



Update 84 COVID-19 Coronavirus Disease 22 September 2021



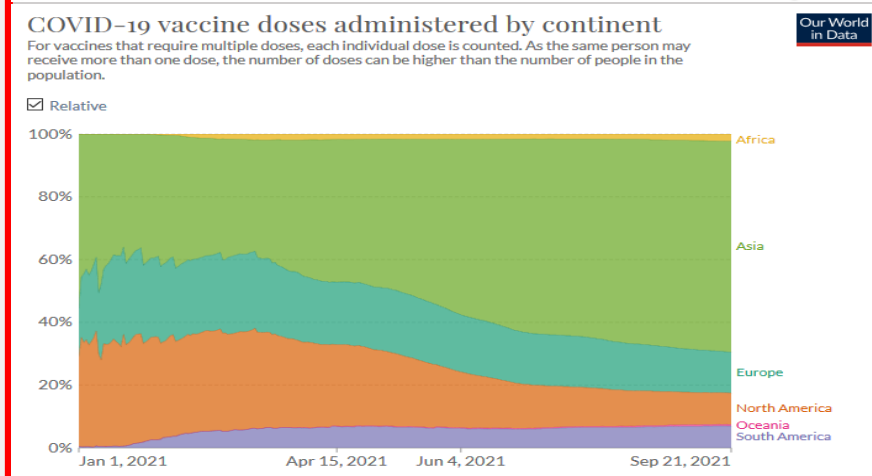
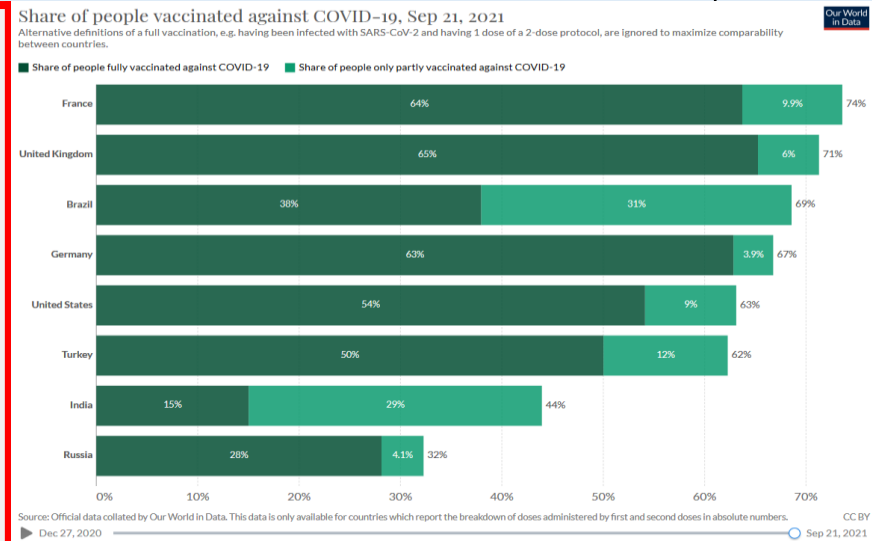
GLOBAL
↘
229 685 115
Confirmed cases
216 100 000 recovered
4 710 160 deaths

USA
(7-days incidence 319,1)
↘
42 210 292
confirmed cases
39 100 000 recovered
675 060 deaths

India
(7-days incidence 15,8)
↘
33 504 534
confirmed cases
32 530 000 recovered
445 385 deaths

Brazil
(7-days incidence 114,1)
↗
21 247 094
confirmed cases
20 270 000 recovered
591 440 deaths

- NEWS:**
- WHO:** The Dir Gen [stated](#) that acute health needs in Afghanistan must be urgently addressed and health gains protected – noting that all aspects of the COVID response have dropped with a rapid decrease in vaccination rates.
 - ECDC:** published [a Protocol for a focused after-action review on evidence-based decision-making for selected COVID-19 response measures](#)
 - WHO:** reported about the [first virtual tabletop \(V-TTX\) exercise for Rapid Response Mobile Laboratories \(RRML/GOARN\) tests RRML deployment procedures and minimum standards](#) :
 - UN:** A [report](#) from the UN suggested that Africa faces a 470 million COVID-19 vaccine shortfall this year.
 - CDC:** The US Government [announced](#) \$2.1 billion investment to improve infection prevention and control activities in US public health and healthcare sectors.
 - EMA:** published the latest update on [Safety of COVID-19 vaccines](#)
 - EMA:** [Increase in manufacturing capacity for COVID-19 vaccine from BioNTech/Pfizer](#)
- Topics:**
- Global situation
 - European situation
 - Vaccination news
 - SARS-CoV-2 VOIs and VOCs
 - Subject in Focus: Cigarette smoke as a gateway for drug development
 - Other Infectious Disease Outbreaks
 - NATO Member State: Summary of information on the individual national Corona restrictions
 - Travel Recommendations and other useful Links



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EUROPE
↘
65 024 146
confirmed cases

61 460 000
recovered
1 272 047 deaths

GBR
(7-days incidence 321,7)
↘
7 496 547
confirmed cases

6 858 000 recovered
135 455 deaths

Russia
(7-days incidence 92,3)
↗
7 208 241
confirmed cases
6 717 000 recovered
196 235 deaths

France
(7-days incidence 70,4)
↘
6 964 699
confirmed cases
6 712 000 recovered
116 222 deaths

Situation by WHO Region, as of 21 September

Global epidemiological situation overview; WHO as of 19 September 2021

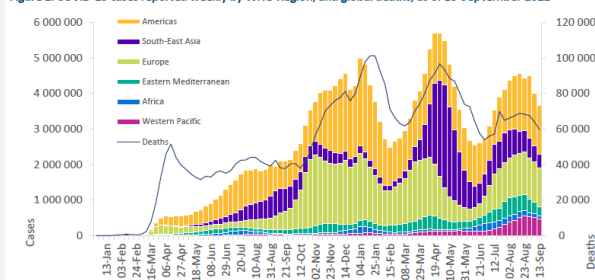
The numbers of weekly COVID-19 cases and deaths globally continued to decline this week, with over 3.6 million cases and just under 60 000 deaths reported between 13-19 September. This brings the cumulative number of confirmed cases reported globally to just under 228 million. While the African and the European Regions reported numbers of cases similar to those of the previous week, the other regions reported decreases in weekly case incidence, with substantial decreases reported in the Eastern Mediterranean (22%) and South East Asia Regions (16%).

In terms of COVID-19 mortality, nearly 60 000 deaths were reported globally in the past week, a 7% decrease as compared to the previous week. This brings the cumulative number of deaths to over 4.6 million. The African, Eastern Mediterranean and South-East Asian Regions reported decreases in weekly mortality over the past week, with the South-East Asia Region reporting the largest percentage decrease (27%). In contrast, the Western Pacific Region reported an increase (7%) in the number of new weekly deaths, while the number of deaths reported in Americas and European Regions reported was similar to that of the previous week.

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

- **United States of America;** reporting 1 017 644 new cases; similar to last week,
- **India;** reporting 211 242 new cases; 15% decrease,
- **United Kingdom;** reporting 203 077 new cases; 21% decrease,
- **Turkey;** reporting 183 962 new cases; 16% increase,
- **Philippines;** reporting 141 522 new cases; similar to last week.

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

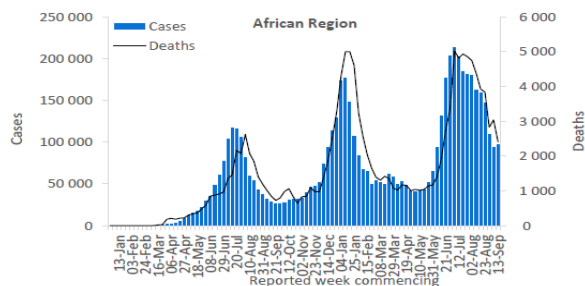


WHO regional overviews Epidemiological week 13 – 19 September 2021

African Region

The African Region reported over 98 000 new cases, a case incidence similar to that of the previous week, following a consistent decline in the number of new weekly cases over the past two months. While most of the countries in the region reported a decline in case incidence, several countries reported an increase including Botswana, Burundi and Zimbabwe. The majority of countries in the region reported a decline in the number of new deaths last week.

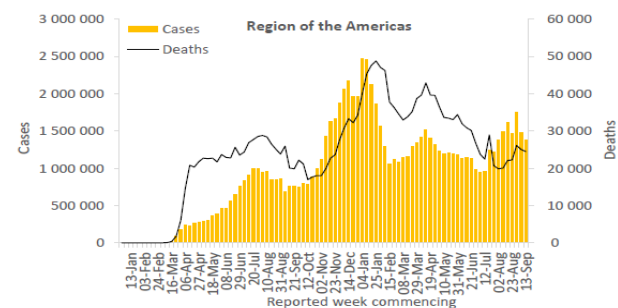
The highest numbers of new cases were reported from South Africa (26 115 new cases; 44 new cases per 100 000 population; 35% decrease), Uganda (22 511 new cases; 49.2 new cases per 100 000), and Ethiopia (9266 new cases; 8.1 new cases per 100 000; figures similar to those of the previous week). The highest numbers of new deaths were reported from South Africa (1365 new deaths; 2.3 new deaths per 100 000 population; 14% decrease), Ethiopia (208 new deaths; <1 new deaths per 100 000, 18% increase), and Algeria (112 new deaths; <1 new deaths per 100 000; 39% decrease).



Region of the Americas

The Region of the Americas reported over 1.3 million new cases and over 24 000 new deaths in the past week, a 7% decrease in the number of cases and a number of new deaths similar to that of the previous week. While the majority of countries in the Region reported a decline in weekly case incidence, several countries including Canada, Chile and Suriname reported an increase over the past week. Nearly a third of countries in the Region reported an increase in the number of new deaths in the past week.

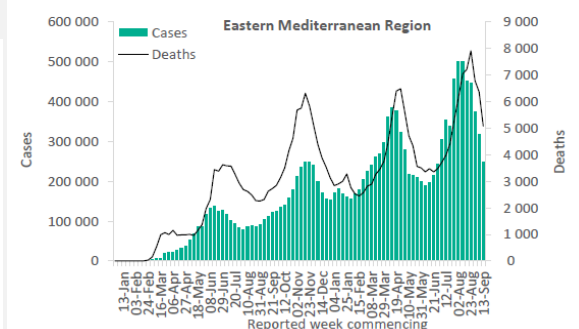
The highest numbers of new cases were reported from the United States of America (1 017 644 new cases; 307.4 new cases per 100 000; similar to the numbers reported last week), Brazil (105 369 new cases; 49.6 new cases per 100 000; 11% decrease), and Mexico (58 751 new cases; 45.6 new cases per 100 000; 34% decrease). Similarly, the highest numbers of new deaths were reported from the United States of America (12 896 new deaths; 3.9 new deaths per 100 000; similar to the numbers reported last week), Brazil (3727 new deaths; 1.8 new deaths per 100 000; 17% increase), and Mexico (3689 new deaths; 2.9 new deaths per 100 000; 20% decrease).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported a marked decrease of 22% in the number of new weekly cases, with over 250 000 new cases reported this week as compared to the previous week. Although the regional case incidence has continued to decline for over a month, weekly incidence increased in five of 22 (23%) countries in the past week, including in Djibouti, Syrian Arab Republic, and Egypt. The highest numbers of new cases were reported from the Islamic Republic of Iran (133 293 new cases; 158.7 new cases per 100 000; 23% decrease), Iraq (25 494 new cases; 63.4 new cases per 100 000; 27% decrease), and Pakistan (19 894 new cases; 9 new cases per 100 000; 23% decrease).

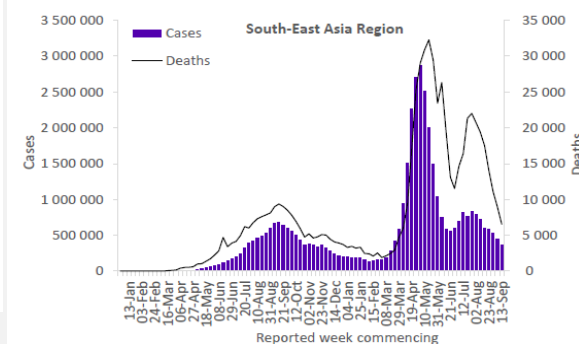
Similarly, weekly deaths have continued to decline for past three weeks, with over 5000 new deaths reported this week, a 20% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Islamic Republic of Iran (2967 new deaths; 3.5 new deaths per 100 000; 21% decrease), Pakistan (473 new deaths; <1 new deaths per 100 000; 14% decrease), and Morocco (342 new deaths; <1 new deaths per 100 000; 31% decrease).



South-East Asia Region

The South-East Asia Region reported over 383 000 new cases and over 6500 new deaths, decreases of 16% and 27% respectively as compared to the previous week. Incidence of cases and deaths has declined for nearly two months, with all countries in the Region reporting a decrease in weekly cases for the past two weeks. This week, notable decreases were reported in Timor-Leste (by 42% for cases and 40% for deaths) and Indonesia (by 40% for cases and 48% for deaths) as compared to last week. The highest numbers of new cases were reported from India (211 242 new cases; 15.3 new cases per 100 000; 15% decrease), Thailand (94 304 new cases; 135.1 new cases per 100 000; 7% decrease), and Indonesia (23 252 new cases; 8.5 new cases per 100 000; 40% decrease).

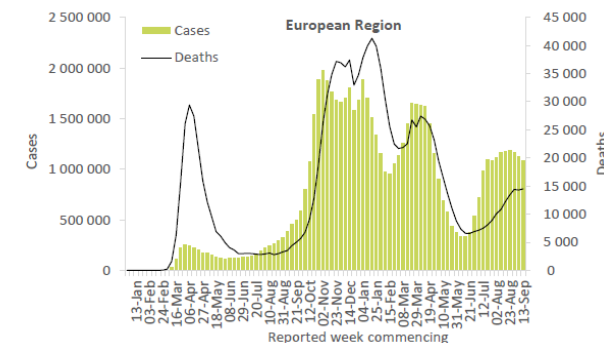
The highest numbers of new deaths were reported from India (2183 new deaths; <1 new deaths per 100 000; similar to last week), Indonesia (1579 new deaths; <1 new deaths per 100 000; a 48% decrease), and Thailand (1010 new deaths; 1.4 new deaths per 100 000; a 33% decrease).



European Region

In the European Region, the weekly incidence in both cases and deaths remained similar to rates reported in the previous week, with just under 1.1 million new cases and over 14 000 new deaths reported this week, as compared to the previous week. The highest numbers of new cases were reported from the United Kingdom (203 077 new cases; 299.1 new cases per 100 000; 21% decrease), Turkey (183 962 new cases; 218.1 new cases per 100 000; 16% increase), and the Russian Federation (134 858 new cases; 92.4 new cases per 100 000; 6% increase).

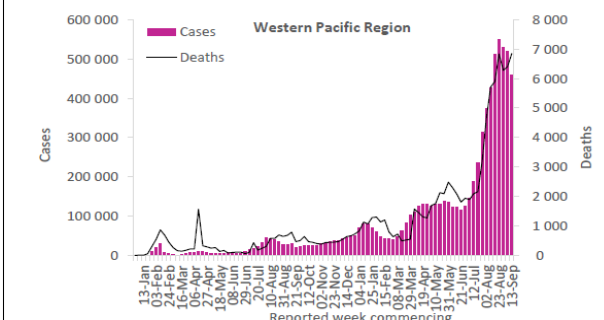
The highest numbers of new deaths were reported from the Russian Federation (5469 new deaths; 3.7 new deaths per 100 000; similar to last week), Turkey (1718 new deaths; 2 new deaths per 100 000; a 5% decrease), and the United Kingdom (1003 new deaths; 1.5 new deaths per 100 000; similar to last week).



Western Pacific Region

Case incidence in the Western Pacific Region has decreased for past three weeks, with just under 462 000 new cases reported this week, a 11% decrease as compared to the previous week. There were notable decreases in weekly case incidence reported in Japan (45%) and French Polynesia (43%). The highest numbers of new cases were reported from the Philippines (141 522 new cases; 129.1 new cases per 100 000; similar to last week), Malaysia (122 376 new cases; 378.1 new cases per 100 000; a 10% decrease), and Viet Nam (75 674 new cases; 77.7 new cases per 100 000; a 16% decrease).

Weekly deaths have continued to increase since early July 2021, with notable increases reported in New Caledonia (by 2000%), Papua New Guinea (by 225%) and Mongolia (by 143%). The highest numbers of new deaths were reported from Malaysia (2648 new deaths; 8.2 new deaths per 100 000; similar to last week), Viet Nam (1839 new deaths; 1.9 new deaths per 100 000; 17% decrease), and the Philippines (1605 new deaths; 1.5 new deaths per 100 000; 75% increase).



Global Situation



CUBA: Disease activity has continued to increase since the first big wave of cases began in July. While the seven-day rolling average number of daily new cases has decreased from 9,412 on August 25 to 6,470 on September 3, a new surge in new cases bumped the seven-day rolling average to 8,023 as of September 19. There is currently limited information on the proportion of positive test results as well as healthcare facilities' capacity. According to media sources, oxygen supplies for COVID-19 patients have been running low since early August, and the factory that produces the country's oxygen tanks has closed, while morgues and crematoriums have been overwhelmed. According to a government official, the city of Guantanamo is dealing with a sharp increase of deaths that on some days has exceeded the usual figure by eight-fold. Media sources have also highlighted that up to December 31 2020, only 110 pregnant and puerperal women had been diagnosed with COVID-19. However, so far in 2021, more than 2,000 women in that risk group have been diagnosed, with an uncertain number of deaths. This suggests that while the number of cases indicates high disease activity, the extent of the outbreak is likely larger than what official numbers are showing.

After restrictions were lifted in July, local authorities have reinstated restrictions due to the surge in cases. These restrictions include limiting travelling within the country, along with the closing of public places such as public beaches. The island's capital, Havana, has been in partial lockdown since mid-August. Individuals seeking to enter the capital are only allowed with special permission and they must not show any COVID-19 symptoms. Travellers arriving in Cuba do not require a PCR test prior to entering the island and do not require quarantine if they go to an all-inclusive hotel. Upon arrival, all passengers must undergo temperature screening, take a free PCR test, and fill out a Health Declaration Form (given on board the flight).

Guam: Disease activity has been surging since the beginning of August, indicating the arrival of the fourth wave. The number of daily new cases reached an all-time peak of 325 on September 8. The seven-day rolling average number of daily new cases increased from six on August 1 to 130 on September 18. The seven-day rolling average number of new deaths has increased from zero on August 1, to 3 on September 18. Since the end of July, 100% of new cases were attributed to the Delta variant (B.1.612.2). Official's report intensive care units have reached capacity as of September 20.

As of September 7, the island remains in a public health emergency until September 29. Unvaccinated individuals will be limited to household activities, while individuals with at least one dose may publicly gather up to 10 people indoors and 25 people outdoors. Travel restrictions are in place for travellers from Brazil, the UK, Ireland, Schengen Area countries, India, Iran, and China. Fully vaccinated travellers are excluded from the ten-day quarantine restriction.

Cambodia: Disease activity has been increasing over the past two weeks, which has been largely attributed to the Delta variant (B.1.617.2). The seven-day rolling average number of new cases has increased from 421 cases on August 31 to 636 cases on September 14. The seven-day rolling average number of new deaths has remained the same over the past two weeks at 11 new deaths. The 14-day test positivity rate as of September 14 was 4.1% which is a slight increase since August 31 when it was 3.9%.

The central government has designated regions of the country as red (high-risk), orange (intermediate-risk), and yellow (low-risk) zones, according to the rate of COVID-19 transmission within the area. Red zones may be subject to a curfew and a ban of non-essential commercial travel and activity, while orange and yellow zones may have fewer restrictions. Phnom Penh (red zone) restrictions are in place from September 15 to September 23. These restrictions include the closure of non-essential businesses such as bars and cinemas, as well as a ban on gatherings of 15 or more individuals. Secondary school students have returned to in-person classes, but are required to abide by a mask mandate and provide proof of vaccination.

Local communities within the Siem Reap Province have been classified as orange zones. Until September 22, a nightly curfew from 9 p.m. to 3 a.m. is in place. During curfew hours residents must stay home except for essential reasons, and only up to two individuals from the same household may leave home to purchase essential goods. Residents are required to carry valid identification while outside. A suspension for tourist visas, visa-on-arrival services, and visa-free travel remains in place. Travellers with demonstrated proof of essential reasons for travel may receive government permission for a 30-day short-term visa. Travellers applying for a short-term visa must also be able to provide proof of medical insurance, and a medical certificate issued within 72 hours of travel clearing the individual of COVID-19 infection. Upon arrival, travellers must complete a COVID-19 test and quarantine for 14 days at a government-designated facility.

French Guiana: Disease activity has escalated over recent months with the seven-day rolling average number of daily new cases increasing from a low of 63 on July 3 to 195 on September 2. As of September 14, this value has dropped to 141. According to media articles, the rise in cases has been attributed to the spread of the Delta variant. According to health officials, as of September 8, the test positive rate is 16.1%.

In response to rising cases and hospitalizations, COVID-19 restrictions have been tightened over recent weeks. A curfew is in place from 7 p.m. to 5 a.m., Monday through Friday, in the municipalities of Cayenne, Kourou, Macouria, Matoury, Montsinery-Tonnegrade, Remire-Montjoly, Roura, and Sinnamary. On weekends, residents from these areas are subject to a curfew from 7 p.m. on Saturday to 5 a.m. Monday. All other municipalities have a curfew set from 9 p.m. to 5 a.m. Domestic movement restrictions are in place between municipalities according to local COVID-19 activity. However, individuals who are fully vaccinated may travel to and from restricted locations. French Guiana's borders remain closed to most non-resident foreign nationals. Those who do arrive must present a negative COVID-19 PCR test result taken no more than 72 hours before departure or an antigen test taken no more than 48 hours before departure. Additionally, authorities pushed back student's return to school until September 13 due to the epidemiologic situation in the country.

Slovenia: The country is in the midst of a fourth wave, with disease activity rising since mid-July. As of August 1, about 99% of new cases are attributable to the Delta variant. Over the past month, the seven-day rolling average number of daily new cases has jumped from 184 on August 14 to 919 on September 14. At its peak, the seven-day rolling average number of daily new cases was 2,028 on January 10. Between August 14 and September 14, the 14-day testing rate has increased from 67,700 to 71,815 per 100,000 people, and the test positivity rate from 10% to 19%, respectively. This high test positivity rate indicates a substantial degree of under-detection of cases.

As of September 10, officials have stated they will maintain international and domestic restrictions until at least September 30. All air and ship travellers must complete an electronic passenger locator form (dPLF) before arrival. Upon arrival, all international travellers must provide one of the following documents: proof of full vaccination, a negative PCR test within 72 hours or a rapid antigen test within 48 hours before departure to the country, or evidence of full recovery from COVID-19 disease. Non-essential travel is permitted from countries in the European Union (EU) and selected others. As of September 7, officials have implemented the recovered-tested-vaccinated requirement, whereby all staff and public-facing workers must prove having recovered from or be fully vaccinated against COVID-19. Otherwise, they will be required to undergo mandatory weekly PCR/rapid antigen tests.

USA: According to the **American Academy of Pediatrics (AAP)**, as of September 13, COVID-19 infections in children have **risen exponentially and are up 240% since early July**. Since the beginning of the pandemic, data from the AAP indicates that there have been nearly 5.3 million children confirmed with COVID-19, which accounts for **29% of all cases reported nationwide**. The main contributing factors to the present trends include: students returning to in-person school, the presence of the highly transmissible Delta variant (**B.1.617.2**), and the fact that **children under 12 are particularly vulnerable to infection compared to those over 12, as they are not yet eligible for vaccination**.

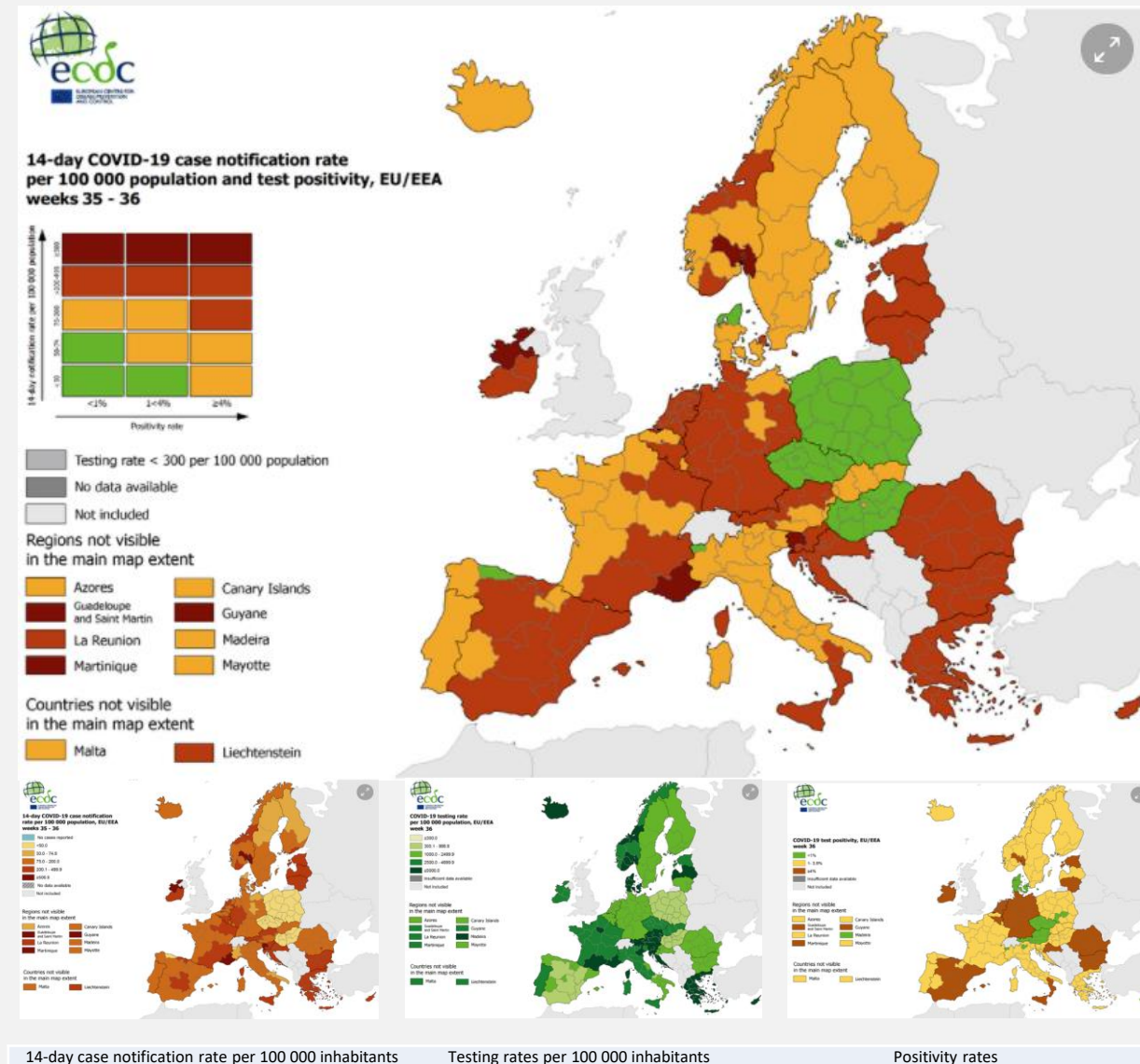
SARS-CoV-2 infections among children and adolescents typically cause less severe illness, hospitalizations, and fewer deaths when compared to adults. There is a growing understanding of the potential long-term impacts of COVID-19 disease in children as in adults, including those with mild symptoms. There are also concerns that mild symptoms may have led to **less testing, resulting in fewer identified cases of SARS-CoV-2 infection in children and adolescents**. Although these groups may have mild or no symptoms, they **contribute to transmission rates in the community**.

Lastly, there are **proportionally fewer** cases, hospitalizations, and deaths from COVID-19 among children, adolescents and young adults as compared to adults. However, these are still a considerable number in the U.S. More than 49,000 children have been hospitalized with COVID-19 since August 2020, according to the U.S. Centers for Disease Control and Prevention (CDC). An average of 276 children were getting hospitalized with COVID-19 every day between August 14 and 20. **Almost half (46.4%) of children hospitalized with COVID-19 across 100 U.S. counties between March 2020 and June 2021 had no known underlying condition**.

Given the rising trends in pediatric cases of COVID-19, the CDC has urged schools to implement universal masking among students aged two years and older along with physical distancing measures. Because **Delta spreads more quickly than previous variants**, and many restrictions have been relaxed, there is ongoing research to understand whether the rise in pediatric cases is solely a result of rapid transmission or whether it may cause more severe disease. Some early studies (which have not focused only on children under 12) suggest that **Delta may contribute to a greater risk of hospitalization than observed with previous variants**.

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 16 September 2021



ECDC COVID-19 surveillance report Week 36, as of 17 September 2021

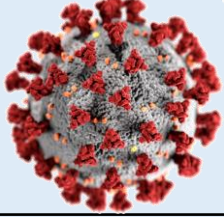
Overall Situation

- At the end of week 36 (week ending Sunday 12 September 2021), the overall epidemiological situation in the European Union and European Economic Area (EU/EEA) was characterised by a high, slowly decreasing overall case notification rate and a low, stable death rate, with these trends forecast to continue over the next two weeks. Hospitalisations and ICU admissions are forecast to remain stable. Case notification rates among those aged 15 to 24 years, the most affected age group, have continued to decrease across the EU/EEA and may have begun to stabilise among children under 15 years of age following a recent increase. The picture varies considerably at Member State level, with increasing trends in case notification rates mainly reported in eastern and northern parts of the EU/EEA. Several countries are reporting increases in severity indicators including cases in older age groups, hospitalisation and mortality.
- ECDC's assessment of each country's epidemiological situation comes from a composite score based on the absolute value and trend of five weekly COVID-19 epidemiological indicators. As shown below, for week 36, the epidemiological situation in the EU/EEA **overall was categorised as of moderate concern** (from low concern the previous week). **One country** was categorised as of **very high concern**, **six countries** as of **high concern**, **12 countries** as of **moderate concern** and **11 countries** as of **low concern**. Compared with the previous week, **four countries** (Czechia, Liechtenstein, Norway and Romania) **moved to a higher category**, **three countries** (France, Greece and Italy) **moved to a lower category** and **23 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 37 to 38. Compared with the current week, decreasing trends in cases, stable trends in hospital admissions, stable trends in ICU admissions and stable trends in deaths are forecast in the EU/EEA by the end of week 38.
- By the end of week 36, the median cumulative uptake of at **least one vaccine dose** in the EU/EEA among adults **aged 18 years and older** was **77.1%** (country range: 23.0–96.9%). The median cumulative **uptake of full vaccination among adults aged 18 years and older** was **71.3%** (country range: 21.4–90.5%).
- The estimated distribution (median and range of values from 16 countries for weeks 34 to 35, 23 August to 5 September 2021) of **variants of concern (VOC)** was **99.4%** (71.0–100.0%) for **B.1.617.2 (Delta)**, **0.0%** (0.0–0.7%) for **P.1 (Gamma)** and **0.0%** (0.0–0.3%) for **B.1.351 (Beta)**. The distribution was **0.1%** (0.0–13.7%) for **B.1.1.7 (Alpha)**, which has been downgraded from the list of VOCs.
- The overall COVID-19 case notification rate for the EU/EEA was **171.0 per 100 000 population** (187.2 the previous week). This rate has been decreasing for two weeks. The 14-day COVID-19 death rate (14.9 deaths per million population, compared with 14.5 deaths the previous week) has been stable for one week. Of 29 countries with data on hospital/ICU admissions or occupancy up to week 36, 14 reported an increasing trend in at least one of these indicators compared to the previous week.

Weekly COVID-19 epidemiological category by country, weeks 22 to 36 2021

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

Level of concern	very low (1 - 2.4)	low (2.5 - 4.4)	moderate (4.5 - 6.4)	high (6.5 - 8.4)	very high (8.5 - 10)
2021-09-12	3.6	3.9	3.3	3.7	3.8
2021-09-05	2.3	2.9	3.7	3.7	3.8
2021-08-29	3.7	2.7	3.0	3.0	3.2
2021-08-22	2.8	1.7	1.7	1.5	1.5
2021-08-15	3.0	3.0	2.9	2.4	2.4
2021-08-08	2.8	2.5	2.7	3.0	2.7
2021-08-01	2.9	1.9	1.7	1.7	2.0
2021-07-25	3.0	2.0	2.2	2.2	2.2
2021-07-18	3.3	2.0	2.5	1.8	1.8
2021-07-11	1.9	1.6	1.8	2.0	2.2
2021-07-04	3.0	2.7	2.9	2.9	3.2
2021-06-27	3.0	2.9	2.9	2.9	3.2
2021-06-20	3.5	2.9	2.5	1.8	1.8
2021-06-13	4.5	3.5	2.8	2.2	2.0
2021-06-06	1.7	1.5	1.5	1.5	2.0
2021-05-30	3.7	2.9	2.9	2.9	3.2
2021-05-23	3.5	2.7	2.2	1.5	1.5
2021-05-16	2.9	2.2	1.5	1.5	1.5
2021-05-09	4.0	3.0	2.8	2.8	3.0
2021-05-02	1.7	1.8	1.6	1.7	2.0
2021-04-25	3.7	3.8	2.8	1.5	2.0
2021-04-18	2.7	2.0	2.0	2.0	2.7
2021-04-11	3.5	2.3	2.2	3.5	4.7
2021-04-04	4.5	3.5	2.8	2.2	3.0
2021-03-28	1.7	1.5	1.5	1.5	2.0
2021-03-21	3.7	2.9	2.9	2.9	3.2
2021-03-14	4.0	3.0	2.2	2.0	2.7
2021-03-07	1.8	2.0	2.0	2.0	2.2
2021-02-28	3.7	4.7	3.7	3.5	4.0
2021-02-21	2.8	2.5	2.5	2.7	2.7
2021-02-14	3.5	2.8	2.7	1.5	1.5
2021-02-07	3.5	2.8	2.7	1.5	1.5
2021-01-31	4.2	4.5	3.2	4.2	4.0
2021-01-24	3.8	3.8	2.5	1.7	1.7



Vaccination news



Global: A total of 10 countries accounted for 71% of all vaccinations administered globally as of September 16. The top five countries/territories with the highest number of cumulative people vaccinated with at least one dose per 100,000 population are Gibraltar (118,160), Palau (97,580), United Arab Emirates (90,180), Portugal (86,950), and Iceland (81,810). The top five countries 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 (320), South Sudan (480), Chad (510), and Tanzania (570).

Cuba: As of September 17, of the island nation's population of over 11.3 million inhabitants, 7,904,075 (69.7%) have received at least one dose of a COVID-19 vaccine, and 4,472,022 (39.5%) are fully vaccinated. Cuban health officials have stated that vaccines made in Cuba have been found safe for young children, thus, the country began a massive vaccination campaign for children between the ages of two and 10 on September 16. Cuban children will be required to get three doses to be considered fully vaccinated. Cuba is not part of the WHO's COVAX program created for low and middle-income nations to access vaccines, nor has it purchased them on the international market.

GUAM: As of September 18, of the country's 167,294 population, 124,276 (74.3%) individuals have received at least one dose of a COVID-19 vaccine, and 108,802 (65.0%) are fully vaccinated. The countries vaccination campaign began in January 2021, with officials administering the Pfizer-BioNTech, Johnson & Johnson, and Moderna vaccine.

Cambodia: As of September 14, 72.8% (~11.5 million) of Cambodia's population of approximately 15.5 million has received at least one dose of a COVID-19 vaccine. While 63% (~9 million) have been fully vaccinated with either Sinopharm, Sinovac, AstraZeneca, or the Johnson & Johnson vaccine. China has donated more than 26.8 million doses of Sinopharm and Sinovac vaccines, the United States donated one million doses of the Johnson & Johnson vaccine, and roughly 300,000 vaccine doses have been delivered through the COVAX program facility. Additionally, 5.1% of the population has received a third dose of the AstraZeneca vaccine, future donations of vaccine doses are intended to be provided as a third dose to the population.

French Guyana: According to health officials, as of September 8, a total of 132,331 total doses of a vaccine have been administered and as of September 9, 28.5% of citizens aged 12 years and over have been fully vaccinated. Vaccines administered have included BioNTech/Pfizer, Oxford AstraZeneca, Moderna, and Johnson & Johnson.

As of September 14, of the country's 2.1 million population, 49.2% (1,026,944) individuals have received at least one dose of a COVID-19 vaccine, and 44.9% (937,578) are fully vaccinated.

The vaccination campaign began in December 2020 and has since been administering the Pfizer/BioNTech, Johnson & Johnson, Moderna, and AstraZeneca vaccines.

Health officials are expecting exponential growth in new cases due to the country having one of the lowest vaccination rates compared to other EU countries in the region.

China: [China Says It Has Vaccinated 1 Billion People - The New York Times \(nytimes.com\)](#)

The media has reported that China has vaccinated 1 billion people. "It was a significant accomplishment, representing 71 percent of China's population of 1.4 billion. China has administered 2.16 billion doses, nearly triple that of India, which is ranked second for shots given and has doled out 752.7 million doses, according to Our World in Data, which tracks vaccination figures.

More than 200 million people ages 60 and older have been inoculated, while about 95 million children ages 12 to 17 have received shots, according to Lei Zhenglong, a senior official with China's National Health Commission.

"The total number of doses and the number of people covered by vaccination in our country rank first in the world," Mr. Lei said at a news briefing on Thursday."

Italy: [Covid News: Idaho Hospitals Prepare to Ration Care - The New York Times \(nytimes.com\)](#)

Italy will require its residents to show a health pass to go to work, the government announced Thursday. It is the first country in Europe to require coronavirus vaccination certificates so widely. "It's an extraordinary endeavor," Italy's public administration minister, Renato Brunetta, said Thursday night. "It's all the human capital in the country."

Starting in mid-October, a requirement that already applies to some essential workers will expand to cover anyone working in factories, public offices, shops, restaurants and other settings. That is 23 million people, Mr. Brunetta said.

BioNTech/Pfizer: On September 20, Pfizer Inc and BioNTech SE announced **the first results from a pivotal trial of the COVID-19 vaccine in children aged five to 11 years old.** The results from a Phase 2/3 trial showed a favourable safety profile and robust neutralizing antibody response in children five to 11 years of age using a two-dose regimen of 10 µg vaccine (adults receive a two-dose regimen of 30 µg vaccine) administered 21 days apart.

The Phase 1/2/3 study enrolled 4,500 children aged six months to 11 years of age at more than 90 clinical trial sites across the United States, Finland, Poland, and Spain. The trial aimed to evaluate the safety, tolerability, and immunogenicity of the Pfizer-BioNTech vaccine on a two-dose regimen administered 21 days apart within three age groups: five to 11 years of age, two to five years of age, and six months to two years of age. From the Phase 2/3 trial, 2,268 participants were five to 11 years of age. Following administration of a two-dose regimen of 10 µg COVID-19 vaccine, the SARS-CoV-2-neutralizing antibody geometric mean titer (GMT) provided **evidence of a strong immune response in this cohort of children one month after the second dose.** This was comparable (non-inferior) to the control group which included participants 16 to 25 years of age who received a two-dose regimen of 30 µg vaccine. Additionally, the COVID-19 vaccine was well tolerated with side effects being comparable to those observed in the 16 to 25 years of age control group.

Pfizer and BioNTech plan to submit this data to the U.S. Food and Drug Administration (FDA), European Medicines Agency, other regulatory bodies, and for peer-reviewed publication as soon as possible. Within the U.S., at this time, **submission for Emergency Use Authorization (EUA) is expected soon for the age cohort of five to 11 years, and full FDA approval will be filed for in the future.** Topline results for the age cohorts of two to five years and six months to two years are expected by the end of 2021. Currently, within the U.S., COMIRNATY® is an FDA-approved COVID-19 vaccine made by Pfizer for BioNTech. It is approved for use as a two-dose series of vaccines for the prevention of COVID-19 in individuals aged 16 years of age and older. For individuals 12 to 15 years of age, it is only authorized under EUA for emergency use in the prevention of COVID-19. Please consult local guidance for regulatory status in your location.

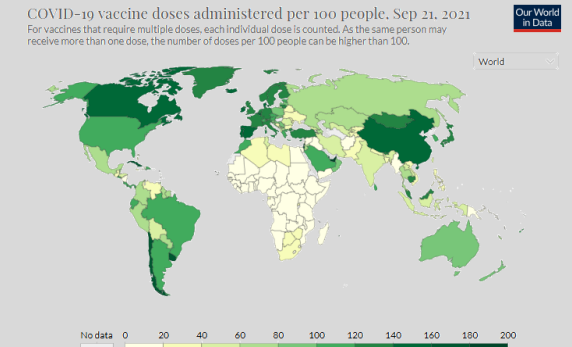
FDA: [FDA advisers vote not to recommend Pfizer booster shots for most Americans](#)

Scientific advisers to the US Food and Drug Administration (FDA) have voted not to **recommend a third shot** of the Pfizer vaccine for most Americans, a potentially significant blow to the Biden administration after it announced a plan to "boost" adults before advisory committees had a chance to review scientific evidence in public.

The Lancet: [Considerations in boosting COVID-19 vaccine immune responses](#)

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.

Although the idea of further reducing the number of COVID-19 cases by enhancing immunity in vaccinated people is appealing, 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. Careful and public scrutiny of the evolving data will be needed to assure that decisions about boosting are informed by reliable science more than by politics. 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.



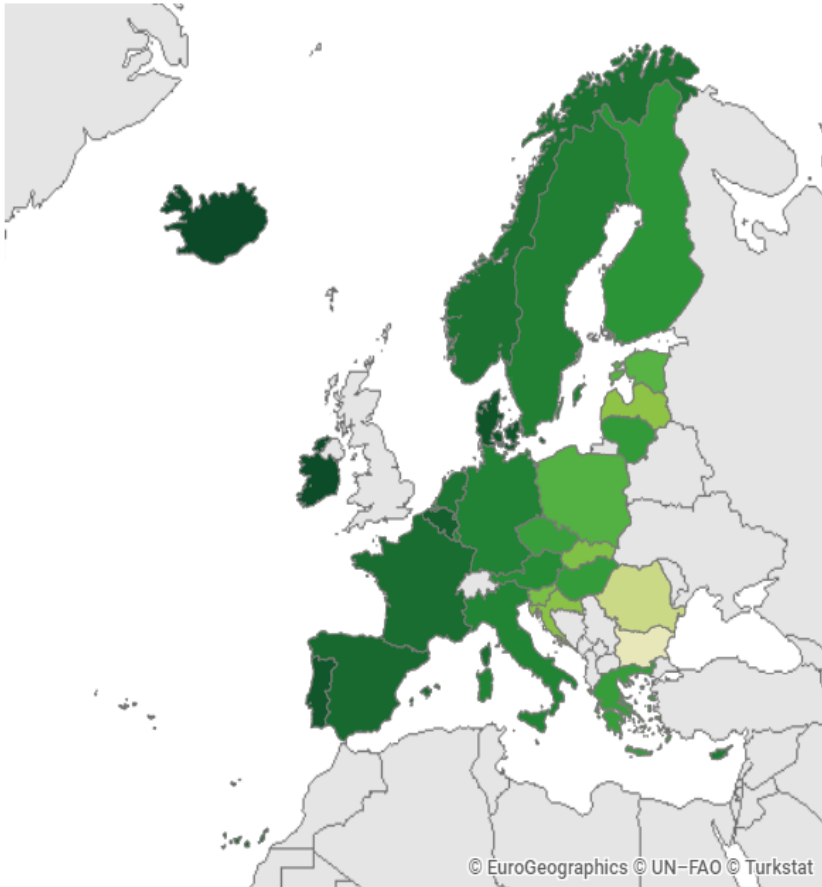
European Situation on Vaccination

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

Total doses distributed to EU/EEA countries

Indicator: Uptake full vaccination

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

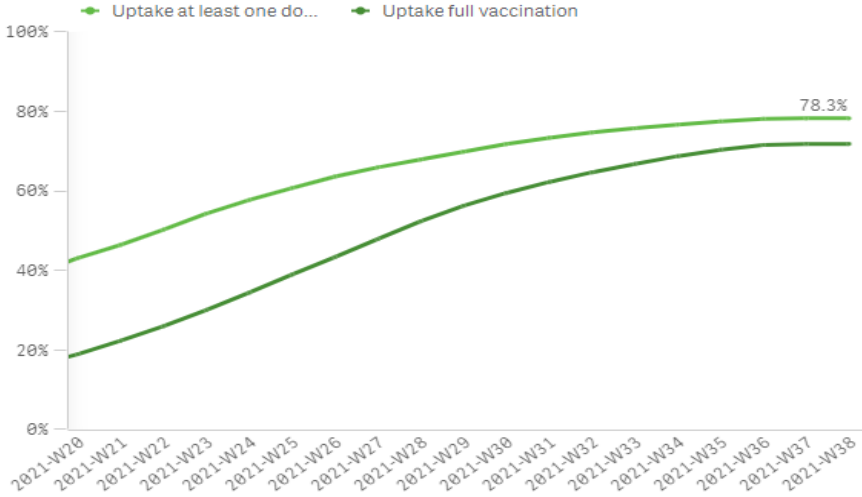


Uptake full vaccination (%)



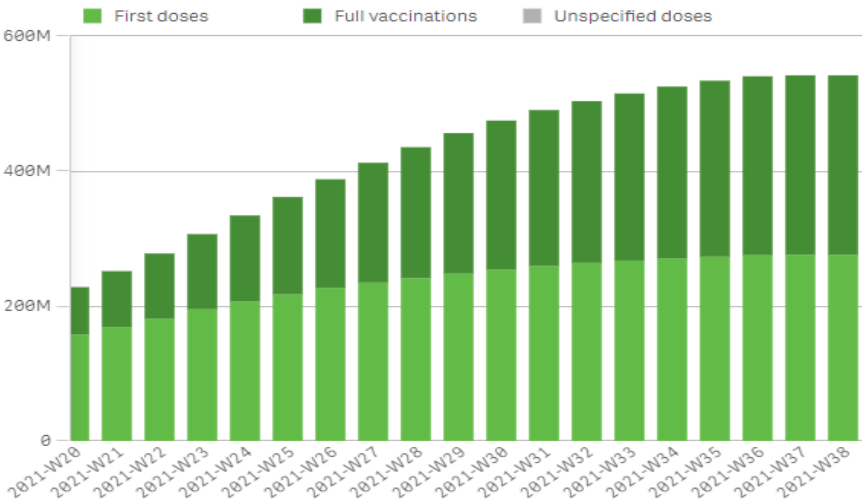
Cumulative uptake (%) of at least one vaccine dose and full vaccination among adults (18+) in EU/EEA countries as of 2021-09-21

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 2021-09-21

by reporting week (data for current week are preliminary)



Cumulative uptake (%) of at least one vaccine dose by age group in EU/EEA countries as of 2021-09-21

Country	80+ years	70-79 years	60-69 years	50-59 years	25-49 years
Austria	100.0%	83.6%	86.3%	76.3%	65.5%
Belgium	90.9%	96.0%	93.3%	89.7%	80.8%
Bulgaria	21.0%	32.5%	30.9%	26.4%	19.1%
Croatia	57.4%	74.3%	69.1%	56.7%	41.5%
Cyprus	97.0%	96.5%	89.3%	83.5%	76.1%
Czechia	83.5%	88.2%	75.8%	71.8%	56.2%
Denmark	100.0%	99.9%	97.1%	94.3%	83.2%
Estonia	66.3%	76.3%	71.6%	69.1%	60.2%
Finland	95.1%	99.6%	91.2%	87.7%	79.2%
France	85.8%	96.9%	89.4%	89.5%	83.5%
Germany	-	-	-	-	-
Greece	73.5%	82.1%	79.4%	73.1%	62.7%
Hungary	75.9%	86.7%	78.4%	72.2%	61.9%
Iceland	100.0%	100.0%	99.4%	92.4%	86.6%
Ireland	100.0%	100.0%	99.9%	98.0%	86.5%
Italy	97.3%	91.7%	89.3%	83.8%	74.3%
Latvia	42.7%	53.9%	55.1%	52.1%	50.4%
Liechtenstein	-	-	-	-	-
Lithuania	60.1%	77.2%	80.1%	73.4%	70.2%
Luxembourg	87.2%	87.4%	84.8%	82.2%	69.5%
Malta	100.0%	100.0%	95.4%	88.7%	87.8%
Netherlands	-	-	-	-	-
Norway	98.3%	100.0%	96.6%	94.3%	84.2%
Poland	69.8%	88.5%	70.9%	63.1%	52.2%
Portugal	100.0%	100.0%	100.0%	98.4%	92.6%
Romania	20.1%	37.1%	39.2%	38.3%	31.7%
Slovakia	53.2%	71.0%	63.6%	54.8%	45.3%
Slovenia	74.3%	82.4%	71.6%	62.6%	45.0%
Spain	100.0%	98.8%	98.2%	94.3%	82.3%
Sweden	95.0%	96.3%	91.5%	89.0%	77.2%

Variants and Mutations; Variants of Global Concern

Reclassification of VOIs Eta (B.1.525), Iota (B.1.526) and Kappa (B.1.617.1)

The VOIs **Eta** (B.1.525), **Iota** (B.1.526) and **Kappa** (B.1.617.1) have been reclassified as ‘former VOIs’ based upon the latest round of assessments on 13 September 2021. These will now be assessed as Variants Under Monitoring (VUMs). While all three variants carry mutations with suspected and/or established phenotypic impacts, the number of reported detections of these variants have decreased over time at the global, regional and country levels. Evidence from both sequencing data submitted to GISAID and information available to WHO indicate a substantial decline in their respective incidence worldwide, and therefore represent diminished public health risks relative to other VOCs and VOIs.

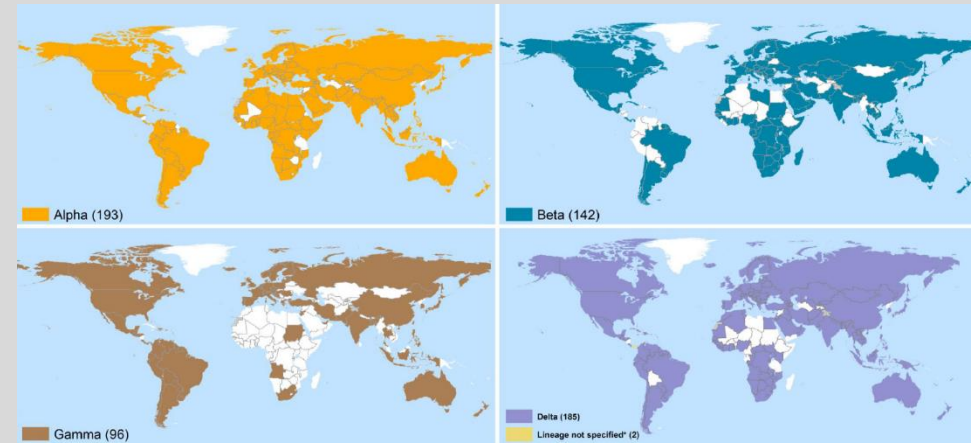
The WHO assessment of the impact of variants considers global risks posed by variants. At country level, national authorities may choose to continue to designate Eta, Iota and Kappa as variants of local interest. Moreover, these variants will continue to be monitored, and if their characteristics change over time, this classification will be reassessed.

Eta (B.1.525) has been detected in 81 countries since it was initially identified in December 2020. It was designated as a VOI on 17 March 2021. This variant has shown a limited reduction in neutralizing activity of sera of vaccinated individuals, comparable to the reduction observed for the Delta variant. Since a peak in circulation in April 2021 of 0.8% of the sequences submitted to GISAID, there has been a continuous decline in the detection of this variant. Sequencing data submitted to GISAID and information from WHO Regional Offices indicate that the prevalence of Eta has remained very low at a global, regional and country level since July 2021.

Iota (B.1.526) was first identified in the United States of America (USA) in November 2020. It was designated as a VOI on 24 March 2021, following an increase in the number of sequences submitted to GISAID across several countries (identified in at least 49 countries). Roughly half of the sequences of this variant contains the E484K mutation in the spike, and one third contain the S477N change, but those two changes are practically never seen together in this variant. By April 2021, the proportion of this variant to overall sequences submitted to GISAID reached a peak of just over 3%, with the majority of sequences being reported from the USA. Since then, the proportion of this variant has declined continuously. Sequencing data from the USA shows a significant and continued decline in the proportion of Iota, which has only been found in very sporadic cases since late July 2021.

Kappa (B.1.617.1) was first reported by India in early October 2020 and has since spread to 57 countries. It was designated as a VOI on 4 April 2021. Like the Delta variant, this variant has the spike mutation P681R, which is thought to increase the transmissibility of the variant. Kappa shares a common parent lineage with Delta, but Delta has additional notable amino acid changes in the spike protein. Also similar to Delta, Kappa shows a limited reduction in the neutralizing activity of convalescent sera and sera of vaccinated individuals. Kappa reached a peak of 1% of all sequences submitted to GISAID in April 2021 but has since shown a steep and continuous decline in the proportion of submitted sequences. Sequencing data submitted to GISAID and information available to WHO indicate that the prevalence of Kappa at a global and country levels has remained very low since July 2021. This decline to very low to no circulation was also observed in regions of India that had previously experienced high transmission of this variant, such as Maharashtra.

Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 21 September 2021



VOI's (below) and VUM's (right side)

The category of ‘Alerts for further monitoring’ has been renamed ‘Variants Under Monitoring’ (VUMs). The change applies only to the name, while the definition remains the same.

WHO label	Pango lineage*	GISAID clade	Nextstrain clade	Earliest documented samples	Date of designation
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

The revised list of current VOIs now includes **Lambda** and **Mu** variants, both circulating in Latin America, where the Delta variant has begun to circulate but has not yet become dominant. The epidemiology of these VOIs, particularly considering the co-circulation of the Delta variant, will continue to be monitored closely.

Source:
[Tracking SARS-CoV-2 variants \(who.int\)](https://www.who.int/tracking-sars-cov-2/variants)
[Weekly epidemiological update on COVID-19 - 21 September 2021 \(who.int\)](https://www.who.int/news-room/weekly-epidemiological-update-on-covid-19-21-september-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 VUM: 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.38.3	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-July-2021
B.1.619	G	20A/S.126A	Multiple countries, May-2020	14-July-2021
B.1.620	G	-	Multiple countries, November 2020	14-July-2021
C.1.2	GR	-	South Africa, May 2021	01-Sep-2021
B.1.617.1 [§]	G/452R.V3	21B	India, Oct-2020	VOI: 4-Apr-2021 VUM: 20-Sep-2021
B.1.526 [§]	GH/253G.V1	21F	United States of America, Nov-2020	VOI: 24-Mar-2021 VUM: 20-Sep-2021
B.1.525 [§]	G/484K.V3	21D	Multiple countries, Dec-2020	VOI: 17-Mar-2021 VUM: 20-Sep-2021

Subject in Focus

Cigarette smoke as a gateway for drug development

The negative impact of smoking on health outcomes in COVID-19 patients is well known and associated with increased severity of disease, however there have been conflicting results concerning the impact of smoking on risk of infection. Expression of the receptor for SARS-CoV-2 infection, angiotensin-converting enzyme 2 (ACE2), was reported to be higher in smoking mice and humans, suggesting that smokers may be at a higher risk of infection. On the other hand, several reports suggested fewer smokers among patients infected with SARS-CoV-2 or lower numbers of SARS-CoV-2 positive cases among smokers than among non-smokers.

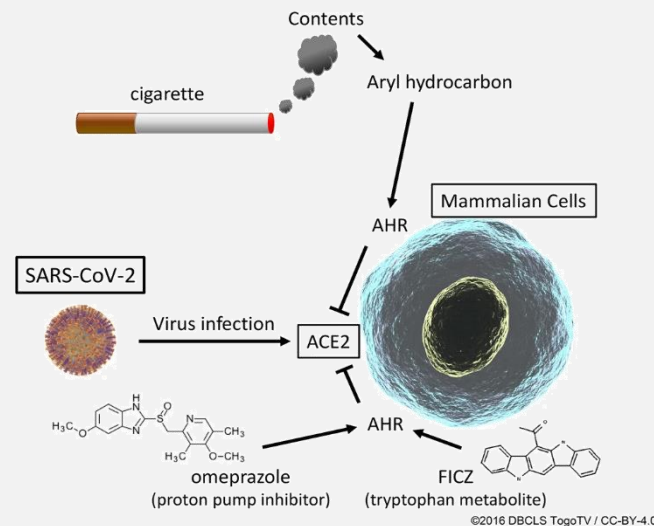
In a recent study performed by the University of Hiroshima, researchers identified two drugs that mimic the effect of chemicals in cigarette smoke and bind to a receptor in mammalian cells that inhibits production of ACE2 proteins, a process that appears to reduce the ability of the SARS-CoV-2 virus to enter the cell. The findings appear in the journal *Scientific Reports* on 17 August.

“We must stress the presence of strong evidence showing that smoking increases the severity of COVID-19,” corresponding author [Keiji Tanimoto](#) said. “But the mechanism we discovered here is worth further investigation as a potential tool to fight SARS-CoV-2 infections.”

Cigarette smoke contains polycyclic aromatic hydrocarbons (PAHs). These can bind to and activate aryl hydrocarbon receptors (AHRs). AHRs are a type of receptor inside of mammalian cells that act as a transcription factor with the ability to increase or decrease the expression of certain genes.

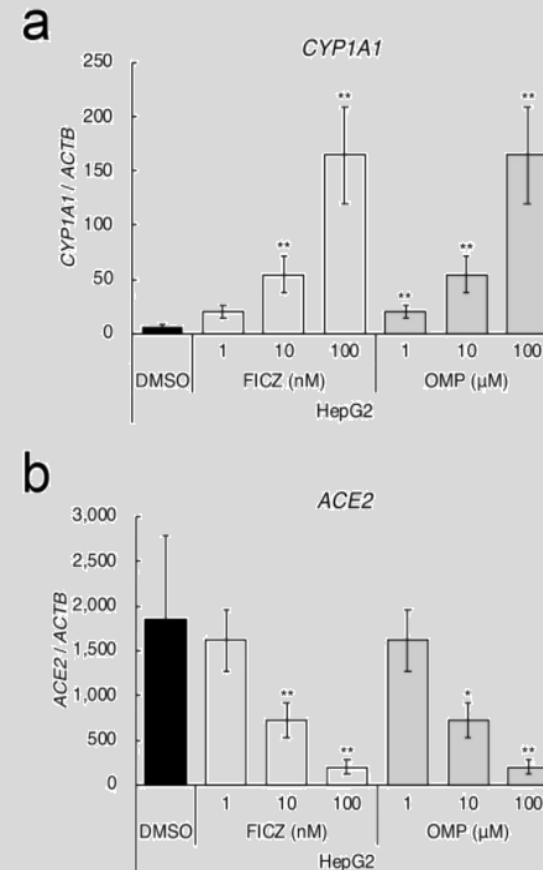
The SARS-CoV-2 virus uses the ACE2 receptor protein on the surface of human cells to enter and infect the cell. Knowing this about the relationship between PAHs and AHRs, the researchers wanted to investigate the effect of drugs that activate AHR on expression of the genes that control production of the ACE2 protein.

First, the scientists investigated various cell lines to examine their gene expression levels of ACE2. They found that those cells originating in the oral cavity, lungs and liver had the highest ACE2 expression. These high-ACE2-expression cells were then subjected to various doses of cigarette-smoke extract (CSE) for 24 hours. After this, the rate of expression of the *CYP1A1* gene, which is known to be inducible by CSE, was evaluated. The CSE treatment induced increased expression of *CYP1A1* gene in liver and lung cells in a dose-dependent manner but was not as pronounced in oral cavity cells. ACE2 expression was significantly reduced in CSE-treated liver cells in a dose-dependent manner, and was slightly reduced in oral and lung cells.



In order to explain why this was happening in the presence of CSE, the researchers then used RNA sequencing analysis to investigate what was happening with gene expression more comprehensively. They found that CSE increased the expression of genes related to a number of key signalling processes within the cell that are regulated by AHR.

To more directly observe this mechanism by which AHR acts on ACE2 expression, the effects of two drugs that can activate AHR were evaluated on the liver cells. The first, 6-formylindolo(3,2-b)carbazole (FICZ) is derivative of the amino acid tryptophan, and the second, omeprazole (OMP), is a medication already widely used in the treatment of acid reflux and peptic ulcers.



RNA sequencing data suggested that the *CYP1A1* gene was strongly induced in liver cells by these AHR activators (Fig. A), and expression of the *ACE2* gene was strongly inhibited (Fig. B), again in a dose-dependent manner.

In other words, CSE and these two drugs—all of which act as activators of AHR—are able to suppress the expression of ACE2 in mammalian cells, and by doing so, reduce the ability of the SARS-CoV-2 virus to enter the cell.

To confirm that the effects of FICZ and OMP on ACE2 suppression were actually dependent on AHR, knock-down experiments were performed. The study also included experiments to determine time-dependence and dose-dependence of drug administration



































































































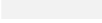
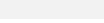
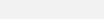
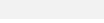
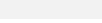
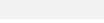
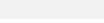
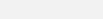
Based on the findings in the lab, the team is now proceeding with pre-clinical and clinical trials on the drugs as a novel anti-COVID-19 therapy.

In conclusion this study is a great example of how generally harmful toxic substances, such as cigarette smoke affect the human body in multiple unique ways. They can offer a starting point in understanding cellular mechanisms and aid in the development of new COVID-19 medications. However it is important to remember that although CSE was able to reduce ACE2 expression in the study, smoking overall has a clearly negative impact on health outcome and should be avoided.

Source: <https://www.nature.com/articles/s41598-021-96109-w>
<https://www.hiroshima-u.ac.jp/en/news/66516->

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:

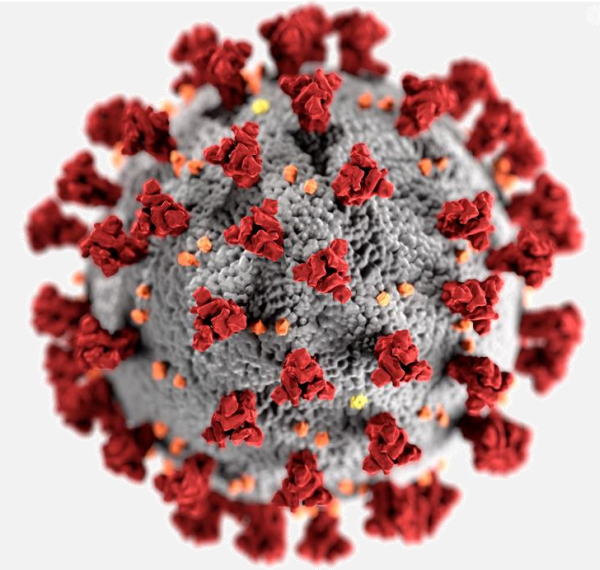
- COVID [Data Tracker](#) and [weekly review](#)
- [What’s new and Updated](#)
- [Guidance for COVID-19](#)

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](#)

