Force Health Protection Branch
NATO MilMed COE
Munich

Short Update 21a
COVID-19
Coronavirus Disease
25th of May 2020

info.dhsc@coemed.org

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

GLOBALLY

5 574 748
Confirmed cases
2 305 389
recovered
350 926 deaths

USA
(new cases/day 21 785)
1 677 684 →
confirmed cases
384 689 recovered
98 784 deaths

Brazil
(new cases/day 16 802)
391 222 ↘
confirmed cases
158 593 recovered
24 512 deaths

Russia
(new cases/day 8 964)
370 680 →
confirmed cases
142 208 recovered
3 968 deaths

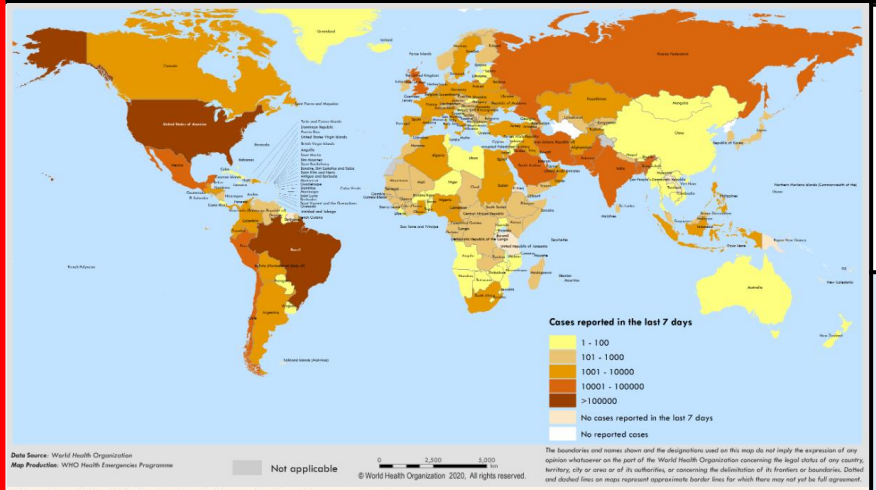
News:

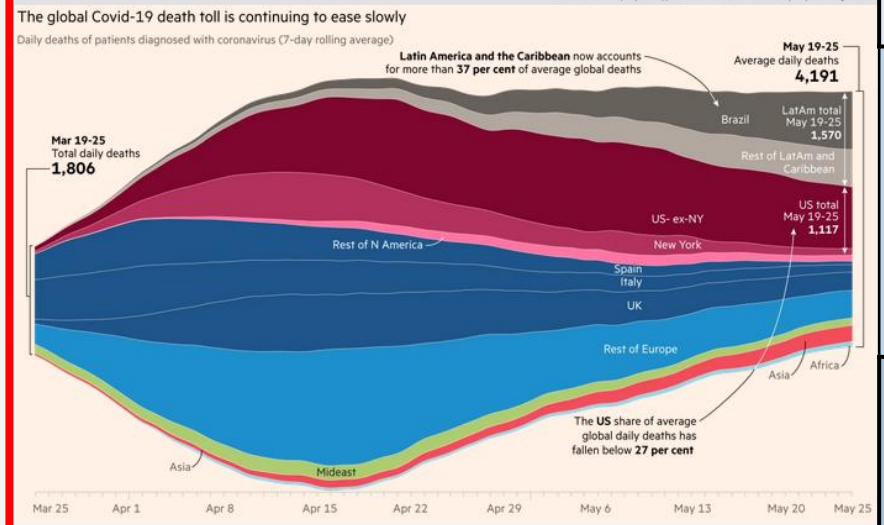
- **WHO:** The Executive Group has implemented a temporary pause of the hydroxychloroquine arm within the Solidarity Trial while the safety data is reviewed by the Data Safety Monitoring Board.
- **EU reconstruction plan**: The EU Commission wants to send the member states 560 billion euros. 310 billion of them as grants, the remaining 250 billion as loans. The bulk of the money will go to Italy (173 billion) and Spain (140 billion), which are particularly strongly affected by the pandemic.
- **ECDC**: Published a technical report on Considerations for travel-related measures to reduce spread of COVID-19 in the EU/EEA as of 26 May. The document outlines principles for developing more individualised guidance or operating procedures related to travel in European countries.

- 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:

- Subject in Focus - Preparing for the next epidemic: Learning from COVID-19 failures
- Projected baselines of COVID-19 in the EU/EEA and the UK for assessing the impact of de-escalation of measures
- In the press





EUROPE

2 19 945
confirmed cases
1 001 339 recovered
174 094 deaths

UK
(new cases/day 2 111)
265 227 ↗
confirmed cases
-not reported- recovered
37 048 deaths

SPAIN
(new cases/day 542)
236 259 ↗
confirmed cases
150 376 recovered
27 117 deaths

ITALY
(new cases/day 610)
230 555 ↘
confirmed cases
144 658 recovered
32 955 deaths

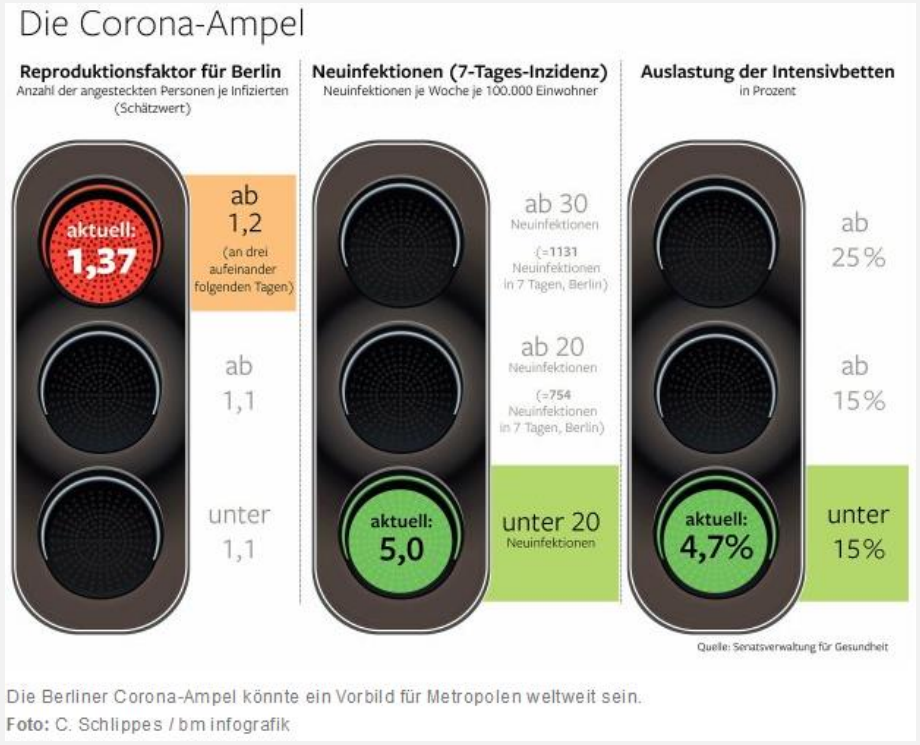
Situation in Europe

The Berlin traffic light system

One of the requirements for De-escalation in DEU was to implement a upper limit of new infections of 50 per 100.000 inhabitants within 7 days. Berlin designated the method as not practical for a major city like Berlin. As the current astimations means that Berlin need 1 800 cases per week, but even in the height of the disease Berlin only counted 1 200 cases per week. Therefor the city implemented the traffic light system that should react more sensitively to the situation.

The system includes three traffic lights the reproductive rate, the number of new infections and the occupancy of the intensive care beds with COVID-19 patients.

- If two of the three traffic lights are yellow, there is "need for discussion" and "preparation of possible measures" is required.
- If there are two reds, there is a need to intervene, which then means that loosening will only come later - or, in the worst case, withdrawn entirely.



Die Berliner Corona-Ampel könnte ein Vorbild für Metropolen weltweit sein.
Foto: C. Schlippes / bm infografik

Source: https://www.tagesspiegel.de/berlin/so-funktioniert-die-berliner-corona-ampel-auf-reproduktionszahl-neuinfektionen-und-intensivbetten-kommt-es-an/25857156.html

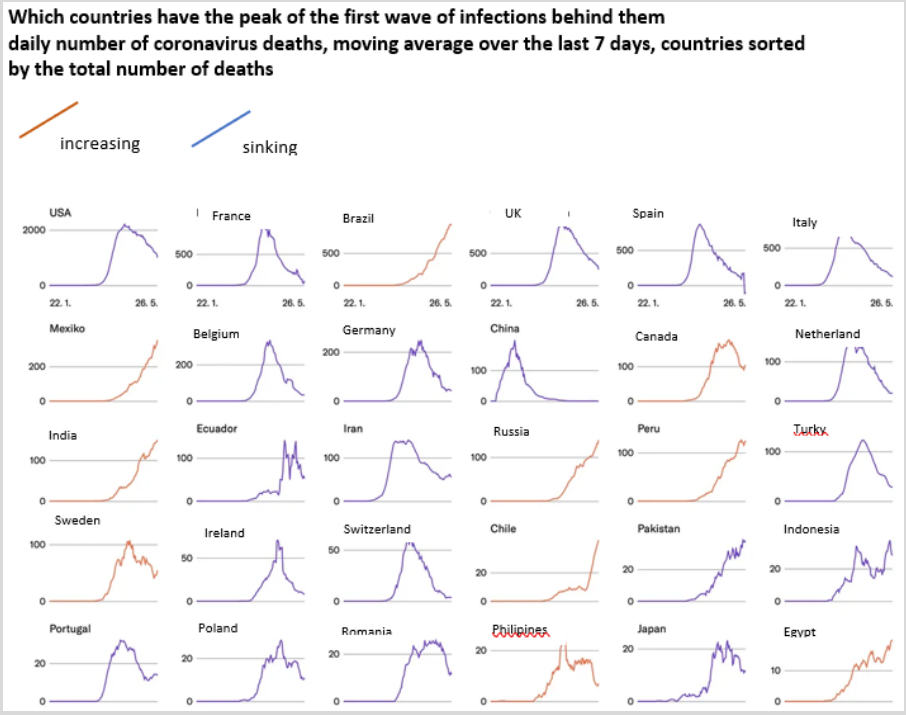
Global Situation

WHO: After the Lancet published an observational study on hydroxycholoroquine and chloroquine and its effects on COVID-19 patients that have been hospitalised**,** WHO implemented a temporary pause of the hydroxychloroquine arm within the Solidarity Trial while the safety data is reviewed by the Data Safety Monitoring Board as it had been announced in the WHO media briefing on 25 May.

CHN: City of WUHAN claims to have tested nine million of its approximately 11 million inhabitants on SARS-CoV-2 in the past 10 days using nucleic acid tests. In the course of the tests, 180 positive tests were counted up to Monday. People with a positive test result but no symptoms are reported by the state health commission, but are still not included in the total number of confirmed cases.

KOR: After the cluster outbreak in the nightlife district ITAEWON (SEOUL) at the beginning of May 2020, the daily number of new infections nationwide leveled off at 15-20, which corresponds to an infection rate of only 0.00004%.

The most accurate value when it comes to showing the progress of the epidemic is the number of deaths. In contrast to the confirmed number of cases, where there are great uncertainties such as different counting methods and high or low testing intensity, the number of deaths is generally reliable, even if there may be differences in the method of recording. To date there have been around 346,000 deaths worldwide. The United States, France, Great Britain, Spain and Italy have absolutely the most COVID-19 deceased.



The graphic shows that the daily number is declining in most of the hardest hit countries - including Switzerland. If you look at those 30 countries with the most corona deaths, then more than two thirds have exceeded the peak for the time being. However, some countries (colored red) still have increasing deaths every day. These include, for example, Brazil, Mexico, India and Russia. Source: NZZ

Subject in Focus
Preparing for the next epidemic: Learning from COVID-19 failures

This is a summary of this article: https://www.foreignaffairs.com/articles/united-states/2020-05-21/coronavirus-chronicle-pandemic-foretold that was published on 21st May 2020 on "Foreign Affairs". The article and the summary does not represent NATO's position on political topics is for informational purposes only. Reading time: approx. 20 minutes.

The COVID-19 pandemic is far from being over but nevertheless, the first „lessons-learned" become visible. Even though the world has seen numerous epidemic outbreaks in the past 20 years, little efforts were made to make the world more resilient against infectious diseases in general and pandemics in particular. Decision makers are often aiming at „quick wins" and preparing a society for fighting a pandemic is not „attractive" enough to gain the necessary attention, as it is a costly project and is unlikely to result in applause for all the efforts. This dilemma is well known among epidemiologists and public health experts: If money is invested and an outbreak is contained at an early stage, all mitigation measures will be criticized as being to harsh or not necessary, if the outbreak gets out of control everybody will accuse the public health experts and epidemiologists for acting too hesitant and risking peoples' life.

Nevertheless, the 3rd outbreak of a novel coronavirus within less than 20 years (SARS in 2002, MERS in 2012 and COVID-19 in 2019) should be alarming to everybody. It is obvious that COVID-19 is not the „Big One" the scientific community expects for the future but it is definitely another warning shot fired by mother nature. The global economy and society has massively changed over the last century and especially the last years: International air travel increased and it is possible to reach almost any point in the world within 24 hours. Supply chains transitioned to giant international networks that bring input goods to a factory just in time. Stockpiling is considered to be expensive and therefore many factories are dependent on a steady delivery of new raw material and components. High production costs led to a massive offshoring of sites that produce goods that where previously considered to be too important to be produced outside of a country. The population grew massively and population density especially in large cities reached unprecedented heights. The destruction of the environment is still on-going at unchecked speed. Keeping this in mind, the argument that the medical progress and our increased knowledge about microbiology, hygiene and vaccines will make up for all the developments that foster the emergence of a pandemic mentioned before becomes improbable.

But what exactly can be learned from COVID-19 and which mistakes occurred that must not happen again when fighting the next pandemic – which will certainly come rather sooner than later?

1. Solely relying on the private sector:
   Private sector firms are usually very good in allocating resources to financially profitable projects. Producing PPE and medications that are just put into storage until they are needed in case of a pandemic doesn't fit this definition. It is also a very understandable move to shift production to cheaper countries from an economical point of view, but concentrating the production in countries like China or India jeopardizes supply security of critical goods in times of an outbreak for various reasons: Potential shut-downs of production sites in affected area as part of outbreak mitigation, confiscation to satisfy the country's need for the produced goods and interruption of delivery routes. Guaranteed purchase of specific goods like PPE in the early stage of an outbreak could incentivize manufacturers to produce much needed goods early.
2. Paying a "peace dividend" in times between two pandemics
   Allowing strategic reserves to be cut down (or never fully setting them up) during non-pandemic times backfires as soon as a pandemic spreads and all affected countries fight over much needed goods like PPE and specific drugs.
3. Not communicating
   Regular exercises to improve intra- and inter-governmental communication as well as keeping the public informed prior and during an outbreak is key. Denying the spread of an infectious disease until it eventually becomes obvious to the public due to a massive increase in fatalities proofed to be a bad strategy during history and in recent times. Military-style tabletop exercises and a "NATO for fighting pandemics" with countries that align their pandemic planning and agree on jointly fighting a disease as soon as one country becomes affected appears to be a good way forward.
4. Underestimate the time and effort that is necessary to develop a vaccine
   It takes a while until the necessary basic research is conducted and vaccines can be developed, tested and distributed. Without a vaccine platform this process is likely to consume more time than available during a pandemic. Investing in research on and development of such vaccine platforms at least for the pathogens that are most likely to cause the next pandemic (influenza- and coronaviruses) is an important step of increasing global resilience.
5. Not seeing the writings on the wall / Refuse to prepare
   Preparation has to take place not only hours or days before a country is hit by a pandemic but years and months prior to this inevitable event. It is of utmost importance that countries learn from past mistakes and react quickly as soon as surveillance systems show that a pandemic is about to start. There is no use in hoping that a country won't be hit by a pandemic, as a microbe doesn't care for borders, skin colors, religions and political positions. The time to act is now!

Projected baselines of COVID-19 in the EU/EEA and the UK for assessing the impact of de-escalation of measures

ECDC 26/05/2020

Introduction

In March 2020, all EU/EEA countries and the UK implemented a range of non-pharmaceutical interventions to respond to the SARS-CoV-2 epidemic. Following a reduction in virus transmission, several countries have started to progressively ease their public health response measures while other countries have announced the lifting or easing of measures in the near future.

The report aims to provide a short-term 30-day forecast of the expected number of COVID-19 cases, deaths and hospitalised cases (including general hospital ward and intensive care unit) under a set of assumptions.

In this first analysis, the baseline scenario corresponds to a 'status quo' in which all control measures in place on 2 May 2020 will be continued until the end of the projection period (7 June 2020). The model is based on the epidemiological data and scientific evidence available at the time of publication. Further developments are expected as new information and epidemiological data become available.

Model description

To represent the dynamics of SARS-CoV-2 infection and COVID-19, ECDC has developed an age-stratified compartmental model based on difference equations, which can be applied at country level. The model is deterministic in nature and simulates discrete time steps of one day. The model incorporates the effects of four main non-pharmaceutical interventions:

- mass gathering cancellations (ban on gatherings above 50 individuals)
- closure of any public spaces (including restaurants, entertainment venues, non-essential shops, partial or full closure of public transport, etc.)
- stay-at-home recommendations for the general population (which are voluntary or not enforced)
- stay-at-home orders for the general population (which are enforced and can be referred to as 'lockdown').

Status quo projections

The majority of countries show a decreasing trend, both in cases and deaths for the short-term projections within a 30-day time horizon. Most notably in countries without a pronounced epidemic peak, the projection shows a moderately increasing or flattening trend (e.g. BUL, POL) and for some countries moderate downward trends (HUN, ROM, SWE, GBR).

For some countries, the model has certain limitations: if the observed number of active cases remains relatively small, the model might not be able to capture small local events in the absence of obvious community spread (e.g. local spread within specific locations or communities). The compartmental model does capture transmission in community and disease flows through and outside hospital settings, but not within all possible sub-communities.

Figure 2. Effect of non-pharmaceutical interventions on the number of contacts between individuals in the EU/EEA and the UK in the period up until 13 May 2020

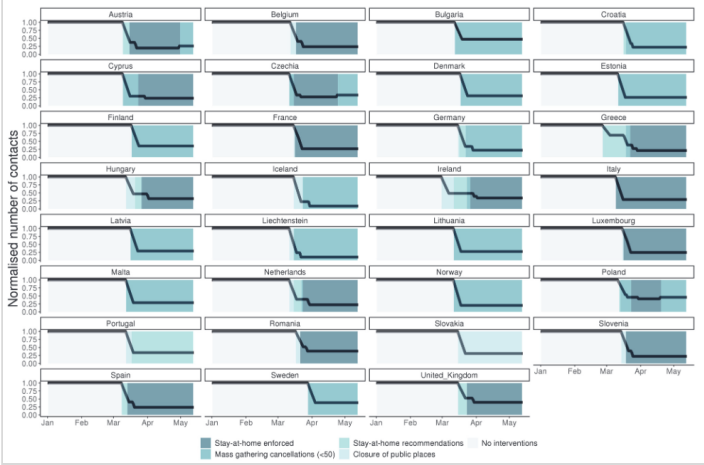
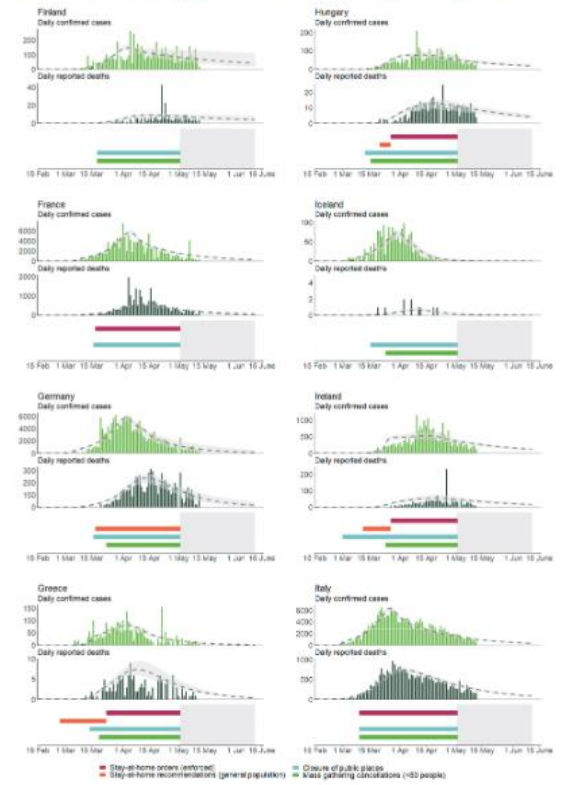


Figure 3 b. Number of observed and predicted newly reported COVID-19 cases and deaths, and non-pharmaceutical interventions in the EU/EEA and the UK in the period up until 12 June 2020.



To date, all EU/UK have implemented at least one of the interventions included in the model. The decrease in the number of contacts after implementing these measures varies between countries and measures. The number of contacts were reduced from baseline 1.00 to 0.28 (median) for the period with the strongest applied intervention measures, varying from 0.09 to 0.47 between the countries. Countries implementing or lifting their interventions at different times show a gradual decrease or increase in the number of normalised contacts.

In the press

This new experimental section tries to summarize trending headlines with regards to COVID-19. The collection does not aim at being comprehensive and we indicate that those 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.

Tue 26 May 2020
The Guardian:
Research reveals gene role in both dementia and severe Covid-19
https://www.theguardian.com/world/2020/may/26/research-reveals-gene-role-in-both-dementia-and-severe-covid-19

May 26, 2020
Aljazera:
'New normal': Indonesian army set to enforce COVID-19 measures
https://www.aljazeera.com/news/2020/05/normal-indonesian-army-set-enforce-covid-19-measures-200526083011926.html

Tue 26 May 2020
Los Angeles Time:
Op-Ed: Why democracies do better at surviving pandemics
https://www.latimes.com/opinion/story/2020-05-26/democracies-autocracies-coronavirus-pandemic-response

May 26, 2020
Financial Times:
Japan delays approval of Fujifilm drug for treating coronavirus
https://www.ft.com/content/207afb7c-74e0-4e79-b6a8-9988c0374047

May 26, 2020
International Monetary Fund:
Keeping Economic Data Flowing During COVID-19
https://blogs.imf.org/2020/05/26/keeping-economic-data-flowing-during-covid-19/

Tue 26 May 2020
South China Morning Post:
Coronavirus: no new cases of Covid-19 in Hong Kong as government gives entertainment venues go-ahead to reopen
https://www.scmp.com/news/hong-kong/politics/article/3086043/coronavirus-more-hong-kong-businesses-reopen-city-eases

May 26, 2020
New York Times:
Global Fundraising for COVID-19 Vaccine, Drugs Exceeds $10 Billion, EU Says
https://www.nytimes.com/reuters/2020/05/26/us/26reuters-health-coronavirus-eu-vaccine.html

Tue 26 May 2020
The Guardian:
Experts sound alarm over lack of Covid-19 test kits in Africa
https://www.theguardian.com/global-development/2020/may/26/africa-concerned-over-lack-of-coronavirus-testing-kits