

Update 45 (10th of November 2020)

Information about Infection disease COVID-19 (novel coronavirus)



Force Health Protection Branch FHPB (former DHSC) NATO MILMED COE in Munich 10th of November 2020

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In December 2019, a novel coronavirus emerged in Wuhan City, China. Since then the virus spread to 65 countries including Europe and America. 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. On 11th of March 2020 WHO characterized the disease as a pandemic.

HIGHLIGHTS/NEWS

- Number of corona infections worldwide exceeds 50 million. The number of deaths related to the virus has been 1.25 million since the pandemic began. On Saturday alone, the number of new infections reported rose by almost half a million. As a result of the cooler weather, the pandemic has recently spread particularly in countries in the northern hemisphere, including Europe and North America. The number of corona infections in the USA has exceeded the ten million mark.
- Contemporary WHO Secretary General Tedros Adhanom Ghebreyesus has warned of fatigue in the fight against the corona pandemic.
- Reports from Denmark about mutated coronaviruses transmitted from mink to humans are causing a stir among experts. <u>The virus mutation</u> <u>"Cluster 5" has not yet been observed, the World Health Organization</u> <u>(WHO) announced on Saturday</u>. In Denmark, twelve people were infected with the variant - experts fear the mutation could affect the effectiveness of future vaccines.
- **Pfizer/BioNTech**: announced vaccine candidate against COVID-19 achieved success in <u>first interim analysis from phase 3 study</u>.
- FDA: <u>authorizes Monoclonal Antibody for Treatment of COVID-19</u> on 9 Nov.
- UNICEF/WHO: as COVID-19 disrupts immunizations, <u>emergency action</u> <u>needs to be implemented to avert major measles and polio epidemics</u>. The two organizations estimate that US\$655 million are needed to address dangerous immunity gaps in non-Gavi eligible countries and target age groups.

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GLOBALLY 🗡

50 910 277 confirmed cases 33 310 100 recovered 1 263 514 deaths

EU/EEA and the UK ≯

12 770 684 confirmed cases 4 496 700 recovered 308 136 deaths

USA ↗ (new cases/day 101 671)

10 064 841 confirmed cases 3 890 463 recovered 237 251 deaths

India → (new cases/day 45 903)

8 591 730 confirmed cases 7 959 406 recovered 127 059 deaths Brazil →

(new cases/day 10 554)

5 675 032 confirmed cases 5 163 226 recovered 162 628 deaths

France ⊾ (new cases/day 20 155)

> 1 807 479 confirmed cases 129 735 recovered 40 987 deaths

Russia ≯ (new cases/day 21 577)

1 781 997 confirmed cases 1 326 568 recovered 30 546 deaths

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Map of countries with reported COVID-19 cases (last 7 days)





room visits in patients at high risk for disease progression within 28 days after treatment when compared to placebo.

Bamlanivimab is not authorized for patients who are hospitalized due to COVID-19 or require oxygen therapy due to COVID-19 as there have been so benefit reported in those patients.

Bamlanivimab is a monoclonal antibody that is specifically directed against the spike protein of SARS-CoV-2, designed to block the virus' attachment and entry into human cells.

Sources:

https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-authorizes-monoclonal-antibodytreatment-covid-19

Vaccination of SARS-CoV-2 development

According to the company, the potential corona vaccine developed by the Mainz-based pharmaceutical company BioNTech and its US partner Pfizer is more than 90 percent effective. Both companies announced this together with reference to data on efficiency from the ongoing clinical trial.

BioNTech and Pfizer want to apply for the accelerated approval in the USA next week. Before submitting the so-called emergency approval in the USA, a necessary "safety milestone" must be reached, the companies said. They anticipated that this would be achieved in the third week of November and that an application for an emergency permit from the US FDA could be made shortly thereafter.

Experts, assessed these messages as interesting first signals. However, the data can only be finally assessed when primary data and a peer-reviewed publication are available.



Our mRNA-based approach for a COVID-19 vaccine

Source: https://biontech.de/covid-19

Country reports:

IND: After the number of infections had stabilized at a high level in the meantime, a record number of corona infections has been registered again in the Indian capital New Delhi. According to antibody studies, around every fourth inhabitant of the city seems to have been infected with the virus by the present time, nevertheless the virus continues to spread unchecked. In addition, there are indications that superspreader events play an enormous role in the country; researchers assume that 10% of all infected people were responsible for 60% of all subsequent infections recorded.

USA: The number of hospital stays has increased by 73 percent in the past 30 days to at least 58,982 - a record level that exceeds the previous high of 58,370 patients on July 22nd. The United States recorded more than 100,000 new infections on Monday for the sixth consecutive year.

The elected US President Joe Biden presented his expert council on Monday to contain the corona pandemic. "I will be informed by science and experts," said Biden in a press release. The Expert

Council should help shape the anti-corona measures of the new government. The main aim is to bring the increasing number of infections under control, to promote the development and distribution of safe and effective vaccines and to protect vulnerable population groups.

CHN: China has identified a pork knuckle imported from Germany as the trigger for a new corona case. State media reported that a worker in a cold store in the east Chinese city of Tianjin was infected. Tests then showed that traces of the virus had been discovered on the packaging of a frozen pork knuckle, which was initially imported from Bremen to Tianjin and from there sent on to the city of Dezhou. Eight people with whom the worker had previously had close contacts were quarantined as a precaution, according to the state newspaper "Global Times". Strict controls have been introduced in Tianjin.

The **German federal government** has rejected the allegations. According to the responsible Federal Institute for Risk Assessment, no infection with the coronavirus through the consumption of meat or contact with contaminated meat products has so far been described. Infections of farm animals - such as pigs or chickens - have not been proven according to the current state of knowledge.

JAP: The suicide rate continues to rise. In October it rose for the fourth consecutive month to its highest level in five years, police data show. Experts blame the economic consequences of the pandemic, which apparently mainly affects women. According to the data, the suicide rate in October was 2153 cases, 300 more than in September and the highest number since May 2015. Of these, 851 were women, an increase of 82.6 percent compared to the same month last year. In men, the rate increased by 21.3 percent.



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Czech Republic - the second wave hits the country hard

The so-called second wave hit the country not only earlier, but also harder than other EU countries. While the country was still comparatively little affected in a European comparison during the so-called first COVID-19 wave in spring 2020, was even considered one of the model countries in Europe The absolute numbers of infections and the number of deaths are currently increasing. These high numbers of infections are also increasingly putting the health system to the test. Pre-crisis data from 2017 showed that the CZE, with an intensive care bed capacity of 11.6 beds per 100,000 inhabitants, was roughly in the middle of the range of European countries. However, the existing capacities are also increasingly reaching their limits. In mid-October 2020, the Czech government warned of an impending bottleneck and decided to temporarily increase general hospital capacity. For this purpose, for example, the construction of a field hospital was announced, which should make 500 beds available, but only 10 ventilation places. Ultimately, however, there is not only a risk of a shortage of hospital beds, but also - as in many European countries - a lack of qualified staff to actually operate these beds. Especially since, in line with the high incidence in the normal population, the number of infections (and the associated guarantine orders among close contact persons) within the medical staff has increased significantly. The Czech government has already asked for support in other European countries with regard to intensive care unit capacities should their own capacities no longer suffice.

The national emergency was already announced on October 5th, 2020, which among other things led to restrictions in restaurants, sports events and schools. A general curfew between 8:00 p.m. and 6:00 a.m. was announced on October 9th. Further regulations came into force at short notice, for example a general mask requirement that applies outdoors when one is in built-up areas and a distance of 2 m cannot be maintained, as well as extensive contact restrictions. The last tightening came into force at the end of October. The ban on going out was retained, but now applies from 9:00 p.m. to 4:59 a.m. In addition to the restrictions already in place in the retail sector, markets and sales in market halls have now also been banned, although "farmers' markets", where Czech products are sold, are still allowed. The next few weeks will show to what extent the measures are working.

First promising results are seen. Only 3608 new infections have been reported in the past 24 hours. The country has its lowest value in four weeks. Compared to last week, there are almost 3000 fewer cases.

https://www.bbc.com/news/world-europe-54639351 https://koronavirus.mzcr.cz/en/

Country Reports:

POR: In the areas hardest hit by the pandemic, a state of emergency was declared due to the increasing number of new corona infections. From today there is a curfew for two weeks. Around seven million people are not allowed on the streets between 11 p.m. and 5 a.m. on weekdays. On weekends, the curfew starts at 1 p.m. The restrictions apply to about 70 percent of the population.

DEU: The Bundeswehr and its soldiers are now deployed in around 80 percent of all German health authorities to track contacts with people infected with corona. As part of administrative assistance, 4412 soldiers are currently serving in 297 health offices in all federal states. The trend is increasing. The main areas of support are the federal states of North Rhine-Westphalia, Bavaria and Berlin.

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The number of corona patients in intensive care units has exceeded the high from spring 2020. The German Interdisciplinary Association for Intensive Care and Emergency Medicine (DIVI) reported that 3005 COVID-19 patients are being treated in intensive care. 1688 (56 percent) of these are ventilated invasively. According to DIVI, the previous high was reached on April 18 with 2933 Covid-19 patients in intensive care units. In fact, the situation in the clinics is currently even worse than in the spring, experts say. There are significantly more infected patients on other wards - who must be assumed that they could become intensive care. The entire infection situation is not comparable with that in April. Unlike the peak on April 18, this time a drop in cases is not to be expected, the increase will rather continue for the time being.

RUS: has reported another high in new corona infections. A total of 21,798 people were infected within 24 hours on Monday. That is almost twice as many as at the peak times of the first wave in May. In Moscow alone, the number of new infections was 6,897. In the course of this Moscow has ordered the closure of restaurants, bars and nightclubs for two months between 11 p.m. and 6 a.m. All mass events are also banned until January 15th. College must switch to online classes. Still the authorities in Moscow wanted to avoid a lockdown.

HUN: Public life will be drastically restricted from Wednesday on for 30 days due to the increasing number of infections. The measures include a nightly curfew from 8 p.m. to 5 a.m., the closure of restaurants and hotels (the latter except for business travelers) and the transition from face-to-face to digital lessons from grade 8. The measures also extend to the closure of theaters, museums, fitness studios, leisure facilities and covered swimming pools. Sports events may only take place without an audience. Weddings may only be held in close family circles, and funerals may only be attended by 50 people. Family gatherings and private events are limited to a maximum of ten participants.

DNK: 1.9 million of the approximately 15 million mink in breeding facilities have already been killed after the appearance of mink corona variants. The Danish police announced on Sunday. To curb the spread of the mutated pathogen in the population, all restaurants in seven northern Danish municipalities with a total of 280,000 inhabitants closed from Saturday.

FRA: At many French schools, teachers have been on strike to tighten the corona measures. With 45 percent of middle school teachers and 20 percent of elementary school teachers, every 10th teacher took part in the strike. Union representatives spoke of a great "anger" and incomprehension, especially in secondary schools, about inadequate Corona measures. According to them, it is impossible in many classes or school canteens to adhere to the rules of distance and hygiene.

GBR: The number of layoffs climbed to a record in the summer quarter due to the Corona crisis. Between July and September there was an increase to 314,000 and thus 181,000 more than in the previous quarter, announced the national statistics office ONS. As expected by economists, the unemployment rate rose to 4.8 percent, the highest level since autumn 2016.

Subject in	Focus					
Animals as	The recent cases at mink farms in DNK, NLD, USA, SWE, ITA and Spain show that there is a need to improve the way we interact with animals to protect their health and our health.					
of the SARS- CoV-2 virus	Within a few months the COVID-19 pandemic has disrupted our communities and ways of life. With devastating effects on society in nearly all countries of the globe, it has also heavily challenged the food supply chains, livelihoods, economies as well as animal production systems. All these components are intrinsically linked					
	The COVID-19 pandemic has provided new evidence that a longstanding and sustainable One Health collaboration is needed. The current COVID-19 pandemic demonstrates the devastating impact emerging zoonotic diseases can have on all of us - globally.					
	The introduction of a new virus to the human population is one of the greatest mysteries an epidemiologist can hope to unravel. Some of the most common and deadliest human diseases are caused by bacteria or viruses of animal origin. In recent decades this trend has only increased, with an estimated 70 per cent of emerging and re-emerging pathogens coming from animals.					
	Diseases which emergence at the human animal interface, like H1N1 (e.g. 'Swine Flu'); zoonotic avian influenza, Ebola virus disease, leprosy, lassa fever, MERS-CoV, rabies, SARS, smallpox, tuberculosis, Zika fever and other well-known diseases are widely known.					
	How an infectious disease crosses the animal-human barrier is a riddle that can take years to solve. But understanding how an epidemic began is essential to preventing further introductions to the human population but also to prevent and respond to future pandemics.					
	How important the finding of the animal reservoir is to all states worldwide can been seen in <u>Resolution WHA73.1</u> made at the 73 rd World Health Assembly in May 2020. It tasks the WHO, the World Organisation for Animal Health (OIE), the Food and Agriculture Organization of the United Nations (FAO) and countries, as part of the One-Health Approach with:					
	"identify[ing] the zoonotic source of the virus and the route of introduction to the human population, including the possible role of intermediate hosts, including through efforts such as scientific and collaborative field missions, which will enable targeted interventions and a research agenda to reduce the risk of similar events occurring, as well as to provide guidance on how to prevent infection with severe acute respiratory syndrome coronavirus 2 (SARS-COV2) in animals and humans and prevent the establishment of new zoonotic reservoirs, as well as to reduce further risks of emergence and transmission of zoonotic diseases."					
	This Resolution signifies the recognition of all 194 Member States of the importance of this work and provides WHO with a clear mandate to lead in this area. This approach not only accounts for COVID-19 but for all existing and upcoming zoonotic					
	Source of SAR-CoV-2 Evidence is that COVID-19 started at the Huanan wholesale market mainly supplying seafood products but also fresh fruits and vegetables, meat, and live animals. At December 2019, 10 stalls operators were trading live wild animals including chipmunks, foxes, racoons, wild boar, giant salamanders, hedgehogs, sika deer, among others. Farmed, wild and domestic animals were also traded at the market including snakes, frogs, quails, bamboo rats, rabbits, crocodiles, and badgers. In January samples of environmental sources as well as frozen animal carcasses where investigated for SARS-CoV-2. All 336 animal samples where PCR negative and 69 out of 842 environmental samples were positive by PCR for SARS-CoV-2. Sixty- one of those (88%) were from the western wing of the market. Of these, 22 samples were from 8 different drains and sewage, and 3 viruses were isolated and sequenced. These were virtually identical to the patient samples collected at the same time (>99.9 % homology). But until now, even with the knowledge above, it remains unclear whether the market was a					
	contamination source, acted as an amplifier for human-to-human transmission, or a combination of those factors. In addition, there is limited information about potential risk factors outside of the market. Factors such as occupation, travel history, and others were identified among the first diagnosed cases.					

For a long time, those big markets where animals and humans interact that closely were suspected to be the (main) source of zoonotic diseases.

To close those markets seems to be the easiest way to handle that threat. But in the global food system, markets that sell and slaughter live wild animals ('wild animal wet markets') hold a strong cultural importance in many nations and facilitate key food security outcomes. For many generations across different continents, wild animal wet markets have been a traditional and valued form of fresh food retail.

Several recent disease events, including SARS and Ebola virus, have resulted in severe socioeconomic crises as a consequence of spill over events stemming from poorly regulated wildlife trade. Wildlife trade is highly complex and carries both risks and benefits. Thus, there is a need to support legal, sustainable and responsible wildlife use by providing sound guidance, standards, risk assessment and risk management tools. This is a challenge for the one health approach, human health and animal health institutions need to work on in conjunction. Thereby COVID-19 proofs again that a longstanding and sustainable One Health collaboration is needed.

Animal infections of SARS-CoV-2

Following widespread human infection, several species of animals have also been infected with SARS-CoV-2. In February and March 2020, the first cases of infection with SARS-CoV-2 were reported in domestic cats and dogs from household of COVID-19 patients in Hong Kong SAR, China and Belgium. Similar cases of pet cats and dogs have since been reported from several countries. Other felines such as tigers and lions in a zoo in the USA were also found to be infected with SARS-CoV-2 following contact with an infected pre-symptomatic zookeeper.

So far, susceptibility studies conducted in several countries have shown that domestic cats, ferrets, hamsters and minks are particularly susceptible to infection, and in some cases exhibit morbidity and mortality and can transmit the disease to other animals of the same species. Cats have been found to be easily infected with SARS-CoV-2 and can transmit to other cats. Infected cats were also shown to shed viruses in large quantities while asymptomatic.

Other species have shown different degree of susceptibility to SARS-CoV-2 infection including several species of bats, tree shrews, and different species of non-human primates while other species such as chicken, turkeys, ducks and quails were found not to be susceptible.

The first preliminary results demonstrate that different animal species in regular contacts with humans are susceptible to infection with SARS-CoV-2 and could serve as intermediate animal host species or could establish new reservoirs for the virus and new sources for spill-over events into the human population.

lember	Species affected	Date of first report	LINKS
Hong Kong	Dog	21/03/2020	Follow-up report no. 3 (23/03/2020)
	Cat	24/07/2020	Follow-up report no. 3 (03/09/2020)
Belgium	Cat	28/03/2020	Situation update 1 (28/03/2020)
USA	Feline (tiger, lion, cat), dog, mink	06/04/2020	Follow-up report no. 23 (30/10/2020)
Netherlands	Mink	28/04/2020	First report (28/04/2020), situation update 1 (15/05 /2020), situation update 2 (9/08/2020), situation update 3 (16/07/2020), situation update 4 (12/08 /2020), situation update 5 (01/09/2020), situation update 6 (06/10/2020)
France	Cat	02/05/2020	First (02/05/2020) and Second (12/05/2020)
Spain	Cat	11/05/2020	First (11/05/2020) and Second (08/06/2020)
	Mink	16/07/2020	Immediate notification (16/07/2020)
Germany	Cat	13/05/2020	First (13/05/2020)
Russia	Cat	26/05/2020	Immediate notification (26/05/2020)
Denmark	Mink	17/08/2020	Situation update 1 (17/06/2020), situation update 2 (03/07/2020, situation update 3 (24/08 /2020, situation update 4 (01/10/2020), situation update 5 (18/10/2020), situation update 6 (05/11 /2020)
United Kingdom	Cat	28/07/2020	Immediate notification (28/07/2020)
Japan	Dog	07/08/2020	1st (07/08/2020) and 2nd (25/09/2020)
Italy	Mink	30/10/2020	Situation update 1 (30/10/2020)
Sweden	Mink	29/10/2020	Situation update 1 (29/10/2020) Situation update 2 (06/11/2020)
Chile	Cat	22/10/2020	Immediate notification (22/10/2020)
Canada	Dog	28/10/2020	1st (28/10/2020)
Brazil	Cat	29/10/2020	Immediate notification

In January, under the leadership of the OIE Wildlife Working Group, the OIE mobilised an expert group to provide scientific advice and to develop guidelines on a range of topics linked to humananimal-ecosystems interface aspects of COVID-19. These include identifying research priorities, communicating results of on-going research in animals, developing scientific opinions on the implications of COVID-19 for animal health and veterinary public health, and providing practical guidance for Veterinary Services. Subsequently an expert group was established to assess the risks and implications of COVID-19 for safe trade in animals and animal products.

Infection of SARS-CoV-2 in minks

A number of outbreaks in mink farms in the Netherlands, Denmark and Spain have shown that minks can spread the disease in farm environment and could potentially establish a new animal reservoir in mink populations for SARS-CoV-2 if not efficiently controlled.

Since June 2020, 214 human cases of COVID-19 have been identified in Denmark with SARS-CoV-2 variants associated with farmed minks, including 12 cases with a unique variant, reported on 5 November. All 12 cases were identified in September 2020 in North Jutland, Denmark. The

cases ranged in age from 7 to 79 years, and eight had a link to the mink farming industry and four cases were from the local community.

The variant of the virus, referred to as the "cluster 5" variant, had a combination of mutations, or changes that have not been previously observed. Even as first observations suggest that the clinical presentation, severity and transmission among those infected are similar to that of other circulating SARS-CoV-2 viruses. Preliminary findings indicate that this particular mink-associated variant identified in both minks and the 12 human cases has moderately decreased sensitivity to neutralizing antibodies.

Minks were infected following exposure from infected humans. Minks can act as a reservoir of SARS-CoV-2, passing the virus between them, and pose a risk for virus spill-over from mink back to humans. People can then transmit this virus within the human population. Additionally, spill-back (human to mink transmission) can occur. It remains a concern when any animal virus spills into the human population, or when an animal population could contribute to amplifying and spreading a virus affecting humans. As viruses move between human and animal populations, genetic modifications in the virus can occur.

The Danish government, like other affected nations, therefore decided to cull all minks that belong to any mink farm in the country. This was said to be a preventive measure to control the further spread of the new variant and to protect the efficacy of any vaccine that is under development to help against SARS-CoV-2.

Further scientific and laboratory-based studies are required to verify preliminary findings reported and to understand any potential implications of this finding in terms of diagnostics, therapeutics and vaccines in development.

Infection with SARS-CoV-2 with virus on food and surfaces

Recent outbreaks in markets as well as food processing plants in USA, Germany, Thailand, India, Brazil, Spain, China and Ireland have raised questions about the potential role of food products as a vehicle of transmission for SARS-CoV-2. Preliminary results suggest that food items, as other surfaces and objects, might be contaminated by the virus. But there is no evidence that contaminated food items may have contributed to transmission.

Even as SARS-CoV-2 RNA has been found on shrimps and salmon packages in recent surveys in China. And the WHO found in experimental studies on the survival of SARS-CoV-2 virus on different surfaces, the virus can remain viable for up to 72 hours on surfaces and recent results further suggest virus viability on meat products, there is currently no evidence for foodborne transmission.

But even with no evidence that food is a likely source or route of transmission for the virus, it is necessary to coordinate and cooperate globally to share data and evidence to further clarify the potential role of food in the spread of COVID-19 virus.

Sources:

- https://www.oie.int/en/scientific-expertise/specific-information-and-recommendations/questions-and-answers-on-2019novel-coronavirus/oies-• response/ https://www.oie.int/en/scientific-expertise/specific-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-recommendations/guestions-and-answers-on-2019novel-coronavirus/expert-information-and-answers-on-2019novel-coronavirus/expert-information-and-answers-on-2019novel-coronavirus/expert-information-and-answers-on-2019novel-coronavirus/expert groups-and-guidance/ https://www.oie.int/en/scientific-expertise/specific-information-and-recommendations/questions-and-answers-on-2019novel-coronavirus/ https://www.who.int/news-room/feature-stories/detail/how-who-is-working-to-track-down-the-animal-reservoir-of-the-sars-cov-2-virus https://www.who.int/publications/m/item/who-convened-global-study-of-the-origins-of-sars-cov-2 http://www.fao.org/documents/card/en/c/ca9959en https://apps.who.int/iris/bitstream/handle/10665/332197/WHO-2019-nCoV-FAQ-Virus_origin-2020.1-eng.pdf https://www.who.int/csr/don/06-november-2020-mink-associated-sars-cov2-denmark/en/
 - https://en.wikipedia.org/wiki/Cluster 5

Conflict and Health

COVID-19 Crisis in Chad

In cooperation with Bundeswehr HQ of Military Medicine

CHAD

Area:	1,284,00	00 km ²
Population:	13,670,0)84
Capital:	N'Djame	ena
Age structure: 0-14 years: 15-24 years: 25-54 years:		48,12% 19,27% 26,95%
65 vears and over:		3,25%



Source: Indexmundi.com

CONFLICT:

Today's Chad with its approx. 16.2 million inhabitants emerges from the subdivision of the French colony of French Equatorial Africa from 1900. After President Idriss Déby Itno took office in 1990, it initially seemed as if the country would gain a democratic opening, this period ended with the establishment of a presidential system. The most important steps in the establishment of power were the expansion of the security forces and the establishment of a sophisticated clientele and patronage system. Chad is one of the most corrupt countries (2019: 162nd out of 180) and the countries with the most fragile state governments (FSI 106.4 / 120). Any opposition or critical voices by e.g. Journalists are constantly threatened by government reprisals as soon as they dare to denounce constitutional amendments, bad governance, rampant corruption or extreme poverty. So far, the well-trained military has managed to keep armed rebellions against the Déby regime away from the center of the country - not least thanks to French support. As an ally in the fight against Islamist terror, Chad plays a key role in French and EU policies in the region. At the regional level, Chad is involved in several missions and alliances aimed at curbing Islamist terrorism. Chadian troops have been represented since July 2013 with a contingent of currently 1,460 soldiers in the UN blue helmet MINUSMA mission in Mali (Mission Intégrée des Nations Unies pour la Stabilization au Mali). Since 2014, Chad has been part of the "Barkhane" anti-terrorist mission launched by France, together with Mauritania, Mali, Burkina Faso and Niger, whose headquarters are in N'Djamena. Since September 2017, the country has been involved in the emergency force of the five Sahel countries (G5-Sahel Joint Force). This international prestige of Déby makes it almost hopeless for the political opposition to make themselves heard in international politics and the public. The Federal Republic of Germany ended bilateral cooperation in 2012 because of the democratic deficits. Since then, German support has been limited to humanitarian and transitional aid and 20% of the EU's aid payments. Around the Lake Chad region, the conflict between Boko Haram and the Nigerian security forces has forced millions of people to flee their homes and caused massive civil suffering. In addition to the conflict with Boko Haram, the areas around Lake Chad are confronted with a number of other challenges (see "Health"). The danger of a new, protracted and stalled conflict in Africa is great if the causes of the problems in the countries around Lake Chad are not addressed.

HEALTH:

Chad ranks 160/195 on the Health Security Index and is considered to be severely underdeveloped. The region around Lake Chad is struggling with extreme poverty, climate change, chronic food shortages, the emergence of several terrorist groups and organized crime. This leads (e) to considerable internal and cross-border population shifts. In 2020, the country will be confronted with several humanitarian crises: the deterioration of the harvest in combination with the COVID-19 crisis will mainly increase the number of cases of acute malnutrition. for <5 year old increase again. In addition, the country is hit annually by measles epidemics, which reached a new dimension in 2019 and has now lasted 2 years. Since only 37% of all children under 5 years of age are vaccinated against measles, a large-scale vaccination campaign was planned for 2020, but this was put on hold due to the corona pandemic. There are also fears that disruptions in care policies could increase HIV deaths. After the WHO declared Africa free of wild poliovirus, there have been multiple cases of vaccinated polio based on Sudan since 2019 (59 cases in 2019, 56 of them with acute flaccid paralysis). Here, too, COVID-19 thwarted the initiation of defense strategies. With regard to SARS-CoV-2, 1,513 infected people and 98 deaths were reported up to November 4, whereby these numbers refer to official reports.

CONCLUSION:

The COVID-19 outbreak in March 2020 put even more pressure on the already fragile health system. The pandemic is expected to add further strain to resources that are already insufficient to carry out essential health programs. The economy depends in large part on the import of industrial products and food, the export of live cattle, grain and oil. The closing of the Chadian borders with neighboring countries severely impaired this exchange and has already led to high unemployment. Overall, it is estimated that by the end of 2020 there will be around 6.4 million

Chad				28.8 Index Score	150	/19
	RES	POND	HEALTH	NORMS	RI	SК
23.2 34.8 36.5 41.9	34.5	38.4	6.6 26.4	46.2	23.7	55.0
				Ave	rage: all 195	count
		AVERAGE SCORE*		I	COUNTRY SCORE	AVERA
PREVENTION	23.2	34.8	HEALTH SYSTEM		6.6	26
Antimicrobial resistance (AMR)	58.3	42.4	Health capacity in cl	inics, hospitals	0.8	24
Zoonotic disease	0.5	271	and community care centers			
Biosecurity	0	16.0	 Medical countermeasures and personnel deployment 		0	2
Biosafety	0	22.8	Healthcare access		18.2	38
Dual-use research and culture of responsible science	0	1.7	Communications with healthcare workers during a public health emergency		0	1
Immunization	70.2	85.0	0 Infection control practices and		0	20
DETECTION AND REPORTING	36.5	41.9	9 availability of equipment		25	45
Laboratory systems	50	54.4	1.4 medical countermeasures		-12	
Real-time surveillance and reporting	40	39.1	1 COMPLIANCE WITH 46.2		48	
Epidemiology workforce	50	42.3	INTERNATIONAL NORMS		50	67
Data integration between human/ animal/environmental health sectors	0	29.7	disaster risk reductio	n n	00	0.
RAPID RESPONSE	34.5	38.4	Cross-border agreer and animal health er	nents on public mergency response	50	54
Emergency preparedness and response planning	0	16.9	International commi	tments	0	53
Exercising response plans	100	16.2	JEE and PVS		50	1
Emergency response operation	0	23.6	Financing		50	30
Linking public health and security authorities	0	22.6	Commitment to sha & biological data & s	ring of genetic pecimens	66.7	68
Risk communication	25	39.4	RISK ENVIRONMEN	π	23.7	55
Access to communications infrastructure	42.7	72.7	Political and security	risks	17.9	60
Trade and travel restrictions	100	97.4	Socio-economic res	ilience	15.4	66
			Infrastructure adequ	асу	16.7	49
*Average: all 195 countries Scores are normalized 40, 100, where 100 - most fill	iorablei		Environmental risks	1.00-2	71.5	52

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should-you-care-about-the-lake-chad-crisis/

MilMed Col	E VTC COVID-19 response					
Торіс	The NATO Centre of Excellence for Military Medicine is putting its expertise and manpower to aid in any way possible during the pandemic. The VTC is for interested participants (experts) to exchange experiences, management regulations and restrictions due to COVID-19. We would like to propose just one of the most important topics in the next iteration. We will have some experts giving a short briefing and then afterward we will have time for questions and experiences as well as a fruitful discussion.					
	 Topics former VTCs: Regulations on the public, military and missions abroad. Medical Treatment Facilities: how equipped they are, is there pooling / isolation of COVID-19 patients in separate facilities. Testing strategies Aeromedical evacuation De-escalation strategy and measures Collateral damage of COVID-19 emphasing Mental Health Aspects and other non COVID related diseases Immunity map, national strategies to measure and evaluate the immunity level" Mental Health Treatment of mild symptomatic cases of COVID-19 Transition home office back to the office COVID-19 Second Wave prediction and preparedness based on facts/experiences, modelling and simulation Perspectives of the current COVID-19 vaccine development National overview on current COVID-19 situation Long term effects of COVID-19 and the impact on force capability Overview on current COVID-19 situation in Missions Civil – military cooperation in view of COVID-19 Immunity development versus reinfections of COVID-19 					
Immunity development versus reinfections of COVID-19	Briefer from NATO MILMED COE, POL, USA and GBR reported.					
	NATO MILMED COE Briefer talked about immunity development in lights of notified COVID-19 reinfections					
	The Briefer from POL talked about new given directions by the polish Government related to the antigen tests for COVID-19					
	GBR Briefer give a short overview of Immunity to COVID-19 in UK					
	Next VTC will be on Wednesday 18 th of November with the topic " The current status of SARS-CoV-2 vaccine development ".					

Recommendat	tions			
Recommendation for international business travellers As of 19 th October 2020	Many countries have halted some or all international travel since the onset of the COVID-19 pandemic but now have re-open travel some already closed public-travel again. This document outlines key considerations for national health authorities when considering or implementing the gradual return to international travel operations. The decision-making process should be multisectoral and ensure coordination of the measures implemented by national and international transport authorities and other relevant sectors and be aligned with the overall national strategies for adjusting public health and social measures. WHO Public health considerations while resuming international travel.			
	Travel has been shown to facilitate the spread of COVID-19 from affected to unaffected areas. Travel and trade restrictions during a public health event of international concern (PHEIC) are regulated under the International Health Regulations (IHR), part III. The majority of measures taken by WHO Member States relate to the denial of entry of passengers from countries experiencing outbreaks, followed by flight suspensions, visa restrictions, border closures, and quarantine measures. Currently there are exceptions foreseen for travellers with an essential function or need.			
	 In the case of non-deferrable trips, please note the following Many airlines have suspended inbound and outbound flights to affected countries. Contact the relevant airline for up-to-date information on flight schedules. Check your national foreign office advices for regulations of the countries you're traveling or regulations concerning your country. Information's about the latest travel regulations and De-escalation strategy measures you can find at <u>IATA</u> and <u>International SOS</u>. For Europe you will find more information <u>here</u>. 			
	 Most countries implemented strikt rules of contact reduction: Everyone is urged to reduce contacts with other people outside the members of their own household to an absolutely necessary minimum. In public, a minimum distance of 1.5 m must be maintained wherever possible. Staying in the public space is only permitted alone, with another person not living in the household or in the company of members of the own household (for most countries, please check bevor traveling). Follow the instructions of the local authorities. 			
	Risk of infection when travelling by plane: The risk of being infected on an airplane cannot be excluded, but is currently considered to be low for an individual traveller. The risk of being infected in an airport is similar to that of any other place where many people gather. If it is established that a COVID-19 case has been on an airplane, other passengers who were at risk (as defined by how near they were seated to the infected passenger) will be contacted by public health authorities. Should you have questions about a flight you have taken, please contact your local health authority for advice.			
	 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; See also: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public 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. 			

• WHO information for people who are in or have recently visited (past 14 days) areas where COVID-19 is spreading, you will find <u>here</u>.

Travellers who develop any symptoms during or after travel should self-isolate; those developing acute respiratory symptoms within 14 days upon return should be advised to seek immediate medical advice, ideally by phone first to their national healthcare provider.

Source: WHO and ECDC

European Commission:

On 13 May, the European Commission presented <u>guidelines and recommendations</u> to help Member States gradually lift travel restrictions, with all the necessary safety and precautionary means in place.

On 13 October, EU Member States adopted a <u>Council Recommendation on a coordinated</u> approach to the restriction of free movement in response to the COVID-19 pandemic.

1. Common criteria

- <u>the notification rate</u> (the total number of newly notified COVID-19 cases per 100 000 population in *the last 14* days at regional level)
- <u>the test positivity rate</u> (the percentage of positive tests among all tests for COVID-19 infection carried out during the last week)
- <u>the testing rate</u> (the number of tests for COVID-19 infection per 100 000 population carried out during the *last week*)

2. A common map

The ECDC will publish a map of EU Member States, broken down by regions, which will show the risk levels across the regions in Europe using a traffic light system. See also <u>"Situation in Europe"</u>.

Areas are marked in the following colours:

- **green** if the 14-day notification rate is lower than 25 cases per 100 000 and the test positivity rate below 4%;
- **orange** if the 14-day notification rate is lower than 50 cases per 100 000 but the test positivity rate is 4% or higher or, if the 14-day notification rate is between 25 and 150 cases per 100 000 and the test positivity rate is below 4%;
- red if the 14-day notification rate is 50 cases per 100 000 or higher and the test positivity rate is 4% or higher or if the 14-day notification rate is higher than 150 cases per 100 000;
- **grey** if there is insufficient information or if the testing rate is lower than 300 cases per 100 000.







Risk Assess	ment
Global	 Because of global spread and the human-to-human transmission the moderate to high risk of further transmission persists. Travellers are at risk of getting infected worldwide. It is highly recommended to avoid all unnecessary travel for the next weeks. Individual risk is dependent on exposure. National regulation regarding travel restrictions, flight operation and screening for single countries you will find <u>here</u>. Official IATA changed their travel documents with new travel restrictions. You will find the documents <u>here</u>. Public health and healthcare systems are in high vulnerability as they already become overloaded in some areas 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. 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.
Europe	ECDC assessment for EU/EEA, UK as of 23 October 2020: Under the current classification system, based on epidemiological indicators, the epidemiological
As of 23 rd of October 2020	situation in countries is classified as <i>stable</i> , <i>of concern</i> or of <i>serious concern</i> . The majority of countries in the European region are currently classified as experiencing an epidemiological situation of serious concern due to the increasing case notification rates and/or test positivity≥3% as well as the high notification rates in the older age groups and/or high mortality rates. Countries have implemented various non-pharmaceutical interventions, but these have not been sufficiently effective in controlling transmission due to several factors:
	 There are currently only six countries in the region that are classified as experiencing a stable epidemiological situation. In countries where the epidemiological situation is stable: the probability of infection for the population is generally low but the impact of infection still varies depending on the individuals affected; the risk for the general population in these countries is low; for vulnerable individuals, including the elderly and people with underlying medical conditions, the risk is moderate. Nevertheless, in these six countries, there is still ongoing transmission and the situation must be closely monitored.
	Based on the latest available data to ECDC, there are currently no countries categorised as having an epidemiological situation 'of concern'.
	 In countries where the epidemiological situation is of serious concern: there is a high risk to the general population, and for vulnerable individuals the COVID-19 epidemiological situation represents a very high risk. In these countries the continuously increasing trend in notification rates calls for strong public health action in order to prevent the imminent risk that health care systems will be overwhelmed, rendering them unable to provide safe, adequate care.

References:

- European Centre for Disease Prevention and Control <u>www.ecdc.europe.eu</u>
- World Health Organization WHO; www.who.int
- Centres for Disease Control and Prevention CDC; <u>www.cdc.gov</u>
- European Commission; <u>https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-</u> response/travel-and-transportation-during-coronavirus-pandemic_en
- Our World in Data; https://ourworldindata.org/coronavirus
- Morgenpost; <u>https://interaktiv.morgenpost.de/corona-virus-karte-infektionen-deutschland-weltweit/</u>

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