Force Health Protection Branch
NATO MilMed COE
Munich

Short Update 34a
COVID-19
Coronavirus Disease
28th of JULY 2020

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GLOBAL

24 432 439
Confirmed cases
16 010 208
recovered
831 750 deaths

USA
(new cases/day 41 375)
→
5 835 159
confirmed cases
2 100 017 recovered
180 404 deaths

Brazil
(new cases/day 37 215)
→
3 761 391
confirmed cases
3 122 846 recovered
118 649 deaths

India
(new cases/day 67 616)
↗
3 387 500

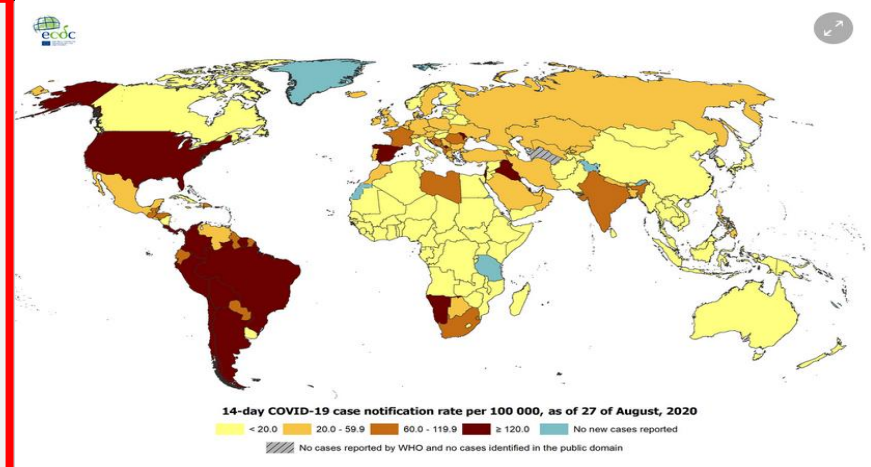
News:

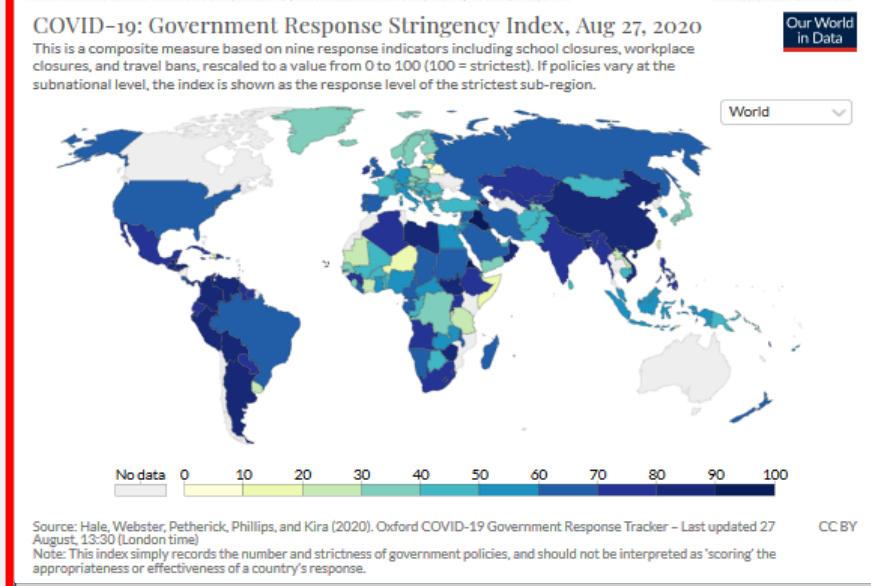
- In **France**, more than 6,000 new corona infections have been registered in the past 24 hours – the highest number in cases since May.
- In **Croatia**, the authorities reported a record of new infections with the corona virus on Wednesday. 358 new cases of infection were recorded on Wednesday - more than ever before. Around a third of the new cases were found on Croatia's southern Adriatic coast, which attracts a particularly large number of tourists.
- **WHO**: excludes achieving herd immunity naturally. The world's population can only be protected from the coronavirus in the long term by extensive vaccinations the organization announched.
- **UPS:** is building up freezers close to their air cargo hubs in the USA and Germany to store COVID-19 vaccines for delivery.
- The **World Economic Forum (WEF**) in Davos is postponed due to the corona pandemic. The traditional meeting is postponed from the end of January to early summer.
- The **European Union** has secured the right to purchase up to 400 million doses of a possible corona vaccine from the British pharmaceutical company AstraZeneca. The contract with the company has now been signed and is therefore in force, said the EU Commission.
- **WHO:** A new commission should evaluate what lessons can be drawn from the COVID-19 pandemic for the future. The aim is to be able to give recommendations at the end of the day on how policy can be improved at national and international level in order to better anticipate future crises and be able to react to them.
- 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;** Stringency index
- **Subject in Focus:** Clinical autopsy for COVID-19 disease
- **Conflict and Health:** Lybia
- **In the press**





EUROPE

3 736 371
confirmed cases
12 192 748
recovered
213 180 deaths

Russia
(new cases/day 4 734)
→
972 972
confirmed cases
790 629 recovered
28 996 deaths

SPAIN
(new cases/day 7 372)
↗
429 507
confirmed cases
150 376 recovered
28 996 deaths

GBR
(new cases/day 1 155)
↗
330 368
confirmed cases

Global Situation

OVERVIEW OF EUROPE - CASE NUMBERS CONTINUE TO RISE

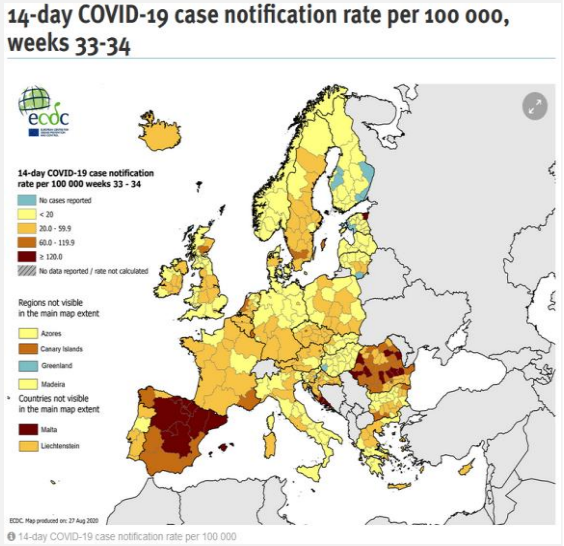
The number of new infections reported daily (pooled over 14 days) has been increasing in Europe for 35 days in a row and is currently given as 37 new infections / 100,000 inh. / 14d.

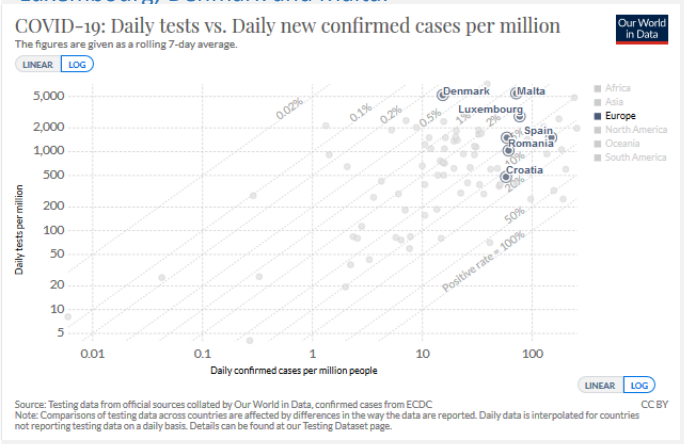
The individual incidences vary greatly for the respective countries, with some reporting only 4 / 100,000 inhabitants in this period; other nations are 124 new infections / 100,000 inh. in the same period.

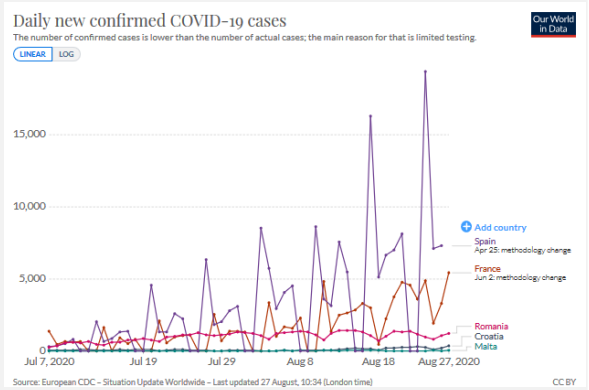
France and the Balkans are hardest hit, but Spain is also above all else. in the north and in the Balearic Islands again faced with an extremely dynamic infection process.

As a result of this development, many EU countries, such as Great Britain, Finland and Austria, are again issuing travel restrictions within the Schengen area or expanding the quarantine and test regulations for return travelers. Nevertheless, travel-associated outbreak clusters are currently being reported in many EU countries, currently for example from Cap d'Agde in FRA. Since the summer season has not yet ended in many countries, increased rates of new infections by holidaymakers can still be expected.

Comprehensive testing is the means of containment of choice in many nations, with the highest test rates reported in Luxembourg, Denmark and Malta.







The **Venezuelan** government wants to manufacture and test the Russian vaccine against the coronavirus in the South American country. The World Health Organization (WHO), however, has expressed reservations about the vaccine, the final series of tests has not yet been completed.

In **France** the number of more than 4,000 new corona cases per day has been exceeded several times in the past few days. Given the rise in the number of cases, 21 out of a hundred departments are in areas marked as "red zones" by the government. The new danger zones are primarily in the south of the country and around Paris. In all of Paris, a mask is required from today, even outside closed buildings.

With the planned reopening of schools in **Spain**, the authorities have announced a mask requirement for children aged six and over. Furthermore, the students must ensure that they are 1.5 meters away from each other and wash their hands five times a day, the classrooms must be ventilated regularly and the body temperature of the students is measured. To curb the increasing number of infections, new restrictions are being introduced on **Mallorca**: Among other things, night visits to the beach and parks are to be prohibited. Smoking in public spaces should be prohibited entirely. A maximum of ten people will be allowed at private meetings, and the number of guests allowed in pubs, restaurants and cafés should be reduced again

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In **DEU** returning travelers from risk areas should soon be able to end a corona quarantine at the earliest with a test from the fifth day after their return. This regulation should apply from October 1, 2020. If someone cognizant travels to a corona risk area, the returnees should not be paid any loss of earnings for the period of mandatory quarantine after an "avoidable trip" to such an area. The free corona tests for travelers from non-risk areas should end on September 15 at the end of the summer holidays. affected.

The night curfew introduced due to the corona pandemic in the **Belgian** province of Antwerp will be lifted after a month. Wearing mouth and nose protection in public places has also no longer been mandatory since Thursday. Masks are strongly recommended, however.

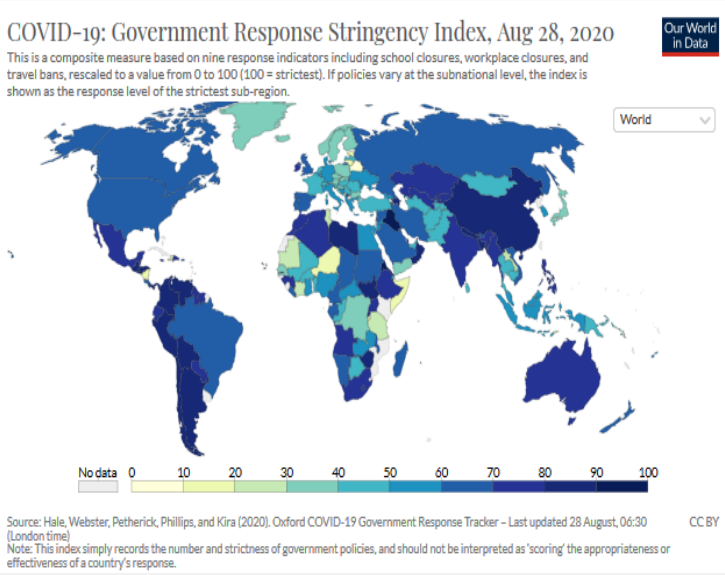
The government in **Jordan** has announced a 24-hour lockdown of the capital Amman and the city of Sarka to the northeast for Friday. The "comprehensive lockdown" should slow the spread of the virus and allow the medical teams to test as many suspected cases as possible.

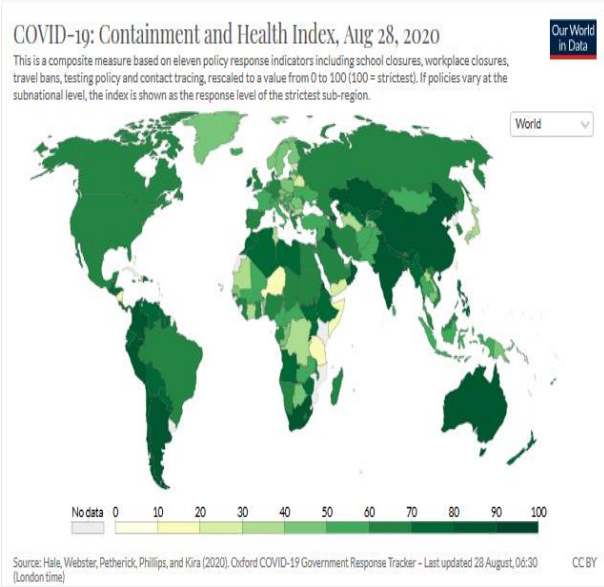
The state of California wants to double the number of tests carried out daily, the current average is around 100,000 tests daily. At the same time, a new rapid test was approved for the **USA**, which is supposed to detect an infection in around 15 minutes. However, antibody-based rapid tests are still subject to diagnostic inaccuracies.

Global Situation

The policy response data presented in the maps on the other side is maintained by Oxford's public policy school, the Blavatnik School of Government. They publish it as the Coronavirus Government Response Tracker (OxCGRT).

The OxCGRT researchers also calculate a summary measure of nine of the response metrics called the Government Stringency Index. The nine metrics used to calculate the Government Stringency Index are: school closures; workplace closures; cancellation of public events; restrictions on public gatherings; closures of public transport; stay-at-home requirements; public information campaigns; restrictions on internal movements; and international travel controls.





Source: Our World in Data

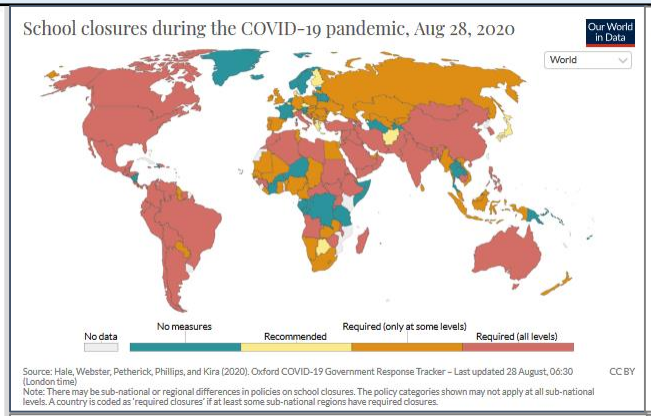
The OxCGRT project also calculate a Containment and Health Index, a composite measure of eleven of the response metrics.

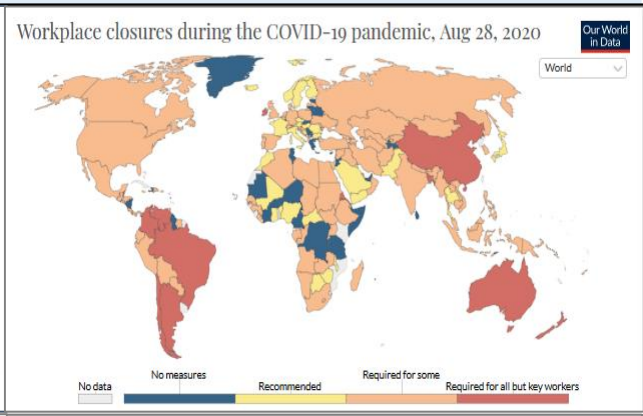
This index builds on the Government Stringency Index, using its nine indicators plus testing policy and the extent of contact tracing. It's therefore calculated on the basis of the following eleven metrics: school closures; workplace closures; cancellation of public events; restrictions on public gatherings; closures of public transport; stay-at-home requirements; public information campaigns; restrictions on internal movements; international travel controls; testing policy; and extent of contact tracing.

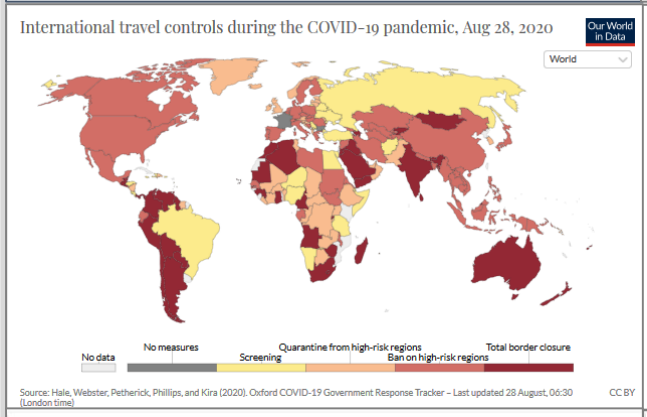
The index on any given day is calculated as the mean score of the eleven metrics, each taking a value between 0 and 100. See the authors' full description of how this index is calculated.

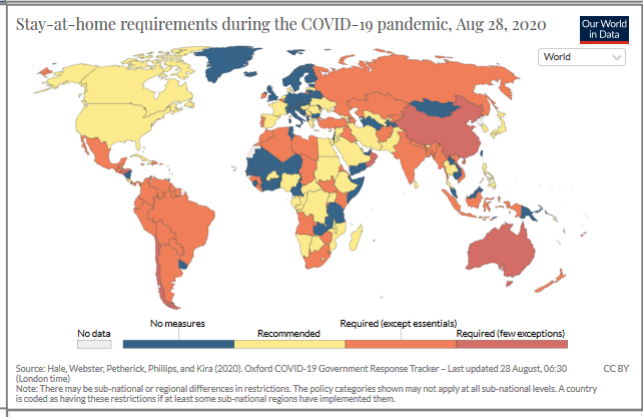
A higher score indicates a stricter response (i.e. 100 = strictest response). If policies vary at the subnational level, the index is shown as the response level of the strictest sub-region.

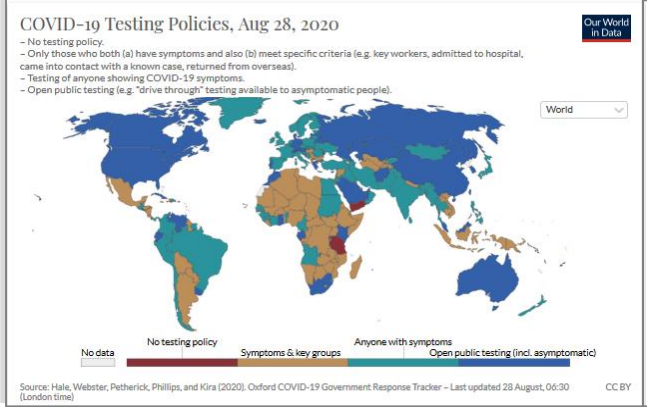
It's important to note that this index simply records the strictness of government policies. It does not measure or imply the appropriateness or effectiveness of a country's response. A higher score does not necessarily mean that a country's response is 'better' than others lower on the index.

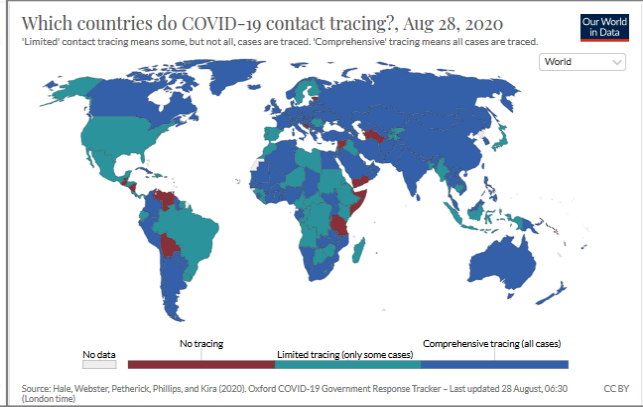










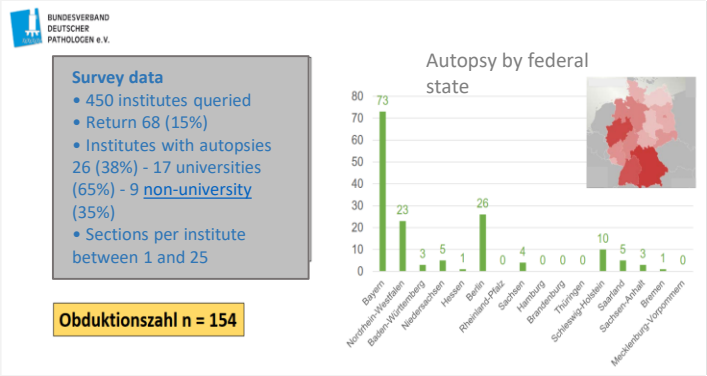


Subject in Focus

Clinical autopsy for COVID-19 disease;

Statement by the Federal Association of German Pathologists, the German Society for Pathology and the German Society for Neuropathology and Neuroanatomy

The clinical autopsy has proven - as is clear in relevant scientific publications - that SARS-CoV-2 not only causes damage to the lungs, but also affects other organ systems and therefore cannot be equated with a normal flu virus. (Local) bleeding disorders are frequent, clinically relevant COVID-19-associated findings. A special characteristic when the lungs are involved is typical damage to the vessels.
The results of a survey by the Federal Association of German Pathologists underline the findings about the virus that have already been published.



Statements:

In the pathology it was shown that the triad of 1. massive blood vessel damage, 2. excessive blood coagulation with blockage of the finest pulmonary vessels and 3. specific neovascularization represent characteristic and previously undescribed changes in the lung involvement of COVID-19; these are fundamentally different from similarly severe lung infections caused by influenza.

In addition, it has been proven that COVID-19 is not only a local infection of the respiratory organs, but that the virus also affects the vascular lining cells (endothelia) and in this way leads to a multi-organ infection (kidneys, heart, etc. but also on involvement of the nervous system). The clinical risk factors for a serious illness (smoking, hypertension, obesity, diabetes mellitus, male gender) are known to be associated with damage to the endothelia.

So far, there is no reliable evidence of an influence on nerve cells by the novel coronavirus or the neuroinvasion of SARS-CoV-2; it has already been proven for infections with other human coronaviruses. Many people who contract COVID-19 suffer from dizziness, headache and severe impairment of the sense of smell and taste. In particular, it is discussed whether disorders of the centres in the brainstem that control cardiovascular function are partly responsible for the often unfavourable course in COVID-19 patients, even under ventilation.

So far, the following neurological involvement and pathomechanisms have been demonstrated in COVID-19:

- Approx. 1/3 of those who died of COVID-19 show evidence of SARS-CoV-2 in the brain.
- Some of the patients show hypoxic-ischemic changes with microthrombic events or infarcts.
- The olfactory mucous membrane can serve as a portal of entry into the brain.

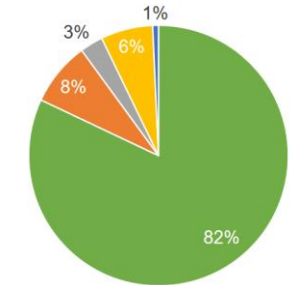
Sources: https://www.pathologie.de/?eID=downloadtool&uid=2019

Summary results of clinical autopsies

- COVID-19 was the cause of death in the majority of cases
- Men were affected more than average
- SARS-CoV-2 not only induces damage to the lungs, but also affects other organ systems
- Consequences of (local) bleeding disorders are frequent, clinically relevant COVID-19-associated findings
- Special characteristic of pulmonary involvement: vascular damage
- Cardiovascular diseases, the most common major comorbidities

Frequency of categories 1-5 (n=139)

Kat 1: Test pos, charact. organ findings, COVID = cause of death
Kat 2: Test pos, no charact. organ findings, COVID ≠ cause of death
Kat 3: Test neg, charact. Organ findings, COVID = cause of death
Kat 4: Test neg, no charact. organ findings, COVID ≠ cause of death
Kat 5: No teast, charact. organ findings, COVID = cause of death

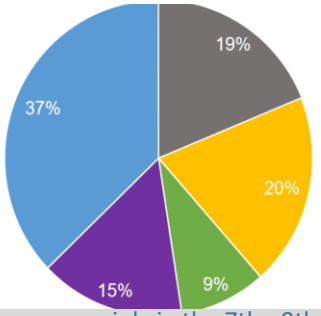


Characteristic autopsy organ findings:

307 mentions in 154 autopsies

Finding 1 (n = 115): Diffuser alveolar Damage

Finding 2 (n = 47): Diffuser alveolar harm with bronchopneumonia



Finding 3 (n = 58): Thrombosis and thromboembolism

Finding 4 (n = 61): Microthrombi

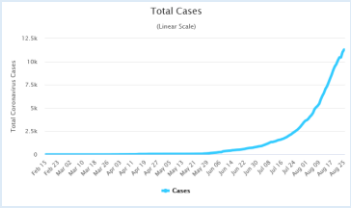
Finding 5 (n = 28): Endothelitis

Summary

1. The autopsies carried out affect twice as many men as women - mainly in the 7th - 9th decades of life.
2. In more than ¾ of the autopsies, COVID-19 was documented as the main or sole fatal disease.
3. In the case of SARS-CoV-2-induced organ damage, the focus is on diffuse alveolar damage as well as micro and macrothrombi and their consequences on various organs.
4. Indications of possible virus-associated damage to the immune system, the liver, the heart and the central nervous system require further clarification and specification.
5. Major comorbidities are cardiovascular diseases (about 43%), pre-existing lung diseases (about 16%) and metabolic diseases such as obesity and diabetes mellitus (about 12%). Complicated bacterial infections were observed in about 8% of the cases.
6. Clinical autopsies should be established as an early warning system for an increased mortality rate of infections.

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

Conflict & Health
LIBYEN



Libya

25.7 Index Score **168**/195

	COUNTRY SCORE	AVERAGE SCORE*
PREVENTION	**23.2**	**34.8**
Antimicrobial resistance (AMR)	25	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	96.5	85.0
DETECTION AND REPORTING	**36.0**	**41.9**
Laboratory systems	50	54.4
Real-time surveillance and reporting	5	39.1
Epidemiology workforce	0	42.3
Data integration between human/ animal/environmental health sectors	100	29.7
RAPID RESPONSE	**18.9**	**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	63.6	72.7
Trade and travel restrictions	100	97.4

	COUNTRY SCORE	AVERAGE SCORE*
HEALTH SYSTEM	**9.1**	**26.4**
Health capacity in clinics, hospitals and community care centers	16.7	24.4
Medical countermeasures and personnel deployment	0	21.2
Healthcare access	16.6	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	25	42.2
COMPLIANCE WITH INTERNATIONAL NORMS	**31.0**	**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	25	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	**39.0**	**55.0**
Political and security risks	0	60.4
Socio-economic resilience	65.2	66.1
Infrastructure adequacy	25	49.0
Environmental risks	59.9	52.9
Public health vulnerabilities	52.5	46.9

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

www.ghsindex.org

Background information:
Despite the brokered ceasefire in January, an arms embargo and another ceasefire agreement in March, fighting in Libya has intensified over the past few months, with both sides stepping up their attacks. Both sides are supported by international allies with troops, mercenaries and financially. Over ten states are now involved in the conflict. A new armistice is currently being negotiated

On March 24, 2020, Libya reported the first COVID-19 case. The internationally recognized government in Tripoli and the counter-government in Benghazi imposed curfews after they again agreed on a ceasefire due to the now one-year Libyan war over Tripoli. Nevertheless, artillery attacks can be heard in Tripoli every day. In Misrata, parks and gardens were disinfected at the same time, and citizens helped with the distribution of protective masks. At the end of April it was reported that very strict exit restrictions were imposed so that the pandemic does not spread beyond the 18 cases up to then. The first death was reported on April 6th. The strict measures introduced apparently prevented a sharp rise in the official figures until the beginning of August. Nonetheless, the fighting continued to escalate and the health system is collapsing. A total of 3,691 COVID-19 cases were reported on August 1st and 11,834 just 3 weeks later on August 26th, which corresponds to a tripling of the cases within three weeks (graphic above right).

The graphs on the right show the country's downward trend in terms of numerous indicators (economic, political, social) of the Fragile State Index, especially in the last two years.

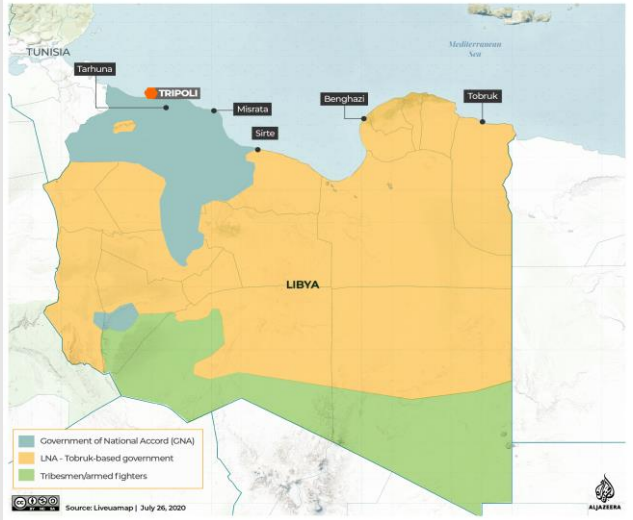
In the graph on the left, it can be seen that LBY in all six health system categories is below the global average of 195 countries considered.

Transmission SARS-CoV-2
There are particular deficits in the area of the prevention of zoonoses (although SARS-CoV-2 is a zoonotic pathogen, this factor is of little importance in terms of its effects in the current situation; since it is now almost exclusively human-to-human transmissions) but especially biosecurity. Even though the situation of vaccination prevention in the country is better than the global average, this is unfortunately of little significance here, as there is still no vaccine against the current pathogen. Overall, the laboratory system would not be so badly set up, and the reporting system in the One Health approach is also rated as good. However, the necessary capacities such as surveillance and epidemiological experts seem to be virtually non-existent for this outbreak. Likewise, the conceptual and other crisis resources and risk communication were initially completely wasted and now rely mainly on the help of international organizations.

Progression COVID-19
To this end, important indicators are shown under “Health Systems” in the illustration on the left: the infrastructural prerequisites that actually existed in the state's hospital system in the past are increasingly being run down in terms of quality and quantity. Essential aspects such as communication with experts in the health system in such a crisis as well as infection protection during patient treatment and the availability of protective equipment hardly exist. It remains to be seen to what extent at least the IHR messages can be transparently reported in accordance with the international standard.

The ongoing fighting has left the country vulnerable to further disasters, according to local aid workers, and **the capacity of hospitals** is rapidly declining from on-site descriptions. In addition, countries that previously accepted wounded patients from the war for care have now stopped because of the coronavirus. The local hospitals are already almost full of wounded fighters and people with other illnesses. The United Nations Humanitarian Coordinator for Libya, Yacoub El Hillo, issued a sharp warning in April following the attack on a hospital. He said that in March / April alone, 27 health facilities were damaged in the fighting and 14 had already been closed. The war killed more than 350 civilians and nearly 150,000 people fled their homes. "If Libya is to have a chance against COVID-19, the ongoing conflict must come to a standstill immediately," Hillo said in a statement. With the rapidly rising numbers in August, this is more relevant than ever.

Conclusion
In summary, it can be stated that the enormous escalation potential in the corona pandemic feared befor has now been fully developed for several weeks after several months with low case numbers. An effective fight against the pandemic without a sustained ceasefire as a framework condition can be ruled out and a deterioration in the humanitarian or health situation is to be expected.



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https://fundforpeace.org/2019/04/10/fragile-states-index-2019/
https://smallwarsjournal.com/blog/libya-war-escalates-health-care-system-crumbles

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!

26th August 2020
BBC
Coronavirus: Obesity 'increases risks from Covid-19'
https://www.bbc.com/news/health-53921141

26th August 2020
The Guardian
Non-woven masks better to stop Covid-19, says Japanese supercomputer
https://www.theguardian.com/world/2020/aug/26/non-woven-masks-better-to-stop-covid-19-says-japanese-supercomputer

24th August 2020
The Guardian
Six of the most promising treatments for Covid-19 so far
https://www.theguardian.com/world/2020/aug/24/six-of-the-most-promising-treatments-for-covid-19-so-far

26th August 2020
DW
COVID-19 vaccine: From the lab to your doorstep
https://www.dw.com/en/coronavirus-covid-19-vaccine-ups-astrazeneca-oxford/a-54691039

27th August 2020
The Guardian
Tribespeople of Andaman Islands in Bay of Bengal test positive for Covid-19
https://www.theguardian.com/world/2020/aug/27/tribespeople-of-andaman-islands-in-bay-of-bengal-test-positive-for-covid-19

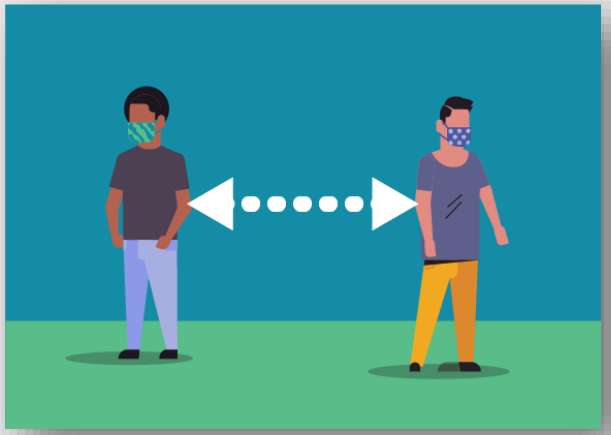
27th August 2020
Aljazeera
Women may mount stronger COVID-19 immune response: Study
https://www.aljazeera.com/news/2020/08/women-mount-stronger-covid-19-immune-response-study-200827072715430.html

24th August 2020
South China Morning Post
World's first coronavirus reinfection case confirmed in University of Hong Kong study
https://www.scmp.com/news/hong-kong/health-environment/article/3098551/hong-kongs-third-wave-losing-momentum-city

26th August 2020
UNICEF press release
COVID-19: At least a third of the world's schoolchildren unable to access remote learning during school closures, new report says
https://www.unicef.org/press-releases/covid-19-least-third-worlds-schoolchildren-unable-access-remote-learning-during

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:

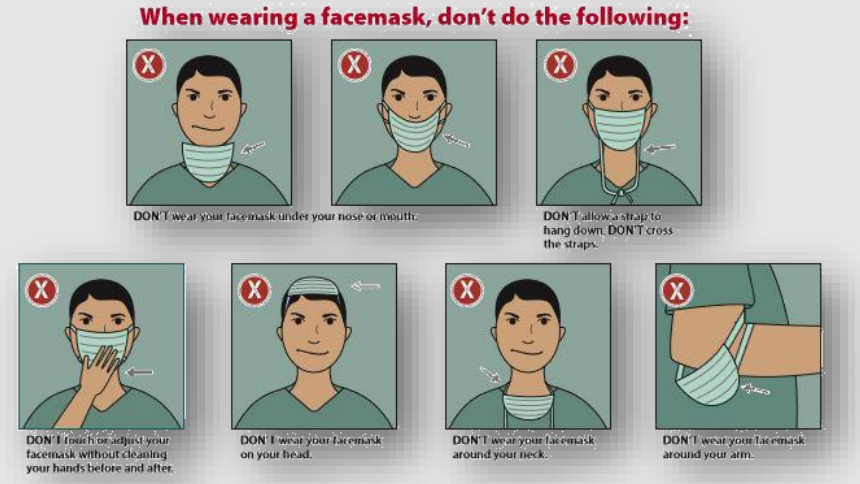
Medical face masks (MNS; surgical (surgical) masks); are primarily used for third-party protection and protect the person against the exposure of potentially infectious droplets of the person wearing the face mask. Corresponding MNS protect the wearer of the mask if the fit is tight, but this is not 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.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html
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

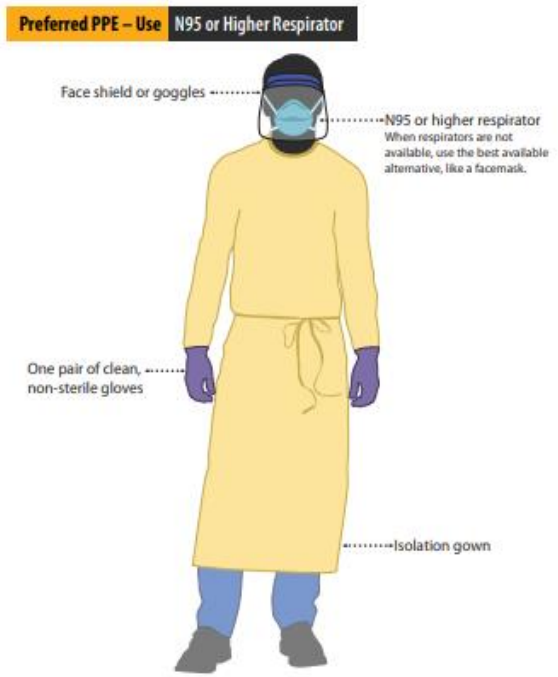
Healthcare personnel should adhere to Standard and Transmission-bases Precautions when caring for patients with SARS-CoV-2 infection. Recommended PPE is describe in the **Infection Control Guidance.**

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

Use of gloves in in the context of the COVID-19 pandemic

Recommendations for the use of gloves to prevent SARS-CoV-2 transmission by community setting

Activity	Non-sterile gloves (without EN standards)	Non-sterile gloves[a]	Sterile gloves[a]	Gloves used in microbiological and biochemical laboratories[b]
Community				
Visiting busy closed spaces such as grocery stores, shopping centers.	no	no	no	no
Leisure activities.	no	no	no	no
Using public transport.	no	no	no	no
Workplaces and professions that involve physical proximity to many people, that did not wear gloves for occupational reasons prior to the COVID-19 pandemic, e.g. cashiers in shops and supermarkets.	no	no	no	no
People in occupations that wore gloves prior to COVID-19, such as environmental cleaners and the police.	yes/no[c]	yes/no[c]	no	no
Healthcare setting (e.g. acute care hospitals, general practices, long-term care facilities)				
Aseptic procedures, e.g. surgical operations, central venous catheter insertion.	n/a	n/a	yes	no
Activities with a risk of contamination of healthcare workers' hands, including contamination with body fluids, or contact with mucous membranes and non-intact skin, e.g. peripheral venous catheter insertion/removal, intubation, cleaning spills of body fluids, emptying emesis basins, handling/cleaning used instruments, handling waste.	yes	yes	no	no
Procedures not included in the two previous examples.	no	no	no	no
Specific laboratory work.	no	no	no	yes

[a] - European Standard EN 455 on medical gloves for single use, as stipulated in the Council Directive 93/42/EEC
[b] - Standards and specifics for the gloves used in microbiological and biochemical laboratories are described in the European Standard EN ISO 374
[c] - Dependent on occupation specific guidance applicable to the setting and/or applicable national guidelines /legislation
n/a - not applicable
Source: https://www.ecdc.europa.eu/sites/default/files/documents/Use-of-gloves-within-COVID-19.pdf