Update 9 (2nd of March 2020)

Information about Infection disease
COVID-19 (novel coronavirus)

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December 2019, a novel coronavirus emerged in Wuhan City, China. Since than the virus spread to 65 countries including Europe and America. Since than 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

- 20 new States (nine European states) reported cases of COVID-19 in the past 24 hours.
- The number of confirmed cases in Hubei province, China, has increased for two successive days after a period of decline.
- The WHO increased their assessment of the risk of spread and the risk of impact of COVID-19 to very high at a global level.
- The outbreaks reported so far have occurred primarily within clusters of cases exposed through close-contacts, within families or special gathering events.
- Control measures that focus on prevention, particularly through regular hand washing and cough hygiene, and on active surveillance for the early detection and isolation of cases, the rapid identification and close monitoring of persons in contacts with cases, and the rapid access to clinical care, particularly for severe cases, are effective to contain most outbreaks of COVID-19.
- WHO still only talks about epidemics in different parts of the world but do not see a pandemic since now. As there is no uncontained global spread of the virus, and there is no large-scale severe disease or death.
- All WHO technical guidance documents regarding COVID-19, you can find here.

Risk Assesment	
China	**Very High**
Regional Level	**Very High**
Global Level	**Very High**

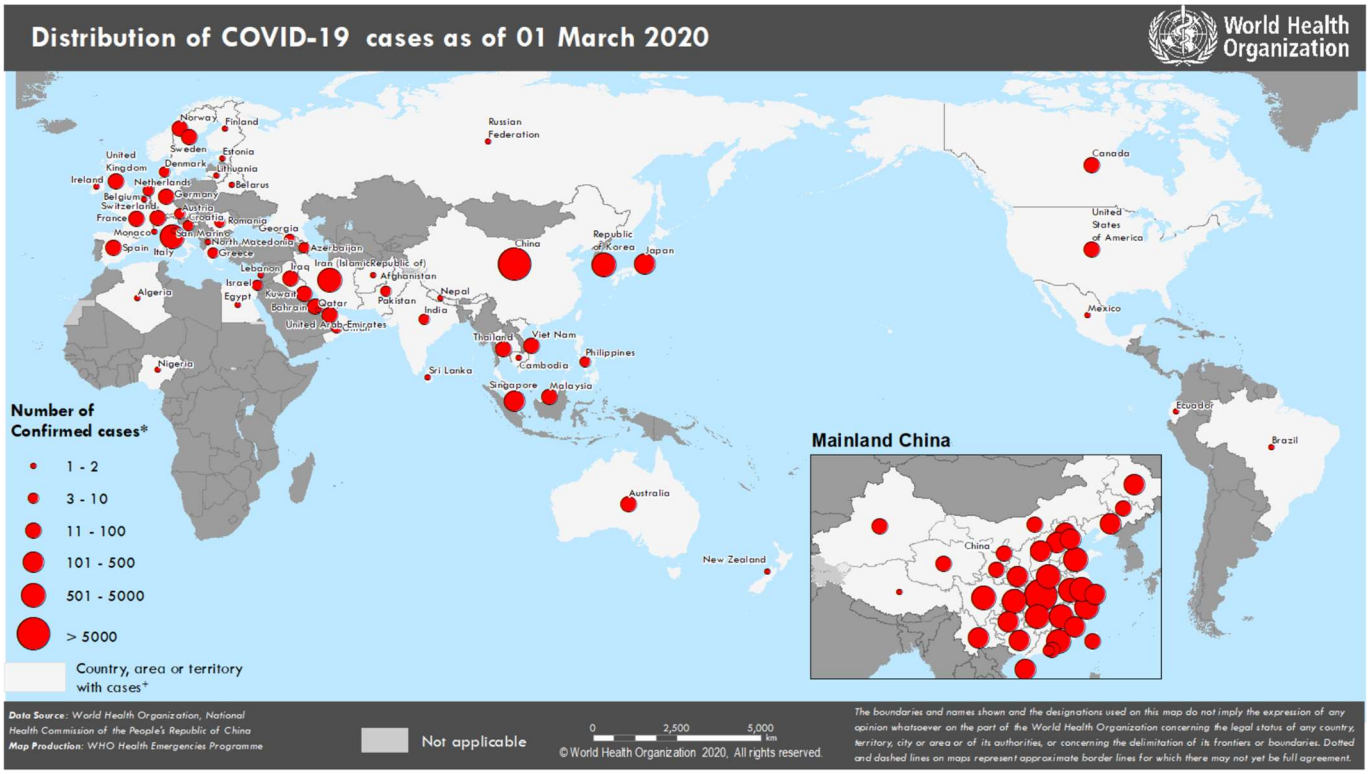
GLOBALLY
89 072
confirmed cases
3 046 death
Dated: 02.03.2020

CHINA (mainland)
80 026
confirmed cases
(including 67 103 from Hubei province)
2 912 death

EU/EEA and the UK
2 236
confirmed cases
38 death (France, Italy, San Marino)

US, Canada and Australia, New Zealand
157
confirmed cases

Outside of CHINA total
9 046
confirmed cases
65 countries
123 death



Country/Territory/Area	Confirmed Cases (Based on case definition by WHO)		Total Death	Transmission classification (Transmission classification is based on WHO analysis of available official data)
Western Pacific Region				
Australia	29	↑	1	Local transmission
Cambodia	1	→	0	Imported cases only
Japan	254	↑	6	Local transmission
Malaysia	29	↑	0	Local transmission
New Zealand	1	New	0	Imported cases only
Philippines	3	→	1	Imported cases only
Republic of Korea	4 212	↑	18	Local transmission
Singapore	106	↑	0	Local transmission
Viet Nam	16	→	0	Local transmission
South-East Asia Region				
China (incl. Hong Kong, Macao, Taiwan)	80 176	↑	2915	Local transmission
India	3	→	0	Imported cases only
Indonesia	2	New	0	Under Investigation
Malaysia	29	↑	0	Under Investigation
Nepal	1	→	0	Imported cases only
Sri Lanka	1	→	0	Imported cases only
Thailand	43	↑	1	Local transmission
Region oft the Americas				
Brazil	2	↑	0	Imported cases only
Canada	24	↑	0	Local transmission
Dominican Republic	1	New	0	Under Investigation
Ecuador	6	New	0	Imported cases only
Mexico	5	New	0	Imported cases only
United States of America	89	↑	0	Local transmission

European Region				
Armania	1	New	0	Under Investigation
Azerbaijan	3	New	0	Imported cases only
Austria	14	↑	0	Imported cases only
Belgium	2	↑	0	Imported cases only
Belarus	1	New	0	Imported cases only
Croatia	7	↑	0	Local transmission
Czech Republic	3	New	0	Under Investigation
Denmark	4	↑	0	Imported cases only
Estonia	1	New	0	Under Investigation
Finland	6	↑	0	Imported cases only
France	130	↑	2	Local transmission
Germany	150	↑	0	Local transmission
Georgia	3	↑	0	Imported cases only
Greece	7	↑	0	Imported cases only
Italy	1 694	↑	35	Local transmission
Ireland	1	New	0	Imported cases only
Iceland	3	New	0	Under Investigation
Luxenbourg	1	New	0	Under Investigation
Lithuania	1	New	0	Imported cases only
Monaco	1	New	0	Under Investigation
Norway	19	↑	0	Local transmission
North Macedonia	1	→	0	Imported cases only
Netherlands	13	New	0	Local transmission
Romania	3	↑	0	Imported cases only
Russian Federation	2	→	0	Imported cases only
San Marino	8	New	1	Local transmission
Spain	83	↑	0	Local transmission
Sweden	14	↑	0	Imported cases only
Switzerland	24	↑	0	Imported cases only
The United Kingdom	36	↑	0	Local transmission
Eastern Mediterranean Region				
Afghanistan	1	→	0	Imported cases only
Bahrain	47	↑	0	Imported cases only
Egypt	2	→	0	Imported cases only
Iran	978	↑	54	Local transmission
Iraq	19	↑	0	Imported cases only
Israel	10	↑	0	Imported cases only
Kuwait	56	↑	0	Imported cases only
Lebanon	10	↑	0	Imported cases only
Oman	6	↑	0	Imported cases only
Pakistan	4	↑	0	Imported cases only
Qatar	3	New	0	Imported cases only
United Arab Emirates	21	↑	0	Local transmission
African Region				
Algeria	1	→	0	Imported cases only
Nigeria	1	New	0	Imported cases only
Subtotal for all regions				
International conveyance (Diamond Princess)	705	↑	4	Local transmission

Distribution of COVID 19 cases reported in Italy (as of 1st March 2020)

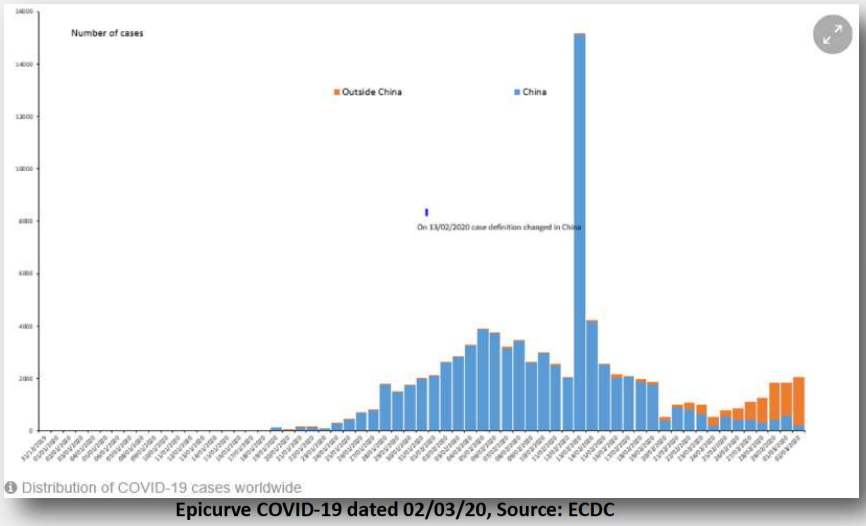
Areas	Number of cases
Lombardia	984
Veneto	263
Emilia Romagna	285
Piemonte	49
Lazio	6 (Including 2 Chinese tourists)
Sicilia	9
Toscana	13
Liguria	25
Bolzano	1
Marche	25
Campania	17
Abruzzo	5
Puglia	3
Calabria	1
Total	**1 694**

Provinces in Italy with confirmed COVID-19 cases as from 02/03/2020; Source: Night Lantern – Own work, data from The Local

Bullet Points

Situation CHINA

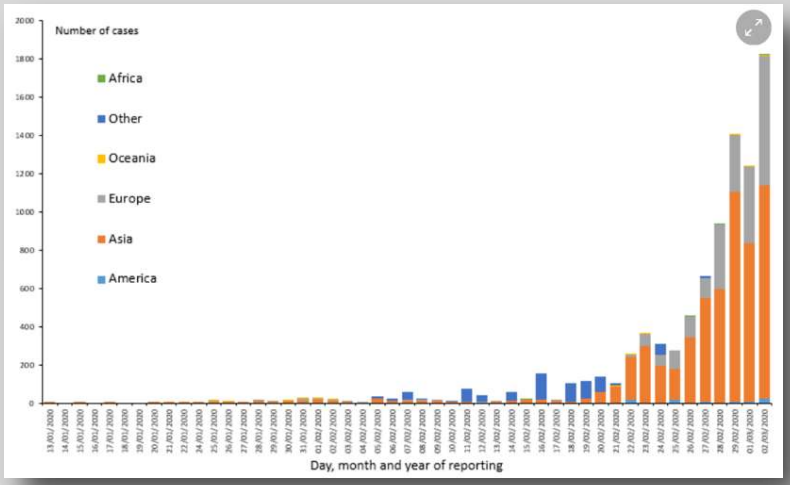
- The number of confirmed cases in Hubei province, China, has increased for two successive days after a period of decline.
- First outcome of the WHO-CHINA joint mission showed an epidemic peak and plateaued between the 23rd and the 2nd of February, and has been declining steadily since then. No significant change in the genetic makeup of the virus have been found.



Epicurve COVID-19 dated 02/03/20, Source: ECDC

Global Situation

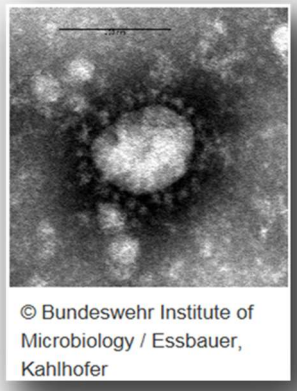
- The trend is still increasing.
- South Korea, Iran and Italy currently the most affected countries with a community spread outside of China.
- Backtracing of contract persons partially not manageable.
- Majority of patients with COVID-19 are adults. The most commonly reported symptoms included fever, dry cough, and shortness of breath, and most patients (80%) experienced mild illness. Approximately 14% experienced severe disease and 6% were critically ill. Mortality in those with critical illness has been reported as over 50%. Early reports suggest that illness severity is associated with age (>60 years old) and co-morbid disease. (Source:WHO, Situation Report-41)

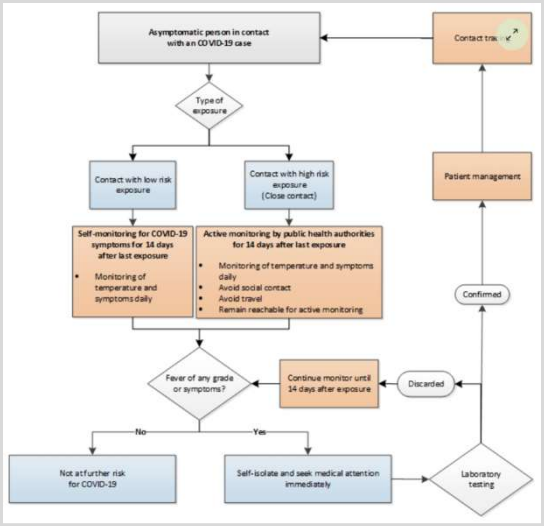
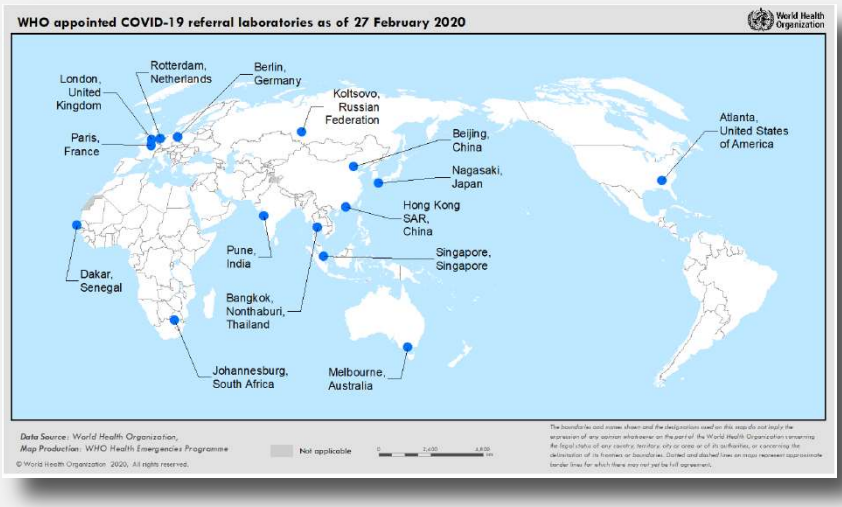


Distribution of COVID-19 cases by continent (except CHN), 02/03/2020, ECDC

- The Global Health Security Index (GHS-Index) created by the Johns Hopkins Center for Health Security is the first comprehensive assessment of global health security capabilities in 195 countries. The GHS Index seeks to illuminate preparedness and capacity gaps. Ranking the US on first rank for outbreak respond, South Korea on rank 9, Italy on rank 31, China on rank 51 and Iran on rank 97. At least prepared countries found in Western and Central Africa.

Global Health Security Index category "Respond" globally

	• Italy: Within the last 24 h 566 new Infections were reported. Third-strongest affected country after China and South Korea, thus the country with the most coronavirus cases outside of Asia. Lombardy, the northern Italian region is the centre of the country's outbreak with more than half of the infections. Italy has put several cities and towns in the country's north on lockdown, banning people from entering or leaving affected areas, suspending public events and closing attractions, such as museums, to the public. Estimated 100 000 people are currently under quarantine. Case numbers in the southern part are increasing. • Iran: Mostly affected province is Ghom with 978 cases. High estimated number of unknown cases feared. The healthcare structure is outdated and the surveillance systems not well implemented. Until now officials have refused to shut down shrines or put any city under quarantine. Only minor restriction have been implemented like access control to some religious areas. Assumptions are that the disease will spread uncontrolled. Iran has been the source of dozens of cases in neighboring countries, including Afghanistan, Bahrain, Iraq, Kuwait, Oman and Pakistan. • South Korea: Besides CHN the biggest outbreak area. US military bases still control access and expanded the screening measures at base entrances. • 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.
Infection	• Coronavirus affects the respiratory tract of animals and humans mostly results in a dry cough, fever and cold-like symptoms. Rarely a sever pneumonia and respiratory distress with need of intensive care and consequent death is possible. Estimated 10 -15% of common colds are through 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. • COVID-19 infection causes mild disease (i.e. non-pneumonia or mild pneumonia) in about 80% of cases and most cases recover, 14 % have more severe disease and 6% experience critical illness. • Recovery time for people with mild disease is about two weeks, for people with severe or critical disease three to six weeks. • 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.  © Bundeswehr Institute of Microbiology / Essbauer, Kahlhofer **EM picture of SARS-CoV-2**

Case definition	• **Laboratory testing** for COVID-19 should be performed for suspected cases according updated WHO case definition: • Suspected cases: A patient with acute respiratory illness (fever and at least one sign/symptom of respiratory disease (e.g., cough, shortness of breath), **AND** with no other aetiology that fully explains the clinical presentation **AND** a history of travel to or residence in a country/area or territory reporting local transmission of COVID-19 disease during the 14 days prior to symptom onset; **OR** A patient with any acute respiratory illness **AND** having been in *contact* with a confirmed or probable case in the last 14 days prior to onset of symptoms; **OR** A patient with severe acute respiratory infection (fever and at least one sign/symptom of respiratory disease (e.g., cough, shortness breath) **AND** requiring hospitalization **AND** with no other aetiology that fully explains the clinical presentation. • However, once local or community transmission has been reported in the country or area, all patients presenting with symptoms of acute respiratory infection in primary care or the accident and emergency department of a hospital (first contact with the healthcare system) will be considered as suspected cases. • Probable cases: Suspected case for whom testing for2019-nCoV is inconclusive1 OR is tested positive using a pan-coronavirus assay. • Confirmed case: A person with laboratory confirmation of virus causing COVID-19 infection, irrespective of clinical signs and symptoms.  **Algorithm for management of contacts of probable or confirmed COVID-19 cases; Source: ECDC, 25/02/2020**
Laboratory Network and Detection	• WHO utilizing an international network of expert laboratories to provide support in the detection of COVID-19 virus globally. • WHO named 15 COVID-19 reference laboratories. These international laboratories can support national labs to confirm the COVID-19 virus. • As the international caseload increases very fast, there is a need to rapidly scale up diagnostic capacity to detect and confirm COVID-19 cases. Therefor ongoing test availability must be ensured. • WHO procured a commercial assay (ISO:13485) and shipped it to over to 150 laboratories globally as an interim measure to strengthen global diagnostic capacity for detection of the virus.  • WHO published guidance (interim laboratory guidance for detection and interim guidance on biosafty) including advice on sample collection, diagnostic testing, and pathogen characterization for COVID-19, which are continually updated as more data becomes available. • Public health efforts are targeted at both interrupting further transmission and monitoring the spread of COVID-19. • As reports of asymptomatic cases increase, the need for reliable serology testing is urgent. Work on that is already in progress.

	• **Laboratory testing** for COVID-19 should be performed for suspected cases according to the
Recommendations	
Recommendation for international business travellers	Avoid nonessential Business travels, particullary while traveling to an affected area (eg China, Iran, Italy, South Korea). General recommendations for personal hygiene, cough etiquette and keeping a distance of at least one metre from persons showing symptoms remain particularly important for all travellers. These include: • Perform hand hygiene frequently. Hand hygiene includes either cleaning hands with soap and water or with an alcohol-based hand rub. Alcohol-based hand rubs are preferred if hands are not visibly soiled; wash hands with soap and water when they are visibly soiled; • Cover your nose and mouth with a flexed elbow or paper tissue when coughing or sneezing and disposing immediately of the tissue and performing hand hygiene; • Refrain from touching mouth and nose; • A medical mask is not required if exhibiting no symptoms, as there is no evidence that wearing a mask – of any type – protects non-sick persons. If masks are to be worn, it is critical to follow best practices on how to wear, remove and dispose of them and on hand hygiene after removal. **People returning from affected areas** (= countries, provinces, territories or cities experiencing ongoing transmission of COVID-19, in contrast to areas reporting only imported cases) **should self-monitor for symptoms for 14 days and follow national protocols of receiving countries. Some countries may require returning travellers to enter quarantine. If symptoms occur, such as fever, or cough or difficulty breathing, persons are advised to contact local health care providers, preferably by phone, and inform them of their symptoms and their travel history.** Source: WHO
Recommendation for soldiers	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: • Avoiding close contact with people suffering from acute respiratory infections. • Frequent hand-washing, especially after direct contact with ill people or their environment. • Avoid mass gathering events and places with high amount of people. • 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). • If returning from a trip to an affected area please adhere to the aforenamed recommendation (in red).

Risk Assessment	
Traveller to China/Wuhan/South Korea	• Risk area! The risk for people travelling/resident in areas with presumed community transmission is currently very **high**.
Europe	**The ECDC considered the risk associated with SARS-CoV-2 infection for people from the EU/EEA and UK currently to be moderate to high.** This assessment is based on the following factors: • Most cases reported in the EU/EEA and the UK outside some regions in Italy have identified epidemiological links. However, there is an increasing number of cases without a defined chain of transmission. Extraordinary public health measures have been implemented in Italy and other EU/EEA countries and the UK, and strong efforts are being made to identify, isolate and test contacts in order to contain the outbreak. Despite contact tracing measures initiated to contain further spread, there continue to be cases exported between EU/EEA countries, and an increasing number of sporadic cases across EU/EEA countries. The probability of further transmission in the EU/EEA and the UK is considered high. There is still a level of uncertainty regarding several unpredictable factors in a situation that is still evolving. • The possibility of new introductions from other countries outside China into the EU/EEA appears to be increasing as the number of countries reporting cases continues to rise. A list of these countries can be found here. • The evidence from analyses of cases to date is that COVID-19 infection causes mild disease (i.e. non-pneumonia or mild pneumonia) in about 80% of cases and most cases recover, 14 % have more severe disease and 6% experience critical illness. The great majority of the most severe illnesses, and deaths, have occurred among the elderly and those with other chronic underlying conditions. In addition to the public health impacts with substantial fatal outcomes in high-risk groups, COVID-19 outbreaks can cause huge economic and societal disruptions. **The risk of acquiring the disease travelling/resident in areas with no cases, or multiple imported cases, or limited local transmission, is currently considered low to moderate AND in areas with more widespread local transmission is currently considered to be high.** **The risk of the occurrence of clusters associated with COVID-19 in other countries in the EU/EEA and the UK is currently considered moderate to high.** **The risk of widespread and sustained transmission of COVID-19 in the EU/EEA and the UK in the coming weeks is moderate to high with more countries reporting more cases and clusters** This assessment is based on the following factors: • There is an increasing number of countries with local or widespread local transmission around the world that are exporting cases to unaffected areas. These exportations have caused transmission in previously unaffected areas. The control measures have up to now been able to only slow the further spread, but not to stop it. • Cases with mild symptoms are numerous and able to transmit the infection. Cases with mild symptoms are not always aware of their potential infectivity and have sought medical care, infecting healthcare workers. • Previously unaffected areas are reporting cases with travel history to a country that did not appear to have widespread local transmission. • The WHO increased their assessment of the risk of spread and the risk of impact of COVID-19 to very high at a global level **The risk for healthcare system capacity in the EU/EEA and the UK in the coming weeks is considered moderate to high.** This assessment is based on the following factors: • As the number of reported COVID-19 cases in the EU/EEA and the UK is increasing, the probability of widespread infection is increasing from low to moderate. • The majority of countries reported widespread influenza activity for week 8/2020, but the proportion of specimens tested positive in sentinel surveillance is slightly decreasing; some EU/EEA countries might have already moved past the peak period of high influenza circulation. For the latest influenza update see the joint ECDC–WHO/Europe weekly influenza update. • •If there is a significant increase in COVID-19 cases in the coming weeks, the potential impact on the public health and overall healthcare systems would be high. Increasing numbers of imported cases and local transmission chains would require additional resources for case management, surveillance, and contact tracing. Risk communication to concerned members of the public and healthcare professionals would tie up further resources. Further increased

	transmission could result in a significant increase of hospital admissions at a time when healthcare systems are may already be under pressure from the current influenza season. This would be exacerbated if substantial numbers of healthcare workers became infected. Specimens for COVID-19 could therefore lead to bottlenecks not only in healthcare but also in diagnostic capacity. Containment measures intended to slow down the spread of the virus in the population are therefore extremely important as outlined below in the 'Options for response' and recent ECDC guidance documents. 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 **high** risk of further transmission persists. • Official IATA changed their travel documents with new travel restrictions. You will find the documents here. • 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. • Appropriate to the global trend of transmission of SARS-CoV-2 an extensive circulation of the virus is expectable. At this moment of time, asymptomatic persons as well as infected but not sickened persons could be a source of spreading the virus. Therefore no certain disease free area could be named globally.

References:

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