Force Health Protection Branch
NATO MilMed COE
Munich

Update 89
COVID-19
Coronavirus Disease
27 October 2021

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GLOBAL
→
244 672 099
Confirmed cases
233 100 000 recovered
4 965 802 deaths

USA
(7-days incidence 148,1)
↘
45 398 891
confirmed cases
43 440 000 recovered
735 338 deaths

India
(7-days incidence 7,9)
→
34 202 202
confirmed cases
33 490 000 recovered
455 068 deaths

Brazil
(7-days incidence 39,6)
↗
21 748 984
confirmed cases
20 940 000 recovered
606 246 deaths

News:

- **WHO:** has published its Management Response Plan to address the findings of the Independent Commission (IC) on allegations of sexual abuse and exploitation (SEA) during the response to the 10th Ebola outbreak in the Democratic Republic of the Congo (DRC) following the issuing of the IC's report on 28 September.
- WHO: Published the statement on the ninth meeting of the International Health Regulations (2005) Emergency Committee regarding the coronavirus disease (COVID-19) pandemic.
- **ECDC**: published the first version of a contact tracing reporting protocol.
- **WHO:** Together with partners launched the second massive open online course for journalists to improve their coverage of COVID-19 vaccines. As well as a course that will help journalists to improve their coverage of the pandemic.
- **WHO** estimates that between 80 000 and 180 000 health and care workers could have died from COVID-19 in the period between January 2020 to May 2021, converging to a medium scenario of 115 500 deaths.
- **WHO**: Together with WIPO and WTO launched an update of the extract "Integrated health, trade and IP approach to respond to the COVID-19 pandemic." This extract, from the 2nd edition of the Trilateral Study Promoting Access to Medical Technologies and Innovation, maps the challenges posed by the COVID-19 pandemic in relation to the integrated health, trade and intellectual property policy framework set out in the Trilateral Study.
- **CDC:** published a recommendation for safe ways to celebrate the upcoming holidays in family settings.
- **ECDC**: Published the 10th and final report for the 2020-2021 influenza season. As of week 39/2021, only 1 276 influenza detections across the WHO European Region were reported to TESSy. This represents a 99.2% drop in detections compared to the 2020-2021 season, probably due to the COVID-19 pandemic and measures introduced to combat it.

Topics:

- Global situation
- European situation
- Vaccination news
- SARS-CoV-2 VOIs and VOCs
- Subject in Focus: Inequitable Global Vaccine Divide
- ECDC Technical Report: The use of rapid antigen detection tests
- Flu Awareness Campaign 2021
- Other Infectious Disease Outbreaks
- NATO Member State: Summary of information on the individual national Corona restrictions
- Travel Recommendations and other useful Links

Company	Vaccine Candidate	Updates
Moderna/National Institute of Health	mRNA-1273	• On October 7, the European Medicines Agency authorized the administration of a third dose for individuals with weakened immune systems.
Genexine	GX-19N	• On October 5, the South Korean company, Genexine, registered its Phase 2/3 trial to test their DNA vaccine as a booster shot for other vaccines.
Anhui Zhifei Longcom	ZF2001 (Zifivax)	• On October 7, the Zifivax vaccine was authorized for use in Indonesia. It has an efficacy rate of 82% against symptomatic COVID-19 disease.
Vaxine	SpikoGen	• On October 6, the Australian company received emergency authorization for the Spikogen vaccine in Iran. • The phase 3 trial results are expected by the end of 2021.
Razi Vaccine and Serum Research Institute	Cov-Pars Razi	• On October 12, sources reported that nasal dose vaccine has shown to reduce the transmission of virus by about 90%.

EUROPE
↗
71 536 877
confirmed cases
66 800 000 recovered
1 360 065 deaths

GBR
(7-days incidence 469,7)
↗
8 853 231
confirmed cases
8 033 000 recovered
139 834 deaths

Russia
(7-days incidence 169,4)
↗
8 185 400
confirmed cases
7 441 000 recovered
228 581 deaths

Turkey
(7-days incidence 198,5)
↘**7 909 081**
confirmed cases
7 382 000 recovered
69 559 deaths

Situation by WHO Region, as of 24 October

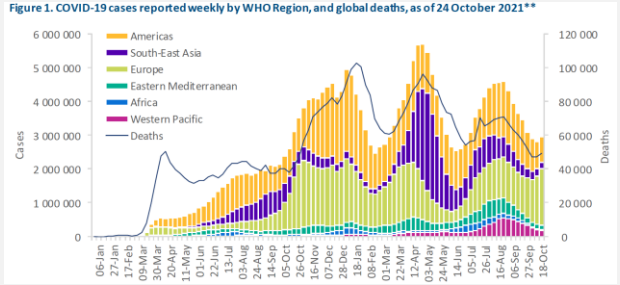
Global epidemiological situation overview; WHO as of 24 October 2021

During the week of 18 to 24 October 2021, the global number of new cases increased slightly (4%) compared to that of the previous week, with just over 2.9 million new cases (Figure 1). The European Region accounted for more than half (57%) of global new weekly cases and was the only region which reported an increase. Other regions reported declines in the number of new cases. The largest decrease in new cases was again reported from the African Region (21%), followed by the Western Pacific Region (17%). The number of new deaths also increased slightly by 5% during the past week, with over 49 000 new deaths reported. Increases were reported in the European (14%) and South-East Asia (13%) regions; whereas the largest declines were observed in the Western Pacific (16%), Eastern Mediterranean (13%) and the African (11%) regions. As of 24 October, over 243 million confirmed cases and over 4.9 million deaths have been reported since the start of the pandemic.

The **highest numbers of new cases** were reported from:

- United States of America (512 956 new cases; 12% decrease
- United Kingdom (330 465 new cases; 16% increase)
- Russian Federation (248 956 new cases; 15% increase)
- Turkey (196 850 new cases;8% decrease)
- Ukraine (134 235 new cases; 43% increase)

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 24 October 2021**

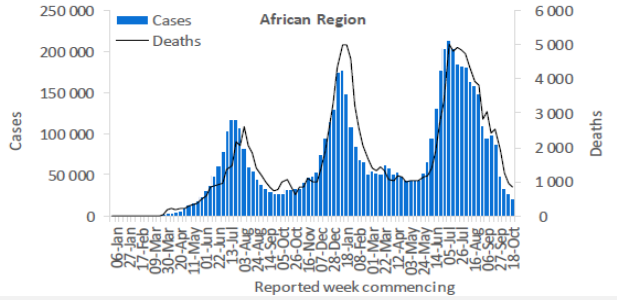


WHO regional overviews Epidemiological week 18-24 October 2021

African Region

The declining trend observed in the African Region since mid-July continued this week with over 22 000 new cases and over 800 new deaths reported, a decrease of 21% and 11% respectively as compared to the previous week. While this is reassuring, ten out of the 49 countries (20%) in the Region reported increases in new weekly cases as compared with the previous week, with the greatest increase observed in Réunion (578%), Botswana (116%), and Gambia (100%). The highest numbers of new cases were reported from South Africa (3153 new cases; 5.3 new cases per 100 000 population; a 33% decrease), Botswana (3063 new cases; 130.3 new cases per 100000; a 116% increase), and Ethiopia (2908 new cases; 2.5 new cases per 100 000; a 38% decrease).

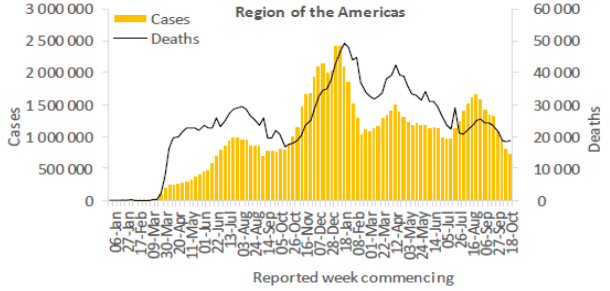
The highest numbers of new deaths were reported from South Africa (327 new deaths; <1 new death per 100 000 population; an 11% increase), Ethiopia (136 new deaths; <1 new death per 100 000; a 45% decrease), and Nigeria (52 new deaths; <1 new death per 100 000; a 12% decrease).



Region of the Americas

The Region of the Americas reported over 745 000 new cases this week, a 9% decline as compared to the previous week and a continuation of the declining trend in the region observed since the end of August 2021. Nevertheles,s 25% of countries (14/56) reported an increase in new cases this week as compared to the previous week, with the largest increases observed in Dominica (166%), Cayman Islands (156%) and Paraguay (136%). The highest numbers of new cases were reported from the United States of America (512 956 new cases; 155.0 new cases per 100 000; a 12% decrease), Brazil (84 367 new cases; 39.7 new cases per 100 000; a 10% increase), and Mexico (32 940 new cases; 25.5 new cases per 100 000; a 7% decrease).

Deaths remain stable as compared with the previous week, with the highest numbers of new deaths reported from the United States of America (11 604 new deaths; 3.5 new deaths per 100 000; similar to the number reported last week), Brazil (2470 new deaths; 1.2 new deaths per 100 000; a 10% increase), and Mexico (2324 new deaths; 1.8 new deaths per 100 000; similar to the number reported last week).

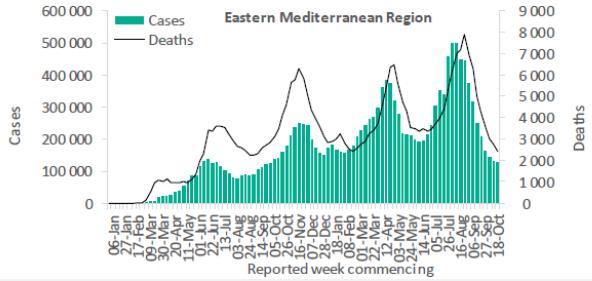


Source: https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---26-october-2021

Eastern Mediterranean Region

The number of cases and deaths continued to decline this week in the Eastern Mediterranean Region, with just under 130 000 new cases and over 2400 new deaths reported, a 5% and a 13% decrease respectively as compared to the previous week. This declining trend in both cases and deaths has been observed since late July 2021. In the past week, just under one third of the countries (6/22; 27%) in the region reported an increase in new cases and the highest increases were observed in Sudan (57%) and the Syrian Arab Republic (26%). The highest numbers of new cases were reported from the Islamic Republic of Iran (78 251 new cases; 93.2 new cases per 100 000; similar to the number reported in the previous week), Iraq (11 290 new cases; 28.1 new cases per 100 000; similar to the number reported in the previous week), and Jordan (9641 new cases; 94.5 new cases per 100 000; a 25% increase).

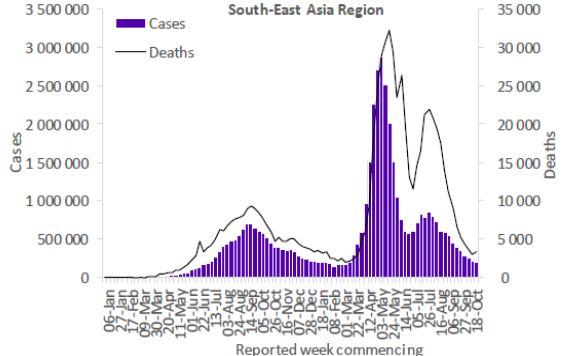
The highest numbers of new deaths were reported from the Islamic Republic of Iran (1176 new deaths; 1.4 new deaths per 100 000; a 22% decrease), Egypt (316 new deaths; <1 new death per 100 000; an 18% increase), and Iraq (199 new deaths; <1 new death per 100 000; similar to the number reported in the previous week).



South-East Asia Region

Since the end of July 2021, new weekly cases continue to decline in the Region , with 197 000 new cases reported this week, an 8% decrease as compared with the previous week. All the countries reported a decreasing trend except for Maldives (23% increase), Timor-Leste (37% increase) and Nepal (42% increase). The highest numbers of new cases were reported from India (107 749 new cases; 7.8 new cases per 100 000; a 6% decrease), Thailand (66 781 new cases; 95.7 new cases per 100 000; an 8% decrease), and Myanmar (6410 new cases; 11.8 new cases per 100 000; a 30% decrease).

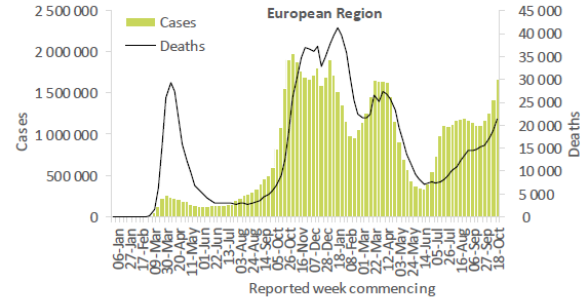
On the other hand, new weekly deaths increased by 13% this week as compared with the previous week, largely driven increases in India (40% increase) and Nepal (21% increase). The highest numbers of new deaths were reported from India (2145 new deaths; <1 new death per 100 000; a 40% increase), Thailand (482 new deaths; <1 new death per 100 000; a 17% decrease), and Indonesia (253 new deaths; <1 new death per 100 000; a 16% decrease).



European Region

The European Region reported over 1.6 million new cases and over 21 000 new deaths, an 18% and a 14% increase respectively compared to the previous week. The trend observed since the end of September continued this week with an increasing number of new cases and deaths reported in the Region . More than half (42/61; 69%) of the countries in the European Region reported an increase in cases in the past week. The highest numbers of new cases were reported from the United Kingdom (330 465 new cases; 486.8 new cases per 100 000; a 16% increase), the Russian Federation (248 956 new cases; 170.6 new cases per 100 000; a 15% increase), and Turkey (196 850 new cases; 233.4 new cases per 100 000; an 8% decrease).

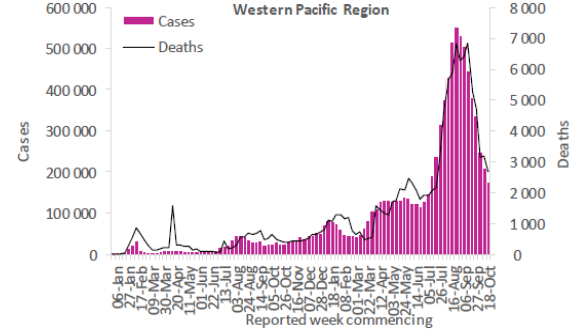
The highest numbers of new deaths were reported from the Russian Federation (7288 new deaths; 5.0 new deaths per 100 000; a 6% increase), Ukraine (3239 new deaths; 7.4 new deaths per 100 000; a 51% increase), and Romania (2889 new deaths; 14.9 new deaths per 100 000; a 22% increase).



Western Pacific Region

The Western Pacific Region reported over 174 000 new cases and over 2600 new deaths, a 17% and a 16% decrease respectively, as compared to the previous week. Despite the ongoing declining trends in the Region, of the countries reporting cases (19/26; 73%), more than a quarter (5/19; 26%) still reported increases in new cases in the past week. The highest numbers of new cases were reported from Malaysia (41 508 new cases; 128.2 new cases per 100 000; a 21% decrease), the Philippines (38 189 new cases; 34.8 new cases per 100 000; a 35% decrease), and Singapore (24 141 new cases; 412.6 new cases per 100 000; a 15% increase).

The highest numbers of new deaths were reported from the Philippines (1005 new deaths; <1 new death per 100 000; a 7% decrease), Malaysia (496 new deaths; 1.5 new deaths per 100 000; a 16% decrease), and Viet Nam (489 new deaths; <1 new death per 100 000; a 29% decrease).



Updates from the Western Pacific Region

Global Situation

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AUT: Disease activity has **increased** steadily since the end of June. Within the last month the seven-day rolling average number of new cases has **doubled**, increasing from 1,672 cases on September 24 to **3,261 cases on October 24**. The 14-day test positivity rate as of **October 22 was 6.7%,** which is an increase from September 22, when it was 5.6%. The seven-day rolling average number of new deaths has remained relatively low with a slight increase from 10 new deaths on September 24 to **12 new deaths on October 24**. Authorities have announced that as part of ongoing healthcare capacity monitoring, if 600 intensive care beds across the country are occupied, a potential lockdown specifically for the unvaccinated will be implemented.
Health authorities require residents to follow the 3-G rule while in certain public venues such as restaurants, hotels, leisure facilities, and cultural establishments. **The 3-G rule requires individuals to show either proof of vaccination, a negative PCR or antigen test result, or medical confirmation of recovery from SARS-CoV-2 infection.** In venues where the 3-G rule applies, there is no physical distancing or face mask requirement. However, in public areas such as banks, post offices, grocery stores, or while on public transport, a face mask is mandatory. Health authorities regularly update lists of low and high-risk countries based on various indicators such as 14-day incidence of infection, test positivity rate, and current trend. These lists are outlined on the Ministry of Health website as Appendix 1 and 2. International travellers arriving from low-risk countries listed in Appendix 1 must abide by the 3-G rule upon entry into Austria. Those arriving without relevant proof, must register for pre-travel clearance prior to entering the country and complete a PCR or antigen test within the first 24 hours of arrival. Travellers from Appendix 2 countries are banned from entry, exceptions are in place for those arriving from Brazil, Chile, Costa Rica, and Suriname. Travellers from countries not listed in Appendix 1 or 2 must register for pre-travel clearance, follow the 3-G rule upon arrival, and quarantine for 10 days. Quarantine periods may be ended early if individuals provide a negative test result completed on the fifth day after entry.

DOM: Disease activity has been **gradually increasing** since entering the **fourth wave** at the end of September. In the past month, the seven-day rolling average number of daily new cases has increased from 283 on September 24 to **832 on October 24.** During the same time frame, the test positivity rate increased from 7.5% to **15.1%** as testing also increased, suggesting that there is still a **substantial degree of community transmission** in which mild or asymptomatic cases are not being detected. As of October 24, there have been **19,578 cases (5.2% of cumulative cases) reported in the past 30 days**, with the **Delta variant (B.1.617.2)** assumed to be the cause of most cases in the country (testing is lagging).
As of October 12, officials have **ended their COVID-19-related state of emergency**, which was implemented in July 2020. As of October 18, officials have mandated proof of full vaccination for individuals age 12 and above to access public spaces. Unvaccinated or partially vaccinated individuals will need to provide proof of a negative PCR test result within seven days to gain access to the same spaces. **Other protective measures** such as wearing face masks and physical distancing **remain unchanged.** International travellers may enter the country by showing proof of full vaccination instead of negative PCR test results, while others may be randomly selected for rapid testing upon arrival at the airport. All travellers must complete an entry and exit (e-Ticket) form, which combines the traveller's Health Affidavit, Customs Declaration, and International Embarkation/Disembarkation forms. This form must be completed within 72 hours before arrival or departure.

NPL: Disease activity had been **declining** after reaching a relative peak in early August, but in the last week, it has begun to **increase**. The seven-day rolling average number of new cases has decreased from 2,655 cases on August 10 to **574 cases on October 24**. While the seven-day rolling average number of new deaths decreased from 33 to **nine** within the same time period. The 14-day test positivity rate as of **October 24 was 8%** out of the 39,540 tests performed. Percent positivity has been **declining** since end-August. Hospitals are reporting a **lack of personnel resources across the country.** The high vacancies have been a problem since pre-pandemic but have been exacerbated recently. Additionally, Nepal is experiencing **severe weather** including heavy rainfall and flooding, with the potential to compound COVID-19 disease activity in the coming weeks due to already stretched healthcare resources.
The **current domestic restrictions remain in place as of October 25**. Large gatherings are prohibited, and individuals are expected to wear facemasks and physical distance or face penalties. Travel between districts and provinces is permitted; however, transit is operating with capacity limits. Kathmandu Valley has been gradually lifting its stricter restriction protocols after **ending a local lockdown at the beginning of September**. Religious gatherings, cinemas, pools, clubs, and museums are permitted to recommence. Transport vehicles are no longer restricted by hours of service. International travellers must provide proof of full vaccination minimum 14 days before arrival, a PCR test 72 hours before arrival, proof of hotel accommodations, and a complete International Traveler Arrival form. Those who do not provide the required documentation must quarantine for 14 days, apart from Nepali citizens and individuals with a diplomatic visa.

BRN: Prior to August 7, 2021, just 339 cumulative cases had been reported in the country since the start of the pandemic. Since then, **disease activity has risen sharply** and as of October 20, **11,386 cumulative cases** have been reported. Over the **past 30 days, 55%** (6,173) of the cumulative total cases have been reported. The seven-day rolling average number of daily new cases has increased from less than one on August 7 to a record-high of **269 on October 18**. According to health officials, roughly half of the cases reported over the past two weeks has been within migrant workers' dormitories which are often cramped and overcrowded.

Montenegro: **Disease activity is beginning to increase again** after the decline mid-September following a substantial increase observed early July which aligns with the tourism season. The seven-day rolling average number of new cases has decreased from 638 cases, at the peak of the fourth wave, on August 28 to **375 cases on October 19**. While the seven-day rolling average number of new deaths fluctuated between five to seven deaths within the same time period. According to official government sources, hospitalization rates have been declining since early-September.

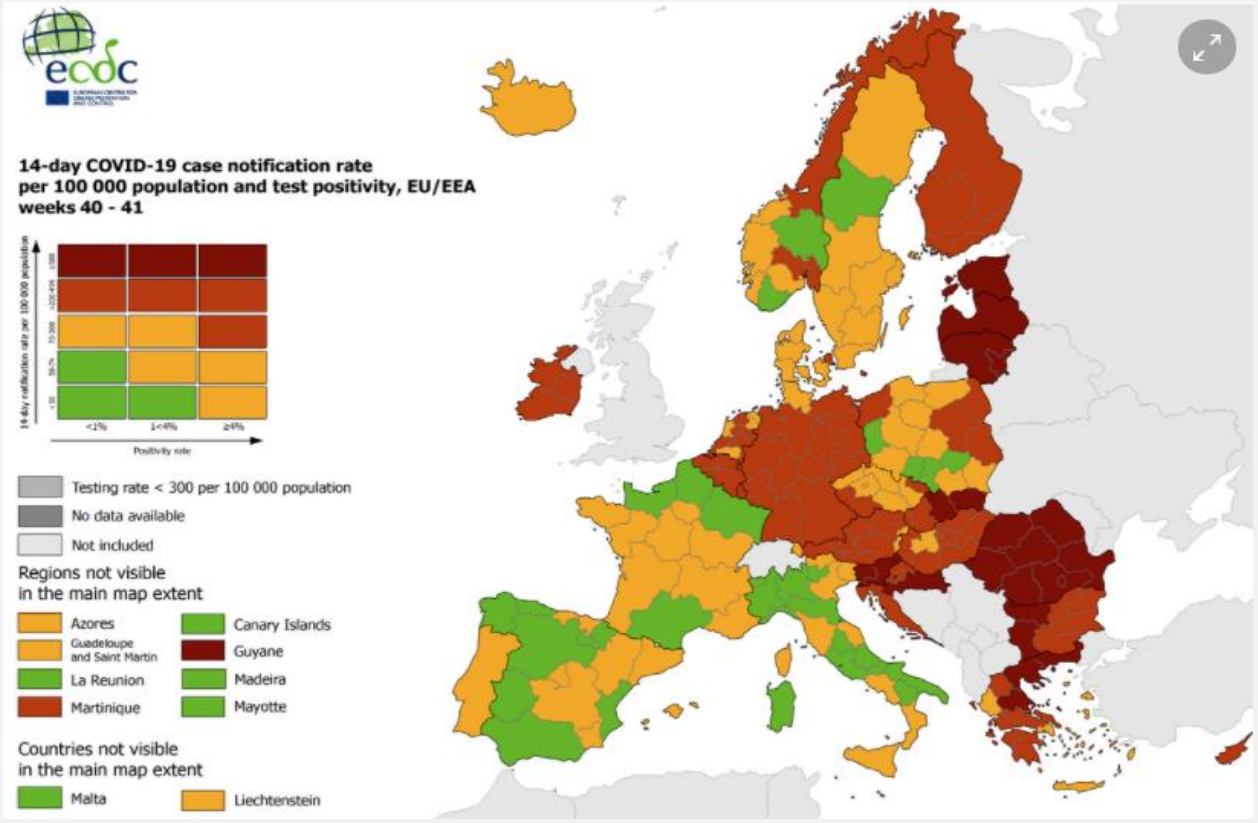
NCL: **Disease activity has decreased since September 22** when the country experienced its first spike in cases. The seven-day rolling average number of new cases has decreased from 483 cases on September 22 to **107 cases on October 19**. The 14-day test positivity rate data is not currently available as the **extent of testing is unknown**. The seven-day rolling average number of new deaths has decreased slightly from seven deaths on September 22 to **five deaths on October 19**. Since March 2020, there have been 243 cumulative deaths due to COVID-19 in the country, all deaths have occurred after September 10, 2021. News media reports state that the current wave is attributed to the **Delta variant (B.1.617.2) and has strained healthcare capacities**.

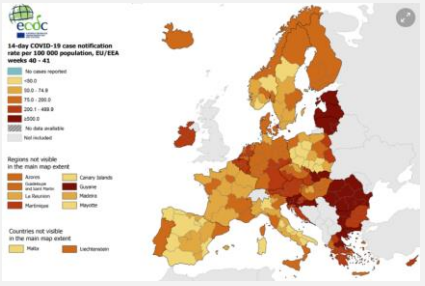
PNG: Hospitals in Papua New Guinea are "**barely coping**" as COVID-19 again threatens to overwhelm the Pacific nation's health system, the government says. Health experts say **low vaccination rates and vaccine hesitancy** are a major problem. **Less than one percent of the population** is **fully vaccinated** against COVID-19 – one of the lowest tallies in the world.

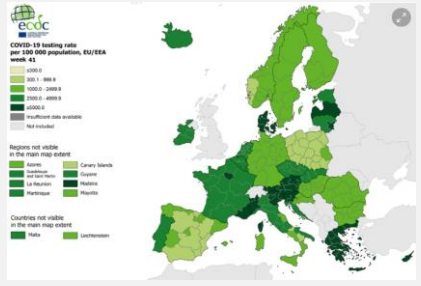
SYR: COVID-19 has **been surging through** northwest Syria's Idlib province for weeks now, overwhelming **already limited hospital capacity**. Amidst oxygen shortages, health workers are struggling to cope with the wave, as the **Delta variant appears to be spreading** particularly quickly in the region's many displacement camps.

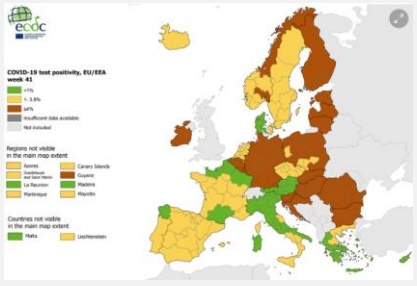
European Situation

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 21 October 2021









14-day case notification rate per 100 000 inhabitants | Testing rates per 100 000 inhabitants | Positivity rates

ECDC COVID-19 surveillance report Week 41, as of 21 October 2021

At the end of week 41 (week ending Sunday 17 October 2021), the overall epidemiological situation in EU/EEA was characterised by a high and increasing overall case notification rate and a low death rate that has been very slowly increasing over time. Case notification rates, death rates, 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 have started to increase again. The picture varies considerably between countries. Increasing case notification rates and an overall epidemiological situation of high or very high concern are mainly concentrated in countries in the eastern part of the EU/EEA, particularly in those with lower rates of vaccination uptake.

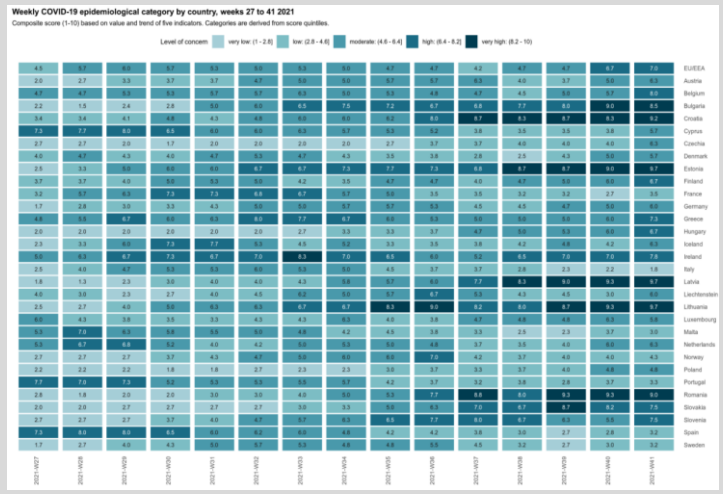
The overall COVID-19 case notification rate for the EU/EEA was 190.0 per 100 000 population (166.4 the previous week). This rate has been increasing for two weeks. The 14-day COVID-19 death rate (23.6 deaths per million population, compared with 20.5 deaths the previous week) has been increasing for two weeks. Of 29 countries with data on hospital or ICU admissions or occupancy up to week 41, 15 reported an increasing trend in at least one of these indicators compared to the previous week.

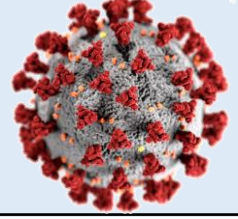
ECDC's assessment of each country's epidemiological situation is based on a composite score based on the absolute value and trend of five weekly COVID-19 epidemiological indicators. As shown below, for week 41, six countries (Bulgaria, Croatia, Estonia, Latvia, Lithuania and Romania) were categorised as of very high concern, seven countries (Belgium, Finland, Greece, Hungary, Ireland, Slovakia and Slovenia) as of high concern, 10 countries (Austria, Cyprus, Czechia, Denmark, Germany, Iceland, Liechtenstein, Luxembourg, Netherlands and Poland) as of moderate concern, six countries (France, Malta, Norway, Portugal, Spain and Sweden) as of low concern and one country (Italy) as of very low concern. Compared with the previous week, 10 countries (Belgium, Cyprus, Czechia, Finland, France, Greece, Hungary, Iceland, Liechtenstein and Slovenia) moved to a higher category and 20 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 42 and 43. 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 43.

By the end of week 41, the pooled cumulative uptake of at least one vaccine dose in the EU/EEA was 79.7% (range: 25.0–98.4%; 30 countries reporting) among adults aged 18 years and older and 68.2% (range: 20.9–87.4%; 30 countries reporting) in the total population. Cumulative uptake of full vaccination was 74.4% (country range: 23.9–92.0%) among adults aged 18 years and older and 63.4% (country range: 19.9–80.5%) in the total population.

The estimated distribution (median and range of values from 16 countries for weeks 39 to 40, 27 September to 10 October 2021) of variants of concern (VOC) was 99.9% (92.5–100.0%) for B.1.617.2 (Delta), 0.0% (0.0–7.5%) for B.1.617 and 0.0% (0.0–0.0%) for P.1 (Gamma). The distribution was 0.1% (0.0–1.9%) for B.1.1.7 (Alpha), which was downgraded from the list of VOCs on 3 September 2021.





Vaccination News

Sources: https://www.thelancet.com/journals/lanepe/article/PIIS2666-7762(21)00235-0/fulltext
https://www.medrxiv.org/content/10.1101/2021.10.10.21264827v1.full.pdf?cmp=apple-news_cbc-new
https://www.cdc.gov/media/releases/2021/p1021-covid-booster.html

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A total of 10 countries account for 69.2% of all vaccinations administered globally as of October 21. The top five countries/territories with the highest number of cumulative people vaccinated with at least one dose per 100,000 population are Gibraltar (119,240), Palau (100,170), United Arab Emirates (95,630), Portugal (88,470), and Cuba (86,010). Conversely, the top five countries with the lowest number of cumulative people vaccinated with at least one dose per 100,000 population are the Democratic Republic of the Congo (110), Haiti (640), South Sudan (740), Chad (920), and Yemen (1,010).

What do the most recent studies suggest on 'mixing-and-matching' (heterologous) vaccines?

Mix-and-match' of primary COVID-19 vaccination regimen

The findings in a study published in Lancet Regional Health analyzed data from approximately 700,000 people from Sweden. Compared to unvaccinated people, results suggested that **the risk of SARS-CoV-2 infection was 50% lower in those who received two doses of the AstraZeneca vaccine, 67% lower in those with a combination of the AstraZeneca and BioNTech vaccines, and 79% lower in those with a combination of AstraZeneca and Moderna.** No significant differences according to vaccine schedule, or among unvaccinated individuals, in the rates of potential side effects that were explored. However, the number of COVID-19 cases severe enough to require hospitalization was too low to be able to calculate the effectiveness of the different vaccine combinations against the outcome. **This study suggests that 'mixing-an-matching' the doses of a two-dose primary COVID-19 vaccination regimen is protective and likely safe.**

'Mix-and-match' of booster shot following primary COVID-19 vaccination regimen

According to a preprint study by the National Institutes of Health that involved a small sample of 458 participants, people who received the Johnson & Johnson vaccine produced higher antibody levels after they received booster shots from BioNTech or Moderna, compared to those who received booster doses of the Johnson & Johnson vaccine. Individuals originally fully-vaccinated with the two-dose vaccines by BioNTech or Moderna and received either company's booster shot produced similar antibody levels. Rates of adverse events were similar across all of the groups irrespective of which vaccine combinations they received. While the antibody levels do not allow us to determine vaccine effectiveness towards preventing symptomatic or severe disease outcomes**, this study suggests that if a vaccine is approved or authorized as a booster, antibody levels will be generated regardless of the primary COVID-19 vaccination regimen.** However, it may be preferable for those who received Johnson & Johnson as their primary vaccination to receive an mRNA booster dose to achieve higher antibody levels. As researchers continue to follow the study participants over the course of a year, additional insights may yield information on long-term protection against disease outcomes and changes to antibody levels over time among the groups receiving different combinations of vaccines.

CDC: CDC now recommends that certain people are now eligible to receive a COVID-19 booster shot, including those who received Moderna and Johnson & Johnson/Janssen COVID-19 vaccines. For individuals who received a Pfizer-BioNTech or Moderna COVID-19 vaccine, the following groups are eligible for a booster shot at 6 months or more after their initial series:

- 65 years and older
- Age 18+ who live in long-term care settings
- Age 18+ who have underlying medical conditions
- Age 18+ who work or live in high-risk settings

For the nearly 15 million people who got the Johnson & Johnson COVID-19 vaccine, booster shots are also recommended for those who are 18 and older and who were vaccinated two or more months ago. See the CDC statement.

AUT: As of October 24, official sources report that **65.5%** (5,852,687) of Austria's total population of 9,073,798 have received at **least one dose** of COVID-19 vaccine. **58%** (5,260,448) of the total population have been **fully vaccinated** with either Comirnaty (BioNTech), Janssen (Johnson & Johnson), Spikevax (Moderna), or Vaxzevria (Oxford/AstraZeneca). **29.4%** (266,327) of the total population have received a **third dose** of COVID-19 vaccine. Health authorities report that as of October 19, **90% of symptomatic illness has been in unvaccinated individuals.**

DOM: As of October 24, of the country's roughly **10.7 million population, 61.5%** (6,605,259) have received at **least one dose** of a COVID-19 vaccine and **48.8%** (5,242,777) are **fully vaccinated**. The country's vaccination campaign began in February 2020 and has since been administering the Comirnaty, CoronaVac (Sinovac), Vaxzevria, and the BBIBP-CorV (Sinopharm) vaccines.

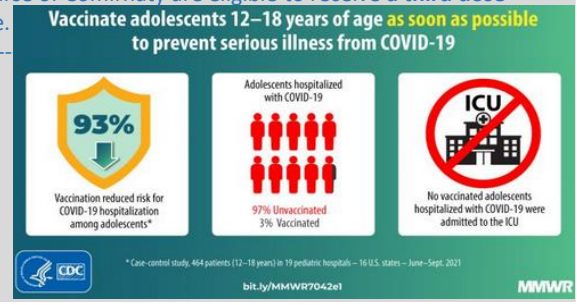
NPL: As of October 24, 29.9% (8,562,365) of the country's population of **over 28 million** has received at **least one dose** of a COVID-19 vaccine and **22.7%** (6,485,923) are **fully vaccinated**. Vaccines administered include Comirnaty, CoronaVac, Janssen, Spikevax, Vaxzevria, BBIBP-CorV, and Sputnik V (Gamaleya Research Institute). The Nepal government has received COVID-19 vaccine donations from multiple countries within the past month including USA and Maldives, with 100,000 Comirnaty and 200,000 Vaxzevria vaccines, respectively.

BRN: As of October 19, **78%** (339,667) of the country's approximately 433,000 population have received **at least one dose** of a COVID-19 vaccine and **52%** (224,028) have been **fully vaccinated**. Government officials have stated that they require the proportion of the population that is fully vaccinated to increase prior to lifting restrictions. Mobile vaccination clinics have been extended to increase rural residents' access to vaccines. Vaccines used to-date include the Comirnaty (Pfizer/BioNTech), Spikevax (Moderna), Vaxzevria (Oxford/AstraZeneca), and BBIBP-CorV (Sinopharm) vaccines. Brunei has approved the use of the **Comirnaty vaccine for individuals 12 to 17 years of age**.

Montenegro: As of October 19, **40.6%** (253,068) of the country's population of over six hundred thousand has received at **least one dose** of a COVID-19 vaccine and **37.2%** (231,346) are **fully vaccinated**. Vaccines administered include Comirnaty, Vaxzevria, BBIBP-CorV, Sputnik V (Gamaleya Research Institute). As of October 2, a **booster dose** of any administered COVID-19 vaccine is recommended **for adults after five months** of completing the regimen, with exceptions to vulnerable populations and those previously infected.

NCL: As of October 19, **59.7%** (172,477) of New Caledonia's population of 289,059 have received **at least one dose** of COVID-19 vaccine and **50.2%** (145,238) are **fully vaccinated.** The country is vaccinating residents with Comirnaty, Spikevax, and Janssen (Johnson & Johnson) vaccines. Individuals who have received a full course of Comirnaty are eligible to receive **a third dose provided six months has passed** since they received their second dose.

CDC: updated their recommendation for COVID-19 vaccine for children and teens over 12 years and older. With a general information that the FDA has not yet authorized a COVID-19 vaccine for children 5 to 11 years of age, and CDC's Advisory Committee on Immunization Practices (ACIP) has not yet made a recommendation on vaccinating this age group. CDC will update it´s web page when new information is available.



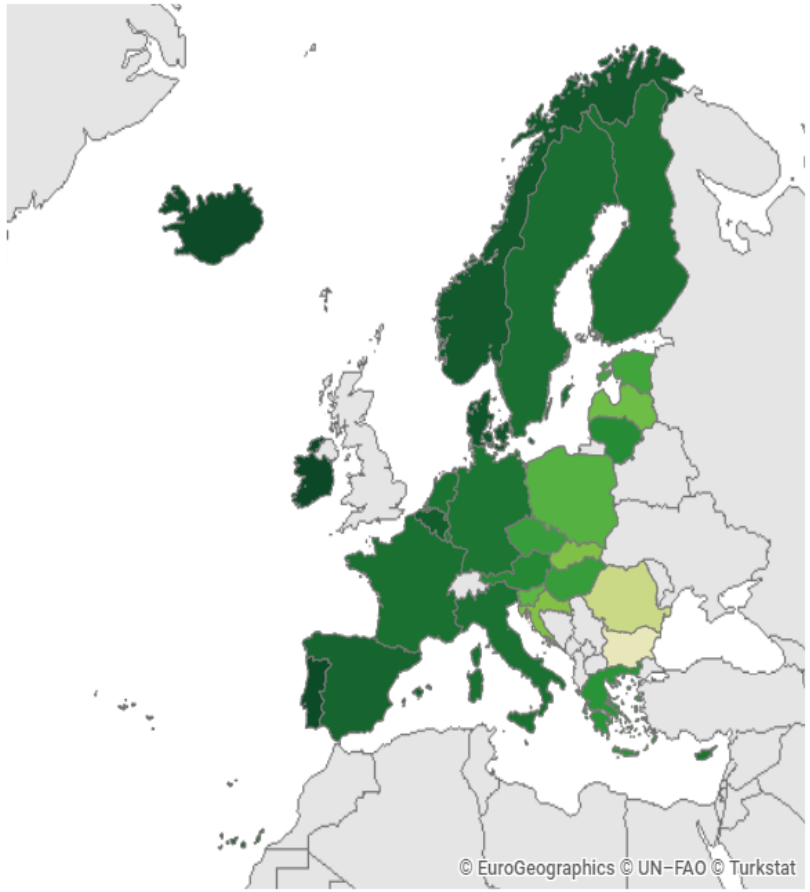
European Situation on Vaccination

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

Total doses distributed to EU/EEA countries 762,462,091 | 582,158,924 **Total doses administered in EU/EEA countries**

Indicator: Uptake full vaccination

Cumulative uptake (%) of full vaccination among adults (18+) in EU/EEA countries as of 2021-10-26

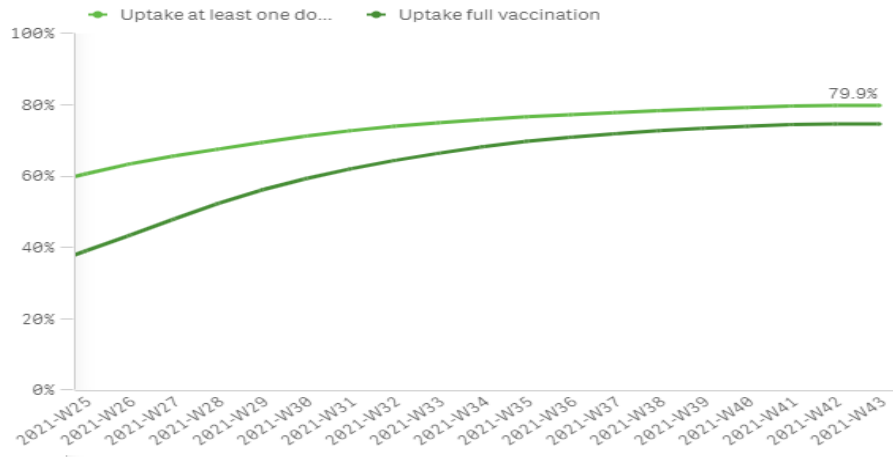


Uptake full vaccination (%)

24.8% 92.1%

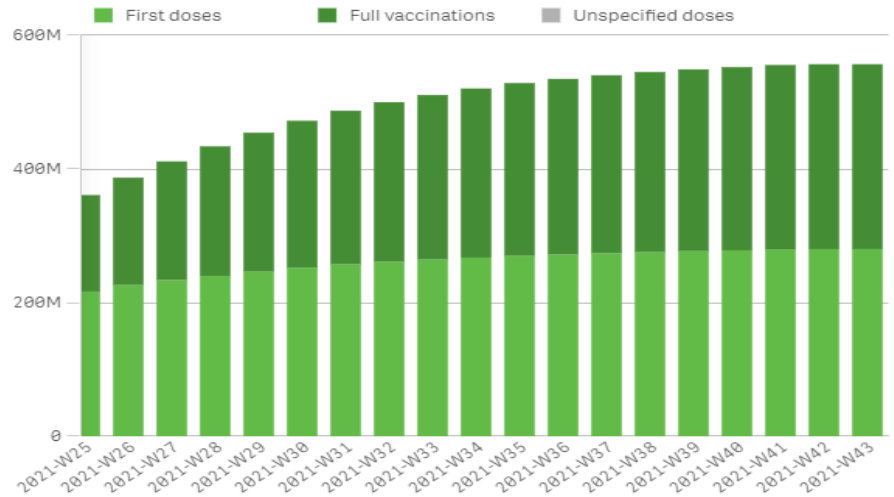
Cumulative uptake (%) of at least one vaccine dose and full vaccination among adults (18+) in EU/EEA countries as of 2021-10-26

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



Cumulative number of vaccine doses administered to adults (18+) in EU/EEA countries as of 2021-10-26

by reporting week (data for current week are preliminary)



Cumulative uptake (%) of at least one vaccine dose by age group in EU/EEA countries as of 2021-10-26

Country	80+ years	70-79 years	60-69 years	50-59 years	25-49 years
Austria	100.0%	84.2%	87.4%	77.9%	68.3%
Belgium	91.2%	96.3%	93.7%	90.4%	82.5%
Bulgaria	22.0%	34.3%	33.3%	29.5%	22.5%
Croatia	59.0%	76.3%	71.6%	59.9%	45.3%
Cyprus	97.5%	97.1%	90.1%	84.7%	78.0%
Czechia	84.2%	88.8%	76.6%	72.8%	57.5%
Denmark	100.0%	99.8%	96.7%	93.3%	82.2%
Estonia	67.9%	77.8%	73.8%	71.6%	63.2%
Finland	95.5%	100.0%	92.0%	88.8%	81.9%
France	86.8%	97.7%	90.5%	91.0%	86.3%
Germany	-	-	-	-	-
Greece	74.6%	82.9%	80.6%	74.9%	65.6%
Hungary	76.4%	87.2%	79.0%	73.0%	62.8%
Iceland	100.0%	100.0%	99.4%	92.5%	87.0%
Ireland	100.0%	100.0%	100.0%	98.4%	87.9%
Italy	98.0%	92.7%	91.5%	88.3%	81.1%
Latvia	47.3%	60.0%	64.5%	63.1%	61.6%
Liechtenstein	-	-	-	-	-
Lithuania	62.0%	78.7%	82.3%	76.5%	74.8%
Luxembourg	89.2%	87.6%	85.9%	83.6%	71.9%
Malta	100.0%	100.0%	95.6%	89.3%	90.6%
Netherlands	-	-	-	-	-
Norway	97.5%	100.0%	97.1%	95.4%	86.6%
Poland	75.6%	92.5%	74.0%	66.3%	55.3%
Portugal	100.0%	100.0%	100.0%	99.1%	94.6%
Romania	21.2%	39.2%	42.1%	42.4%	36.3%
Slovakia	60.5%	75.1%	64.6%	56.3%	46.7%
Slovenia	78.2%	86.7%	76.4%	68.8%	52.0%
Spain	100.0%	98.9%	98.6%	94.9%	84.0%
Sweden	95.1%	96.5%	91.9%	89.8%	79.3%

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

Source: bluedot
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1028113/Technical_Briefing_26.pdf
https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---26-october-2021

Geographic spread and prevalence of VOCs

The current global genetic epidemiology is characterized by a predominance of Delta variant, with declining prevalence of other variants among SARS-CoV-2 sequences submitted to publicly available datasets or reported to WHO (Figure 5, Annex 1). Delta has outcompeted other variants, including other VOCs, in most countries. However, sub-regional and country-level variation continues to be observed; most notably within some South American countries, where the progression of the Delta variant has been more gradual, and other variants (e.g. Gamma, Mu) still contribute a large proportion of sequences.
Global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities, sampling strategies between countries and delays in reporting. Current efforts are underway to strengthen genomic surveillance in several regions and countries to enhance coverage of sequencing and detection of variants globally.

A New Delta Variant Sub-lineage (AY.4.2)

A **new Delta variant sub-lineage, AY.4.2 (B.1.617.2.3),** has been recently identified and is currently under monitoring due to its rising incidence across the United Kingdom (UK). The AY.4.2 sub-lineage is defined by the presence of two "S-gene mutations" on A222V and Y145H, both located on the gene that encodes the spike glycoprotein of SARS-CoV-2, which may confer increased transmissibility of the virus. While the effects of these mutations on the **virus' transmissibility remain uncertain**, some experts have **estimated that AY.4.2 could be up to 10% more transmissible than the original Delta variant**. Due to its potentially increased transmissibility, on October 22, the UK Health Security Agency announced that the AY.4.2 Delta sub-lineage has now been designated as a **Variant Under Investigation (VUI) –VUI-21OCT-01.**

According to media reports, this sub-lineage was **first found in the UK this spring** and accounts for a total of 14,247 cases in the country since first identified for a cumulative prevalence of 1% as of October 20. However, according to the UK Health Security Agency, AY.4.2 is on an increasing trajectory and **represented 6% of all genome sequencing cases for the week of September 27**. Experts estimate that AY.4.2 could currently account for 7-8% of sequenced cases due to at least a week-long lag in genome sequencing.

The AY.4.2 Delta sub-lineage has primarily been detected in the UK, and several other countries including the **United States, Denmark, Canada, and Israel**. While new variants have repeatedly overtaken one another to become the dominant strain globally in the past year, experts say it is **too soon to know whether AY.4.2 will become significant**. However, any increase in transmissibility over the dominant strain is a reason for concern. If the AY.4.2 variant continues to increase in prevalence, SARS-CoV-2 will become harder to control in affected regions.

While media have referred to the AY.4.2 sub-lineage as "Delta plus", this variant is not the same as the Delta plus variant previously highlighted in June 2021. The previous Delta plus variant in June referred to the B.1.617.2.1 variant (or AY.1)– another Delta sub-lineage that possessed a different combination of mutations and whose frequency has since declined.

Finally, the emergence of AY.4.2 in the UK and its increasing incidence points once more to the concern that in the presence of uncontrolled viral transmission, new variants may be more likely to emerge. The UK has had the highest rate of daily COVID-19 cases and deaths per million people in Western Europe since most pandemic restrictions were dropped in the summer. On October 19, there were 223 COVID-19 associated deaths reported, which is the highest daily figure since early March. In response, experts are urging the government to reintroduce measures such as mask mandates in enclosed spaces to help ease the pressure on the healthcare system and avoid the need for more stringent measures if the situation worsens.

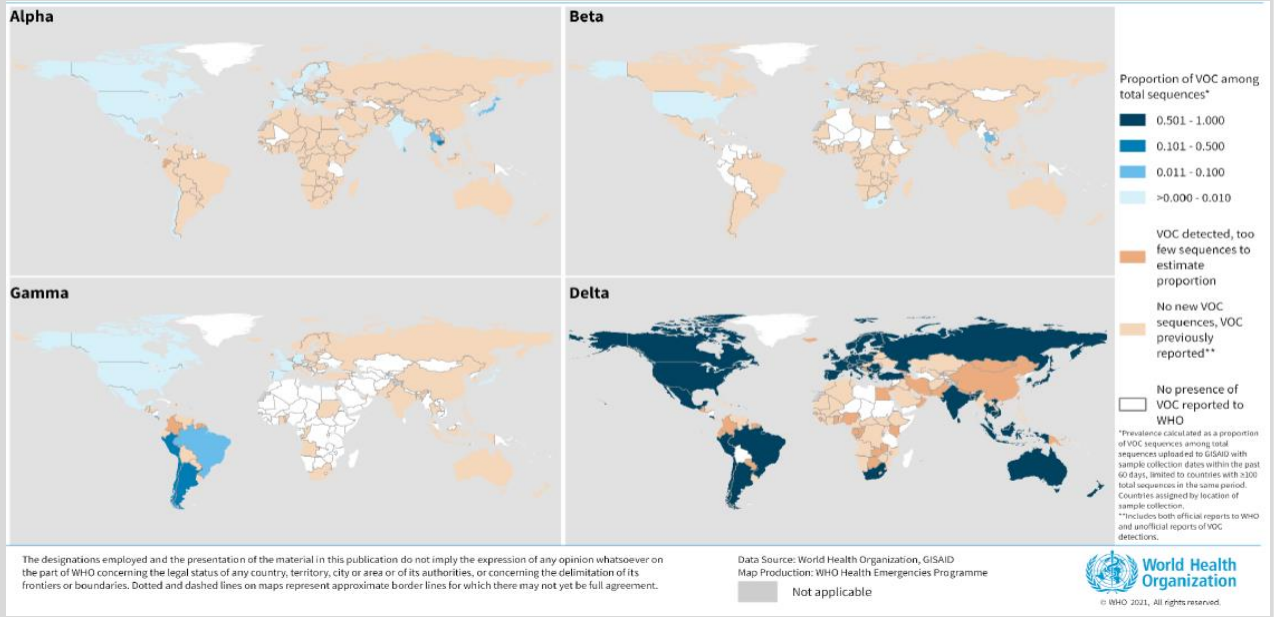
Table 3. Attendance to emergency care and inpatient admission of cases in England (15 May 2021 to 20 October 2021)

Variant	Number of cases since 15 May 2021#	Cases with an A&E visit or where presentation to A&E resulted in inpatient admission*(exclusion‡)	
	n	n	%
Delta	704,541	1,739	0.25% (95% CI 0.24-0.26)
VUI-21OCT-01	8,666	27	0.31% (95% CI 0.21-0.45)
Total	713,207	1,766	0.25% (95% CI 0.24-0.26)

Table 4. Deaths of cases in England (15 May 2021 to 20 October 2021)

Variant	Number of cases since 15 May# (Exclusion‡)	Deaths^	
	n	n	%
Delta	704,440	3,813	0.54% (95% CI 0.52-0.56)
VUI-21OCT-01	8,665	62	0.72% (95% CI 0.55-0.92)
Total	713,105	3,875	0.54% (95% CI 0.53-0.56)

Prevalence of Variants of Concern (VOCs) in the last 60 days and historic detections, data as of 26 October 2021



Subject in Focus

Inequitable Global Vaccine Divide

In low-income countries, age-specific infection fatality rates (IFR) have been found to be 1.3 to 2.5 times higher than in high-income countries. The disease burden of COVID-19 is far higher in low-income countries than in high-income countries, reflecting a combination of elevated transmission to middle-aged and older adults and limited access to adequate healthcare. These inequities are now exacerbated by inequitable access to the global vaccine supply.

According to data collected by Our World in Data, more than 6.69 billion COVID-19 vaccine doses have been administered in 184 countries. As of October 18, the WHO's COVAX program has shipped 371 million doses to 144 eligible countries.

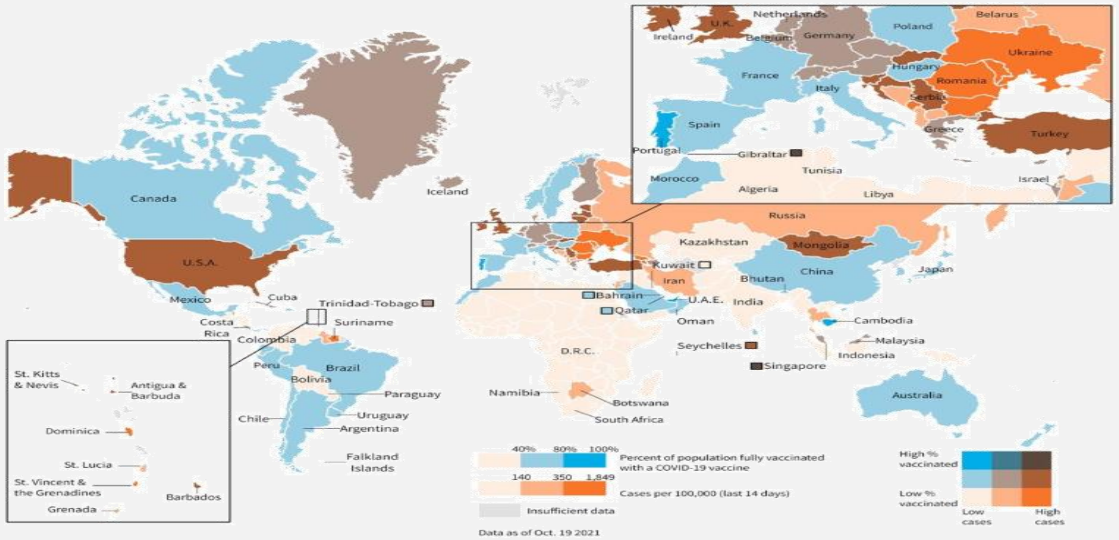


Figure 1: COVID-19 incidence rates (represented by the number of cases per 100,000 in the past 14 days) and COVID-19 vaccine coverage (represented by the percent of population fully vaccinated with a COVID-19 vaccine) as of October 19, 2021. Source: BlueDot COVID-19 Data Suite & Our World in Data.

What is the vaccination situation in high-income countries compared to low-income countries?

A large imbalance continues in the global distribution of vaccines. Vaccines against COVID-19 are not reaching many people in low-income countries despite the COVAX facility and donations from wealthier nations. Less than 1% of people in low-income countries and 10% in lower-middle-income countries are fully vaccinated, compared to more than 50% of the combined populations in high-income countries. Low-income nations continue to be affected by a combination of limited access to vaccines and a lack of the leverage that high-income nations have deployed to cope with the economic impact of the virus and support the negative impacts of non-pharmaceutical interventions on their populations.

According to a recent preprint study that assessed the burden of COVID-19 in low-income developing countries, seroprevalence in many low-income developing countries was markedly higher than in high-income countries but still far short of the estimated levels required for herd immunity. In low-income countries, IFR were 1.3 to 2.5 times higher than in high-income countries. The burden of COVID-19 is far higher in low-income countries than in high-income countries, reflecting a combination of elevated transmission to middle-aged and older adults as well as limited access to adequate healthcare. These results underscore the critical need to accelerate the provision of vaccine doses to vulnerable populations in low-and low-middle income countries.

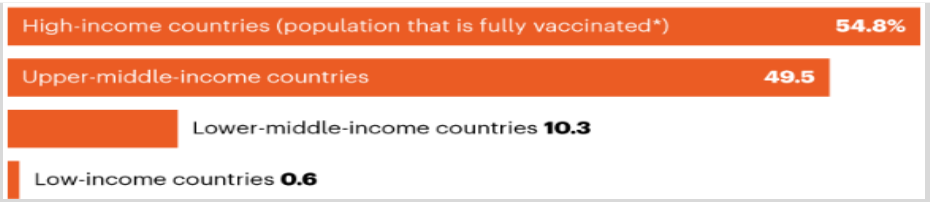
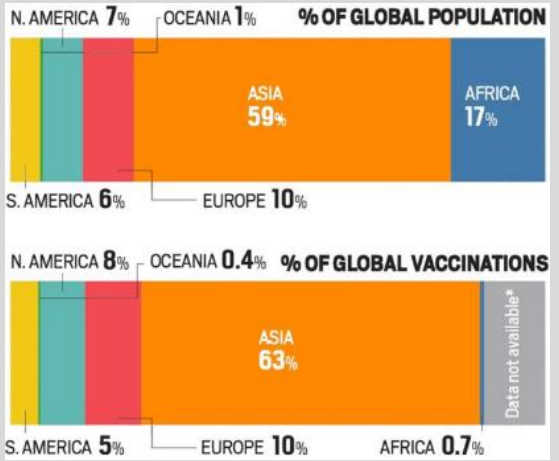


Figure 2: Percent of population that is fully vaccinated in high-income, upper-middle-income, lower-middle-income, and low-income countries. Source: Our World in Data, chart adapted from Nature.



Globally, Africa remains the most deprived continent (Figure 3). According to Our World in Data, while being home to more than 17% of the global population, African countries, on average, have accessed less than 1% of global doses. However, we note that many African countries do not have vaccination data available.

*Figure 3: Continent-level access to COVID-19 vaccines. Top: Percent of global population of each continent. Bottom: Percent of global vaccinations received by each continent. * Total vaccination data are not available for select countries. Source: Our World in Data, chart adapted from India Today Group. Data as of September 1, 2021.*

What are the impacts of the global inequitable vaccine divide?

According to Kristalina Georgieva, the head of the International Monetary Fund(IMF), the world economy remains staggered by the COVID-19 pandemic and the global vaccine divide between rich and poor nations continues to be the most serious obstacle to a full global economic recovery. It is estimated that the world could suffer a cumulative $ 5.3trillionloss over the next five years unless the gap was closed. The divergence in economic fortunes was becoming "more persistent" prior to the pandemic. Although, output by advanced economies is projected to return to pre-pandemic trends by 2022, it will take many more years for emerging and developing countries to recover. Thus, it is in the interest of all countries to support nations disproportionately impacted by COVID-19 to speed the global recovery effort and to mitigate the lasting harms that COVID-19 will have in low-income regions.

The IMF has recommended that efforts to address the current and future health crises should also include greater collaboration among governments in low-and middle-income countries to increase their own scientific and technological capacity and ability to produce vaccines, contribute intellectual property rights and foster cutting-edge research at the global level.

Source: https://www.medrxiv.org/content/10.1101/2021.09.29.21264325v1
https://www.theguardian.com/business/2021/oct/05/imf-cuts-global-economic-forecast-as-pandemic-hobbles-growth
https://ourworldindata.org/covid-cases

bluedot

ECDC Technical Report

Options for the use of rapid antigen detection tests for COVID-19 in the EU/EEA

In the year since the original report was published (NOV 2020), the overall epidemiological situation has continuously evolved, new variants have emerged, and vaccines have been deployed. This updated report is intended to facilitate further discussions between Member States with the aim of reaching agreement on the settings and purpose for which it is appropriate to use rapid antigen detection tests (RADTs) and summarises key considerations for their implementation.

Throughout the pandemic, testing for SARS-CoV-2 infection with nucleic acid amplification tests (NAAT) has remained the gold standard for detecting SARS-CoV-2. NAATs are characterised by both high sensitivity (the ability of a test to correctly identify those with the disease) and specificity (the ability of the test to correctly identify those without the disease) in detecting the presence of the SARS-CoV-2 virus. Many currently available RADTs show **a lower sensitivity** compared to the standard NAATs, while their **specificity is generally reported to be high**. It is important to note that RADTs are sensitive enough to detect cases with a **high viral load**. RADTs should be applied in a way that compensates for the lower sensitivity compared to NAAT, i.e. by **including repeat testing for screening purposes and confirming test results by NAAT** when appropriate.

RADTs can contribute to overall COVID-19 testing capacity and offer an advantage in terms of shorter turnaround time and reduced cost, especially in situations where NAAT testing capacity is reduced. The benefits of RADTs can help reduce transmission more efficiently through the timely identification of cases and faster contact tracing.

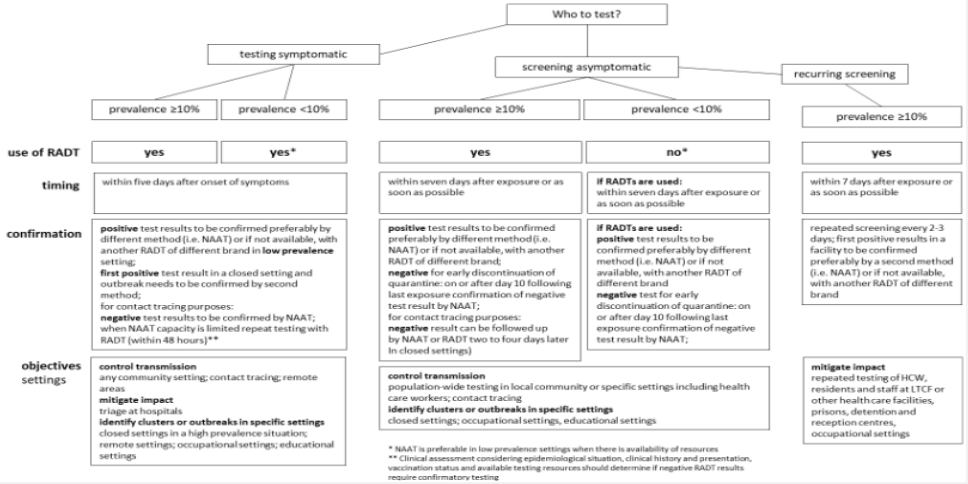
In February 2021 the Health Security Committee (HSC) established a list of mutually recognised RADTs for the purpose of issuing testing certificates together with the definition of clinical performance criteria. **ECDC recommends Member States to use tests that are listed on the common list of COVID-19 RADTs as agreed by the HSC**.

ECDC considers that appropriately validated RADTs, which are part of the HSC list, could be used to **certify that a person has recovered from a past COVID-19 infection**. However, **self-test RADTs should not be used for issuing a formal certificate** as proper sampling is crucial for diagnosis, and if testing is not performed correctly, a reliable test cannot be assured.

The emergence of virus variants triggered general concern about whether the analytical performance of RADTs could be affected by different virus variants. So far, the available data provide reassuring results for the use of RADTs to detect emerging virus variants.

Data describing the performance of RADTs in vaccinated individuals infected with SARS-CoV-2, irrespective of virus variants, have not yet been published.

Figure 1. Flowchart describing objectives and settings on when to use RADTs



What are the new information in the updated document?

- The EU Health Security Committee (HSC)established a technical working group on COVID-19 diagnostic tests which has agreed on a common, frequently updated list of COVID-19 RADTs that meet defined performance criteria.
- Despite the emergence of virus variants, no reduction in test sensitivity has been observed so far.
- Studies on the performance of RADTs in vaccinated individuals infected with SARS-CoV-2have not yet been published.

What are the changes in advice for the use of RADTs in this document?

- ECDC agrees with the WHO minimum performance criteria of ≥ 80% sensitivity and ≥ 97% specificity, but also advocates for the use of higher performance tests (≥ 90% sensitivity and > 98% specificity). In low prevalence settings and/or if RADTs are to be used to certify recovery, RADTs with a high specificity (> 98%) are preferable for first-line testing to reduce false positive results.
- Contact tracing testing algorithms have been revised to differentiate between vaccinated and unvaccinated contacts of COVID-19 cases.
- Laboratories should remain vigilant to identify reductions in RADT sensitivity or specificity due to the potential emergence and circulation of new SARS-CoV-2 variants.

Table 1. NPV and PPV of a test at different prevalence levels of infection in a given setting using two different tests with different sensitivities and specificities (conceptual example)

Example prevalence	Sensitivity	Specificity	NPV	PPV	True positive	False positive	True negative	False negative	Nr with disease	Nr of positive tests in total
50/100 000	0.8	0.98	1.000	0.020	40	1 999	97 951	10	50	2 039
50/100 000	0.98	0.999	1.000	0.329	49	100	99 850	1	50	149
100/100 000	0.8	0.98	1.000	0.038	80	1 998	97 902	20	100	2 078
100/100 000	0.98	0.999	1.000	0.495	98	100	99 800	2	100	198
500/100 000	0.8	0.98	0.999	0.167	400	1 990	97 510	100	500	2 390
500/100 000	0.98	0.999	1.000	0.831	490	100	99 401	10	500	590
1 000/100 000	0.8	0.98	0.998	0.288	800	1 980	97 020	200	1 000	2 780
1 000/100 000	0.98	0.999	1.000	0.908	980	99	98 901	20	1 000	1 079
5 000/100 000	0.8	0.98	0.989	0.678	4 000	1 900	93 100	1 000	5 000	5 900
5 000/100 000	0.98	0.999	0.999	0.981	4 900	95	94 905	100	5 000	4 995
10 000/100 000	0.8	0.98	0.978	0.816	8 000	1800	88 200	2 000	10 000	9 800
10 000/100 000	0.98	0.999	0.998	0.991	9 800	90	89 910	200	10 000	9 890
20 000/100 000	0.8	0.98	0.951	0.909	16 000	1600	78 400	4 000	20 000	17 600
20 000/100 000	0.98	0.999	0.995	0.996	19 600	80	79 920	400	20 000	19 680
50 000/100 000	0.8	0.98	0.831	0.976	40 000	1000	49 000	10 000	50 000	41 000
50 000/100 000	0.98	0.999	0.980	0.999	49 000	50	49 950	1 000	50 000	49 050

Key messages

- Rapid antigen detection tests (RADTs) can contribute to overall COVID-19 testing capacity, offering advantages in terms of shorter turnaround times and reduced costs, especially in situations in which Nucleic Acid Amplification Testing (NAAT) capacity is limited.
- RADTs can help reduce further transmission through early detection of highly infectious cases, enabling a rapid start of isolation and contact tracing.
- RADTs are sensitive enough to detect cases with high viral load, early in the course of infection in pre-symptomatic and early symptomatic cases up to five days from symptom onset.
- The predictive value of RADTs is highest in settings where SARS-CoV-2 prevalence is high.
- RADTs are less sensitive than NAATs, especially in asymptomatic patients.
- RADTs can also be used in low prevalence settings to rapidly identify infectious cases with high viral load.
- Proper clinical validation studies should be done before introducing new tests in the different settings.

Source: https://www.ecdc.europa.eu/en/news-events/ecdc-publishes-updated-technical-report-options-use-rapid-antigen-detection-tests-covid

https://www.ecdc.europa.eu/sites/default/files/documents/Options-for-the-use-of-rapid-antigen-tests-for-COVID-19-first-update.pdf

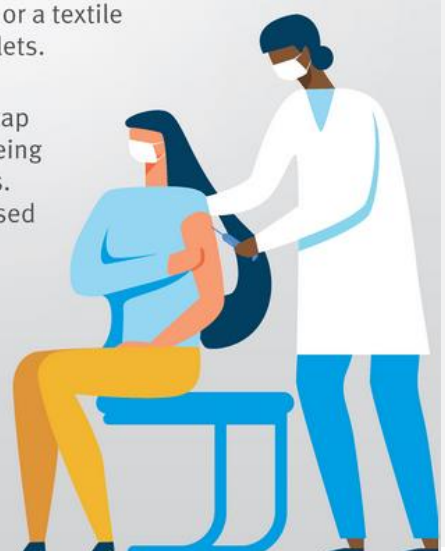
Flu Awareness Campaign 2021

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/

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.

Other Infectious Disease Outbreaks / human disasters

ESCAID 2021

The European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE 2021) will be online this year with free registration for all. The conference will take place from 16 to 19 November to discuss current issues facing infectious disease prevention and control, hear the latest high-quality research in the field and meet fellow public health professionals and researchers. Register here.
Registration closes on 12 November 2021 (presenters must register by 7 November).

Pneumonic Plague

Madagsacar; Antananarivo - Media reports are raising concerns about an ongoing pneumonic plague outbreak in Antananarivo, the capital city of Madagascar, in the island's Central Highlands. According to the Ministry of Health, from August 25 to 30, there have been roughly 30 cases of pneumonic plague and seven associated deaths, including a child. This event is noteworthy as pneumonic plague is the most severe and virulent form of plague (more so than bubonic or septicemic plague forms) as it can be transmitted from person-to-person through respiratory droplets or through contact with respiratory fluids. The pneumonic plague disease type has a higher mortality rate than the bubonic plague type but similar to the septicemic form of the disease. Plague is endemic to Madagascar, and there are roughly 200 to 700 cases reported year-round, primarily the bubonic form. However, outbreaks of pneumonic plague have also been confirmed. Earlier this year, cases of bubonic plague were also confirmed. Media reports indicate that health authorities have imposed quarantine measures across Antananarivo city to prevent the further spread of the disease.

Source: News Media - https://ren.tv/news/v-mire/876098-na-madagaskare-zafiksirovali-vspyshku-legochnoi-chumy

Unknown Illness

Chad - Media reports are raising concerns over more than 50 fatal cases of an unknown illness in Melfi, Guera Region, southern-central Chad. There is limited information on symptoms across the affected but some individuals have presented to a local hospital with a cough, headache, fever, and vomiting between October 19 and 23. The Minister of Public Health has released statements on social media and has indicated that a team has been deployed to investigate the cause of the disease. Laboratory samples to rule out COVID-19 and malaria have been sent. Despite limited resources, health authorities have equipped the nearest health facilities in the affected village to help prioritize and identify the cause of the illness. In addition, health authorities are also contributing to distributing insecticide-infused mosquito nets and are raising awareness amongst the population to seek medical help at the onset of the symptoms.

Source: Media News - https://tchadinfos.com/tchad/tchad-le-ministre-de-la-sante-rassure-sur-la-maladie-inconnue-dans-le-guera/

Polio vaccination campaign

Afghanistan - The first door-to-door polio vaccination campaign in three years could restart on 8 November in Afghanistan with Taliban approval, UN agencies announced. But worker safety remains a question mark: At least eight health workers involved in polio vaccinations have been killed this year. An offshoot of so-called Islamic State in Afghanistan has claimed some of these attacks, and has killed or wounded hundreds of civilians since the Taliban's August takeover.

Source: WHO - http://www.emro.who.int/afg/afghanistan-news/house-to-house-polio-vaccination-s

Influenza

Europe - Week 41/2021 (11 - 17 October 2021)

- Influenza activity was low throughout the European Region, though Croatia and Kyrgyzstan experienced early influenza activity related to A(H3) circulation.
- Influenza viruses were detected sporadically in specimens from persons with respiratory illness presenting to medical care with a slight increase compared to the previous week.
- Both influenza A and B type viruses were detected, with A(H3) subtype predominating.
- Type A virus infection was reported for two patients in intensive care units. Seven patients with SARI in hospital settings were infected with A(H3) viruses.

Source – ECDC/WHO - https://flunewseurope.org/

WMO- Weather Data

Global COP26 - The lead-up to next month's crucial COP26 climate crisis gathering in Glasgow has been marked by a string of disappointing developments: from Russia's Vladimir Putin pulling out and warnings that China's Xi Jinping won't attend, to concerns that poorer countries will be under-represented due to COVID-19 vaccine inequality. But it hasn't all been bad news. One under-reported but potentially significant development happened last week at the World Meteorological Congress in Geneva, with the 193 member states agreeing sweeping measures to ensure vital weather data – temperature, humidity, wind speed and direction, and surface pressure – is shared between wealthy countries and poorer neighbours. Even as extreme weather events and climate-related disasters become more common, the ability of some of the most-affected poorer nations to predict and prepare is still often hampered by a lack of information. At COP, the WMO hopes to announce the first $50 million tranche of a new financing mechanism that would allow developing countries to access computer modelling run by some of the world's richest nations.

Source: News Media - https://www.thenewhumanitarian.org/environment-and-disasters/climate-change?

Ebola

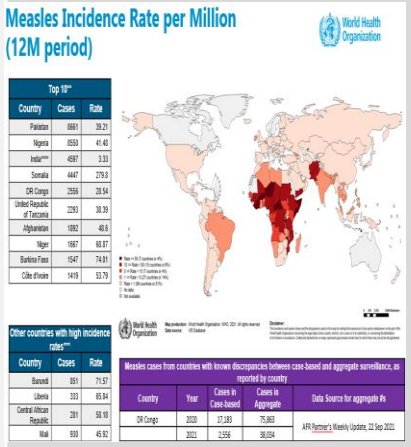
DR Congo - Additional cases and one additional death of Ebola virus disease have been confirmed in the 13th Ebola virus outbreak in Beni. As of October 25, there has been a total of six confirmed cases and four deaths, while three cases and deaths that were traced back to September remain as suspected.

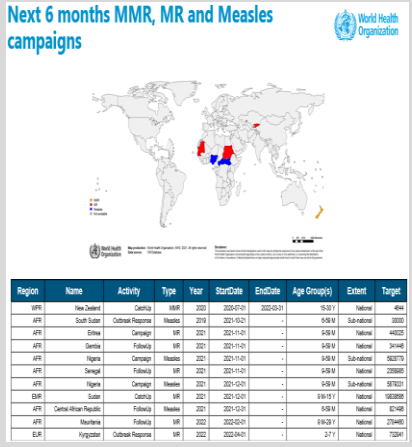
Source: news media - https://www.radiookapi.net/2021/10/25/actualite/sante/beni-deux-nouveaux-cas-debola-enregistres-et-aucun-cas-de-covid-19

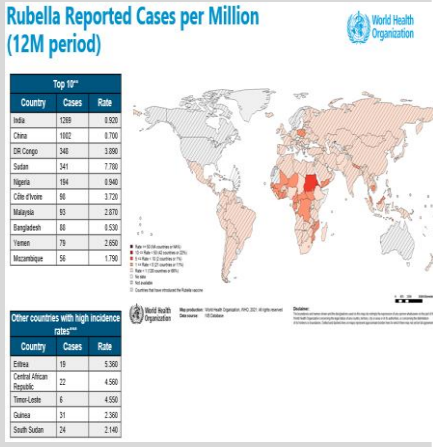
WHO Global Measles and Rubella update, October 2021

Global - The Global Measles and Rubella Report is based on surveillance data reported by Member States to the regional offices weekly or monthly. The regional compilation is reported to HQ monthly.
Data are to be reported from the regions on the 1st Friday of the month, and HQ attempts to release the monthly report by the 3rd Monday of the month.

Source: WHO - https://www.who.int/teams/immunization-vaccines-and-biologicals/







Travel Recommendations and other Useful Links

Travel Recommendations

Many countries have halted some or all international travel since the onset of the COVID-19 pandemic but now have re-open travel some already closed public-travel again. This document outlines key considerations for national health authorities when considering or implementing the gradual return to international travel operations.
The decision-making process should be multisectoral and ensure coordination of the measures implemented by national and international transport authorities and other relevant sectors and be aligned with the overall national strategies for adjusting public health and social measures.
Travel has been shown to facilitate the spread of COVID-19 from affected to unaffected areas. Travel and trade restrictions during a public health event of international concern (PHEIC) are regulated under the International Health Regulations (IHR), part III.
The majority of measures taken by WHO Member States relate to the denial of entry of passengers from countries experiencing outbreaks, followed by flight suspensions, visa restrictions, border closures, and quarantine measures. Currently there are exceptions foreseen for travellers with an essential function or need.

Information on COVID-19 testing and quarantine of air travellers in the EU and the US you can find following the link:
- https://www.ecdc.europa.eu/en/publications-data/guidelines-covid-19-testing-and-quarantine-air-travellers
- https://www.cdc.gov/coronavirus/2019-ncov/travelers/testing-air-travel.html

More information about traveling worldwide:

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

More information about traveling in the EU

- by the ***European Commission*** you will find here:
https://www.consilium.europa.eu/en/policies/coronavirus/covid-19-travel-and-transport/

- The ***ECDC*** publishes a map of EU Member States, broken down by regions, which show the risk levels across the regions in Europe using a traffic light system. Find it **here**.
As a general rule, information on new measures will be published 24 hours before they come into effect.

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

Useful links

ECDC:

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

WHO:

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

CDC:

- COVID Data Tracker and weekly review
- What´s new and Updated
- Guidance for COVID-19

References:

- European Centre for Disease Prevention and Control www.ecdc.europe.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/