



Update 7 (24th of February 2020)

**Information about Infection disease
COVID-19 (novel coronavirus)**



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in Munich**

24th of February 2020

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December 2019, a novel coronavirus emerged in Wuhan City, China. Since then the virus spread to 25 countries including Europe and the US. Since then the virus showed evidence for human-to-human transmission as well as evidence of asymptomatic transmission. At 30th January 2020 WHO declared a Public Health Emergency of International Concern. The disease was formally named COVID-19 on 11th of February. The virus itself has been named SARS-CoV-2.

HIGHLIGHTS/NEWS

- During the course of the day on 22 February, the Italian authorities reported clusters of cases in Lombardy. On 22 February, COVID-19 cases were also reported from two other Regions, Piedmont and Veneto. On 23 February Emilia-Romagna also reported cases.
- Since the last update, the daily number of laboratory confirmed cases increased outside China. Bahrain, Kuwait, Lebanon and Israel reported their first cases.
- The US citizen tested positive in Malaysia after leaving the cruise ship "Westerdam" has been tested negative in a second sampling.
- WHO developed guidance documents for managing public health events at Points of Entry and mass gatherings, as well as for the work of health care workers. On that website, you will find Handbooks for the management of Public Health events in air transport, maritime sector and for the inspection of ships and issuance of ship sanitation certificates. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/points-of-entry-and-mass-gatherings>
https://www.who.int/docs/default-source/coronaviruse/who-rights-roles-respon-hw-covid-19.pdf?sfvrsn=bcabd401_0

GLOBALLY

79 360

confirmed cases

2 618 death

Dated: 24.02.2020

CHINA

77 169

confirmed cases
(including 64 287 from Hubei province)

2 592 death

EU/EEA and the UK

180

confirmed cases

3 death (France, Italy)

**US, Canada and
Australia**

66

confirmed cases

**Outside of CHINA
total**

2 191

confirmed cases

33 countries

26 death

Risk Assessment

China

Very high

Regional Level

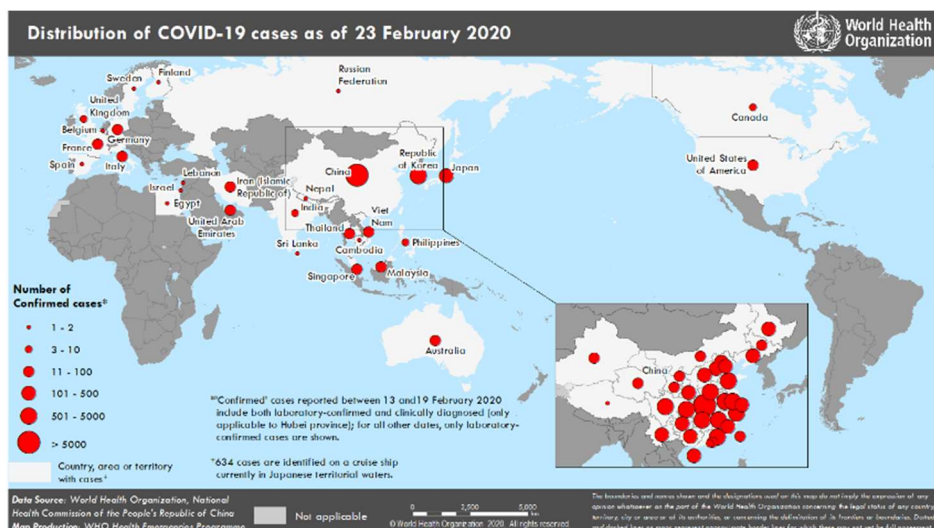
High

Global Level

High

Europe

Moderate



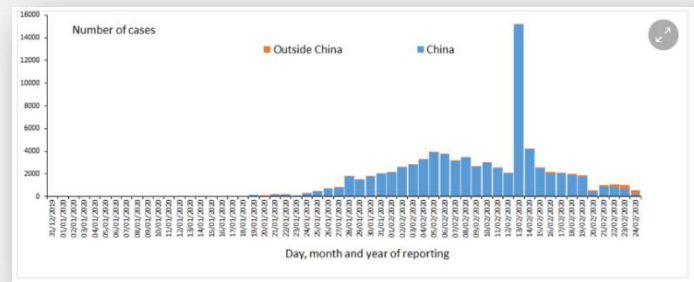
Geographical distribution of COVID-19 cases – worldwide

Continent	Country	Confirmed cases		Death
Asia	Bahrain	1	New	0
Asia	China	77 169	↑	2 592
Asia	Cambodia	1	→	0
Asia	Hong Kong	74	↑	2
Asia	India	3	→	0
Asia	Israel	2	New	0
Asia	Iran (Islamic Republic of)	43	↑	8
Asia	Japan	144	↑	1
Asia	Kuwait	3	New	0
Asia	Lebanon	1	New	0
Asia	Macao	10	→	0
Asia	Malaysia	22	→	0
Asia	Nepal	1	→	0
Asia	Philippines	3	→	1
Asia	Republic of Korea	763	↑	7
Asia	Singapore	89	↑	0
Asia	Sri Lanka	1	→	0
Asia	Taiwan	28	↑	1
Asia	Thailand	35	→	0
Asia	United Arab Emirates	13	↑	0
Asia	Vietnam	16	→	0
Others	Cases on an international conveyance Japan	691	↑	3
Europe	Belgium	1	→	0
Europe	France	12	→	1
Europe	Finland	1	→	0
Europe	Germany	16	→	0
Europe	Italy	132	↑	2
Europe	Russia	2	→	0
Europe	Spain	2	→	0
Europe	Sweden	1	→	0
Europe	United Kingdom	13	↑	0
America	Canada	9	↑	0
America	United States of America	35	↑	0
Oceania	Australia	22	↑	0
Africa	Egypt	1	→	0
Total		79 360		2 618

Bullet Points

Situation CHINA

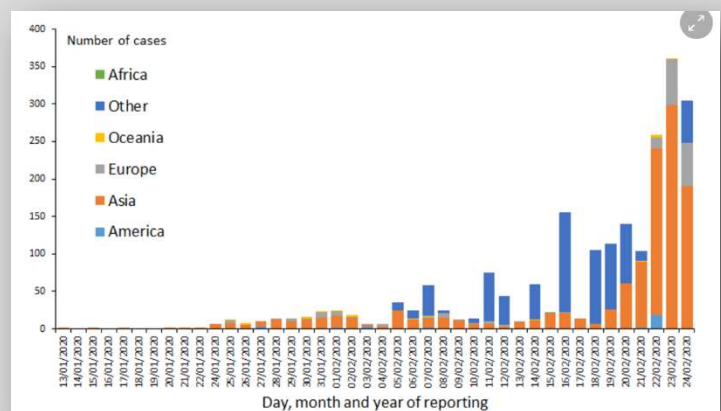
- Beside the aberration of the curve because of the change in case definition in China, a decrease in cases is visible for whole CHN. This decrease could be found in epicurves in all CHN provinces.



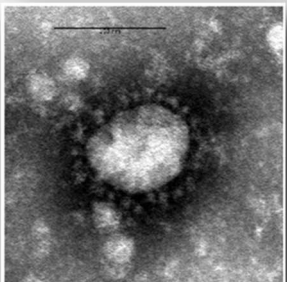
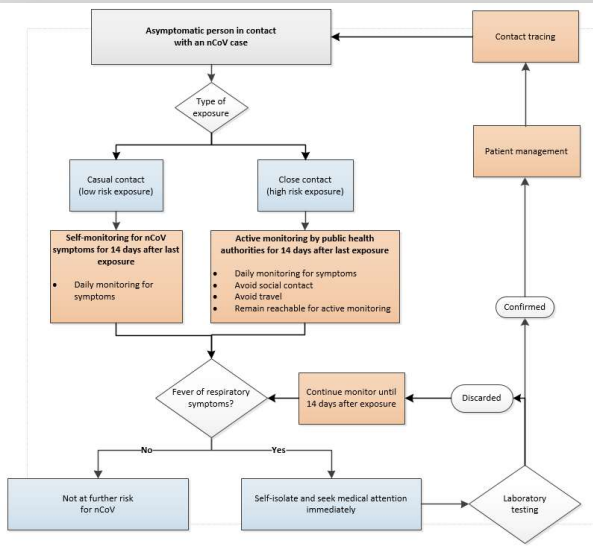
Epicurve COVID-19 dated 24/02/20, Source: ECDC

Global Situation

- Outside CHN case numbers are slightly increasing. First cases without travel history to CHN or close contact to a COVID-19 patient have been reported.
- Over 80% of patient are infected with a mild form of the disease and recover. Around 20% develop a severe form which can cause death.
- Cruise ship "Westerdam": as mentioned above the first positive tested person was tested negative by the CDC during a control sampling. The remaining 2.300 passengers tested negative.
- South Korea and Israel: The South Korean cluster has been on a pilgrimage to Israel. Nine out of 77 pilgrims were tested positive for SARS-CoV-2 after the return. Israel currently investigates for contact persons (ap. 200). South Korea has reported seven deaths and more than 700 confirmed infections - the highest number outside China.
- Iran: 43 confirmed cases of the virus, most of them in the holy city of Qom. Eight of those infected have died, the highest number of deaths outside China. Iraq, Pakistan, Armenia and Turkey have closed their borders with Iran, and Afghanistan has suspended air and road travel to and from Iran.
- Italy: The information currently available about the different COVID-19 clusters of cases in four Regions in Italy is limited. Transmission appears to not be first generation transmission from people travelling or returning from an affected area, but seems to have occurred in hospitals, with COVID-19 cases identified among healthcare workers and patients. Four deaths among elderly people have been observed. Italy has imposed strict quarantine restrictions in two northern "hotspot" regions close to Milan and Venice. About 50,000 are under a mandatory house stay. Even outside the zone, many businesses and schools have suspended activities, and sporting events have been cancelled including several top-flight football matches and the Venice Carnival. In neighbouring Austria, a train from Venice was stopped at the Austrian border after it emerged that two passengers had fever symptoms. Police, and if necessary the armed forces, will have the authority to ensure the regulations are enforced.
- Pharmaceutical supply: Hubei is one of the leading places for pharmaceutical industry, especially for antibiotics and their basic commodities. Due to the current COVID-19 outbreak industrial production discontinued for over 4 weeks now. A potential shortness of pharmaceuticals for western countries in the future is reasonable but currently not rateable.



Distribution of COVID-19 cases by continent (except CHN), 24/02/2020, ECDC

<p>Infection</p>	<ul style="list-style-type: none"> Coronavirus affects the respiratory tract of animals and humans mostly results in a dry cough, fever and cold-like symptoms. Rarely a severe pneumonia and respiratory distress with need of intensive care and consequent death is possible. Estimated 10 -15% of common colds are thought to be due to Coronavirus infections, globally. It's almost certain that the transmissibility of the Virus occurs also in patients with mild or beginning symptoms. These patients assume themselves as not sick enough to go on sick call and can become a threat for other humans. Incubation time of the virus lies between 2-14 (WHO) and 2-12 (ECDC) days. A transmission can also take place during this time. Information and technical guidance for Laboratory testing for COVID-19 in humans you could find under: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/laboratory-guidance The virus shows a wide Public Health dimension as especially patients with mild infections can spread the virus unnoticed to contact persons. First vaccination trial will be possible at the end of April. <div data-bbox="1173 224 1460 638">  <p>© Bundeswehr Institute of Microbiology / Essbauer, Kahlhofer</p> <p>EM picture of SARS-CoV-2</p> </div>
<p>Case definition</p>	<ul style="list-style-type: none"> You will find the WHO case definition “Global Surveillance for human infections with novel coronavirus” from 31 January 2020 enclosed to this report. Case definition of ECDC you will find under following Link: https://www.ecdc.europa.eu/en/case-definition-and-european-surveillance-human-infection-novel-coronavirus-2019-ncov Suspected case: patient with severe acute respiratory infection <u>AND</u> with no other etiology that fully explains the clinical presentation <u>AND</u> a history of travel to or residence in China during the 14 days prior to symptom onset <u>OR</u> were in close contact with a confirmed or probable case of SARS-CoV-2 infection <u>OR</u> worked or attended a health care facility where patients with SARS-CoV-2 infections were being tested. Probable case: Suspected case for whom testing for 2019-nCoV is inconclusive <u>OR</u> is tested positive using a pan-coronavirus assay and without laboratory evidence of other respiratory pathogens. Confirmed case: A person with laboratory confirmation of 2019-nCoV infection, irrespective of clinical signs and symptoms. <div data-bbox="906 974 1500 1523">  <p>Algorithm for management of contacts of probable or confirmed COVID-19 cases; Source: ECDC</p> </div> <ul style="list-style-type: none"> - Be aware that every contact person needs to be monitored for at least 14 days. - Enclosed you will find a list of the official WHO laboratories. There are also national reference laboratories which are capable to prove an infection of SARS-CoV-2.
<p>Strategic</p>	<p>Strategic objectives for response by WHO are:</p> <ul style="list-style-type: none"> Limit human-to-human transmission including reducing secondary infections among close contacts and health care workers, preventing transmission amplification events, and preventing further international spread from China*; Identify, isolate and care for patients early, including providing optimized care for infected patients; Identify and reduce transmission from the animal source; Address crucial unknowns regarding clinical severity, extent of transmission and infection, treatment options, and accelerate the development of diagnostics, therapeutics and vaccines;

	<ul style="list-style-type: none"> Communicate critical risk and event information to all communities and counter misinformation; Minimize social and economic impact through multisectoral partnerships. <p>*This can be achieved through a combination of public health measures, such as rapid identification, diagnosis and management of the cases, identification and follow up of the contacts, infection prevention and control in health care settings, implementation of health measures for travellers, awareness-raising in the population and risk communication.</p> <p>Further strategic measures:</p> <ul style="list-style-type: none"> Vaccination against influenza should be controlled and recommended for soldiers in theatres. Influenza results in similar symptoms as COVID-19 therefore it could not only have a personal protective effect but prevent unnecessary suspected cases and easing the burden for healthcare.
Recommendation	<p>Preventive measures are the same as for other viruses circulating at this time of the year such as Influenza. Following recommendations can all contribute to interrupting transmission of COVID-19 and a wide range of other infectious diseases:</p> <ul style="list-style-type: none"> Avoiding close contact with people suffering from acute respiratory infections. Frequent hand-washing, especially after direct contact with ill people or their environment. Avoiding unprotected contact with farm or wild animals. People with symptoms of acute respiratory infection should practice cough etiquette (maintain distance, cover coughs and sneezes with disposable tissues or clothing, and wash hands). Within health care facilities, enhance standard infection prevention and control practices in hospitals, especially in emergency departments.

Risk Assessment

Traveller to China/Wuhan/South Korea	<ul style="list-style-type: none"> Risk area! ECDC considers the risk for people from the EU and UK travelling/resident in areas with presumed community transmission is currently high.
Europe	<p>The ECDC considered the risk associated with SARS-CoV-2 infection for people from the EU and UK currently to be low to moderate.</p> <p>This assessment is based on the following factors:</p> <ul style="list-style-type: none"> All previously reported cases in the EU and UK have clearly established epidemiological links; contact tracing measures have been in place to contain further spread. Extraordinary public health measures have been implemented in northern Italy and strong efforts are being made to identify, isolate and test contacts in order to contain the outbreak. The probability of further transmission in the EU/EEA and the UK is considered to be low, but cannot be excluded because a high level of uncertainties with several unpredictable factors and a situation that is still evolving. The possibility of new introductions from other countries outside China in the EU appears to be increasing as the number of non EU countries reporting cases keeps going up. Among the increasing number of countries reporting COVID-19 cases are Israel, Lebanon, Iran, and Egypt, while the number of cases in countries outside of China (South Korea, Japan) has been increasing over the last few days. This also increases the possibility of cases being introduced from other countries outside China by travellers to the EU. The impact of sustained transmission in the EU/EEA would be moderate to high, especially for elderly populations with comorbidities, given that the reported case severity is high among these groups. <p>The risk of the occurrence of similar clusters, similar to the ones in Italy, associated with COVID-19 in other countries in the EU and the UK is currently considered to be moderate to high.</p> <p>This assessment is based on the following factors:</p> <ul style="list-style-type: none"> The current event in Italy indicates that local transmission may have resulted in several clusters for which an epidemiological link to areas where ongoing transmission is presumed, was not apparent. The accumulated evidence from clusters reported in the EU and the UK indicates that once imported, the virus causing COVID-19 can transmit rapidly. This may emanate from cases with mild symptoms that do not provoke healthcare-seeking behaviour. The increases in cases and the number of countries outside China reporting those cases increases the potential routes of importation of the infection into the EU and the UK. The impact of such clusters in the EU would be moderate to high, especially if hospitals were affected and a large number of healthcare workers had to be isolated. The impact on

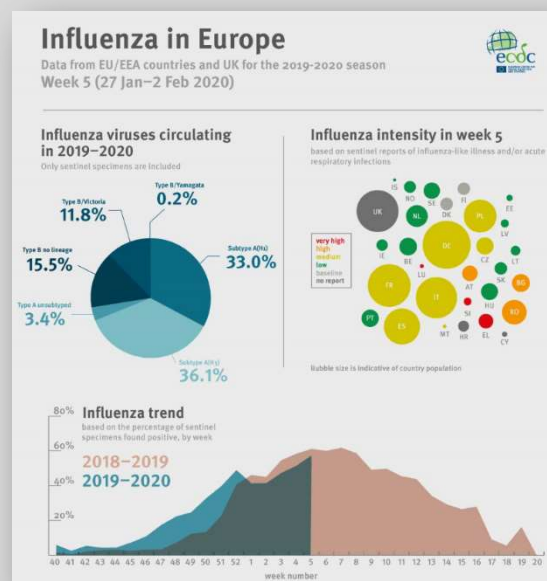
vulnerable groups within affected hospitals or healthcare facilities is considered to be severe, in particular for the elderly.

- The rigorous public health measures that were implemented immediately after identifying the Italian COVID-19 cases will reduce the impact of such outbreaks as well as the further spread.

The risk for healthcare systems capacity in the EU and the UK during the peak of the influenza season is low to moderate.

This assessment is based on the following factors:

- As the number of reported COVID-19 cases in the EU and the UK remains low, the probability of widespread infection remains low during the peak of the 2019–2020 influenza season. The majority of countries reported widespread influenza activity for week 7/2020, but the proportion of specimens tested positive in sentinel surveillance is slightly decreasing; some EU countries might have already moved past the peak period of high influenza circulation.
- If a significant increase in COVID-19 cases were to coincide with a high level of influenza activity, the potential impact on healthcare systems would be moderate to high. The increased number of cases would require additional resources for testing, case management, surveillance, and contact tracing. Increased transmission could result in further pressure on healthcare systems. This situation would be exacerbated should a substantial number of healthcare workers become infected.



Source: <https://www.ecdc.europa.eu/en/current-risk-assessment-novel-coronavirus-situation>

Global

- Because of high amount of touristic traffic and the potential human-to-human transmission the risk of further transmission still persist.
- The potential public health threat posed by COVID-19 is **high**.
- Individual risk is dependent on exposure.
- Public health and healthcare systems are in high vulnerability as they may become overloaded (some areas already are) with elevated rates of hospitalizations and deaths. Other critical infrastructure, such as law enforcement, emergency medical services, and transportation industry may also be affected. Health care providers and hospitals may be overwhelmed.

Italy

- The clusters are currently limited to a few Regions in northern Italy.
- No close contacts or other related cases have been reported to be linked to other European countries.
- The information currently available about the different COVID-19 clusters of cases in four northern Regions in Italy (Lombardy, Piedmont, Veneto and Emilia-Romagna) is limited as there is no clear epidemiological link, such as travel history to CHN or contact with a confirmed case seen.
- The situation is dynamically evolving, with more cases expected in the coming days.
- Authorities implemented a restricted zone where only drive-through traffic is allowed but no passenger movement.
- The single case in Roma has travel history and is already under quarantine.



Source BBC

References:

- European Centre for Disease Prevention and Control www.ecdc.europa.eu
- World Health Organization WHO; www.who.int
- Centres for Disease Control and Prevention CDC; www.cdc.gov