



Update 95 COVID-19 Coronavirus Disease 08 December 2021



GLOBAL
↗
263 010 414
Confirmed cases
248 900 000 recovered
5 218 330 deaths

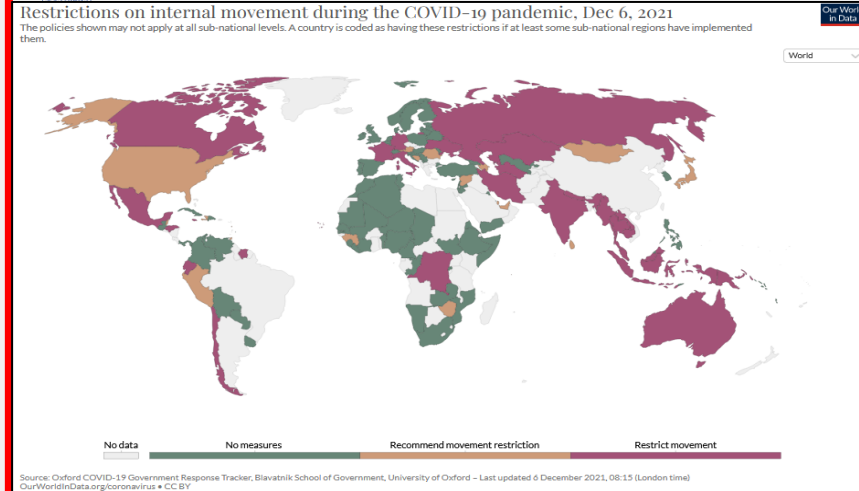
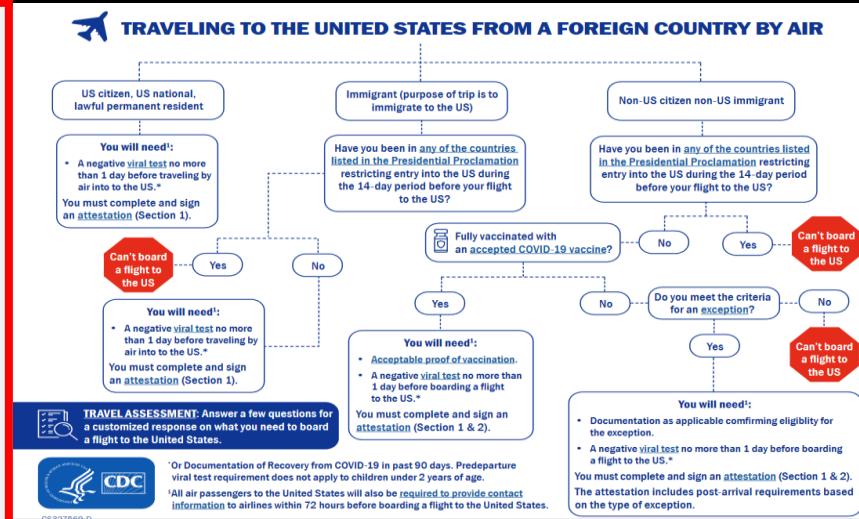
USA
(7-days incidence 251,4)
↗
49 172 752
confirmed cases
46 810 000 recovered
787 880 death

India
(7-days incidence 4,4)
↘
34 656 822
confirmed cases
34 030 000 recovered
473 952 deaths

Brazil
(7-days incidence 25,1)
↘
22 157 726
confirmed cases
21 390 000 recovered
616 018 deaths

News:

- WHO:** WHO has updated its [living guideline on COVID-19 therapeutics](#) to include convalescent plasma. For non-severe COVID-19 patients, WHO recommends against its use, while it should only be used within clinical trials for severe and critical COVID-19 patients.
- EMA:** EMA's human medicines committee (CHMP) [has recommended extending the indication](#) of RoActemra (tocilizumab) to include the treatment of adults with COVID-19 who are receiving systemic treatment with corticosteroids and require supplemental oxygen or mechanical ventilation.
- WHO:** As of 30 November 2021 WHO has received US 1 billion out of the 1.9 billion total [requirement of the SPRP](#). A funding shortfall of 36 remains during the final quarter of the year, leaving WHO in danger of being unable to sustain core COVID 19 functions at national and global levels for urgent priorities such as vaccination, surveillance and acute response, particularly in countries experiencing surges in cases.
- CDC:** Emphasizes again the importance of vaccination, boosters, and general prevention strategies that are needed to protect against COVID-19. Especially due to the recent emergence of the [Omicron variant](#). Everyone 5 and older should get vaccinated and boosters are recommended for everyone 18 years and older.
- WHO:** WHO has joined efforts with the Islamic Development Bank IsDB Group and Yemen's Ministry of Public Health and Population to construct [14 new oxygen production stations](#) that will save lives from the COVID 19 pandemic
- ECDC:** Published a [threat assessment brief](#) about the implications of the further emergence and spread of the SARS CoV-2 B.1.1.529 variant of concern (Omicron) for the EU.
- WHO:** has called for mandatory corona vaccination to be considered only as a last resort in the fight against the pandemic. Mandatory vaccination regulations "are an absolute last resort and can only be applied when all other feasible options to improve vaccination activity have been exhausted".
- Topics:**
 - Global situation
 - European situation
 - Vaccination news
 - SARS-CoV-2 VOIs and VOCs
 - Subject in Focus: Notable Update: Pros and Cons of rolling out third doses?
 - Poster "Hemostatic profiles of COVID-19 convalescent freeze-dried plasma"
 - Flu Awareness Campaign 2021
 - Other Infectious Disease Outbreaks



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EUROPE
↗
86 080 870
confirmed cases
78 460 000 recovered
1 524 348 deaths

GBR
(7-days incidence 499,1)
↗
10 560 345
confirmed cases
9 715 000 recovered
145 826 deaths

Russia
(7-days incidence 152,5)
↘
9 692 411
confirmed cases
8 892 000 recovered
278 131 deaths

Turkey
(7-days incidence 178,3)
↘
8 945 807
confirmed cases
8 509 000 recovered
78 215 deaths

Situation by WHO Region, as of 05 December

Global epidemiological situation overview; WHO as of 05 December 2021

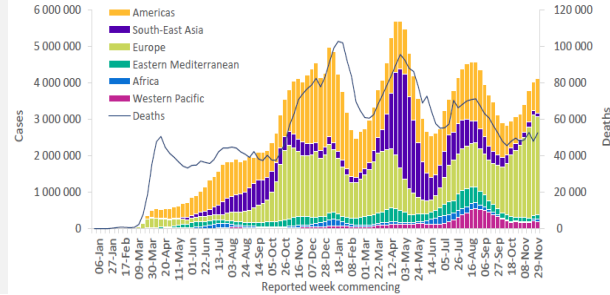
Globally, weekly case incidence plateaued this week (29 November - 5 December 2021), with over 4 million confirmed new cases reported, like the number reported in the previous week's figures. However, new weekly deaths increased by 10% as compared to the previous week, with over 52 500 new deaths reported. As of 5 December, nearly 265 million confirmed cases and over 5.2 million deaths have been reported globally.

The African Region and the Region of the Americas reported increases in new weekly cases of 79% and 21%, respectively, while the Western Pacific and South-East Asia regions both reported decreases of 10%. The number of new weekly cases reported by the European and Eastern Mediterranean regions were like the numbers reported in the previous week. New weekly deaths increased by 49% in the South-East Asia Region and 38% in the Region of the Americas, while the weekly deaths decreased in the African and Eastern Mediterranean Regions by 13% and 8%, respectively. The number of new deaths were like those reported in the previous week in both the European and the Western Pacific regions. The regions reporting the highest weekly case incidence per 100 000 population continue to be the European Region (288.0 new cases per 100 000 population) and the Region of the Americas (91.4 new cases per 100 000 population). Both regions also reported the highest weekly incidence in deaths of 3.1 and 1.3 per 100 000 population, respectively while <1 new death per 100 000 was reported in all other regions.

The highest numbers of new cases were reported from:

- United States of America (752 394 new cases; 30% increase),
- Germany (396 429 new cases; similar to previous week),
- United Kingdom (310 696 new cases; similar to previous week),
- Russian Federation (231 240 new cases; like previous week) and,
- France (283 500 new cases; 49% increase)

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 5 December 2021**

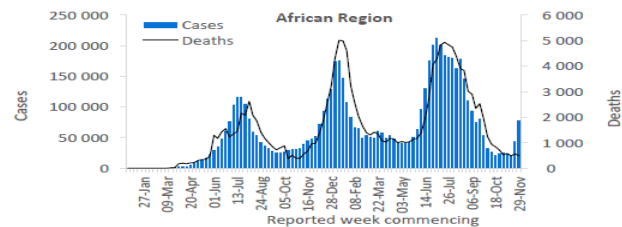


WHO regional overviews Epidemiological week 29 November – 5 December 2021

African Region

The case incidence in the African Region continues to increase with over 79 000 new cases reported during the week of 29 November to 5 December, a 79% increase. However, weekly deaths have continued to decrease, with just under 500 new deaths reported in the past week, a 13% decrease. Twenty-one of the 49 countries in the region (43%) reported an increase of >10% in new cases as compared to the previous week, with the highest numbers of new cases reported from South Africa (62 021 new cases; 104.6 new cases per 100 000; a 111% increase), Zimbabwe (4572 new cases; 30.8 new cases per 100 000; a 1361% increase) and Réunion (2140 new cases; 239.0 new cases per 100 000; a 14% increase). However, proportionally, very large increases in the incidence of cases were also seen in Eswatini (1900%), Mozambique (1207%) and Namibia (681%).

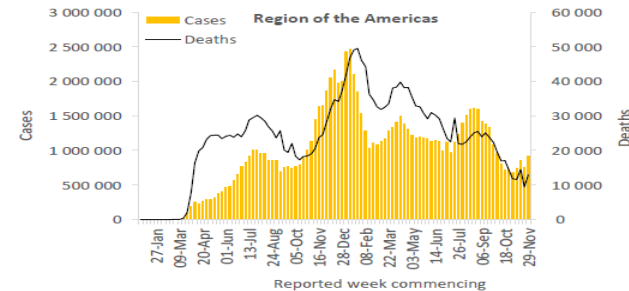
Six of the 49 countries in the Region reported an increase of over 10% in the number of new weekly deaths, with the highest numbers of new deaths reported from South Africa (174 new deaths; <1 new death per 100 000; a 21% decrease), Mauritius (126 new deaths; 9.9 new deaths per 100 000; an 31% increase), and Ethiopia (58 new deaths; <1 new death per 100 000; a 9% decrease).



Region of the Americas

The Region of the Americas reported a 21% increase in case incidence in the past week, with over 935 000 new cases reported. This trend is largely driven by the increase in the incidence of cases reported in the United States of America (752 394 new cases; 227.3 new cases per 100 000; a 30% increase). Twenty-seven percent (15/56) of countries in the region reported increases of over 10%. In addition to the United States of America, countries reporting the highest numbers of cases included Brazil (61 779 new cases; 29.1 new cases per 100 000; similar to the previous week's figures) and Canada (20 188 new cases; 53.5 new cases per 100 000; similar to the previous week's figures).

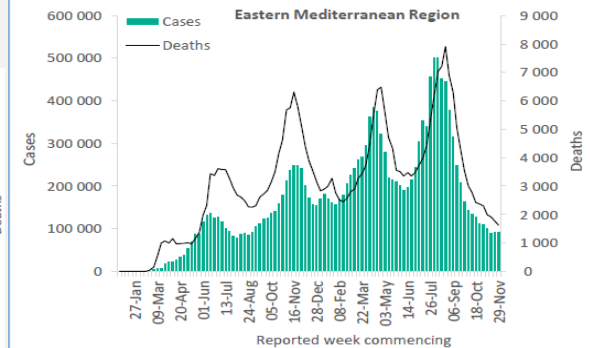
The incidence of deaths also increased with just under 13 000 new deaths reported, a 38% increase compared to the previous week. The highest numbers of new deaths were reported from the United States of America (8527 new deaths; 2.6 new deaths per 100 000; a 56% increase), Brazil (1443 new deaths; <1 new death per 100 000; a 9% decrease) and Mexico (1002 new deaths; <1 new death per 100 000; a 55% increase).



Eastern Mediterranean Region

The weekly incidence of cases in the Eastern Mediterranean Region remained stable with over 94 000 new cases reported. The weekly incidence of deaths decreased by 8%, with over 1600 reported. However, nearly half (10/22) of countries in the region reported a >10% increase in weekly incidence of cases. Most cases continued to be reported from three countries: Jordan (32 108 new cases; 314.7 new cases per 100 000; a 15% increase), the Islamic Republic of Iran (26 255 new cases; 31.3 new cases per 100 000; an 18% decrease), and Lebanon (10 406 new cases; 152.5 new cases per 100 000; an 11% increase).

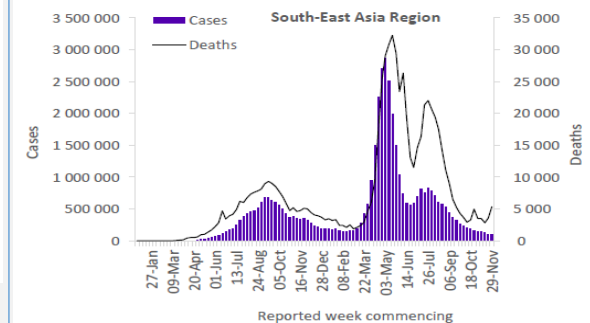
The highest numbers of new deaths continued to be reported from the Islamic Republic of Iran (575 new deaths; <1 new death per 100 000; an 18% decrease), Egypt (377 new deaths; <1 new death per 100 000; a 13% decrease), and Jordan (200 new deaths; 2.0 new deaths per 100 000; a 19% increase).



South-East Asia Region

Since July 2021, the incidence of cases in the South-East Asia Region has continued to decline with over 109 000 new cases reported this week, a 10% decrease as compared to the previous week. Only one country reported an increase of over 10%, Timor-Leste (6 new cases; <1 case per 100 000; a 100% increase). The highest number of new cases continued to be reported from India (60 732 new cases; 4.4 new cases per 100 000; similar to the previous week's figures), Thailand (34 428 new cases; 49.3 new cases per 100 000; an 18% decrease) and Sri Lanka (5162 new cases; 24.1 new cases per 100 000; a 12% decrease).

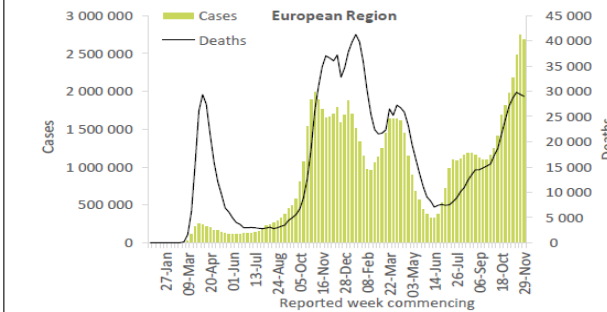
The number of new weekly deaths however, increased by 49% as compared to the previous week, with over 5300 new deaths reported this week, the majority being reported from India (4772 new deaths; <1 new death per 100 000; a 65% increase). While Thailand and Sri Lanka reported the second and third highest number of deaths this past week, both countries reported a decline (237 new deaths; <1 new death per 100 000; a 26% decrease, and 156 new deaths; <1 new death per 100 000; a 12% decrease, respectively).



European Region

Following an increase in the incidence of cases from mid-October, the weekly number of new cases in the European Region plateaued this week with just over 2.6 million new cases reported. The incidence in deaths also remained stable compared to the previous week, with over 29 000 new deaths reported. Fewer countries (11/61, 18%) reported an increase in new weekly cases of over 10% compared to the previous week. Germany and the United Kingdom continue to report the highest number of new cases with 396 429 new cases (476.7 new cases per 100 000; similar to the previous week's figures) and 310 696 new cases (457.7 new cases per 100 000; similar to the previous week's figures), respectively, with France reporting the third highest number of new cases (283 500 new cases; 435.9 new cases per 100 000; a 49% increase).

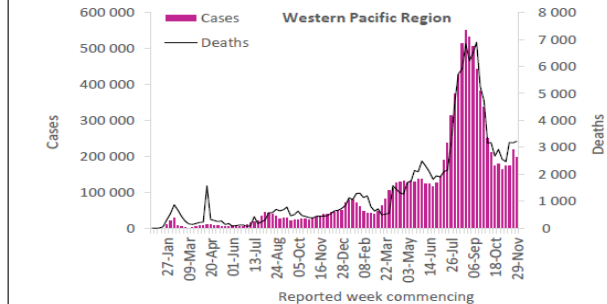
The highest numbers of new deaths continued to be reported from the Russian Federation (8523 new deaths; 5.8 new deaths per 100 000; similar to the previous week's figures); Ukraine (3163 new deaths; 7.2 new deaths per 100 000; an 18% decrease) and Poland (2636 new deaths; 6.9 new deaths per 100 000; a 19% increase).



Western Pacific Region

Following an increase in the weekly case incidence in the Western Pacific Region from early November, in the past week a 10% decrease was seen with just under 200 000 new cases reported. However, five of the 27 countries in the region reported an increase in case incidence of >10%, including French Polynesia (3976%), China (147%), the Northern Mariana Islands (75%), the Republic of Korea (26%) and Fiji (20%). The highest number of new cases continued to be reported from Viet Nam (97 374 new cases; 100.0 new cases per 100 000; a 14% decrease), Malaysia (34 897 new cases; 107.8 new cases per 100 000; an 8% decrease) and the Republic of Korea (32 142 new cases; 62.7 new cases per 100 000; a 26% increase).

The region reported over 3200 new deaths this week, similar to the previous week's figures. Two of the three countries reporting the highest numbers of new deaths showed an increasing trend: Viet Nam (1369 new deaths; 1.4 new deaths per 100 000; a 36% increase) and the Republic of Korea (304 new deaths; <1 new death per 100 000; an 11% increase), while the Philippines reported a decrease (1025 new deaths; <1 new death per 100 000; a 21% decrease).



Source: <https://www.tagesschau.de/thema/liveblog/>
<https://www.thenewhumanitarian.org>



Global Situation

Notable Update:

Worldwide, there have been over **264.6** million reported cases and approximately **5.2** million reported deaths attributed to COVID-19 as of 3 Dez. According to the WHO, about 3.8 million new cases (**5.3% increase over last week**) and over 47,500 new deaths (**7.5% decrease over last week**) were reported globally during the week of November 22 to November 28. The European region continues to report an increase in new cases (+7%), with the addition of the **African (+93%)**, Western Pacific (+24%), and Eastern Mediterranean (+2%) regions also reporting an increase in new cases this week. However, the large increase reported by the African region can be explained by the **backlog of antigen tests included by South Africa in an updated testing protocol last week**. The **American regions** observed the **largest decrease in new cases (-24%) and deaths (-36%)**, while South-East Asian region reported the largest increase in new deaths (+26%).

As of December 2, the top five countries with the highest seven-day rolling average number of daily new cases are the **United States, Germany, United Kingdom, France, and Russia**. The top five countries/territories with the highest seven-day rolling average number of daily new cases per million population are **Andorra, Czech Republic, Cayman Islands, Belgium, and Guernsey**.

As of December 2, **Europe** is the continent with the largest proportion of countries (45%, or 23 out of 51) with a **high incidence rate** (>350 per 100,000 over the past 14 days) and a stable or increasing trend in daily new cases over the last seven days.

Africa has the highest proportion of countries (27%, or 15 out of 56) with a **low (<=140) to moderate (140 - 350) incidence rate** and an increasing trend in new cases over the last seven days. **South America** has the highest proportion of countries (71%, or 10 out of 14) reporting a **low incidence rate (<= 140)** with a stable or decreasing trend in new cases.

IOM: The world is experiencing a mobility paradox due to the COVID-19 pandemic, according to [IOM's annual World Migration Report 2022](#), released on 1 December. The number of people internally displaced due to climate disasters, conflict, and violence increased from 31.5 million in 2019 to 40.5 million in 2020. Meanwhile, the number of people who migrated internationally in 2020 was around 2 million lower than it would have been without the pandemic, the report found.

CDC: A COVID-19 viral test (regardless of vaccination status or citizenship) no more than 1 day before travel by air into the US is required for international travelers. The negative result must be shown to the airline before board the flight. Because of the Omicron variant, this new one-day testing policy will help to protect travelers and the health and safety of American communities from COVID-19. [CDC continues to recommend](#) that all travelers get a COVID-19 viral test 3-5 days after arrival, and that unvaccinated travelers should quarantine for 7 days after travel. [The 3-level notice system was updated to a 4-level system](#), to align with the same incidence rate or case count thresholds adopted by recognized public health organizations and shares a common 4-level structure with the [U.S. Department of State's Travel Advisory system](#).

WHO Europe: Will launch a [new ten-step platform](#) for building capacities in risk communication and community engagement (RCCE) at the end of April 22. The platform comprises ten simple steps that begin with developing situational awareness, identifying core capacities, setting goals and objectives and identifying stakeholders then move on to segmenting audiences, choosing channels and creating key messages before organizing activities, measuring and evaluating them and ending with testing the plan.

The RCCE platform features:

- A step-by-step interactive template that teams can use to write a practical RCCE plan.
- A hands-on tool for building RCCE capacities and capabilities.
- A resource library.

ECDC: Publishes every day an [epidemiological update](#) on the Omicron variant of concern with the latest information of the distribution of the variant in the EU.

WorldBank: The COVID-19 pandemic could drive up learning poverty, the share of 10-year-olds who cannot read a basic text, to around 70 percent in low- and middle-income countries, according to preliminary analysis from an upcoming World Bank report. This rise is a result of the prolonged school closures and poor learning outcomes despite government efforts to deliver remote learning. In many of these countries, schools have been closed for as many as 200 to 250 days, and many have yet to reopen.

GBR: The Omicron variant of the coronavirus will become dominant within weeks in the UK, according to experts at the Wellcome Sanger Institute. The variant is spreading faster in the UK than the Delta variant. According to the British government, 336 Omicron cases have been registered so far. None of those affected has had to be treated in hospital so far. The number of infections has been at a comparatively high level since July.

Travellers to the UK will have to show a negative corona test upon entry beginning Tuesday. The regulation applies to all adults as well as children and adolescents from the age of twelve. The PCR or antigen test must not be older than 48 hours. The measure is intended to slow the spread of the Omicron variant of the coronavirus. Until a negative result is received, a quarantine obligation applies. The government in London has also imposed a requirement for arrivals from several African countries, including South Africa and Nigeria, to quarantine hotels for ten days at their own expense.

IND: As of December 4, 2021, 2,796 new deaths were reported in India. This represents a **615% increase** compared to the number of new deaths reported on December 3, 2021. [According to media reports](#), this large increase is secondary to a backlog of deaths after the reconciliation of data from the Ministry of Health across the states of Bihar and Kerala. Notably, since the beginning of the pandemic, governments have often revised officially reported case counts. As a result, single-day large increases/decreases in cases or deaths due to these revisions have occurred, causing irregular patterns in the daily reported numbers.

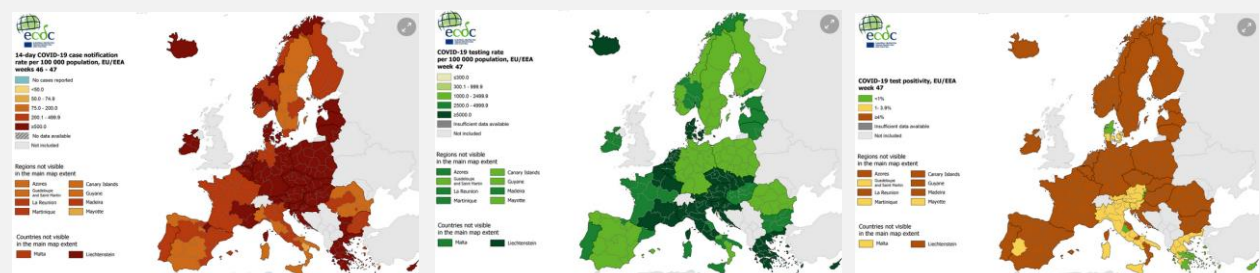
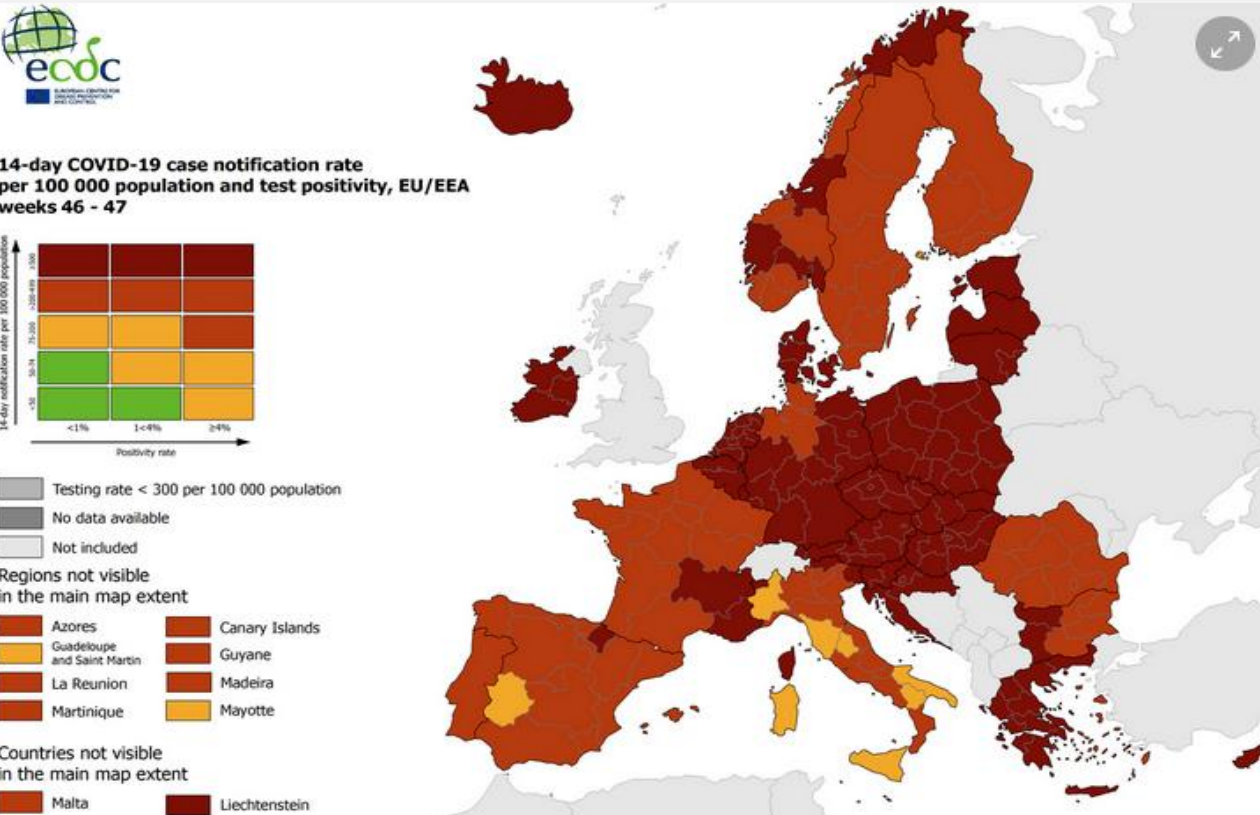
NDL: The army is once again providing support for the expansion of hospital capacities due to the rising number of infections with the coronavirus. "The military is trying to support Dutch hospitals to ensure that no hospital has to reject patients," military official Martin van Dijk told AFP. As head of operations, he coordinates the construction of an additional corona ward at Utrecht Hospital. The Corona station can be operated, thanks to 50 military personnel, with medical training.

USA: Employers and workers in New York City will have to require their employees to have corona vaccinations in the future. Mandatory vaccination for private businesses comes into effect on December 27 and is designed to prevent an increase in corona infections during the holiday season and colder months.

Africa: The African states want to expand their vaccine production from currently less than one percent as quickly as possible. By 2040, the African Union (AU) is aiming for 60 percent production on the continent. The establishment of a continental vaccine production is necessary not only in the fight against the corona pandemic, but also against other diseases such as malaria or Ebola. On the African continent, only seven percent of the population has so far been fully vaccinated against the coronavirus.

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 02 December 2021



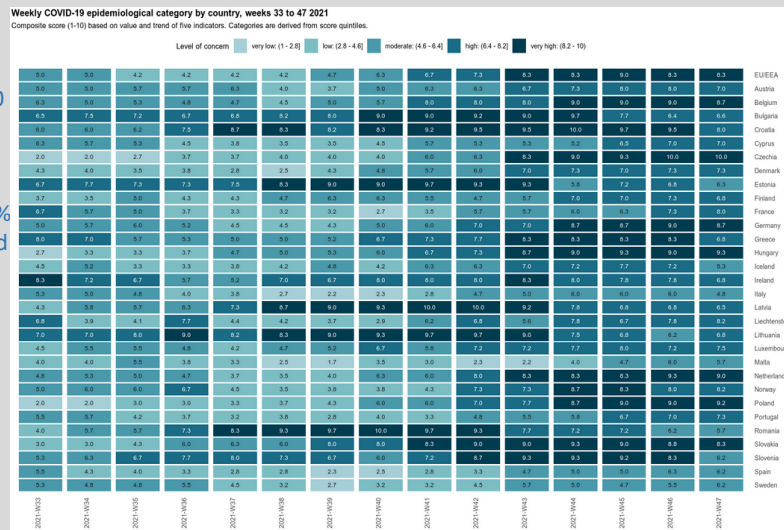
ECDC COVID-19 country overviews report Week 47, as of 03 December 2021

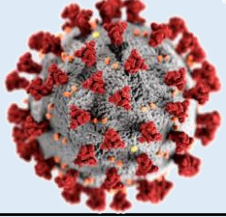
At the end of week 47 (week ending Sunday 28 November 2021), the overall epidemiological situation in the EU/EEA was characterised by a high and rapidly increasing overall case notification rate and a low but slowly increasing death rate. Case notification rates, death rates, and hospital and ICU admissions are all forecast to increase over the next two weeks. Case notification rates are currently highest among age groups under 50 years old, but notification rates among older age groups are also rapidly increasing. The picture varies considerably between countries. Increasing case notification rates and an overall epidemiological situation of high or very high concern are now observed in most of the EU/EEA Member States. Whilst the burden from COVID-19 is particularly high in a number of countries experiencing low vaccine uptake, there is evidence of rising burden even among countries with higher uptake.

The overall COVID-19 case notification rate for the EU/EEA was 742.1 per 100 000 population (626.2 the previous week). This rate has been increasing for eight weeks. The 14-day COVID-19 death rate (46.7 deaths per million population, compared with 46.9 deaths the previous week) has been stable for two weeks. Of 29 countries with data on hospital or ICU admissions or occupancy up to week 47, 20 reported an increasing trend in at least one of these indicators compared to the previous week. ECDC's assessment of each country's epidemiological situation is based on a composite score based on the absolute value and trend of five weekly COVID-19 epidemiological indicators. As shown below, for week 47, seven countries (Belgium, Czechia, Germany, Hungary, the Netherlands, Poland and Slovakia) were categorised as of very high concern, 15 countries (Austria, Bulgaria, Croatia, Cyprus, Denmark, Finland, France, Greece, Ireland, Latvia, Liechtenstein, Lithuania, Luxembourg, Norway and Portugal) as of high concern and eight countries (Estonia, Iceland, Italy, Malta, Romania, Slovenia, Spain and Sweden) as of moderate concern. Compared with the previous week, one country (Lithuania) moved to a higher category, five countries (Croatia, Estonia, Greece, Iceland and Slovenia) moved to a lower category and 24 countries stayed in the same category. Forecasts of cases and deaths from the European COVID-19 Forecast Hub and of hospital and ICU admissions produced by ECDC provide predictions for weeks 48 and 49. Compared with the current week, increasing trends in cases, increasing trends in hospital admissions, increasing trends in ICU admissions and increasing trends in deaths are forecast in the EU/EEA by the end of week 49.

By the end of week 47, the cumulative uptake of at least one vaccine dose in the EU/EEA was 82.2% (range: 32.2–99.4%; pooled data from 30 countries) among adults aged 18 years and older and 70.6% (range: 26.9–88.4%; pooled data from 30 countries) in the total population. Cumulative uptake of full vaccination was 77.4% (country range: 30.2–93.0%) among adults aged 18 years and older and 66.2% (country range: 25.3–81.6%) in the total population.

The estimated distribution (median and range of values from 17 countries for weeks 45 to 46, 8 November to 21 November 2021) of variants of concern (VOC) was 99.6% (62.0–100.0%) for B.1.617.2 (Delta). The distribution was 0.0% (0.0–0.2%) for B.1.1.7 (Alpha), which was downgraded from the list of VOCs on 3 September 2021.





Vaccination News



Official data indicates that about **65%** of people in high-income countries have had at least one dose of vaccine whereas only over **7%** have received one dose across low-income countries.

A total of 10 countries accounted for **66.4%** of all vaccinations administered globally as of December 2.

The top five countries/territories with the **highest number** of cumulative people fully vaccinated per 100,000 population are **Gibraltar** (118,190), **Singapore** (91,910), **United Arab Emirates** (88,400), **Portugal** (87,780), and **Chile** (84,010).

Conversely, the top five countries with the **lowest number** of cumulative people fully vaccinated per 100,000 population are **Burundi** (10), **Congo (Kinshasa)** (60), **Chad** (430), **Haiti** (580), and **Guinea-Bissau** (950).

What does most recent study suggest on COVID-19 vaccine effectiveness in children over 12?

On November 22, Pfizer/BioNtech announced topline results from their follow-up analysis of the phase 3 study on the COVID-19 vaccine Comirnaty (BNT162b2) in preventing COVID-19 in children 12 to 15 years of age. [This was the first publicly announced long-term COVID-19 vaccine efficacy data for this age group.](#) The analysis included 2,228 participants followed over a six-month period, between November 2020 to September 2021, after receiving two doses of the vaccine/placebo (30 ug/dose). Results suggest that the vaccine **demonstrates 100% efficacy** (95% CI: 87.7-100.0) in preventing symptomatic infections in children 12 to 15 years within seven days to four months of completing the vaccine series, [which is similar to the initial reported efficacy.](#) Out of the 2228 trial participants included in the follow-up analysis, all symptomatic cases were reported in the placebo group. Findings were consistent over subpopulations including gender, race and ethnicity, and the presence of a comorbidity. Identified adverse events were similar to previously available information for Comirnaty and no serious events in this age group were reported within 6 months of the second dose.

Real-world assessment of vaccine effectiveness provides additional information regarding hospitalizations and severity. A case-control study released as an early print in the [CDC Morbidity and Mortality Weekly Report](#) assessed vaccine effectiveness among individuals 12 to 18 years of age who sought medical attention for COVID-19. There were 106 identified cases and 176 controls belonging to the 12 to 15 age group with 3.8% and 29.6% being fully vaccinated, respectively, indicating a 91% risk reduction for hospitalization when vaccinated in this age group. Notably, patients with severe illness requiring additional medical attention were all unvaccinated.

Estimates of vaccine effectiveness may vary based on the predominantly circulating variant and additional policies affecting mobility. However, clinical and surveillance data suggest high effectiveness and safety of the vaccine in the 12 to 18 year old cohort, supporting Pfizer's plan to pursue additional regulatory approval/licensing in the U.S. and other countries. Extended uptake and surveillance will continue to provide a greater breadth of real-world data.

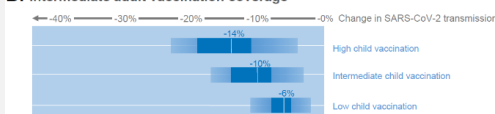
ECDC: The [new technical report](#) provides a set of interim public health considerations to support EU/EEA public health authorities taking decisions on the administration of COVID-19 vaccines to children aged 5-11 years.

Estimated effect from vaccinating 5-11-year-olds

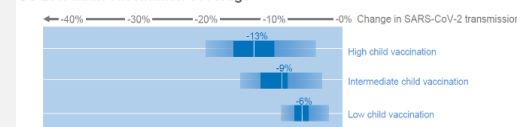
A. High adult vaccination coverage



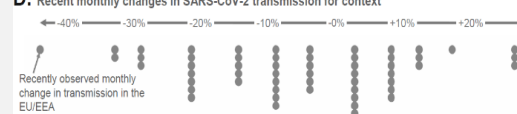
B. Intermediate adult vaccination coverage



C. Low adult vaccination coverage



D. Recent monthly changes in SARS-CoV-2 transmission for context



How will the approval of COVID-19 vaccines in children aged 5 to 11 impact population immunity across countries with different population age structure?

Recently, many countries have approved COVID-19 vaccines for children aged 5 to 11. Eligibility is expected to open up in increasing numbers of countries. Across the globe, the following trends could be observed:

- Europe, North America, and high-income countries in Asia have the lowest percentage of population aged between 5 and 11, while Africa has by far the largest proportion of the population aged between 5 and 11. (Figure 1)
- In Europe, North America, Oceania, and higher-income Asian countries (blue), the population is older and the percent of population fully vaccinated is high. This reflects the fact that countries with older populations tend to be more economically developed, resulting in stronger health care services and government support. (Figure 2)
- In African countries (green), the population is the youngest across all continents and the total population fully vaccinated against COVID-19 is also the lowest, reflecting that many of these countries still struggle to access vaccines for high risk groups (healthcare workers, older adults, people with increased risk factors). (Figure 2)
- In South America, the Middle East, and South East Asia (purple), although the population is younger, the percent of population fully vaccinated is relatively high given that vaccines are accessible to most older age groups. (Figure 2)

With more countries now approving and recommending COVID-19 vaccines for children aged between 5 to 11, the increase in the population eligibility will likely help these countries improve population immunity. As increasing proportions of cases in unvaccinated children have been reported while vaccination coverage increased in adults, the approval of vaccines in children will help protect children from severe disease and long complications of COVID-19, promote a safe environment for in-person learning at schools, and protect the community (i.e., teachers, parents, and adults that they interact with). In countries where children account for a smaller proportion of their population, the increase in children vaccine eligibility will still help in improving a country's total vaccination coverage. However, **countries where approval of vaccines in children would be of most benefit are also the same ones with limited access to COVID-19 vaccines (i.e., African countries).** While opening up childhood eligibility unlocks the potential to achieve larger population immunity, these countries still struggle to increase vaccination coverage in older age groups.

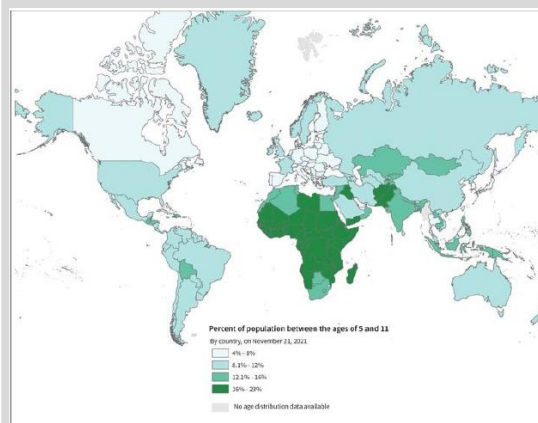


Figure 1. Percent of country/territory's population between the ages of 5 and 11. Source: United States Census Bureau

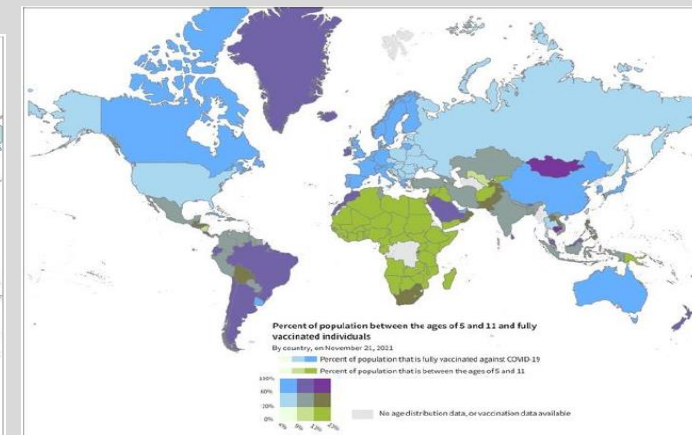


Figure 2. Percent of country/territory's population between the ages of 5 and 11 and percent of country/territory's population fully vaccinated. Source: United States Census Bureau and Our World in Data

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

856,851,069

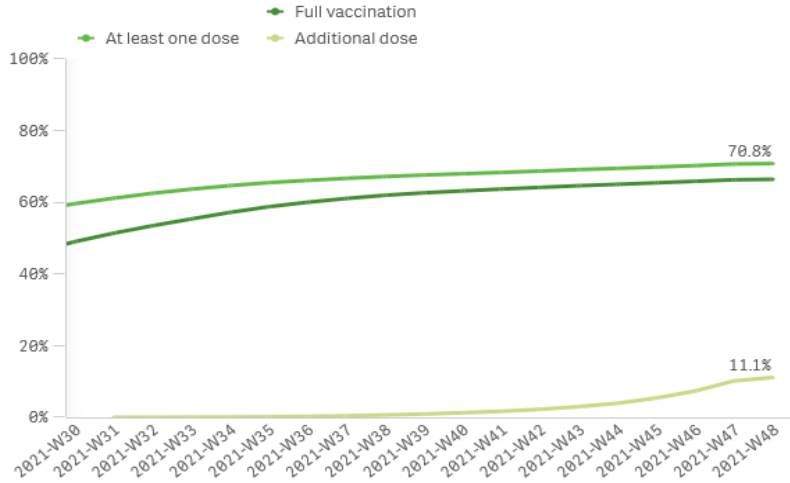
650,129,960

Cumulative uptake (%) of full vaccination by age group in EU/EEA countries as of 2021-12-07

Indicator: Uptake full vaccination

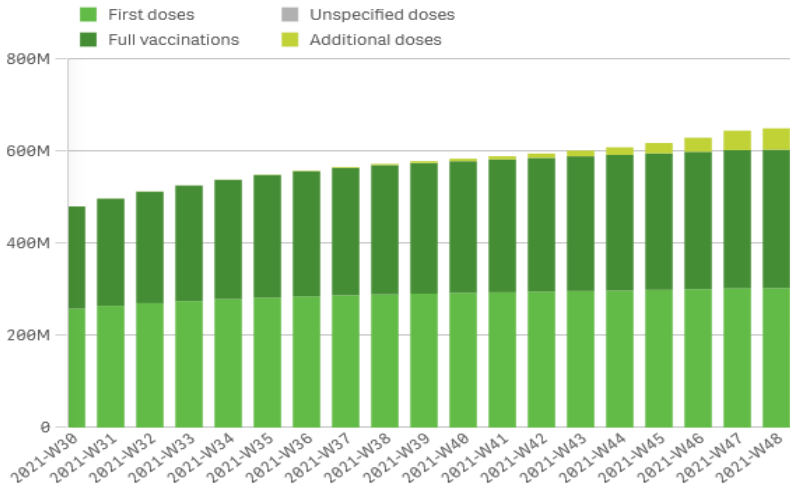
Cumulative vaccine uptake (%) in the total population in EU/EEA countries as of 2021-12-07

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

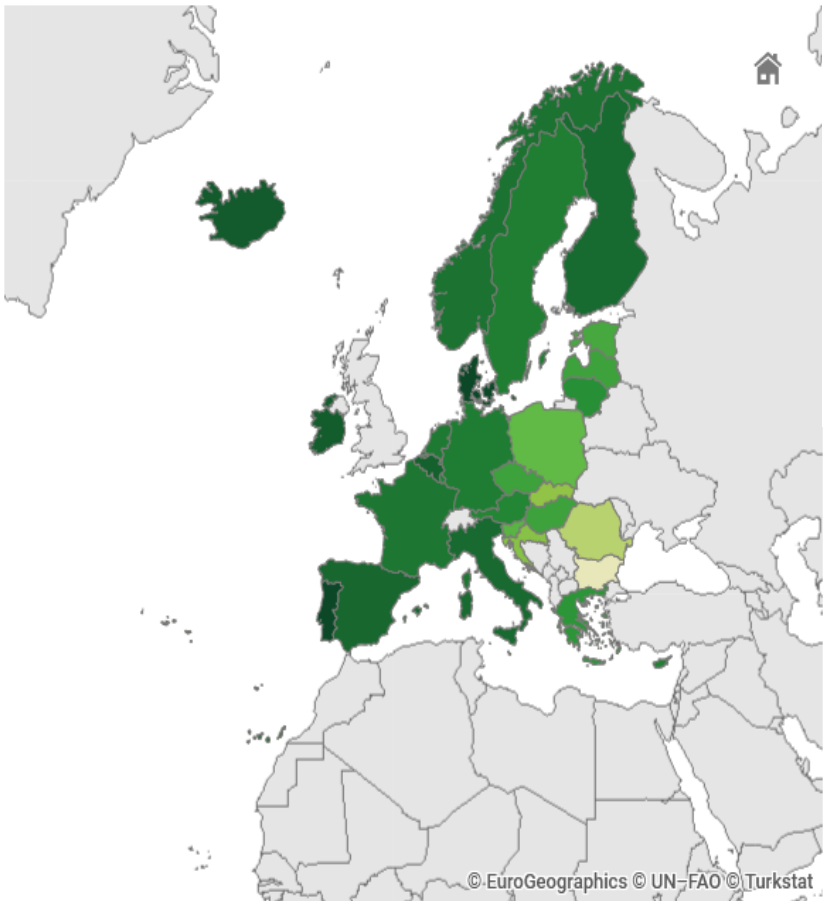


Cumulative number of vaccine doses administered to the total population in EU/EEA countries as of 2021-12-07

by reporting week (data for current week are preliminary)



Cumulative uptake (%) of full vaccination in the total population in EU/EEA countries as of 2021-12-07



Uptake full vaccination (%)

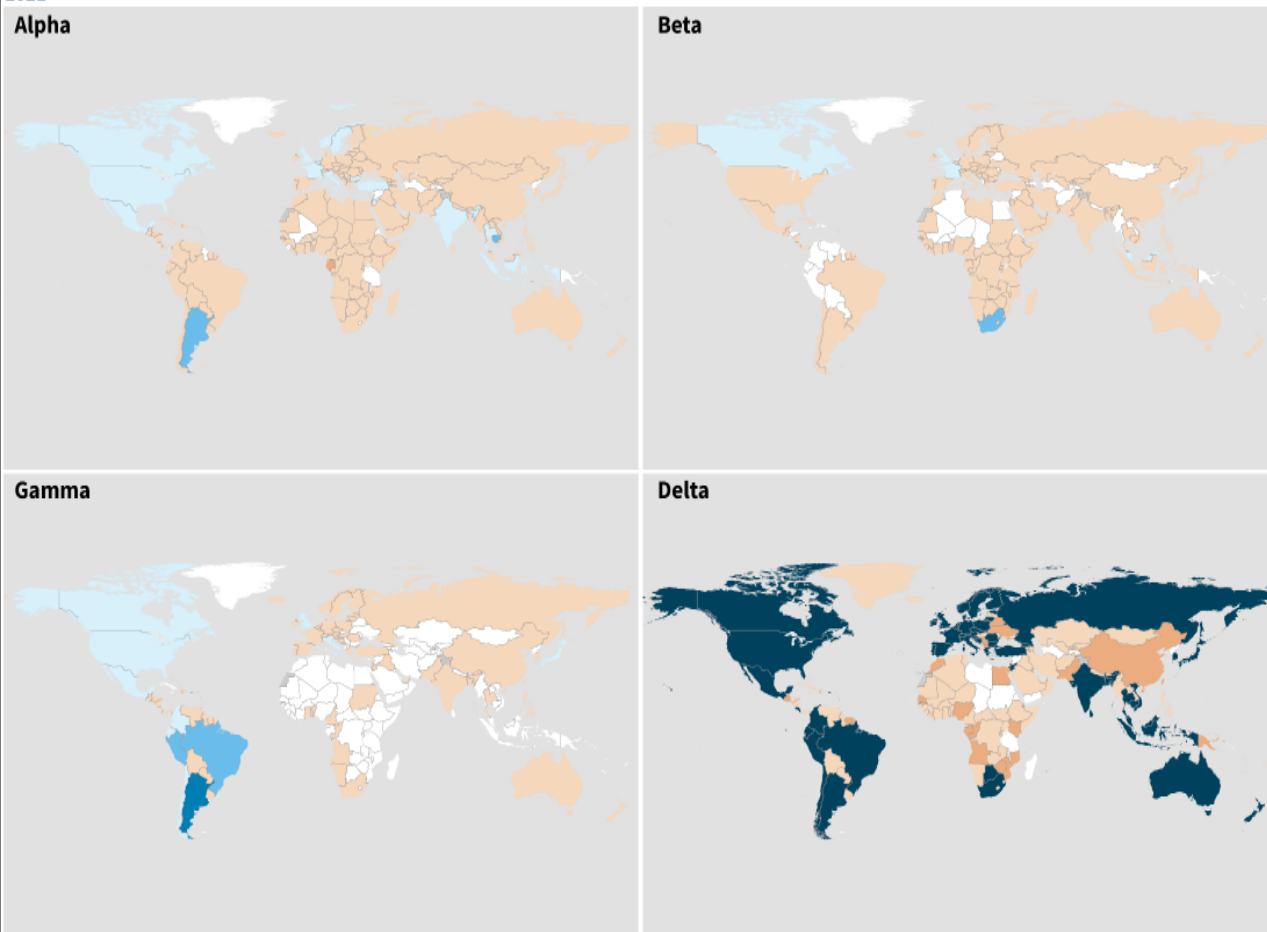


Country	60+ years	50-59 years	25-49 years	18-24 years	<18 years
Austria	88.7%	78.0%	69.5%	65.9%	16.6%
Belgium	93.7%	90.5%	83.0%	79.9%	28.2%
Bulgaria	34.2%	34.8%	28.3%	22.9%	1.3%
Croatia	71.5%	61.9%	48.2%	34.4%	2.2%
Cyprus	92.8%	84.5%	78.2%	61.3%	11.5%
Czechia	82.9%	75.1%	60.9%	61.2%	13.9%
Denmark	99.1%	93.1%	81.8%	78.6%	26.0%
Estonia	73.4%	71.1%	63.7%	65.3%	15.5%
Finland	93.7%	86.1%	78.3%	71.5%	24.7%
France	86.6%	81.3%	76.8%	77.5%	23.4%
Germany	-	-	-	-	-
Greece	80.1%	76.5%	68.0%	62.0%	10.6%
Hungary	80.4%	72.6%	62.0%	49.6%	17.1%
Iceland	100.0%	92.2%	86.7%	85.2%	26.0%
Ireland	100.0%	98.7%	87.4%	84.1%	24.6%
Italy	89.6%	83.2%	76.2%	81.1%	23.3%
Latvia	68.1%	72.1%	69.8%	72.0%	15.4%
Liechtenstein	-	-	-	-	-
Lithuania	76.1%	75.2%	74.5%	70.3%	12.6%
Luxembourg	87.8%	83.4%	72.5%	65.8%	23.3%
Malta	98.9%	88.0%	91.2%	83.2%	25.7%
Netherlands	-	-	-	-	19.7%
Norway	98.1%	92.9%	82.4%	80.7%	6.0%
Poland	74.9%	65.4%	56.0%	50.5%	12.8%
Portugal	99.7%	93.4%	86.9%	84.3%	29.2%
Romania	43.5%	52.5%	45.6%	43.9%	5.4%
Slovakia	67.9%	57.6%	48.3%	46.6%	7.4%
Slovenia	81.2%	67.4%	53.8%	55.0%	8.4%
Spain	97.5%	88.6%	75.9%	68.5%	25.8%
Sweden	93.3%	88.7%	77.4%	69.4%	10.6%

SARS-CoV-2 Variants of Interest and Variants of Concern

Source: <https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19--7-december-2021>

Figure 4. Prevalence of Variants of Concern (VOCs) Alpha, Beta, Gamma and Delta in the last 60 days and historic detections, data as of 7 December 2021



*Prevalence calculated as a proportion of VOC sequences among total sequences uploaded to GISAID with sample collection dates within the past 60 days prior to the latest date of collection, excluding low coverage sequences, limited to countries with ≥ 100 total sequences in the same period. Countries assigned by location of sample collection.
 **Includes both official reports to WHO and unofficial reports of VOC detections.

Proportion of VOC among total sequences*

- 0.501 - 1.000
- 0.101 - 0.500
- 0.011 - 0.100
- >0.000 - 0.010

VOC detected, too few sequences to estimate proportion

No new VOC sequences, VOC previously reported**

No presence of VOC reported to WHO

Not applicable



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 Data Source: World Health Organization, GISAID
 Map Production: WHO Health Emergencies Programme

Prevalence data based on sequences reported to GISAID, excluding low coverage sequences. See also Annex 1 for reported VOC detections by country/territory/area

Figure 5. Presence of Variant of Concern (VOC) Omicron, data as of 7 December 2021 (4 pm CET)



Presence of Omicron variant reported

- Verified (54)
- Under verification (3)
- Presence not reported
- Not applicable

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization, GISAID
 Map Production: WHO Health Emergencies Programme



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SARS-CoV-2 Variant of Concern: Omicron (B.1.1.529)



As of December 7 at 3 pm EST, according to media and official sources, a total of **1,325 confirmed cases** of the Omicron variant (B.1.1.529) have been identified across **55 countries**.

Since the last update cases of the Omicron variant have been reported for the first time in **China, Namibia, Singapore, Uganda, Argentina, Latvia, Maldives, Nepal, Croatia, Fiji, Russia, Thailand, Mexico, Malaysia, Zimbabwe, Brazil, South Korea, United States, Nigeria, Saudi Arabia, Norway, Switzerland, France, India, Greece, Iceland, Finland, the United Arab Emirates, Sri Lanka, Luxembourg, Zambia, Romania, Chile, Senegal and Tunisia**. According to official sources, Denmark has reported a cumulative total of 183 confirmed cases of the Omicron variant. Notably, health authorities in Denmark highlight that not all cases have travel history or contact with recent travellers.

It is also noteworthy, that the case from **Tunisia, has a history of recent travel to the Democratic Republic of the Congo (DRC)**. Although details of this case remain limited, this event is noteworthy as yet no Omicron cases have been confirmed in the DRC. In addition the case confirmed from Chile has a recent history of travel to **Ghana**, indicating that an outbreak of greater magnitude might be in place due to exportation of cases.

As of December 5, the majority of confirmed cases continue to have a **history of travel to countries in Africa**, with some having taken connecting flights at other locations between Africa and Europe. However several countries (i.e. South Africa, Botswana, Israel, Belgium, Germany, Spain, Australia, Italy, United Kingdom, Portugal, Switzerland, Brazil, South Korea, Norway, India, Ghana, Finland, Iceland, Zimbabwe, Zambia, United States, and Canada) **have detected cases without an epidemiological link to known Omicron clusters, which may indicate that community transmission could be ongoing within these countries**.

Country	# of confirmed cases	*Date of the first report	Evidence of local transmission	**Subnational reports of local transmission
Argentina	1	5-Dec-21		
Australia	31	7-Dec-21	Yes	New South Wales, Australian Capital Territory
Austria	11	30-Nov-21		
Belgium	11	26-Nov-21	Yes	
Botswana	23	24-Nov-21	Yes	
Brazil	6	7-Dec-21	Yes	Sao Paulo
Canada	27	28-Nov-21	Yes	Alberta, Ontario
Chile	1	5-Dec-21		
China	12	7-Dec-21	Unknown	
Croatia	3	2-Dec-21	Yes	
Czech Republic	1	27-Nov-21	Yes	Liberec
Denmark	183	28-Nov-21	Yes	
Fiji	2	6-Dec-21	Yes	
Finland	7	6-Dec-21	Yes	
France	25	2-Dec-21	Yes	Hessen, Leipzig
Germany	15	27-Nov-21	Yes	
Ghana	34	1-Dec-21		Accra
Greece	3	7-Dec-21		
Hong Kong	19	25-Nov-21		
Iceland	12	1-Dec-21	Yes	Reykjavik
India	23	2-Dec-21	Yes	Karnataka, Rajasthan, Maharashtra
Ireland	1	1-Dec-21		
Israel	24	26-Nov-21	Yes	Tel Aviv
Italy	19	27-Nov-21	Yes	Campania Region
Japan	3	30-Nov-21		
Latvia	2	5-Dec-21		
Luxembourg	1	4-Dec-21		
Malaysia	3	3-Dec-21		
Maldives	1	5-Dec-21		
Mexico	1	3-Dec-21		
Namibia	18	7-Dec-21	Yes	
Nepal	2	5-Dec-21	Yes	
Netherlands	36	28-Nov-21		
Nigeria	3	1-Dec-21	Yes	
Norway	19	7-Dec-21	Yes	Oslo
Portugal	34	28-Nov-21	Yes	Lisbon
Romania	2	4-Dec-21		
Russia	2	6-Dec-21		
Saudi Arabia	1	1-Dec-21		
Senegal	1	5-Dec-21		
Singapore	2	7-Dec-21		
South Korea	2	7-Dec-21		

Country	# of confirmed cases	*Date of the first report	Evidence of local transmission	**Subnational reports of local transmission
South Africa	226			
South Korea	36	1-Dec-21	Yes	
Spain	7	29-Nov-21	Yes	
Sri Lanka	1	4-Dec-21	Yes	
Sweden	11	29-Nov-21		
Switzerland	9	30-Nov-21	Yes	Basel-Stadt
Thailand	1	6-Dec-21		
Tunisia	2	3-Dec-21		
Uganda	7	7-Dec-21		
United Arab Emirates (UAE)	1	1-Dec-21		
United Kingdom	437	27-Nov-21	Yes	Scotland, England, New York, Maryland, Nebraska, Hawaii, California
United States	41	1-Dec-21	Yes	Minnesota, Mississippi, Connecticut, Louisiana, and Texas
Zambia	3	4-Dec-21	Yes	Lusaka
Zimbabwe	50	3-Dec-21	Yes	

*Date of first report refers to the earliest date that confirmed cases were reported.
 **This list is based on limited data, and may not capture the location of all local transmission events.
 ***The confirmed Omicron cases are relatively few but the region is experiencing a steep exponential increase in COVID-19 cases. This steep increase in COVID-19 cases can likely be attributed to the Omicron variant.

Local Transmission
 The definition of local transmission is inclusive of any evidence where individuals acquired the Omicron variant outside of a known importation event. The concept is inclusive of transmission that occurs when:

- infected individuals have contracted the infection without having travelled to known source countries and can identify or trace the person they were infected by, inclusive of household-close contacts and importation events that led to subsequent transmission
- infected individuals have contracted the infection without having travelled to known source countries and cannot identify or trace the person they were infected by
- a country has a confirmed exportation event

Notable update **Table 1.** Overview of Omicron cases worldwide as of 7 Dec. **Epidemiological Overview of COVID-19 in South Africa and preliminary findings on increased risk of re-infections with Omicron Variant**

A steep rise in new COVID-19 cases in South Africa continues to be reported, indicating rapid growth of the Omicron variant. According to official statistics, as of December 6, there have been **6,381 new cases of COVID-19 reported in 24 hours, and 249 new hospitalizations across the country**. The majority of cases continue to be reported in Gauteng province, although all provinces are showing rising case trends. The **test positivity** rose from 9.8% to **23.8%** in the previous 7 days, indicating a **significantly growing epidemic with substantial under-detection of cases**.

Of note, over the past 24 hours there have been **249 new hospital admissions** officially reported, concurrent with a **20% increase in patients requiring ICU care and a 41% increase in those requiring a ventilator**. While earlier reports from local doctors suggested that this wave appeared to be demonstrating milder disease than observed in previous waves, these new data suggests that severe disease manifestations are now beginning to occur in the population at a higher rate. Since hospitalizations typically lag cases by 2-3 weeks, more time is required to determine the impact of the extremely rapid growth in cases on hospitalization rates in the country.

Omicron's unprecedented rate of growth in South Africa has been occurring in a population estimated to have **high levels of immunity due to previous infection (estimated at 60-80% based on serological evidence) or vaccination (25% of the population has received 2 doses)**. It is important to assess available data to understand the extent of immune escape among those previously vaccinated or those that have recovered from a prior infection, and the extent to which the Omicron variant causes severe disease. It is also still unclear if the demographic shift observed in early data from South Africa (reported on Sunday, December 5) in which hospitalization rates have increased in the youngest population group (under 5 years old), is due to early spread in this particular population, a level of protection from infection in the older population afforded by vaccines or previous infections, or a clinical manifestation inherent to the variant itself.

On November 2, the South African Centre for Epidemiological Modelling and Analysis (SACEMA) and the NICD indicated in a **pre-print** (not certified/peer-reviewed) that **recent findings provide epidemiological evidence that the Omicron variant may have the ability to evade immunity from prior infection**. In this study, 35,670 suspected reinfections were identified among 2,796,982 individuals with laboratory-confirmed SARS-CoV-2 who had a positive test result at least 90 days prior to November 27, 2021. According to this study, **the Omicron variant poses a threefold higher risk of reinfection than the currently dominant Delta variant and the Beta strain**. However, the authors also noted that there is less evidence of immune escape associated with the Beta or Delta variants, when compared to the first wave of COVID-19. **Of note, questions remain regarding whether Omicron is also able to evade vaccine-induced immunity, and the implications on protection against severe disease and death**. See more [here](https://www.medrxiv.org/content/10.1101/2021.11.11.21266068v2).

Reference: <https://www.medrxiv.org/content/10.1101/2021.11.11.21266068v2>

Omicron highlights

- Media reports indicate that there is a **higher hospital rate of admissions among children amid the fourth wave of COVID-19 infections in South Africa**. In addition, these reports highlight that these cases are being driven by the Omicron variant, however, there are limited data available. For context, an unspecified large number of infants were admitted with COVID-19 last month in Tshwane, the metropolitan area that includes the capital Pretoria, South Africa. Thus far, these infections among children have been mild. Of note, this observation should be interpreted with caution as investigations on the Omicron variant are still underway.
- Interestingly, the municipality of the York Region, Ontario, Canada confirmed its first positive case of the COVID-19 Omicron variant on December 3, in a child with a recent history of travel to South Africa.
- A recent study conducted by the Massachusetts-based data analytics company suggested that **the Omicron variant had likely acquired at least one mutation from the genetic material of the virus that causes the common cold while co-infecting the same infected cells**. While more research is needed to find the origins of Omicron, this underscores the importance of understanding the likelihood and consequence of co-infection, as well as continued investment in vaccination programs.
- The emergence of the Omicron variant of SARS-CoV-2 represents the most recent evidence of the risks of unequal vaccination distribution worldwide. The consequences of newly emerging variants are not constrained to countries with low vaccination rates, but impact countries around the world. Official data indicates that about **65%** of people in high-income countries have had at least one dose of vaccine whereas only over **7%** have received one dose across low-income countries.

Global SARS-CoV-2 Genomic Surveillance Capacity of Omicron Variant



Source: <https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---30-november-2021>

This report, estimates the size of the Omicron variant outbreak in South Africa for October – November 2021. Secondly it evaluates the SARS-CoV-2 genomic surveillance capacity globally especially for locations with highest air travel connectivity from South Africa. Recent epidemiological and phylogenetic sequencing data¹ suggest the Omicron variant may have emerged around early October 2021, although the mechanism and first location of emergence are unclear. While there are likely other countries experiencing varying degrees of community spread, South Africa has been identified as an epicentre. This is supported by rapidly increasing case counts, a high and increasing test positivity, and detected global spread through air travel from the country. It is likely that the true outbreak size in South Africa, and particularly in Guateng province, is much larger than that being detected.

It is possible to estimate the true size of the outbreak in South Africa using air travel data, population size, the number of exported cases reported globally, and the expected length of stay for visitors coming to the region. For the current analysis, the estimated air travel volumes departing South Africa from October 1, 2021 to November 30, 2021, based on modelled historical and scheduled flight data is used. It then account for the number and destinations of infected travellers reported in official and non-official sources as being infected with Omicron, who had a recent travel history from South Africa, as of November 30, 2021. Afterwards an average length of stay among travellers of 4 days, based on hotel accommodation was assumed².

Key results: Based on the volume of air travel modelled for the period of October 1, 2021 to November 30, 2021, the population size of South Africa, and an assumed visit length of 4 days, it was estimated that the number of cases of the Omicron variant in South Africa that occurred during this period was 91 248 (95%CI: 49 886 - 153 099).

To better understand the likelihood of detection of Omicron among COVID-19 cases detected within countries, a proxy measure for relative genomic sequencing capacity at national levels was explored. Specifically, the percentage of a country/territory's COVID-19 cases sequenced and reported to GISAID in the last 90 days was examined.³

- 126/245 (51.4%) of countries tracked by GISAID had data on the percentage of COVID-19 case sequenced and reported to GISAID in the last 90 days.
- The distribution of values are depicted in a histogram (Figure 2). Of these 126 countries, the median value is 1.43% with an interquartile range of 3.2% suggesting that the genomic surveillance capacity of most countries are low.
- The five countries with the highest percentage of COVID-19 cases sequenced and reported to GISAID in the last 90 days were: **the Dutch territory of St Maarten (44.9%), Denmark (44.7%), Montserrat (33.3%), Bonaire Saint Eustatius and Saba (33.3%), New Zealand (28.0%).**
- The five countries with the lowest percentage were: **Iran (0%), Belarus (0.001%), Mongolia (0.001%), Serbia (0.002%), and Ukraine (0.012%).**

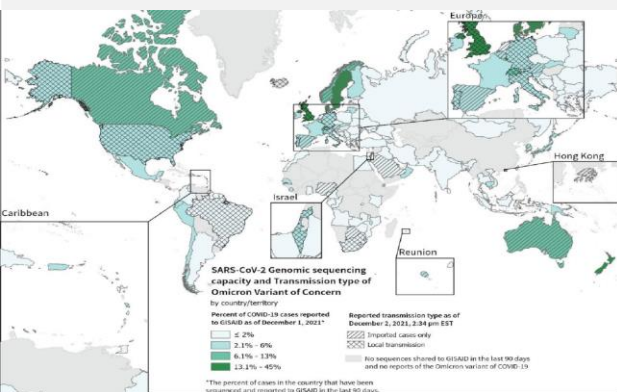


Figure 1. A global map depicting the percentage of COVID-19 cases that have been sequenced and reported to GISAID in the last 90 days, as of December 1, 2021 (a proxy metric for SARS-CoV-2 genomic sequencing capacity) and the reported transmission of the Omicron Variant as of December 2, 2021

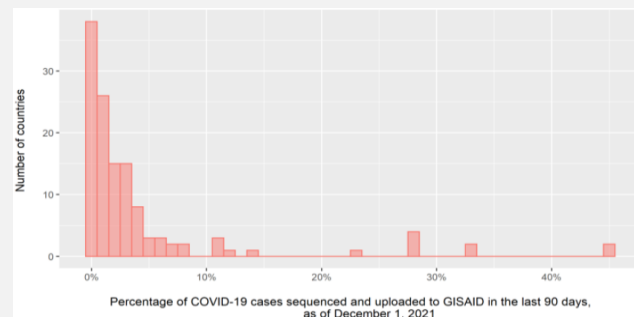


Figure 2. A histogram depicting the distribution of values for the percentage of COVID-19 cases sequenced and uploaded to GISAID in the last 90 days as of December 1, 2021. Each bar has a width of 1%, thus bars sitting on 0% range from 0 to <1% (only Iran has a value of 0%).

Key results

- South Africa had high air travel connectivity to African and European countries, many of which have low genomic sequencing capacity This can hinder the detection of the Omicron variant.
- Zimbabwe is a particular concern as it accounts for 13.1% of total outbound international air travel from South Africa yet has sequenced a very low percentage of its COVID 19 cases reported in the last 90 , and fewer than the majority of African countries in this Top 10 list.
- As the second most popular travel destination from South Africa, the U.S. has relatively higher genomic sequencing capacity than the other top 20 destination countries but its sequencing capacity is lower than observed among many high income countries (Figure 1).

Executive Summary

- In September 2021, South Africa had high air travel connectivity to African and European countries in addition to the United States. Many of these top travel destinations in Africa have low genomic sequencing capacity which can hinder the detection of the Omicron variant. African countries are particularly vulnerable due to low vaccination coverage as a result of global vaccine inequities.
- Zimbabwe is a particular concern as it accounted for 13.1% of total outbound international air travel from South Africa, has a very low genomic surveillance capacity, and is beginning to observe rapidly increasing cases of COVID-19. Recently, local transmission of the Omicron variant has been detected. As the second most popular travel destination from South Africa, the U.S., has relatively higher genomic sequencing capacity than most of the other top 20 destination countries but its sequencing capacity is lower than observed among many high-income countries (Figure 2).

What does it mean?

- Genomic surveillance capacity is highly variable across the globe and is low in most countries. Insufficient capacity limits the detection the Omicron variant.
- The Omicron variant is likely to be more widespread in Africa, Europe, and the United States than detected thus far due high connectivity to South Africa and varying levels of genomic surveillance effort. African countries are at particular risk due to low vaccine access and hence, protection of their populations.
- Although South Africa identified and notified the global community of the Omicron variant relatively early in its' epidemic, the true size of the outbreak in South Africa is likely much larger than was understood at that time. This indicates greater likelihood to spread internationally prior to subsequent travel and border measures were enacted by different countries.

Rank	Destination Country	Total outbound air passenger volume from South Africa for Sep 2021	% of total outbound travel volume	% of COVID-19 cases reported in the last 90 days sequenced and uploaded to GISAID as of Dec 1, 2021	Transmission type of the Omicron variant, reported as of Dec 2, 2021*
1	Zimbabwe	18,025	13.1%	0.2%	Local transmission reported as of Dec 3
	United States	9,144	6.7%	5.7%*	Local transmission
2	Namibia	6,112	4.5%	-	-
3	Zambia	5,849	4.3%	Less than 0.1%	-
4	United Arab Emirates	5,315	3.9%	-	Imported cases only as of Dec 3
5	Botswana	5,169	3.8%	1.1%	Imported cases only
6	Mozambique	4,903	3.6%	0.2%	-
7	Germany	4,243	3.1%	3.9%	Local transmission
8	Nigeria	3,927	2.9%	1.6%	Imported cases only
9	Tanzania	3,716	2.7%	-	-
10	Ethiopia	3,557	2.6%	-	-
11	Kenya	3,493	2.6%	1.7%	-
12	France	3,450	2.5%	3.2%	-
13	India	3,364	2.5%	0.5%	-
14	Netherlands	3,294	2.4%	1.8%	Imported cases only
15	Malawi	3,255	2.4%	1.8%	-
16	Angola	2,753	2.0%	0.5%	-
17	Ireland	2,718	2.0%	4.1%	-
18	Maldives	2,451	1.8%	4.5%	-
19	Congo (Kinshasa)	2,268	1.7%	-	-

References

- 1 <https://nextstrain.org>
- 2 <https://businesstech.co.za/news/lifestyle/129732/how-long-the-average-joe-goes-on-holiday-for-in-sa/>
- 3 <https://www.gisaid.org/index.php?id=208>
- 4 <https://www.statnews.com/2021/12/01/first-case-omicron-coronavirus-variant-identified-united-states/>

Top 20 countries with highest air travel connectivity from South Africa

*On November 30, 2021, the U.S. CDC Director Rochelle Walensky indicated that the number of positive SARS-CoV-2 tests being reported to the U.S. was now 80,000 and the weekly case rate was 58% and 10% of cases imported.

SARS-CoV-2 Variants of Interest and Variants of Concern

European Update



European update on SARS-CoV-2 B.1.1.529 variant of concern (Omicron)

As of 2 December 2021, and since 26 November 2021, overall, 415 confirmed cases of SARS-CoV-2 Omicron VOC have been confirmed in 34 countries. Ninety-five cases have been reported by 16 European Union and European Economic Area (EU/EEA) countries: Austria (4), Belgium (3), Czechia (1), Denmark (14), Finland (1), France (3, including 1 in Reunion), Germany (13), Greece (1), Iceland (1), Ireland (1), Italy (9), the Netherlands (16), Norway (5), Portugal (14), Spain (3) and Sweden (6) according to information from public sources. A number of probable cases have been reported in the EU/EEA, with confirmation pending.

The majority of confirmed cases have a history of travel to African countries, with some having taken connecting flights at other locations between Africa and Europe. Several European countries reported cases with no direct links to travel (Belgium, Germany, Spain, and United Kingdom), indicating previously undetected community transmission. Finland reported cases with travel history within the EU/EEA (Sweden, Denmark). The United States of America reported a case with travel history within the country (Minnesota to New York).

Almost all cases for which there is available information on severity were either asymptomatic or mild. Among 415 cases there was one hospitalisation (Iceland); no additional severe cases or deaths have been reported among these cases so far. Cases have been reported in 18 countries and territories outside of the EU/EEA (Australia, Botswana, Brazil, Canada, Hong Kong Special Administrative Region, Ghana, India, Israel, Japan, Malaysia, Nigeria, Saudi Arabia, South Africa, South Korea, Switzerland, United Arab Emirates, United States of America and United Kingdom).

For the latest information about variants, please [see ECDC's webpage on variants](#).

ECDC assessment

ECDC has classified a SARS-CoV-2 variant belonging to Pango lineage B.1.1.529 as a variant of concern (VOC) due to concerns regarding immune escape and potentially increased transmissibility compared to the Delta variant. The majority of cases reported in the EU/EEA remain travel-associated and mild, however there are indications of community transmission in a number of countries.

At the moment, there is considerable uncertainty related to the transmissibility, vaccine effectiveness, risk for reinfections and other properties of the Omicron variant. However, given its immune escape potential and potentially increased transmissibility advantage compared to Delta, we assess the probability of further introduction and community spread in the EU/EEA as high. In a situation where the Delta variant is resurgent in the EU/EEA, the impact of the introduction and possible further spread of Omicron could be very high. In conclusion, the overall level of risk for the EU/EEA associated with the SARS-CoV-2 variant Omicron is assessed as high to very high.

Actions

ECDC is continuously monitoring the situation through Epidemic Intelligence. TESSy reporting for B.1.1.529 has been implemented. A daily updated on reported cases is available on the [ECDC website](#).

ECDC published a Threat Assessment Brief on 26 November 2021 - '[Emergence of SARS-CoV-2 variant B.1.1.529](#)' and is actively monitoring, assessing and reporting about the situation with the Omicron variant. ECDC published the Threat Assessment Brief '[Implications of the emergence and spread of the SARS-CoV-2 B.1.1.529 variant of concern \(Omicron\) for the EU/EEA](#)', on 2 December 2021.

Source: <https://www.ecdc.europa.eu/en/publications-data/communicable-disease-threats-report-28-november-4-december-2021-week-48>
<https://ourworldindata.org/grapher/covid-variants-bar?country=AUS~GBR~USA~BEL~ITA~FRA~ESP~DEU~BWA~ZAF~CAN>

Underestimation of Omicron cases:

Reports suggest that the Omicron (B.1.1.529) variant is much more widespread in the UK than official sources report. It is likely that this is an issue across many countries however the UK-focused report provides important information about why this might be the case.

As of December 7, there have been 437 confirmed cases of Omicron in the UK, however, due to local transmission, it is estimated this number may be over 1,000. The underestimation has been mainly attributed to three items:

Low testing of the asymptomatic and those with mild symptoms

- Those who are asymptomatic or have mild symptoms are less likely to get tested for the virus. With a low number of tests completed, there is a high probability for under-detection of cases. This may be a contributing factor to why many cases are found through routine surveillance of travellers, as opposed to those presenting to healthcare facilities. The 14-day test positivity rate as of December 6 was 4.5%, since November 6 this value has changed only slightly, fluctuating between 4.1% and 4.6%.

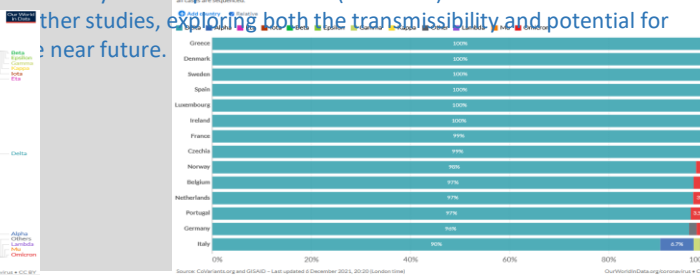
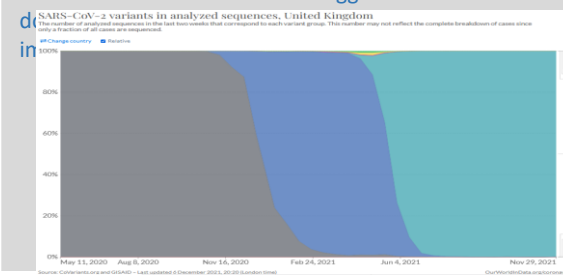
Variable S-gene monitoring across the UK

- One of the quickest ways to identify a probable Omicron case is by checking for the coronavirus S-gene. The Omicron variant has 'S-gene dropout', which means the S-gene is missing from the viral genome. It is highly important to note that other variants may also show S-gene dropout, and the newly discovered Omicron lineage, BA.2, retains the S-gene. This means the absence of the S-gene is only an indicator for one Omicron lineage, BA.1, and regardless the sample will require genomic sequencing to be confirmatory.
- In the UK, according to government sources, only 30%-35% of PCR tests for the general population are processed in labs that assess for S-gene dropout. When including hospitals and routine tests, only half of the tests completed in the UK undergo S-gene testing.
- Furthermore, S-gene testing varies by geography and sample catchment areas, for example, it has been reported that there is lower coverage of S-gene testing in local authorities in the southwest of England. This creates difficulties in identifying geographical clusters and ultimately slowing the spread of Omicron.

Time delays of genomic sequencing and reporting

- The gold standard for confirming cases of Omicron is through genomic sequencing of samples. These results are more accurate and when compared to S-gene testing. However, genomic sequencing is a slower process and it takes between five to seven days for a sample to be sequenced and reported.
- News media reports that currently in the UK, tests sent for genomic sequencing include positive PCR tests with S-gene dropout, tests of their contacts, all travellers, and approximately 20% of general tests completed.

Based on preliminary data, scientists estimate that the UK-wide doubling times of Omicron is around three days. This has led both scientists and officials to suggest that Omicron will most likely outcompete the Delta (B.1.617.2) variant and become the dominant variant in the near future.



Subject in Focus

Pros and Cons of rolling out third doses? What does currently available evidence suggest?

1. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)02183-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)02183-8/fulltext)
2. <https://investors.modernatx.com/news-releases/news-release-details/moderna-highlights-new-clinical-data-its-covid-19-vaccine>
3. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3949410
4. <https://www.nejm.org/doi/full/10.1056/NEJM2108861>
5. <https://www.nih.gov/news-events/nih-research-matters/moderna-covid-19-booster-may-protect-against-variants>

- 6 <https://www.nytimes.com/2021/10/03/world/israel-covid-booster.html>
- 7 <https://www.dw.com/en/israels-bet-on-early-covid-booster-shots-pays-off/a-59787257>
- 8 <https://www.nejm.org/doi/full/10.1056/NEJMoa2114255>
- 9 [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)02249-2/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)02249-2/fulltext)

In a U.S. study¹ published in the Lancet of 4,920,549 individuals between Dec 14, 2020, and Aug 8, 2021, effectiveness against infections declined from 88% during the first month after full vaccination to 47% after five months. Among sequenced infections, vaccine effectiveness against infections of the Delta variant was 93% during the first month after two-dose vaccination but declined to 53% after four months. A decline in effectiveness was also observed in the data released by Moderna, showing that people fully vaccinated within the last eight months had 36% fewer breakthrough infections than those who were vaccinated a year ago.²

Multiple SARS-CoV-2 variants have been identified globally, some of which possess mutations in the spike protein that may cause higher transmissibility, more severe disease, and allow the virus to evade immune responses elicited by infection or vaccination. However, currently it is unclear how effective vaccines will be against Omicron (B.1.1.529). Trials of the third (booster) dose of the Pfizer, Moderna, Sinovac, and AstraZeneca vaccines displayed similar vaccine-related side effects that were seen in the first and second-dose trials and showed that third doses can potentially improve an individual's antibody levels against COVID-19. A nationwide Swedish preprint study³ strengthens evidence for a third COVID-19 vaccine dose. Results indicated that vaccine effectiveness against symptomatic COVID-19 infection after the Delta variant was dominant waned progressively over time across all age and gender subgroups, but at different rates according to type of vaccine. Waning of vaccine effectiveness was faster for men and older, frail individuals. However, implementing third dose vaccine programs in some higher-income countries when the majority of population in lower-income countries have yet to receive their first dose may be met with ethical challenges. Below, you find the proposed pros and cons of third doses based on currently available information:

Pros

- Evidence on which groups within the population may benefit from a third dose is limited. However, it is believed that immunocompromised individuals would benefit the most as they may not produce a robust immune response following two doses. One recent study showed that only 40% of solid-organ transplant immunocompromised individuals had anti-SARS-CoV-2 antibodies four weeks after their second dose, which was increased to 68% following a third dose.⁴
- In a primate study⁵, Moderna third doses increased levels of antibodies against all known SARS-CoV-2 variants of concern (Omicron was not investigated). The increases lasted for at least eight weeks after the third dose and antibody levels were significantly higher post-boost than after the first two doses.
- Many countries have been wasting millions of COVID-19 vaccines. This wastage and surplus are occurring while third doses of the vaccine are being restricted to select subpopulations and limited by the timing of the 2nd dose. Expanded eligibility may improve population-level immunity sooner and reduce wastage.

Cons

- As many developed countries prepare to roll out third doses to their populations, some experts are questioning the global implications on vaccine inequity. Experts have highlighted that global efforts to control the pandemic may prove futile if expanding access to third doses in wealthy countries worsens the disparity among lower-income countries with higher population densities and weaker healthcare systems. The recent emergence of the Omicron variant highlights the risk to all countries when vaccines are not accessible especially to vulnerable groups.

Conclusion

Neutralizing antibody levels against SARS-CoV-2 and its subsequent variants may be boosted with the implementation of third (booster) doses of the COVID-19 vaccines. Immunocompromised individuals, individuals with underlying conditions, and those at risk of severe complications associated with the disease are likely to benefit most. However, it is essential to exercise appropriate use criteria for additional vaccine doses without jeopardizing global vaccination efforts and worsening the issue of global vaccine inequity.

Case Study: Israel's roll-out of third doses and its impact on disease activity in the country

On July 30, 2021, Israel authorized the use of a third (booster) dose of the Pfizer/BioNTech mRNA vaccine for populations that were 60 years of age or older and had received their second dose of the COVID-19 vaccine at least five months prior. Throughout August, the country rolled out third doses for different age groups, and as of August 29, 2021, the third dose was approved and available to everyone who was 12 years of age or older. Third doses were approved during a time when Israel's reported COVID-19 cases were surging in the context of the Delta (B.1.617.2) variant, reaching their highest levels since January 2021. However, by late September, after about one month of the third dose being available to all populations over the age of 12, COVID-19 cases had decreased by about half and the number of severe cases among the hospitalized was also decreasing.⁶ This was likely due to a variety of reasons, including the implementation of capacity limits in retail stores, restrictions on gatherings, the requirement of the "Green Pass" (proof of vaccination) for establishments such as gyms, restaurants, bars, etc., as well as the availability of the third dose to all populations over the age of 12. As of mid-November, approximately 44% (4 million individuals) of Israel's 9.2 million population had received the third dose.⁷

The first study in Israel on the effectiveness of the vaccine booster was conducted on populations that were 60 years of age or older from July 30 to August 31, 2021. The authors found that the rate of confirmed infections was 11.3 times lower (95% CI: 10.4 – 12.3) in the group that received the booster compared to the group that did not receive a vaccine booster, after at least 12 days of receiving the booster dose.⁸ The rate of severe illness was also 19.5 times lower (95% CI: 12.9 – 29.5) in the group that received the booster compared to the group that did not. Additionally, a secondary analysis found that the rate of confirmed infections was substantially lower 12 days after administering the booster compared to the rate of confirmed infections only four to six days after the booster was administered.

Another study on the effectiveness of the vaccine booster in Israel was conducted on populations that received their booster dose between July 30 and September 23, 2021. This observational study was carried out on almost 1.5 million people; half the sample comprised the control group (the group that received two doses only), while the other half was the group that received the booster dose. Compared to the control group, **the group that received the booster dose experienced 93% (95% CI: 88% – 97%) fewer hospital admissions, 92% (95% CI: 82% – 97%) fewer cases of severe disease, and 81% (95% CI: 59% – 97%) fewer deaths related to COVID-19.**⁹

The findings from these initial studies suggest that the third dose of the the Pfizer/BioNTech Comirnaty mRNA vaccine is highly effective in protecting individuals against severe COVID-19 disease and in helping to control the spread of the disease in Israel. As of October 3, 2021, Israel updated their vaccine passports to include the requirement of the third dose to be considered fully vaccinated. As the rate of infection rises in several parts of the world and the length of time since the second doses were rolled out extends, third doses may be required to slow viral spread, especially in the context of the Omicron variant. It is yet unclear whether or to what extent third doses may protect against infection and disease due to the Omicron variant, or whether updates to the requirements for vaccine passports for international travel may be required as well by some countries.



Hemostatic profiles of COVID-19 convalescent freeze-dried plasma

BACKGROUND

Hemorrhage is the leading cause of preventable death in combat casualties [1]. Freeze-Dried Plasma (FDP) is a promising blood component for hemostatic resuscitation in an austere field environment given its benefits in reducing blood loss and mortality, and its long storage stability at ambient temperatures, high portability, and fast reconstitution for transfusion.

On the other hand, the COVID-19 pandemic has dramatically reduced the national ability to provide blood products for medical care in an emergency [2], which highlights the need to secure a stockpile of blood products with long shelf-lives (e.g., FDP) to be self-sufficient in a national crisis. Additionally, COVID-19 convalescent plasma (CCP) obtained from individuals following recovery from COVID-19 infection and development of antibodies against the virus is used to treat patients with active infection, although its clinical effectiveness needs further investigation in a large well-designed randomized controlled trial [3], and there will be a need to stockpile CC-FDP for use and production of hyperimmune globulin to support treatment in developing countries or deployed troops during future waves of the pandemic where resources are likely to be lacking for vaccination and use of more expensive therapies.

In collaboration with Canadian Blood Services and Defence Research and Development Canada (DRDC), Canadian Forces Health Services (CFHS) is developing FDP from Canadian-sourced plasma.

Here, we present in vitro characterization of Canadian-sourced FDP and CC-FDP for their hemostatic profiles as measured by Rotational Thromboelastometry (ROTEM) and Stago coagulation analyzer.

METHODOLOGY

ROTEM tests (INTEM and EXTEM) were conducted with a ROTEM Delta machine, using standard reagents and procedures recommended by the manufacturer. Prothrombin time (PT), partial thromboplastin time (PTT), and specific coagulation and fibrinolysis factor assays were conducted using Stago Compact Max following the manufacturer's instructions. The following samples were analyzed: pre-COVID-19 fresh frozen plasma (FFP) used to produce FDP, FDP reconstituted and stored immediately at -80°C (Immediate), reconstituted FDP stored at 4°C for 24 h and room temperature (RT) for 4 h, respectively, before being frozen at -80°C, CCP used to produce CC-FDP, and CC-FDP reconstituted and stored immediately at -80°C. In addition, commercially sourced healthy control plasma and pre-COVID-19 plasma collected in-house from healthy volunteers were also analyzed as a normal control reference standard. One-way analysis of variance with post-hoc tests was used to determine any differences between the samples. A p value of less than 0.05 was considered significant.

RESULTS AND DISCUSSION

A total of 40 samples, including normal healthy controls were analyzed. As shown in Table 1, there were no differences in any ROTEM parameters (clot formation time (CFT), α angle, maximum clot firmness (MCF) and lysis index 30 (LI30)) and Stago measurements for PT, PTT, fibrinogen, D-dimer concentrations and antithrombin, factor V, VIII and protein S activities between FFP and its corresponding FDP for either pre-COVID-19 or CC samples. Differences were observed in clotting time (CT) for ROTEM INTEM test and PT, PTT, D-dimer when comparing the reconstituted FDP stored at 4°C for 24 h or RT for 4 h to the healthy control and comparing FFP to FDP stored at 4°C for 24 h. Differences were also seen in antithrombin, factor V and protein S activities between the pre-COVID-19 samples and healthy control.

When comparing the pre-COVID-19 FFP and FDP with CCP and CC-FDP, the only significant difference in the ROTEM tests was the INTEM CT for pre-COVID-19 FDP from the CC samples. CCP and CC-FDP showed shorter PT than pre-COVID-19 FDP. On the other hand, both CCP and CC-FDP samples showed comparable hemostatic profiles with the healthy control plasma except for CC-FDP showing a lower antithrombin activity.

Table 1: ROTEM and Stago tests of pre-COVID-19 FFP and FDP, CCP and CC-FDP.

Tests	Parameters	Pre-COVID-19 FFP	Pre-COVID-19 FDP			CCP	CC-FDP	Healthy control
			Immediate	4°C, 24h	RT, 4h			
ROTEM INTEM	CT (sec)	172.8±16.8	189.2±19.7	203.8±23.0*	199.4±26.7*	155.7±4.0*	143.3±28.2*	161.3±25.7
	CFT (sec)	469.2±243.4	707.4±414.1	820.2±678.1	647.0±367.5	658.0±367.2	955.5±809.6	342.8±105.5
	Alpha (°)	80.4±1.1	78.7±4.2	79.0±2.5	78.4±3.6	79.0±1.0	78.7±2.3	79.8±1.3
	MCF (mm)	23.4±1.1	22.3±1.6	22.2±1.7	22.4±1.5	22.0±1.7	20.3±2.5	22.0±0
	LI30 (%)	100±0	99.8±0.6	100.0±0	100.0±0	100.0±0	100.0±0	100.0±0
ROTEM EXTEM	CT (sec)	51.8±2.9	54.8±2.9	55.0±4.4	52.8±4.1	51.7±2.9	52.7±2.5	56.3±4.1
	CFT (sec)	327.8±178.5	398.0±354.5	357.3±135.3	391.0±200.3	358.0±138.6	630.0±475.2	295.8±85.9
	Alpha (°)	81.0±0.7	81.7±0.7	81.2±0.8	81.8±0.4	81.0±0	80.7±2.1	81.5±1.0
	MCF (mm)	24.2±1.8	23.8±2.0	24.0±2.3	23.8±2.0	23.7±2.1	21.3±2.5	22.8±0.5
	LI30 (%)	100.0±0	100.0±0	100.0±0	100.0±0	100.0±0	100.0±0	100.0±0
Stago	PT (sec)	13.6±0.2	14.6±0.6*	15.0±0.4*	14.3±0.5*	12.4±0.2*	13.4±0.2*	13.0±0.7
	PTT (sec)	37.5±1.7	40.7±3.3*	41.3±3.1*	39.6±3.7*	34.9±2.2	38.0±3.2	34.1±3.6
	Fibrinogen (g/L)	2.63±0.17	2.54±0.23	2.42±0.14	2.58±0.18	2.90±0.31	2.96±0.35	2.81±0.51
	Antithrombin (U/mL)	0.96±0.05*	0.90±0.04*	0.90±0.04*	0.85±0.05*	1.06±0.03*	0.96±0.04*	1.11±0.04
	D-Dimer (µg/mL)	0.30±0.03	0.30±0.07	0.34±0.06*	0.29±0.11	0.41±0.34	0.39±0.25	0.27±0.09
	Factor V (U/mL)	0.77±0.06*	0.61±0.07*	0.57±0.06*	0.70±0.08*	0.87±0.07*	0.75±0.11	0.96±0.15
	Factor VIII (U/mL)	0.52±0.23	0.52±0.14	0.44±0.11	0.57±0.17	0.90±0.24	0.74±0.22	0.79±0.24
	Protein S (U/mL)	0.74±0.02*	0.69±0.05*	0.62±0.02*	0.61±0.06*	0.87±0.03*	0.79±0.06	0.93±0.12

*Significantly different from the healthy control (p<0.05); *Significantly different from pre-COVID-19 FFP (p<0.05); *Significantly different from pre-COVID-19 FDP (p<0.05).

Currently, there are three licensed FDP products [4]. The French Army and the German Red Cross have developed their products FLYP from 10 donors and LyoPlas from a single donor, respectively, which have been fielded to their armed forces. However, these products do not meet regulatory requirements by Health Canada concerning the risk of prion disease transmission. In addition, these products are produced in a glass bottle that is not ruggedized for combat environments. Our FDP is produced from Canadian-sourced plasma in a rugged, light-weight plastic package.

The key finding of this study is the preservation of hemostatic functions through the freeze-drying process for both pre-COVID-19 FDP and CC-FDP as measured by global ROTEM and plasma factor-specific Stago tests. Our results are consistent with the reported retention of coagulation factors of FDP produced using the same technology [5]. Our results also confirm that the hemostatic properties of reconstituted FDP were not altered at 4°C or room temperature for a short duration, which is consistent with that of FLYP showing a minimal reduction of PT after reconstitution and storage at 4°C for 24 h [6].

There are a number of hemostatic biomarkers for coagulopathy in COVID-19 patients, including antithrombin, fibrinogen and its degradation products, factor VIII, and D-dimer, resulting in hypercoagulability [7]. In our study, no significant differences in hemostatic profiles between CCP and healthy control plasma suggest recovery of COVID-19 patients who donated the CCP.

There are several advantages of CC-FDP over current CCP used in clinical trials. First, it has long stability which would allow for stockpile and easy use in developing countries and deployed troops during future pandemics. Secondly, as this is a pooled plasma product of 10 donors, it would standardize neutralizing antibody activity than single donor CCP. Thirdly, CC-FDP can be reconstituted and transfused in a small volume to get a high antibody level and avoid volume overload. However, the clinical benefit of CC-FDP for COVID-19 therapy needs to be further investigated.

Some variations in hemostasis between pre-COVID-19 FFP, FDP and the healthy control could be due to plasma sources and preparations (pooled fresh-frozen plasma versus freshly prepared plasma from a healthy volunteer), storage time and condition. Frozen storage time could affect the coagulation tests and factor activities of plasma even at -80°C [8]. Give the pre-COVID-19 samples have been stored at -80°C for more than one year, some labile plasma proteins might lose their activities. On the other hand, to avoid the effects of multiple freeze-thaws on coagulation tests and factor activities, freeze-thaw cycles for all samples were less than three times.

CONCLUSIONS

- FDP and CC-FDP retained their same hemostatic functional activities relative to their initial plasma sources.
- The technology can be also beneficial as a first-line treatment against future pathogens and may provide passive immunity against a Biological Warfare Threat.
- Further investigations on their effects in trauma-induced coagulopathy and COVID-19 virus neutralization models are warranted.

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Other Infectious Disease Outbreaks / Human Disasters



Ebola

DRC – In a follow-up on the 13th Ebola virus outbreak in Beni, Nord-Kivu province, **no new cases** have been confirmed since October 30. The WHO has praised the DRC's health authorities and all healthcare workers for their swift response which has been built and strengthened on the country's previous experiences in tackling Ebola outbreaks. Although no new cases have been reported the WHO continues to encourage health authorities to remain vigilant and maintain a strong surveillance system as potential flare-ups are possible, and 42 days without any new cases is required for the declaration of the outbreak to be over.

Source: WHO – <https://apps.who.int/iris/bitstream/handle/10665/349343/OEW47-152112021.pdf>

Unknown Illness

South Sudan - Media reports are raising concerns about an unknown illness affecting mostly children and elderly across Fangak County, within Jonglei State in South Sudan. According to these reports, the first cases appeared on October 2, and symptoms among the affected have been listed as chest pains, vomiting, and diarrhea. There is limited information about infectious diseases that have been ruled out so far, nor laboratory investigations underway, but some experts have suggested that it might be related to a waterborne disease. In addition, the report indicates that the World Health Organization has been notified of the ongoing illnesses and deaths and a team of experts is soon to be deployed in the affected area.

Source: News Media - <https://radiotamazuj.org/en/news/article/fears-as-90-people-die-of-a-mysterious-illness-in-jongleis-fangak-county>

Yellow Fever

Ghana - From 15 October to 27 November 2021, 202 suspected cases of Yellow Fever (YF) including 70 confirmed cases and 35 deaths [Case Fatality Ratio (CFR): 17%] have been reported in four regions in Ghana (Savannah, Upper West, Bono and Oti regions). YF is endemic in Ghana and is associated with severe disease in approximately 15% of cases and a high CFR. YF cases were reported mostly from nomadic populations who had moved from Nigeria into a forest reserve in Ghana's Savannah region which is visited by tourists. The region shares porous borders with Cote d'Ivoire and Burkina Faso, highlighting the potential for spread outside of Ghana. The cases, age ranging from 4 months to 70 years, presented with symptoms of body pain, fever, abdominal pain, vomiting, jaundice and bleeding from the gums. Females accounted for 52% (105/202) of the cases. A YF outbreak was confirmed after three samples tested positive for YF by PCR (negative for Ebola virus disease, dengue and other viral hemorrhagic fevers) at Institute Pasteur Dakar in Senegal, the regional reference laboratory. As of 27 November, 70 out of 196 samples collected have tested positive for YF by IgM and/or polymerase chain reaction (PCR), and results are pending for 68 samples. Plaque reduction neutralization testing was positive in 5 samples at the regional reference laboratory. Although there is high overall population immunity against YF in Ghana (88% in 2020 according to WHO-UNICEF estimates), pockets of the population, including unvaccinated nomadic people, remain at risk for YF which could result in continued YF transmission. The current outbreak investigation found settlements of newcomer populations who had arrived after the last mass campaign and were largely unvaccinated.

Source: WHO – <https://www.who.int/emergencies/disease-outbreak-news/item/yellow-fever---ghana>

Schistosomiasis

Sub-Saharan Africa - Researchers have found that treating school-aged children periodically with praziquantel has decreased the prevalence of schistosomiasis (bilharzia) in sub-Saharan Africa by almost 60% during the past 20 years. [The study was published in the Lancet Infectious Diseases](#). It analyses cross-sectional survey data of school-aged children (aged 5–14 years) in 44 countries across sub-Saharan Africa. Models were used with data on both *Schistosoma haematobium* and *S. mansoni* at three different time periods (2000-2010, 2011-2014 and 2015-2019). The study could potentially assist policy makers to plan their future schistosomiasis control strategies.

Source: WHO - <https://www.who.int/news/item/03-12-2021-schistosomiasis-large-scale-treatment-decreases-prevalence-by-60-among-school-aged-children>

[https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(21\)00090-6/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(21)00090-6/fulltext)

Influenza

Europe - Week 47/2021 (22 - 28 November 2021)

- Influenza activity was increasing throughout the European Region.
- Of the 1471 specimens tested for influenza viruses for week 47/2021, from patients presenting with ILI or ARI symptoms to sentinel primary healthcare sites, 26 (2%) were positive for influenza virus; 24 for type A (the 14 subtyped were A(H3)) and 2 for type B (neither ascribed to a lineage). Influenza activity with influenza-confirmed patients in primary care or hospital settings with a rate of influenza virus detections above 10% has been reported by Kosovo (in accordance with Security Council resolution 1244 (1999)).
- Hospitalized laboratory confirmed influenza cases were reported from ICU wards (1 influenza A virus), and from SARI cases (26 influenza A virus detections).
- Influenza viruses were detected sporadically from non-sentinel sources (such as hospitals, schools, primary care facilities not involved in sentinel surveillance, or nursing homes and other institutions). Both influenza type A and type B viruses were detected.

Source: ECDC - <https://flunewseurope.org/>

Malaria

Global - New data from the WHO reveal that the COVID-19 pandemic has disrupted malaria services, leading to a marked increase in cases and deaths. According to WHO's latest [World malaria report](#), there were an estimated 241 million malaria cases and 627 000 malaria deaths worldwide in 2020. This represents about 14 million more cases in 2020 compared to 2019, and 69 000 more deaths. Approximately two-thirds of these additional deaths (47 000) were linked to disruptions in the provision of malaria prevention, diagnosis and treatment during the pandemic. However, the situation could have been far worse. In the early days of pandemic, WHO had projected that – with severe service disruptions – malaria deaths in sub-Saharan Africa could [potentially double in 2020](#). But many countries took urgent action to shore up their malaria programmes, averting this worst-case scenario.

Source: WHO - <https://www.who.int/news/item/06-12-2021-more-malaria-cases-and-deaths-in-2020-linked-to-covid-19-disruptions>

Chikungunya

Honduras - According to official data from the Pan American Health Organization (PAHO), cases of chikungunya continue to be reported in Honduras in 2021. This year to date, Honduras has seen a decrease of 11.4% in cases, as compared to the same period in 2020.

Source: PAHO - <https://www3.paho.org/data/index.php/en/mnu-topics/chikv-en/550-chikv-weekly-en.html>

Cholera

Uganda - On November 4, 2021 health authorities in Uganda declared a cholera outbreak following laboratory confirmation of at least 14 stool samples from suspected cases in the villages of Nyarugugu B and C, in the Isingiro district in the Western Region of Uganda. As of November 17, the WHO-Afro weekly report has reported over 160 cases not only from Isingiro district, the epicentre, but also from the capital city of Kampala, however, no deaths have been confirmed in this outbreak. Rapid response teams are currently conducting cholera epidemiological investigations in areas reporting cases. Experts have indicated that the main factor behind the current cholera outbreak points to insufficient clean water in affected areas.

Source: WHO - <https://apps.who.int/iris/bitstream/handle/10665/349343/OEW47-152112021.pdf>

Flu Awareness Campaign 2021

Influenza

during the COVID-19 pandemic

How do I protect myself and others from COVID-19 during influenza vaccination?

- Don't come for a vaccination if you are ill or have had close contact with a COVID-19 case in the past two weeks.
- Keep a distance of at least one metre (ideally two) to other people, except for the vaccinator, in the facility.
- Schedule your vaccination during less busy times when there are no queues.
- Use a surgical face mask or a textile mask to protect against droplets.
- Wash your hands with soap and water before and after being in the facility for vaccinations. Alternatively, use alcohol-based disinfectant.
- Avoid touching surfaces with bare hands, or shaking hands with anyone in the facility.



The Flu Awareness Campaign is a communication campaign marked across the [WHO European Region](#) every year in October. It aims to raise awareness of the importance of vaccination for people's health and well-being and to increase the uptake of seasonal influenza vaccination of people with underlying risk factors.

ECDC supports the Flu Awareness Week by providing scientific evidence on vaccination and promoting vaccination uptake among risk- and priority groups.

Source:

<https://www.euro.who.int/en/health-topics/communicable-diseases/influenza>
<https://www.ecdc.europa.eu/en/news-events/flu-awareness-campaign-2021>
<https://flunewseurope.org/>

Get ready for the upcoming flu season!



It is crucial that vulnerable populations and healthcare workers get vaccinated for COVID-19 and flu before the winter months.

Influenza

during the COVID-19 pandemic

Why is it important to get vaccinated against influenza during the COVID-19 pandemic?

- By getting vaccinated, you help protect the vulnerable, such as the elderly and those with chronic underlying medical conditions. These are people who are at increased risk of severe outcomes such as respiratory difficulties or death.
- Both influenza and COVID-19 can cause severe disease, but note that the influenza vaccine only protects against influenza.
- Dual infection with COVID-19 and influenza is likely to cause more severe outcomes.
- Both COVID-19 and influenza can disrupt healthcare services and the functioning of nursing homes. It is especially important this year that healthcare staff get vaccinated against influenza and that healthcare services keep running.



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-airtravellers>
- <https://www.cdc.gov/coronavirus/2019-ncov/travelers/how-level-is-determined.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/>