**Update 26 (30th of June 2020)**

**Information about Infection disease**
**COVID-19 (novel coronavirus)**

**Force Health Protection Branch FHPB (former DHSC) NATO MILMED COE in Munich**
**30th of June 2020**
email: info.dhsc@coemed.org

In December 2019, a novel coronavirus emerged in Wuhan City, China. Since then the virus spread to 65 countries including Europe and America. Since then the virus showed evidence for human-to-human transmission as well as evidence of asymptomatic transmission. At 30th January 2020 WHO declared a Public Health Emergency of International Concern. The disease was formally named COVID-19 on 11th of February. The virus itself has been named SARS-CoV-2. On 11th of March 2020 WHO characterized the disease as a pandemic.

## HIGHLIGHTS/NEWS

- **WHO**: has published interim guidance on rapid hospital readiness and an accompanying checklist tool, which can be used to monitor the development of operational readiness capacity in hospitals and identify gaps that require investment and action. The checklist covers hospital governance, structures, plans and protocols to rapidly determine the current capacities of hospitals to respond to COVID-19.
- **WHO**: has published interim guidance on biomedical equipment for COVID-19 case management and an accompanying inventory tool, which countries can use to collect in-depth facility inventories of biomedical equipment re-allocation, procurement and planning for COVID-19 case management. The tool is intended for use from the early stages of an emergency to early recovery.
- **WHO:** has released a timeline of the response to the COVID-19 pandemic listing some milestones and events since the start of the outbreak 6months ago.
- **FHP Branch** started to organize a weekly VTC on "COVID-19 response" in April. The last VTC before the Summer break was contributed at 24th of June. Details please find on page 19.

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**Please use our online observation form to report your lessons learned observations as soon as possible.**
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| GLOBALLY |
|---|
| **10 385 197** confirmed cases<br>5 258 722 recovered<br>509 551 deaths |
| **EU/EEA and the UK** |
| **2 591 928** confirmed cases<br>**1 485 2629** recovered<br>**196 303** deaths |
| **USA ↘ (new cases/day 36 784)** |
| **2 675 131** confirmed cases<br>**704 934** recovered<br>**129 375** deaths |
| **Brazil ↗ (new cases/day 37 257)** |
| **1 368 195** confirmed cases<br>**757 811** recovered<br>**58 314** deaths |
| **Russia ↘ (new cases/day 6 969)** |
| **646 929** confirmed cases<br>**411 973** recovered<br>**9 306** deaths |
| **India ↗ (new cases/day 17 577)** |
| **566 840** confirmed cases<br>**334 822** recovered<br>**16 893** deaths |
| **UK ↘ (new cases/day 954)** |
| **311 965** confirmed cases<br>**not reported** recovered<br>43 575 deaths |

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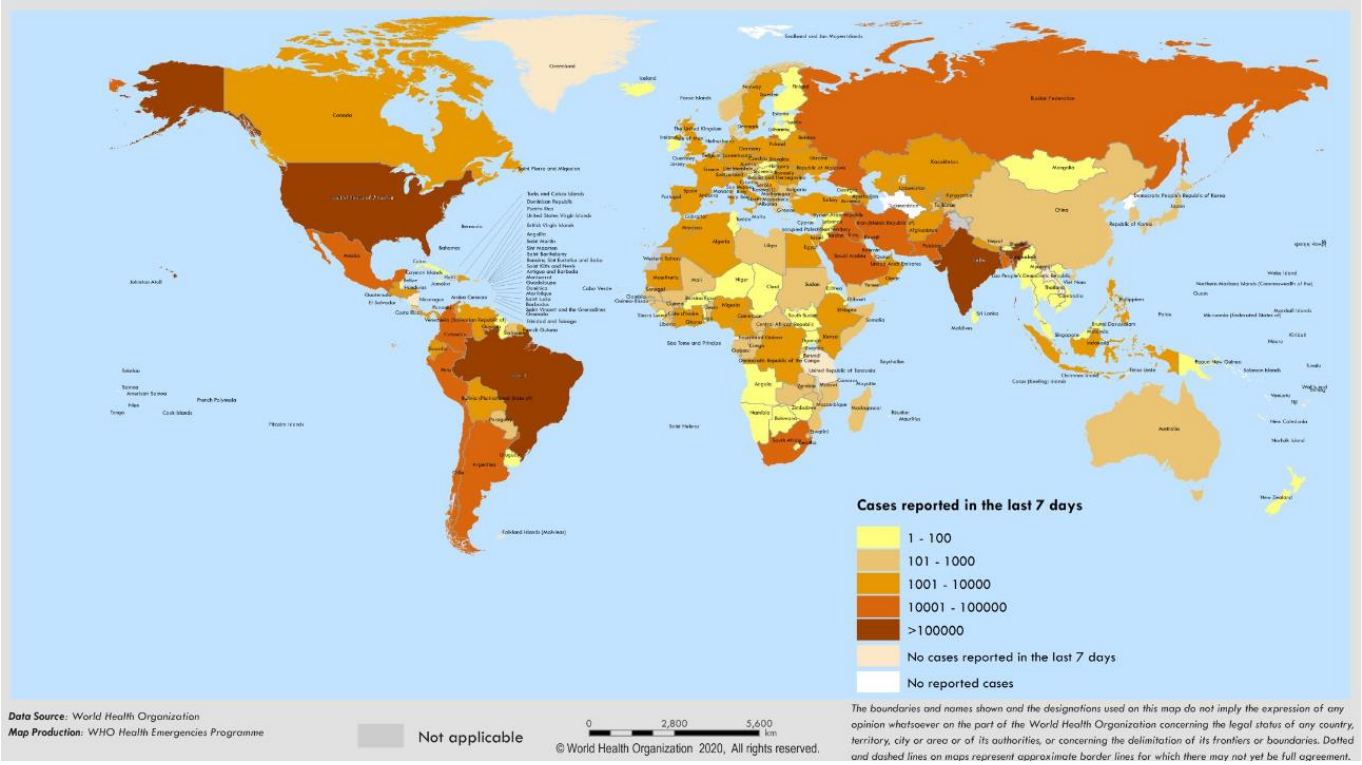
# Map of countries with reported COVID-19 cases (last 7 days)



# Worldwide Situation

Global Situation

**500,000 global deaths are reported as the world's case total reaches 10 million**

The global total of deaths passed 500,000 on Sunday, while the number of confirmed cases surpassed 10 million. The grim markers were hit as countries around the world struggle to keep new infections from reaching runaway levels while simultaneously trying to emerge from painful lockdowns.

In April, roughly a month after the World Health Organization declared the outbreak a pandemic, deaths topped 100,000. In early May, the figure climbed to 250,000. Now it has doubled in less than two months. More than a quarter of all known deaths have been in the United States. The number of confirmed infections - which took about 40 days to double - may be substantially underestimated, public health officials say. Data released last week by the Centers for Disease Control and Prevention indicated that the actual figures in many regions are probably 10 times as high as reported.

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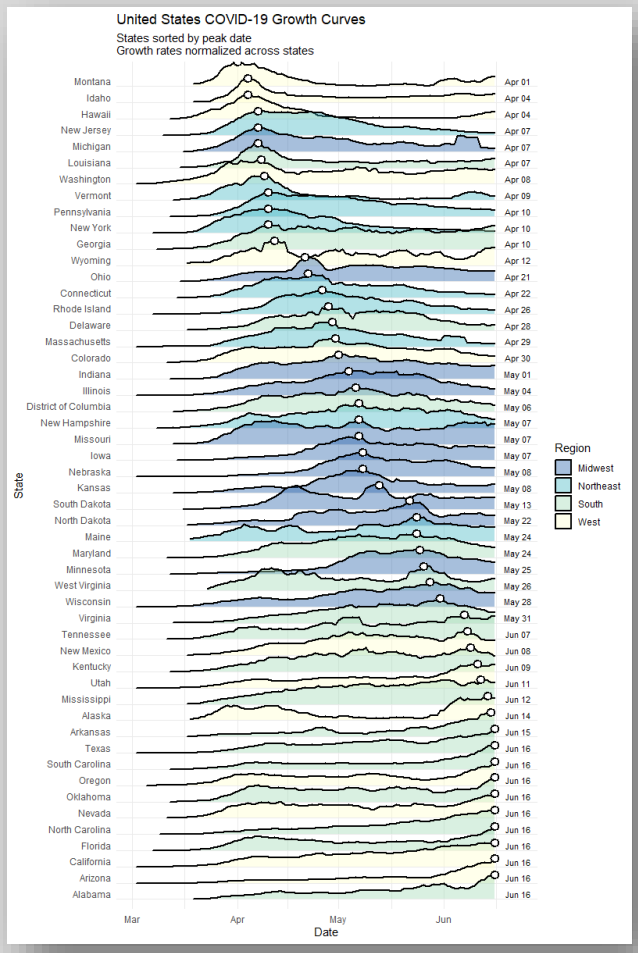
**USA:** Given the rapid spread of the coronavirus pandemic in the southern states (such as Florida, Texas, California and Arizona), around 88,000 new infections were reported in the US over the weekend. 42,600 new infections were reported on Saturday. The previous day, US authorities reported 45,255 confirmed new infections - the largest increase in one day since the pandemic started.




As you can see, when looking purely at active cases, the situation has evolved considerably from a geographical perspective.

Early on, COVID-19 cases were more concentrated in coastal population centers, especially in the Northeast. New York, New Jersey, and Massachusetts, the three hardest hit states per capita so far, saw cases peak in April.

However, a look at the bottom half of the visualization shows that generally, states in the South and West are starting to heat up with cases. Recent daily numbers confirm this, with California, Texas, Florida, Arizona, and North Carolina all gaining more than 1,000 new cases on June 17th.

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**COD:** The Ebola outbreak in the northeast of the Democratic Republic of Congo (COD) was declared over today, almost two years since the first case was confirmed. The COD Ministry of Health made the announcement after no new cases were reported 42 days since the last patient tested negative for the virus. DRC is now better, smarter and faster at responding to Ebola and this is an enduring legacy which is supporting the response to COVID-19 and other outbreaks. The gains made during this response are already being applied to other public health emergencies in the COD. Many of the key approaches in tackling Ebola such as contact tracing, infection prevention and control and isolating

patients and suspected cases are at the core of COVID-19 response in the country, where more than 6000 cases have been confirmed so far.

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**CHN:** The Chinese government has ordered a new lockdown for half a million people near Beijing (Anxin County, approx 150km from Beijing). The number of new infections increased again. The health agency said that the place was “completely logged off and checked”. The residents should now stay at home. Only one family member can do shopping or get medicine. The recent infections in Beijing have raised fears of a widespread resurgence of the virus in China. After two months without new infections in Beijing, the number of new infections has risen to 311 since June 11. However, the authorities assured that the situation would “improve”.

At the same time Chinese Scientists published a warning in the Proceedings of the National Academy of Sciences of the United States of America, stating that a new and more virulent variant of the swine flu (H1N1) virus with pandemic potential might be on the rise.

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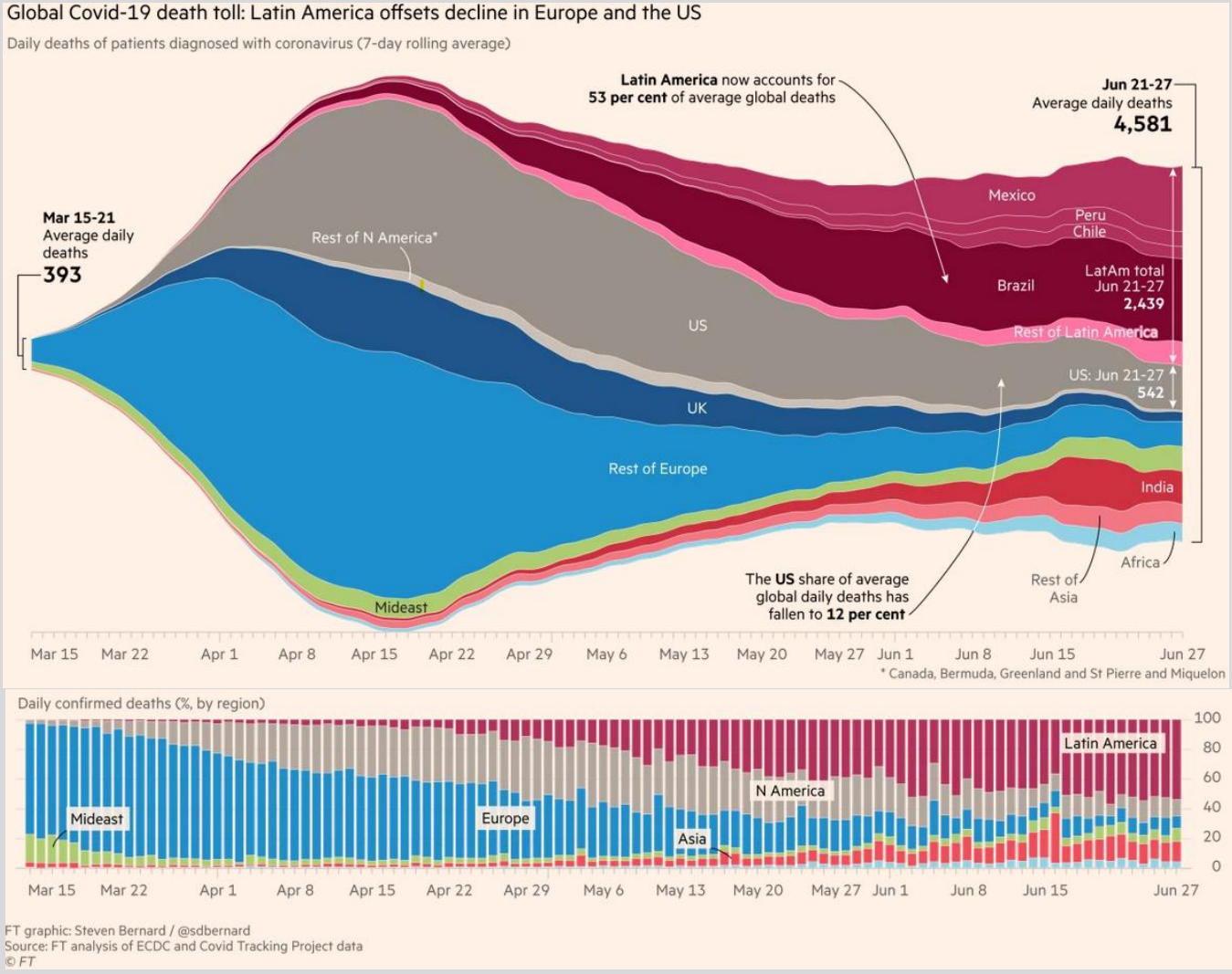


Source: Financial Times

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## Situation in Europe

The WHO Regional Director for Europe, Dr. Hans Henri P. Kluge, shared that the European Region accounts for 31% of COVID-19 cases and 43% of COVID-19 deaths globally. Dr. Kluge highlighted that several countries continue to face increasing disease incidence and that "Preparing for the autumn is a priority now at the WHO Regional Office for Europe".

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**ESP:** For the first time since the beginning of the pandemic there has been no new fatality within one day in the Spanish Corona hotspot Madrid.

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**PRT:** Rising infection numbers and a regional lockdown in the Lisbon area are the latest developments in Portugal. During spring, Portugal was still considered as a positive example for a country fighting the Corona crisis. But now it is the EU country with the second most new infections per day (only surpassed by Sweden).

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**GBR:** In the United Kingdom there is currently an on-going discussion on GBR's performance during the COVID-19 outbreak. One of the most discussed topics is the reason for the extraordinary high number of deaths (GBR is currently facing 59,537 excess deaths since the week ending 20th March and has the second highest number of fatalities per million inhabitants compared to countries of a comparable size, only surpassed by Spain). The focus is on two aspects of GBR's COVID-19 response: The comparably late implementation of a lockdown and mainly focusing on state-owned laboratories of biosafety class 3 for testing in the early stage of the outbreak. However this discussion will develop, researchers are confident that the British way of fighting COVID-19 will be helpful in identifying valuable lessons learned for future pandemics and the potential second wave of COVID-19.

Source:

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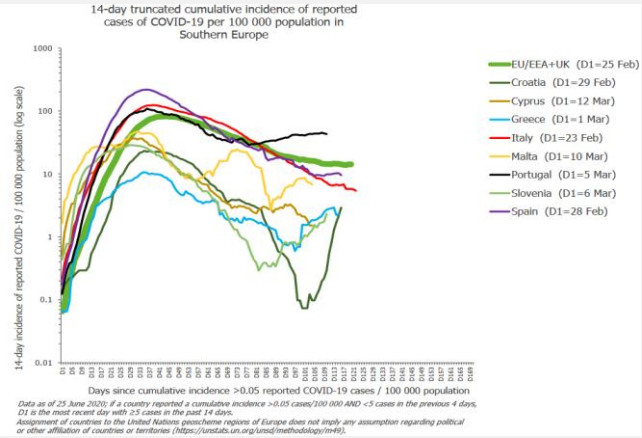
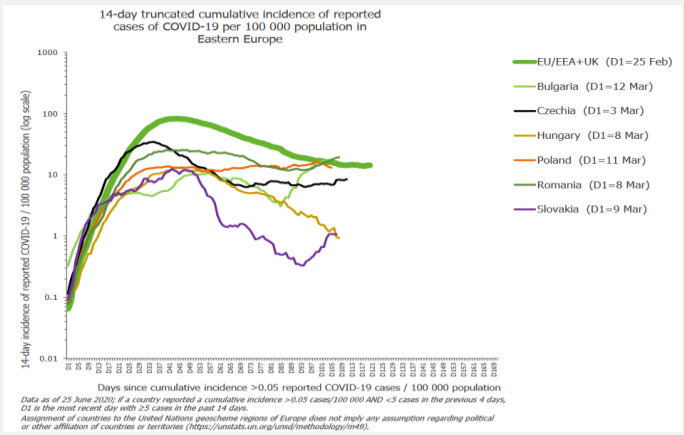
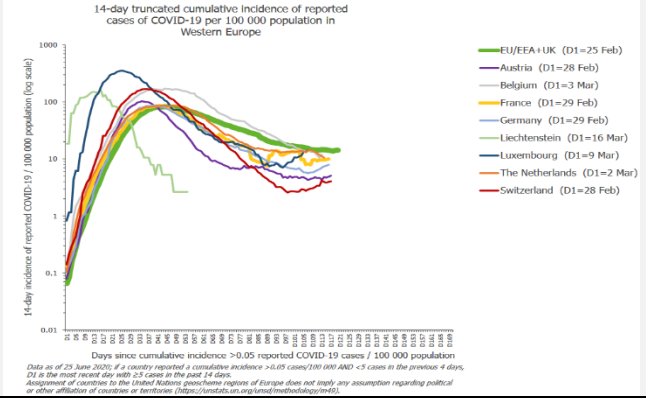
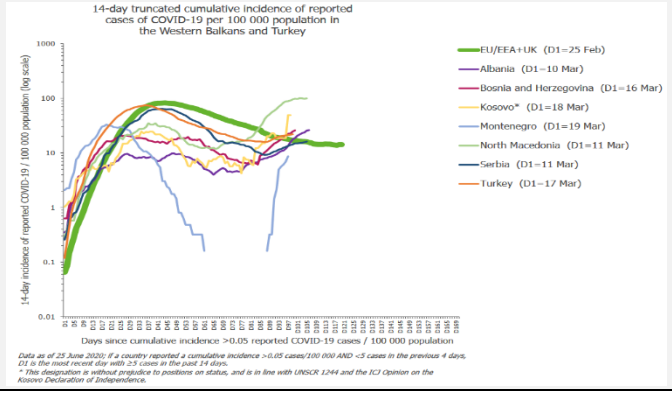
## EU trends

14-day notification rates and trends are based on data collected from various sources and are affected by the testing strategy, laboratory capacity, effectiveness of surveillance systems and publicly available reports. As all of these factors can differ greatly between countries, ECDC does not recommend using notification rates to directly compare countries. Particular caution is needed when interpreting reported rates from areas with small populations where small changes in numbers of reported cases can have a big impact on the notification rate.

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## ECDC COVID-19 surveillance report Week 25, 2020

### Summary of key messages

**New this week**

- A new weekly COVID-19 country overview report is now available online that provides a concise overview for the epidemiological situation for the COVID-19 pandemic by country.
- A table summarising the definition of deaths (by case classification, setting and time limit) included in each country's COVID-19 death totals has been added to the report in Section 4.7.

**Overall reported cases**

- Based on data available to ECDC on 26 June 2020, 29 out of 31 countries (EU/EEA countries and the UK) have observed COVID-19 notification rates lower than at peaks that were observed between eight and 86 days ago (the average rate for the EU/EEA and the UK was 83% lower than at the peak on 9 April 2020).
- COVID-19 notification rates are the highest since the start of the pandemic in Bulgaria and Sweden, where rates have increased by 21% (increase of 3.3 cases per 100 000) and 10% (14.1 cases per 100 000), respectively, compared to one week ago. A 29% increase compared to last week has also been observed in Romania (4.8 cases per 100 000). Some of these increases may reflect increases in testing.

**Primary care**

- Among three countries that reported data up to week 25 from primary care sentinel surveillance for COVID-19 using the systems established for influenza, one country (Sweden) has observed a recent increasing trend in SARS-CoV-2 positivity among individuals with respiratory symptoms; the remaining two (Germany and Netherlands) have observed stable trends with no detections.
- All countries that reported ILI and/or ARI syndromic surveillance data up to week 25 using the systems established for influenza have observed stable recent trends in consultation rates that remain lower than those reported during the same period in the last two years.

**Hospitalisation**

- Both countries that have reported recent data from in-hospital SARI surveillance (Sweden and Slovenia) have observed decreasing trends in the numbers positive for SARS-CoV-2 and/or SARS-CoV-2 positivity among individuals with SARI.
- Overall, 31% of reported COVID-19 cases in the EU/EEA and the UK to date have been hospitalised; among hospitalised patients, 12% required ICU and/or respiratory support, although there is considerable variation among countries.

**Mortality**

- New deaths due to COVID-19 were reported in the last week in 22 countries. The remaining nine countries last reported a death due to COVID-19 between seven and 82 days days ago.
- We estimate that 24% of hospitalised COVID-19 cases reported to date in the EU/EEA and the UK have died.
- Pooled estimates of all-cause mortality reported by EuroMOMO have now returned to normal levels following a period of substantially increased excess mortality that coincided with the COVID-19 pandemic peaks. A few countries are still seeing low levels of excess mortality.

## COVID-19 situation update for the WHO European Region (15 – 21 June 2020 Epi week 25)

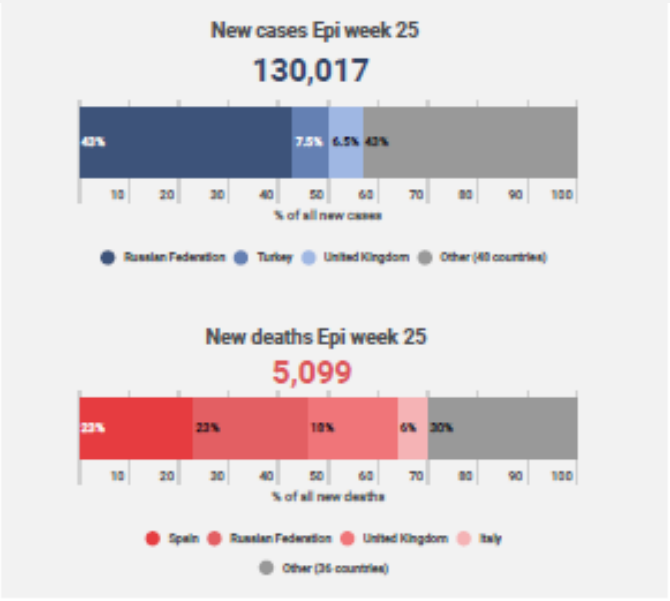
### Key points

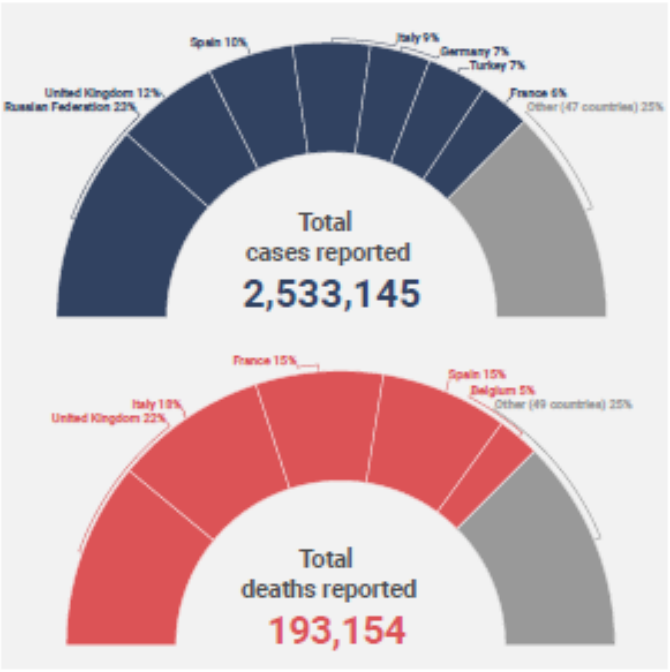
**Week 25/2020 (15 - 21 Jun 2020)**

- The overall number of cases reported in the Region has declined by 50% since week 14/2020; the overall number of deaths has declined by 80% in the same time period
- 57% of the 130,017 cases in week 25/2020 were reported from three countries: the Russian Federation (23%; 55,716), Turkey (7.5%; 9816) and the United Kingdom (6.7%; 8735). The remaining cases (43%; 55,750) were reported by 48 countries; each accounted for <5% of the total cases reported in week 25/2020
- Seven countries had a crude incidence of ≥35 per 100,000 in week 25/2020: Armenia, Republic of Moldova, San Marino, North Macedonia, Sweden, Belarus and the Russian Federation. The crude incidence continues to vary across the region with a range from 0.3 per 100,000 population in Hungary to 121.7 per 100,000 population in Armenia
- In 27 countries, the 14-day cumulative incidence increased by ≥10% in week 25/2020, however for some countries data was retro-adjusted by national authorities. In order of increase: Croatia, Iceland, Greece, Bulgaria, Malta, Israel, Bosnia and Herzegovina, Slovakia, Albania, North Macedonia, Slovenia, Uzbekistan, Kyrgyzstan, Republic of Moldova, Serbia, Ukraine, Luxembourg, Azerbaijan, Switzerland, Romania, Czech Republic, Turkey, Georgia, Portugal, Sweden, Poland and Armenia. (see EURO COVID-19 Dashboard for recent trends)
- 70% of the deaths reported in week 25/2020 were from Spain (23%; 1185), the Russian Federation (23%; 1163), the United Kingdom (18%; 927) and Italy (6%; 309). The remaining deaths (30%; 1514) were reported from 36 countries; each accounted for <5% of the total deaths reported in week 25/2020
- The proportion of reported cases that died increased from 3.3% in week 24/2020 to 3.9% in week 25/2020, a change that is likely due to a range of factors
- The number of countries and territories reporting community-transmission (29) has remained unchanged since week 24/2020 (see EURO COVID-19 Dashboard)
- Since the emergence of COVID-19 virus in Europe at the end of February 2020, a wide range of public health and social measures (PHSM) have been implemented. See EURO COVID-19 Dashboard (NPI Explorer) for a snapshot of the temporal relationship between case and death numbers and the introduction and easing of these measures in some countries in the Region. Several countries have recently started gradual easing of these measures. Continued vigilance is recommended as countries in the Region continue to ease these measures.

**Summary overview**

- As of 11 June 2020, seven countries in the European region had an effective reproductive number significantly over 1: Kazakhstan*, Kyrgyzstan, Republic of Moldova*, Romania*, Sweden*, Turkey and Ukraine. (* Increase since last update on 7 June 2020) (See EpiForecasts and the CMMID COVID working group COVID-19 Global Summary for latest estimates)
- Ten countries in the Region each reported a cumulative incidence of ≥500 cases per 100,000 population: San Marino, Andorra, Armenia, Luxembourg, Belarus, Sweden, Iceland, Spain, Belgium and Ireland
- As of week 25/2020, 75% of cumulative cases (1,908,411) were reported from the Russian Federation (23%; 584,680), United Kingdom (12%; 303,110), Spain (10%; 245,938), Italy (9%; 238,275), Germany (7%; 189,822), Turkey (7%; 186,493) and France (6%; 160,093). The remaining cases (25%; 624,734) were reported by 47 countries; each accounted for <5% of the total cases reported until week 25/2020
- 21% of all reported infections with information available were in a health care worker
- 76% of all ICU admissions were in persons aged 50-79 years of age, with 70% of all ICU admissions in men
- As of week 25/2020, 75% of cumulative deaths (144,850) were reported from the United Kingdom (22%; 42,589), Italy (18%; 34,610), France (15%; 29,633), Spain (15%; 28,322) and Belgium (5%; 9696). The remaining deaths (25%; 48,304) were reported by 49 countries; each accounted for <5% of the total cases reported until week 25/2020
- 90% of all deaths were in persons aged ≥65 years and 57% of all deaths were in men
- 95% of all deaths with information available had at least one underlying condition, with cardiovascular disease the leading comorbidity (66%)
- Following a period of a very substantial excess mortality observed in some countries coinciding with the COVID-19 pandemic, pooled estimates of all-cause mortality for the countries in the EuroMOMO network have now returned to normal levels. A few countries are still seeing some excess mortality. Excess mortality was observed primarily in the age group of ≥65 years, followed by the age group of 45-64 years and 15-44 years.
- In week 25/2020, one country reported 16 tests and 0 COVID-19 detections in persons with influenza-like illness in primary care sentinel surveillance. The updated positivity rate in week 24/2020 was 2.9% (5 countries) compared to 9.1% (7 countries) in week 23/2020. The highest positivity was 19%, seen in week 15/2020




**21%** of all people infected were health care workers

**95%** of all deaths had at least 1 underlying condition

**57%** of all deaths were in men

**76%** of all ICU admissions were people aged 50-79 years

**90%** of all deaths were in persons aged 65+

**66%** of all deaths had cardiovascular disease

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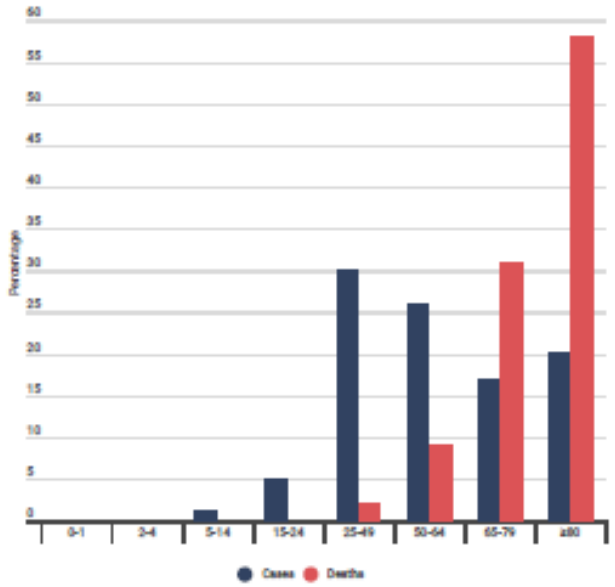
Figure 3. Percentage of COVID-19 cases (N=800,507) and deaths (N=118,013) by age group



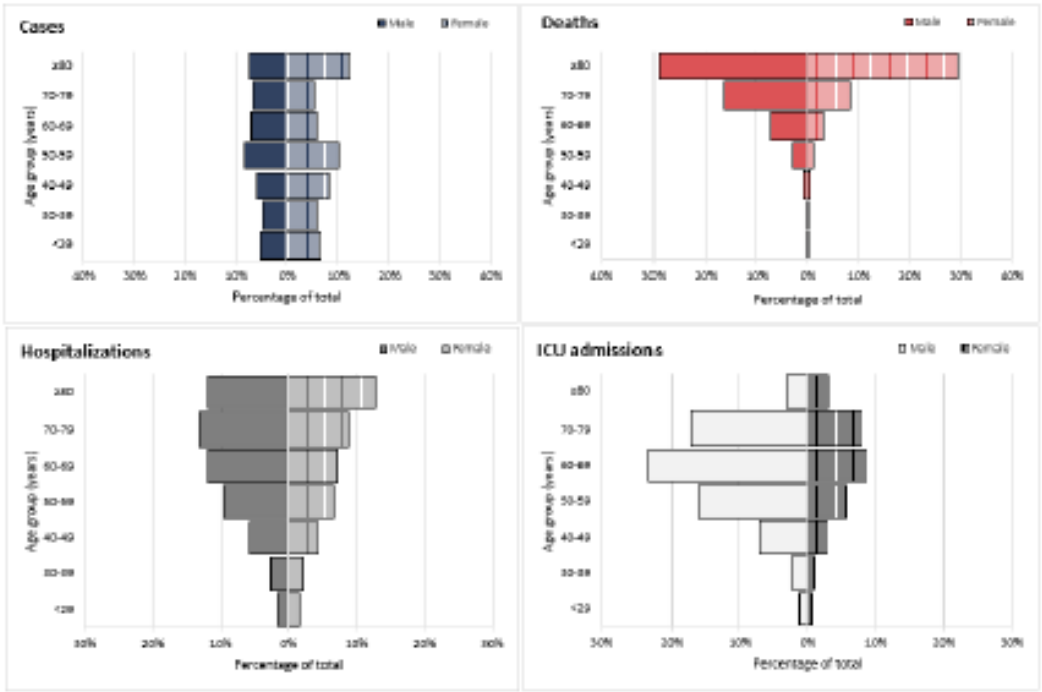

Source: Cases: Case-report forms and aggregate data from TESSy (Spain); Deaths: Case report forms, mortality survey, aggregated data from TESSy (Spain)

Table 1. Characteristics of COVID-19 cases and deaths

| | Characteristics | n | % | Total records with data available |
|---|---|---|---|---|
| Cases | Age in years, median (range)* | 55 (1-105) | | 550,750 |
| | Sex, male* | 254,909 | 46 | 548,719 |
| | Recovered* | 205,685 | 91 | 226,646 |
| | Health care workers# | 92,274 | 21 | 443,487 |
| | Hospitalization* | 141,727 | 27 | 526,031 |
| | Intensive care unit admissions* | 10,689 | 2 | 448,017 |
| Deaths | Age in years, median (range)^ | 82 (0-108) | | 120,245 |
| | Sex, male^ | 68,412 | 57 | 120,145 |
| | At least one underlying condition^ | 58,217 | 95 | 61,399 |
| | • cardiovascular disease | 18,607 | 68 | 28,391 |
| | • diabetes | 9,058 | 33 | 27,060 |
| | • lung disease | 6,210 | 23 | 27,385 |
| | • neurological disease / dementia | 2,436 | 25 | 9,704 |
| | • renal disease | 1,730 | 19 | 8,955 |
| | • malignancy | 1,005 | 25 | 3,962 |
| | • obesity | 720 | 10 | 7,216 |
| | • liver disease | 453 | 5 | 8,957 |
| | • immune disease | 275 | 3 | 8,284 |
| | • other | 12,753 | 50 | 25,261 |

Source:
*Case report forms (n=550,750);
#Case report forms and aggregated data from Italy (16/18 June) and Spain (28 May 2020), TESSy) (n=650,797);
Health care workers refer to occupation and not to the place of exposure
^Case report forms, mortality survey, aggregated data from Italy (18 June 2020) and Spain (29 May 2020) (n=120,271)

Figure 4. Percentage of COVID-19 cases (N=794,044), hospitalizations (N=140,690), ICU admissions (N=12,729) and deaths (N=120,107) by age group and sex




Source: Cases, hospitalizations and ICU data: case report forms and aggregate data from Spain (29 May 2020); Deaths: Case report forms, mortality survey, aggregated data from Italy (18 June 2020) and Spain (29 May 2020)

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Figure 1: Number of COVID-19 cases (N=2,533,145) and deaths (N=193,154) by reporting week

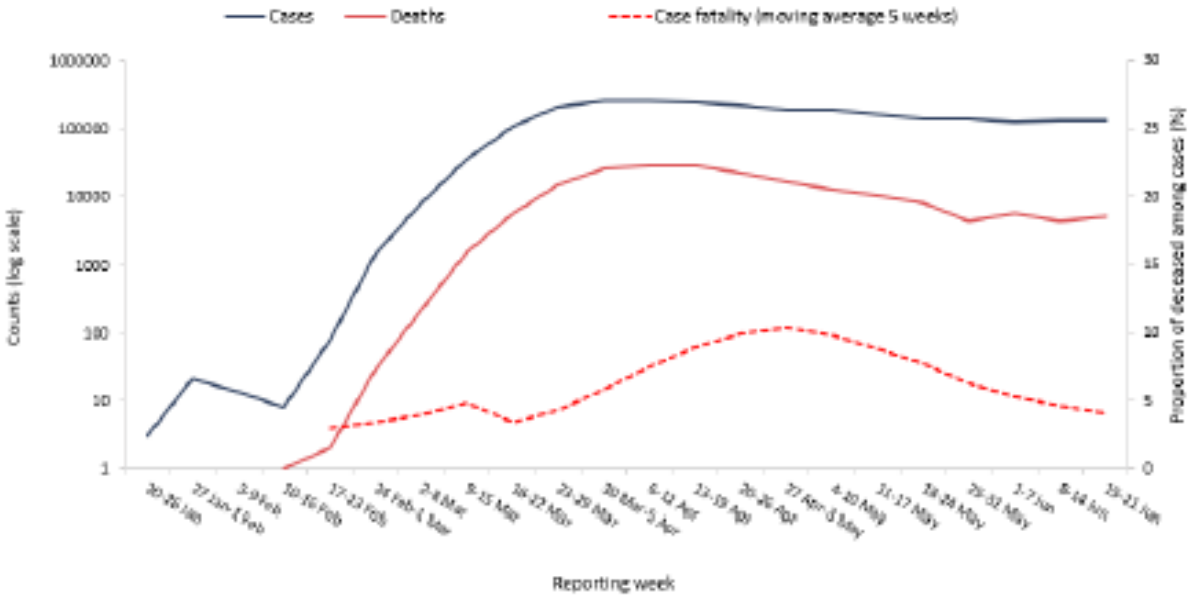
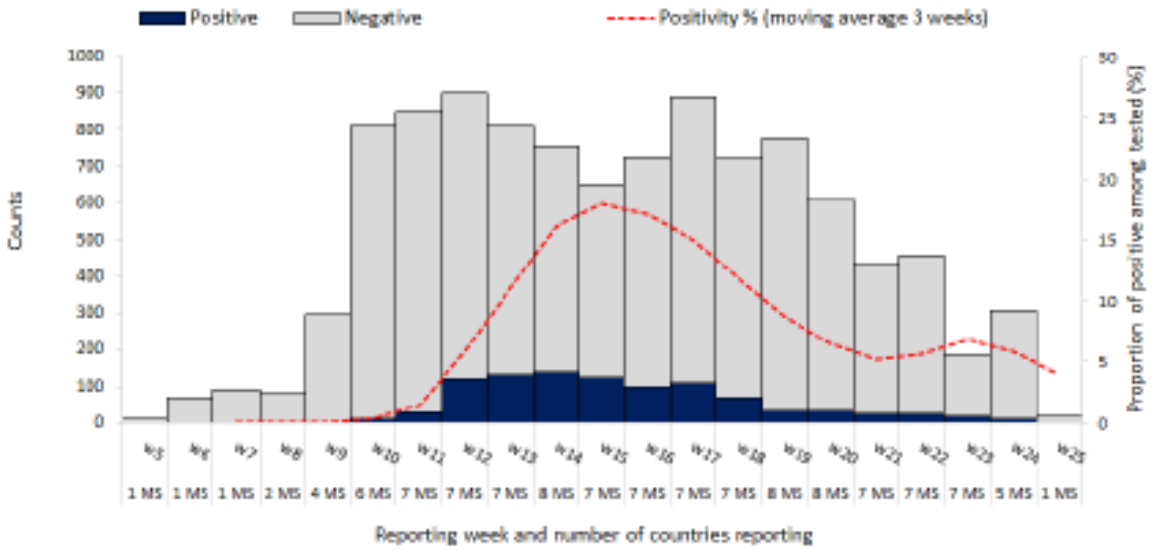



Figure 5. Percentage positive for COVID-19 in the ILI/ARI sentinel surveillance by reporting week

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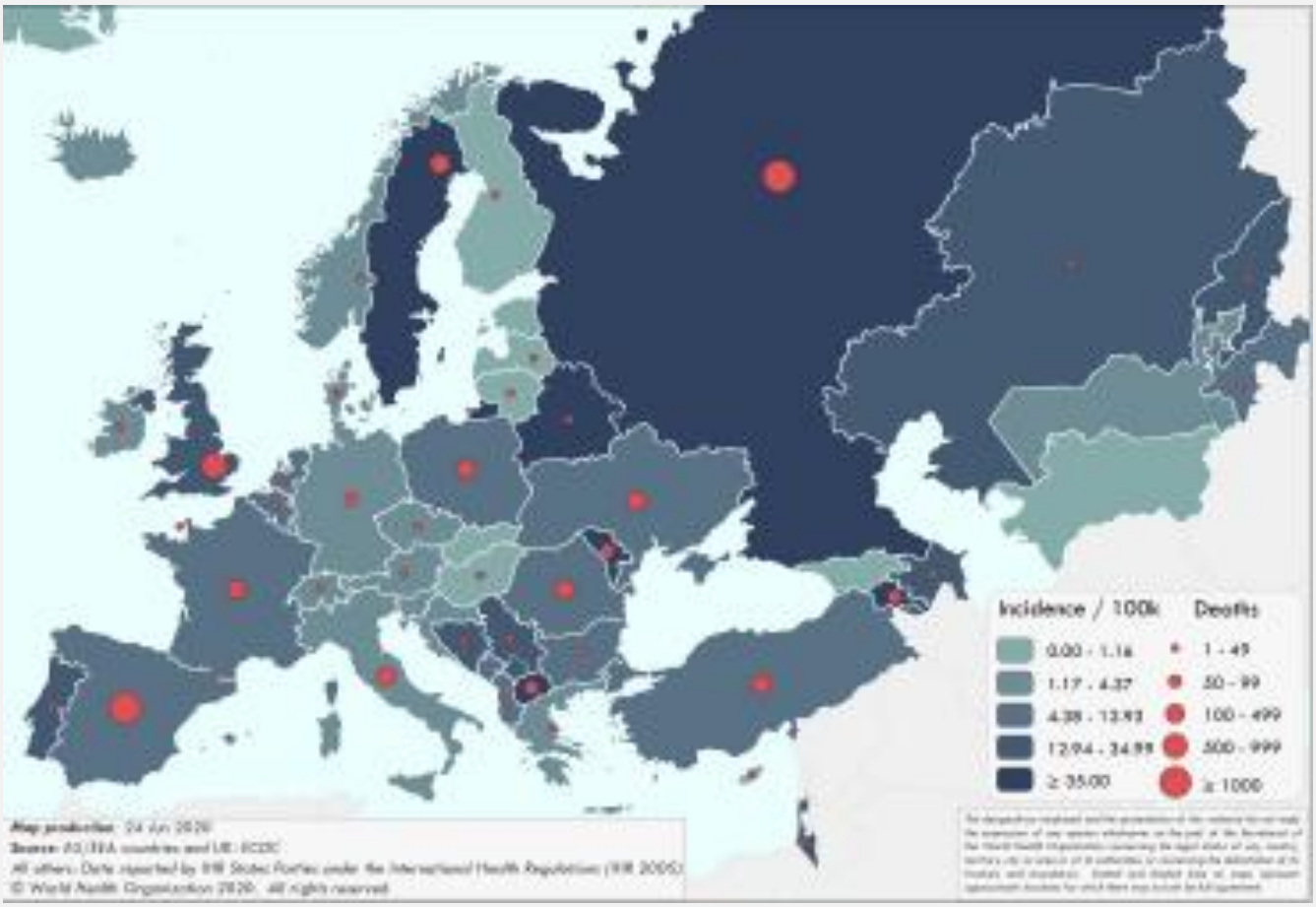


**COVID-19 incidence per 100,000 population and number of deaths by country for week 25**

## Subject in Focus

BEHIND THE CURVE

HOW THE WORLD MISSED COVID-19`S SILENT SPREAD

"All the News That's Fit to Print"

The New York Times

Late Edition

VOL. CLXIX ... No. 58,738 NEW YORK, SUNDAY, JUNE 28, 2020 $6.00

Voters' Moods: Tired, Anxious And Optimistic

Betting on the Election as a Turning Point

Cases Soaring As Leadership On Virus Fails

How the World Missed Covid's Symptom-Free Carriers

Doctors Said the Seemingly Healthy May Be Contagious, but No One Listened for Months

Symptomless transmission makes the coronavirus far harder to fight. But health officials dismissed the risk for months, pushing misleading and contradictory claims in the face of mounting evidence.

By Matt Apuzzo, Selam Gebrekidan and David D. Kirkpatrick June 27, 2020

MUNICH — Dr. Camilla Rothe was about to leave for dinner when the government laboratory called with the surprising test result. Positive. It was Jan. 27. She had just discovered Germany's first case of the new coronavirus.

But the diagnosis made no sense. Her patient, a businessman from a nearby auto parts company, could have been infected by only one person: a colleague visiting from China. And that colleague should not have been contagious.

The visitor had seemed perfectly healthy during her stay in Germany. No coughing or sneezing, no signs of fatigue or fever during two days of long meetings. She told colleagues that she had started feeling ill after the flight back to China. Days later, she tested positive for the coronavirus.

Scientists at the time believed that only people with symptoms could spread the coronavirus. They assumed it acted like its genetic cousin, SARS.

"People who know much more about coronaviruses than I do were absolutely sure," recalled Dr. Rothe, an infectious disease specialist at Munich University Hospital.

But if the experts were wrong, if the virus could spread from seemingly healthy carriers or people who had not yet developed symptoms, the ramifications were potentially catastrophic. Public-awareness campaigns, airport screening and stay-home-if-you're sick policies might not stop it. More aggressive measures might be required — ordering healthy people to wear masks, for instance, or restricting international travel.

Dr. Rothe and her colleagues were among the first to warn the world. But even as evidence accumulated from other scientists, leading health officials expressed unwavering confidence that symptomless spreading was not important.

In the days and weeks to come, politicians, public health officials and rival academics disparaged or ignored the Munich team. Some actively worked to undermine the warnings at a crucial moment, as the disease was spreading unnoticed in French churches, Italian soccer stadiums and Austrian ski bars. A cruise ship, the Diamond Princess, would become a deadly harbinger of symptomless spreading.

Interviews with doctors and public health officials in more than a dozen countries show that for two crucial months — and in the face of mounting genetic evidence — Western health officials and political leaders played down or denied the risk of symptomless spreading. Leading health agencies including the World Health Organization and the European Center for Disease Prevention and Control provided contradictory and sometimes misleading advice. A crucial public health discussion devolved into a semantic debate over what to call infected people without clear symptoms.

The two-month delay was a product of faulty scientific assumptions, academic rivalries and, perhaps most important, a reluctance to accept that containing the virus would take drastic measures. The resistance to emerging evidence was one part of the world's sluggish response to the virus.

It is impossible to calculate the human toll of that delay, but models suggest that earlier, aggressive action might have saved tens of thousands of lives. Countries like Singapore and Australia, which used testing and contact-tracing and moved swiftly to quarantine seemingly healthy travelers, fared far better than those that did not.

It is now widely accepted that seemingly healthy people can spread the virus, though uncertainty remains over how much they have contributed to the pandemic. Though estimates vary, models using data from Hong Kong, Singapore and China suggest that 30 to 60 percent of spreading occurs when people have no symptoms.

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| | “This was, I think, a very simple truth,” Dr. Rothe said. “I was surprised that it would cause such a storm. I can’t explain it.”<br>Even now, with more than 9 million cases around the world, and a death toll approaching 500,000, Covid-19 remains an unsolved riddle. It is too soon to know whether the worst has passed, or if a second global wave of infections is about to crash down. But it is clear that an array of countries, from secretive regimes to overconfident democracies, have fumbled their response, misjudged the virus and ignored their own emergency plans.<br>It is also painfully clear that time was a critical commodity in curbing the virus — and that too much of it was wasted.<br><br>**‘She Was Not Ill’**<br>On the night of Germany’s first positive test, the virus had seemed far away. Fewer than 100 fatalities had been reported worldwide. Italy, which would become Europe’s ground zero, would not record its first cases for another three days.<br>A few reports out of China had already suggested the possibility of symptomless spreading. But nobody had proved it could happen.<br>That night, Dr. Rothe tapped out an email to a few dozen doctors and public health officials.<br>“Infections can actually be transmitted during the incubation period,” she wrote.<br>Three more employees from the auto parts company, Webasto, tested positive the following day. Their symptoms were so mild that, normally, it’s likely that none would have been flagged for testing, or have thought to stay at home.<br>Dr. Rothe decided she had to sound the alarm. Her boss, Dr. Michael Hoelscher, dashed off an email to The New England Journal of Medicine. “We believe that this observation is of utmost importance,” he wrote.<br>Editors responded immediately. How soon could they see the paper?<br>The next morning, Jan. 30, public health officials interviewed the Chinese businesswoman by phone. Hospitalized in Shanghai, she explained that she’d started feeling sick on the flight home. Looking back, maybe she’d had some mild aches or fatigue, but she had chalked them up to a long day of travel.<br>“From her perspective, she was not ill,” said Nadine Schian, a Webasto spokeswoman who was on the call. “She said, ‘OK, I felt tired. But I’ve been in Germany a lot of times before and I always have jet lag.’”<br>When the health officials described the call, Dr. Rothe and Dr. Hoelscher quickly finished and submitted their article. Dr. Rothe did not talk to the patient herself but said she relied on the health authority summary.<br>Within hours, it was online. It was a modest clinical observation at a key time. Just days earlier, the World Health Organization had said it needed more information about this very topic.<br>What the authors did not know, however, was that in a suburb 20 minutes away, another group of doctors had also been rushing to publish a report. Neither knew what the other was working on, a seemingly small academic rift that would have global implications.<br><br>**Academic Hairsplitting**<br>The second group was made up of officials with the Bavarian health authority and Germany’s national health agency, known as the Robert Koch Institute. Inside a suburban office, doctors unfurled mural paper and traced infection routes using colored pens.<br>Their team, led by the Bavarian epidemiologist Dr. Merle Böhmer, submitted an article to The Lancet, another premier medical journal. But the Munich hospital group had scooped them by three hours.<br>Dr. Böhmer said her team’s article, which went unpublished as a result, had reached similar conclusions but worded them slightly differently.<br>Dr. Rothe had written that patients appeared to be contagious before the onset of any symptoms.<br>The government team had written that patients appeared to be contagious before the onset of full symptoms — at a time when symptoms were so mild that people might not even recognize them.<br>The Chinese woman, for example, had woken up in the middle of the night feeling jet-lagged.<br>Wanting to be sharp for her meetings, she took a Chinese medicine called 999 — containing the equivalent of a Tylenol tablet — and went back to bed.<br>Perhaps that had masked a mild fever? Perhaps her jet lag was actually fatigue? She had reached for a shawl during a meeting. Maybe that was a sign of chills? |

After two lengthy phone calls with the woman, doctors at the Robert Koch Institute were convinced that she had simply failed to recognize her symptoms. They wrote to the editor of The New England Journal of Medicine, casting doubt on Dr. Rothe's findings.
Editors there decided that the dispute amounted to hairsplitting. If it took a lengthy interview to identify symptoms, how could anyone be expected to do it in the real world?
"The question was whether she had something consistent with Covid-19 or that anyone would have recognized at the time was Covid-19," said Dr. Eric Rubin, the journal's editor.
"The answer seemed to be no."
The journal did not publish the letter. But that would not be the end of it. That weekend, Andreas Zapf, the head of the Bavarian health authority, called Dr. Hoelscher of the Munich clinic. "Look, the people in Berlin are very angry about your publication," Dr. Zapf said, according to Dr. Hoelscher.
He suggested changing the wording of Dr. Rothe's report and replacing her name with those of members of the government task force, Dr. Hoelscher said. He refused.
The health agency would not discuss the phone call.
Until then, Dr. Hoelscher said, their report had seemed straightforward. Now it was clear: "Politically, this was a major, major issue."

**'A Complete Tsunami'**
On Monday, Feb. 3, the journal Science published an article calling Dr. Rothe's report "flawed." Science reported that the Robert Koch Institute had written to the New England Journal to dispute her findings and correct an error.
The Robert Koch Institute declined repeated interview requests over several weeks and did not answer written questions.
Dr. Rothe's report quickly became a symbol of rushed research. Scientists said she should have talked to the Chinese patient herself before publishing, and that the omission had undermined her team's work. On Twitter, she and her colleagues were disparaged by scientists and armchair experts alike.
"It broke over us like a complete tsunami," Dr. Hoelscher said.
The controversy also overshadowed another crucial development out of Munich.
The next morning, Dr. Clemens-Martin Wendtner made a startling announcement. Dr. Wendtner was overseeing treatment of Munich's Covid-19 patients — there were eight now — and had taken swabs from each.
He discovered the virus in the nose and throat at much higher levels, and far earlier, than had been observed in SARS patients. That meant it probably could spread before people knew they were sick.
But the Science story drowned that news out. If Dr. Rothe's paper had implied that governments might need to do more against Covid-19, the pushback from the Robert Koch Institute was an implicit defense of the conventional thinking.
Sweden's public health agency declared that Dr. Rothe's report had contained major errors. The agency's website said, unequivocally, that "there is no evidence that people are infectious during the incubation period" — an assertion that would remain online in some form for months.
French health officials, too, left no room for debate: "A person is contagious only when symptoms appear," a government flyer read. "No symptoms = no risk of being contagious."
As Dr. Rothe and Dr. Hoelscher reeled from the criticism, Japanese doctors were preparing to board the Diamond Princess cruise ship. A former passenger had tested positive for coronavirus.
Yet on the ship, parties continued. The infected passenger had been off the ship for days, after all. And he hadn't reported symptoms while onboard.

**A Semantic Debate**
Immediately after Dr. Rothe's report, the World Health Organization had noted that patients might transmit the virus before showing symptoms. But the organization also underscored a point that it continues to make: Patients with symptoms are the main drivers of the epidemic.
Once the Science article was published, however, the organization waded directly into the debate on Dr. Rothe's work. On Tuesday, Feb. 4, Dr. Sylvie Briand, the agency's chief of infectious disease preparedness, tweeted a link to the Science article, calling Dr. Rothe's report flawed.
With that tweet, the W.H.O. focused on a semantic distinction that would cloud discussion for months: Was the patient asymptomatic, meaning she would never show symptoms? Or pre-

symptomatic, meaning she became sick later? Or, even more confusing, oligo-symptomatic, meaning that she had symptoms so mild that she didn't recognize them?
To some doctors, the focus on these arcane distinctions felt like whistling in the graveyard. A person who feels healthy has no way to know that she is carrying a virus or is about to become sick. Airport temperature checks will not catch these people. Neither will asking them about their symptoms or telling them to stay home when they feel ill.
The WHO later said that the tweet had not been intended as a criticism.
One group paid little attention to this brewing debate: the Munich-area doctors working to contain the cluster at the auto parts company. They spoke daily with potentially sick people, monitoring their symptoms and tracking their contacts.
"For us, it was pretty soon clear that this disease can be transmitted before symptoms," said Dr. Monika Wirth, who tracked contacts in the nearby county of Fürstenfeldbruck. Dr. Rothe, though, was shaken. She could not understand why much of the scientific establishment seemed eager to play down the risk.
"All you need is a pair of eyes," she said. "You don't need rocket-science virology."
But she remained confident. "We will be proven right," she told Dr. Hoelscher. That night, Dr. Rothe received an email from Dr. Michael Libman, an infectious-disease specialist in Montreal. He thought that criticism of the paper amounted to semantics. Her paper had convinced him of something: "The disease will most likely eventually spread around the world."

**Political Paralysis**
On Feb. 4, Britain's emergency scientific committee met and, while its experts did not rule out the possibility of symptomless transmission, nobody put much stock in Dr. Rothe's paper.
"It was very much a hearsay study," said Wendy Barclay, a virologist and member of the committee, known as the Scientific Advisory Group for Emergencies. "In the absence of real robust epidemiology and tracing, it isn't obvious until you see the data."
The data would soon arrive, and from an unexpected source. Dr. Böhmer, from the Bavarian health team, received a startling phone call in the second week of February.
Virologists had discovered a subtle genetic mutation in the infections of two patients from the Munich cluster. They had crossed paths for the briefest of moments, one passing a saltshaker to the other in the company cafeteria, when neither had symptoms. Their shared mutation made it clear that one had infected the other.
Dr. Böhmer had been skeptical of symptomless spreading. But now, there was no doubt: "It can only be explained with pre-symptomatic transmission," Dr. Böhmer said. Now it was Dr. Böhmer who sounded the alarm. She said she promptly shared the finding, and its significance, with the W.H.O. and the European Center for Disease Prevention and Control.
Neither organization included the discovery in its regular reports.
A week after receiving Dr. Böhmer's information, European health officials were still declaring: "We are still unsure whether mild or asymptomatic cases can transmit the virus." There was no mention of the genetic evidence.
WHO officials say the genetic discovery informed their thinking, but they made no announcement of it. European health officials say the German information was one early piece of an emerging picture that they were still piecing together.
The doctors in Munich were increasingly frustrated and confused by the World Health Organization. First, the group wrongly credited the Chinese government with alerting the German authorities to the first infection. Government officials and doctors say the auto parts company itself sounded the alarm. Then, the World Health Organization's emergency director, Dr. Michael Ryan, said on Feb. 27 that the significance of symptomless spreading was becoming a myth. And Dr. Maria Van Kerkhove, the organization's technical lead on coronavirus response, suggested it was nothing to worry about.
"It's rare but possible," she said. "It's very rare."
The agency still maintains that people who cough or sneeze are more contagious than people who don't. But there is no scientific consensus on how significant this difference is or how it affects the spread of virus.
And so, with evidence mounting, the Munich team could not understand how the W.H.O. could be so sure that symptomless spreading was insignificant.
"At this point, for us it was clear," said Dr. Wendtner, the senior doctor overseeing treatment of the Covid-19 patients. "This was a misleading statement by the WHO."

**‘If This Is True, We’re in Trouble’**

The Munich cluster was not the only warning. The Chinese health authorities had explicitly cautioned that patients were contagious before showing symptoms. A Japanese bus driver was infected while transporting seemingly healthy tourists from Wuhan.

And by the middle of February, 355 people aboard the Diamond Princess cruise ship had tested positive. About a third of the infected passengers and staff had no symptoms.

But public health officials saw danger in promoting the risk of silent spreaders. If quarantining sick people and tracing their contacts could not reliably contain the disease, governments might abandon those efforts altogether.

In Sweden and Britain, for example, discussion swirled about enduring the epidemic until the population obtained “herd immunity.” Public health officials worried that might lead to overwhelmed hospitals and needless deaths. Plus, preventing silent spreading required aggressive, widespread testing that was then impossible for most countries.

“It’s not like we had some easy alternative,” said Dr. Libman, the Canadian doctor. “The message was basically: ‘If this is true, we’re in trouble.’”

European health officials say they were reluctant to acknowledge silent spreading because the evidence was trickling in and the consequences of a false alarm would have been severe. “These reports are seen everywhere, all over the world,” said Dr. Josep Jansa, a senior European Union health official. “Whatever we put out, there’s no way back.”

Looking back, health officials should have said that, yes, symptomless spreading was happening and they did not understand how prevalent it was, said Dr. Agoritsa Baka, a senior European Union doctor. But doing that, she said, would have amounted to an implicit warning to countries: What you’re doing might not be enough.

**‘Stop Buying Masks!’**

While public health officials hesitated, some doctors acted. At a conference in Seattle in mid-February, Jeffrey Shaman, a Columbia University professor, said his research suggested that Covid-19’s rapid spread could only be explained if there were infectious patients with unremarkable symptoms or no symptoms at all.

In the audience that day was Steven Chu, the Nobel-winning physicist and former U.S. energy secretary. “If left to its own devices, this disease will spread through the whole population,” he remembers Professor Shaman warning.

Afterward, Dr. Chu began insisting that healthy colleagues at his Stanford University laboratory wear masks. Doctors in Cambridge, England, concluded that asymptomatic transmission was a big source of infection and advised local health workers and patients to wear masks, well before the British government acknowledged the risk of silent spreaders. The American authorities, faced with a shortage, actively discouraged the public from buying masks. “Seriously people — STOP BUYING MASKS!” Surgeon General Jerome M. Adams tweeted on Feb. 29.

By early March, while the World Health Organization continued pressing the case that symptom-free transmission was rare, science was breaking in the other direction.

Researchers in Hong Kong estimated that 44 percent of Covid-19 transmission occurred before symptoms began, an estimate that was in line with a British study that put that number as high as 50 percent. The Hong Kong study concluded that people became infectious about two days before their illness emerged, with a peak on their first day of symptoms. By the time patients felt the first headache or scratch in the throat, they might have been spreading the disease for days.

In Belgium, doctors saw that math in action, as Covid-19 tore through nursing homes, killing nearly 5,000 people.

“We thought that by monitoring symptoms and asking sick people to stay at home, we would be able to manage the spread,” said Steven Van Gucht, the head of Belgium’s Covid-19 scientific committee. “It came in through people with hardly any symptoms.”

More than 700 people aboard the Diamond Princess were sickened. Fourteen died. Researchers estimate that most of the infection occurred early on, while seemingly healthy passengers socialized and partied.

Government scientists in Britain concluded in late April that 5 to 6 percent of symptomless health care workers were infected and might have been be spreading the virus.

In Munich, Dr. Hoelscher has asked himself many times whether things would have been different if world leaders had taken the issue seriously earlier. He compared their response to a rabbit stumbling upon a poisonous snake. “We were watching that snake and were somehow paralyzed,” he said.

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| | **Acceptance. Or Not.**<br>As the research coalesced in March, European health officials were convinced.<br>“OK, this is really a big issue,” Dr. Baka recalled thinking. “It plays a big role in the transmission.”<br>By the end of the month, the U.S. Centers for Disease Control announced it was rethinking its policy on masks. It concluded that up to 25 percent of patients might have no symptoms.<br>Since then, the C.D.C., governments around the world and, finally, the World Health Organization have recommended that people wear masks in public.<br>Still, the W.H.O. is sending confusing signals. Earlier this month, Dr. Van Kerkhove, the technical lead, repeated that transmission from asymptomatic patients was “very rare.” After an outcry from doctors, the agency said there had been a misunderstanding.<br>“In all honesty, we don’t have a clear picture on this yet,” Dr. Van Kerkhove said. She said she had been referring to a few studies showing limited transmission from asymptomatic patients.<br>Recent internet ads confused the matter even more. A Google search in mid-June for studies on asymptomatic transmission returned a W.H.O. advertisement titled: “People With No Symptoms — Rarely Spread Coronavirus.”<br>Clicking on the link, however, offered a much more nuanced picture: “Some reports have indicated that people with no symptoms can transmit the virus. It is not yet known how often it happens.”<br>After The Times asked about those discrepancies, the organization removed the advertisements.<br>Back in Munich, there is little doubt left. Dr. Böhmer, the Bavarian government doctor, published a study in The Lancet last month that relied on extensive interviews and genetic information to methodically track every case in the cluster.<br>In the months after Dr. Rothe swabbed her first patient, 16 infected people were identified and caught early. All survived. Aggressive testing and flawless contact-tracing contained the spread.<br>Dr. Böhmer’s study found “substantial” transmission from people with no symptoms or exceptionally mild, nonspecific symptoms.<br>Dr. Rothe and her colleagues got a footnote.<br>https://www.nytimes.com/2020/06/27/world/europe/coronavirus-spread-asymptomatic.html?referringSource=articleShare<br>https://www.nejm.org/doi/full/10.1056/NEJMc2001468?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub++0pubmed |

## MilMed CoE VTC COVID-19 response

**Topic**

The NATO Centre of Excellence for Military Medicine is putting its expertise and manpower to aid in any way possible during the pandemic. The VTC is for interested participants (experts) to exchange experiences, management regulations and restrictions due to COVID-19. We would like to propose just one of the most important topics in the next iteration. We will have some experts giving a short briefing and then afterward we will have time for questions and experiences as well as a fruitful discussion.

**Topics former VTCs:**

- Regulations on the public, military and missions abroad. Medical Treatment Facilities: how equipped they are, is there pooling / isolation of COVID-19 patients in separate facilities.
- Testing strategies
- Aeromedical evacuation
- De-escalation strategy and measures
- Collateral damage of COVID-19 emphasing Mental Health Aspects and other non COVID related diseases
- Immunity map, national strategies to measure and evaluate the immunity level"
- Mental Health
- Treatment of mild symptomatic cases of COVID-19
- Transition home office back to the office
- COVID-19 Second Wave prediction and preparedness based on facts/experiences, modelling and simulation
- Perspectives of the current COVID-19 vaccine development

**Perspectives of the current COVID-19 vaccine development**

Briefers from ACO, Oxford University, SVK, GBR give a short summary about the Perspectives of the current COVID-19 vaccine development .

Summary Briefings:

**Vaccine development global:**

1. Vaccines saved a billion of human beings lives since 19-th century.
2. Vaccination became the most powerful weapon against infectious diseases in history.
3. Vaccination allowed human population to grow up as we see now (7,2 billion people).
4. That means, human territory around the globe is larger and our distribution and life style is threatening lives of other species on the Earth, including microbiotas.
5. Current genomic technologies help us to develop state of art products including vaccines against most of the dangerous infectious diseases.
6. Immediately after wake-up call scientific teams discovered genomic of novel coronavirus.
7. Nevertheless the previous coronavirus hits, vaccine against SARS CoV-1 never been finished.
8. When pandemic became inevitable, scientific teams and institutions started to rush-up with vaccine development IOT mitigate and stop SARS CoV-2 spreading.
9. We are now still in the middle of vaccine development process...

**Vaccine development in Slovakia:**

1. Until now Slovak Academy of Science was on the shadow of the industry. Previews governments didn't support its human and scientific potential enough financially and systematically.
2. Private entities are going to brake this rules to use creative potential of Slovak science to bring new ideas and solutions for the entire world.
3. Leading company in vaccine development in Slovakia is **AXON Neuroscience SA**.
4. Privately supported company is in the COVID19 vaccine development process to bring effective vaccine, which can help to save lives especially to elderly population and weakened population (people with immunodeficiency).

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There are different phases to develop Vaccine. According to World Health Organization

- 128 candidate vaccines in preclinical evaluation
- 13 candidate vaccines in clinical evaluation

**According to:** Vaccine Centre at the London School of Hygiene & Tropical Medicine

- 177 candidate vaccines in preclinical evaluation and
- 17 candidate vaccines in clinical evaluation

Nobody knows why it is different.

**Development and produce bootleneck:**

- Clinical trials compressed at the maximum (normally 5-10 years minimum)
  - Vaccines safety at stake. Long-term safety impossible to assess.
  - Efficacy difficult to prove if COVID-19 pandemic ↘
- Mass-production depends on vaccines factories availability:
  - Existing factory diverted from its production (→ shortage of another vaccine)
  - New factory to be build (+ 6 months delay minimum)

Time frame

**Best case scenario:**

- Vaccine developed, patented and approved (FDA or EMA) by end 2020
- Mass-produced by mid 2021 (by whom and where?)

**Worse case scenario:**

- All phase III trials fail, no vaccines being efficient to prevent the COVID-19

**Realistic scenario:**

- Vaccine developed, patented and approved (FDA or EMA) by mid 2021
- Mass-produced for winter 2021-2022

**Expectation management:**

when political authorities communicate on a vaccine available by the end of the year, they are speaking about a finalized development, not about vaccines for everyone.

**Recommendation:**

- Monitor vaccines development
- Prepare vaccination campaigns at home and for missions:
  procurement, supply, implementation, supervision
- Prepare lists of prioritization, according to critical capability and mission lists
  Level 1: per missions and per entities
  Level 2: per personal
- Deconflict by anticipation national/HN & civil/military vaccination strategies

**How to use a candidate vaccine(s)?**

- Possible constraints post-licensing
  - Manufacturing
  - Safety – likely to be the biggest factor
- Objective of vaccination
  - Prevention of infection/limit transmission vs reduce severity (morbidity/mortality)
  - Individual and population-based benefits (e.g. herd immunity)
- COVID-19: 70-80% immune population for herd immunity
- Achieved by vaccination or natural infection

**Safety - Individual vs Population**

- Central principle of preventative vaccinology
  - Risk from acquiring symptomatic disease in an individual must be greater than the risk from the vaccine itself
- Detection of adverse events depends on size of clinical trial
- Potential unknown risks below limit of detection of clinical trial

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| | ▪ Only evident after widespread implementation (e.g Rotavirus)<br><br>**Current COVID-19 vaccine trials**<br>▪ Largest COVID-19 vaccine trials of 5,000 recipients – minimal detectable frequency of adverse events = 0.06%<br>▪ Events <0.06% will not be detected (relevant to mass vaccination campaigns)<br>▪ Risks balanced against disease severity e.g. infection fatality ratio (IFR)<br>▪ COVID-19 IFR age-related<br>▪ Which populations would benefit most?<br>▪ Larger trials/post-licensing surveillance (larger cohort sizes) to provide data on lower frequency adverse events<br>▪ Current prevalence of COVID-19 - limit primary vaccine trial endpoints<br>▪ Surrogate endpoints (e.g. antibody and T cell responses) - unknown what these reflect<br>▪ Limited safety data<br><br>**Impact of limited safety data**<br>▪ Likely COVID-19 vaccination strategy<br>• Prioritize high risk groups<br>• Phased roll-out<br>• Ongoing surveillance<br>▪ Delays in achieving herd immunity<br>▪ What are the implications for military populations?<br>▪ What are the operational considerations?<br><br>This was the last VTC before Summer break. We are going now in a stand by phase during this time. |

# Conflict and Health

## COVID 19 Crisis in Bangladesh

Bangladesh

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| AREA: | 147.570 km2 |
| POPULATION: | 161.377.000 |
| RELIGION: | 90.5 % Islamic |
| | 8.5 % Hinduism |
| | 0.6 % Buddhism |
| | 0.4 % Christianity |
| CAPITAL: | Dhaka |
| AGE STRUCTURE: | |
| | 0-14 years: 27.29% |
| | 15-24 years: 19.14% |
| | 25-54 years: 40.07% |
| | 55-64 years: 7.09% |
| | 65 years and over: 6.42% |


As of June 22, 2020, Bangladesh reported 115.786 confirmed cases of COVID-19 within its borders. Among these, 16.747 have recovered and there have been 1502 deaths.

**HISTORY**

After the 1757 Battle of Plassey, Bengal (former name of Bangladesh) was the first region of the Indian subcontinent conquered by the British East India Company, the country became British colony. Almost 200 years later, after the Morley-Minto Reforms in the legislatures of British India, the British government promised limited provincial autonomy in 1935. The Bengal Legislative Assembly, British India's largest legislature, was established in 1937. Later, on 3 June 1947, the Mountbatten Plan outlined the partition of British India. On 20 June, the Bengal Legislative Assembly met to decide on the partition of Bengal.

The Dominion of Pakistan was created on 14 August 1947. East Bengal, with Dhaka as its capital, was the most populous province of the 1947 Pakistani federation. Ethnic and linguistic discrimination was common in Pakistan's civil and military services, in which Bengalis were under-represented.

The Bengali population was angered when the Pakistani Military prevented Prime Minister-elect Sheikh Mujibur Rahman from taking the office. The Pakistan Army arrested the prime minister and flew him away to Karachi. However, before his arrest Mujibur proclaimed the Independence of Bangladesh at midnight on 26 March which led the Bangladesh Liberation War to break out within hours. The Pakistan Army continued to massacre Bengali students, intellectuals, politicians, civil servants and military in the 1971 Bangladesh genocide, while Bengali guerrilla forces created strong resistance throughout the country. During the war, an estimated 0.3 to 3 million people were killed and several million people took shelter in neighbouring India. Global public opinion turned against Pakistan as news of the atrocities spread. The nine-months long war ended with the surrender of Pakistani armed forces to the Bangladesh-India Allied Forces on 16 December 1971. The constituent assembly adopted the constitution of Bangladesh on 4 November 1972, establishing a secular, multiparty parliamentary democracy. The Bangladesh famine of 1974 worsened the political situation, then the prime minister

introduced one-party socialist rule. He was assassinated during a coup on 15 August 1975, followed by a few other military coups in Bangladesh. After the 1991 general election, the twelfth amendment to the constitution restored the parliamentary republic and Begum Khaleda Zia became Bangladesh's first female prime minister. Zia led a BNP government from 1990 to 1996. In 1991 her finance minister, Saifur Rahman, began a major program to liberalise the Bangladeshi economy. Due to strong domestic demand, Bangladesh emerged as one of the fastest-growing economies in the world. However, human rights abuses increased under the administration, particularly enforced disappearances. Between 2016 and 2017, an estimated 1 million Rohingya refugees took shelter in south-eastern Bangladesh amid a military crackdown in neighbouring Myanmar.
Source: Wikipedia

**GOVERNMENT RESTRICTIVE MEASURES**

The Government of Bangladesh announced a general holiday period from March 26 – May 30 during which most Bangladeshi government offices and private sector organizations were closed. The Government of Bangladesh has made wearing masks mandatory when outside the home. No one were allowed outdoors from 8 p.m. to 6 a.m. Stores can remain open between 10.00-16.00.
On the last week recorded the highest single-day fatality and case numbers of COVID-19. Therefore, Bangladesh is going to impose lockdown once again due to the rising trend of infections for the last couple of days. Earlier, the country observed a 66-day nationwide lockdown since March 26 that was later eased before the holy Eid-al-Fitr, citing economic interests and people's sufferings.

**IMPACT OF RESTRICTIONS**

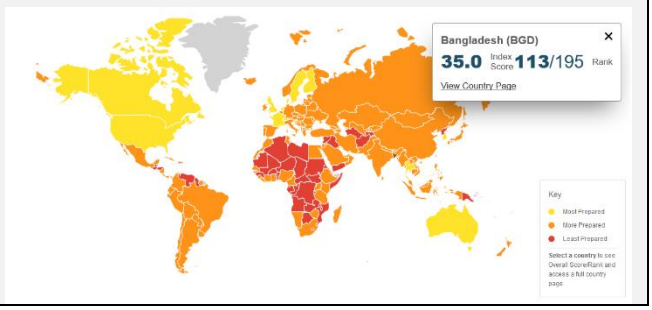
Social distancing cannot be interpreted in terms of Bangladeshi society and culture. Even if people want to follow the guidelines, as in other countries, social distancing is a privilege of the rich and middle class in Bangladesh. Most Bangladeshis live in close proximity to each other. Families are large and live in small and cramped settlements, with several families sharing a single tap and toilet. This is even more pronounced in the refugee camps in Chittagong, where around a million Rohingya refugees live in crowded and temporary shelters and access to health and other facilities is even lower than in the rest of Bangladesh.

**IMPACT OF RELIGION**

Religious gatherings have been an important vector in spreading the new coronavirus in several countries in Asia. Since religious beliefs are strong among a significant section in Bangladesh and clerics wield more influence than the government over the thinking and actions of these people, the government has been apprehensive that such gatherings will dramatically increase the already rising number of coronavirus infections in the country. Since early March, the government has been cautioning the public against gathering in large numbers, advising people to remain indoors. and on March 26 a have been imposed.
Despite the imposed nationwide lockdown, on April 18 around 100,000 people gathered at the Rahmania Madrassa in Bertola village in Bangladesh to participate in the funeral of Maulana Jubayer Ahmed Ansari, a popular Islamic teacher. Only a month earlier, some 25,000 people congregated at Raipur in Lakshmipur district for a mass prayer, which they believed would protect them from being infected by the coronavirus.
Millions of people expected to flock to mosques and markets during Ramadan (Islam's holy month) therefore additional rules have been put in place. These disallow the presence of more than 12 people, including clerics and mosque officials, in places of worship during Ramzan prayers. The government has also banned iftar (evening meals that mark the breaking of the fast) gatherings. The question is whether authorities will be able to enforce lockdown rules during a period of important religious events.
Source: BBC News

**HEALTH SYSTEM**

Bangladeshi physicians are now the foremost victims of the disease as frontline workers dedicated to the treatment of COVID-19 patients. As of Sunday, around 1,200 doctors had tested positive and at least 36 doctors have died from the disease in the past two months alone. The country is losing senior doctors of the country, which is an



irreparable loss for the health sector. According to the Bangladeshi Doctors Foundation (BDF) out of the 100,000 registered physicians, nearly 80,000 are dealing with COVID-19 patients, increasing their chances of contracting the virus. The reasons of the high fatality rate of the medical personnel are among others the lack of testing facilities in the early stages of the pandemic, scarcity of personal protective equipment (PPE) and lack of doctors' familiarity with PPE use and disposal. In many cases patients hide their symptoms, which invariably impacts the physicians.
Source: Arab News


| | COUNTRY SCORE | AVERAGE SCORE* |
|---|---|---|
| **PREVENTION** | **27.3** | **34.8** |
| Antimicrobial resistance (AMR) | 16.7 | 42.4 |
| Zoonotic disease | 35.4 | 27.1 |
| Biosecurity | 0 | 16.0 |
| Biosafety | 0 | 22.8 |
| Dual-use research and culture of responsible science | 0 | 1.7 |
| Immunization | 93.9 | 85.0 |
| **DETECTION AND REPORTING** | **50.9** | **41.9** |
| Laboratory systems | 100 | 54.4 |
| Real-time surveillance and reporting | 45 | 39.1 |
| Epidemiology workforce | 50 | 42.3 |
| Data integration between human/ animal/environmental health sectors | 0 | 29.7 |
| **RAPID RESPONSE** | **23.1** | **38.4** |
| Emergency preparedness and response planning | 12.5 | 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 | 25 | 39.4 |
| Access to communications infrastructure | 45 | 72.7 |
| Trade and travel restrictions | 100 | 97.4 |

| | COUNTRY SCORE | AVERAGE SCORE* |
|---|---|---|
| **HEALTH SYSTEM** | **14.7** | **26.4** |
| Health capacity in clinics, hospitals and community care centers | 27.4 | 24.4 |
| Medical countermeasures and personnel deployment | 33.3 | 21.2 |
| Healthcare access | 23.6 | 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 | 0 | 42.2 |
| **COMPLIANCE WITH INTERNATIONAL NORMS** | **52.5** | **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 | 75 | 53.4 |
| JEE and PVS | 75 | 17.7 |
| Financing | 50 | 36.4 |
| Commitment to sharing of genetic & biological data & specimens | 66.7 | 68.1 |
| **RISK ENVIRONMENT** | **44.0** | **55.0** |
| Political and security risks | 53.6 | 60.4 |
| Socio-economic resilience | 69 | 66.1 |
| Infrastructure adequacy | 16.7 | 49.0 |
| Environmental risks | 43 | 52.9 |
| Public health vulnerabilities | 38.5 | 46.9 |

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

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## Recommendations

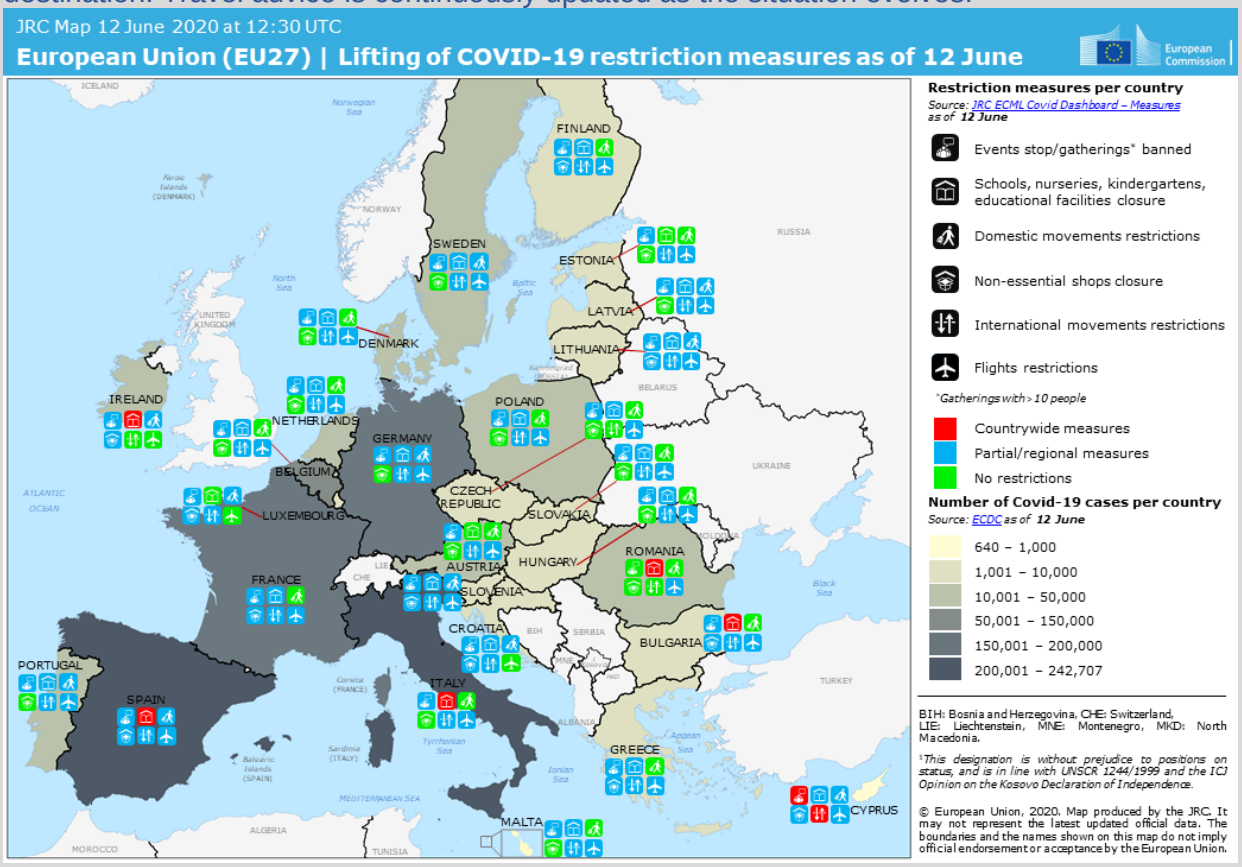
| | |
|---|---|
| Recommendation for international business travellers | **Travel has been shown to facilitate the spread of COVID-19 from affected to unaffected areas. Travel and trade restrictions during a public health event of international concern (PHEIC) are regulated under the International Health Regulations (IHR), part III.**<br>The majority of measures taken by WHO Member States relate to the denial of entry of passengers from countries experiencing outbreaks, followed by flight suspensions, visa restrictions, border closures, and quarantine measures. Currently there are exceptions foreseen for travellers with an essential function or need.<br><br>**In the case of non-deferrable trips, please note the following**<br>• Many airlines have suspended inbound and outbound flights to affected countries. Contact the relevant airline for up-to-date information on flight schedules.<br>• Check your national foreign office advices for regulations of the countries you´re traveling or regulations concerning your country.<br>• Information's about the latest travel regulations and De-escalation strategy measures you can find at IATA and International SOS. For Europe you will find more information here.<br><br>**Most countries implemented strikt rules of contact reduction:**<br>• Everyone is urged to reduce contacts with other people outside the members of their own household to an absolutely necessary minimum.<br>• In public, a minimum distance of 1.5 m must be maintained wherever possible.<br>• 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).<br>• Follow the instructions of the local authorities.<br><br>**Risk of infection when travelling by plane:**<br>The risk of being infected on an airplane cannot be excluded, but is currently considered to be low for an individual traveller. The risk of being infected in an airport is similar to that of any other place where many people gather. If it is established that a COVID-19 case has been on an airplane, other passengers who were at risk (as defined by how near they were seated to the infected passenger) will be contacted by public health authorities. Should you have questions about a flight you have taken, please contact your local health authority for advice.<br><br>**General recommendations for personal hygiene**, cough etiquette and keeping a distance of at least one metre from persons showing symptoms remain particularly important for all travellers. These include:<br>• Perform hand hygiene frequently. Hand hygiene includes either cleaning hands with soap and water or with an alcohol-based hand rub. Alcohol-based hand rubs are preferred if hands are not visibly soiled; wash hands with soap and water when they are visibly soiled;<br>• Cover your nose and mouth with a flexed elbow or paper tissue when coughing or sneezing and disposing immediately of the tissue and performing hand hygiene;<br>• Refrain from touching mouth and nose; See also: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public<br>• 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.<br>• WHO information for people who are in or have recently visited (past 14 days) areas where COVID-19 is spreading, you will find here.<br><br>**Travellers who develop any symptoms during or after travel should self-isolate; those developing acute respiratory symptoms within 14 days upon return should be advised to seek immediate medical advice, ideally by phone first to their national healthcare provider.**<br>Source: WHO and ECDC |

**European Commission**:
The coronavirus outbreak is a serious threat to public health. Lockdowns and other coordinated restrictive measures are necessary to save lives. However, these measures may also severely slow down our economies and can delay the deliveries of critical goods and services. The European Commission has taken measures to ensure continued and uninterrupted land, waterborne and air cargo services. These services are of crucial importance for the functioning of the EU's internal market and its effective response to the current public health crisis.
On 13 May, the European Commission presented guidelines and recommendations to help Member States gradually lift travel restrictions, with all the necessary safety and precautionary means in place. Measures intended to enable citizens to travel again after months of confinement include, but are not limited to:

**Re-open EU – new web platform to help travellers and tourists**

On 15 June, the European Commission launched 'Re-open EU', a web platform that contains essential information allowing a safe relaunch of free movement and tourism across Europe. To help people confidently plan their travels and holidays during the summer and beyond, the platform will provide real-time information on borders, available means of transport, travel restrictions, public health and safety measures such as on physical distancing or wearing of facemasks, as well as other practical information for travellers.
Re-open EU will act as a key point of reference for anyone travelling in the EU as it centralises up-to-date information from the Commission and the Member States in one place. It will allow people to browse country-specific information for each EU Member State through an interactive map, offering updates on applicable national measures as well as practical advice for visitors in the country. Available in the 24 official EU languages.

Travel advice and Border measures
Travel advice is a national competence and you should check if your national authority, e.g. the Ministry of Foreign Affairs, has issued an official travel warning concerning your planned destination. Travel advice is continuously updated as the situation evolves.




Source: https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/travel-and-transportation-during-coronavirus-pandemic_en

| Risk Assessment | |
|---|---|
| Global | • Because of global spread and the human-to-human transmission the **moderate to high** risk of further transmission persists.<br>• Travellers are at risk of getting infected worldwide. It is highly recommended to avoid all unnecessary travel for the next weeks.<br>• Individual risk is dependent on exposure.<br>• National regulation regarding travel restrictions, flight operation and screening for single countries you will find here.<br>• Official IATA changed their travel documents with new travel restrictions. You will find the documents here.<br>• Public health and healthcare systems are in high vulnerability as they already become overloaded in some areas with elevated rates of hospitalizations and deaths. Other critical infrastructure, such as law enforcement, emergency medical services, and transportation industry may also be affected. Health care providers and hospitals may be overwhelmed.<br>• Appropriate to the global trend of transmission of SARS-CoV-2 an extensive circulation of the virus is expectable. At this moment of time, asymptomatic persons as well as infected but not sickened persons could be a source of spreading the virus. Therefore, no certain disease-free area could be named globally. |
| Europe | ECDC assessment for EU/EEA, UK as of 11 June 2020:<br>• **Risk of COVID-19 to the general population currently assessed:**<br>**Low** in areas where community transmission has been reduced and/or maintained at low levels and where there is extensive testing showing very low detection rates.<br>**Moderate** in areas where there is substantial ongoing community transmission and where appropriate physical distancing measures are not in place.<br>• **Risk of COVID-19 to the population with defined factors associated with severe disease outcome currently assessed:**<br>**Moderate** in areas where community transmission has been reduced and/or maintained at low levels and where there is extensive testing showing very low detection rates.<br>**Very high** in areas where there is substantial ongoing community transmission and where appropriate physical distancing measures are not in place.<br>• **Risk of COVID-19 incidence rising to a level that may require the re-introduction of stricter control measures is currently assessed as:**<br>**Moderate** if measures are phased out gradually, when only sporadic or cluster transmission is reported, and when appropriate monitoring systems and capacities for extensive testing and contact tracing are in place.<br>**High** if measures are phased out when there is still ongoing community transmission, and no appropriate monitoring systems and capacities for extensive testing and contact tracing are in place. |

## References:


- European Centre for Disease Prevention and Control www.ecdc.europe.eu
- World Health Organization WHO; www.who.int
- Centres for Disease Control and Prevention CDC; www.cdc.gov
- Our World in Data; https://ourworldindata.org/coronavirus


## Disclaimer:

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