



Update 83 COVID-19 Coronavirus Disease 15 September 2021



GLOBAL

225 947 904
Confirmed cases
211 900 000 recovered
4 650 278 deaths

USA

(7-days incidence 323,9)
41 167 722
confirmed cases
38 050 000 recovered
660 654 deaths

India

(7-days incidence 17,0)
33 289 579
confirmed cases
32 260 000 recovered
443 213 deaths

Brazil

(7-days incidence 50,4)
21 019 830
confirmed cases
21 120 000 recovered
587 797 deaths

News:

- **WHO:** [Cases of cholera have been confirmed](#) in Ansongo, a small town in the **Gao Region** of eastern Mali as of the 13 September 2021.
- **WHO:** Again issued an urgent call for vaccine equity globally and in Africa in particular. The worst pandemic in the last hundred years will not end unless and until, there is genuine global cooperation on vaccine supply and access. There is still the need to conclude the WHO's global vaccination target for 70% of the population of all countries to be vaccinated by mid- 2022.
- **WHO:** Announce the [5th infodemic management conference](#) that will be held between 2 - 11 November 2021. This conference will bring together global experts over four sessions for discussions about quantifying the impact of the infodemic on public health, and the effectiveness of measures to mitigate the infodemic.
- **COVAX:** published a [joint statement on supply forecast](#) for 2021 and early 2022.
- **WHO:** announced a [joint statement calling on governments to facilitate access to medicines containing controlled substances in emergency settings](#), including during pandemics and the increasing number of climate-related disasters.
- **The Global Laboratory Leadership Programme:** has released its new learning package that includes a GLLP Planning and Implementation Guide, Mentorship Guide and virtual and in-person course materials including PowerPoint presentations, and instructor and participant guides.
- **CDC:** had published an early release of a paper concerning: "[Monitoring Incidence of COVID-19 Cases, Hospitalizations, and Deaths, by Vaccination Status](#)".

Topics:

- Global situation
- European situation
- Vaccination news
- SARS-CoV-2 VOIs and VOCs
- Subject in Focus: Boostering the vaccination
- COVID-19 in children and adolescents
- Other Infectious Disease Outbreaks
- NATO Member State: Summary of information on the individual national Corona restrictions
- Travel Recommendations and other useful Links

After Delta became the most common variant,*
fully vaccinated people had reduced risk[†] of...



Vaccination offers strong protection against COVID-19

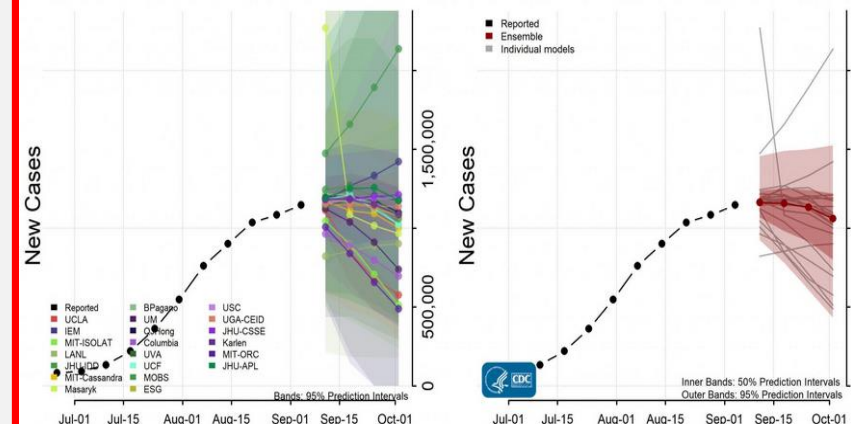


bit.ly/MMWR91021

* June 20-July 17, 2021
† Compared with people not fully vaccinated



National Forecast USA



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EUROPE

64 010 874
confirmed cases

60 450 000
recovered
1 258 451 deaths

GBR

(7-days incidence 341,2)

7 282 814
confirmed cases

6 597 000 recovered
134 446 deaths

Russia

(7-days incidence 85,8)

7 072 825
confirmed cases
6 595 000 recovered
190 793 deaths

France

(7-days incidence 94,6)

6 917 460
confirmed cases
6 618 000 recovered
115 723 deaths

Situation by WHO Region, as of 14 September

Global epidemiological situation overview; WHO as of 7 September 2021

With nearly 4 million new cases reported globally in the past week (6-12 September), this represents the first substantial decline in weekly cases in more than two months (Figure 1). All regions reported declines in new cases as compared to the previous week.

The number of deaths reported globally in the past week also decreased as compared to previous week, with just over 62 000 new deaths. The **African Region** reported an increase in the number of weekly deaths (7%), while the **South-East Asia Region** reported the largest decrease (20%). The **American and Eastern Mediterranean Regions** reported slightly smaller decreases, 9% and 6% respectively, while the numbers of deaths reported in the **European and the Western Pacific Regions** were similar to last week. The cumulative number of cases reported globally is now over 224 million and the cumulative number of deaths is just over 4.6 million.

In the past week, the five countries reporting the highest number of new cases were:

- **United States of America**; reporting 1 034 836 new cases; 20% decrease
- **United Kingdom**; reporting 256 051 new cases; 5% increase,
- **India**; reporting 248 248 new cases; 15% decrease,
- **Iran**; reporting 172 030 new cases; 17% decrease,
- **Turkey**; reporting 158 236 new cases; 6% increase.

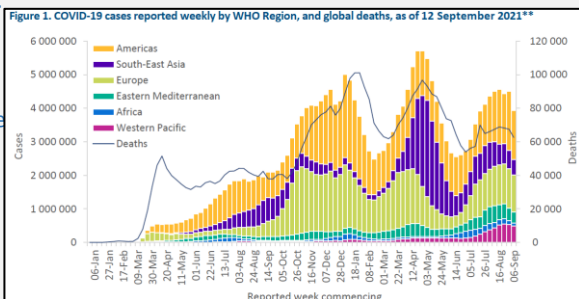


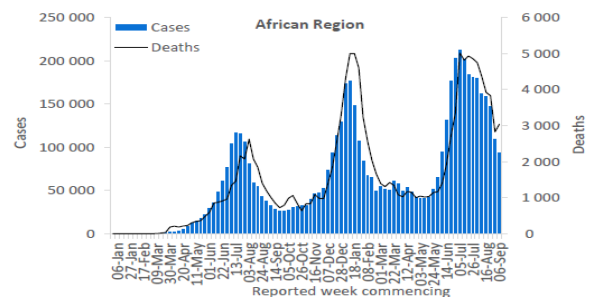
Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 12 September 2021**

WHO regional overviews – Epidemiological week 6 – 12 September 2021

African Region

The African Region reported over 94 000 new cases and over 3000 new deaths, a 15% decrease and a 7% increase respectively as compared to the previous week. Although the regional case incidence has continued to decline for over two months, weekly incidence increased in 18 of 49 (37%) countries in the past week, including in Ethiopia and Nigeria. The highest numbers of new cases were reported from South Africa (40 220 new cases; 67.8 new cases per 100 000 population; a 29% decrease), Ethiopia (9269 new cases; 8.1 new cases per 100 000; a 10% increase), and Nigeria (5061 new cases; 2.5 new cases per 100 000; a 90% increase).

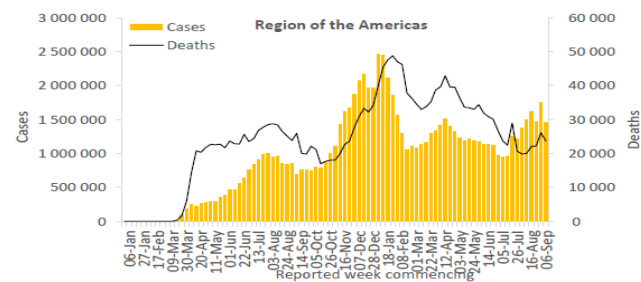
The highest numbers of new deaths were reported from South Africa (1590 new deaths; 2.7 new deaths per 100 000 population; a 6% decrease), Namibia (187 new deaths; 7.4 new deaths per 100 000), and Algeria (185 new deaths; 0.4 new deaths per 100 000; a 5% decrease).



Region of the Americas

The Region of the Americas reported the largest proportional decrease in cases and the second largest proportional decrease in deaths this week, decreases of 17% and 9%, respectively, as compared to the previous week. However, the Region also reported the highest number of weekly cases and deaths as compared to other Regions, with notable increases observed in Cuba (22% increase) and Ecuador (72% increase) for cases, and Honduras (55% increase) and Haiti (50% increase) for deaths. The highest numbers of new cases were reported from the United States of America (1 034 836 new cases; 312.6 new cases per 100 000; a 20% decrease), accounting for 70% of all new cases reported in the Region this week, Brazil (118 790 new cases; 55.9 new cases per 100 000; a 22% decrease), and Mexico (88 938 new cases; 69.0 new cases per 100 000; a 5% decrease).

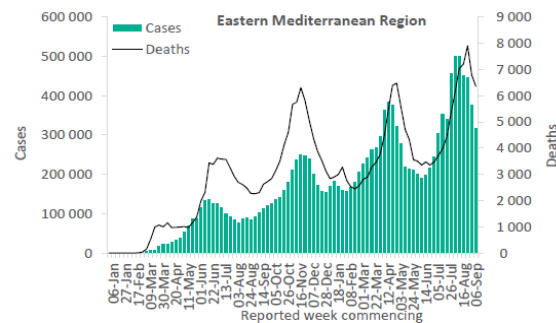
Similarly, the highest numbers of new deaths were reported from the United States of America (11 371 new deaths; 3.4 new deaths per 100 000; a 5% decrease), Mexico (4628 new deaths; 3.6 new deaths per 100 000; a 9% decrease), and Brazil (3176 new deaths; 1.5 new deaths per 100 000; a 27% decrease).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported a marked decrease (15%) in the number of new cases reported this week, with over 319 000 new cases. The Region reported a slight decrease (6%) in the number of new deaths reported, with over 6300 new deaths this week. These decreasing trends in cases and deaths reflect decreases in 13 of the 22 countries (59%) for cases and 15 out of 22 (68%) for deaths in the region this week. The highest numbers of new cases were reported from the Islamic Republic of Iran (172 030 new cases; 204.8 new cases per 100 000; a 17% decrease), Iraq (34 816 new cases; 86.6 new cases per 100 000; a 21% decrease), and Pakistan (25 819 new cases; 11.7 new cases per 100 000; a 4% decrease).

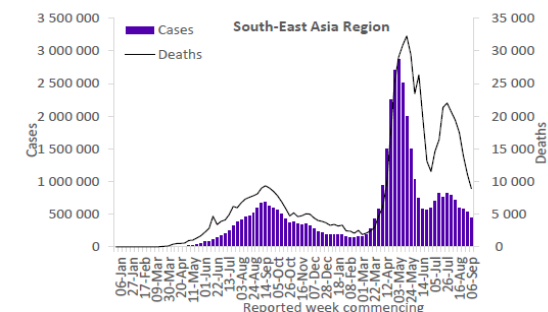
The highest numbers of new deaths were reported from the Islamic Republic of Iran (3760 new deaths; 4.5 new deaths per 100 000; a 10% decrease), Pakistan (548 new deaths; <1 new deaths per 100 000; a 5% decrease), and Tunisia (497 new deaths; 4.2 new deaths per 100 000; a 47% increase).



South-East Asia Region

The South-East Asia Region reported substantial decreases in new cases and deaths with over 453 000 new cases and over 8900 new deaths, decreases of 16% and 20%, respectively as compared to the previous week. Overall, regional cases and deaths have declined consistently over the past month and a half. This week all countries in the Region reported a decrease in weekly cases and deaths as compared to last week, with a notable decrease reported in Indonesia (30% decrease) for cases and Bangladesh (33% decrease) for deaths. The highest numbers of new cases were reported from India (248 248 new cases; 18.0 new cases per 100 000; a 15% decrease), Thailand (101 639 new cases; 145.6 new cases per 100 000; a 5% decrease), and Indonesia (38 491 new cases; 14.1 new cases per 100 000; a 30% decrease).

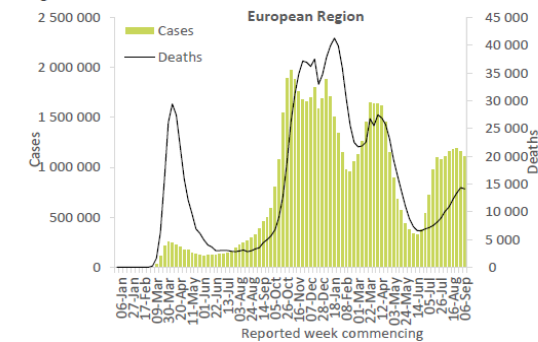
Similarly, the highest numbers of new deaths were reported from Indonesia (3028 new deaths; 1.1 new deaths per 100 000; a 23% decrease), India (2122 new deaths; <1 new deaths per 100 000; a 21% decrease), and Thailand (1498 new deaths; 2.1 new deaths per 100 000; a 13% decrease).



European Region

Case incidence in the European Region decreased by 5% with just over 1.1 million new cases, while death incidence remained similar to that of the previous week with over 14 000 deaths. The highest numbers of new cases were reported from the United Kingdom (256 051 new cases; 377.2 new cases per 100 000; a 5% increase), Turkey (158 236 new cases; 187.6 new cases per 100 000; a 6% increase), and the Russian Federation (127 471 new cases; 87.3 new cases per 100 000; similar to the previous week's figures).

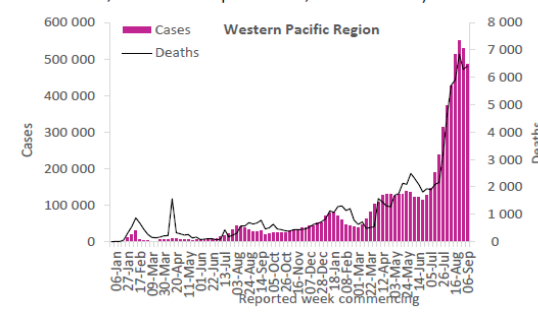
Similarly, the highest numbers of new deaths were reported from the Russian Federation (5549 new deaths; 3.8 new deaths per 100 000; similar to the previous week's figures), Turkey (1806 new deaths; 2.1 new deaths per 100 000; similar to the previous week's figures), and the United Kingdom (983 new deaths; 1.4 new deaths per 100 000; a 25% increase). These three countries accounted for almost half (49%) of new weekly cases and 59% of new weekly deaths reported in the Region.



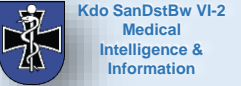
Western Pacific Region

Case incidence in the Western Pacific Region decreased by 8% with just over 487 000 new cases, while death incidence remained similar to that of the previous week with over 64 00 deaths. After reporting a continuous increase in cases since 21 June 2021, the Region has begun to show a declining trend in weekly cases over the past two weeks, mainly driven by declines in cases reported in Japan (46% decrease), Mongolia (46% decrease) and Fiji (45% decrease). However, the weekly deaths continue to show an increasing trend since 19 July 2021, with notable increases in weekly deaths reported for Guam (33% increase), and Malaysia (22% increase) this week.

The highest numbers of new cases were reported from the Philippines (144 991 new cases; 132.3 new cases per 100 000; a 16% increase), Malaysia (136 061 new cases; 420.4 new cases per 100 000; similar to the previous week's figures), and Viet Nam (90 179 new cases; 92.6 new cases per 100 000; similar to the previous week's figures). The highest numbers of new deaths were reported from Malaysia (2536 new deaths; 7.8 new deaths per 100 000; a 22% increase), Viet Nam (2225 new deaths; 2.3 new deaths per 100 000; a 7% decrease), and the Philippines (916 new deaths; <1 new deaths per 100 000; a 13% decrease).



Global Situation



ABW: Disease activity has been **decreasing** since the third wave began in July, with the seven-day rolling average number of daily new cases **decreasing from 70 on August 12 to 32 as of September 12**. While cases have decreased during the past few weeks, healthcare centres are still operating at capacity. Due to the rise in cases in late August, the Horacio Oduber Hospital, Aruba's largest medical facility, has reached its **maximum capacity**, with Aruba's second-largest medical centre, Dr. Rudy Engelbrecht Medical Centre in San Nicolas closing its operation and surgical rooms in order to send healthcare personnel to assist at the Horacio Oduber Hospital. According to a recent report by health care officials, **more than 80% of the cases in hospitals are unvaccinated individuals**.

Officials have implemented new domestic restrictions that began on September 1.

As of September 1, the curfew has been eliminated with closing hours at 12:00 am. Other general measures include: a maximum of six persons are allowed per table at restaurants inside and outside and an overall limit on private/public of 90 people indoors and 125 outdoors. Commercial locations (cinemas, stores, supermarkets), churches, and funeral parlours may only **operate at 50% capacity**. While outdoor training can still occur, any sort of sporting event is not allowed. Previous measures will continue including the mandatory use of face masks, physical distancing, and the overall ban on the consumption of alcoholic beverages outside establishments. Schools will remain closed. Since August 1, everyone travelling to Aruba from a location listed on the island information website is eligible but high-risk locations will need to complete the 72-hour PCR testing requirement **regardless of vaccination status**.

Saint Lucia: Disease activity has been **decreasing over the past two weeks**, however, the country remains in its fourth wave of the pandemic. The Ministry of Health has reported that the presence of the **Mu variant (B.1.621)** has been detected on the island. The seven-day rolling average number of new cases has **increased from a low of six cases on August 28 to a peak of 168 cases on September 3**. As of **September 12**, the seven-day rolling average number of new cases stands at **54 cases**. Over the same period of time, the seven-day rolling average of new deaths increased from zero deaths on August 28, to two deaths on September 3 and has remained at two new deaths as of September 12.

A daily curfew remains in place from 7 p.m. to 4 a.m. until September 14, and on weekends the curfew is in place from 4 p.m. on Friday to 4 a.m. on Monday. **During curfew hours individuals must remain at home**; exemptions are in place for emergency situations and for those with essential work duties. Indoor dining has been suspended, along with the sale of alcohol at bars and restaurants. Social activities involving members of different households are banned, while social activities involving members of the same household are limited to 10 people. Upon arrival in the country, all international travellers are required to present a negative PCR test result completed no more than five days before arrival. Travellers aged 18 years or older are also required to complete a Travel Registration document seven or more days before arrival. Fully vaccinated travellers who provide proof of receiving their final dose at least 14 days before arrival are exempt from quarantine measures but must still stay in COVID-19 certified accommodations until a second negative PCR test result is confirmed after arrival.

TTO: The seven-day rolling average number of daily new cases has **decreased from 233 on August 12 to 202 on September 12**. The seven-day rolling average number of daily new deaths has remained stable over the past month at seven as of September 12. While testing has decreased since mid-August, the **14-day test positivity rate has increased from 14.7% on August 7 to 17.8% on September 7**. On September 10, the country **received eight ventilators** from the United States to help COVID-19 patients in need. While **variant detection is slow**, the cumulative prevalence of the **Gamma variant (P.1)** remains the highest **at 72%**. The **first case** of the **Delta variant (B.1.617.2)** was detected on July 30. As of September 13, seven cases of this variant have been confirmed. As of September 8, health officials reported they have begun screening for the Mu variant as nearby Caribbean countries have reported their first cases of this variant in the region. A domestic curfew between 9 p.m. to 5 a.m. remains in place between Monday to Sunday.

Do fake vaccination passports and certificates contribute to the spread of the virus?

New reports on patients in intensive care units

In some countries, there are reports of increasing numbers of COVID-19 patients in intensive care units, mostly unvaccinated people. But up to 20% would be fully or once vaccinated persons – sometimes with significant underlying diseases – so severe disease courses then seem quite plausible.

Are there also people who have been vaccinated and could not build up immune protection and then become seriously ill?

Yes, these so-called non responders or low responders are probably available in small numbers, but no figures are published.

Are there people who are considered vaccinated and still fall ill without pre-existing conditions?

Yes – here is the hypothesis of the increase in falsified vaccination certificates as the cause of unclear severe courses in the room. With fake vaccination passports or certificates, more and more unvaccinated people gain access to events and places that, according to certain official regulations, are only intended for vaccinated, recovered or tested persons – to protect against virus transmission.

To put it bluntly, **"if you don't want to be vaccinated"** with a fake vaccination certificate, you can still **"visit a festival or enter restaurants without a corona test, book flights, etc."**. Or even start professional careers that require vaccination.

The fact that not only one's own health is endangered, but also the environment can be significantly damaged, is not considered or simply ignored.

Forgery of documents or just a health certificate?

On the Darknet and messenger services, fake vaccination books have been traded for several hundred euros each for some time. The entry in the vaccination certificate looks real and yet the people have never received the attested corona vaccination. The ingredients are easy and inexpensive to obtain: International vaccination certificate and stamp can be purchased legally and real-looking stickers with batch numbers of approved vaccines can be easily produced.

In any case, everything together is forgery of documents (document forgery) or at least forgery of a health certificate. And is punishable by imprisonment or fines in all European countries. Even the attempt is punishable.

On the Internet you can get the new international vaccination certificate, which contains additional COVID-19 vaccination pages and complies with the current requirements of the WHO. The vaccination book is blank without entries and serves as official proof of vaccinations; Matching protective covers are offered and for orders from two pieces the price is equally cheaper (e.B. 50 pieces for just under 100 euros). Stamp manufacturers already spoke in the spring of an increased demand for doctor's stamps and of addresses to which to be sent, which could not be associated with medical practices or vaccination centers. Throughout Europe, the trade in fake vaccination certificates is booming. As an Austrian newspaper reported, it should now be possible to "buy fully functional vaccination passports via the chat app Telegram". On the controversial Internet platform, conspiracy theories are repeatedly exchanged in various chat groups.

Accordingly, hundreds of providers are currently on the road. The fake vaccination certificates are then paid for with Bitcoin or a voucher. But even fraudsters are not protected against fraud. Not infrequently, the counterfeits do not reach the buyers at all.

Oded Vanunu speaks on the portal datensicherheit.de. The Head of Products Vulnerabilities Research at Check Point Software Technologies talks about research by the software company's security officers: "This year, we examined the Darknet and Telegram for coronavirus-related offerings. At the moment, fake vaccination certificates can be purchased for almost all countries. All interested parties have to do is indicate the country they come from and what product they want."

The growing pressure on opponents of vaccination in throughout Europe could therefore fuel the trade in fake vaccination passports even further in the future: "In fact, there are people who do not want to be vaccinated, but still want to have the freedoms that come with proof of vaccination. These people are increasingly turning to dubious providers."

Way ahead?

Political and official discussions about further measures are gaining momentum

In some countries, consultations are underway at the political level and with experts to discuss the measures to mitigate the already swelling 4th wave. The vaccination campaigns, restrictions for unvaccinated people and also the suspension of free test offers are on the list. The role of controls on measures already in place is assessed differently. And it remains to be seen whether the issue of counterfeiting will also be discussed and how to deal with the associated dirty business.

The role of rapid tests as an entry control to certain events or antibody tests in applications could then be re-evaluated as well.

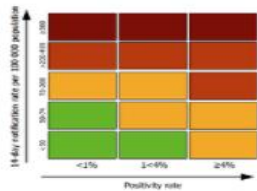
European Situation

Maps in support of the Council Recommendation on a coordinated approach to the restriction of free movement in response to the COVID-19 pandemic in the EU, as of 9 September 2021

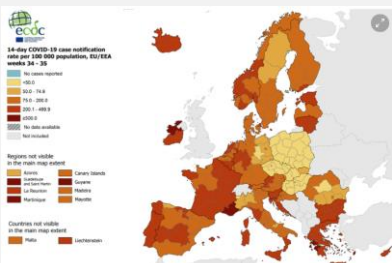
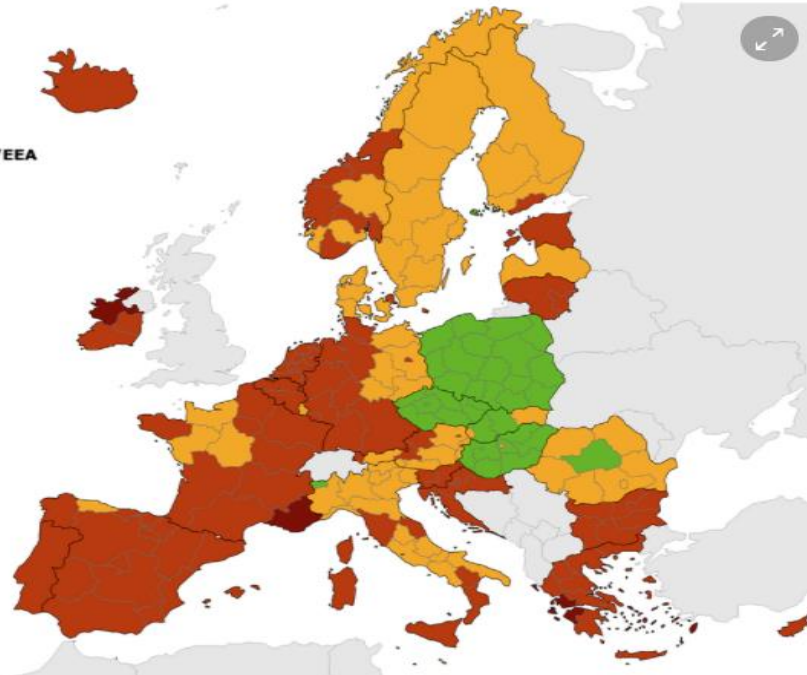
Combined indicator: 14-day notification rate, testing rate and test positivity, updated 9 September 2021



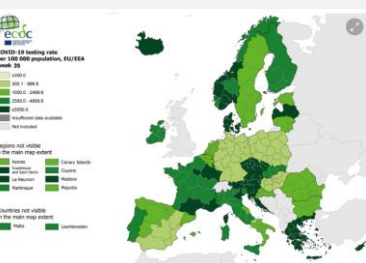
14-day COVID-19 case notification rate per 100 000 population and test positivity, EU/EEA weeks 34 - 35



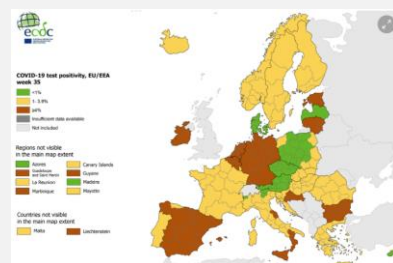
- Testing rate < 300 per 100 000 population
- No data available
- Not included
- Regions not visible in the main map extent
 - Azores
 - Guadeloupe and Saint Martin
 - La Reunion
 - Martinique
 - Canary Islands
 - Guyane
 - Madeira
 - Mayotte
- Countries not visible in the main map extent
 - Malta
 - Liechtenstein



14-day case notification rate per 100 000 inhabitants



Testing rates per 100 000 inhabitants



Positivity rates

ECDC COVID-19 surveillance report Week 35, as of 10 September 2021

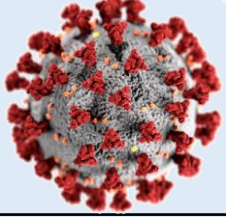
Overall Situation

- At the end of week 35 (week ending Sunday 5 September 2021), the overall epidemiological situation in the EU/EEA was characterised by a **high, slowly decreasing** overall case notification rate and a **low, slowly increasing death rate** with case and death notification rates forecast to remain stable over the next two weeks. Hospitalisations and ICU admissions are forecast to **increase slightly**. Case notification rates among those aged **15-24 years (the most affected age group)** have continued to **decrease** across the EU/EEA. This is in contrast to case notification rates among children **under 15 years of age**, which is the only age group with a **clearly increasing trend**. The picture varies at Member State level, and several countries are reporting increases in severity indicators including cases among older age groups, hospitalisation and mortality.
- ECDC's assessment of each country's epidemiological situation derives from a composite score based on the absolute value and trend of five weekly COVID-19 epidemiological indicators. As shown below, for week 35, the epidemiological situation in the EU/EEA overall was categorised as **of low concern** (of moderate concern the previous week). **One country was categorised as of very high concern, 13 countries as of moderate concern, 11 countries as of low concern and one country as of very low concern.** Compared to the previous week, **five countries** (Finland, Liechtenstein, Lithuania, Poland and Slovenia) moved to a **higher category**, **six countries** (Iceland, Italy, Luxembourg, Portugal, Spain and Sweden) moved to a **lower category** and 19 countries stayed in the same category.
- Forecasts of cases and deaths from the [European COVID-19 Forecast Hub](#) and of hospital/ICU admissions produced by ECDC provide predictions for weeks 36 to 37. During this period, and compared to the current week, **stable trends in cases, increasing trends in hospital admissions, increasing trends in ICU admissions and stable trends in deaths** are forecast in the EU/EEA by the end of week 37.
- By the end of week 35, the **median cumulative uptake** of at least **one vaccine dose** among adults aged 18 years and older was **76.5%** (country range: 22.5–96.2%). The median cumulative uptake of **full vaccination** among adults aged 18 years and above was **70.6%** (country range: 20.7–91.1%).
- The estimated distribution (median and range of values from 15 countries for weeks 33 to 34, was **99.5%** (84.7–100.0%) for B.1.617.2 (Delta), **0.0%** (0.0–0.5%) for P.1 (Gamma) and **0.0%** (0.0–0.3%) for B.1.351 (Beta). The distribution was **0.2%** (0.0–1.7%) for B.1.1.7 (Alpha).
- The overall COVID-19 case notification rate for the EU/EEA was **187.0 per 100 000 population** (198.5 the previous week). This rate has been **decreasing for one week**. The 14-day COVID-19 death rate (14.5 deaths per million population, compared with 12.7 deaths the previous week) has been **increasing for five weeks**. Of 29 countries with data on hospital/ICU admissions or occupancy up to week 35, 16 reported an **increasing trend** in at least one of these indicators compared to the previous week.

Weekly COVID-19 epidemiological category by country, weeks 21 to 35 2021

Composite score (1-10) based on value and trend of five indicators. Categories are derived from score quintiles.

Level of concern	very low (1-2.8)	low (2.8-4.6)	moderate (4.6-6.4)	high (6.4-8.2)	very high (8.2-10)									
20210901	3.8	2.5	2.2	2.3	1.3	3.2	4.8	9.7	6.0	9.7	8.5	8.5	9.0	9.2
20210902	2.2	2.2	2.0	1.7	1.3	2.0	2.0	2.7	3.8	3.7	3.7	4.8	9.0	8.8
20210903	3.7	3.7	2.7	2.0	2.0	3.2	4.7	9.3	5.3	9.7	9.7	6.2	9.0	9.3
20210904	3.5	3.2	1.7	1.7	1.2	1.2	2.2	1.5	2.4	2.8	5.0	6.0	6.9	7.5
20210905	8.0	3.0	3.0	2.5	2.0	2.2	3.2	3.2	3.8	4.7	4.3	4.7	5.7	5.7
20210906	2.5	2.5	2.5	2.5	2.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
20210907	4.0	4.0	3.0	1.3	1.7	1.7	2.0	2.7	3.0	3.0	2.0	2.0	2.0	2.7
20210908	3.8	3.0	3.0	2.2	2.2	3.3	4.0	4.7	4.3	4.0	4.7	4.3	4.3	3.5
20210909	4.0	3.3	2.0	2.5	1.8	1.8	2.5	3.3	3.0	3.0	6.0	6.7	6.7	7.7
20210910	2.0	1.8	1.8	1.8	2.8	2.7	3.7	4.6	3.9	3.9	4.0	4.7	4.5	4.7
20210911	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
20210912	3.0	3.0	1.7	1.2	1.5	1.5	1.8	3.0	3.3	3.7	2.7	5.3	5.3	5.0
20210913	4.5	4.5	3.5	2.8	2.2	3.0	4.2	5.2	6.3	6.0	5.7	6.0	7.7	6.7
20210914	3.0	1.7	1.3	1.3	1.5	2.0	2.0	2.0	2.0	2.0	2.0	2.7	3.3	3.3
20210915	2.5	2.7	2.0	2.0	2.0	2.0	2.3	3.3	3.0	2.2	2.7	2.5	4.1	3.9
20210916	3.2	3.3	3.3	2.2	3.3	4.7	4.7	5.0	9.7	5.3	7.0	7.0	6.0	9.0
20210917	2.5	2.5	2.2	1.3	1.3	1.5	2.5	4.0	3.0	5.7	4.3	3.3	5.0	4.2
20210918	8.2	4.5	4.2	4.2	2.8	2.2	1.8	1.3	2.3	3.0	4.0	4.3	3.8	3.7
20210919	1.5	1.8	1.8	1.8	2.0	2.5	2.5	3.8	3.8	3.8	3.8	3.8	3.8	3.8
20210920	3.5	3.7	3.8	2.2	1.5	1.3	2.8	2.8	3.3	3.8	4.7	4.7	2.3	3.0
20210921	3.3	2.7	2.8	2.2	2.0	4.0	6.0	4.3	3.8	3.5	4.3	4.3	5.3	3.7
20210922	2.7	2.7	2.0	2.0	2.0	2.7	3.3	7.0	8.3	9.8	8.0	4.8	3.8	4.5
20210923	3.8	4.0	3.2	2.2	2.0	2.7	3.3	6.7	4.3	3.2	4.0	4.2	4.7	3.5
20210924	3.8	2.7	2.5	2.2	2.7	2.5	2.7	2.7	2.7	3.7	3.7	4.3	4.8	3.8
20210925	2.7	1.7	2.7	2.7	2.0	2.2	2.2	2.2	2.2	1.8	1.8	2.7	2.3	3.0
20210926	3.7	3.7	6.7	6.7	6.3	6.0	7.7	7.0	7.3	5.2	5.3	5.3	5.3	4.0
20210927	1.8	2.8	2.5	2.5	2.7	2.7	2.2	1.5	2.0	2.0	2.0	4.0	3.0	3.0
20210928	2.8	3.3	2.2	1.7	1.3	1.3	1.3	2.0	2.0	2.0	2.7	2.7	2.7	2.7
20210929	3.5	3.5	3.8	2.7	1.3	1.5	2.7	2.7	3.0	3.7	4.0	4.7	3.2	3.0
20210930	3.8	4.2	4.5	3.2	4.2	6.0	7.3	8.0	7.7	6.5	6.0	6.2	3.7	4.8
20210931	3.7	3.8	3.8	2.0	2.3	1.7	1.7	2.7	4.0	4.3	5.0	6.7	5.3	4.8



Vaccination news

As of September 9, a total of 10 countries accounted for **72%** of all vaccinations administered globally. The top five countries/territories with the **highest number** of cumulative **people vaccinated** with at least one dose per 100,000 population are **Gibraltar** (118,000), **Palau** (95,930), **United Arab Emirates** (88,200), **Portugal** (86,380), and **Iceland** (81,580). The top five countries/territories with the **lowest number** of cumulative people vaccinated with at least one dose per 100,000 population are the **Democratic Republic of the Congo** (90), **Haiti** (300), **Chad** (310), **South Sudan** (470), and **Tanzania** (500).

According to data collected by Our World in Data, more than 5.53 billion COVID-19 vaccine doses have been administered in 183 countries. As of September 7, the WHO's COVAX program has shipped 243 million doses to 139 eligible countries. Yet the global picture of access to COVID-19 vaccines is unacceptable. Only **20%** of people in **low- and lower-middle-income countries** have received a first dose of vaccine compared to **80% in high- and upper-middle** income countries.

According to its latest **Supply Forecast**, COVAX expects to have access to **1.425 billion doses** of vaccine in **2021**, in the most likely scenario and in the absence of urgent action by producers and high-coverage countries to prioritize COVAX. Of these doses, approximately 1.2 billion will be available for the lower income economies participating in the COVAX Advance Market Commitment (AMC). This is enough to **protect 20%** of the population, or **40%** of all adults, in all 92 AMC economies with the exception of India. Over 200 million doses will be allocated to self-financing participants. The key COVAX milestone of **two billion doses** released for delivery is now expected to be reached in the **first quarter of 2022**.

ABW: As of September 12, **75.7% (80,344)** of the island nation's population of over **106,000** have received at least one dose of a COVID-19 vaccine, and **68.7% (72,845)** are fully vaccinated. Since the island began its vaccination campaign in mid-February, the approved vaccines used in the campaign have been the BioNTech vaccine and the Johnson & Johnson vaccine.

Saint Lucia: As of September 12, **20.2% (37,296)** of Saint Lucia's population of 184,632 has received at least one dose of COVID-19 vaccine, while **15.6% (28,803)** have been fully vaccinated. On August 17, Saint Lucia received 52,650 doses of BioNTech vaccine from the United States. This was the first shipment of a total bilateral donation of 169,000 vaccines.

TTO: As of September 12, of the country's 1.4 million population, **38.9% (543,072)** have received at least one dose of a COVID-19 vaccine, and **31.4% (438,491)** are fully vaccinated. Vaccinations for children between the ages of 12 to 18 began in mid-August. Children who are fully vaccinated will be permitted to attend in-person school starting October 1.

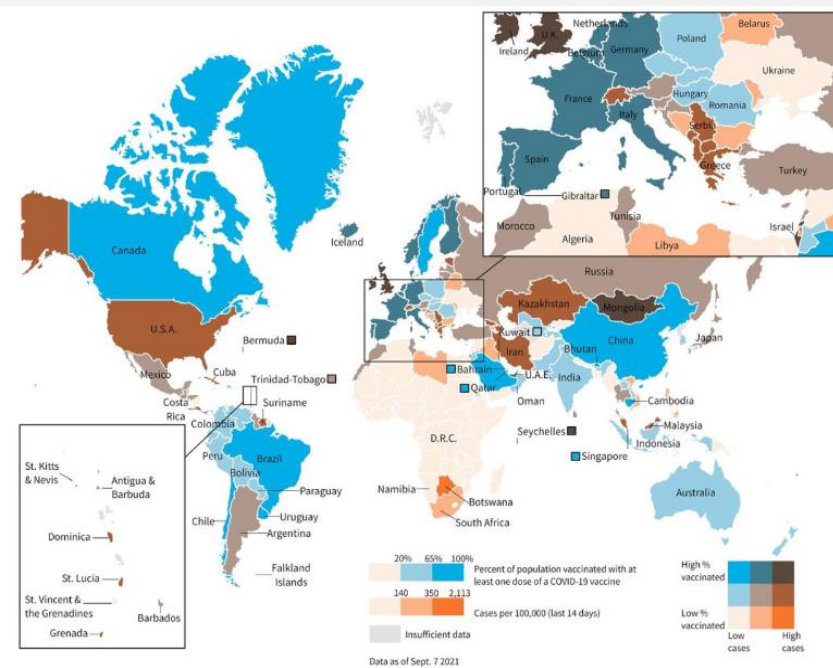


Figure 2. COVID-19 incidence rates (represented by the number of cases per 100,000 in the past 14 days) and COVID-19 vaccine coverage (represented by the percent of population vaccinated with one dose of a COVID-19 vaccine) as of September 7, 2021. Source: BlueDot COVID-19 Data Suite & Our World in Data.

* There has been an update in the way this figure is produced compared to previous reports: Values for island territories represent those associated with the territory itself; they are no longer assigned the same value as the larger countries they are a part of

What does most recent research indicate about natural immunity compared to vaccine-induced immunity?

Studies have suggested that COVID-19 vaccines induce higher levels of antibody (i.e., vaccine-induced immunity) compared to COVID-19 infections (i.e., natural immunity). Furthermore, they have found that unvaccinated people who had a prior COVID-19 infection are **2.34 times more likely to be re-infected** with COVID-19 than people who are fully vaccinated. Yet, a recent preprint study suggested that natural immunity confers longer lasting and stronger protection against infection, symptomatic disease, and hospitalization caused by the Delta variant of SARS-CoV-2 compared to the vaccine-induced immunity conferred by two-doses of the Pfizer vaccine. Individuals who were both previously infected with SARS-CoV-2 and given a single dose of the vaccine gained additional protection against the Delta variant. However, in evaluating the study's research methodology, a few methodological issues that may have generated a biased result and lead to incorrect conclusions can be found. Thus, the results of this pre-print study must be interpreted with caution. The general body of scientific evidence continues to suggest that **COVID-19 vaccines provide the safest means to achieve robust protection against serious illness**.

Source: <https://www.cdc.gov/media/releases/2021/s0806-vaccination-protection.html>

<https://www.biorxiv.org/content/10.1101/2021.04.15.440089v2.full.pdf>

<https://www.jwatch.org/na53802/2021/07/08/people-with-past-covid-19-benefit-immunization>

What are the updates for vaccine candidates in Phase 3 or Phase 2/3 trials?

Company	Vaccine Candidate	Updates
	Ad26.COVS.2S	<ul style="list-style-type: none"> On August 25, Johnson & Johnson released interim data showing that an additional dose of vaccine generated an increase in spike-binding antibodies which were nine-fold higher than 28 days after the primary single-dose vaccination.
	Brilife	<ul style="list-style-type: none"> In July, Israel formed a partnership with the American company NRx Pharmaceuticals to advance research on Brilife. In August, NRx registered a Phase 2/3 trial, with plans to recruit 550 volunteers.
	N/A	<ul style="list-style-type: none"> On August 23, Taiwan started administering Medigen's vaccine. The vaccine was granted emergency use authorization on July 19, after the Phase 2 trial demonstrated that the vaccine produced strong levels of antibodies and did not cause serious adverse reactions.
	NVX-CoV2373	<ul style="list-style-type: none"> On Aug. 25, Novavax announced that its vaccine would be part of a study looking at the effects of an additional vaccine in patients with impaired immune systems.
	CoronaVac	<ul style="list-style-type: none"> In late August, Chilean researchers registered a Phase 2 trial to assess the effectiveness of providing either a dose of Pfizer/BioNTech vaccine or AstraZeneca vaccine, as an additional dose to those who completed a full course of the CoronaVac vaccine.

European Situation on Vaccination

Source: <https://gap.ecdc.europa.eu/public/extensions/COVID-19/vaccine-tracker.html#uptake-tab>

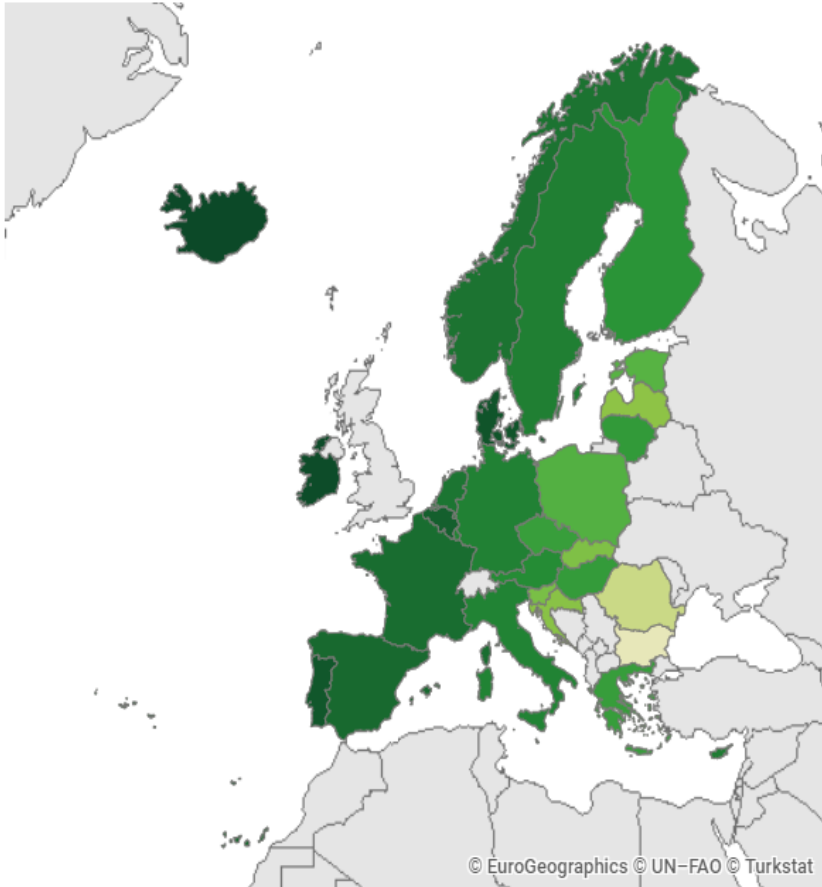
Total doses distributed to EU/EEA countries

667,861,532

553,689,352

Indicator: Uptake full vaccination

Cumulative uptake (%) of full vaccination among adults (18+) in EU/EEA countries as of 2021-09-14

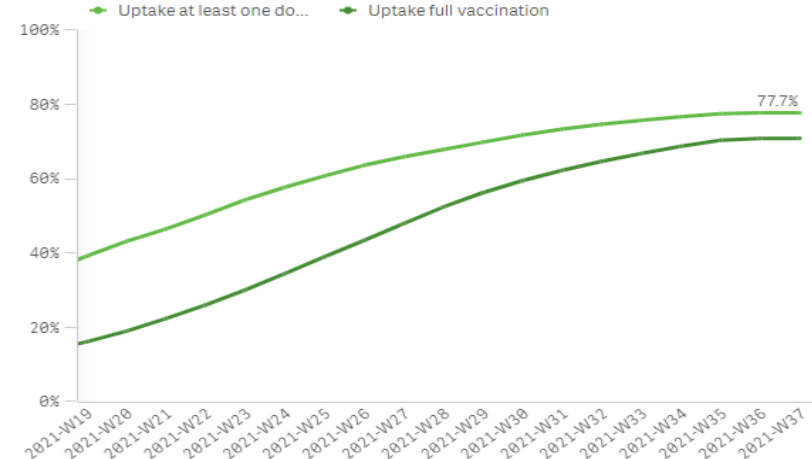


Uptake full vaccination (%)



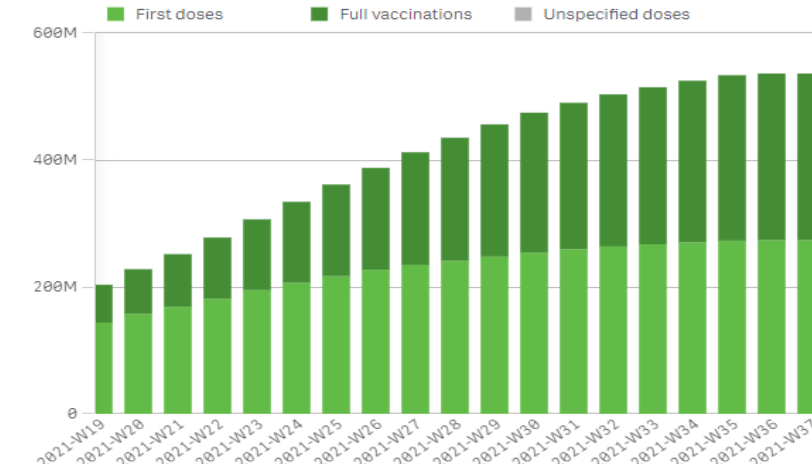
Cumulative uptake (%) of at least one vaccine dose and full vaccination among adults (18+) in EU/EEA countries as of 2021-09-14

by reporting week (data for the current week are preliminary)



Cumulative number of vaccine doses administered to adults (18+) in EU/EEA countries as of 2021-09-14

by reporting week (data for current week are preliminary)



Cumulative uptake (%) of full vaccination by age group in EU/EEA countries as of 2021-09-14

Country	80+ years	70-79 years	60-69 years	50-59 years	25-49 years
Austria	97.3%	80.7%	82.9%	72.3%	60.7%
Belgium	89.1%	95.1%	92.5%	88.6%	78.2%
Bulgaria	19.4%	30.2%	28.5%	24.0%	17.0%
Croatia	55.0%	71.6%	65.8%	52.8%	37.5%
Cyprus	93.8%	94.0%	86.6%	79.9%	70.7%
Czechia	81.4%	86.8%	74.6%	70.4%	54.1%
Denmark	100.0%	99.8%	97.1%	93.6%	78.7%
Estonia	63.8%	73.1%	66.3%	62.4%	51.4%
Finland	90.9%	95.8%	85.0%	78.7%	52.8%
France	77.9%	88.3%	77.4%	74.3%	67.8%
Germany	-	-	-	-	-
Greece	71.7%	80.5%	76.9%	70.0%	57.0%
Hungary	73.5%	84.7%	76.0%	69.4%	58.6%
Iceland	100.0%	100.0%	98.7%	91.6%	85.0%
Ireland	100.0%	100.0%	98.9%	97.1%	83.6%
Italy	92.4%	86.5%	82.8%	74.9%	61.4%
Latvia	40.9%	50.7%	51.1%	47.5%	45.8%
Liechtenstein	-	-	-	-	-
Lithuania	57.1%	73.5%	74.9%	66.8%	62.9%
Luxembourg	85.3%	85.9%	83.5%	80.5%	66.4%
Malta	100.0%	100.0%	95.9%	89.9%	88.5%
Netherlands	-	-	-	-	-
Norway	95.4%	99.9%	93.9%	88.0%	64.0%
Poland	63.2%	83.3%	71.0%	62.3%	51.3%
Portugal	98.0%	100.0%	95.6%	91.3%	79.6%
Romania	19.5%	36.4%	38.5%	37.3%	30.7%
Slovakia	51.6%	69.8%	62.4%	53.2%	43.4%
Slovenia	68.5%	77.2%	66.1%	55.1%	38.4%
Spain	100.0%	98.0%	92.9%	86.8%	70.9%
Sweden	91.3%	93.8%	88.6%	84.5%	63.9%

Variants and Mutations; Variants of Global Concern

Spotlight on Alpha, Beta and Gamma

SARS-CoV-2 variants of concern (VOCs) began to emerge in 2020. While **Alpha** surged in many countries in early 2021, it has now been largely replaced by **Delta**. Two other VOCs, **Beta** and **Gamma**, have accounted for a smaller number of cases since first being identified.

The Alpha, Beta, Gamma, and Delta variants have been deemed by the WHO as VOCs given that there has been scientific evidence reported that supports their association with one of the following changes that impact their global public health significance:

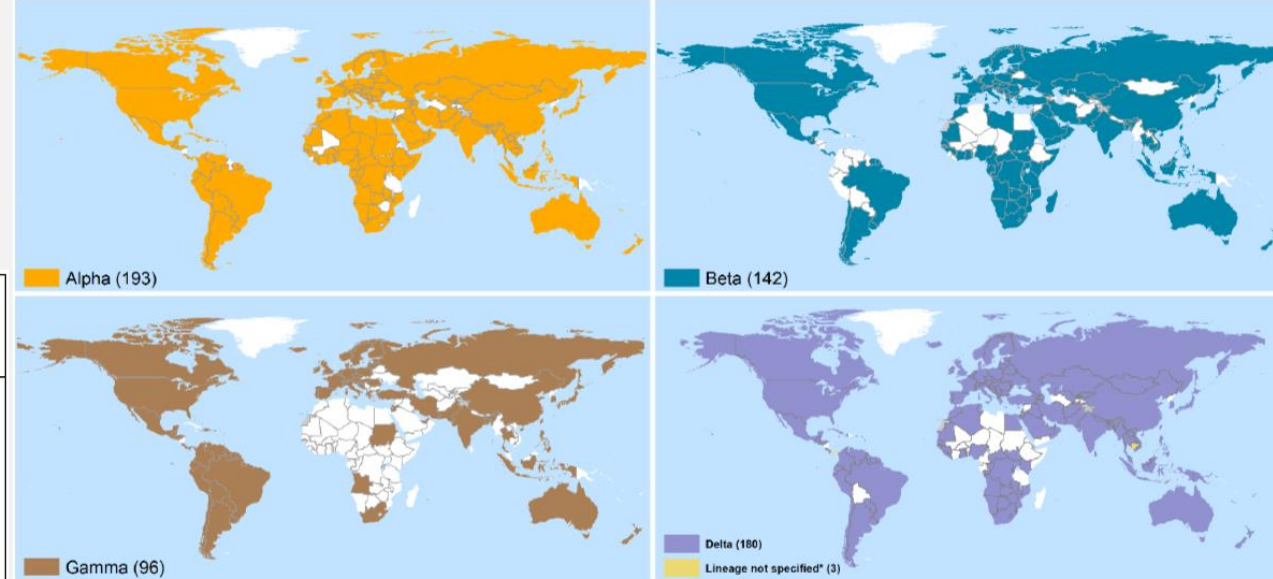
- Increased transmissibility rates or a detrimental change in COVID-19 epidemiology;
- Demonstrated a change in clinical disease presentation (more severe form); and/or
- Decrease in effectiveness of public health and social measures or available diagnostics, vaccines, and therapeutics.

As of April 2021, scientific evidence was reported that supports that the SARS-CoV-2 virus mutates approximately every 11-15 days. This is roughly half the speed at which influenza mutates and one-fourth the speed of HIV. So far, SARS-CoV-2 appears to have roughly 13,000 mutations and almost 4,000 variants. Some of these mutations may cause viruses to become stronger, weaker, stay mostly the same, or even disappear.

Of the countries provided as an example of those who had previously reported a high proportion of sequences positive for each respective VOC, the majority have since reported a decline in the respective VOC and a subsequent surge in the Delta variant. According to data from covariants.org, exceptions to this include some countries which continue to have a high prevalence of the Gamma variant including Brazil (of 58 sequences between August 23 and September 6, 64% are positive for Gamma), Chile (of 19 sequences between August 23 and September 6, 47% are positive for Gamma), Trinidad and Tobago (of 38 sequences between July 26 and August 9, 84% are positive for Gamma), and Suriname (of 26 sequences between July 26 and August 9, 81% are positive for Gamma).

VOC	Pango Lineage	Earliest Detected Samples	Worldwide 7-day rolling average of percent positive sequences	Number of countries that detected the variant & example of countries with a previously high proportion of positive sequences	Evidence supporting variant as VOC
Alpha	B.1.1.7	U.K. September 2020	Peak: May 17, 2021, 70% As of August 30, 1% As of September 1, 0%	182 countries Belgium Canada Denmark Finland France Germany Ireland Israel Italy Japan Norway Poland Portugal Slovenia Spain Sweden U.K. U.S.	Researchers estimate that it is roughly 50% more transmissible than the original virus but possesses only nominal ability to escape protection provided by prior infection with the original SARS-CoV-2 variant. Current data do not indicate more severe illness or death than other variants.
Beta	B.1.351	South Africa May 2020	Peak: March 20, 2021, 2% July 5, 2021 1% As of September 4, 0%	132 Countries Angola Bangladesh Botswana Malawi Malaysia Mozambique Qatar Rwanda South Africa Zambia Zimbabwe	May spread faster than other variants. Although still controversial, some evidence suggested that severe cases of COVID-19 were more common during South Africa's Beta-driven second wave than during its first wave, however more data is required. In addition, Beta seems to be more resistant to immunity generated by vaccines and previous infections than are other variants, including Delta.
Gamma	P.1	Brazil November 2020	Peak: May 22, 2021, 8% As of July 11, 3% As of September 4, 0%	81 countries Argentina Aruba Brazil Chile Colombia Costa Rica Ecuador Suriname Trinidad and Tobago	Despite its low global prevalence, high transmissibility leading to local dominance has been reported for the Gamma VOC. Current data do not indicate more severe illness or death than other variants. In addition, in-vitro assays raised the potential of reduced vaccine efficacy, and a seroprevalence study using convenience sampling of blood donors in Brazil suggested the risk of reinfection with Gamma.

Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 14 September 2021



VOI's (below) and Alerts for further monitoring (right side)

WHO label	Pango lineage*	GISAID clade	Nextstrain clade	Earliest documented samples	Date of designation
Eta	B.1.525	G/484K.V3	21D	Multiple countries, Dec-2020	17-Mar-2021
Iota	B.1.526	GH/253G.V1	21F	United States of America, Nov-2020	24-Mar-2021
Kappa	B.1.617.1	G/452R.V3	21B	India, Oct-2020	4-Apr-2021
Lambda	C.37	GR/452Q.V1	21G	Peru, Dec-2020	14-Jun-2021
Mu	B.1.621	GH	21H	Colombia, Jan-2021	30-Aug-2021

Pango Lineage*	GISAID clade	Nextstrain clade	Earliest documented samples	Date of designation
B.1.427 B.1.429	GH/452R.V1	21C	United States of America, Mar-2020	VOI: 5-Mar-2021 Alert: 6-Jul-2021
R.1	GR	-	Multiple countries, Jan-2021	07-Apr-2021
B.1.466.2	GH	-	Indonesia, Nov-2020	28-Apr-2021
B.1.1.318	GR	-	Multiple countries, Jan-2021	02-Jun-2021
B.1.1.519	GR	20B/S.732A	Multiple countries, Nov-2020	02-Jun-2021
C.36.3	GR	-	Multiple countries, Jan-2021	16-Jun-2021
B.1.214.2	G	-	Multiple countries, Nov-2020	30-Jun-2021
B.1.1.523	GR	-	Multiple countries, May-2020	14-Jul-2021
B.1.619	G	20A/S.126A	Multiple countries, May-2020	14-Jul-2021
B.1.620	G	-	Multiple countries, November 2020	14-Jul-2021
C.1.2	GR	-	South Africa, May 2021	01-Sep-2021

Subject in Focus

Boostering the vaccination

Q&A



Source:
[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)02046-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)02046-8/fulltext)

What are booster shots?

A “booster shot” refers to an additional dose of a vaccine that is given to someone after they have been fully vaccinated. For example, a booster shot for two-dose COVID-19 vaccines (e.g., BioNTech, AstraZeneca, and Moderna) would be a third dose. A booster shot for one-dose COVID-19 vaccines (e.g., Johnson & Johnson-Janssen) would be a second dose. Booster shots are given to “boost” immunity when the immune system is likely to have lost its ‘memory’ to protect against a virus.

When should you get a booster?

Ongoing research is still being conducted to understand what the best time might be for booster shots for COVID-19. Differences in when vaccines were rolled out in countries, the timing of doses, and what vaccines were used are factors that will help to decide when booster shots should be given. Other considerations based on age, type of vaccines received, and the state of the individual’s immune system will also help inform this decision. A number of countries are beginning to offer booster shots to certain individuals. The U.S. has approved an additional dose to people who are immunocompromised any time after 4 weeks from their second dose. Beginning on September 20, 2021, the U.S. also plans to offer boosters to anyone eight months out from their second shot, if it is found to be safe and effective and the timing is determined to be appropriate.

Israel is currently offering boosters to the entire population over 12 years old. Israel was one of the earliest countries to administer vaccines. However, still roughly 37% of the country is not fully vaccinated. Since the Delta variant became dominant, they have been seeing a high number of cases including in those previously vaccinated (which are usually mild). It is important to note that all vaccines used in the U.S. are still showing high protection against severe illness, hospitalization, and death in all countries.

Also, since many countries are struggling with COVID and don’t have access to enough vaccines, the WHO has called for a moratorium on the administration of boosters. They are requesting that wealthy countries hold off on boosters until at least 10% of every country’s population is vaccinated by the end of September and 40% by the end of the year. While some studies have highlighted the benefits of a booster vaccine dose in staying ahead of breakthrough infections (i.e., SARS-CoV-2 infections among fully vaccinated individuals), most cases that are becoming seriously ill now are in unvaccinated people. Especially in places with low vaccination coverage, the impact of boosters on controlling COVID-19 will not be as beneficial as more people receiving their initial vaccine doses.

Are you better off getting the same vaccine or a different one?

There is ongoing research to determine whether an individual is better off getting the same vaccine or a different one. So far, the BioNTech COVID-19 vaccine is the only vaccine that has been used in some countries as a booster dose. For other COVID-19 vaccine brands, there is still ongoing research on their use case as a booster.

While it is likely that those in the U.S. who received the J&J/Janssen vaccine will require a booster dose, the CDC has indicated that data needed to make this decision are not available yet. The data are expected in the coming weeks. Prior research related to mixing first and second doses (i.e., not boosters) has supported the use of mRNA vaccine (BioNTech or Moderna) as a second dose if the individual received the AstraZeneca vaccine as the first dose. This may lend some early support to using a different type of vaccine as a booster dose, but research on mixing for booster doses would need to be conducted.

Considerations in boosting COVID-19 vaccine immune responses, a peer-reviewed Lancet study by an international group of scientists, including FDA and WHO.

Summary

A new wave of COVID-19 cases caused by the highly transmissible Delta variant is exacerbating the worldwide public health crisis, and has led to consideration of the potential need for, and optimal timing of, booster doses for vaccinated populations. Any decision to do so should be evidence-based and consider the benefits and risks for individuals and society. COVID-19 vaccines continue to be effective against severe disease, including that caused by the Delta variant. Most of the observational studies on which this conclusion is based are, however, preliminary and difficult to interpret precisely due to potential confounding and selective reporting. Even if boosting were eventually shown to decrease the medium-term risk of serious disease, current vaccine supplies could save more lives if used in previously unvaccinated populations than if used as boosters in vaccinated populations.

Boosting might ultimately be needed in the general population because of waning immunity to the primary vaccination or because variants expressing new antigens have evolved to the point at which immune responses to the original vaccine antigens no longer protect adequately against currently circulating viruses. Although the benefits of primary COVID-19 vaccination clearly outweigh the risks, there could be risks if boosters are widely introduced too soon, or too frequently, especially with vaccines that can have immune-mediated side-effects (such as myocarditis, which is more common after the second dose of some mRNA vaccines, or Guillain-Barre syndrome, which has been associated with adenovirus-vectored COVID-19 vaccines). If unnecessary boosting causes significant adverse reactions, there could be implications for vaccine acceptance that go beyond COVID-19 vaccines. Thus, widespread boosting should be undertaken only if there is clear evidence that it is appropriate.

Current evidence does not, therefore, appear to show a need for boosting in the general population, in which efficacy against severe disease remains high. Even if humoral immunity appears to wane, reductions in neutralising antibody titre do not necessarily predict reductions in vaccine efficacy over time. Protection against severe disease is mediated not only by antibody responses, which might be relatively short lived for some vaccines, but also by memory responses and cell-mediated immunity, which are generally longer lived. It seems that the variants have not yet evolved to the point at which they are likely to escape the memory immune responses induced by those vaccines.

Outcome:

The message that boosting might soon be needed, if not justified by robust data and analysis, could adversely affect confidence in vaccines and undermine messaging about the value of primary vaccination. Whatever advantage boosters provide they do not outweigh the benefit of using those doses to protect the billions of people who remain unvaccinated worldwide. Boosters may be useful in some people with weak immune systems, but are not yet needed for the general population.

COVID-19 in children and adolescents

SARS-CoV-2 infections among children and adolescents typically cause less severe illness and fewer deaths as compared to adults. While a less severe course of disease is a positive outcome, there are concerns that mild symptoms may have led to less testing, resulting in fewer identified cases of SARS-CoV-2 infection in children and adolescents. If children and adolescents with mild or no symptoms also transmit the disease, they may also contribute to transmission in the community. Consequently, understanding symptoms, infectivity and patterns of SARS-CoV-2 transmission in children and adolescents is essential for developing, adapting and improving control measures for COVID-19 across all ages, especially since vaccination is not currently available or authorized for those under the age of 12 years in most contexts.

This report summarizes the current knowledge around SARS-CoV-2 infection acquisition and transmission and COVID-19 disease in children under the age of five years, older children (5 to 9 years old), younger adolescents (10 to 14 years old) and older adolescents (15 to 19 years old). Some information on incidence and mortality is also provided for young adults (20 to 24 years old). It aims to inform decisions, based on local contexts, on how best to keep schools, kindergarten and day-care facilities open and what advice to apply to intergenerational mixing.

Incidence and mortality in children, adolescents and young adults

Overall, there are proportionally fewer cases and deaths from COVID-19 among children, adolescents and young adults as compared to adults (Table 1). Based on age-disaggregated case data reported to WHO from 30 December 2019 to 6 September 2021, the proportion of global cases increased with age category: children under the age of five represented the smallest proportion of cases among individuals up to 24 years old, while older adolescents (15 to 19 years old) and young adults (20 to 24 years old) grouped together had the highest proportion of the global cases. Deaths for all age groups represented less than 0.5% of the proportion of global deaths.

What are the symptoms of COVID-19 in children and adolescents?

Younger children (under five years old), older children and adolescents (10 to 19 years old) usually have fewer and milder symptoms of SARS-CoV-2 infection than adults >25 years old and are less likely than adults to experience severe COVID-19 1-9. Milder symptoms and asymptomatic presentation often mean less frequent care-seeking for these groups; thus, children and adolescents tend to be tested less frequently and cases may go unreported. Early reports suggested an age-dependent risk of severe disease with those under one year experiencing more severe disease^{6, 10}, although several reviews show that neonates (first 28 days of life) have mild disease as compared to other paediatric patients¹¹⁻¹⁴. However, it is important to note that children under the age of one year and within the neonatal period (first 28 days after birth) have a higher risk of diseases which have overlapping presentation with COVID-19, such as pneumonia and malaria. Additionally, age disaggregation has not been systematically provided in the current literature and the results of these studies are context-specific such as timing within the pandemic and an emphasis on hospitalized patients. Children and adolescents can experience prolonged clinical symptoms (known as post COVID-19 condition, or post-acute sequelae of SARS-CoV-2 infection), however, the frequency and characteristics of these are still under investigation¹⁵. Additionally, a hyperinflammatory syndrome, referred to as paediatric inflammatory multisystem syndrome, temporally associated with SARS-CoV-2 (PIMS-TS) in Europe and multisystem inflammatory syndrome in children (MIS-C) in the United States of America, although rare, can occur, and complicates recovery from COVID-19¹⁶⁻¹⁹. The severity of disease in children and adolescents caused by SARS-CoV-2 variants of concern (VOC), in comparison with non-VOC lineages, remains under investigation.

Are children and adolescents less susceptible to SARS-CoV-2 infection than adults?

The risk of becoming infected with SARS-CoV-2 depends on a combination of susceptibility (host biological factors), biological properties of the virus, environmental factors associated with exposure type (going to work, or school etc.) and exposure intensity (level of community transmission and adherence to public health and social measures (PHSM)). Multiple population-based SARS-CoV-2 seroprevalence and viral shedding studies have investigated whether children and adolescents are infected at the same rate as adults, but the results have been mixed, possibly because of the studies being conducted at different time points in the pandemic when populations were subjected to different levels of PHSM²⁰. Even so, we do know that children of all ages can become infected and can spread the virus to others. Data on the global incidence of COVID-19 in adolescents suggests they test positive for SARS-CoV-2 at a higher proportion than children, however, seroprevalence surveys are needed to provide more information. Additionally, more detailed epidemiological information about the factors influencing susceptibility of children and adolescents to the new SARS-CoV-2 variants is urgently needed.

What about transmission of infection? Is there a difference between young children, older children and adolescents in transmitting SARS-CoV-2?

Outbreaks of COVID-19 have been identified in secondary schools, summer camps and day care centres, particularly when neither physical distancing nor masks were used to reduce risk²¹⁻²⁴. There is some preliminary evidence that children may be less infectious, than adolescents and adults, as measured by secondary attack rates²⁵. Children and adolescents who become infected with SARS-CoV-2 shed the virus in their respiratory tract and may also shed virus in their faeces²⁶⁻²⁹. Among individuals who were positive for SARS-CoV-2 who were tested at the same time point after symptom onset, SARS-CoV-2 viral RNA shedding in the respiratory track appeared similar in children, adolescents and adults³⁰.

The relationship between age, viral load and transmission across the full symptom spectrum of SARS-CoV-2 infection has not been comprehensively investigated because people with no, or mild, symptoms are seldom tested systematically. Thus, the relative transmissibility of SARS-CoV-2 at different ages remains uncertain, largely due to the challenges involved in disentangling the influences of biological, host, virus and environmental factors³¹⁻³⁵.

Conclusions

Children and adolescents infected with SARS-CoV-2 generally present with milder symptoms of COVID-19 disease; although infection with the variants of SARS CoV-2, including the Delta variant, require more investigation to determine if this will remain the case. The risk of transmission to and from children and adolescents depends on contextual factors such as the level of community transmission and the measures implemented to control the virus, host factors in the child, as well as biological factors related to the virus itself. However, children and adolescents of all ages become infected and also transmit SARS-CoV-2 to others. Younger children may be less susceptible than older children and adolescents, but the precise role of children and adolescents in the overall transmission of SARS-CoV-2 still requires further investigation.

The use of public health and social measures (PHSM), including physical distancing, cleaning hands, coughing into a bent elbow or a tissue, adequate ventilation in indoor settings, and masks (for older children - see guidance below), should be consistently and appropriately implemented for all ages in schools, especially since children under the age of 12 years are generally not yet eligible for vaccination.

Source: <https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---14-september-2021>

Table 1. Global epidemiological overview on children and adolescents (information from 30 December 2019 to 06 September 2021; Data cleaning is continuous, please interpret with caution).

Age group	Number of cases	Proportion (%) to global cases*	Number of deaths	Proportion (%) to global deaths**
<5 years	1 599 073	1.8	1704	0.1
5 to 14 years	5 622 295	6.2	1218	0.1
15 to 24 years	13 071 320	14.3	6327	0.4

Other Infectious Disease Outbreaks



Cholera

Mali - Cases of cholera have been confirmed in Ansongo, a small town in the **Gao Region** of eastern Mali, an area known as the three borders, surrounded by Mali, Burkina, and Niger. According to the Ministry of Health and Social Development, laboratory samples identified *Vibrio cholerae* 01 on September 11. Niger has an active cholera outbreak from which at least 100 deaths have been confirmed. Since coronavirus restrictions have relaxed, population movement has facilitated the importation of disease. Official data indicates that in 2011, Mali experienced a cholera outbreak that caused 65 deaths in the north of the country. The Ministry of Health indicated that epidemiological investigations are underway in accordance with the recommendations of the World Health Organization (WHO). Health authorities are encouraging the population to seek healthcare assistance in the event of diarrhea and or vomiting and to enhance hygiene practices. **Source:** [Promedmail.org](https://www.promedmail.org)

Measles in Afghan evacuees

Extremadura - The CDC requested that the evacuation flights for Afghan evacuees from Germany to the US be temporarily suspended "out of an abundance of caution" after four Afghans were found to have measles after arriving in the United States. Now all Afghan evacuees must be vaccinated for measles as a condition of entry to the United States. Therefore the US government is exploring measures to vaccinate people while they are still overseas. The transfer flights to the US have been stopped temporarily.

Source: <https://www.dw.com/en/evacuated-afghans-stranded-in-germany-due-to-measles/a-59161625>
<https://www.nytimes.com/2021/09/10/us/politics/measles-afghanistan-refugees.html>

Anthrax

Kyrgyzstan - Regional health officials announced a suspected cluster of anthrax cases in the Aksy district of the Jalal-Abad region of Kyrgyzstan. The cases appear to be linked to the manipulation and consumption of a dead animal infected with anthrax. The investigation was launched after an individual presented with skin lesions and tested positive for the disease. Other individuals presented with similar symptoms and are still waiting for test results. The health agency continues to conduct an epidemiological investigation and there are over 50 people who may have been exposed. So far, all of the cases have presented with cutaneous symptoms and no cases of gastrointestinal anthrax have been reported. Health officials are conducting household visits in an effort to identify close contacts while raising awareness among the population to implement safe practices when dealing with animals.

Spain - On September 6, health authorities from Extremadura -a western Spanish region bordering Portugal- issued an alert about probable cases of human anthrax. There is limited information about the number of individuals under investigation nor the clinical presentation among the affected. The Department of Agriculture of the Regional Government of Extremadura indicated that laboratory samples from animals in the local area have been sent for investigation. In addition, media reports indicate that by the end of August in the province of Badajoz, also in Extremadura, a horse was infected with anthrax. Anthrax continues to be a rare disease in Europe, with only a few cases reported every year. Between 2010 and 2014, 58 confirmed cases were reported via the European Surveillance System. Cutaneous anthrax is usually the most common form of anthrax and can occur after contact with infected livestock.

Show less

Source: https://24.kg/english/206697_Seven_people_hospitalized_with_suspected_anthrax_in_Aksy_district/
<https://promedmail.org/promed-post/?id=8660105>
<https://radio.opole.pl/104,479573,hiszpania-alert-epidemiczny-na-zachodzie-kraju-p>

Meningitis

Democratic Republic of the Congo – On 8 September 2021, the Democratic Republic of the Congo declared an outbreak of meningitis in the north-eastern Tshopo Province, with 261 suspected cases and 129 deaths reported (case fatality ratio (CFR): 49%). Confirmatory tests carried out by Institut Pasteur in Paris detected *Neisseria meningitidis*, one of the most frequent types of bacterial meningitis with the potential to cause large epidemics. Health authorities have deployed an initial emergency team and the WHO is supporting the response. A crisis response committee has been set up in Banalia, the community affected by the outbreak, as well as in Kisangani, the capital of Tshopo, to accelerate the outbreak control efforts. WHO has provided medical supplies in Banalia and plans to deploy more experts and resources

Source: <https://www.ecdc.europa.eu/sites/default/files/documents/communicable-disease-threats-report-10-09-2021-public.pdf>

Nipha virus

India - A case of Nipah virus infection was reported in a 12-year-old boy on 4 September 2021, in Kozhikode, Kerala state, India. The case was hospitalised on 29 August 2021 and has since died. As of 8 September 2021, media quoting health authorities stated that test results for 30 close contacts of the index case including the boy's parents and healthcare workers that treated him were confirmed to be negative. Samples from other close contacts continue to be sent for testing. According to an official government statement on 7 September 2021, a total of 122 close contacts have been identified, with 68 individuals in stable condition under isolation at Kozhikode Medical College. A team from the National Institute of Virology in Pune is tasked with collecting samples from bats and other animals to ascertain the source of the virus, as part of the Nipah outbreak management plan implemented by the State of Kerala since 5 September 2021.

Source: <https://www.ecdc.europa.eu/sites/default/files/documents/communicable-disease-threats-report-10-09-2021-public.pdf>

Plague

Madagascar - On 29 August 2021, an alert was made by the health authorities of the Arivonimamo district, in the Itasy region of Madagascar, regarding cases of pneumonic plague. As of 3 September 2021, a total of 30 cases of pneumonic plague, including 12 confirmed cases and seven deaths (CFR=23%), have been reported. According to media, the first case was in a patient who died in the week starting 23 August 2021, but was not reported by relatives. A second person died in the same family a week later. According to the same report, the Ministry of Public Health confirmed a diagnosis of pneumonic plague. Media quoting the Madagascar Ministry of Health reports that the seven deaths occurred in the municipality of Miandrandra. Of these, three died in hospital and four in the community. Twenty-two other patients are being treated. The municipality of Miandrandra is in the Arivonimamo district, Itasy region of Madagascar, in the centre of the island and 40 km southwest of the capital, Antananarivo. The municipality has been quarantined. Internal movement is banned for residents of the six municipalities of the Arivonimamo district. Active case finding and chemoprophylaxis for high-risk contacts are ongoing.

Plague is endemic in Madagascar. The last large outbreak of plague in Madagascar in 2017 resulted in 2417 confirmed, probable and suspected cases, including 209 deaths (case fatality rate 8.7%) reported from 57 of 114 districts in the country.

Source: <https://www.ecdc.europa.eu/sites/default/files/documents/communicable-disease-threats-report-10-09-2021-public.pdf>






























































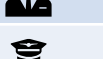
































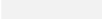
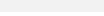
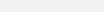
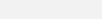
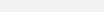
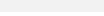
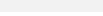
Leptospirosis

France - The Occitanie Regional Health Agency in France has reported a cluster of leptospirosis cases in the Auzat region this summer. Officials continue to investigate the situation as it appears that the source of infection has been linked to canyoning (travelling in canyons using a variety of techniques that may include swimming). Further information is limited regarding the specific area or demographics affected, or if there are any other factors that could have contributed to the individuals being infected.

Source: <https://www.ladepeche.fr/2021/09/11/dix-baigneurs-victimes-dune-bacterie-dans-lauzat-ils-attendent-une-enquete-9782731.php>

Summary of information on the individual national Corona restrictions

The icons are linked to the respective information. Please click on the icons for information.

NATO Member State		Health information	Vaccination news	Governmental information	NATO Member State		Health information	Vaccination news	Governmental information
	Albania					Latvia			
	Belgium					Lithuania			
	Bulgaria					Luxembourg			
	Canada					Montenegro			
	Croatia					Netherland			
	Czech Republic					North Macedonia			
	Denmark					Norway			
	Estonia					Poland			
	France					Portugal			
	Germany					Rumania			
	Great Britain					Slovakia			
	Greece					Slovenia			
	Hungary					Spain			
	Italy					Turkey			
	Iceland					USA			

Travel Recommendations and other Useful Links

Travel Recommendations

Many countries have halted some or all international travel since the onset of the COVID-19 pandemic but now have re-open travel some already closed public-travel again. 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.

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.

Information on COVID-19 testing and quarantine of air travellers in the EU and the US you can find following the link:

- <https://www.ecdc.europa.eu/en/publications-data/guidelines-covid-19-testing-and-quarantine-air-travellers>
- <https://www.cdc.gov/coronavirus/2019-ncov/travelers/testing-air-travel.html>

More information about traveling worldwide:

- National regulation regarding travel restrictions, flight operation and screening for single countries you will find [here](#) (US) and [here](#) (EU).
- Official IATA travel restrictions. You will find [here](#).

More information about traveling in the EU

- by the **European Commission** you will find here:

<https://www.consilium.europa.eu/en/policies/coronavirus/covid-19-travel-and-transport/>

- The **ECDC** publishes a map of EU Member States, broken down by regions, which show the risk levels across the regions in Europe using a traffic light system. Find it [here](#).

As a general rule, information on new measures will be published 24 hours before they come into effect.

All information should also be made available on [Re-open EU](#), which should contain a cross-reference to the map published regularly by the European Centre for Disease Prevention and Control.

Useful links

ECDC:

- [All info about the COVID-19 pandemic](#); (situation updates, latest news and reports, risk assessments etc.)
- [COVID-19 Vaccine tracker](#)
- [SARS-CoV-2 variants dashboard](#) for EU
- [Latest Risk assessment on COVID-19](#), 15 Feb 2021
- All “guidance’s and technical reports” can be found under “All COVID-19 outputs” on this page [here](#)

WHO:

- Epi-WIN [webinars and updates](#)
- Status of “[COVID-19 Vaccines within WHO](#) EUL/PQ evaluation process” and the “Draft landscape and tracker of [COVID-19 candidate vaccines](#)”
- Weekly [Epidemiological and operational updates](#)
- COVID-19 new variants: [Knowledge gaps and research](#)
- COVID-19 [Dashboard](#)
- [Vaccines explained](#)
- Tracking [SARS-CoV-2 variants](#)
- Science in 5: [WHO’s series on science and COVID-19](#)
- [Quick links](#)

CDC:

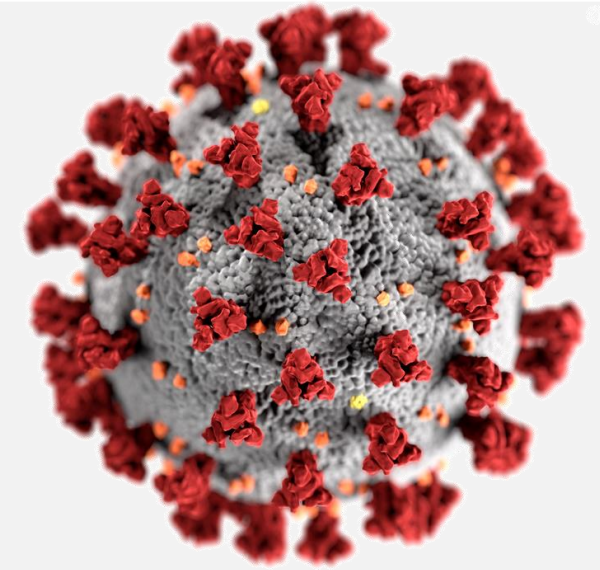
- COVID [Data Tracker](#) and [weekly review](#)
- [What’s new and Updated](#)
- [Guidance for COVID-19](#)

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/>
- BlueDot; <https://bluedot.global/>

Upcoming Events FHPB

We are happy to announce the;
Force Health Protection Event:
COVID-19; A retrospective look at a turbulent time



When: 3rd to 4th November 2021
Location: Virtual event via Microsoft Office
Teams platform
Registration: Open 3rd May 2021
Link: Registration [page](#)

