Force Health Protection Branch
NATO MilMed COE
Munich

Short Update 13a
COVID-19
Coronavirus Disease
01th of April 2020

info.dhsc@coemed.org

Branch Chief
Phone: +49 89 1249 4003
Branch Admin
Phone: +49 89 1249 4001

GLOBALLY

860 181
Confirmed cases

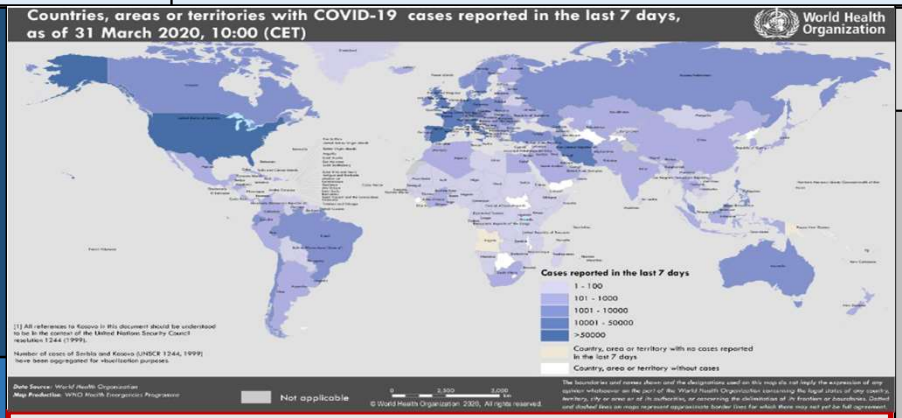
180 countries
42 345 death

USA

189 132
confirmed cases
4 067death

ITALY

105 792
confirmed cases
12 428 death



News:

- No new countries/territories/areas reported cases of COVID-19 since the last update.
- **WHO** officials still do not recommend mask wearing for healthy members of the general population. Masks should be worn by those with the disease or those in close contact with those infected.
- **WHO**: "Previous outbreaks have demonstrated that when health systems are overwhelmed, deaths due to vaccine-preventable and treatable conditions increase dramatically. Trade bans are proliferating. This is slowing the response and restricting countries from getting desperately needed supplies for diagnostic tests, protective gear for health workers, and critical equipment such as ventilators. Newly erected trade barriers not only create potentially catastrophic slowdowns for the COVID-19 pandemic, but for other diseases and disorders. " More information find here and here. A guideline you can find here.
- **Bosch** developed a rapid molecular diagnostic test which can detect SARS-CoV-2 in under two hours. Information see here.
- Respiratory infections hit smokers harder than non-smokers on average. This is probably also the case with Covid-19. Even the risk of infection could be higher for smokers. **Now is the opportunity to quit smoking!**

Risk Assessment

EUROPE

- The risk for importing/exporting the virus into/from Europe is currently high.
- The risk of severe disease associated with COVID-19 infection is currently considered moderate for the general population and high for older adults and individuals with chronic underlying conditions. In addition, the risk of milder disease, and the consequent impact on social and work-related activity, is considered high.
- The risk of the occurrence of subnational community transmission of COVID-19 is currently considered very high.
- The risk of occurrence of widespread national community transmission of COVID-19 in the coming weeks is high.
- The risk of healthcare system capacity being exceeded in the coming weeks is considered high.

GLOBALLY

- The risk for people travelling/resident in affected provinces with ongoing community transmission is currently very high.

EUROPE
464 244
cofirmed
cases
30 462 death

ASIA & Western Pacific Region
105 299
confirmed
cases
3 693 death

Eastern Mediterranean Region
58 926
confirmed
cases
3 304 death

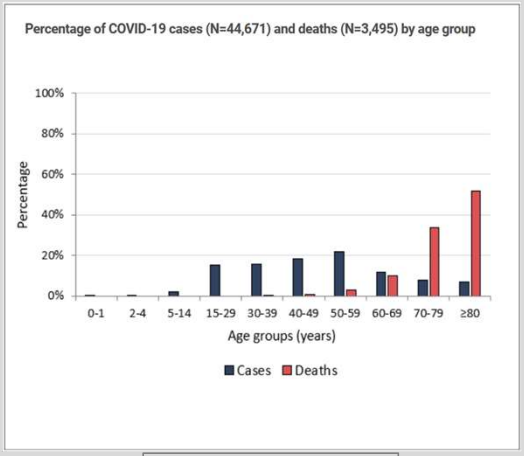
AMERICAS REGION
217 487
confirmed
cases
4 702 death

AFRICA
4 263
confirmed
cases
101 death

Situation in Europe

- Europe is now considered the active center of COVID-19 according to the WHO as of 13 March 2020. Other focus areas of the outbreak are in USA and Iran.
- Many countries discussing a mandatory wear of face mask. WHO officials do not recommend mask wearing for healthy members of the general population. In fact wearing a mask can provide a false sense of security. See also slide 4.
- **ESP** reports more than 800 fatalities per day for a couple of days now.
- **FRA** reported some severe side effects with Hydroxychloroqiun and Kaletra. Cases are under investigation.
- **GBR** British Medical Association reported a lack in medical supplies. Royal college of Physicians reported every forth doctor of NHS being sick or in isolation.
- **NOR**, relax their entry regulations for agricultural seasonal workers coming from the EU/EWR. They have to go to a 14 days quarantine after entering the country.

Country	Confirmed case (Over 10 000 cases)	Deaths
USA	189 132	4 067
Italy	105 792	12 428
Spain	95 923	8 464
China	81 539	3 306
Germany	71 808	775
France	52 128	3 523
Iran	44 605	2 898
Great Britain	25 150	1 789
Switzerland	16 605	433
Turkey	13 531	214
Belgian	12 775	705
Netherlands	12 595	1 039
Austria	10 180	128



Source: WHO-Europe

Characteristics of COVID-19 cases and deaths

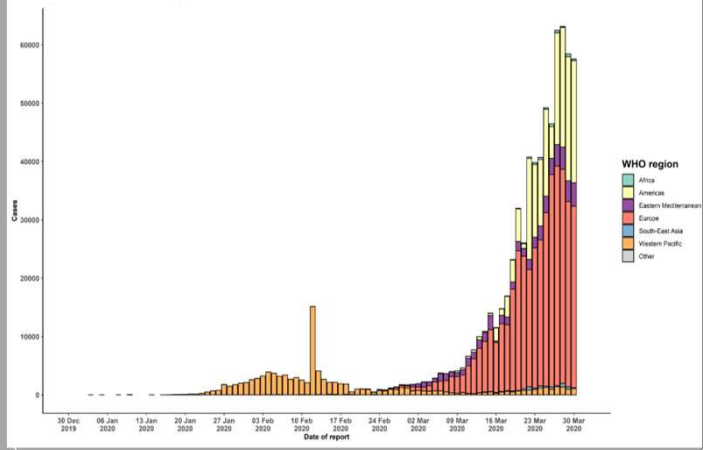
	Characteristics	n	%	Total records with data available
Cases	Age in years, median (range)*	49 (1-120)		44673
	Sex, male*	23358	53.6	43548
	Travelled*	6644	43.55	15257
	Recovered*	18656	86.62	21537
	Asymptomatics#	901	6.8	13342
	Health care workers#	3636	10.1	36151
	Hospitalization#	6437	47.82	13460
	Intensive care unit admission#	624	9.9	6314
Deaths	Age in years, median (range)^	80 (30-103)		3495
	Sex, male^	2421	69.47	3485
	At least one underlying condition^	486	96.62	503

Source:
*Case report forms (n=45,315);
#Case report forms and aggregated data from Italy up to 19 March 2020 (n=81,042); Health care workers refer to ocupation and not to the place of exposure
^Case report forms and aggregated data from Italy up to 20 March 2020 (n=3,500);

Global Situation

- Globaly case numbers still increasing.
- **South Korea**: number of new infections per day still under 100. Authorities still concerned because of local clusters and imported cases.
- **USA**: US Naval hospital ship U.S.N.S. Comfort arrived in New York harbour. The vessel will take patients with other medical problems than COVID-19, to relieve NYC hospitals
- **Turkey:** The situation threatens to escalate. 1500 new confirmed cases are counted every day. The authorities have quarantined around 40 Areas. Some experts assume that the number of unreported cases in Turkey is 50 times higher because very few tests on COVID-19 are carried out.

Figure 1. Epidemic curve of confirmed COVID-19, by date of report and WHO region through 31 March 2020



Yellow: Americas; Purpel: Eastern Mediterranan; Red: Europe
Blue: South East Asia; Orange: Western Pacific

Source: WHO as of 31 March

Adapted "recipe for success" from Hong Kong, Japan, Taiwan and South Korea:

- **Urgent recommendation**: strict protection of risk groups
- **Know your infection chains**: Isolation of all infected people as quickly as possible and quick, preventive quarantine of all their contact persons until they are tested as well as complete digital tracking of all infected persons and all their contact persons.
- **Comprehensive testing:** (Ag / Ak testing according to an epidemiologically balanced, agile representative model)
- **Transmission minimization**: Consistent wearing of respiratory masks / scarves or scarves over your mouth / nose in public spaces - the new chic!
- **Wash your hands**.
- **Safety distance of 1.50 meters** from other people.

None of the measures works perfectly to some extent. But taken together, they seem to build an effective safety net, to live with the virus without permanently overwhelming the economy or public life. In times of crisis, innovative approaches - albeit socially and culturally unusual - are a measure of (r)evolutionary intelligence: adaptability.

Preparedness and Response

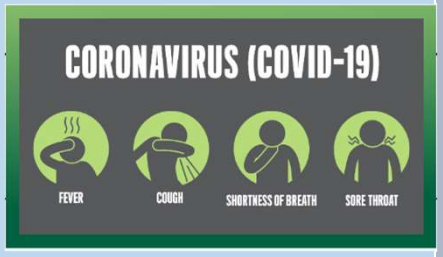
Basic protective measures against COVID-19:

- When coughing and sneezing, keep your distance and turn away; hold the crook of your arm in front of your mouth and nose or use a handkerchief that you should dispose immediately (respiratoryhygiene).
- Wash your hands regularly with soap and water, avoid touching your eyes, nose and mouth (handhygiene). See also Epi-WIN.
- A medical mask is **not** required if exhibiting no symptoms, as there is no evidence that wearing a mask – of any type – protects non-sick persons. If masks are to be worn, it is critical to follow best practices on how to wear, remove and dispose of them and on hand hygiene after removal.

WHO's Information Network for Epidemics (EPI-WIN) website: Gives people access to timely, accurate, and easy-to-understand advice and information from trusted sources on the evolving COVID-19 pandemic, translating scientific information to actionable information. You will find information and guidelines for individuals, travellers, the health sector and countries on this side.

- All WHO technical guidance regarding COVID-19 you can find here.

During a pandemic considerable physical and psychic stress can occur to concerned persons, relatives and personnel. It is necessary to assign a psychosocial clinical emergency care timely, by incorporating all SMEs in this field. A WHO guidline you can find here.



Travel Informations

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 you can find at IATA and International SOS.

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.

People returning from affected areas should self-monitor for symptoms for 14 days and follow national protocols of receiving countries. If symptoms occur, such as fever, or cough or difficulty breathing, persons are advised to contact local health care providers, preferably by phone, and inform them of their symptoms and their travel history.

When to use a mask

To wear or not to wear? That has become the key question during the pandemic as the face mask has become a symbol of our changed lives under coronavirus.

Key to remember, say WHO officials, is that coronavirus is spread by droplets and not airborne transmission. “The most likely person to become a case is someone who has been in significant contact of another case”.

WHO still don´t recommend mask wearing by the general public. “We don’t generally recommend the wearing of masks in public by otherwise well individuals because it has not up to now been associated with any particular benefit,”.

Recommendations/orders differ from country to country. The US Surgeon General pleaded with the public in February to stop buying masks, while countries such as South Korea and Japan distributed them to the public. Recently the Czech Republic, Slovakia and Austria even made them mandatory.

Who should wear a mask:

- **Those who are sick**. WHO officials recommended those infected with the COVID-19 coronavirus to wear masks to prevent spreading it to someone else.
- **Those who are home caregivers for those who are sick**. People caring for the sick should wear masks to protect themselves and to prevent further transmission throughout a family unit.
- **Those who are frontline healthcare workers**. Right now the people most at risk from this virus are frontline healthworkers who are exposed to the virus "every second of every day", WHO also said.

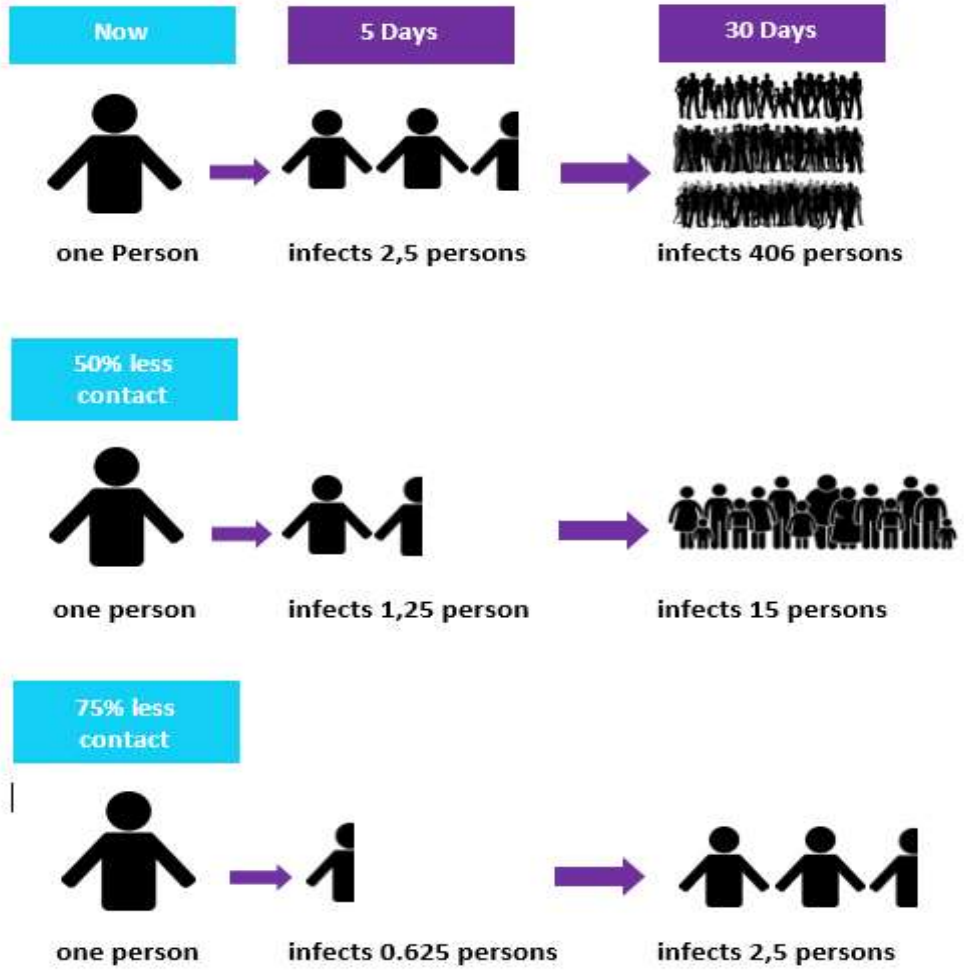
Why is it still not recommended by WHO?

- There is no scientific proof that wearing a mask as a healthy person helps you from not getting sick.
- Wearing a mask can provide a false sense of security, leading some to become less vigilant in more important hygiene measures, such as hand washing. Additionally, removing a mask so it no longer covers your nose, or touching the outside of the mask can make it less effective.
- The global shortage of personal protection equipment underscored the need to carefully deploy masks where they would do the most good.

World Health Organization officials helped clarify how they recommend masks can best be deployed at a briefing on 30 March. The entire press conference you will find here. WHO advice for the public: When and how to use masks you will find here.

Source: World Economic Forum

Why do we practise „Social Distancing“?



Social Distancing

Director-General WHO: Physical distance doesn’t mean social distance.

1. Avoid gatherings or meetings with many people. Use online conference facilities, VTC, conference calls, e-mail, phone calls within the same building as well as Home Office as far as possible.
2. Unavoidable personal meetings should be kept brief and take place in a sufficiently large, well-ventilated room that allows you to keep your distance. Avoid handshakes – a smile connects.
3. Cancel unnecessary travel and postpone meetings that are not essential.
4. Do not stay longer than necessary in social rooms such as kitchens or common rooms. Keep your distance from others.
5. Bring your own meals to work and eat them at your desk.
6. Avoid public transportation. Instead, walk, use the bike or your own car. Avoid the "rush hours" by starting or stopping work early.
7. Restrict your off-duty activities: e.g. no mass events, concerts, course participation, fitness studios or cinemas. Support high-risk patients in order to minimize their social contacts (shopping, etc.).

General actions and information on mental health

During a pandemic considerable physical and psychic stress can occur to concerned persons, relatives and personnel. It is necessary to assign a psychosocial clinical emergency care timely, by incorporating all SMEs in this field.

General information on prevention

A pandemic usually puts an increased burden – psychologically and physically – on affected people, their relatives and staff tasked with fighting the disease.

Especially with regards to maintaining endurance the scientific community and professional societies (e.g. DIVI and DGPPN) recommend adapting the already established and standardized preclinical processes in the field of psychosocial trauma care to a clinical setting, at least in those hospitals treating patients affected with the pandemic disease. Large hospitals should order staff with relevant training (e.g. psychiatrists, psycho-therapists etc.) as well as staff with related experience (e.g. priests), ideally with experience in palliative care to develop and maintain an easy-to-access, transparent clinical psychosocial emergency concept for the infected, their relatives and medical staff.

Home quarantine and self-isolation can have serious psychosocial consequences.

There are three critical factors:

- The feeling of (losing) independency
- The feeling of connectedness (with others)
- The feeling of self-competence

(the feeling of something meaningful/effective)

In order to prevent such situations or to alleviate their impact on the individual there is some advice to be followed.

Information of the Psychotrauma Centre Bundeswehr on handling COVID-19

In order to mitigate the spread of COVID-19 (SARS-CoV-2) a number of measures aiming at implementing social-distancing or even quarantine/self-isolation have been implemented by the government. This results in an increasing number of people ordered to stay at home, especially people that are (potentially) infected have to stay at home.

These measures don't leave anybody unaffected. Reducing our social contacts can be burdensome for us. Being as suspect case, the fear of being infected or the disease itself can also negatively impact our psyche. In order to handle this burden the following is recommended:

Access trustworthy information - gain safety: Frequent information from reliable sources (e.g. public broadcasting, websites of the federal ministries) helps to avoid getting lost in thoughts. Thereby safety in a situation where fear and anxiety are "perfectly normal and understandable" is maintained/regained.

Accept your feelings: Quick and frequent changes of your feelings and emotions are a normal thing during a crisis: Feelings like helplessness, fear, anger and inner emptiness can come and go very quickly. In such emotional times no important/life changing decisions should be made.

Set goals: This allows you to regain the feeling of being in control of the situation. The goals need to be achievable and should fit into your overall situation, e.g. keeping a diary, developing new skills, cleaning the flat, completing tasks you tend to postpone.

Talk about it: Talk to your friends, relatives, colleagues and comrades. Sharing your fears and hopes with them helps during a crisis.

Stay in touch: It is very important to maintain social contacts regularly via telephone, messenger apps, video calls and the like. COVID-19 shouldn't be the only topic in those conversations. Take care of your interlocutors, change the topic if you feel the topic is annoying or stressing them.

Seek distraction: Actively distract yourself from the dominating COVID-19 pandemic: Try to have conversations about other topics, read a good book, watch a movie or try to spend time on things you like to do (e.g. a hobby , if possible given the current situation).

Allow humor: "Humor is allowed!" – humor is "battle-proven" against hopelessness. Smiling and laughing often bring relief during stressful situations

Stay active: Complete tasks you usually don't have time for and focus on positive activities, e.g. needlework, cooking or watching a good movie.

Do physical exercises: It is important to stay physically active. Exercising helps to reduce stress levels and increase your wellbeing.

Maintain your everyday rhythm: Try to keep your everyday rhythm during this exceptional situation. Get up at a regular time , fulfill your chores and enjoy your free time afterwards. Eat at the same time you would usually eat and try to go to bed at the same time you would usually go to sleep.

Activate your resources: Look for things that keep up your mood and think about calming and encouraging sentences you can tell yourself and your family, such as "We'll manage this situation together!"

Don't lose track of your own strengths: During a crisis you focus automatically on fears, things that don't work. In order to compensate this and to maintain a positive mentality it is of utmost importance to refocus actively on the things that are working, your strengths and what you've already achieved.

Suggestion for categorization of contact persons as used by DEU military

Contact with a **confirmed** COVID-19 case

Category I – higher risk

- **Minimum** 15 minutes cumulative face-to-face contact
- Domestic cohabitation
- Contact to respiratory secretions/ aerosol-producing activity
- Medical personnel without PPE and distance <2m

- Report by name to responsible Public Health agency
- Quarantine (either in military facility or at home) for 14 days and general hygiene measures
- Information and record keeping of a symptom diary incl. documentation of body temperature

Category II – lesser risk

- Staying in the same room, but **less than** 15 minutes of cumulative face-to-face-contact
- Medical personnel without adequate PPE, but a distance of > 2m

- Approach according to assessment of PH officer
- Optional: Information especially regarding reduction of contacts and behaviour in case of symptoms

Category III – Med. Personnel in PPE

- **Standard-PPE:** minimum FFP-2-mask, protective goggles, liquid-proof gown and gloves
- Keeping records of deviations

- Recording by name through hygiene personnel
- Daily measurement of temperature + keeping records in a symptom diary
- Immediate reporting in case of symptoms
- As far as possible no treatment of non-COVID-19-patients

Testing for SARS-CoV-2 **only** reasonable if becoming symptomatic

Exception: asymptomatic medical or otherwise key personnel of **category I**, in order to keep them available for their duties if these cannot be guaranteed otherwise.
Must be done in coordination with the responsible PH officer and under protective conditions.
Conditions generally are: daily swab diagnostic, FFP2-masks without exhale valve (if this is not available surgical mask)

In case of a respiratory infection symptoms/ unspecific general symptoms

- Test for SARS-CoV-2
- Report/ registration as a justified suspect case. Further approach according to flowchart of national PH institute in its most recent version and considering the option of quarantine in a military facility

20200323_Kdo SanDstBw VI-1_Covid-19 Kategorien Kontaktpersonen_V1_4.pdf

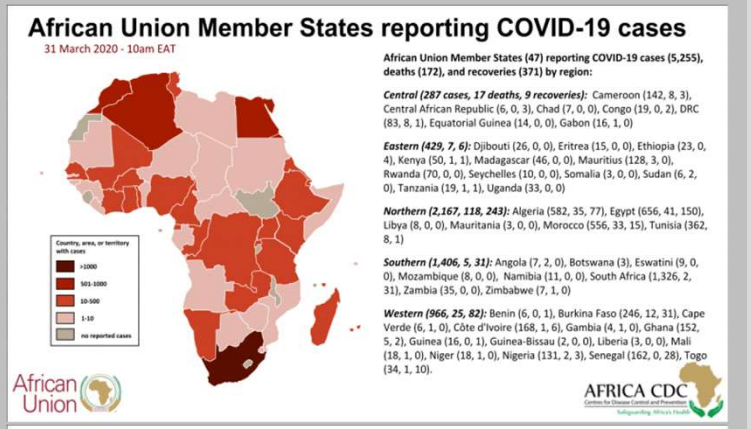
„…The concept of every country trying to look only within its own borders is completely, mindbogglingly, a waste of everybody's time'.
Chikwe Ihekweazu/CDC NGA

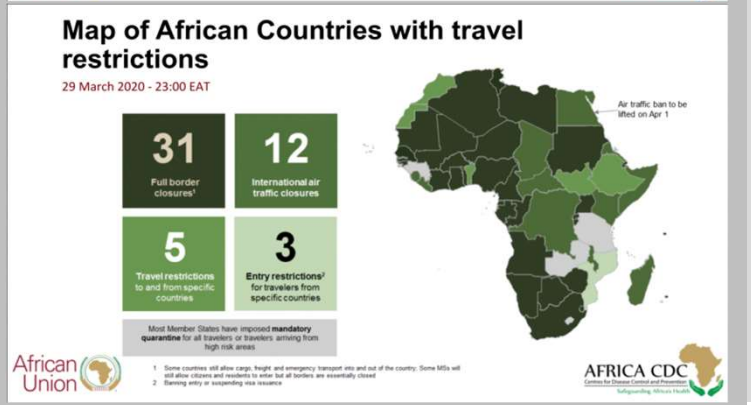
Africa – Current news, facts & a editorial

Current news:
- A lot of African countries issued travel bans.
- No nationwide/comprehensive diagnostics are available.
- CAVE: three patients in Lagos/NGA are in clinical treatment due to a Chloroquin-overdose. This anti-malaria drug is currently used on a trial-basisi for treating COVID-19-patients (see also FRA).
- **A joint strategy for COVID-19 in Africa has been signed off: find it here.**
- **Joint African guidelines for Social Distancing: find it here.**
- **Joint African guidelines for monitoring and travel restrictions: find it here.**
- **Pan Afrian Information on Travel and Events: find it here.**

Facts and figures:

Africa CDC COVID-19 Surveillance Update: 31 March 2020 10:00am EAT
- See the update here.





Africa and the SARS-CoV-2-pandemic

A pandemic is a non-linear, highly complex and – at a first glance – chaotic outbreak scenario. As the outbreak seems to be contained in China the **epicenter seems to have moved to Europe and the US**. The absolute number of cases in the US is likely to surpass the number of cases in Italy, the current hot-spot of the outbreak. But what's about the countries in sub-Saharan Africa?

Until now the reason for the low number of cases within the humanitarian and tropical medicine related trouble spot Africa can be found in the **comparably limited testing capacities.**
How does the climate affect the future course of the pandemic? A number of European experts are counting on **seasonality** and hope that the outbreak will end in the summer (at least temporary). The incidence of other respiratory viral diseases support this hypothesis. For example Influenza has its peak during the cold season and is regularly not demonstrable during summer. Higher temperatures dry out droplets (a typical vector for the virus) faster and reduce their radius. An increase of UV-radiation during summer and spring is capable of reducing the virus' ability to survive in the environment. As temperatures rise people tend to be more active outside their houses and thereby reduce transmission rates as the distance between people being outside is bigger compared to the distance between people inside of a building. The influenza-surveillance in sub-Saharan-Africa – as limited its significance may be – shows notably lower activities of circulating Influenza A and B strains compared to Europe.
Those who implemented climate effects for Europe or sub-Saharan-Africa into predictive models of the outbreak as a given should have a look at the currently massively increasing number of cases in South America. Brasil can be seen as a case in point. Another aspect in most African countries has to be taken into consideration as well when talking about the future development of the outbreak: **demographic factors**.
Severe and lethal progression of COVID-19 is mostly observed in old patients with an age of over 60 years and several comorbidities. The younger and healthier patients are by far less affected. In the group of children up to 10 years of age no fatalities have been reported yet and up to the age of 30 the lethality of the disease is well below 2% (and – due to a probable massive underestimation of the denominator of the Case Fatality Rate – the true lethality is likely to be even lower).
Africa is the second largest continent (by size and population respectively) only outnumbered by Asia and by far the youngest continent. 60% of all Africans are under the age of 25. The median age in Italy is 47.3 years, in contrast the median age in Nigeria (the most populous country in Africa) is 17.9 years. If the spread of the disease isn't slowed down an infection rate that is sufficient to grant herd immunity will be reached in sub-Sahara-Africa with a comparably low number of severe progressions and a much higher recovery rate. Approximately 35% of all Africans are over the age of 60 and usually live with their families and not in retirement homes. This could probably reduce the likelihood of outbreak clusters usually induced by a concentration of high-risk patients.
On top of that the huge African continent has a **mobility problem**: Streets are – depending on seasonality and security situation -often unusable and air travel between the African countries is limited and costly. On the one hand those logistic shortcomings might be a protective factor regarding the spread of the virus. A Ghanaian TroTro with its unlimited number of passengers on the other hand has to be considered as a (potential) super spreader.

Taking into consideration the aspects mentioned above it has to be said that forecasting has to be don on a weak evidence base.

The **immunity** within the African population can be considered to have basically the same protective potential as the immunity of the rest of the global population. In addition the following holds true: Tropical medicine is not the medical discipline of the warm countries but of the poor ones. The "social determinants of health" are for sure as relevant as the impact of high parasitical infection rates, the sometimes disastrous food situation, numerous comorbidities – not least HIV/AIDS and tuberculosis – and the effect of slums and townships on the outbreak dynamic.
The **comparably fragile health** systems in Africa are without doubt not prepared for treating cases of COVID-19; this holds true for the quality as well as for the quantity of treatment (but the latter is the same in the rest of the world for the time being). Apart from that the continent finds itself in a "**constant training" in the management of outbreaks** (e.g. Measles, Cholera, Monkey Pox, Lassa Fever and Ebola) - sometimes to a degree that is critical for a whole country. Numerous African countries are post-conflict countries or never left conflict-state. The connection between "conflict" and "health" is evident.
First and foremost this leads to a blatant shortage of resources down to unmet basic-needs like basic hygiene and supply of clean water. To what extent the implementation of harsh public health measures is facilitated by the weak legal situation (e.g. lack of fundamental rights) resulting from the persistent crisis is disputed, even among public health experts. Are societies that haven't been socialized with a law compliant administration or the compulsive silo thinking of many bureaucracies really more agile during a crisis? What does "**being agile**" mean in this context?
The **Cynefin framework** pictured in the upper right corner is a simple model for knowledge management and gives us unexpected insights: In case of complex and chaotic problems – apart from the simple and complicated issues pictured on the right side of the framework – "Best Practice" and "Good Practice" are replaced by "Emergent Practice" (a kind of "Reflection in Action"). Those requirements challenge western bureaucracies with their latent aversion against innovation and cooperation regularly and tend to bring them to their breaking points. Whether the African Communities' will demonstrate to be able to self-organize and develop alternative structures or not has to be awaited. What does all this now mean for Europe? Will we –currently not even looking as being capable of acting solidary on a European level – be able to provide European resources to support African outbreak areas when the time has come? Maybe even preventive?
During the last years – especially in the aftermath of the Ebola crisis – Africa has been prepared for various outbreak scenarios – at least on a conceptual level by WHO and numerous other organizations. A strong leadership role played the NGA CDC. Along with the preparation on a conceptual level, laboratory capacities have been improved, Public Health capacities were increased and surveillance-systems were implemented. In contrast to other supranational bodies there is a continent-wide strategy for Africa(see on the left). There are various docking points and – not to forget – a European Medical Corps. NGA CDC's executive director Chikwe Ihekweazu claims consequently that, because of the limited clinical capacities for teating severely ill patients, in Africa all efforts should be directed towards the early detection of the virus and the interruption of the chain of infections – using "… hard core Public Health and Prevention (approaches)".

Christian Janke, Andreas Jansen, Katalyn Roßmann

Links zu Anregungen für unser Editorial:
http://theiddoc.net/2020/03/15/covid19-pandemic-and-pandemonium-will-africa-sit-this-one-out/
https://www.thinkglobalhealth.org/article/anticipating-coronavirus-west-africa
https://www.thinkglobalhealth.org/article/africa-not-starting-scratch-covid-19 https://de.wikipedia.org/wiki/Cynefin-Framework