



Update 38 (22th of September 2020)

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



**Force Health Protection Branch FHPB (former DHSC) NATO MILMED COE
in Munich**

22th of September 2020

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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

- Since the beginning of the corona crisis, more than 31 million infections with the corona virus have been reported worldwide. In many countries, the trend is negative, despite recent successes in the fight against the pandemic.
- **EU:** Europe's healthcare regulator has endorsed using [dexamethasone to treat Covid-19 patients](#) with breathing difficulties, paving the way for the steroid to become the region's second approved treatment for the respiratory illness.
- **WHO:** UNESCO and UNICEF briefed on the COVID-19 Impact on Education and the Reopening of Schools. WHO noted that there will be no zero risk in reopening of schools, and the question for policy makers and public health and education officials is how to prevent clusters from turning into community transmission.
- **WHO:** During the United Nations Crisis Management Team (UNCMT) meeting on 9 September 2020, WHO briefed on the epidemiological situation and informed that WHO issued living guidance on the [use of corticosteroids](#), and the finalization of [guidance on considerations for the use of antigen-based rapid diagnostic tests](#).
- **WHO:** has published new guidance on [school-related public health measures](#) that examines considerations for school operations, and the measures needed to minimize the risk to students and staff of COVID-19.
- **WHO** has released a slide set on ['What we know about the long-term effects of COVID-19'](#). Typically people recover from COVID-19 after two to six weeks; however, for some people, including young adults and persons with no underlying medical conditions who were not hospitalized, symptoms may linger or recur for weeks or months following initial recovery. Some patients develop medical complications that may have lasting health effects. Much is still unknown, and more time and research are needed to understand the long-term effects of COVID-19.

GLOBALLY

31 216 459
confirmed cases
21 380 350 recovered
963 479 deaths

EU/EEA and the UK

4 802 625
confirmed cases
2 559 450 recovered
224 591 deaths

USA ↗ (new cases/day 39 894)

6 810 771
confirmed cases
2 613 229 recovered
199 197 deaths

Brazil → (new cases/day 30 596)

4 558 040
confirmed cases
3 993 432 recovered
137 272 deaths

India → (new cases/day 91 593)

5 487 580
confirmed cases
4 396 399 recovered
87 882 deaths

Russia ↗ (new cases/day 5 801)

1 105 048
confirmed cases
909 026 recovered
19 420 deaths

Spain ↗ (new cases/day 11 105)

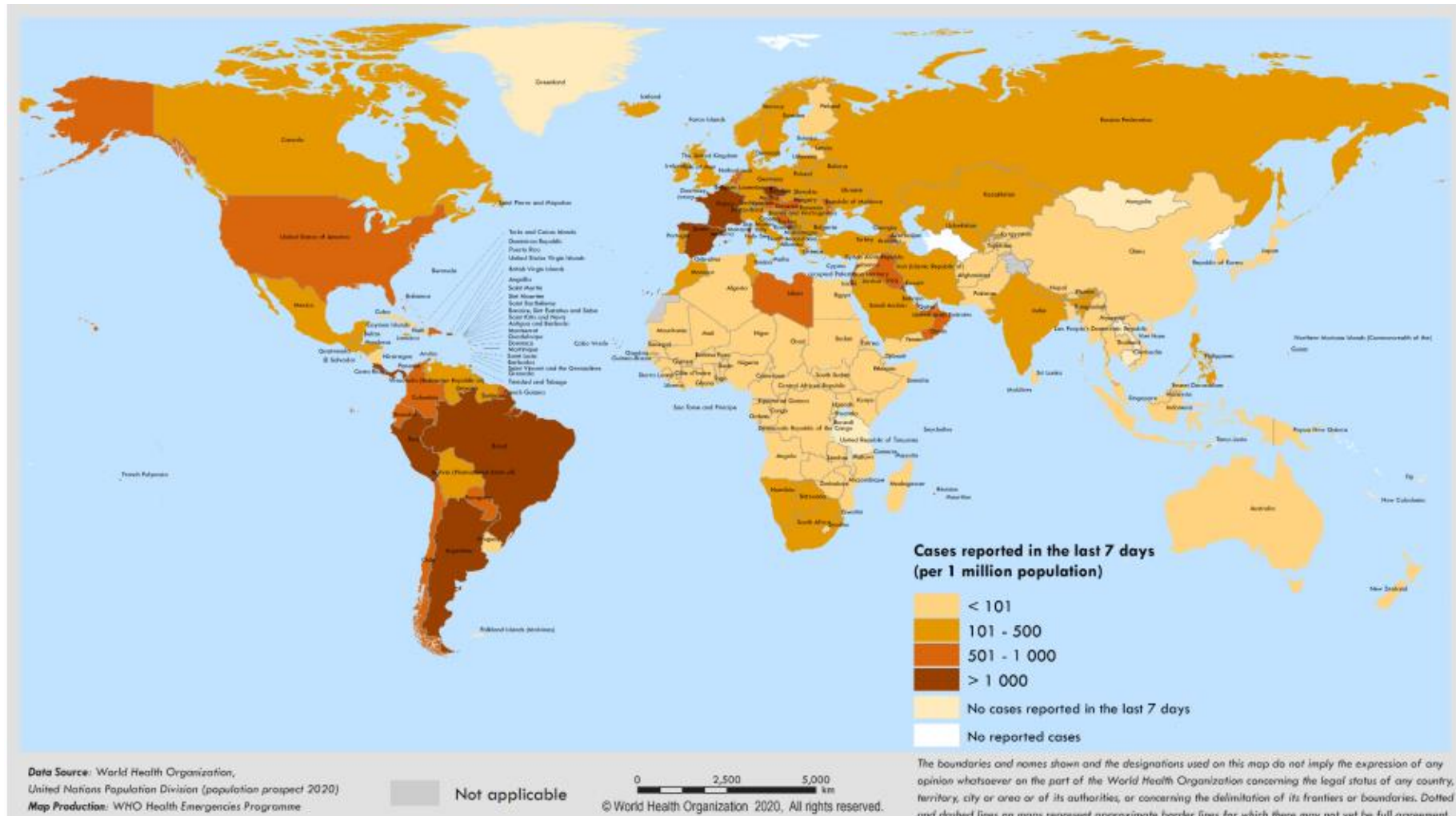
671 468
confirmed cases
150 376 recovered
30 663 deaths

Please click on the headlines to jump into the document

Table of Contents

HIGHLIGHTS/NEWS	1
Map of countries with reported COVID-19 cases (last 7 days)	3
Worldwide Situation	4
<i>Global Situation</i>	<i>4</i>
<i>Situation in Europe.....</i>	<i>11</i>
<i>Diagnostic testing and screening for SARS CoV-2</i>	<i>14</i>
Subject in Focus	21
<i>ECDC's September 30 days baseline projections of COVID-19 in the EU/EEA and the UK</i>	<i>21</i>
Conflict and Health	26
<i>COVID-19 Crisis in IRAQ.....</i>	<i>26</i>
MilMed CoE VTC COVID-19 response	29
<i>Topic.....</i>	<i>29</i>
<i>National overview on current COVID-19 situation</i>	<i>29</i>
Recommendations	30
<i>Recommendation for international business travellers</i>	<i>30</i>
Risk Assessment.....	34
<i>Global.....</i>	<i>34</i>
<i>Europe</i>	<i>34</i>
References:	34
Disclaimer:	35

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



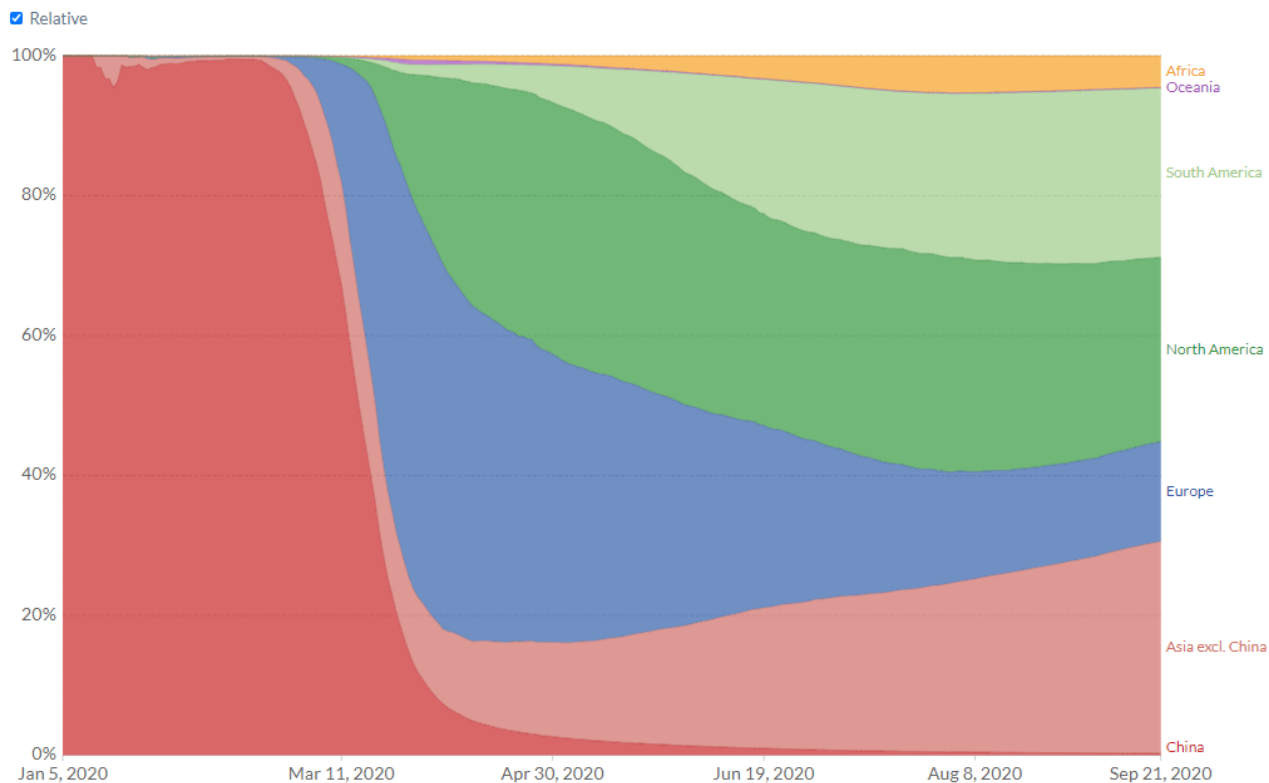
Worldwide Situation

Global Situation

Total confirmed COVID-19 cases

The number of confirmed cases is lower than the number of total cases. The main reason for this is limited testing.

Our World in Data



[WHO weekly operational update on COVID-19 as of 18 September 2020:](#)

See information about partnership, logistics, health learning, medicines and health products, funding/donors and regional highlights in the document as well as links to Technical guidance and latest publications.

Find some selected topic out of the paper down below:

COVID-19 Preparedness

Impact of Simulation Exercises on Covid-19 Response

WHO Simulation Exercises (SimEx) have supported Member States to strengthen their emergency preparedness and response capacities for COVID-19 and other health emergency risks through national learning and system improvement. Since the start of the COVID-19 pandemic, multiple countries have used and benefitted from SimEx to enhance their preparedness and response. Some examples include:

In the Republic of Korea, a table top exercise was conducted in December 2019 to assess national capacities to manage a potential infectious disease outbreak. The outcomes of the exercise are reported to have been supportive of COVID-19 case testing in the country.



In April 2019 [Uganda](#) tested capacities to detect and contain potential importation of an infectious disease at Entebbe International airport. The exercise reviewed capabilities for effective case detection, safe transportation, laboratory testing, contacting tracing, case management, community engagement and safe and dignified burial. The SimEx was carried out in real-time giving health workers and other frontline workers a real feel of the time pressures that can occur during an emergency which proved to be a highly supportive experience. In facilitating detection of the first COVID-19 case at Entebbe International Airport.



In the [Kingdom of Bhutan](#) (November 2019) and [Namibia](#) (March-April 2020), SimEx were conducted to assess existing capacities to manage potential cases of infectious disease outbreaks. These types of SimEx can further strengthen preparedness capacities of Points Of Entry (PoE) and frontline health workers.

To further support national COVID-19 preparedness, WHO has developed a comprehensive [COVID-19 tabletop exercise \(SimEx\) packages](#), including:

1. A generic COVID-19 SimEx to examine and strengthen existing plans, procedures and capabilities to manage of an imported case
 2. A health facility & IPC SimEx at both the national and acute care facility level.
 3. A point of entry (POE) SimEx to examine and strengthen existing plans, procedures and capabilities at the main airport (POE).
 4. An urban Covid19 SimEx to discuss critical issues in urban environments
- The COVID-19 SimEx packages are regularly updated based on updated and published WHO COVID-19 guidance.

[WHO weekly epidemiological report, 21 September 2020](#)

Global epidemiological situation

In the week from 14 through 21 September, there were over 2 million new cases of COVID-19, comparable to the previous seven days (Table below); during the same period, there was a 10% decrease in the number of death, with 37 700 deaths reported in the past seven days.

The Region of the **Americas** has consistently registered the greatest number of reported cases for many weeks. Although the Region has reported a 22% decrease in new death.

The **African Region**, an increase in the weekly case incidence was reported across all regions in the last seven days.

The **South-East Asia Region** has continued report an increase in new COVID-19 deaths, with over 9000 deaths in the past week, accounting for 25% of all reported deaths and surpassing 100 000 total COVID-19 deaths since the beginning of the pandemic.

The **European Region** showed the greatest rise in deaths in the past week, with a 27% increase compared to the previous week.

Figure 1: Number of COVID-19 cases reported weekly by WHO Region, and global deaths, 30 December 2019 through 20 September 2020**

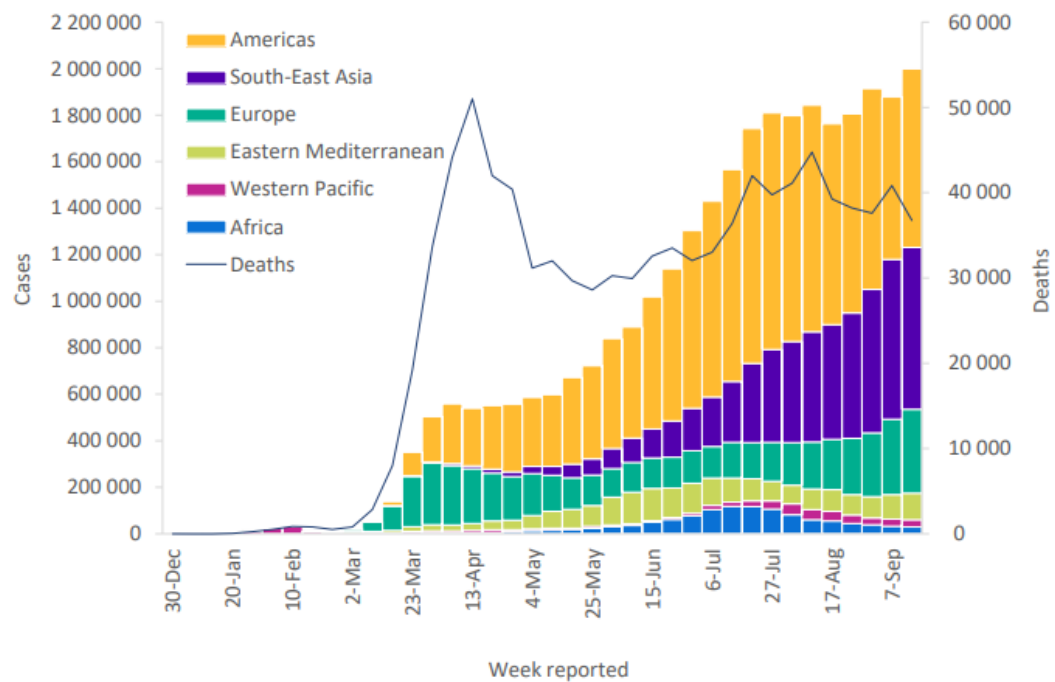


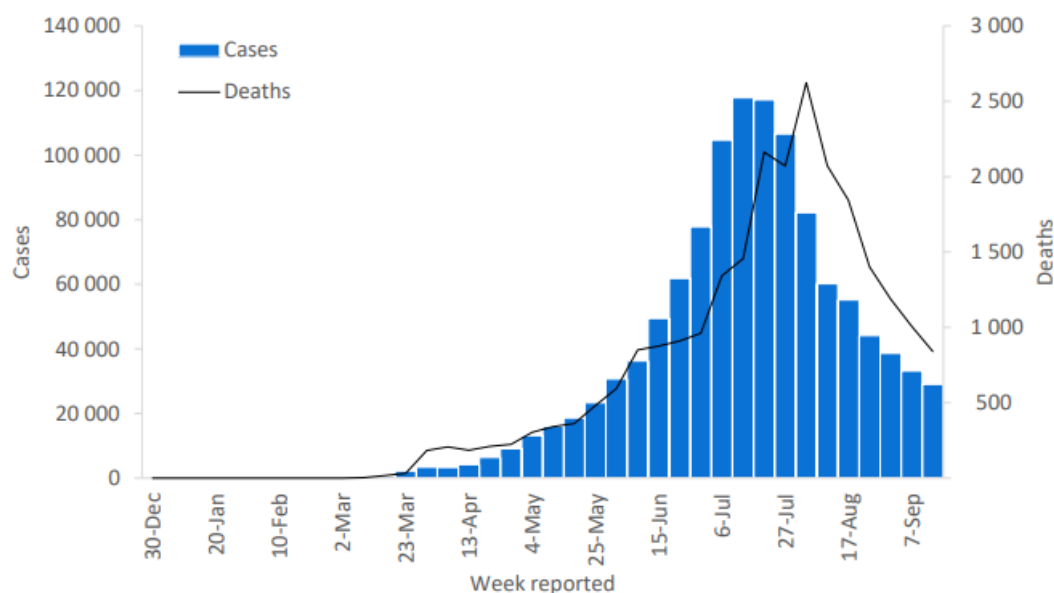
Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 20 September 2020**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days*	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days*	Cumulative deaths (%)
Americas	767 410 (38%)	10%	15 466 584 (50%)	19 132 (52%)	-22%	527 837 (55%)
South-East Asia	696 400 (35%)	1%	6 073 462 (20%)	9 309 (25%)	4%	101 700 (11%)
Europe	360 601 (18%)	11%	5 195 853 (17%)	4 072 (11%)	27%	229 802 (24%)
Eastern Mediterranean	114 057 (6%)	8%	2 215 733 (7%)	2 629 (7%)	14%	57 641 (6%)
Western Pacific	31 353 (2%)	4%	577 905 (2%)	781 (2%)	15%	12 667 (1%)
Africa	29 076 (1%)	-12%	1 145 397 (4%)	841 (2%)	-16%	24 757 (3%)
[†] Other	-	-	741 (<1%)	-	-	13 (<1%)
Global	1 998 897 (100%)	6%	30 675 675 (100%)	36 764 (100%)	-10%	954 417 (100%)

[African Region](#)

For the last six weeks, the African Region has continued to report a decrease in both COVID-19 cases and deaths. During the past week, 33 of the 49 affected countries reported either a decrease in deaths or no deaths. The region has reported almost 25 000 cumulative deaths to date, of which **South Africa** accounts for 15 900 (64%). **South Africa** continues to report the highest number of new cases and new deaths, followed by **Ethiopia, Algeria and Mozambique**. Notably, 35 of 49 affected countries/territories/areas in the Region continue to report ongoing community transmission.

Figure 3: Number of COVID-19 cases and deaths reported weekly by the WHO African Region, as of 20 September 2020**



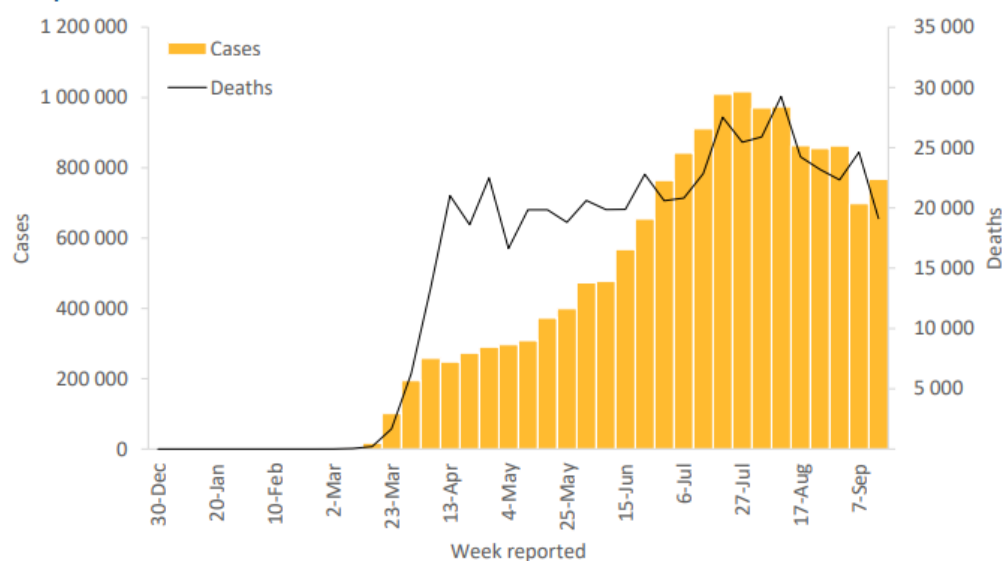
Region of the Americas

The Region of the Americas remains the most affected WHO Region, accounting for 50% of all reported cases and 55% of deaths. Even though the Region has reported an increase of 10% in the number of new cases in the past week, it also accounts for the largest decrease in deaths compared to the previous seven days (-22%) (Figure 4).

32 out of the 48 affected countries and territories in the Region report community transmission, while only eight report sporadic transmission. The countries reporting the highest numbers of new cases in the past week include the **United States of America, Brazil, Argentina and Colombia**. The number of **daily cases** reported in **Ecuador** has remained relatively high, with an average of more than 500 cases reported daily in September. The marked decrease in the **number of deaths** in the Region has been driven mainly by a decrease in **Colombia, Mexico, Ecuador and Bolivia** in the past seven days, while the **United States of America and Brazil** continue to report the **highest number of deaths**, each reporting over 5000 new deaths in the past week.

While **Argentina** was one of the countries in the Americas with the lowest incidence of cases and deaths during the first few months of the pandemic, over the last few months the weekly incidence of cases has been rising rapidly, and test positivity rates have exceeded 40% in recent weeks.

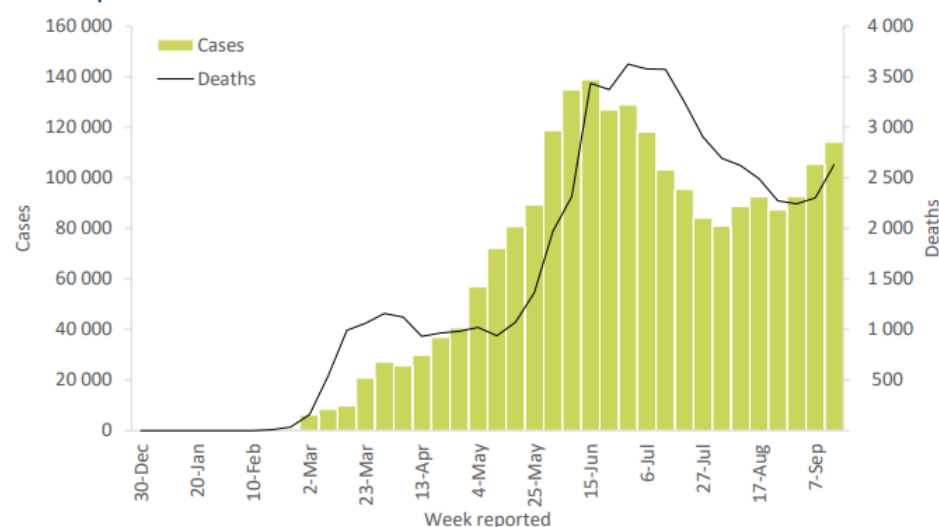
Figure 4: Number of COVID-19 cases and deaths reported weekly by the WHO Region of the Americas, as of 20 September 2020**



Eastern Mediterranean Region

The number of cases and deaths reported in the **Eastern Mediterranean Region** have consistently increased over the last three weeks (Figure 5), and have increased by 8% and 14% respectively in the last seven days. The highest numbers of new cases were reported by **Iraq, Iran and Morocco**. **Jordan, Oman and Tunisia** reported the greatest relative increase in cases compared to the previous week. While Iran reported the highest number of new deaths, **Tunisia and Afghanistan** reported the greatest increase in deaths compared to the previous week.

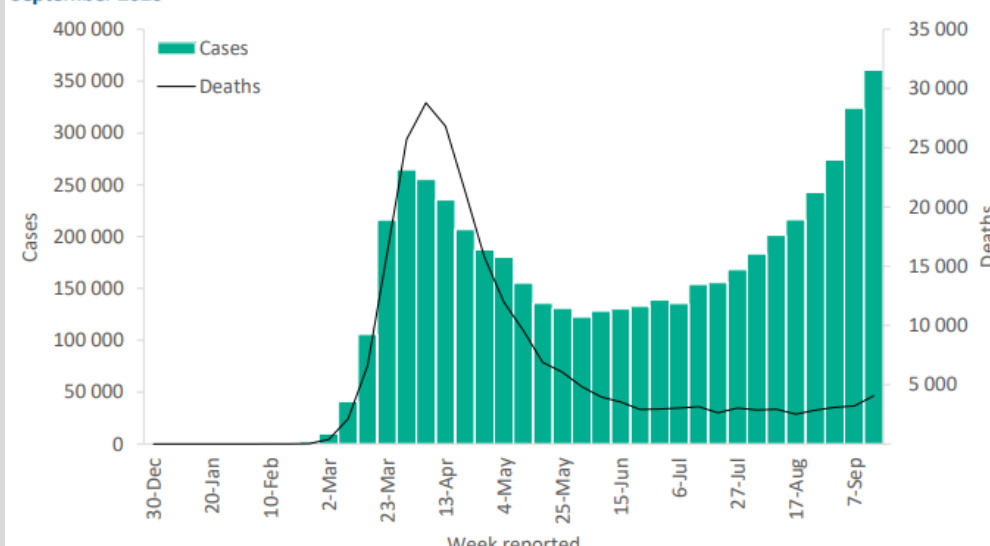
Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 20 September 2020**



European Region

The number of cases and deaths reported in the **European Region** increased by 11% and 27% respectively in the past seven days (Figure 6), with France, the **Russian Federation, Spain and the United Kingdom** reporting the highest numbers of new cases in the past week. **Iceland and Cyprus** have reported the greatest percentage increase in new cases in the past week. The Region has been experiencing a slight increase in the number of reported deaths over the past four weeks, reaching over 4000 new deaths in the past seven days. **Hungary and Denmark** reported the highest relative increase in deaths in the past week, while the **United Kingdom** continues to report the highest number of cumulative deaths, with almost 42 000.

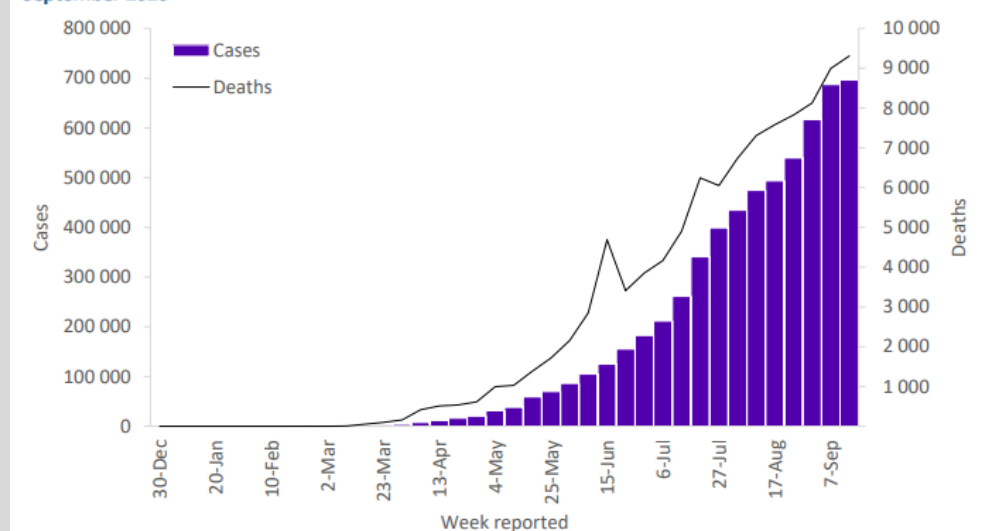
Figure 6: Number of COVID-19 cases and deaths reported weekly by the WHO European Region, as of 20 September 2020**



South-East Asia Region

The **South-East Asia Region** is the second most affected Region and currently accounts for 35% and 25% of cases and deaths, respectively, newly reported globally in the past seven days. Although the number of cases and deaths has been increasing steadily since March, the increases have slowed, with increases in new cases and deaths of only 1% and 4% respectively in the past week. The countries reporting the highest number of new cases continue to be **India, Indonesia and Bangladesh**, while **Myanmar and Nepal** showed the highest increase in new cases in the past seven days. The countries reporting the highest number of new deaths per million population include **India and Maldives**, with 6 and 4 deaths per million population respectively, while **Myanmar** continues to show the highest increase in deaths in the past week.

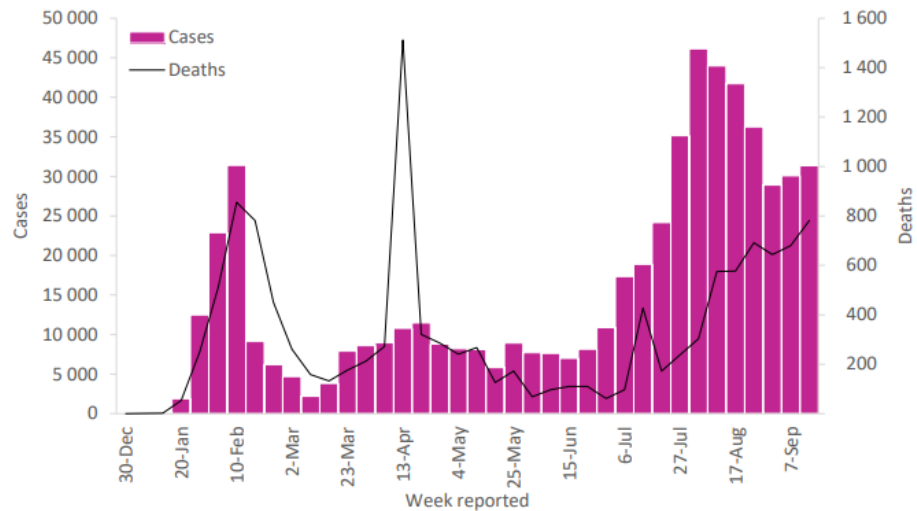
Figure 7: Number of COVID-19 cases and deaths reported weekly by the WHO South-East Asia Region, as of 20 September 2020**



Western Pacific Region

Overall, the **Western Pacific Region** continues to show the lowest cumulative cases, accounting for less than 2% of global cases and less than 1.5% of all deaths. The **Philippines and Japan** accounted for the greatest number of new cases and new deaths in the Region. Relative increases in the number of deaths were reported in **Malaysia, New Zealand and Papua New Guinea**.

Figure 8: Number of COVID-19 cases and deaths reported weekly by the WHO Western Pacific Region, data as of 20 September 2020**



Updates from WHO regional offices:

WHO [AFRO](#)

WHO [EMRO](#)

WHO [EURO](#)

- WHO [PAHO](#)

- WHO [SEARO](#)

- WHO [WPRO](#)

BRA: In Rio de Janeiro, a 39-meter-long band of wave-shaped steel commemorates the coronavirus deaths. The three-ton monument to the victims and their families in one of the worst-hit cities in Brazil was unveiled on Sunday in a cemetery where the bodies of many COVID-19 victims are buried. The memorial was designed by Brazilian architect Crisa Santos, who came up with the idea after visiting several cemeteries. "It gives your heart satisfaction to know that your father has not been forgotten, that he is not just another victim," said 54-year-old Giselle Peixoto, whose father Geraldo Diniz Gonsalves died of coronavirus infection.

USA: In the US, 37,417 new infections were registered within 24 hours. A total of 6.786 million people were reportedly infected with the corona virus, according to the CDC. The death toll rose by 270 to 199,024.

The US health agency CDC has withdrawn its controversial recommendation to reduce coronavirus testing in people without symptoms. In an update of the CDC guidelines on Friday it is now again said that they should also be tested if they have had contact with infected people. The CDC amended the document on August 24, stating that a test is not absolutely necessary in these cases if you have no symptoms – except for people who belong to risk groups.

This assessment came under heavy criticism from experts. Since there is a significant risk of coronavirus transmission by people without symptoms of illness, testing those is necessary, this is expressly stated in a "clarification".

ECDC COVID-19 surveillance report Week 37, as of 18 September 2020

Weekly surveillance summary

This summary presents highlights from two separate weekly ECDC surveillance outputs.

- The [COVID-19 country overview](#) provides a concise overview of the evolving epidemiological situation with the COVID-19 pandemic, both by country and for the EU/EEA and the UK as a whole, using daily and weekly data from a range of sources.
- The [COVID-19 surveillance report](#) presents the epidemiological characteristics of COVID-19 cases reported to The European Surveillance System (TESSy) to date and assesses the quality of the data.

New this week

- From this week onwards, data for all indicators will be displayed only up to the end of the current reporting week (week 37, ending Sunday 13 September 2020).
- Section 3.1 contains an interactive summary table of key indicators, their trends and current values for the EU/EEA and the UK. This replaces the heatmap which appeared in Section 3.1 in previous weeks.
- The countries listed for the various indicators in the summary below are those that have high values for the current week, and/or sustained increasing trends.

Trends in reported cases and testing

- By the end of week 37 (13 September 2020), the 14-day case notification rate for the EU/EEA and the UK, based on data collected by ECDC from official national sources, was 76 (country range: 5–271) per 100 000 population. The rate has been increasing for 56 days.
- Based on data reported to TESSy, high levels (at least 60 per 100 000) or sustained increases (for at least seven days) in the 14-day COVID-19 case notification rates against the previous week have been observed in 19 countries (Austria, Belgium, Croatia, Czechia, Denmark, Estonia, France, Hungary, Ireland, Luxembourg, Malta, Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain and the United Kingdom).
- Among people over 65 years of age, high levels or sustained increases in the 14-day COVID-19 case notification rates compared to last week have been observed in 15 countries (Austria, Croatia, Czechia, Denmark, Estonia, Hungary, Ireland, Luxembourg, Malta, Netherlands, Norway, Romania, Slovakia, Slovenia and the United Kingdom).
- Notification rates are highly dependent on several factors, one of which is the testing rate. Weekly testing rates for week 37, available for 25 countries, varied from 343 to 8 293 tests per 100 000 population. Luxembourg had the highest testing rate for week 37, followed by Malta, the United Kingdom, Cyprus and Belgium.
- Weekly test positivity was high (at least 3%) or had increased compared to the previous week in 10 countries (Austria, Bulgaria, Czechia, France, Hungary, Netherlands, Romania, Slovakia, Slovenia and Spain).

Primary care

- In the five countries that reported data from primary care sentinel surveillance for COVID-19 up to week 37, using the systems established for influenza, there was a single detection of SARS-CoV-2 reported among the 66 patients tested.
- Among those countries that reported influenza-like illness (ILI) and/or acute respiratory infection (ARI) syndromic surveillance data up to week 37, using the systems established for influenza, three (Belgium, Ireland and Slovenia) had observed recent increases in consultation rates to levels higher than those reported during the same period for the last two years.

Hospitalisation

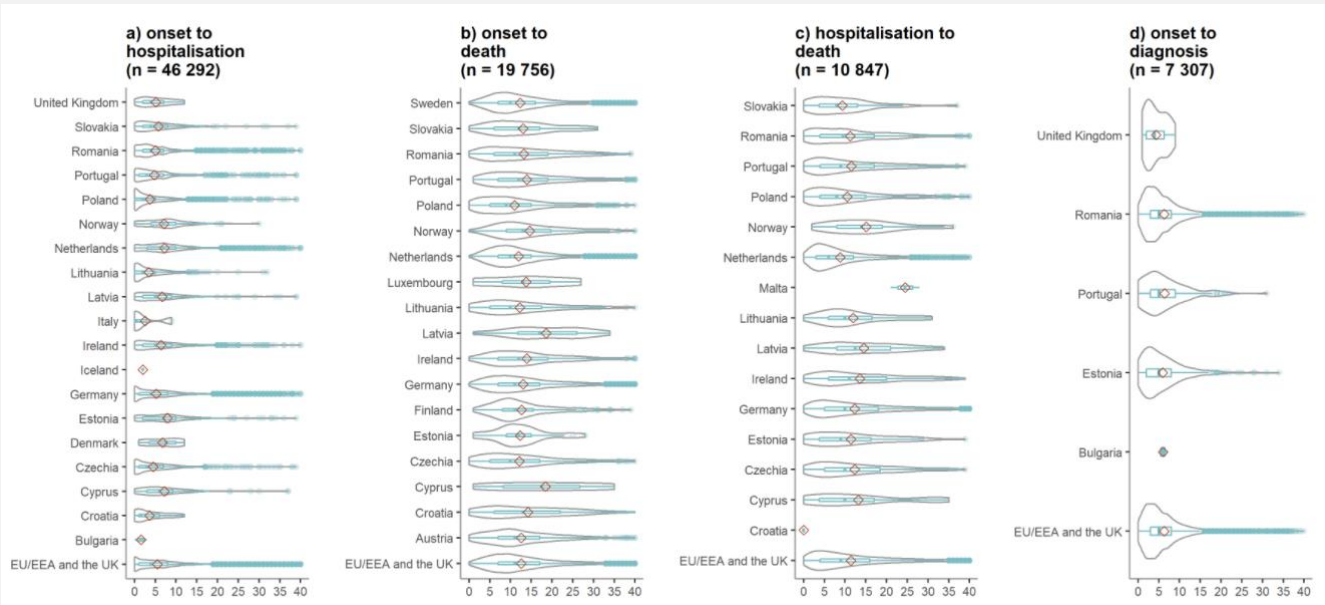
- Hospital and/or ICU occupancies and/or new admissions due to COVID-19 have recently increased in Austria, Croatia, Czechia, France, Greece, Hungary, Latvia, Slovakia and Slovenia. No other increases have been observed, although data availability varies.
- Based on surveillance data reported to TESSy by 22 countries to date, we estimate that 22% (country range: 3–60%) of reported COVID-19 cases have been hospitalised. Data from 17 countries show that a total of 9% (country range: 0–62%) of hospitalised patients required ICU and/or respiratory support. These proportions vary considerably by age and sex and may be influenced by national policies and practices.

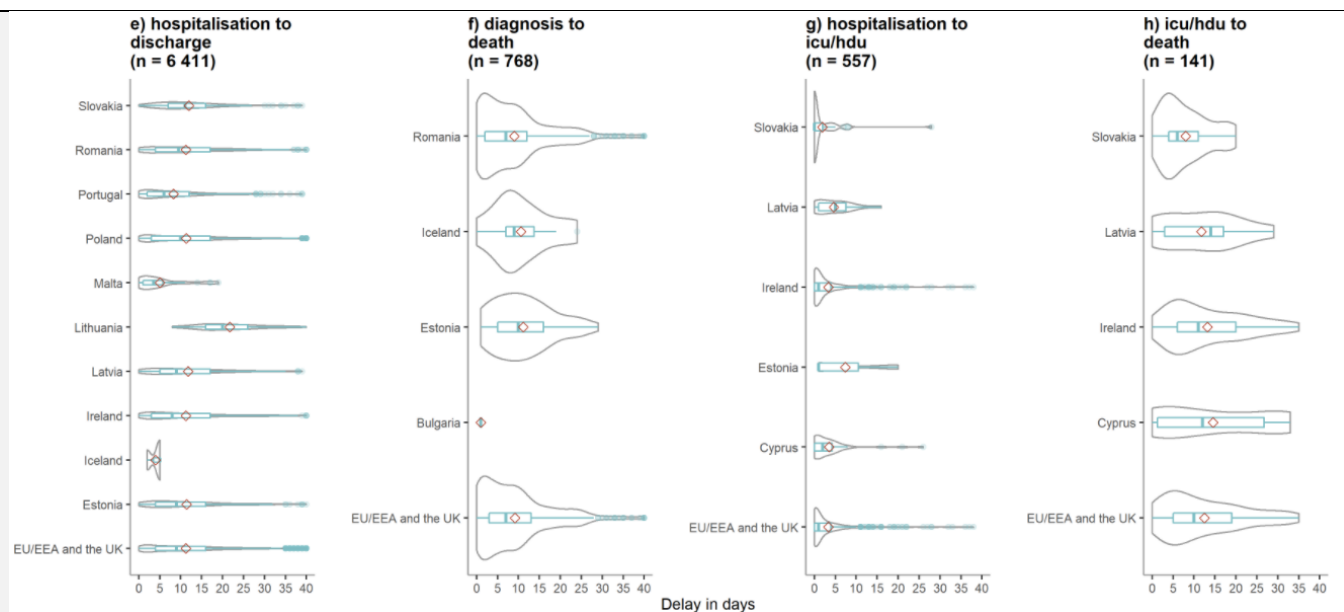
Mortality

- The 14-day COVID-19 death rate for the EU/EEA and the UK, based on data collected by ECDC from official national sources, was five (country range: 0–30) per million population. The rate has been stable for 72 days.
- High levels (at least 10 per million) or sustained increases (for at least seven days) in the 14-day COVID-19 death rates compared to those reported seven days ago are currently being observed in five countries (Bulgaria, Croatia, Malta, Romania and Spain).
- Overall pooled estimates of all-cause mortality reported by EuroMOMO show normal levels for the participating countries. However, in some countries there seems to be a small excess mortality.

Country-specific distribution of duration of disease progression stages from onset to outcome, EU and UK

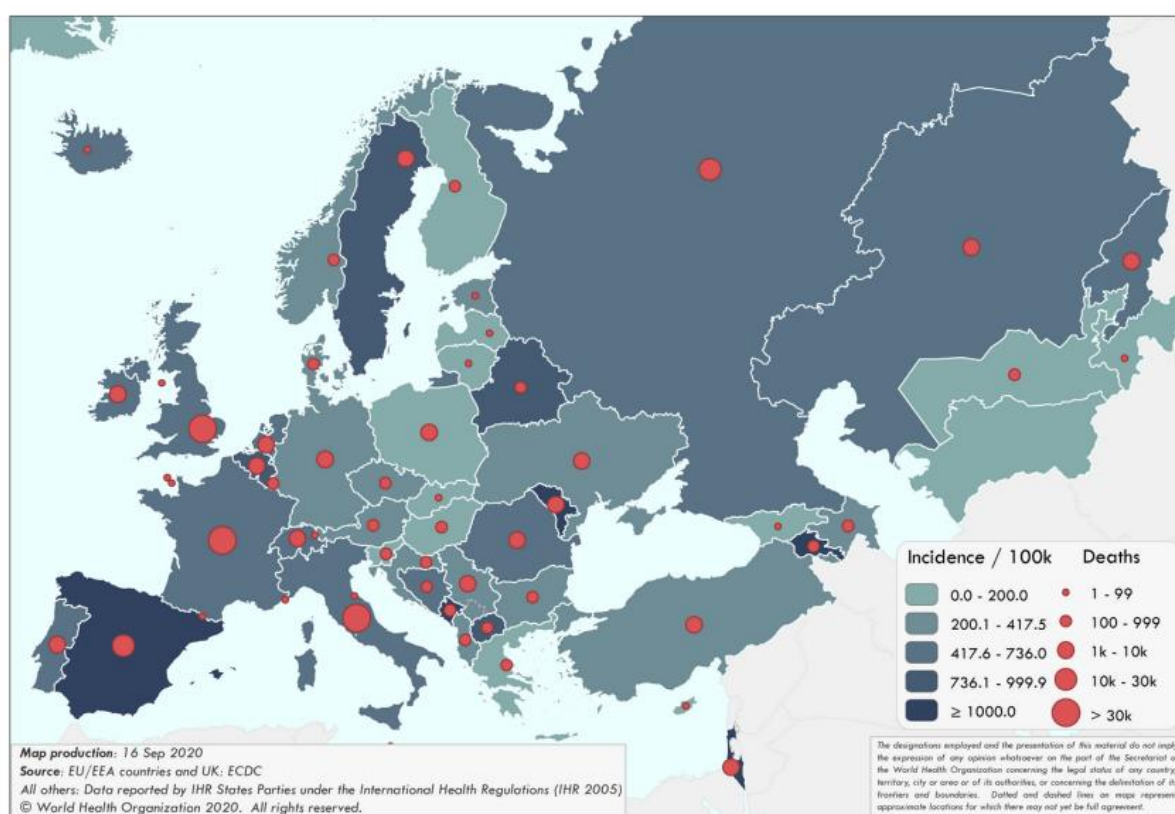
The figures below show the time in days between date variables in TESSy to give an indication of the distribution, by country and by age, of the times for different stages of disease progression or case management. Negative delays, which were likely introduced through errors in data entry, have been censored.





COVID-19 situation update for the WHO European Region (7 – 13 September 2020 Epi week 37)

Figure 2B. COVID-19 cumulative incidence per 100,000 population and number of deaths by country



Key points

Week 37/2020 (7 - 13 Sep 2020)

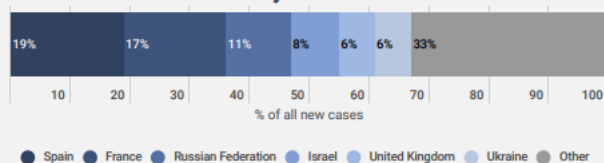
- The number of cases reported in the Region increased 20% to 329,484 in week 37/2020 compared to the previous week (274,885 cases in week 36/2020) and have now exceeded those reported when the pandemic first peaked in Europe in week 14/2020 (30 Mar - 5 Apr; 265,037)
- 67% (220,773) of the cases reported in week 37/2020 were reported from six countries: Spain (19%; 62,846), France (17%; 56,205), the Russian Federation (11%; 37,306), Israel (8%; 24,965), the United Kingdom (6%; 21,010) and Ukraine (6%; 18,441). The remaining cases (33%; 108,711) were reported by 52 countries and territories; each accounted for <5% of the total cases reported in week 37/2020
- Seven countries had a crude incidence of ≥ 70 per 100,000 in week 36/2020: Andorra, Czech Republic, France, Israel, Montenegro, Republic of Moldova and Spain
- The crude incidence continues to vary across the region with a range from 1.3 per 100,000 population in Cyprus to 293 per 100,000 population in Israel in week 37/2020 (Figure 2A)
- The 14-day cumulative incidence increased by $\geq 10\%$ in week 37/2020 in 25 countries and territories in the Region, however for some countries data was retro-adjusted by national authorities: Andorra, Austria, Belarus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Hungary, Ireland, Israel, Italy, Latvia, Luxembourg, Montenegro, Netherlands, Norway, Portugal, Slovakia, Slovenia, Switzerland, Turkey, Ukraine, and the United Kingdom (see [EURO COVID-19 Dashboard](#) for recent trends)
- The number of deaths in the Region in week 37/2020 increased 5% to 3,214 compared to the previous week (3,072 deaths in week 36/2020) (Figure 1). The proportion of reported cases that died was 1.0% in week 37/2020
- 71% (2,276) of the deaths reported in week 37/2020 were reported by the Russian Federation (24%; 758), Turkey (12%; 379), Ukraine (10%; 332), Spain (10%; 318), Romania (9%; 277) and France (7%; 212). The remaining deaths (29%; 938) were reported from 37 countries and territories; each accounted for <5% of the total deaths reported in week 37/2020
- Community-transmission was reported by 30 countries and territories, 23 countries and territories reported cluster transmission, while 5 countries and territories reported sporadic transmission in week 37/2020 (see [EURO COVID-19 Dashboard](#))
- For an interactive subnational view of the recent COVID-19 situation in the WHO-EURO Region see the [WHO-EURO COVID19 Subnational Explorer](#)

Summary overview

- The cumulative cases across the Region increased 7.3% to 4,857,845 cases in week 37/2020 (from 4,528,361 cases in week 36/2020) and cumulative deaths increased by 1.4% to 225,941 deaths (from 222,727 deaths in week 36/2020)
- As of 23 August 2020, ten countries in the Region had an effective reproductive number significantly over 1: Azerbaijan, Belarus, Czech Republic, France, Hungary, Israel, Italy, Monaco, Portugal and Slovakia (See [EpiForecasts and the CMMID COVID working group COVID-19 Global Summary](#) for latest estimates)
- Seven countries in the Region each reported a cumulative incidence of ≥ 1000 cases per 100,000 population: Andorra, Armenia, Israel, Luxembourg, Montenegro, Republic of Moldova and Spain (Figure 2B)
- As of week 37/2020, 66% (3,226,600) of cumulative cases were reported from the Russian Federation (22%; 1,062,811), Spain (12%; 589,344), France (8%; 373,911), the United Kingdom (8%; 365,174), Turkey (6%; 289,635), Italy (6%; 286,297) and Germany (5%; 259,428). The remaining cases (34%; 1,631,245) were reported by 54 countries and territories; each accounted for <5% of the total cases reported until week 37/2020
- As of week 37/2020, 69% of cumulative deaths (156,613) were reported from the United Kingdom (18%; 41,623), Italy (16%; 35,603), France (14%; 30,910), Spain (13%; 29,899) and the Russian Federation (8%; 18,578). The remaining deaths (31%; 69,328) were reported by 52 countries and territories; each accounted for <5% of the total cases reported until week 37/2020
- 15% of cases were in persons aged ≥ 65 years in week 37/2020, a decrease from 38% in week 14/2020, while the percentage of fatal cases aged ≥ 65 years was 71% in week 37/2020 (compared to 91% in week 14/2020) (Figure 3)
- 88% of all deaths with information available were in persons aged ≥ 65 years and 57% of all deaths were in men (Table 1). 95% of all deaths with information available had at least one underlying condition, with cardiovascular disease the leading comorbidity (76%) (Table 1)
- Pooled estimates of all-cause mortality for 24 countries in the [EuroMOMO](#) network show normal levels of excess mortality for the participating countries, however in some countries there seems to be a small excess mortality
- In week 37/2020, six countries reported a total of 351 tests and 28 detections of SARS-CoV-2 (North Macedonia (n=27); Netherlands (n=1)) in persons with influenza-like illness (ILI) in primary care sentinel surveillance. The overall positivity was 8% in week 37/2020 (Figure 4)
- Overall, there were 242,836 (8.6%) COVID-19 cases among the total of 2,821,274 tests reported to have been performed in 20 countries in week 37/2020 (Figure 5)

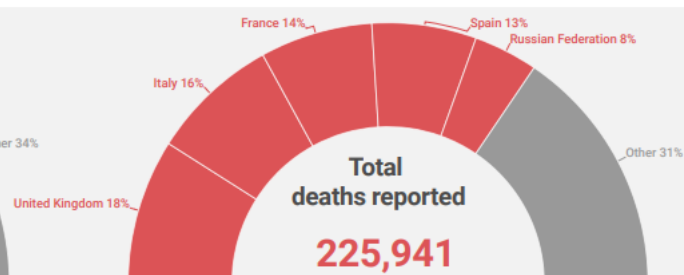
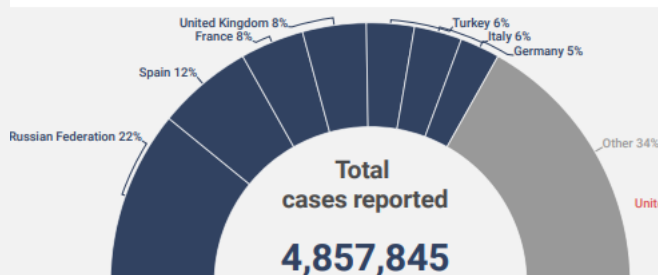
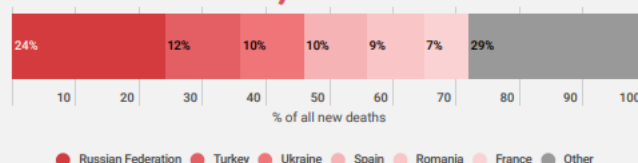
New cases (week 37/2020)

329,484



New deaths (week 37/2020)

3,214



Note: Reported cases and/or deaths from IHR States Parties may be subject to retrospective adjustments.

88%
of all deaths
were in persons aged 65+

57%
of all deaths
were in men

95%
of all deaths
had at least 1 underlying
condition

76%
of all deaths
had cardiovascular disease

Figure 1: Number of COVID-19 cases (N=4,857,845) and deaths (N=225,941) by reporting week

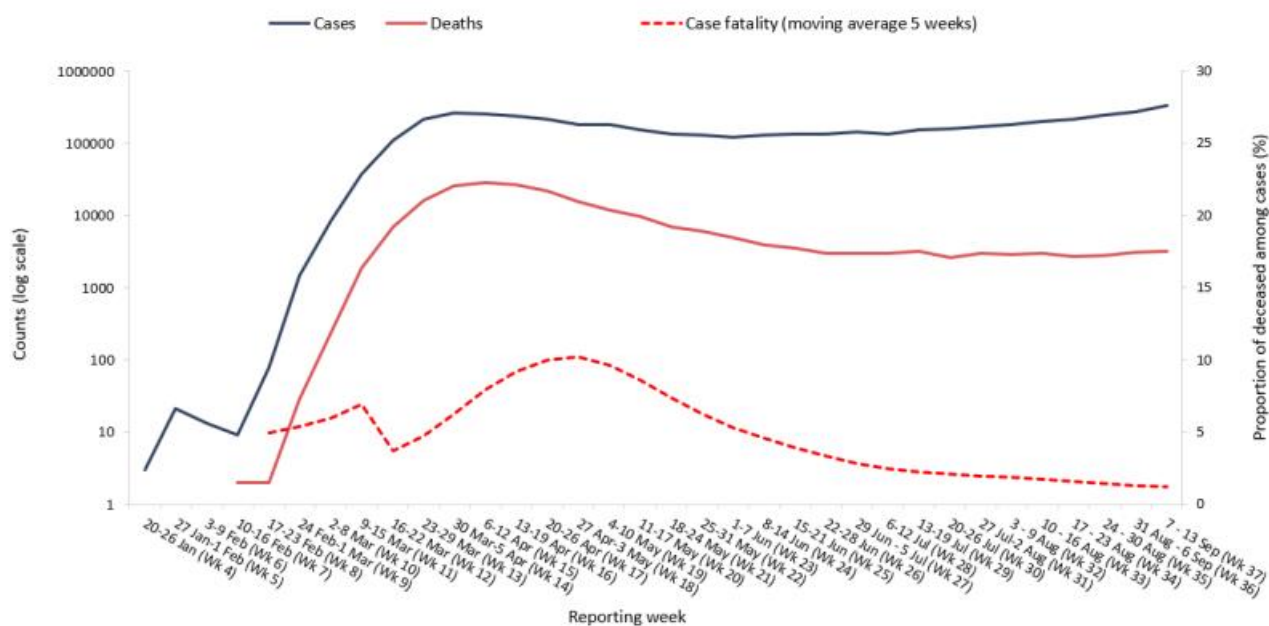
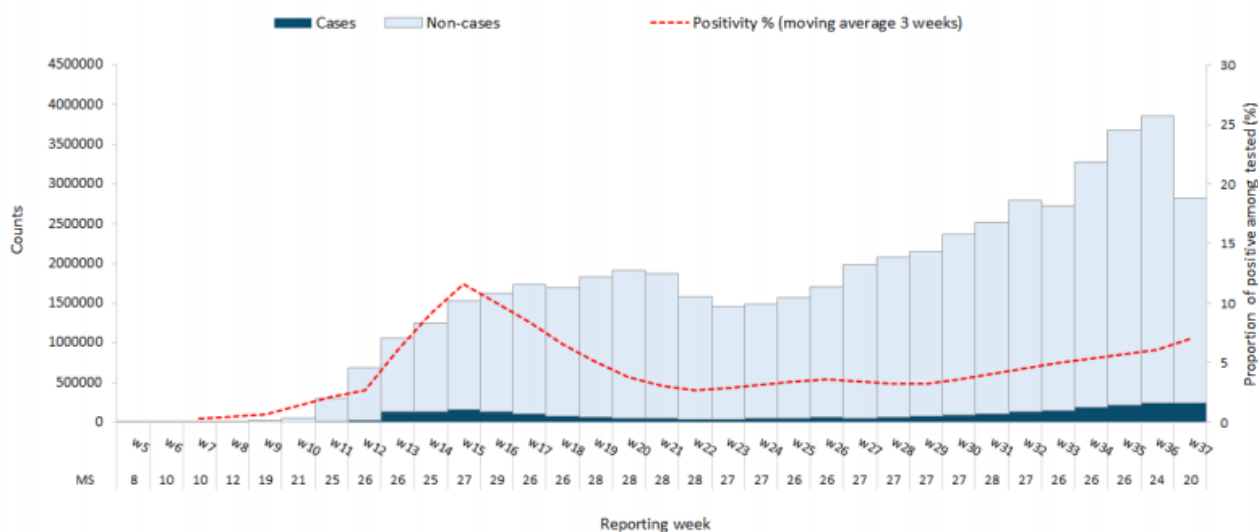


Figure 5. Percentage positive for COVID-19 among all tested by reporting week



Source: Aggregate data from WHO Xmart and TESSy. Note: Member States that report cases only (no testing data) are not included. MS: Member State

Diagnostic testing and screening for SARS CoV-2

Diagnostic specimens

Samples for diagnostic tests for SARS-CoV-2 can be taken from the upper (nasopharyngeal/oropharyngeal swabs, nasal aspirate, nasal wash or saliva) or lower respiratory tract (sputum or tracheal aspirate or bronchoalveolar lavage – BAL). Data comparing the accuracy of RT-PCR testing suggest that test sensitivity may vary by type of specimen. One study suggested that viral RNA levels are higher and RNA is more frequently detected in nasal specimens as compared to oral specimens, however this finding was based on a small number of nasal swabs tested. A COVID-19

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investigation team in the US comparing 117 pairs of nasopharyngeal and oropharyngeal specimens from 12 patients simultaneously, found that 32 pairs were discordant with one test positive and the other negative: the nasopharyngeal specimen tested positive in 66% of those pairs compared with 34% for the oropharyngeal specimen. Another study did not show higher viral RNA levels in nasopharyngeal compared with oropharyngeal specimens.

When comparing different types of specimens, preliminary results from a pre-print article not yet peer-reviewed showed that the most accurate sample for the diagnosis of SARS-CoV-2 was sputum, followed by nasal swabs and throat swabs. A meta-analysis of saliva testing studies found 91% (95%CI = 80%-99%) sensitivity for saliva tests and 98% (95%CI 89%-100%) sensitivity for nasopharyngeal swab tests in previously confirmed COVID-19 infected patients, with moderate heterogeneity among studies. Another study showed that saliva was the most appropriate sample for diagnosis of SARS-CoV-2. Saliva offers a non-invasive specimen that can also be considered for self-sampling. In a situation where a nasopharyngeal or other above mentioned specimen is not acceptable, saliva could be considered as an alternative specimen.

The combination of nasopharyngeal/oropharyngeal swab samples proved more sensitive for diagnosis of SARS-CoV-2 compared to nasopharyngeal swab only in three different studies.

Assay types

There are three main types of detection assays relevant for COVID-19 diagnostic testing and screening, based on the target that is being detected:

Nucleic acid tests detect the presence of viral RNA. Typically, these use an amplification step based on RT-PCR.

Antigen tests detect the presence of a viral antigen, typically part of a surface protein.

Antibody tests detect the presence of antibodies generated against SARS-CoV-2. The three most used assays are enzyme-linked immunosorbent assays (ELISA), chemoluminescence assays (CLIA) and lateral flow assays (LFA). In addition, virus neutralisation tests are used, which can specifically detect neutralising antibodies, but this is mainly used for assay validation and research. Preliminary reports on ELISA assays have shown good correlation of antibody titration results with virus-neutralising antibodies.

Apart from these main detection assays, whole genome sequencing can also be performed to determine the sequence of the SARS-CoV-2 virus in a sample, with possible quasi-species variants.

In-house tests versus in vitro diagnostic medical devices

In-house tests are non-commercial in vitro test methods performed in laboratories, following a scientifically published protocol after internal performance verification, in accordance with their quality assurance system based on international clinical laboratory quality standards. In-house real-time reverse transcription polymerase chain reaction (RT-PCR) test methods targeting SARS-CoV-2 viral RNA are the gold standard in vitro methods for diagnosing suspected cases of COVID-19. These PCR tests can be automated by using robotic molecular platforms for high-throughput batch processing of clinical specimens.

In vitro diagnostic medical devices (IVDs) are commercial kits or systems that must be affixed the CE-IVD label to be placed on the EU market. The IVD Directive 98/79/EC defines an 'in vitro diagnostic medical device' as any medical device which is a reagent, reagent product, calibrator, control material, kit, instrument, apparatus, equipment, or system, whether used alone or in combination, intended by the manufacturer to be used in vitro for the examination of specimens, including blood and tissue donations, derived from the human body, solely or principally for the purpose of providing information, in the COVID-19 context, concerning a physiological or pathological state, or to monitor therapeutic measures. The 'intended purpose' of IVD means the use for which the device is intended according to the data supplied by the manufacturer on the labelling, in the instructions for use and/or in promotional materials. According to IVD Directive 98/79/EC Article 9 on conformity assessment procedures, for COVID-19 diagnostic devices that are not intended for use as self-tests, the manufacturer shall, in order to affix the CE marking, draw up the EC declaration of conformity required before placing the devices on the market. This is a self-declaration procedure based on satisfying essential safety and performance requirements listed in the Directive and specifications of the device performance characteristics, stated by the manufacturer. In case of self-tests, involvement of a third-party conformity assessment body is necessary. The performance of point-of-care and rapid diagnostic test devices put on the EU market with CE label may vary in the laboratory in comparison to the performance study of the manufacturer done for the purposes of CE-marking. There are several hundreds of CE-marked

IVDs for COVID-19 virus or antibody detection: independent evaluation of their diagnostic accuracy is ongoing.

Intended use

Diagnostic testing for COVID-19 by viral RNA or protein detection in respiratory specimens supports decision making for clinical, infection control or public health management. SARS-CoV-2 detection for diagnosis of patients with COVID-19-like symptoms is essential for patient care, triage and isolation in healthcare facilities.

SARS-CoV-2 detection can also be used for screening close contacts for asymptomatic infection and disease as part of contact tracing or outbreak investigations. Testing is also used to screen for infection in crucial target groups like healthcare and social workers as part of local surveillance programmes. This is especially important for prevention and early control of viral transmission to vulnerable persons living in closed institutions such as long-term care facilities.

Apart from real-time use for medical or public health case management and transmission control, virus detection tests are used for policy-oriented surveillance purposes to monitor the epidemiologic situation in terms of incidence and prevalence of infection and disease. This use includes prevalence surveys and sentinel surveillance programmes in the community, primary care or hospital care patient populations.

Antibody tests currently have limited diagnostic use. They can be used as a complement to the virus detection tests for patients presenting late after symptoms onset to healthcare facilities and where virus detection tests are negative despite strong indications of infection. In addition, they can potentially be used for informing the decision on discharge of patients who recovered from SARS-CoV-2 infection but remain RNA-positive by RT-PCR for a long time after symptoms have subsided. The degree of protective immunity conferred by or correlated with the antibodies detected in subjects with past SARS-CoV-2 infection is still under investigation. Once this is clarified, such antibody tests could be, together with the direct virus detection, an essential tool in de-escalation strategies. Currently antibody tests are used for sero-epidemiological surveys and studies.

Rapidity and point of testing

Two other important aspects of detection assays are their rapidity and ease of use. The common technical specifications for in vitro diagnostic medical devices (IVDs, Commission Decision 2002/364/EC) define rapid tests as qualitative or semi-quantitative IVDs, used once or in a small series, which involve non-automated procedures and have been designed to give a fast result. Typically, rapid tests can be performed under 30 minutes.

Tests that can be performed at the point-of-care, by less specialised personnel, are called point of care tests (POCTs). POCTs are normally rapid tests as well.

When rapid antigen tests are well-validated, they may be considered for the rapid diagnosis of infected patients. However, these tests tend to have lower sensitivity than RT-PCR, and therefore a negative rapid test may not be able to rule out infection. They may be useful during an ongoing outbreak, when timely access to sensitive molecular testing is unavailable, but a negative result should be interpreted by a healthcare professional with caution and based on clinical judgement.

Diagnostic accuracy and validation

The Commission has published a working document which proposes a tentative definition of COVID-19 diagnostic test performance criteria and has reviewed publically available data on the performance of CE-marked commercial IVD tests. These criteria include analytical sensitivity, analytical specificity, clinical sensitivity and clinical specificity. As a follow-up of this document, the European Commission is collating, in a searchable database, the manufacturer data of CE-marked commercial IVD tests and reviewing in-house laboratory-developed tests with performance data in scientific publications.

A large number of commercial detection assays for SARS-CoV-2 RNA or antigen and serological assays for SARS-CoV-2 specific antibodies are being placed on the market or are potentially exportable to EU countries with CE-IVD marking. However, information on their clinical performance is still limited and further scientific validation of their diagnostic accuracy, i.e. clinical sensitivity and specificity, is a priority. This must be performed in real-life prospective cohort studies of the intend-to-test patient or general population. The [Foundation for Innovative New Diagnostics \(FIND\)](#), WHO Collaborating Centre for Laboratory Strengthening and Diagnostic Technology Evaluation, has received over 600 manufacturers' submissions for IVDs, and has been performing independent clinical evaluations in a few FIND collaborating hospitals on a subset of them. ECDC has been collecting

clinical performance data on commercial assays since 1 April from Member States' laboratories willing to share such information with each other.

WHO experts, through the Emergency Use Listing procedure (EUL), shortlist molecular detection assays based on manufacturers' data as suitable for emergency procurement prior to full clinical validation and pre-qualification.

Biosafety

On 3 June 2020 the Commission adopted Directive (EU) 2020/739 [16] updating the Biological Agents Directive 2000/54/EC with classification of SARS-CoV-2 as risk group 3 in the Annex III- list of biological agents. In line with Article 16(1)©, and in accordance with WHO interim recommendations on laboratory biosafety for COVID-19 laboratory procedures, non-propagative diagnostic laboratory work involving SARS-CoV-2 should be conducted at a facility using procedures equivalent to at least containment level 2. Propagative work (virus culture, neutralisation assays) involving infectious SARS-CoV-2 should be conducted at a containment level 3 laboratory with air pressure negative to atmosphere.

Testing capacity and methodologies

As part of the Joint European Roadmap towards lifting COVID-19 containment measures, the European Commission has issued Guidelines on COVID-19 in vitro diagnostic tests and their performance. These guidelines assess both what information different types of tests can deliver for medical and public health decision-making and how to validate that the test performance is fit for purpose. To foster scaling up of the testing capacity and ensure adequate quality of tests across the EU, the Commission has undertaken a number of actions including:

- an assessment of common approaches in national testing strategies;
- the discussion of best practices and development of guidance on performance evaluation and conformity assessment of tests;
- the provision of reference materials and common methods for the comparison of devices;
- the sharing of information on the performance of tests;
- additional dialogue with industry and national competent authorities;
- support in the fight against counterfeit devices;
- coordination of supply and demand;
- ensuring the fair distribution of laboratory supplies between Member States.

In this context, ECDC contributes to capacity building and test validation efforts by mobilising the knowledge and experience from Member States within the European networks of public health experts and reference laboratories. ECDC coordinates a COVID-19/SARS-CoV-2 network which includes laboratory experts and discusses key laboratory aspects on a regular basis within the network. In close collaboration with WHO and WHO referral laboratories, ECDC is organising external quality assessment exercises and facilitating exchange of information on test performance between Member States' public health laboratories from the COVID-19 laboratory network.

Despite shortages of consumables in the past, testing capacity for virus detection has rapidly expanded in EU/EEA countries by the roll-out of PCR-based diagnostics from central public health laboratories to regional and local diagnostic laboratories and the use of high-throughput automated molecular testing platforms. However, additional capacity for much larger scale testing with rapid commercial tests, once such tests are validated to have adequate performance for infection detection, will most likely be necessary to fully meet the operational needs for COVID-19 control in the forthcoming months.

ECDC proposes five primary objectives when testing for COVID-19:

To control overall transmission of the disease.

Monitor transmission rates and
severity of the disease.

Ease the impact of COVID-19 in
hospitals and care homes.

Detect clusters or outbreaks of
the disease in specific settings.

Prevent a recurrence of
COVID-19 once it has been
brought under control.

#COVID19



Population-wide testing of SARS-CoV-2: country experiences and potential approaches in the EU/EEA and the United Kingdom

Key messages

Different population-wide testing approaches have already been used in various countries, including household testing, individual testing and the testing of incoming travellers, irrespective of whether or not they are displaying symptoms.

Factors that need to be considered prior to implementation of any population-wide testing strategy which is to include all individuals are the epidemiological situation, costs, logistics, technical feasibility, resource availability, contact tracing capabilities, barriers to testing, potential false positivity and timely notification.

Population-wide testing strategies can complement other public health measures and are more effective when paired with case isolation and contact tracing.

Eastern Europe: Poland has registered more new corona cases than ever since the beginning of the pandemic. On Saturday, the authorities recorded 1,002 new infections within 24 hours.

After Poland, alarming numbers of infections are reported from other parts of Eastern Europe. 290 new corona cases were reported in **Slovakia** on Saturday. So far more than 6,500 infections have been detected in the country with 5.4 million inhabitants. "The situation has become critical".

In **Lithuania**, the number of corona infections rose by 99 to more than 3,600 on Saturday. The **Czech Republic** reported a record of 3,130 new infections on Friday. On Saturday there were a good 2,100 new cases. For **all of these countries** these are new record highs of daily new infections.

FRA: In the fight against the rising Corona numbers, more and more cities and departments in France are imposing stricter rules. From Monday, dance evenings, aperitifs and drinks are prohibited in the Indre-et-Loire department in the center of the country. Bars without seating in closed rooms must remain closed. Toulouse, Nice, Bordeaux and Marseille have already introduced similar rules. The French health authorities reported a new high of 13,498 new infections within 24 hours on Saturday evening. In the past seven days, 3,853 COVID-19 patients were hospitalized, 593 of them in intensive care units.

NDL: In Amsterdam, Rotterdam and other large cities in the Netherlands, protective precautionary measures against the coronavirus are being tightened. In a total of six particularly affected regions, restaurants will no longer be allowed to let in new guests after midnight and will have to close at 1 a.m., as the government announced in The Hague on Friday. The measures will come into force on Sunday evening. From then on, celebrations with more than 50 people are prohibited. This also applies to outdoor celebrations. The authorities in Amsterdam also ordered that the parks have to be closed at night to prevent illegal parties.

ESP: In Madrid, drastic restrictions of the freedom of movement are imposed again to contain the outbreak situation. Residents of a number of neighborhoods are only allowed to leave their homes when they go to work, to the doctor or when they bring children to school. Around 850,000 people are affected – around 13 percent of the city's 6.6 million inhabitants.

GBR: Anyone who violates the Corona rules in England must expect high fines. Anyone who disregards the isolation requirement after a positive corona test or after being asked by the health authorities to go into quarantine, must expect a fine of up to 10,000 pounds (11,000 euros), as the British government announced on Saturday. The new regulations will apply from September 28th onwards.

Citizens who do not go into quarantine after an international trip are also threatened with a fine. The minimum fine for violation of this order is £ 1,000. Repeated or particularly serious violations will result in a charge of up to £10,000. Companies that threaten their employees with dismissal if they comply with the quarantine must also pay the maximum amount.

GRC: According to the government, 243 refugees tested positive for the corona virus on the Greek island of Lesbos. The average age of those infected was 24 years and most cases were asymptomatic.

DEU: The number of cases per 100,000 inhabitants continues to rise throughout Germany. In some cities, including Munich, the restrictions are being tightened, e.g. wearing a mask is now compulsory in Munich's pedestrian zone.

ITA: will require travelers from Paris and several other French areas with high corona infection rates to have a virus test. The situation in Europe should not be underestimated. Italy is doing better today than other countries, but great caution is required.

Visitors from Greece, Malta, Spain and Croatia have had to present a negative Covid-19 test in Italy for a long time - or they can be tested upon arrival. Italy was hit particularly hard by the pandemic at the beginning. Since then, the country has been able to bring infection rates under control. The values have now risen again, albeit not as drastically as in France and Spain.

HUN: From Monday September 21, the new protection measures are introduced in Hungary. Now, in addition to shops and public transport, mask-wearing will be made mandatory in shopping malls, cinemas, theatres, health and social institutions and public offices, while clubs will have to close by 11pm to curb the spread of the virus.

Failure to comply with the mask obligation will result in more severe sanctions. Those who do not wear a mask can be excluded from public transport, and will also be fined with up to HUF 50,000 (EUR 137). The penalty can be even harsher if the person concerned disrupts public transport in the absence of cooperation, in which case police action can be taken against them and they can potentially be detained.

The HUN medical authorities approved the shortening of the duration of the quarantine, it will be 10 days, instead of 14.

Country	Case rate		Death rate		Positivity (%)		Testing rate		65-79yr		80+yr	
	W37	Trends	W37	Trends	W37	Trends	W37	Trends	W37	Trends	W37	Trends
Austria	67.9		2.4		4.6		974		24.1		27.1	
Belgium	78.9		3.1		2.6		1,802					
Bulgaria	24.7		16		3.9		343					
Croatia	86		8.6						33		31.2	
Cyprus	4.6		0		0.1		2,031		3.7		3.1	
Czechia	106.2		3		7.8		917		40.9		45.5	
Denmark	43.3		0.9						22.7		17.4	
Estonia	22		0		1.3		939		13.4		4	
Finland	8.4		0.4		0.4		1,242		1.9		2.3	
France	151.3		4.6		5.4		1,554					
Germany	21.3		0.7						3.2		2.8	
Greece	28.5		3.9		1.7		916					
Hungary	63		1.9		6.3		636		21.9		29.6	
Iceland	17.4		0		0.7		1,004		20.9		8	
Ireland	41		1.2		1.6		1,525		29.8		48.8	
Italy	32.2		2.2		1.7		992					
Latvia	4.6		0.5		0.3		751		1.8		0.9	
Liechtenstein	5.2		0									
Lithuania	16.4		0									
Luxembourg	94.3		0		0.6		8,293		28.1		12.4	
Malta	77.6		10.1		1.6		2,684		93.9		249.4	
Netherlands	65.8		1.7		3.7		1,122		24.3		34.9	
Norway	24.8		0.2		1		1,466		6.5		10.2	
Poland	19.5		4						8.6		11.4	
Portugal	57		4.1		2.7		1,236					
Romania	85.3		30.3		6		736		88.4		81.8	
Slovakia	29.6		0.9		3.3		517					
Slovenia	37		1.4		3		744		17.9		35.1	
Spain	270.7		15.7		10.9		1,317		153.5		202.9	
Sweden	27.4		1.9		1.1		1,395		10.2		17.2	
United Kingdom	48.6		1.9		1.4		2,269		5.1		10.8	
Albania	66.6		19.2									
Bosnia and Herzegovina	119.5		29.9		15.3		396		107.9		150.3	
Kosovo*	75.1		45									
Serbia	14.6		3		0.9		710					
Turkey	27.5		8.7									
Montenegro	289.8		40.2									
North Macedonia	78.4		27.9		9.5		402		76.8		59.4	

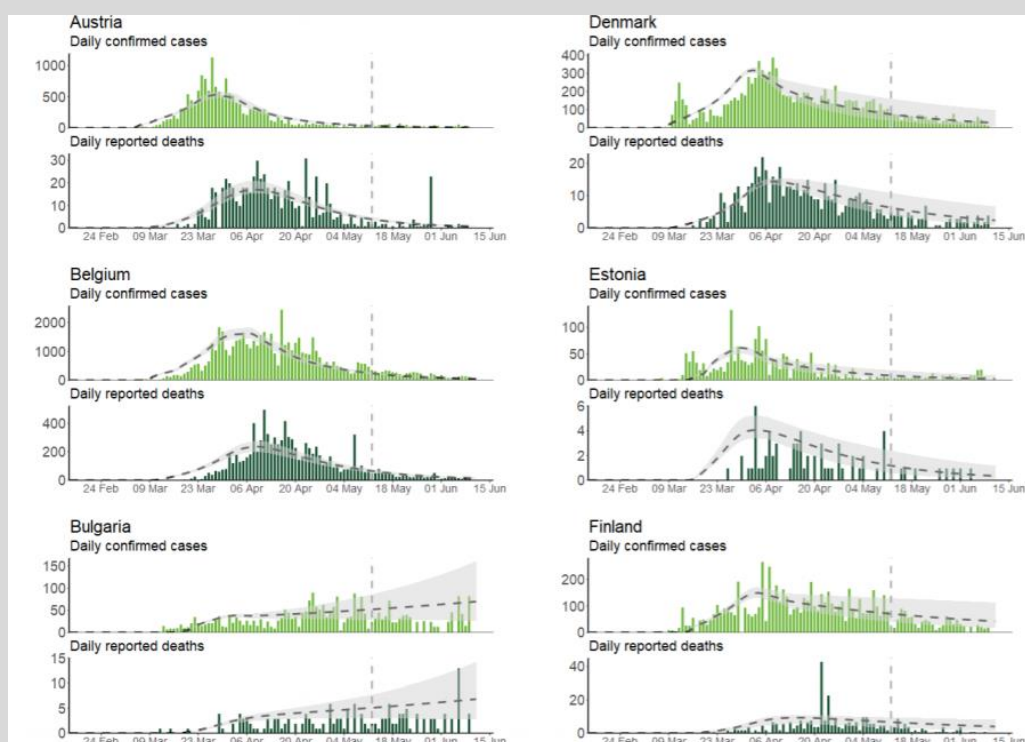
Subject in Focus

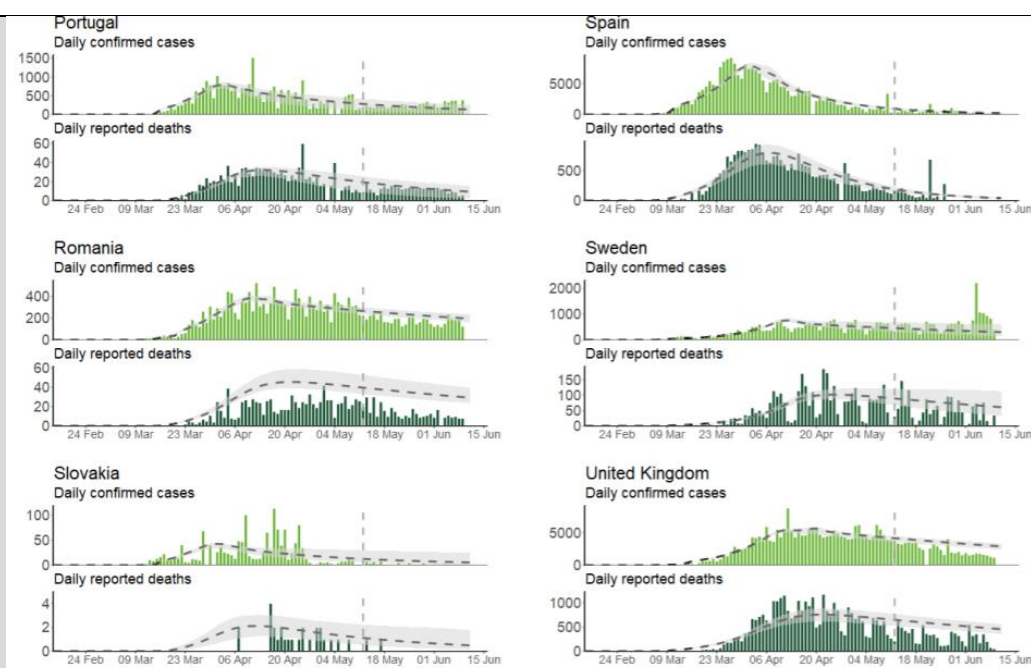
ECDC's September 30 days baseline projections of COVID-19 in the EU/EEA and the UK

The use of mathematical model and simulation techniques is becoming commonplace in certain areas of medical and biological research. Methods based on the mathematical models are particularly valuable for study of situations which are essentially dynamic and for which simplifying steady-state assumption cannot be justified. What is more, the computer simulation can be extremely supportive to understand the current situation as well as to predict the future trends of the emerging diseases spread. Now a day, the SARS-CoV-2 is the causative agent of the current global COVID-19 pandemic, which began in December 2019. The mathematical base analysis of novel coronavirus pandemic development is frequently published by different entities in support of policy making process.

By March 2020, all European Union (EU)/European Economic Area (EEA) countries and the United Kingdom (UK) had implemented a range of non-pharmaceutical interventions in response to the SARS-CoV-2 epidemic. Following an observed reduction in the number of confirmed cases and hospitalisations, almost all subsequently took action to reduce the intensity of these measures. The approach to so-called de-escalation of measures has differed between countries, both in policy and in timing. In May 2020, The European Centre for Disease prevention and Control (ECDC) published baseline projections of the number of confirmed COVID-19 cases and associated hospitalisation and mortality for 30 EU/EEA countries and the UK, with a comprehensive description of the dynamic compartmental model developed to produce the forecasts. After comparing the forecasts of the development of the situation for the next 30 days with the confirmed cases of COVID-19 as of June 9, it can be concluded that the forecasts with the assumed parameters did not differ significantly from the notified situation in individual countries.

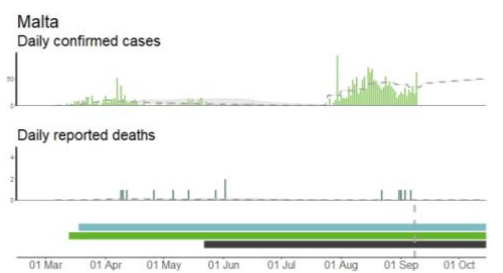
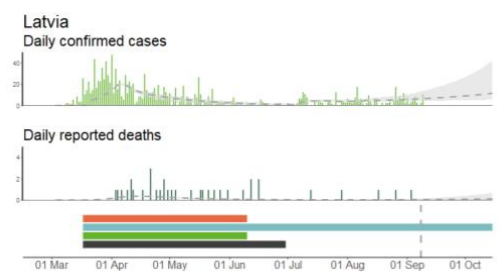
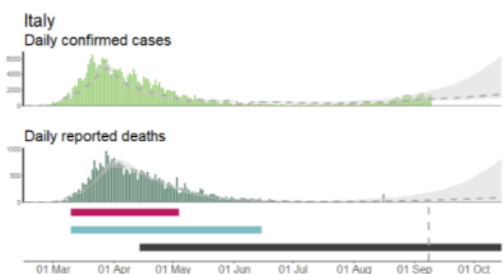
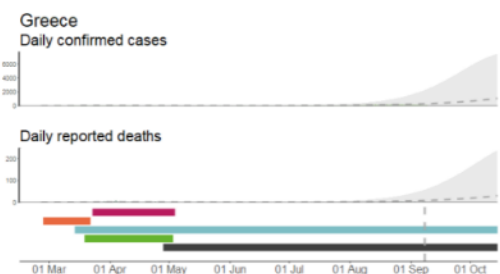
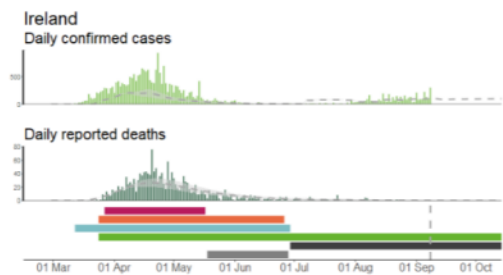
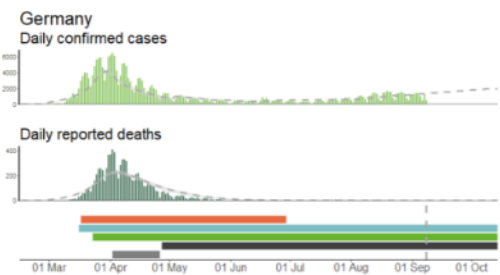
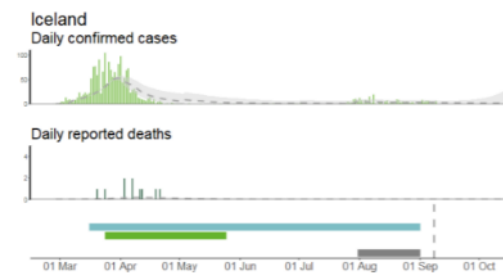
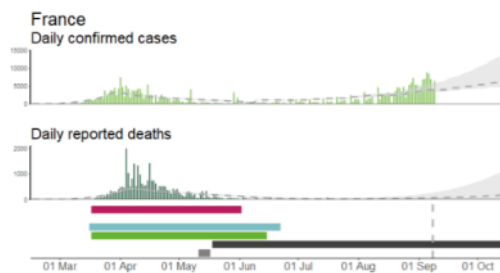
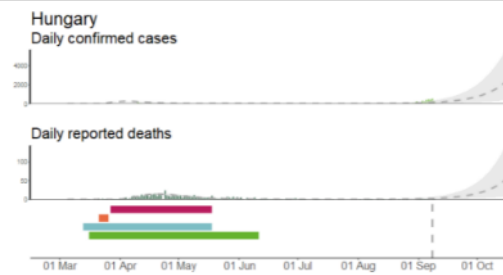
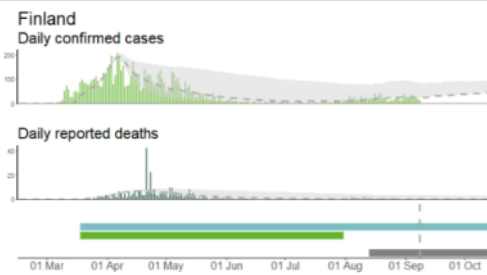
Below are shown examples of comparison of ECDC projections 12 May 2020 with the observed epidemiological data until 9 June 2020 for several EU states.





Since the previous publication of ECDC’s projections in May 2020, additional functionality has been incorporated into the mathematical model. Progresses in functionality have been made in response to changes in countries policy. The use of face masks in the community is now implemented in the model, following the assumption that they limit the number of effective contacts between people by reducing both the probability of infecting others and the probability of being infected. An additional change from the previous simulations is the implementation of population-based testing for COVID-19. The number of diagnostic tests conducted for COVID-19 increased across the EU/EEA and the UK even when the number of hospitalisations was at its lowest level. The updated model incorporates the number of tests conducted over time between 1 June 2020 and 6 September 2020 to account for an increased rate of identification of mild (non-hospitalised) cases. In order to forecast over the 30-day period, has been assumed that the trend in the number of tests conducted in each country over the preceding six weeks will continue over the 30-day period.

Figures show below the projected trend for confirmed cases and deaths (line), plotted against the observed data to date for each country of the EU/EEA and the UK (15 February–14 October 2020). The non-pharmaceutical interventions included in the model are shown in horizontal bars (15 February–8 September 2020). Many EU/EEA countries observed an increased number of confirmed cases in August, following the period of two to three months of low incidence following the introduction of non-pharmaceutical interventions. However, not all these countries have observed an associated increase in the rates of hospitalisation or mortality associated with COVID-19. By incorporating data on the number of tests conducted, and assuming that the rate of severe cases has remained constant over time. In countries that have lifted all non-pharmaceutical measures, often following relatively successful containment of the virus in the early months, the projections show the potential for a larger upsurge of cases later in the year, given that an increase has already been observed. In countries where there has been a rapid increase in the rate of testing but not an increase in hospitalisation, intensive care (ICU) admission and mortality, the model predicts continued higher numbers of confirmed cases. In some cases, this is accompanied by increased hospital use and deaths as a result of higher rates of community transmission following the lifting of measures. Some countries that have kept measures constant over time may expect to see rates of hospitalisation and mortality remaining broadly consistent. The number of confirmed cases can be expected to mirror testing rates in the general population, as more mild cases are identified.



Liechtenstein
Daily confirmed cases



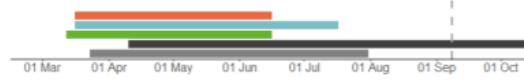
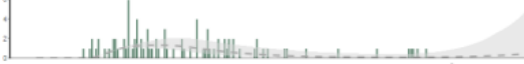
Daily reported deaths



Lithuania
Daily confirmed cases



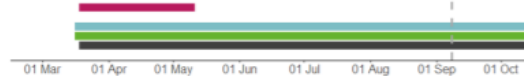
Daily reported deaths



Luxembourg
Daily confirmed cases



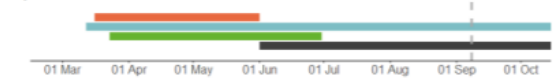
Daily reported deaths



Netherlands
Daily confirmed cases



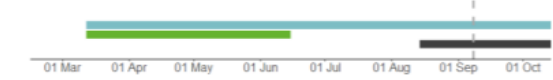
Daily reported deaths



Norway
Daily confirmed cases



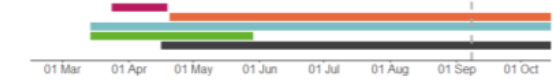
Daily reported deaths



Poland
Daily confirmed cases



Daily reported deaths



Portugal
Daily confirmed cases



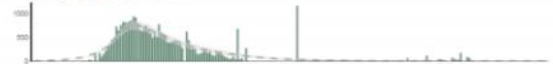
Daily reported deaths



Spain
Daily confirmed cases



Daily reported deaths



Romania
Daily confirmed cases



Daily reported deaths

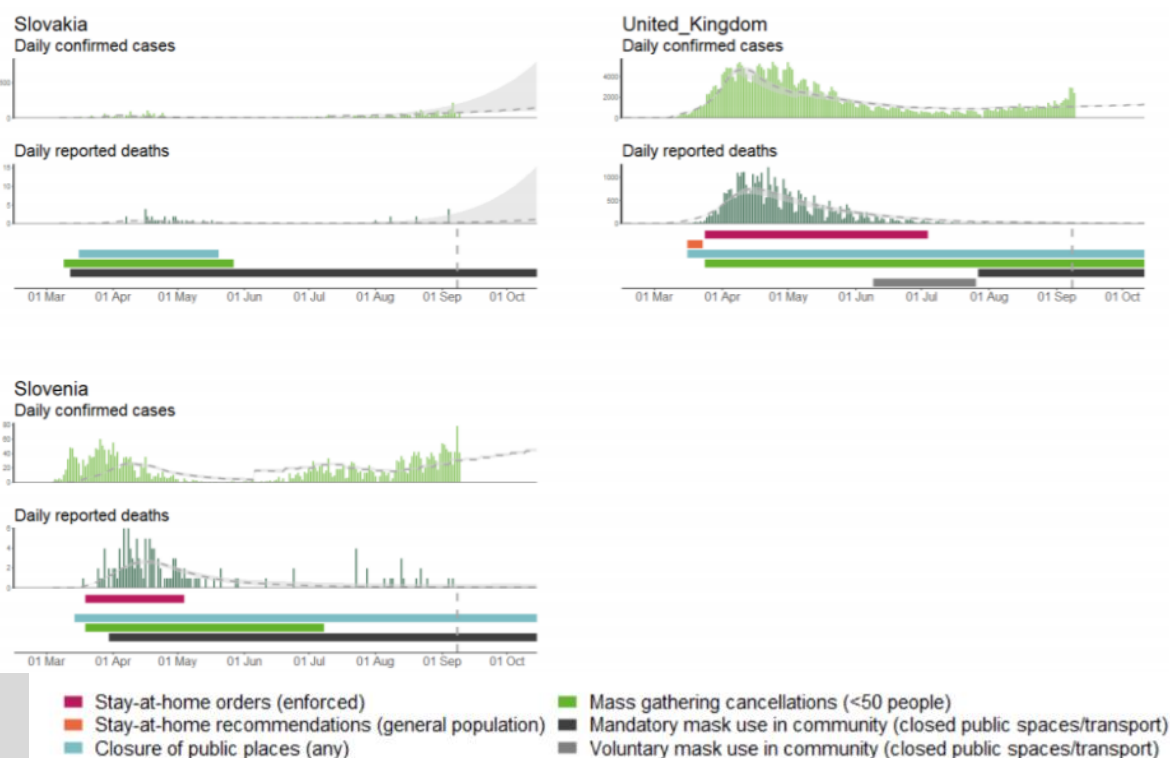


Sweden
Daily confirmed cases



Daily reported deaths





ECDC's model is calibrated to epidemiological data from all EU/EEA countries and the UK, including multiple community and hospital COVID-19 case time series. The model provides 30-day projections of the number of reported cases and deaths, together with the expected requirement for hospital and intensive care (ICU) beds for EU/EEA countries and the UK. These projections illustrate the number of newly reported cases that could be anticipated in countries, under the baseline scenario that the response measures currently implemented are maintained for the coming 30-days. In this analysis, the baseline scenario corresponds to the situation in which all control measures in place on 8 September 2020 will be continued until the end of the projection period (14 October 2020). It is assumed that for a test conducted in hospital or in the community, respectively, the probability of a positive result has not changed over the period since 1 June. It is possible that when tests first became widely available more healthy people would have chosen to be tested even in the absence of COVID19-like symptoms. If so, the positivity rate in population-based tests might have increased over time and it would underestimate the number of mild cases in recent days. The impact of this assumption is mitigated by fitting to data on both number of confirmed cases and hospitalisations. The ECDC has also assumed that testing rates will continue the trend of the preceding six weeks for the 30-day projection period. If testing rates were to plateau, there would be a flattening in the projected trend of the number of confirmed cases. However, the projected rates of hospitalisation, ICU admission and death would not be affected.

The current challenge for the public health community (including modellers and epidemiologists) and policy-makers is to disentangle how much of the increase in observed COVID-19 cases across the EU/EEA and UK is due to increased testing rates in mild cases and how much is due to increased transmission in communities as a result of the de-escalation of measures. Nonetheless, the projections presented here illustrate potential future trends in COVID-19 transmission in EU/EEA countries and the UK.

Source: <https://www.ecdc.europa.eu/en/publications-data/baseline-projections-covid-19-eueea-and-uk-update>

Conflict and Health

COVID-19 Crisis in IRAQ



In cooperation with Bundeswehr HQ of Military Medicine

IRAQ

Area:	438 317 km ²
Population:	38 433 600
Capital:	Baghdad
Age structure:	
0-14 years:	39,01%
15-24 years:	19,42%
25-54 years:	33,97%
55-64 years:	4,05%
65 years and over:	3,55%



Source: Wikipedia; Indexmundi.com

CONFLICT:

With around 38 million inhabitants, IRAQ is one of the five largest countries in the Arab world. The current state emerged in 1920 from three Ottoman provinces that were declared a kingdom in 1921 and were ruled as a republic after a military coup in 1958 and then from 1979-2003 by the dictator Saddam HUSSEIN. Its rule ended in 2003 with the invasion of a US-led coalition, after which the country suffered civil war until 2011. From 2014 onwards, parts of the national territory were conquered by the ISLAMIC STATE, but the Islamists were defeated in 2017. The IRAQ's location in the Middle East, its ethnic composition and its abundance of natural resources do not allow the country to calm down, which is why the IRAQ now regularly ranks in the lower quarter of development indices. An important factor here is the fact that the IRAQ has one of the youngest and fastest growing populations in the world - the population is forecast to double by the middle of the century, which threatens to pose major challenges for the state, the economy and the health system.

The political system of today's IRAQ is characterized by a tripartite division based on ethnic and religious lines, which corresponds to the former Ottoman provinces: Sunni Kurds and Turkmens in the north, Sunni Arabs in the center of the country and Shiite Arabs in the south. So far this has made it difficult to form a common national identity, which leaves room for radical Islamic (from within) and geopolitical (from outside) strivings for power. Since February 2020, the already weakened country has also been hit by the worldwide rampant COVID-19 pandemic.

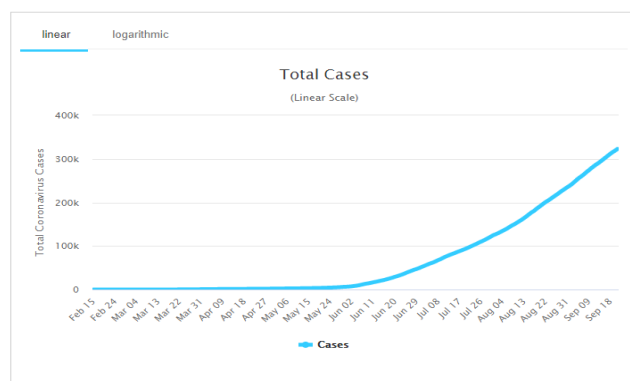
HEALTH/COVID-19 CURRENT SITUATION:

COVID-19 index case was a student in NAJAF from IRAN at the end of February, the first death in March was a 70-year-old cleric from SULAYMANIYAH. To contain the epidemic, nocturnal curfews were imposed and the entry and exit of people and goods severely restricted.

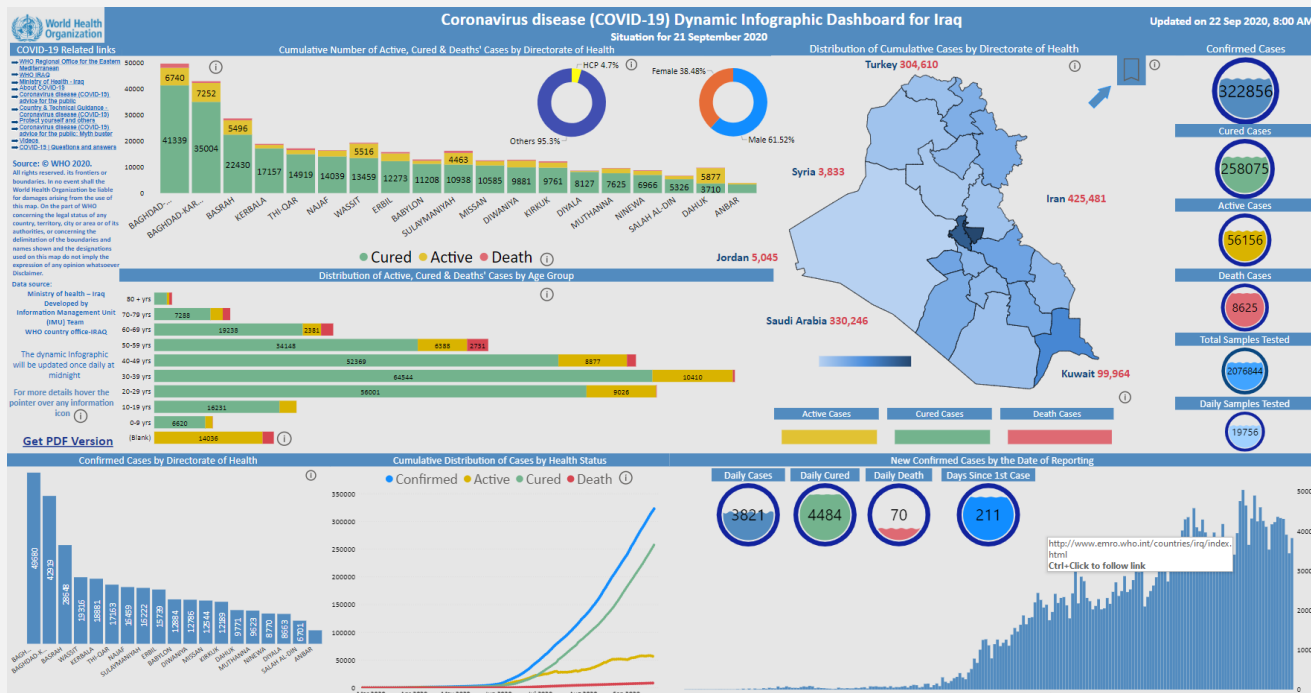
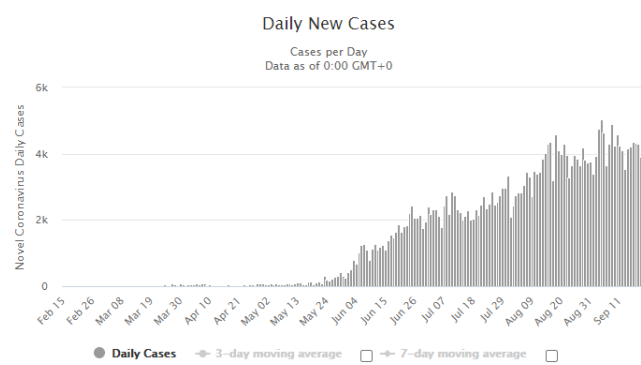
As of 7 April, 28,414 tests have been done in Iraq as a whole (including the Kurdistan Region), with 1202 of them turning out positive. Of those tests, 12,143 were done by the Kurdish Ministry of Health, which means that the other 16,271 were done by the Iraqi Ministry of Health. While 0.25% of the KRG

population has been tested, only 0.05% of the rest of the country has been tested, thus highlighting the possible disparity between total positive case numbers between regions. Over the course of the month, the number of confirmed cases increased sevenfold: from 6,868 on June 1 to 53,708 on July 1. The number of cases continued to grow exponentially. By July 5, there were over 60,000 cases. The number of cases increasing the last 2 months rapidly actually they have 322 856 cases and 8 625 death. The basic reproduction number R_0 has been constant at 1.0-1.2 since the end of July, which still corresponds to an exponential increase in infections. The number of confirmed cases of infection, broken down by governorate, reflects the population distribution of the IRAQ. Cultural customs such as washing the dead, religious festivals or the social stigmatization of illness and quarantine favor the spread in the IRAQ.

Total Coronavirus Cases in Iraq



Daily New Cases in Iraq



The Higher Committee for Health and National Safety held a meeting in Baghdad on Saturday 19/9/2020 review and assess current measures to combat Covid-19.

Following discussions, the Committee decided to:

- Ban the entry into Iraq of visitors from all countries
- Permit the reopening of mosques and houses of worship on condition that they adhere to the preventative measures as directed by the Ministry of Health and follow social distancing rules
- Permit the reopening of public and amusements parks on condition that they adhere to the preventative measures as directed by the Ministry of Health and follow social distancing rules

- Expedite the first payment for the purchase of 20% of the first effective Covid-19 vaccine, and in compliance with the guidelines of the World Health Organization
- Continue to partner with the People's Republic of China and the United Arab Emirates to develop a Chinese Covid-19 vaccine

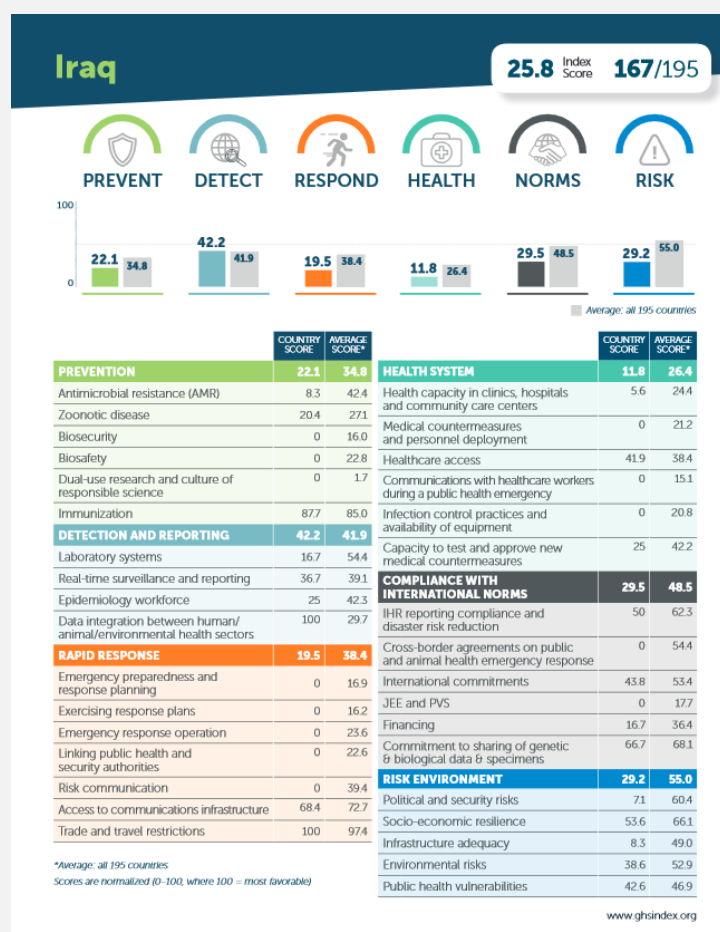
The Committee at its meeting on 7/9/2020 announced a number of other decisions and agreed to:

- Permit youth, sports activities and events in various fields (without the presence of spectators) while adhering to preventive health measures from 12/09/2020
- Allow restaurants, event halls and tourist facilities at five-star hotels to reopen, provided that health preventive measures are put in place as directed by the Ministry of Health

The Committee urged all Iraqis to continue to remain vigilant and to follow the official guidance of the Ministry of Health including adhering to preventive health and social distancing measures.

CONCLUSION:

The IRAQ is considered to be particularly vulnerable to COVID-19 due to its ethno-religious conflicts, past wars and UN sanctions. The country invests only about 6.5% of its GDP in the health sector (DEU: 11.3%, FRA: 11.5%, USA: 17.7%). In view of the weakened health system, the low average age of the population in particular is likely to save the country from higher case numbers.



Source: <https://gds.gov.iq/covid-19/>
<https://coronavirus.iq/>
<https://gov.krd/english/government/entities/moh/>
<http://www.emro.who.int/countries/iraq/index.html>
<http://www.emro.who.int/iraq/iraq-infocus/iraq-covid-19-dashboard.html>
https://de.wikipedia.org/wiki/COVID-19-Pandemie_im_Irak
<https://www.worldometers.info/coronavirus/country/iraq/>

MilMed CoE VTC COVID-19 response

Topic	<p>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.</p> <p>Topics former VTCs:</p> <ul style="list-style-type: none"> • 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 emphasizing 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 • National overview on current COVID-19 situation
National overview on current COVID-19 situation	<p>COVID-19 VTC was remerged 10th September 2020 after the summer break. Starting with the topic "National overview on current COVID-19 situation". Briefers from UK, FRA, ITA, BEL and USA reported on the current situation in the countries.</p> <p>Summary:</p> <ul style="list-style-type: none"> - In all countries case numbers arose over the last weeks - Age distribution shifted to younger people - ICU's seems to be relieved in all countries - Mostly cluster outbreaks occure - Studies about long-term effects are implemented in some countries, up to 20% of infected service people showed after-effects <p>Next VTC will be on Wednesday 23rd of September with the topic "Long term effects of COVID-19 and the impact on force capability"</p>

Recommendations

Recommendation for international business travellers

As of 15th September 2020

Many countries have halted some or all international travel since the onset of the COVID-19 pandemic but now have plans to re-open travel. This document outlines key considerations for national health authorities when considering or implementing the gradual return to international travel operations.

The decision-making process should be multisectoral and ensure coordination of the measures implemented by national and international transport authorities and other relevant sectors and be aligned with the overall national strategies for adjusting public health and social measures. [WHO Public health considerations while resuming international travel.](#)

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.

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.

In the case of non-deferrable trips, please note the following

- Many airlines have suspended inbound and outbound flights to affected countries. Contact the relevant airline for up-to-date information on flight schedules.
- Check your national foreign office advices for regulations of the countries you're traveling or regulations concerning your country.
- Information's about the latest travel regulations and De-escalation strategy measures you can find at [IATA](#) and [International SOS](#). For Europe you will find more information [here](#).

Most countries implemented strikt rules of contact reduction:

- Everyone is urged to reduce contacts with other people outside the members of their own household to an absolutely necessary minimum.
- In public, a minimum distance of 1.5 m must be maintained wherever possible.
- Staying in the public space is only permitted alone, with another person not living in the household or in the company of members of the own household (for most countries, please check bevor traveling).
- Follow the instructions of the local authorities.

Risk of infection when travelling by plane:

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.

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:

- 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;
- 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;
- Refrain from touching mouth and nose; See also: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>
- If masks are to be worn, it is critical to follow best practices on how to wear, remove and dispose of them and on hand hygiene after removal.

- WHO information for people who are in or have recently visited (past 14 days) areas where COVID-19 is spreading, you will find [here](#).

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.

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.

Lifting of travel restrictions: Council reviews the list of third countries

Following a review under the recommendation on the gradual lifting of the temporary restrictions on non-essential travel into the EU, the Council updated the list of countries for which travel restrictions should be lifted. As stipulated in the Council recommendation, this list will continue to be reviewed regularly and updated.

Based on the criteria and conditions set out in the recommendation, as from 8 August member states should **gradually lift the travel restrictions at the external borders for residents of the following third countries:**

- Australia
- Canada
- Georgia
- Japan
- New Zealand
- Rwanda
- South Korea
- Thailand
- Tunisia
- Uruguay
- China, subject to confirmation of reciprocity

Residents of Andorra, Monaco, San Marino and the Vatican should be considered as EU residents for the purpose of this recommendation.

While the restrictions on non-essential travel and their lifting depend on the traveller's place of residence, the visa requirement continues to depend on nationality. If a traveller resides in a country where restrictions have been lifted, but is a national of a visa-required country, he or she must apply at the consulate of the Member State to which he wishes to travel to, in his or her country of residence.

For all other third countries not on this list, Member States and Schengen Associated countries are temporarily suspending all non-essential travel from those third countries to the EU+ area, meaning that only certain categories of travellers could be authorised for entry. The "EU+ area" includes 30 countries: 26 out of the 27 EU Member States as well as the four Schengen Associated States: Iceland, Liechtenstein, Norway and Switzerland. Ireland does not currently apply the travel restriction.

Travel restrictions aim to reduce the number of travellers entering the European Union. The aim is to restrict the spread of the coronavirus and protect public health within the EU, as well as to prevent the virus from spreading from the EU to other countries.

As the epidemiological situation in and outside the EU evolves and travel restrictions at the EU's external borders gradually start to be lifted, visa operations will also resume gradually. On 11 June 2020, the Commission published a Guidance for a phased and coordinated resumption of visa operations.

The rules for applying for a short-stay visa remain unchanged. Member States' consulates and external service providers will, however, have adapted practical aspects of access management, hygiene measures, payment methods etc. Appropriate information on the procedure to follow for lodging an application should be provided to applicants.

Information on travel restrictions in place should be available on the websites of the relevant national authorities (e.g. Ministries of Interior and Foreign Affairs). A daily summary of flight and passenger restrictions is available on the [Eurocontrol website](#) and is entitled 'Covid Notam (notice to airmen) summary'.

Exemption from travel restriction

The following categories of persons are exempt from the temporary travel restriction to the EU+ area from the third countries which are not on the list agreed by the Member States:

- a) Union citizens within the meaning of Article 20(1) TFEU and third-country nationals who, under agreements between the Union and its Member States, on the one hand, and those third countries, on the other hand, enjoy rights of free movement equivalent to those of Union citizens, as well as their respective family members¹⁵;
- b) third-country nationals who are long-term residents under the Long-term Residence Directive or deriving their right to reside from other EU Directives or national law or who hold national long-term visas, as well as their respective family members.

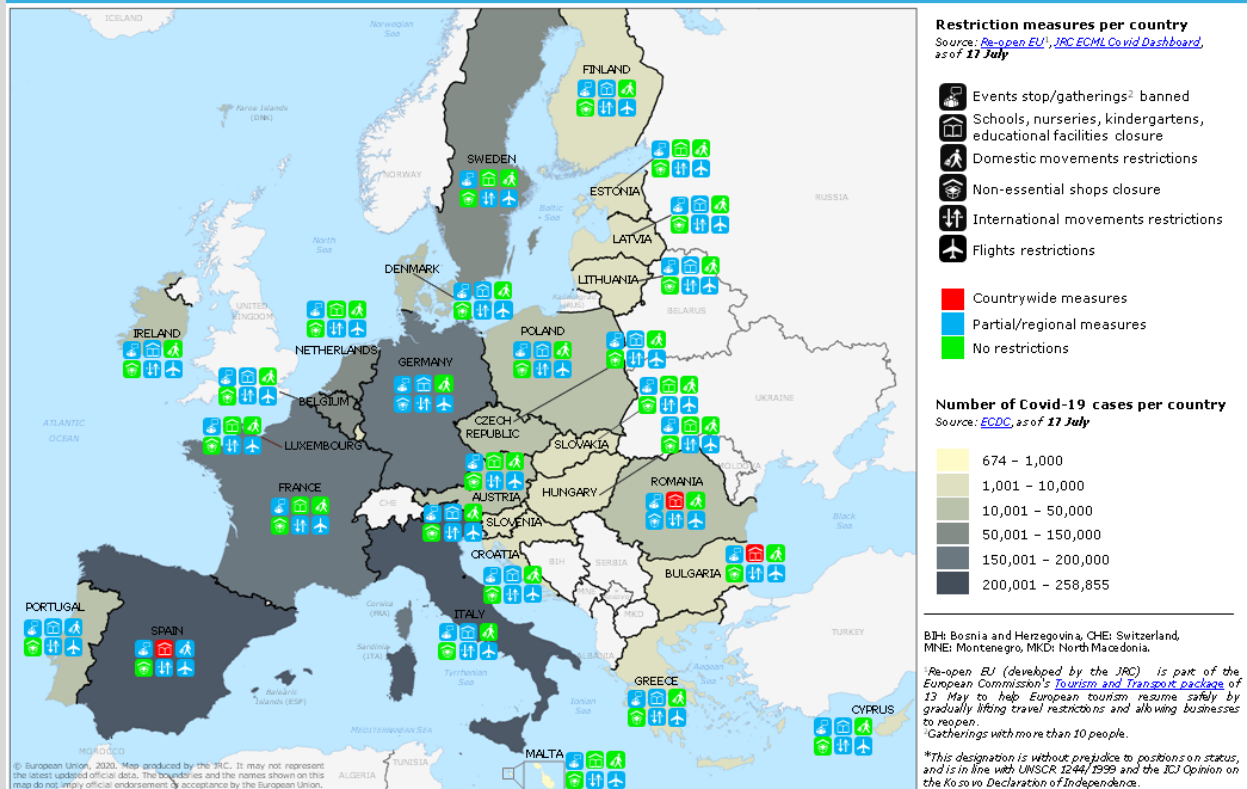
The temporary travel restrictions should also not apply to people with an essential function or need, including:

- healthcare professionals, health researchers, and elderly care professionals
- frontier workers
- seasonal workers in agriculture
- transport personnel
- Diplomats, staff of international organisations and people invited by international organisations whose physical presence is required for the well-functioning of these organisations, military personnel and humanitarian aid workers and civil protection personnel in the exercise of their functions;
- passengers in transit
- passengers travelling for imperative family reasons
- seafarers
- persons in need of international protection or for other humanitarian reasons;
- third-country nationals travelling for the purpose of study;

- highly qualified third-country workers if their employment is necessary from an economic perspective and the work cannot be postponed or performed abroad.

JRC Map 17 July 2020 at 13:00 UTC

European Union (EU27) | COVID-19 restriction measures update



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

Risk Assessment

Global	<ul style="list-style-type: none"> Because of global spread and the human-to-human transmission the moderate to high risk of further transmission persists. Travellers are at risk of getting infected worldwide. It is highly recommended to avoid all unnecessary travel for the next weeks. Individual risk is dependent on exposure. National regulation regarding travel restrictions, flight operation and screening for single countries you will find here. Official IATA changed their travel documents with new travel restrictions. You will find the documents here. 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. 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 As of 10 th of August 2020	<p>ECDC assessment for EU/EEA, UK as of 10 August 2020 (still valid):</p> <p>Risk of COVID-19 across all EU/EEA countries and the UK:</p> <ul style="list-style-type: none"> The risk of further escalation of COVID-19 is moderate for countries that continue to implement and enforce multiple measures, including physical distancing, and have sufficient contact tracing and testing capacity. The risk of further escalation of COVID-19 is very high for countries that do not implement or enforce multiple measures, including physical distancing, and have sufficient contact tracing and testing capacity. <p>Risk of COVID-19 in the countries that have reported a recent increase of cases:</p> <ul style="list-style-type: none"> The risk of further escalation of COVID-19 is high in countries that have also had an increase in hospitalisations, providing a strong indication that there is a genuine increase in transmission occurring. For these countries, the overall risk of escalation is very high if they do not implement or reinforce multiple measures, including physical distancing measures and contact tracing, and have sufficient testing capacity. The risk of further escalation of COVID-19 is high for the countries reporting no increase in hospitalisations but having seen an increase in test positivity (if testing capacity is sufficient and intensity has remained stable), suggesting increasing levels of transmission. For these countries, the overall risk of escalation is very high if they do not implement or reinforce multiple measures, including physical distancing measures and contact tracing. The risk of further escalation of COVID-19 is moderate to high for those countries reporting no increase in hospitalisations or test positivity (if testing capacity is sufficient and intensity has remained stable). The countries that have multiple physical distancing measures in place should conduct local risk assessments to better understand the groups or settings driving the increase in cases and to determine which measures should be in place or strengthened.

References:

- European Centre for Disease Prevention and Control www.ecdc.europa.eu
- World Health Organization WHO; www.who.int
- Centres for Disease Control and Prevention CDC; www.cdc.gov
- European Commission; https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/travel-and-transportation-during-coronavirus-pandemic_en
- Our World in Data; <https://ourworldindata.org/coronavirus>
- Morgenpost; <https://interaktiv.morgenpost.de/corona-virus-karte-infektionen-deutschland-weltweit/>

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