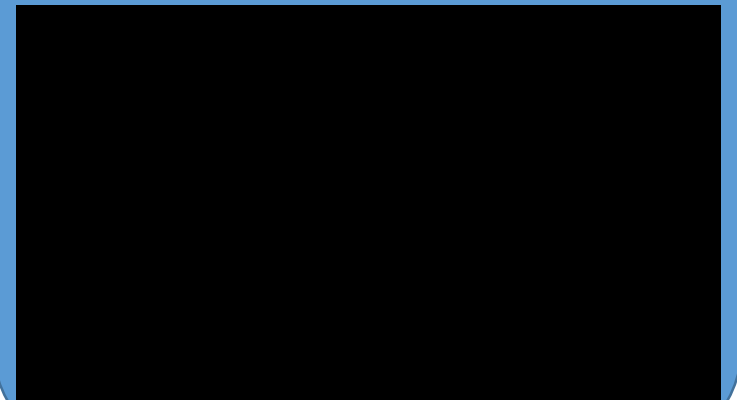
3 human infections by new virus types, no human-to-human spread

4 limited local human-to-human spread

5 major outbreaks, but still local

6 pandemic situation

Watch the video, explaining WHO's Strategic Preparedness and Response Plan to COVID-



Pandemic phases and main actions by phase

	ESTIMATED PROBABILITY OF PANDEMIC	DESCRIPTION	MAIN ACTIONS IN AFFECTED COUNTRIES	MAIN ACTIONS IN NOT-YET-AFFECTED COUNTRIES
PHASE 1	Uncertain	No animal influenza virus circulating among animals has been reported to cause infection in humans.	Producing, implementing, exercising, and harmonizing national pandemic influenza preparedness and response plans with national emergency preparedness and response plans.	
PHASE 2		An animal influenza virus circulating in domesticated or wild animals is known to have caused infection in humans and is therefore considered a specific potential pandemic threat.		
PHASE 3		An animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks.		
PHASE 4	Medium to high	Human-to-human transmission of an animal or human-animal influenza reassortant virus able to sustain community-level outbreaks has been verified.	Rapid containment.	Readiness for pandemic response.
PHASE 5	High to certain	The same identified virus has caused sustained community-level outbreaks in at least two countries in one WHO region.	Pandemic response: each country to implement actions as called for in their national plans.	Readiness for imminent response.
PHASE 6	Pandemic in progress	In addition to the criteria defined in Phase 5, the same virus has caused sustained community-level outbreaks in at least one other country in another WHO region.		
POST-PEAK PERIOD		Levels of pandemic influenza in most countries with adequate surveillance have dropped below peak levels.	Evaluation of response; recovery; preparation for possible second wave.	
POSSIBLE NEW WAVE		Level of pandemic influenza activity in most countries with adequate surveillance is rising again.	Response	
POST-PANDEMIC PERIOD		Levels of influenza have returned to the levels seen for seasonal influenza in most countries with adequate surveillance.	Evaluation of response; revision of plans; recovery.	

Sources:

https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Steckbrief.html;jsessionid=E86C7A7F7C5385E6AE8991F99510434F.internet082?nn=13490888#doc13776792bodyText1

<https://www.euro.who.int/de/health-topics/health-emergencies/coronavirus-covid-19/novel-coronavirus-2019-ncov>

<https://www.faz.net/aktuell/wirtschaft/schneller-schlau/die-toedlichsten-pandemien-der-welt-und-ihre-folgen-16991965.html>

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>

<https://ourworldindata.org/coronavirus-data>

<https://www.unicef.org/lac/en/impact-covid-19-mental-health-adolescents-and-youth>

<https://www.cdc.gov/flu/pandemic-resources/1918-commemoration/what-cdc-does.htm>

<https://www.ncbi.nlm.nih.gov/books/NBK143061/table/ch4.t1/?report=objectonly>