Force Health Protection Branch
NATO MilMed COE
Munich

Short Update 37a
COVID-19
Coronavirus Disease
18th of September 2020

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GLOBAL
30 054 829
Confirmed cases
20 447 800
recovered
945 051 deaths

USA
(new cases/day 38 621)
↗
6 632 047
confirmed cases
2 537 706 recovered
196 991 deaths

Brazil
(new cases/day 31 599)
→
4 455 386
confirmed cases
3 873 934 recovered
134 935 deaths

India
(new cases/day 93 199)
↗
5 118 253
confirmed cases
4 025 079 recovered

News:

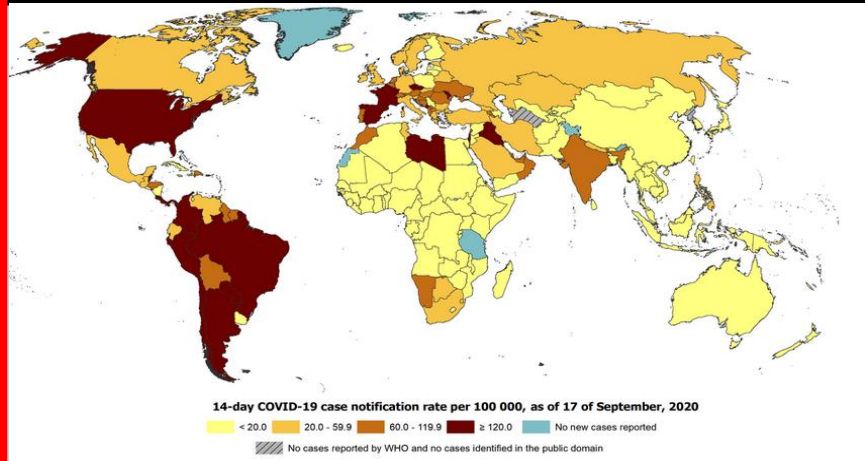
- **India** has recorded more than five million known corona infections.
- Several rich nations, which together make up only 13 percent of the world's population, have already secured more than half of the announced corona vaccine doses, according to a report by the aid organization **Oxfam**. Oxfam estimated the combined production capacity of the manufacturers of the five potentially most promising vaccine candidates at 5.9 billion doses. That would be enough to immunize around three billion people, as most of the potential vaccines are likely to require two vaccinations.
- **UNICEF**: reported that the coronavirus pandemic has plunged an additional 150 million children into poverty. Since the outbreak of the pandemic, the number of children living in poverty in countries with low or middle average incomes has risen by 15 percent to around 1.2 billion. For the report, data on education, health systems and nutrition from more than 70 countries were evaluated.
- After the publication of a study on the new Russian corona vaccine with the name "Sputnik V" in the medical journal "The Lancet", international criticism was raised by researchers. Because of the many open questions, the journal has now called on the authors of the Russian vaccination study to comment.

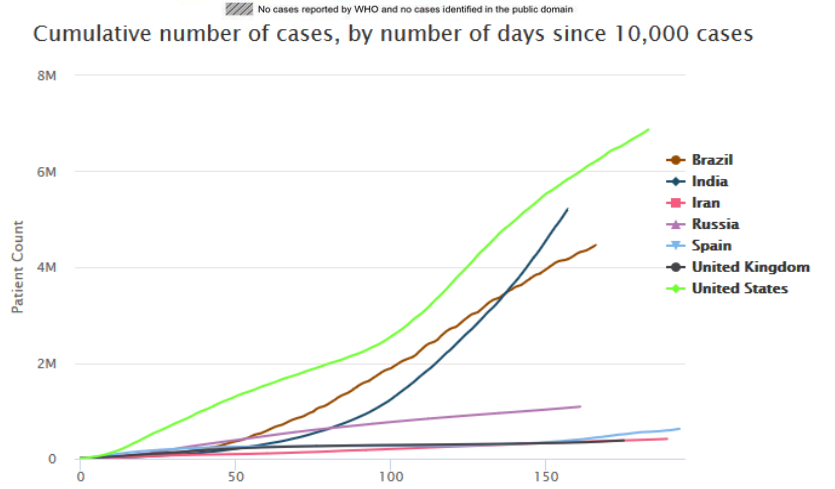
- **WHO's** health emergencies online learning platform: OpenWHO.org.

- Find Articles and other materials about COVID-19 on **our** website here.
- Please use **our** online observation form to report your lessons learned observations as soon as possible here.

Topics:

- **Global situation**
- **Subject in Focus:** Children and young people and COVID-19
- **Conflict and Health:** Update Somalia
- **In the press**





EUROPE
4 586 750
confirmed cases
2 463 500 recovered
222 523 deaths

Russia
(new cases/day 5 474)
→
1 081 152
confirmed cases
893 145 recovered
18 996 deaths

SPAIN
(new cases/day 10 215)
↗
625 651
confirmed cases
150 376 recovered
30 405 deaths

GBR
(new cases/day 3 354)
↗
381 614
confirmed cases
not reported
recovered
41 705 deaths

Global Situation

Source: https://link.springer.com/article/10.1007/s00134-020-06229-6
https://tradingeconomics.com/country-list/icu-beds
https://link.springer.com/article/10.1007/s00134-012-2627-8

Access to intensive care in 14 European countries: a spatial analysis of intensive care need and capacity in the light of COVID-19

The coronavirus disease 2019 (COVID-19) poses major challenges to health-care systems worldwide. The current s pandemic demonstrates the importance of timely access to intensive care. Therefore a study was conducted to explore the accessibility of intensive care beds in 14 European countries and its impact on the COVID-19 case fatality ratio (CFR).

Method

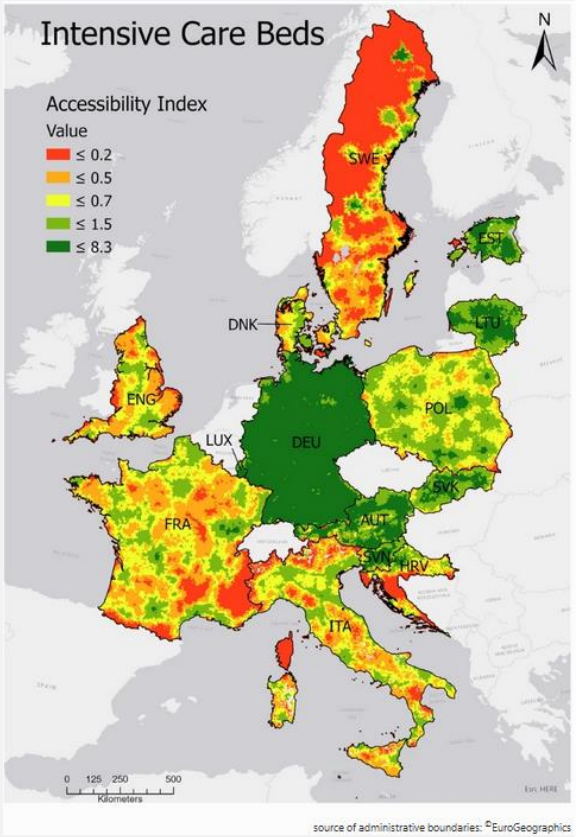
The group of authors modelled current intensive care bed capacities in 14 European countries with regard to the number of beds per 100,000 inhabitants ("AI" = accessibility index) at regional (NUTS-1) level (= larger regions of a country) and the shortest driving distance to a hospital with intensive care capacity. For this purpose, available data for the years 2017 to 2019 from 14 European countries were evaluated, whereby it should be noted that both the definitions of a "hospital" and an "intensive care unit" are associated with a certain heterogeneity between the European countries considered.

Results

We found national-level differences in the levels of access to intensive care beds. The AI was highest in Germany (AI = 35.3), followed by Estonia (AI = 33.5) and Austria (AI = 26.4), and lowest in Sweden (AI = 5) and Denmark (AI = 6.4). The average travel distance to the closest hospital was highest in Croatia (25.3 min by car) and lowest in Luxembourg (9.1 min). Subnational results illustrate that capacity was associated with population density and national-level inventories. The correlation analysis revealed a negative correlation of ICU accessibility and COVID-19 CFR ($r = -0.57$; $p < 0.001$).

Conclusion

Geographical access to intensive care beds varies significantly across European countries and low ICU accessibility was associated with a higher proportion of COVID-19 deaths to cases (CFR). Important differences in access are due to the sizes of national resource inventories and the distribution of health-care facilities relative to the human population. The findings provide a resource for officials planning public health responses beyond the current COVID-19 pandemic, such as identifying potential locations suitable for temporary facilities or establishing logistical plans for moving severely ill patients to facilities with available beds.



TAKE HOME MESSAGE: The results suggest substantial pre-existing subnational- and national-level differences for spatial accessibility to intensive care units. Furthermore, lower accessibility of intensive care is associated with higher COVID-19 case fatality ratios. In conclusion, some countries (e.g. Germany) are particularly well positioned to manage a swiftly increased need for intensive care, whereas others (e.g. Denmark, Italy or Sweden) have lower numbers of intensive care beds that are also spatially more concentrated, and thus localized shortages are possible during a locally increased need for intensive care.

US President Donald Trump announced that there will be an effective coronavirus vaccine within the next three to four weeks. The pharmaceutical companies Pfizer and BioNTech confirmed last week that if their phase 3 study with a joint vaccine candidate was successful, they will apply for approval in October.

.....

Microsoft founder Bill Gates expects several vaccines against the coronavirus to be available as early as the beginning of next year. He expects that "with a bit of luck" "three or even four" vaccines will be approved in the first quarter. The challenge then is to mass-produce the drug. It takes nearly 14 billion doses to make the vaccine available to seven billion people. More doses at a time than any other vaccine before.

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At a hearing in the US Senate, the head of the US CDC estimated the time horizon for the active supply with vaccines to be in the middle of next year.

The **Chinese** authorities have responded with extensive measures to three proven corona infections on the border with Myanmar. A lockdown was ordered in the border town of Ruili in Yunnan Province. Only grocery stores and pharmacies are allowed to open. Entering and leaving the small town has been prohibited since Monday evening. The authorities also ordered a mass test for the entire population.

In view of the falling number of infections, **South Africa** is loosening its corona restrictions. The restrictions are to be lowered to the lowest level since the outbreak's start, the loosening comes into effect on Monday. After a six-month ban, the airspace is to be reopened for international flights from October 1st.

Two days before a lockdown begins in **Israel**, the number of new corona infections has reached a record high. The Ministry of Health announced that 5,523 new cases had been registered the day before. The number of seriously ill people was also at a record high of 535.

More than 90,000 new cases have been reported in **India** in the past 24 hours.
Local media now reported a shortage of medical oxygen for patients in several regions. Some patients are said to have died due to the shortage. Oxygen manufacturers have quadrupled their production in the past six months, but the increased demand cannot be met. In the southern state of Karnataka, doctors had called for a price freeze in the face of rising oxygen prices to ensure the treatment of COVID patients.

Due to increasing corona numbers, the **Czech Republic** has imposed stricter rules. Restaurants, cafes, bars, night clubs and similar establishments are only allowed to let in as many people as they have seats. For indoor events with more than ten people, each visitor must be assigned a seat in the future. This should create a "certain distance". Exceptions apply to exhibitions and trade fairs.

Global Situation

COVID-19: Cases increasing across Europe:

In many countries across the EU/EEA and the UK, an increase in COVID-19 cases is being observed following the lifting of lockdowns and the relaxation of preventive measures such as physical distancing.

According to the latest COVID-19 data, the 14-day case notification rate for the EU/EEA and the UK has been increasing for more than 50 consecutive days, with over half of all EU countries currently experiencing an increase in cases.

While increased testing allows for a more comprehensive reflection of the ongoing outbreak situation and is likely to increase the number of positive cases even if the real number of infections stays stable, it is not the only reason for the increase in the number of reported COVID-19 cases. This increase is also linked to the relaxation of physical distancing and other preventive measures.

As schools reopen and more indoor activities are held, the increase of cases comes as a reminder that the pandemic is not over.

Everybody has a role to play in preventing the further spread of the disease by observing simple preventive measures, including:

- Increased hand hygiene;
- Proper cough and respiratory etiquette;
- Appropriate use of face masks;
- Staying home when even mildly ill;
- Physical distancing.

Recent evidence confirms the importance of physical distancing for the prevention of person-to-person transmission. Physical distancing of one metre or more has been proven to ensure a five-fold reduction in the transmission risk, and every extra metre of distance gives twice the protective effect.

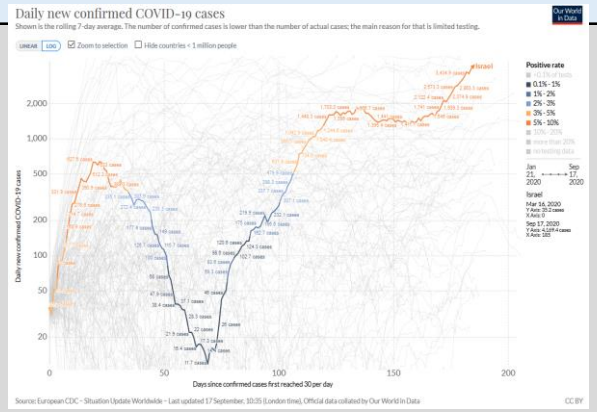
ECDC recommends that testing efforts are maximised, with the aim of offering timely testing to all symptomatic cases, including mild ones. Along with rapid contact tracing, large-scale testing is the key to controlling transmission within a population, followed by the isolation and treatment of identified cases and the quarantining of contacts.

Furthermore, with the influenza season approaching, the preparedness of healthcare systems across Europe is vital. This includes essential services, primary care facilities and hospitals ensuring appropriate surge capacity plans in case of a high demand for the care of patients with respiratory distress.

ECDC continues to monitor the pandemic closely and provide guidance to the Member States on how to cope with the current challenges.

Source: https://www.ecdc.europa.eu/en/news-events/covid-19-cases-increasing-across-europe

Israel:



The second corona lockdown in Israel starts today for at least 3 weeks.
Israel was a role model at the beginning of the pandemic but the number of new infections per day is now reaching record levels. The Ministry of Health on Wednesday reported more than 5,500 new cases in 24 hours within the 8.9 million inhabitants.
In relation to the population, that is almost 30 times as many as in Germany. And as many as in hardly any other country in the world. The government of Prime Minister Benjamin Netanyahu is taking tough measures again to prevent the health system from becoming overwhelmed. Two clinics have already reported to be unable to accept any more coronavirus patients. As of Friday afternoon, assembly restrictions apply: Up to 20 people can assemble outdoors and up to ten people indoors. Schools and kindergartens will remain closed. Hotels, shopping centres, leisure centres and beaches will also have to close. Restaurants are only allowed to sell outdoors. Grocery shopping and visits to the doctor are still allowed. People are only allowed to move further than 500 meters from their home in exceptional cases, for example to get to work. Schools and kindergartens were closed on Thursday because the latest increase was mainly due to infections in school children aged ten and older.

Infection chains difficult to break:

Access to synagogues and other places of worship is also severely restricted or prohibited entirely - this has a major impact on the Jewish holidays. For the first time in its history, the Great Synagogue in Jerusalem will be closed for the Jewish New Year (Rosh Hashana) on Friday. It has been closed since March. A regulation according to which around 200 believers could have gathered in the building was not wanted. The Muslim holy places on the Temple Mount in Jerusalem, including the Dome of the Rock and the Al-Aqsa Mosque, will also remain closed.
The Israeli government wants to prevent the coronavirus from spreading further with a second nationwide lockdown.
Many countries have recently responded to increased corona numbers with local measures. But Israel is now taking nationwide measures and is thus a pioneer worldwide.

Source: https://orf.at/stories/3181693/

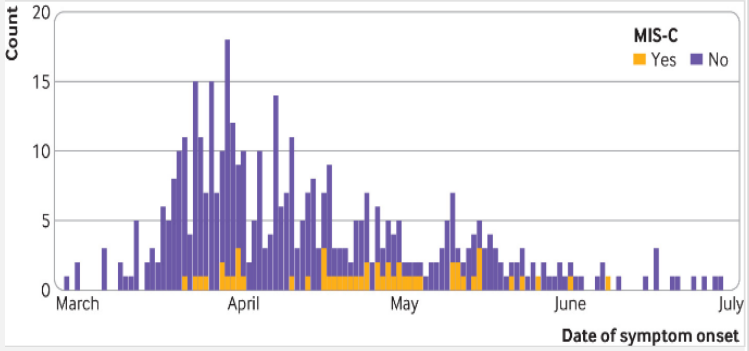
Subject in Focus

Children and young people and COVID-19

Source: https://www.bmj.com/content/370/bmj.m3249
https://www.bmj.com/content/370/bmj.m3484
https://www.spiegel.de/wissenschaft/mensch/corona-bei-kindern-muedigkeit-und-kopfschmerzen-die-haeufigsten-covid-19-symptome

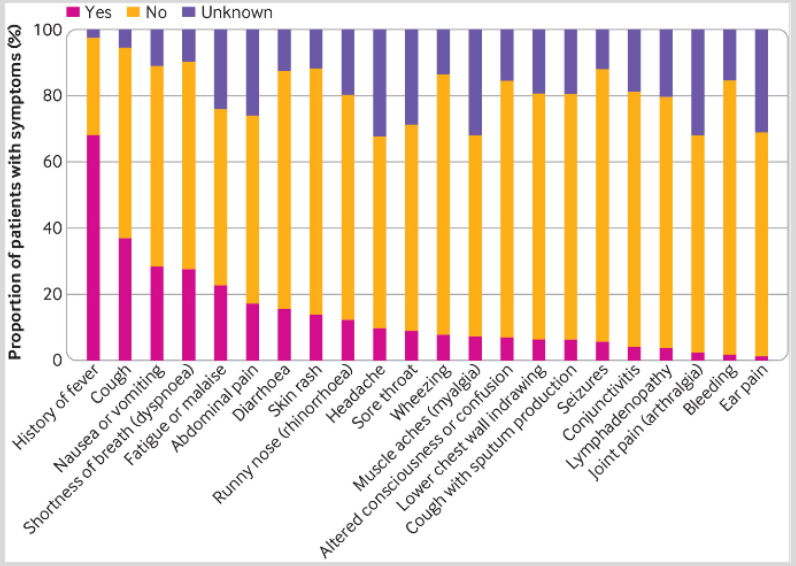
As part of a cohort study, a British team of researchers examined the situation of hospitalized COVID-19 patients in childhood. According to this, children and adolescents develop a severe course of the disease or die from it less than adults. Overall, the team, headed by the Universities of Edinburgh and Liverpool, Imperial College London and the Royal Hospital for Children in Glasgow, evaluated the data from 651 children and adolescents aged up to 19 years. The results confirmed previous studies that concluded that children and adolescents are less likely than adults to develop severe disease or die from COVID-19. Knowledge was also gained on risk factors in childhood. Obesity, dark skin and being less than a month old are factors that increase the risk of needing intensive care, according to the report in the British Medical Journal.

The data came from the ISARIC4C Covid-19 study - the largest study of its kind outside of China on COVID-19. 138 hospitals in England, Wales and Scotland provided information material on affected patients, primarily covering all age groups. As a result, sick people under the age of 19 made up less than 1% of the participants in the ISARIC study. The typical age of hospitalized children was around five years. About 42% of the patients had at least one previous illness - most commonly neurological diseases and asthma. The number of children and adolescents who died from COVID-19 was relatively small compared to the number of deaths in adults - six total. Three children who died were newborns born with other serious health problems. The other three children were 15 to 18 years old and also had serious health problems. Around 18% of hospitalized children and adolescents had to receive intensive care. The experts assume that children under one month of age and children between 10 and 14 years of age are at the highest risk.



In addition, the study also provides data on the so-called MIS-C (“Multisystem Inflammatory Syndrome in Children”) or multisystemic inflammation syndrome, a strong inflammatory reaction of the body to COVID-19. A total of 52 test persons were affected by this; the disease appears to be a risk factor that leads to these patients being transferred to the intensive care unit five times more often than other children. The symptoms that usually occur in people with MIS-C include conjunctivitis, rash, or gastrointestinal problems such as abdominal pain, vomiting, and diarrhea. Headache, fatigue, muscle aches, and sore throats were also observed. The number of blood platelets (thrombocytes) - which are involved in blood clotting - was much lower in the blood of children with MIS-C than in children without this condition. In combination with the above clinical symptoms, thrombopenia could act as a warning parameter in the future, in order to identify children with MIS-C at an early stage and to predict a possible severe course.

At the same time, the authors report a similar study, also published in the British Medical Journal, of a significantly different distribution of clinical symptoms in children with COVID-19. About a third of the children showed no symptoms at all. Of those who did, 55 percent complained of fatigue, 54 percent had a headache and almost half had a fever. Sore throats occurred in around 38 percent, and loss of appetite in 35 percent. 15 percent had an unusual rash and 13 percent had diarrhoea.
For the study, the researchers from King's College in London evaluated the symptoms of 198 children who were confirmed as positive for a Sars-CoV-2 infection in a PCR test. As part of the "COVID Symptom Study", the symptoms of the young patients were then recorded using an app. Due to the fact that the affected children were tested together with their parents, some symptom-free diseases could also be recorded.



Results: The team found that of the children who tested positive and had symptoms, around half did not report any of the three main symptoms (fever; cough/sour throat; loss of smell and taste). "We have to tell people what the most important symptoms are in the different age groups," said the main person responsible for the study. This also means a departure from the triad of fever, cough and lack of smell, which has so far mainly been used to make a diagnosis, at least for patients in childhood. For the adult test persons, the distribution of the symptoms corresponded more to the known data: fatigue, headache, cough, sore throat and loss of smell were among the most frequent responses. A previously underestimated symptom could serve as a diagnostic criterion to differentiate between COVID-19 and common colds in childhood. Around every sixth child developed a non-specific skin rash in the course of the disease. In some cases, this was even the only observed symptom for the disease. In contrast, signs of dermal disease tend to occur rarely in the case of flu-like infections. This criterion could also be useful in light of the coming cold season. Especially with children of kindergarten age, a significant increase in flu-like and other mundane infections must be expected in the coming months. Should the symptoms of COVID-19 in childhood actually be related to the reported extent with the symptom complex of colds and especially overlap gastrointestinal infections, it can be assumed that there will be a massive increase in suspected cases of COVID-19 in childhood. In addition to a massively increased need for SARS-CoV-2 tests, this would also lead to a significant increase in the burden on parents and caregivers if children are classified as suspected COVID-19 due to unspecific symptoms and have to be cared for in quarantine at home.

In cooperation with Bundeswehr HQ of Military Medicine
Translated by FHPB NATO MILMED COE

Conflict & Health
Somalia

Somalia

16.6 Index Score **194**/195

	COUNTRY SCORE	AVERAGE SCORE*
PREVENTION	**15.8**	**34.8**
Antimicrobial resistance (AMR)	16.7	42.4
Zoonotic disease	1.6	27.1
Biosecurity	0	16.0
Biosafety	0	22.8
Dual-use research and culture of responsible science	0	1.7
Immunization	65.8	85.0
DETECTION AND REPORTING	**21.5**	**41.9**
Laboratory systems	16.7	54.4
Real-time surveillance and reporting	16.7	39.1
Epidemiology workforce	50	42.3
Data integration between human/ animal/environmental health sectors	0	29.7
RAPID RESPONSE	**17.4**	**38.4**
Emergency preparedness and response planning	0	16.9
Exercising response plans	0	16.2
Emergency response operation	0	23.6
Linking public health and security authorities	0	22.6
Risk communication	0	39.4
Access to communications infrastructure	51.2	72.7
Trade and travel restrictions	100	97.4

	COUNTRY SCORE	AVERAGE SCORE*
HEALTH SYSTEM	**0.3**	**26.4**
Health capacity in clinics, hospitals and community care centers	1.5	24.4
Medical countermeasures and personnel deployment	0	21.2
Healthcare access	0	38.4
Communications with healthcare workers during a public health emergency	0	15.1
Infection control practices and availability of equipment	0	20.8
Capacity to test and approve new medical countermeasures	0	42.2
COMPLIANCE WITH INTERNATIONAL NORMS	**28.5**	**48.5**
IHR reporting compliance and disaster risk reduction	50	62.3
Cross-border agreements on public and animal health emergency response	0	54.4
International commitments	6.3	53.4
JEE and PVS	25	17.7
Financing	16.7	36.4
Commitment to sharing of genetic & biological data & specimens	66.7	68.1
RISK ENVIRONMENT	**15.9**	**55.0**
Political and security risks	7.1	60.4
Socio-economic resilience	35	66.1
Infrastructure adequacy	0	49.0
Environmental risks	38	52.9
Public health vulnerabilities	4.6	46.9

*Average: all 195 countries
Scores are normalized (0–100, where 100 = most favorable)

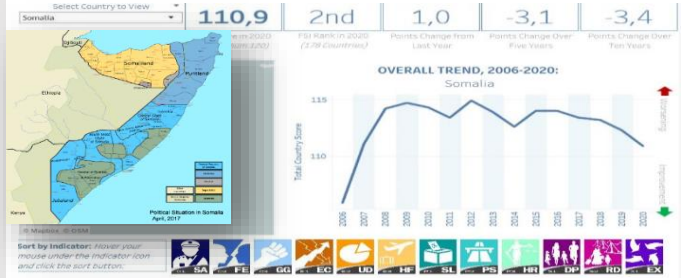
www.ghsindex.org

CONFLICT: Somalia is considered the second most fragile and underdeveloped country on earth. The foundation for the on-going state of war, which has lasted intermittently for several decades, was laid in the 19th century after Great Britain, France and Italy had divided the region among themselves. Despite the achievement of independence and the unification of the various territories in 1960, many of the domestic conflicts still take place along the old demarcation lines. A major challenge for attempts of pacification is the special structure of society and population: The whole society is structured along the clan system, which was probably influenced by the tribal societies of the Arabian Peninsula. The population is divided into different sub-clans and families who grant protection as a collective, but also blood feuds and political conflicts take place within this tribal system. Within the population, a distinction is made between "real" Somali, who are traditionally nomadic, and the settled-peasant "fake" Somali. In addition, a 15% share of the population are ethnic minorities that descend from various Central African ethnic groups. The origin of the individual also defines its place and value within the system at the same time. Religiously, however, the country is united, almost 100% of the population belong to the Sunni Islam. Only the form of religious practice varies from region to region. The Salafist tradition (a strict interpretation of Islam) is common and represents the majority opinion in Somalia. The judicial system is based on the Sharia. Most recently, extreme fundamentalist tendencies have evolved within the country.
Although Somalia has been nominally independent since 1960, different global and regional powers exerted influence on the politics of the country. For example, the dictator Siad Barré ruled the country from 1969 to 1991 supported by the Soviet Union. After the fall of the regime, the North of the country - formerly under British influence - declared itself independent and proclaimed the establishment of the Republic of Somaliland. Since then, a bloody civil war has raged in the country, which in fact continues until present times and which could not be ended even by several interventions by the United Nations. In the course of the conflict, the Puntland, Maakhir and South West region (Koofur Orsi) also declared themselves independent. However, the central government in Mogadishu does not recognize this.
Power in the country is currently divided regionally: the weak central government has no influence outside the capital. The other parts of the country are ruled by various warlords as de facto independent areas. The Islamic al-Shabaab militia and branches of other jihadist groups (e.g. al-Qaida, IS) are enforcing a strictly Islamic regime, especially in the south. There are currently around 2 million Somalis on the run, 1.1 million of them within the country. About 977,000 are registered in neighbouring African countries.

HEALTH: The ongoing conflict has made it impossible to establish a functioning health system. Malnutrition and infectious diseases are widespread, and child mortality is extremely high. In addition, the country is regularly hit by natural disasters such as drought, floods and famine. Support from official agencies and NGOs can only be provided to a very limited extent, as warlords often claim aid deliveries for themselves and the security situation is extremely unstable, development workers are murdered regularly.

The country reported the first COVID-19 case back in mid-March, which was exactly six months ago. To date, 3,390 cases and 98 deaths have been officially reported. There was a linear increase in the number of cases, which is certainly due to the poor testing capacities and the minimal health infrastructure. The number of reported cases has been steadily decreasing since the end of June, which is likely to be explained by a probable decrease in the number of tests that were carried out. A significantly high number of unreported cases has to be considered. The low incidence rate in women (only 29% of all cases) is noticeable. It is unlikely that this low share of infected women accurately corresponds to reality. It rather illustrates the limited access women have to health care. WHO fears that Somalia is one of the countries most vulnerable to COVID-19 in the world. WHO urges the communities to increase their efforts in the fight against the pandemic. Research undertaken by the international press (video link BBC) reports an extremely high number of unreported cases and an extraordinary high mortality. They underpin their report - among other observations - with pointing at the unusual large increase in new graves outside of the capital Mogadishu since the beginning of this year.

CONCLUSION: With Somalia, the COVID-19 pandemic hits a country that could hardly be more fragile. The ongoing conflicts and the catastrophic security situation as well as constant incidents reinforce this. An effective fight against a COVID-19 outbreak with the additional burden of a non-existent health system is unrealistic for the foreseeable future.



https://reliefweb.int/sites/reliefweb.int/files/resources/covid-19_16-22_sitrep.pdf
https://reliefweb.int/sites/reliefweb.int/files/resources/Somalia_Flood_Update-26052020.pdf
https://reports.unocha.org/en/country/somalia
https://www.crisisgroup.org/africa/horn-africa/somalia
https://allafrica.com/stories/202009170466.htmlhttps://allafrica.com/stories/202009170466.html
https://www.bbc.com/news/av/world-africa-53521563

In the press

This section aims at summarizing trending headlines with regards to COVID-19. The collection does not aim at being comprehensive and we would like to point out that headlines and linked articles are no scientific material and for information purposes only. The headlines and linked articles do not reflect NATO's or NATO MilMed COE FHPB's view. Feedback is welcome!

17th September 2020
The Guardian
I volunteered to be a human guinea pig for a Covid vaccine.
https://www.theguardian.com/commentisfree/2020/sep/17/covid-vaccine-trial-coronavirus

14th September 2020
SPIEGEL international
How COVID-19 Is Indirectly Killing Mothers and Babies
https://www.spiegel.de/international/tomorrow/childbirth-in-the-pandemic-how-covid-19-is-indirectly-killing-mothers-and-babies-a-adf7c1f1-441b-4aa3-87bd-86e9f3345b0b

17th September 2020
Aljazeera
Violence, hunger: The 'overwhelming' impact of school closures
https://www.aljazeera.com/indepth/features/violence-hunger-overwhelming-impact-school-closures-200917073508071.html

17th September 2020
Los Angeles Times
How disaster relief has adapted to two horrors: Wildfires and coronavirus
https://www.latimes.com/california/story/2020-09-17/emergency-services-swamped-fires-coronavirus

14th September 2020
Aljazeera
Rakhine: Where the military is more feared than the coronavirus
https://www.aljazeera.com/news/2020/09/rakhine-military-feared-coronavirus-200913234754274.html

16th September 2020
South China Morning Post
Study on infant in Brazil suggests coronavirus 'does not efficiently spread into brain'
https://www.scmp.com/news/china/science/article/3101838/study-infant-brazil-suggests-coronavirus-does-not-efficiently

18th September 2020
South China Morning Post
How artificial intelligence makes travel safer during Covid-19 and city commuting easier
https://www.scmp.com/native/tech/innovation/topics/machine-learning-data-powered-innovations/article/3101899/ML-AI

17th September 2020
DW
Coronavirus: 'We won't get rid of masks anytime soon,' says leading German virologist
https://www.dw.com/en/coronavirus-we-wont-get-rid-of-masks-anytime-soon-says-leading-german-virologist/a-54961783

The new normal!

In some places, as cases of COVID-19 go down, some control measures are being lifted.

But this doesn't mean we should go back to the 'old normal'.
If we don't stay vigilant and protect ourselves and others, coronavirus cases may go up again.

If we stop following the key protective measures, coronavirus can come rushing back.

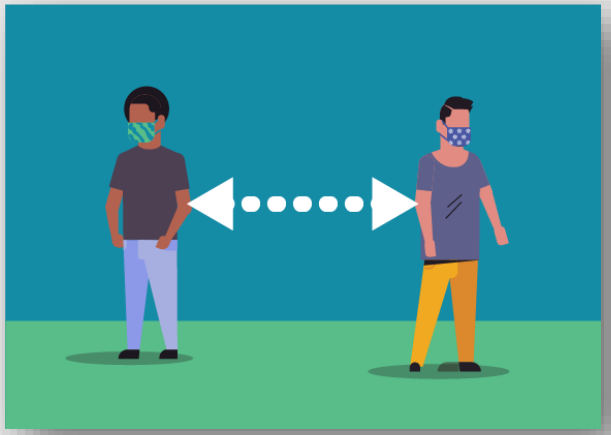
Now, more than ever, it's important that we all follow our national health authority's advice and be part of helping to prevent coronavirus transmission.

Wherever you are, you still need to protect yourself against COVID-19.

Even as restrictions are lifted, consider where you are going and stay safe.

The perfect wave – why masks are still important

	Mouth and nose protection	FFP2/FFP3 mask without valve	FFP2/FFP3 mask with valve
Protects wearer of mask	limited	✓	✓
Protects periphery	✓	✓	✗



NEW STUDY ON MOUTH NOSE PROTECTION AND SOCIAL DISTANCING

Unfortunately, in the epicenter of the new hot spots areas often enough people are seen who do not adhere to the still valid protective regulations such as social distancing and the correct wearing of a nose and mouth protection. It could be as simple as that - new studies show that these two measures make a significant contribution to reducing the probability of transmission.

In the case of protective masks with an advertised protective effect in connection with SARS-CoV-2, depending on the intended purpose, a distinction is made between two types:

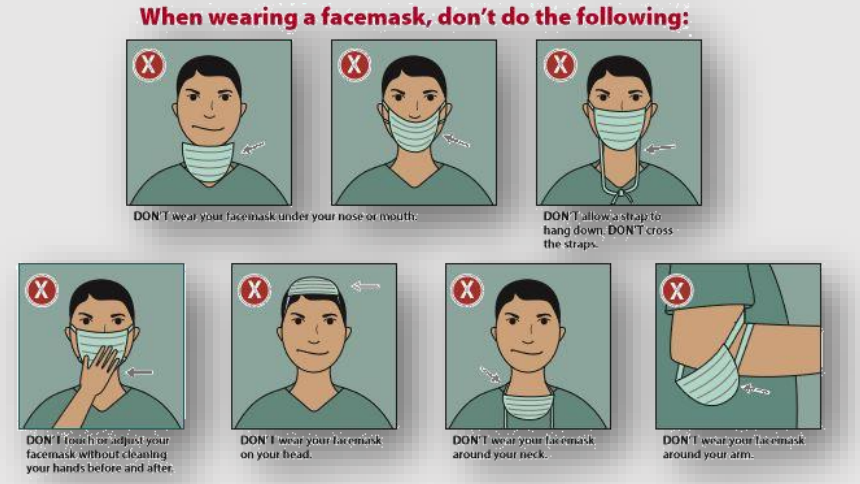
Medical face masks (MNS; surgical (surgical) masks); are primarily used for third-party protection and protect the person against the exposure of potentially infectious droplets of the person wearing the face mask. Corresponding MNS protect the wearer of the mask if the fit is tight, but this is not the primary purpose of MNS. This is e.g. used to prevent droplets from the patient's breathing air from getting into open wounds of a patient. Since, depending on the fit of the medical face mask, the wearer not only breathes in through the filter fleece, but the breathing air is drawn in as a leakage current past the edges of the MNS, medical face masks generally offer the wearer little protection against aerosols containing excitation. However, you can protect the mouth and nose area of the wearer from the direct impact of exhaled droplets from the other person as well as from pathogen transmission through direct contact with the hands.

Particle-filtering half masks (FFP masks); are objects of personal protective equipment (PPE) in the context of occupational safety and are intended to protect the wearer of the mask from particles, droplets and aerosols. The design of the particle-filtering half masks is different. There are masks *without an exhalation valve* and masks *with an exhalation* valve. Masks without a valve filter both the inhaled air and the exhaled air and therefore offer both internal and external protection, although they are primarily designed for internal protection only. Masks with valves only filter the inhaled air and therefore **offer no external protection!!!**

As a large number of unrecognized people move around in public spaces without symptoms, mouth and nose protection protects other people, thereby reducing the spread of the infection and thus indirectly reducing the risk of becoming infected

Due to the occasion, it should be pointed out again and again, also by executives, that the correct way of wearing the mask is essential to achieve maximum protection. The mask wrong, e.g. for example, wearing it under the nose means accepting a possible infection of others.

FFP2 / 3 masks are still considered deficient equipment and should be kept available for healthcare workers and emergency services.



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https://www.bfarm.de/SharedDocs/Risikoinformationen/Medizinprodukte/DE/schutzmasken.html

Using Personal Protective Equipment (PPE) when caring for Patients with confirmed or suspected COVID-19

Who needs PPE:

Patients with confirmed or possible SARS-CoV-2 infection should wear a facemask when being evaluated medically

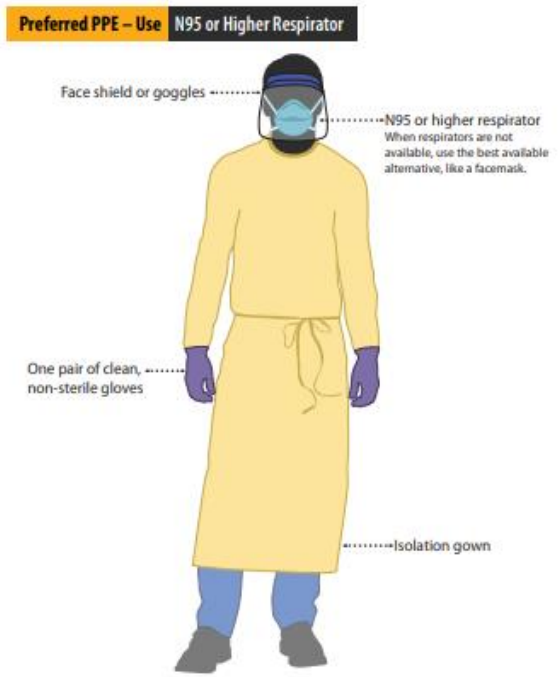
Healthcare personnel should adhere to Standard and Transmission-bases Precautions when caring for patients with SARS-CoV-2 infection. Recommended PPE is describe in the **Infection Control Guidance.**

Before caring for patients with confirmed or suspected COVID-19, healthcare personnel (HCP) must:

- Receive comprehensive training on when and what PPE is necessary, how to don (put on) and doff (take off) PPE, limitations of PPE, and proper care, maintenance, and disposal of PPE
- Demonstrate competency in performing appropriate infection control practices and procedures

Remember:

- PPE must be donned correctly before entering the patient area
- PPE must remain in place and be worn correctly for the duration of work in potentially contaminated areas
- PPE should not be adjusted during patient care and
- PPE must be removed slowly and deliberately in a sequence that prevents self-contamination



Donning (putting on the gear):

1. **Identify and gather the proper PPE to don**. Ensure choice of gown size is correct.
2. **Perform hand hygiene using hand sanitizer**
3. **Put on isolation gown.** Assistance may be needed by other HCP
4. **Put on NIOSH-approved N95 filtering facepiece respirator of higher (use a facemask if a respirator is not available.**
   - **Respirator** straps should be placed on crown of head and base of neck. Perform a user seal check each time you put on the respirator.
   - **Facemask** should be secured on crown of head and base of nex. If mask has loops, hook them appropriately around your ears.
5. **Put on face shield or googles.**
6. **Put on gloves**
7. **HCP may now enter patient room**

Doffing (taking off the gear):

1. **Remove gloves.** Ensure gloves removal does not cause additional contamination of hands.
2. **Remove gown.** Untie all tis. Some gown ties can be broken rather than untied. Do so in gentle manner, avoiding a forceful movement. Reach up to the shoulders and carefully pull gown down and away from the body.
3. **HCP may now exit patient room.**
4. **Perform hand hygiene.**
5. **Remove face shield or googles. Carefully remove face shield or googles by grapping the strap and pulling upwards and away from head. Do not touch the front of face shield or googles.**
6. **Remove and discard respirator.** Remove the bottom strap by touching only the strap and bring it carefully over the head. Grasp the top strap and bring it carefully over the head and then pull the respirator away from the face without touching the front of the respirator or facemask.
7. **Perform hand hygiene after removing the respirator/facemask**

Source: https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html