



GLOBAL

541 762 951
confirmed cases
527 000 000
recovered
6 326 824 deaths

FRA (Martinique)

7-days incidence
2 152,0

TWN

7-days incidence
1 610,0

BRN

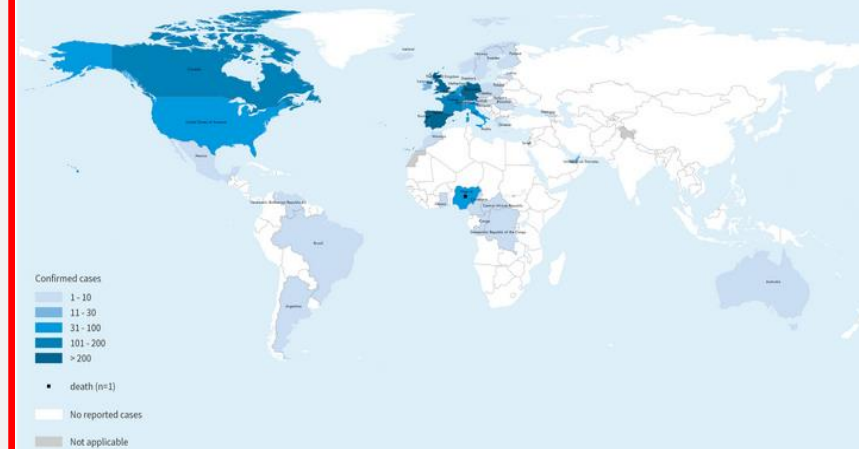
7-days incidence
1 004,0

News:

- **WHO:** Announced an [interim guidance](#), developed with the advice and support of the Strategic Advisory Group of Experts (SAGE) Ad-hoc Working Group on smallpox and monkeypox vaccines, that provides the first WHO recommendations on vaccines and immunization for monkeypox.
- **WHO:** In the context of the current multi-country monkeypox outbreak, WHO has developed interim [rapid response guidance](#) for the clinical management and infection prevention and control of monkeypox for health care and community settings.
- **WHO/ECDC:** published both a public health advice on monkeypox for gay, bisexual and other men who have sex with men: [WHO](#) and [ECDC](#).
- **WHO/ECDC:** Published a "[Joint ECDC-WHO Regional Office for Europe Monkeypox Surveillance Bulletin](#)".
- **WHO:** Published an [Interim statement](#) on decision-making considerations for the use of variant updated COVID-19 vaccines.
- **CDC:** Air passengers will [not longer need to get tested and show the COVID-19 test result](#) or documentation of recovery from COVID-19 prior to boarding a flight to the United States.
- **ECDC/WHO:** published a [joint ECDC-WHO Regional office for Europe Hepatitis of Unknown Origin in Children Surveillance Bulletin](#).
- **ECDC:** published a study on [Surveillance, prevention and control of leishmaniasis in the European Union and its neighbouring countries](#) that concludes that the disease remains widespread and underreported in many countries of southern Europe, northern Africa, and the Middle East and that there is a need to improve leishmaniasis prevention and control based on robust surveillance in humans, animals, and vectors, and to increase public awareness following a one health approach.
- **ECDC:** published a technical [guidance for antigenic SARS-CoV-2 monitoring](#).
- **Topics:**
 - Information on Monkeypox (slide 2 – 3)
 - Global situation: COVID-19 (slide 4 – 8)
 - Other infectious diseases (slide 9)
 - Emergency in Ukraine (slide 10)

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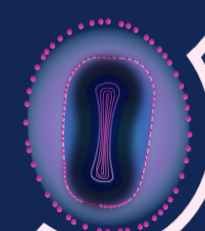
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Data Source: World Health Organization
Map Production: WHO Health Emergencies Programme
Map Date: 17 June 2022
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CLINICAL MANAGEMENT AND INFECTION PREVENTION AND CONTROL FOR MONKEYPOX

Interim rapid response guidance
10 June 2022



EUROPE

217 617 328
confirmed cases
212 600 000
recovered
1 952 972 deaths

PRT

7-days incidence
1 426,0

SMR

7-days incidence
1 114,0

MCO

7-days incidence
1 096,0

Multi-country monkeypox outbreak: situation update by WHO as of 17 June

This current Disease Outbreak News on the multi-country monkeypox outbreak is an update to the previously published Disease Outbreak News, with updated data, some further details on surveillance and reporting, One Health, gatherings, Risk communication and community engagement and International travel and points of entry.

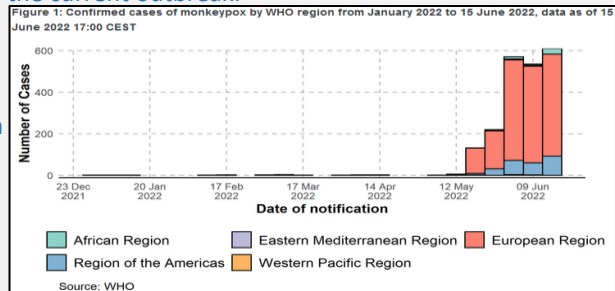
In this edition, WHO is removing the distinction between endemic and non-endemic countries, reporting on countries together where possible, to reflect the unified response that is needed.

WHO assesses the **risk at the global level as moderate** considering this is the first time that many monkeypox cases and clusters are reported concurrently in many countries in widely disparate WHO geographical areas, balanced against the fact that mortality has remained low in the current outbreak.

Description of the outbreak

Between 1 January to 15 June 2022, a cumulative total of 2103 laboratory confirmed cases, one probable case, and one death have been reported to WHO from 42 countries in five WHO Regions. The majority of cases (98%) have been reported since May 2022 (Figure 1).

Region	Country	Confirmed	Probable	Deaths
Americas	Cameroon	3		
	Central African Republic	8		
	Congo	2		
	Democratic Republic of the Congo	10		
	Ghana	5		
	Nigeria	36		1
	Argentina	3		
	Brazil	5		
	Canada	159		
	Mexico	5		
Americas	United States of America	72		
	Venezuela (Bolivarian Republic of)	1		
Eastern Mediterranean	Morocco	1		
	United Arab Emirates	13		
European	Austria	4		
	Belgium	52		
	Czechia	6		
	Denmark	7		
	Finland	3		
	France	125		
	Georgia	1		
	Germany	263		
	Greece	2		
	Hungary	5		
	Iceland	3		
	Ireland	14		
	Israel	5		
	Italy	68		
	Latvia	2		
	Malta	2		
	Netherlands	80		
	Norway	2		
	Poland	3		
	Portugal	241		
	Romania	3		
	Slovenia	7		
	Spain	313		
	Sweden	10		
	Switzerland	28		
	The United Kingdom	524		
	Western Pacific	Australia	7	1
Cumulative		42 countries	2103	1



Of cases reported (468 out 2103 confirmed cases) from 14 countries for which demographic information and personal characteristics are available, 99% are reported in men aged 0 to 65 years (Interquartile range: 32 to 43 years; median age 37 years), of which most self-identify as men who have sex with other men.

To date, the clinical presentation of monkeypox cases associated with this outbreak has been variable. Many cases in this outbreak are not presenting with the classically described clinical picture for monkeypox (fever, swollen lymph nodes, followed by a centrifugal evolving rash). Atypical features described include: presentation of only a few or even just a single lesion; lesions that begin in the genital or perineal/perianal area and do not spread further; lesions appearing at different (asynchronous) stages of development; and the appearance of lesions before the onset of fever, malaise and other constitutional symptoms. The modes of transmission during sexual contact remain unknown; while it is known that close physical and intimate skin-to-skin or face-to-face contact can lead to transmission (through direct contact with infectious skin or lesions), it is not clear what role sexual bodily fluids, such as semen and vaginal fluids, play in the transmission of monkeypox.

WHO risk assessment

- Currently, the public health risk at the global level is assessed as moderate considering this is the first time that monkeypox cases and clusters are reported concurrently in many countries in widely disparate WHO geographical areas, balanced against the fact that mortality has remained low in the current outbreak.
- In apparently newly affected countries, cases have mainly, but not exclusively, been confirmed amongst men who self-identify as men who have sex with men, participating in extended sexual networks. Person to person transmission is ongoing, still primarily occurring in one demographic and social group. At present, transmission in apparently newly affected countries is primarily linked to recent sexual contacts.
- The current risk for the **general public remains low**. There is a risk to health workers if they are in contact with a case while not wearing appropriate personal protective equipment (PPE) to prevent transmission

Surveillance and reporting

- As per IHR (2005) Article 6, a minimum data set (formatted as a case report form) for reporting under IHR has been developed.
- The additional [Case Reporting Form](#) (CRF) and CIF in the [Go.Data](#) platform will help to facilitate local capture, analysis, and/or sharing of the relevant data.

One Health

- Various wild mammals have been identified as susceptible to monkeypox virus in areas that have long experienced monkeypox. These include rope squirrels, tree squirrels, Gambian pouched rats, dormice, non-human primates, among others. Some species may have asymptomatic infection.
- Thus far, there is no documented evidence of domestic animals or livestock being affected by monkeypox virus.
- There is also no documented evidence of human-to-animal transmission of monkeypox.
- However, there remains a hypothetical risk of human-to-animal transmission; as such appropriate measures such as physical distancing of persons with monkeypox from domestic pets, proper waste management to prevent the disease from being transmitted from infected humans to susceptible animals at home (including pets), in zoos and wildlife reserves, and to peri-domestic animals, especially rodents.

Large gatherings

- As it is standard practice for mass gatherings, and even more so during the COVID-19 pandemic, authorities and event organizers are invited to apply the WHO recommended risk-based approach to decision-making, and tailor it to the large or small social events under consideration. In the context of the current outbreak, monkeypox-associated risks should be considered and factored in.

International travel

Based on available information at this time, WHO does **not recommend** that States Parties adopt any international travel-related measure for either incoming or outgoing travellers.

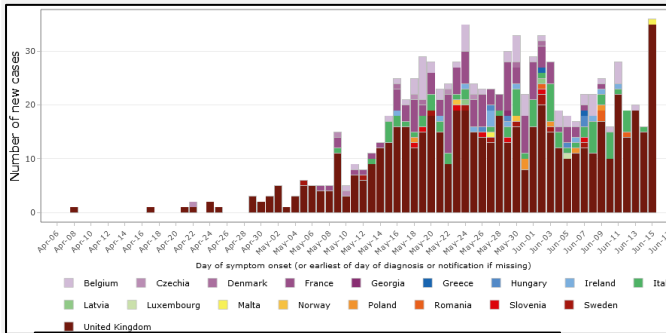
Monkeypox outbreak: situation update

Joint ECDC-WHO Regional Office for Europe Monkeypox Surveillance Bulletin, as of 17 June 2022

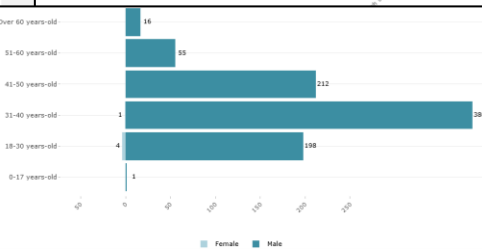
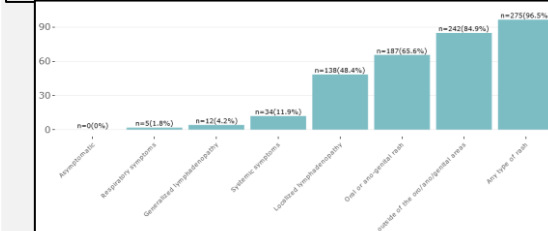
The report provides an overview of the total number of cases of monkeypox reported to ECDC and the WHO Regional Office for Europe through IHR/EWRS mechanisms for the period up to the 15 May 2022 12:00 (IHR/EWRS) and case-based data through The European Surveillance System (TESSy) up to 17 June 2022 10:00 (TESSy).

Surveillance summary

- A total of 1704 cases of monkeypox have been identified through IHR/EWRS mechanisms, from 28 countries throughout the European region. Case-based data were reported for 892 cases from 18 countries to ECDC and the WHO Regional Office for Europe through The European Surveillance System (TESSy).
- All 892 cases reported in TESSy were laboratory confirmed. The earliest date of symptom onset was reported as 08 April 2022. The majority of cases were between 31 and 40 years-old (397/890 - 44.6%) and male (870/875 - 99.4%). Most of the cases for whom information was available identified as men who have sex with men (423/430 - 98.4%). No cases were reported to have died.
- So far 3 health care workers were notified as cases in TESSy. None are known to have acquired infection through occupational exposure to date.



Country	Confirmed	Probable	Total
Belgium	62	0	62
Czechia	6	0	6
Denmark	4	0	4
France	111	0	111
Georgia	1	0	1
Greece	2	0	2
Hungary	6	0	6
Ireland	14	0	14
Italy	71	0	71
Latvia	2	0	2
Luxembourg	1	0	1
Malta	2	0	2
Norway	2	0	2
Poland	6	0	6
Romania	4	0	4
Slovenia	7	0	7
Sweden	11	0	11
United Kingdom	580	0	580
Total	892	0	892



	Yes	No	Total
Admitted to ICU	0 (0.0%)	89 (100.0%)	89 (100.0%)
Hospitalized (isolation or treatment)	12 (12.1%)	87 (87.9%)	99 (100.0%)
Died	0 (0.0%)	306 (100.0%)	306 (100.0%)
HIV-Positive	28 (35.9%)	50 (64.1%)	78 (100.0%)
MSM	423 (98.4%)	7 (1.6%)	430 (100.0%)
Health care worker	3 (3.1%)	93 (96.9%)	96 (100.0%)

Vaccines and immunization for monkeypox: WHO Interim guidance, 14 June 2022

The goal of the global outbreak response for monkeypox is to control the outbreak, and to effectively use strong public health measures to prevent onward spread of the disease. Judicious use of vaccines can support this response. The interim guidance, developed with the advice and support of the Strategic Advisory Group of Experts (SAGE) Ad-hoc Working Group on smallpox and monkeypox vaccines, provides the first WHO recommendations on vaccines and immunization for monkeypox. Key points follow.

- Mass vaccination is not required** nor recommended for monkeypox at this time.
- For **contacts of cases**, post-exposure prophylaxis (PEP) is **recommended** with an appropriate second- or third-generation vaccine, ideally within four days of first exposure to prevent onset of disease.
- Pre-exposure prophylaxis (PrEP) is recommended for health workers at risk, laboratory personnel** working with orthopoxviruses, **clinical laboratory staff** performing diagnostic testing for monkeypox, and others who may be at risk as per national policy.
- Vaccination programmes must be backed by thorough surveillance and contact-tracing, and accompanied by a strong information campaign, robust pharmacovigilance, ideally in the context of collaborative vaccine effectiveness studies with standardized protocols and data collection tools.
- Decisions on use of smallpox or monkeypox vaccines should be based on a **full assessment of risks and benefits on a case-by-case basis**.

Most interim recommendations provided here concern off-label use of vaccines. The guidance will be updated as more information becomes available.

Source: <https://www.who.int/publications/i/item/who-mpx-immunization-2022.1>

Use of vaccines for pre-exposure prophylaxis (PrEP) for prevention of monkeypox

Population group	Recommendations for vaccination (WHO SAGE, 2013)	Interim recommendations for vaccination (WHO Health Emergency Programme, 2022)
General population	Not recommended	Not recommended
Health workers at risk of exposure, research laboratory personnel,* clinical laboratory personnel performing diagnostic testing for orthopoxviruses,** and designated response team members at risk for occupational exposure to monkeypox	Recommended ACAM2000 LC16	Recommended ACAM2000 LC16 MVA-BN
As above — Individuals for whom standard replicating vaccine is contraindicated because of young age (children), pregnancy, immune deficiencies, immunosuppression therapies*** or atopic dermatitis****	Recommended MVA-BN	Recommended LC16 MVA-BN

Table 3. Smallpox and monkeypox vaccine options (June 2022)

Vaccine (Manufacturer)	Licensed for smallpox (country, type, date)	Licensed for monkeypox (country, type, date)	Considerations	Presentation	Injection materials
MVA-BN (Bavarian Nordic) 3rd generation	EU: Imvanex has been authorised under exceptional circumstances (2013) Canada: Full MA (2013) USA: Full MA (2019)	USA, full MA (2019) Canada, full MA (2019)	Very limited supply Liquid-frozen formulation, approved for use in the general adult population Two doses four weeks apart	Liquid frozen or lyophilized (freeze-dried) Single dose vials (Multidose vials possible)	Needle and syringe (sub-cutaneous administration)
LC16 (KM Biologics) 3rd generation	Japan - Full MA (1975) USA - EIND (2014)	No	Approved for use in infants and children (all ages) as well as adults (all ages)	Freeze-dried Multidose vials	Bifurcated needle
ACAM20 (Emergent BioSolutions) 2nd generation	USA - Approved	USA - EIND for PEP	Approved for use in adults aged 18 – 64 years of age. Earlier production by Sanofi Pasteur approved in France.	Freeze-dried Multidose vials	Bifurcated needle
Vaccinia, various strains* from national production 1st generation	Various countries Various national production (SEP), held by various countries	No	Regular potency testing recommended	Liquid frozen or lyophilized vials or ampoules	Bifurcated needle

Latest country reports

-Monkeypox New Activity-



New Activities

Luxembourg - According to Luxembourg's Ministry of Health, the first case of monkeypox has been confirmed in the country. Health officials state that the patient is receiving treatment at the National Service for Infectious Diseases in Luxembourg Hospital Centre (CHL). Health officials state that the patient is in good condition and that contact tracing of the patient's close contacts has begun. No further information has been released regarding the affected individual. Monkeypox is a neglected tropical disease endemic to western and central African countries. It is considered to spread primarily through animal contact in endemic regions but can also spread between people through direct contact with skin lesions and/or exposure to infectious respiratory droplets.

Source: [NEWSMEDIA](#)

Romania - On June 13, the first case of monkeypox was confirmed in Bucharest, Romania. The Ministry of Health reported that the affected patient is a 26-year-old man who began showing symptoms on June 9 and was hospitalized as of June 12. The patient is currently in isolation at the hospital and receiving treatment for mild undisclosed symptomatic disease. The patient was likely exposed by their partner, who had recently travelled to several undisclosed European countries where monkeypox outbreaks may have been reported. The current health status of the partner is unknown.

Source: [NEWS MEDIA](#)

Serbia - According to the Serbian Ministry of Health, the country has confirmed its first monkeypox case. Health officials noted that the case is a man with recent travel to Germany, and the diagnosis was confirmed by the Institute for Virology, Vaccines and Serums (Torlak). The individual has mild symptoms and is receiving treatment. In addition, outbreak control methods such as contact tracing of the case's close contacts have begun to control the spread of infection.

Source: [NewsMedia](#)

Poland - On June 10, the first case of monkeypox has been confirmed by the National Institute of Public Health and the National Institute of Hygiene in Poland. There are no details provided on the demographics of the affected individual nor the probable source of infection. Official available information indicates that the individual has been placed under isolation at a local hospital.

Source: [NewsMedia](#)

Georgia - According to Georgia's National Center for Disease Control and Public Health, the first case of monkeypox has been laboratory confirmed in the country. According to officials, the case was detected among a man who had recently returned from Europe, but details regarding his travel destination(s) have not been released. The affected individual is reported to have had a mild form of the virus and after receiving treatment has been discharged from a medical institution. Authorities conducted contact tracing for all known contacts but no suspected cases based on clinical signs have been identified. No further information has been released regarding the affected individual.

Source: [NewsMedia](#)

Brazil - The first case of monkeypox has been confirmed by the Instituto Adolfo Lutz (analytical laboratory) in Brazil. Officially available information indicates that the affected individual is a 41-year-old man who is a resident of Sao Paulo municipality in the Southeast Region of Brazil. The individual has a recent history of travel to Portugal and Spain, where outbreaks of monkeypox have been reported and cases without links to endemic countries have been reported, likely indicating community transmission. In addition, available information indicates that the affected individual has been isolated at the Instituto de Infectologia Emílio Ribas (hospital) and is in good condition. All close contacts are also being monitored.

Source: [NEWS MEDIA](#)

Venezuela - On Sunday, June 12, the Venezuelan Ministry of Health confirmed the first case of monkeypox in La Guaira, Venezuela. The case is reported in a man who had contact with two infected individuals in Barcelona, Spain and recently had a flight to the Simón Bolívar International Airport in Maiquetía from Madrid, Spain. Upon arrival, the patient was immediately isolated and sent to the hospital for assessment. The patient's age, symptoms and current health status are unknown.

Source: [NEWS MEDIA](#)

Chile - The Chilean Ministry of Health confirmed the first case of monkeypox in Chile on June 18, 2022. The affected individual is a young man from the Metropolitan Region who experienced symptoms of monkeypox after returning from a recent trip to Europe. While the report added that the individual is in good condition, symptom and treatment details were not provided. There is no evidence that Chile currently has access to smallpox vaccines for a preventive control strategy. However, the WHO is currently working with manufacturers to provide greater access to the vaccine. Chile is implementing close contact tracing, case isolation, and educating the population about monkeypox to limit the potential for disease spread.

Source: [NewsMedia](#)

Singapore - The Singapore Ministry of Health (MOH) has confirmed the country's first case of monkeypox in Singapore on June 21, 2022. The MOH reports that this is an imported case and the patient is a British male flight attendant who flew in and out of Singapore between June 15 and 17, and again on June 19. The patient is reported to be in stable condition and is receiving treatment at the National Centre for Infectious Diseases. The MOH states that 13 close contacts have been identified and have been placed in quarantine for 21 days since their last contact with the patient. Contact tracing is ongoing for the affected flights and for the establishments which the patient visited during his stay in Singapore.

Source: [Ministry of Health](#)

Additional cases or information

USA - According to the United States Centers for Disease Control and Prevention (CDC), monkeypox has been detected in 18 states in the country. On June 14, the US CDC released new guidance on identifying monkeypox by assessing recent cases. Most notably, health officials have noted that more recent infections show different symptoms than previously observed in endemic nations in Africa. Typically symptoms in endemic countries included fever, swollen lymph nodes, body aches, and rashes that would begin on the face and mouth and then eventually spread to other parts of the body. Comparatively, recent cases observed in the United States have described rashes first appearing in the mouth or genital regions, then being localized in other areas such as the face, hands, and feet. Rashes have presented differently in recent cases, with lesions at different stages (fluid vs. pus-filled blisters) appearing on the body simultaneously. In addition, some cases have described developing flu-like symptoms after rashes. Lastly, the CDC identified new and rare symptoms among US patients, including pain in and around the anus and rectum, rectal bleeding, proctitis (inflammation of the lining of the rectum), and an urge for bowel movements when bowels are empty. These findings are consistent with case reports from the European Union, suggesting the initial rash is acquired through cutaneous and mucosal contact, followed by more typical generalized symptoms and rash features.

Source: [CDC](#)

France - Public Health France reports that the first female case of monkeypox has been confirmed in the country as of June 21, 2022. No details about the female case have been provided, however health authorities state that the mode of transmission is under investigation. Of the 277 monkeypox cases confirmed up until June 21, 2022, 276 are male between the ages of 19 and 71.

Source: [NewsMedia](#)

COVID-19 Situation by WHO Region, as of 15 June

Global epidemiological situation overview; WHO as of 15 June 2022

Globally, the number of new weekly cases has continued to decline since a peak in January 2022. During the week of 6 until 12 June 2022, over 3.2 million cases were reported, similar to the number reported during the previous week.

After five weeks of decline, the number of new weekly deaths has risen again, with over 8700 fatalities reported, a 4% increase as compared to the previous week.

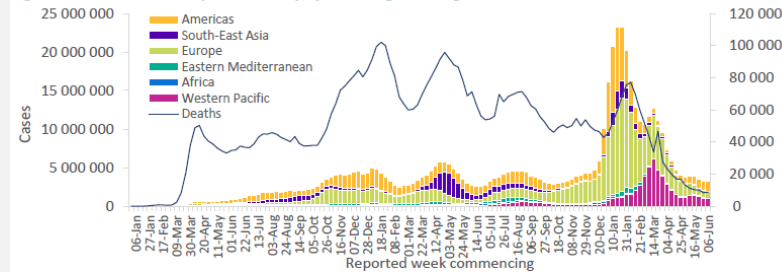
At the regional level, the number of **new weekly cases increased** in the **Eastern Mediterranean Region** (+58%), in the **South-East Asia Region** (+33%) and in the **Region of the Americas** (+13%), while it decreased in the other three WHO regions.

The number of new weekly deaths increased in the **Region of the Americas** (+21%) and **Western Pacific Region** (+17%), while decreasing trends were observed in the other four regions.

As of 12 June 2022, over 533 million confirmed cases and over 6.3 million deaths have been reported globally.

These trends should be interpreted with caution as several countries have been progressively changing COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 12 June 2022**

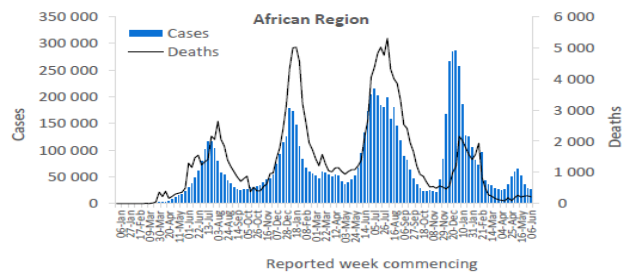


WHO regional overviews: Epidemiological week 6-12 June 2022**

African Region

The African Region reported a decline in the number of new weekly cases for the third consecutive week, with over 27 000 new cases, a 7% decrease as compared to the previous week. However, 13 (27%) countries reported an increase in the number of new cases of 20% or greater, with some of the greatest proportional increases seen in Malawi (89 vs 37 new cases; +141%), Uganda (572 vs 267 new cases; +114%) and Cabo Verde (540 vs 266 new cases; +103%). The countries that reported the highest numbers of new cases were South Africa (10 550 new cases; 17.8 new cases per 100 000 population; -29%), Ethiopia (3829 new cases; 3.3 new cases per 100 000; +54%), and Réunion (1924 new cases; 214.9 new cases per 100 000; -6%)

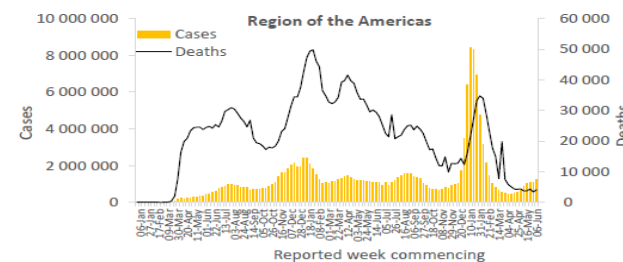
The number of new weekly deaths in the Region decreased by 11% as compared to the previous week, with over 200 new deaths reported. The highest numbers of new deaths were reported from South Africa (164 new deaths; <1 new death per 100 000 population; -4%), Réunion (12 new deaths; 1.3 new deaths per 100 000; +71%), and Zimbabwe (11 new deaths; <1 new death per 100 000; +10%).



Region of the Americas

The Region of the Americas has continued to report increases in case incidence since mid-April 2022, with over 1.2 million new weekly cases, a 13% increase as compared to the previous week. Seventeen (30%) countries reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Saint Martin (74 vs 38 new cases; +95%), the British Virgin Islands (137 vs 75 new cases; +83%) and Bolivia (Plurinational State of) (2002 vs 1250 new cases; +60%). The highest number of new cases were reported from the United States of America (743 723 new cases; 224.7 new cases per 100 000; +13%), Brazil (279 862 new cases; 131.7 new cases per 100 000; +29%), and Chile (69 174 new cases; 361.9 new cases per 100 000; +25%).

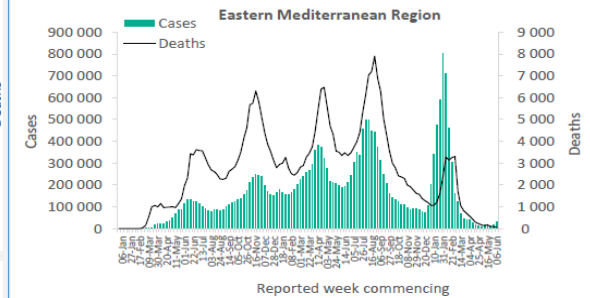
The number of new weekly deaths in the Region increased by 21% as compared to the previous week, with over 4100 new deaths reported. The highest numbers of new deaths were reported from the United States of America (2367 new deaths; <1 new death per 100 000; +32%), Brazil (989 new deaths; <1 new death per 100 000; +52%), and Canada (199 new deaths; <1 new death per 100 000; -35%).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 33 000 new weekly cases, representing a 58% increase as compared to the previous week. Twelve (55%) countries reported increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Morocco (5184 vs 2188 new cases; +137), Kuwait (1701 vs 851 new cases; +100%) and the United Arab Emirates (5909 vs 3269 new cases; +81%). The highest numbers of new cases were reported from Bahrain (6551 new cases; 385.0 new cases per 100 000; +60%), Saudi Arabia (6149 new cases; 17.7 new cases per 100 000; +35%), and the United Arab Emirates (5909 new cases; 59.7 new cases per 100 000; +81%).

The number of new weekly deaths in the Region decreased by 32% as compared to the previous week, with 62 new deaths reported. The highest numbers of new deaths were reported from the Islamic Republic of Iran (21 new deaths; <1 new death per 100 000; -5%), Saudi Arabia (15 new deaths; <1 new death per 100 000; +25%), and Lebanon (eight new deaths; <1 new death per 100 000; -11%).

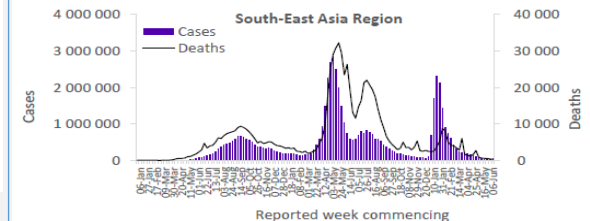


South-East Asia Region

After the declining trend in new cases observed since mid-January 2022, the South-East Asia Region reported over 67 000 new cases, a 33% increase compared to the previous week. Five (50%) countries showed increases in the number of new cases of 20% or greater, with the greatest proportional increases observed in Bangladesh (492 vs 216 new cases; +128%), India (45 200 vs 23 774 new cases; +90%) and Indonesia (3688 vs 2385 new cases; +55%). The highest numbers of new cases were reported from India (45 200 new cases; 3.3 new cases per 100 000; +90%), Thailand (18 070 new cases; 25.9 new cases per 100 000; -25%), and Indonesia (3688 new cases; 1.3 new cases per 100 000; +55%).

The number of new weekly deaths in the Region decreased by 25% as compared to the previous week, with over 200 new deaths reported. The highest numbers of new deaths were reported from Thailand (163 new deaths; <1 new death per 100 000; -18%), India (69 new deaths; <1 new death per 100 000; -35%), and Indonesia (28 new deaths; <1 new death per 100 000; -32%).

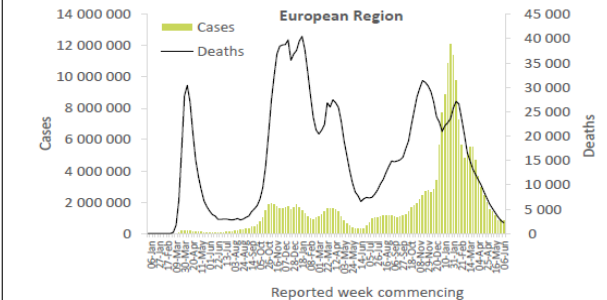
Reports of an outbreak of COVID-19 reported in the Democratic People's Republic of Korea continue through official media on 12 May 2022; however, at present, no confirmed cases or deaths have been reported to WHO.



European Region

After decreases in the number of new weekly cases observed since mid-March 2022, the European Region reported over 873 000 new cases this week, an 8% increase compared to the previous week. Twenty-one (34%) countries in the Region reported increases in new cases of 20% or greater, with some of the greatest proportional increases observed in the Republic of Moldova (227 vs 34 new cases; +568%), Jersey (308 vs 167 new cases; +84%) and Israel (29 248 vs 16 476 new cases; +78%). The highest numbers of new cases were reported from Germany (281 706 new cases; 338.7 new cases per 100 000; +16%), Italy (143 614 new cases; 240.8 new cases per 100 000; +23%), and France (136 360 new cases; 209.7 new cases per 100 000; -2%).

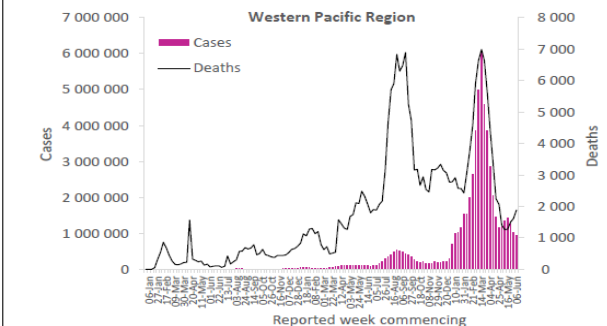
Over 2200 new weekly deaths were reported, an 18% decrease as compared to the previous week. The highest numbers of new deaths were reported from the Russian Federation (500 new deaths; <1 new death per 100 000; -12%), Italy (443 new deaths; <1 new death per 100 000; +17%), and France (240 new deaths; <1 new death per 100 000; -26%).



Western Pacific Region

With just under 971 000 new cases reported last week, the Western Pacific Region continues the decreasing trend observed for the third consecutive week. This represents an 8% decline in new cases as compared to the previous week. Six (18%) countries reported increases in new cases of 20% or greater, with the largest proportional increases observed in Guam (688 vs 126 new cases; +446%), French Polynesia (160 vs 35 new cases; +357%) and Palau (80 vs 45 new cases; +78%). The highest numbers of new cases were reported from China (501 146 new cases; 34.1 new cases per 100 000; -5%), Australia (194 158 new cases; 761.4 new cases per 100 000; -13%), and Japan (125 577 new cases; 99.3 new cases per 100 000; +3%).

The Region reported over 1800 new weekly deaths, representing a 17% increase as compared to the previous week. The highest numbers of new deaths were reported from China (1201 new deaths; <1 new death per 100 000; +32%), Australia (295 new deaths; 1.2 new deaths per 100 000; +2%), and Japan (144 new deaths; <1 new death per 100 000; -28%).



COVID-19 Global Situation

Spotlight on Portugal



Overview of COVID-19 in Portugal

Portugal was the first European country to observe a significant increase in cases of BA.5, which fueled its sixth wave beginning in April 2022. Although cases appear to have potentially peaked in early June, Portugal had a very high test positivity rate (48.7%) in the week of June 7, 2022 while testing (available to those symptomatic or a contact) declined. This is concerning as it indicates that a substantial proportion of cases are going undetected and/or unreported. Meanwhile, deaths (a lagging indicator) are continuing to increase and there is moderate excess mortality compared to expected rates and at a similar level to the initial Omicron epidemic wave.

Portugal's experience should be heeded as BA.4/BA.5 are becoming dominant variants in other countries, particularly in the EU. Portugal has a higher population-level vaccination rate including third-dose coverage compared to most other countries in the EU, where cases are increasing amidst relaxed public health measures and increased travel, and despite high population-level vaccination rates including third-dose coverage.

Disease activity

As of June 15, 2022, the incidence rate of COVID-19 cases in Portugal is **moderate** (140.1 - 350) **to high** (>350), **with a decreasing trend**. This indicates that Portugal has experienced >140 reported cases per 100,000 over the past 14 days and has a decreasing rate of change in new cases over the past seven days which is statistically significant.

The seven-day rolling average number of daily new cases is **13,150 as of June 15**, which is a **74% decrease** from the 50,036 seven-day rolling average number of daily new cases recorded a month prior on May 15, 2022. Two months prior, on **April 15, 2022**, the seven-day rolling average of daily new cases was **9,056**.

This marks Portugal's **sixth wave** of COVID-19 since early 2020. While this wave has a **similar magnitude** of deaths and hospital admissions when compared to the **first Omicron wave (BA.1)** which occurred in January and February of this year, rates are **much lower** than those experienced during peaks previous to 2022. [1,2]

Of note, as of May 18, 2022, Portugal now **includes the number of reinfection cases in their cumulative case counts**. Numbers were added retrospectively and may create an artificial spike in cases, during this time frame. [3]

Although a decreasing case trend is currently reported, the seven-day rolling average number of **new deaths has an increasing trend**, rising from 26 new deaths on May 15, 2022 to **31 new deaths on June 15, 2022**. News media reports that a majority of reported deaths are occurring in those over 80 years of age. [4] However, excess mortality statistics indicate that the **population as a whole is experiencing moderately increasing deaths**, over what is expected for this time of the year. As excess mortality is based on all age groups, this may potentially indicate an underdetection of deaths attributed to COVID-19 across the population.

News media reports that the high case count and increasing deaths have been attributed to the **lifting of pandemic restrictions** such as the return of crowded events and festivals, in tandem with the **emergence of new highly contagious Omicron sub-lineages**. There is an increasing concern given the tourism season is beginning in the country. [5]

The Portuguese National Institute of Health (Instituto Nacional de Saúde Doutor Ricardo Jorge; INSA) reports that for the week of June 7, 2022, to June 13, 2022, **48.7% of 237,223 tests completed were positive**. This is a very high positivity rate and indicates a **substantial proportion of cases are going undetected**. The health authority reports that the **number of tests being completed is decreasing**; 317,695 tests were completed in the week prior to June 7, 2022. [6]

The INSA reports that the Omicron BA.5 sub-lineage became the dominant sub-lineage in Portugal in the week of May 9, 2022 to May 15, 2022 according to the Situation Report on Genetic Diversity of the New Coronavirus SARS-CoV-2 report. **BA.5 made up 84%** of COVID-19 sequencing completed by random sampling for the week of May 30, 2022 to June 5, 2022. Notably, since the week of May 9, 2022, **less than 1%** (seven sequences) of **BA.4** have been identified in the country. [7]

The European Centre for Disease Prevention and Control (ECDC) notes that Portugal was the first European country to observe a significant increase in cases of BA.5, and other European countries beginning to see an increase in the proportion of sequenced samples attributed to BA.4/BA.5 can expect to see sudden case increases as these variants become dominant. [8]

Test eligibility

Individuals who are experiencing COVID-19 symptoms or have been in close contact with someone who has tested positive for COVID-19 are eligible to receive a COVID-19 test from the National Health Service (Serviço Nacional de Saúde; SNS). [13] Tests may be arranged with a public or private health provider and are generally free of charge when referred by the SNS to certain laboratories. **Residents are encouraged to call the National Healthline for more information.** [13]

Public measures

As of May 25, 2022, the SNS reported that face masks are only required for individuals over 10 years of age when **entering healthcare facilities, public transportation, prisons, and long-term care facilities**. For individuals who test positive for COVID-19, a face mask is required when leaving their place of isolation until 10 days have passed since either the date of symptom onset or a positive test result was received. For individuals who have had known contact with a confirmed case of COVID-19, a face mask is required for 14 days after the date of exposure.

Face masks are no longer required when entering public establishments such as restaurants, sports venues, or educational buildings. [14]

International travellers over 12 years of age are required to present proof of vaccination upon arrival in the country. An EU Digital COVID certificate, a recovery certificate from a country under reciprocal conditions, a negative PCR test completed 72 hours before boarding, or a negative rapid antigen test completed 24 hours before boarding are accepted.

Passengers are no longer required to complete the Passenger Locator Form for travel into the country. [15]

Vaccination coverage

According to the ECDC [16], of the country's approximately 10 million total population:

- **94.4%** (9,570,911) have received **at least one dose of a COVID-19 vaccination**
- **86.2%** (8,739,539) have received **at least two doses**
- **64.3%** (6,519,169) have received **a booster or additional dose**

In mid-May 2022, Portugal began offering a fourth dose of COVID-19 vaccine to those over the age of 80 and individuals residing in nursing homes. News media reports that increasing new infections in the current wave prompted an earlier roll-out of fourth doses, which were originally scheduled for early autumn 2022. [17]

Portugal Weekly COVID-19 Indicators [9,10,11,12]

	25-May-22	1-Jun-22	8-Jun-22	15-Jun-22
Number of new cases <small>(past 7 days per 100,000 population)</small>	1,835 cases	1,707 cases	1,539 cases	1,111 cases
In ICU <small>(% of critical threshold of ICU bed occupancy currently occupied by a COVID-19 patient)</small>	38.8% <small>(up from 32.9% the previous week)</small>	42.00%	42.40%	38.40%
Specific mortality from COVID-19 <small>(past 14 days per 1,000,000 population)</small>	41 deaths	44 deaths	50 deaths	54 deaths
Excess all-cause mortality	Higher than expected for this time of year	An excess of all-cause mortality associated with an increase in COVID-19 specific mortality is observed.	Higher than expected for the time of year, indicating an excess of all-cause mortality, associated with an increase in COVID-19 specific mortality.	Higher than expected for this time of year, indicating a moderate excess of all-cause mortality, partly associated with COVID-19 specific mortality.

COVID-19 Global Situation

Moderna Omicron-specific COVID-19 Booster Candidate shows superior antibody response

On June 8, 2022, Moderna released **Phase 2/3 clinical trial results on their new Omicron-containing COVID-19 booster vaccine**. The most recent booster candidate, mRNA-1273.214, is a bivalent COVID-19 booster dose which includes elements of both the original Spikevax (mRNA-1273) vaccine and a new Omicron variant-specific target.⁽¹⁾

This specific Moderna Phase 2/3 clinical trial began in February 2022 and included participants aged 16 years and older from the United Kingdom. Participants who had previously received two or three doses of an authorized COVID-19 vaccine were randomized to receive a single vaccination dose (50µg) of either the mRNA-1273.214 vaccine or the original Spikevax vaccine.^(1,2) The trial was administered during the time period when the Omicron variant was the most dominant strain of COVID-19 circulating globally. As of June 8, preliminary results showcased that the neutralizing antibody response of mRNA-1273.214 against the Omicron variant one month after vaccination had superior results compared to the original Spikevax vaccine. Among the seronegative participants (i.e., participants that were not COVID-19 positive at the time of the study), the study demonstrated an increase in neutralizing geometric mean titers (GMT) against the ancestral SARS-CoV-2 strain, with GMT levels of 5,977 elicited by mRNA-1273.214 and 5,649 by the original Spikevax vaccine. Comparatively, GMT levels against the Omicron variant elicited by mRNA-1273.214 were 2,372, and GMT levels elicited by the original Spikevax vaccine were 1,473. This indicated an **eight-fold boost in neutralizing antibody levels against the Omicron-variant above baseline levels among participants**. In addition, binding antibody titers for mRNA-1273.214 compared to the original Spikevax were found to also be significantly higher against all other variants of concern, including Alpha, Beta, Gamma, Delta, and Omicron. While neutralizing antibodies are important in defending cells against the SARS-CoV-2 virus, binding antibodies serve the purpose of binding to the virus to alert the immune system. **The bivalent COVID-19 vaccine was shown to be well-tolerated and safe among the 437 study participants, with side effects being comparable to those observed in Moderna's previous monovalent and bivalent COVID-19 vaccine studies.**^(1,2)

Based on the clinical trial results, Moderna has indicated that **the mRNA-1273.214 vaccine is their primary candidate for booster doses in the coming Fall**. The company is planning to make regulatory submissions for the vaccine within the coming weeks to have the booster vaccine be available by late summer. The booster dose is expected to provide long-lasting protection against COVID-19 variants of concern.

New Coronavirus spreading through Animal Reservoirs - Rodents

On June 1, 2022, Swedish researchers from the Zoonosis Science Center at the Uppsala University **identified a new coronavirus, Grimsö virus, circulating among rodents**. The study examined red-backed voles, a common rodent in Sweden and Europe, for coronavirus using RNA sequencing between 2015 and 2017. Sample analysis led to the discovery of a new coronavirus belonging to the betacoronavirus family that also includes SARS-CoV, MERS, and SARS-CoV-2. The study assessed approximately 450 voles and found the Grimsö virus circulating among 3.4% of samples. Previous studies have found that closely related coronaviruses are broadly circulating among voles in other European countries such as France, Germany, and Poland, **suggesting that voles are a natural animal reservoir for the disease**. Novel coronaviruses have previously been detected in wild animals, including bats and pangolins. In addition, rodents are well-known carriers for other infectious diseases such as Hantavirus and Tularemia. Despite detecting a novel coronavirus, it is unknown whether it poses a threat to public health at the moment. **However, as rodents and other wild animals may live within close proximity to human populations, it is important to be cautious of disease spillover events**. The study reiterates the **importance of engaging in One Health approaches and improving sentinel surveillance of wild animals for diseases** that could potentially jump species from animals to humans.^(3,4,5)

Survey on the implementation of integrated surveillance of respiratory viruses with pandemic potential, ECDC 17 June 22

The study includes the results from 29 European Union/European Economic Area (EU/EEA) countries about the implementation of integrated surveillance of respiratory viruses with pandemic potential.

The aim was to better understand the current national surveillance strategies and country-specific priorities, to explore anticipated hurdles to the implementation of an integrated surveillance system, to examine changes in testing strategies and to better understand the current systems in place in relation to indicator-based surveillance, event-based surveillance and special studies.

Some examples of the outcomes (see all by reading the [full report](#)):

- In total, **79.3%** of countries (23/29) envisage moving to **integrated sentinel respiratory surveillance also including respiratory viruses other than influenza and SARS-CoV-2** (e.g. Respiratory Syncytial Virus (RSV), adenoviruses, rhinoviruses and parainfluenza).
- **72.4%** of countries (21/29) anticipate potential hurdle for the **implementation for a sentinel surveillance for Severe Acute Respiratory Infection (SARI)** surveillance and **51.7%** of countries (15/29) for **primary care sentinel surveillance**.
- **72.4%** of the countries (21/29) already implemented **changes in the COVID-19 testing strategy** for community testing; **41.4%** of countries (12/29) specifically for testing of mild cases.
- In total, **89.7%** (26/29) of countries implemented or plan to **implement a indicator bases surveillance** on primary care level, **75.9%** (22/29) of countries on hospital level.
- In total, **93.1%** (27/29) of countries implemented or plan to implement a **genomic surveillance for SARS-CoV-2 and influenza**, **55.2%** (16/29) of countries for **RSV**.
- In total, **62.1%** (18/29) of countries implemented or plan to implement a **non-sentinel respiratory virus monitoring** for all three pathogens.
- In total, **82.8%** (24/29) of countries implemented or plan to implement **excess mortality monitoring** for SARS-CoV-2 and influenza, **51.7%** (15/29) of countries for RSV.
- In total, **55.2%** (16/29) of countries implemented or plan to implement a **primary care syndromic surveillance system** for SARS-CoV-2 and influenza, **34.5%** (10/29) of countries implemented or plan to implement for RSV. For **secondary care syndromic surveillance system** **48.3%** (14/29) of countries implemented or plan to implement it for all three pathogens.
- In total, **31.0%** (9/29) of countries implemented or plan to implement a **participation in a community surveillance** – for example InfluenzaNet for SARS-CoV-2 and influenza, **20.7%** (6/29) of countries implemented or plan to implement for RSV.

Summary

- Member States were in unanimous agreement that common objectives should be established for sentinel surveillance of respiratory viruses.
- Overall, countries agree with the proposed ECDC/WHO core objectives for an integrated surveillance of respiratory viruses with pandemic potential (>70% for 8/9 core objectives).
- Most countries are in the process of discussing, planning, or implementing integrated surveillance at national level.
- Hurdles to the implementation of integrated surveillance are anticipated, particularly as regards the availability of necessary infrastructure and resources.
- Changes in testing strategies for community testing have been implemented, or are expected to be implemented, in the majority of the countries

COVID-19 Global Situation

SARS-CoV-2 variants of interest and variants of concern

Geographic spread and prevalence of VOCs

The Omicron VOC continues to be the dominant variant circulating globally, accounting for nearly all sequences reported to GISAID in the last 30 days. Due to very low circulation among sequences submitted to GISAID in the last three months, Delta is now categorized by WHO as a 'previously circulating VOC,' in the same way that Alpha, Beta and Gamma are categorized. Importantly however, this does not imply that previously circulating VOCs cannot resurge in the future and WHO will continue to monitor using available data.

Among Omicron lineages, as of epidemiological week 20 (15 to 21 May 2022), BA.2 and its descendent lineages (pooled lineages named BA.2.X) are declining but remain dominant, accounting for 44% and 19% respectively (figure 4, Table 2). Several variants with preliminary evidence of a growth advantage over other Omicron lineages show a global prevalence of <1% and are no longer rising, namely BA.2.11, BA.2.13, and BA.2.9.1. These lineages have in common the acquisition of a mutation at the locus S:L452X. Former dominant Omicron lineages BA.1, BA.1.1, BA.1.X and BA.3 sublineages have declined to <1%.

Globally, BA.2.12.1, BA.5, and BA.4 variants are rising in prevalence. As of week 20, BA.2.12.1 (detected in 53 countries) has reached a prevalence of 28%, a prevalence that may be largely attributed to an initial rapid increase in the Region of the Americas. BA.5 (detected in 47 countries) and BA.4 (detected in 42 countries) account for 4% and 2% of circulating variants, respectively. All three variants carry the signature mutation at locus S:L452 that is thought to

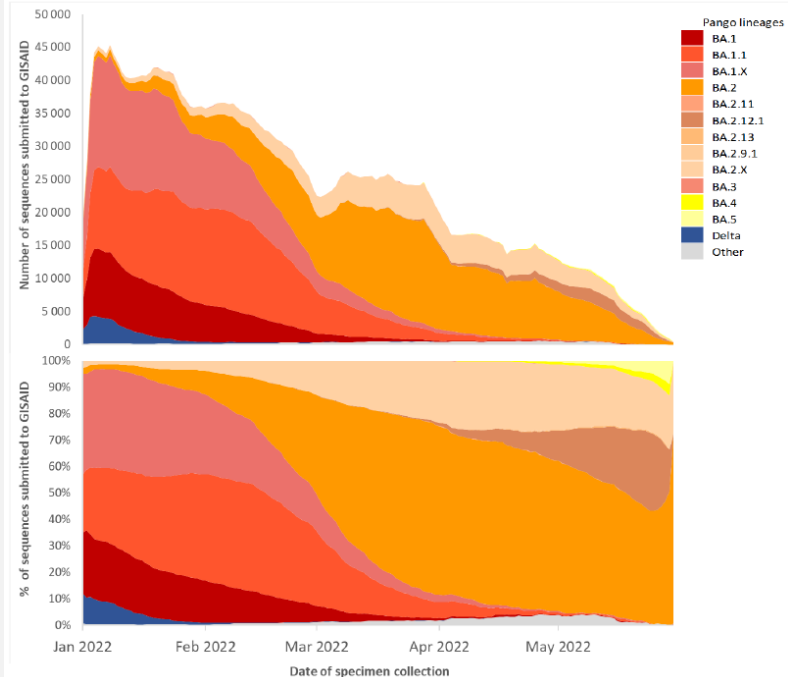
Figure 4 Panel A shows the number and **Panel B** the percentage of all circulating variants since 1 January 2022. Omicron sister-lineages and additional Omicron VOC descendent lineages under further monitoring (VOC-VUM) are shown. BA.1.X and BA.2.X include all BA.1 and BA.2 pooled descendent lineages, except those already shown in the figure above. Source: SARS-CoV-2 sequence data and metadata from GISAID, as of 4 June 2022.

Table 2: Relative proportions of Omicron lineages over the last four weeks by specimen collection date

Lineage	Countries	Sequences ^a	2022-18 ^b	2022-19 ^b	2022-20 ^b	2022-21 ^b
BA.1	175	491 224	0.11	0.21	0.20	0.02
BA.1.1	174	959 680	0.53	0.52	0.39	0.13
BA.1.X*	174	889 390	0.17	0.32	0.31	0.02
BA.2	138	1 054 358	53.15	49.60	43.98	49.88
BA.2.11	12	547	0.04	0.05	0.05	0.03
BA.2.12.1	53	68 256	16.78	21.85	27.83	15.62
BA.2.13	34	1 529	0.34	0.44	0.47	0.45
BA.2.9.1	13	649	0.08	0.08	0.14	0.21
BA.2.X*	122	404 797	22.89	21.24	19.25	20.05
BA.3	31	817	0.01	0.01	0.00	0.00
BA.4	42	4 692	1.12	1.25	2.38	4.14
BA.5	47	4 905	1.01	1.87	4.00	8.75
Delta	202	4 338 590	0.01	0.01	0.00	0.02
Other	209	2 675 752	3.75	2.55	0.98	0.70

^aData source: sequences and metadata from GISAID
^bRelative proportions in %
^{*}BA.1.X and BA.2.X include all BA.1 and BA.2 pooled descendent lineages, except those already shown in the table above. The blue rows indicate the dominant lineages. The grey rows indicate the lineages that are increasing in prevalence.

Figure 4 Panel A and B: The number and percentage of SARS-CoV-2 sequences, as of 4 June 2022



confer greater transmissibility through higher cell fusogenicity and immune escape characteristics. Accumulating evidence from several countries indicates that there has been no observed increase in severity associated with BA.5 and BA.4.1. No evidence is available at the current time on disease severity associated with BA.2.12.1. As for the recombinant variants of SARS-CoV-2 detected in early 2022, including recombinants of known VOCs, a few had characteristics indicative of potential for increased transmissibility; however, this did not translate into a wide spread. The number of SARS-CoV-2 recombinant sequences submitted to GISAID which were being monitored by WHO or which showed an initial rise in the number of sequences reported (XE, XD and XF) continues to decline weekly, now representing <0.1% of sequences submitted during week 20.

Characteristics of Omicron

Available evidence on the phenotypic impacts of VOCs is reported in previous editions of the COVID-19 Weekly Epidemiological Update. Table 3 summarizes the phenotypic characteristics of the Omicron VOC and its sublineages for which evidence is available since the last update on 25 May 2022. Some of these studies have not been peer-reviewed and the findings must, therefore, be interpreted with due consideration of this limitation.

Table 3: Summary of phenotypic characteristics* of the Omicron VOC

Public health domain of impact	Omicron (B.1.1.529)	Omicron sublineages			
		BA.1	BA.2	BA.4	BA.5
Transmissibility	Growth advantage and increased transmissibility compared to Delta (Campbell 2021) ²	Lower transmissibility compared to BA.2 (Atkulwar 2022) ³	Increased transmissibility compared to BA.1 ³	No studies on relative transmissibility compared to BA.1 and BA.2	No studies on relative transmissibility compared to BA.1 and BA.2
Disease severity	Overall evidence suggests lower severity despite contrasting evidence. Earlier studies reported lower severity compared to Delta. ^{1,4-7} However, more recent studies reported similar ^{8,9} or increased severity ¹⁰ compared to Delta. ^{1,4-7,11-12}	No difference in disease severity compared to BA.2 ¹³	No difference in disease severity compared to BA.1 ¹³	Currently available evidence does not suggest a difference in disease severity compared to BA.1 ¹⁴	Currently available evidence does not suggest a difference in disease severity compared to BA.1 ^{14,15}
Risk of reinfection	Reduced risk of Omicron reinfection if previously infected with a different SARS-CoV-2 variant ^{16,17}	Reduced risk of reinfection with BA.1 following infection with BA.2 ¹⁸	Reduced risk of reinfection with BA.2 following infection with BA.1 ¹⁸	No specific data available	No specific data available
Impact on antibody responses	Reduction in neutralizing activity reported as compared to other VOCs ¹⁹⁻²¹	Lower neutralising antibody titers compared to the index virus ²⁰	Lower neutralising antibody titers compared to the index virus ²⁰	Lower neutralising antibody titres (7.6-fold) compared to BA.1 ²²⁻²⁴	Lower neutralising antibody titres (7.5-fold) compared to BA.1 ^{22,24}
Impacts on diagnostics	PCR assays that include multiple gene targets maintain their accuracy to detect Omicron ²⁵ ; S gene target failure/positivity (SGTF) may be a proxy for screening. Limited to no impact on sensitivity of Ag-RDTs observed ²⁶⁻²⁹	S gene target failure.	The majority will be S gene target positive (SGTP).	S gene target failure.	S gene target failure.
Impact on treatment	No difference in the effectiveness of antiviral agents (polymerase and protease inhibitors) against the Omicron variant ³⁰ . Conserved neutralizing activity for three broadly neutralizing monoclonal antibodies (sotrovimab, S2X259 and S2H97) and a reduced effectiveness of other monoclonal antibodies ³¹⁻³⁴	Reduced efficacy of casirivimab-imdevimab against BA.1 ³⁵	Reduced neutralising activity of sotrovimab ³⁵ , casirivimab and imdevimab against BA.2 ³⁶	Reduced neutralising activity of casirivimab and imdevimab ³⁶	Reduced neutralising activity of casirivimab and imdevimab ³⁶
Impact on vaccination	Results of vaccine effectiveness (VE) studies should be interpreted with caution because estimates vary with the type of vaccine administered and the number of doses and scheduling (sequential administration of different vaccines). For further information, see the section Interpretation of the results of the VE for the Omicron variant				

Source: <https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---8-june-2022>



Other Infectious Disease Outbreaks/ Conflicts

Cholera

Ukraine - News media has reported that there are unconfirmed reports of cholera cases under investigation in the port city of Mariupol, located in the southeastern region of Ukraine. Due to the ongoing conflict in the area, it is reported that residents are facing barriers to accessing drinking water due to the failure of critical infrastructure which supports the sanitation systems and that there is a shortage of medicines in some regions. News media reports that there have been isolated cases of cholera since May 2022, however, these cases remain unconfirmed. There is a high risk of a cholera outbreak in the region given the circumstances in the country, but the Ministry of Health announced just recently that until now no case of cholera was found among the patients with acute intestinal infections examined.

Source: Insights by BlueDot – [NewsMedia](#) and [NewsMedia](#)

Iraq - The first confirmed case of cholera in Iraq in 2022 has been reported. Health officials from the Kirkuk governorate note the affected individual has mild symptoms and is currently recovering at home. In addition, there has been an increase in reported diarrheal cases across several governorates, including the Sulaymaniyah district. Although the extent and number of diarrheal patients have not been disclosed, media reports note that some regional hospitals have reached admission capacity and are now having to re-allocate patients seeking medical attention to other health facilities. Testing for cholera among diarrheal cases is underway. Iraq reported the last confirmed cholera outbreak in 2015, with approximately 4,945 confirmed cases. Cholera is endemic to several parts of Iraq, with outbreaks typically following seasonal increases in water contamination between July to September. As a result, health officials have recommended that residents enhance protective public health measures, including drinking clean water, hygiene awareness, and improving cholera surveillance to prevent the spread of the disease.

Source: Insights by BlueDot –

Pakistan - In 2022, Sindh province is facing a significant increase in cholera cases with 234 laboratory confirmed cases reported between 15 January to 27 May. Balochistan and Punjab provinces have also reported 31 and 25 confirmed cases of cholera, respectively.

Currently, there is no evidence of cross-border spread of the disease. The risk of potential international spread exists given that Pakistan has long land borders with significant cross border movement and multiple major urban hubs including Karachi city in Sindh province, with international transport hubs.

Source: [WHO](#)

Plague

Democratic Republic of the Congo - On June 2, 2022, this year's first case of pneumonic plague case in the DRC has been confirmed in the health zone of Rethy in the territory of Djugu (Ituri Province). Officially available information indicates that the affected individual is a man in his forties living in Belendju village who presented to a local hospital in Rethy with symptoms such as fever and headache. Later he received laboratory confirmation of pneumonic plague. Local health authorities have reported their concern as the case has been reported on top of an ongoing outbreak of bubonic plague in the region which is not fully under control. In addition, the affected health zone is facing difficulties due to a shortage of treatment and a lack of protective equipment, which may be challenging to avoid further spread especially amongst healthcare workers. This event is noteworthy, as the pneumonic plague is the most severe and virulent form of plague (compared to bubonic or septicemic plague forms) as it can be transmitted easily from person to person through respiratory droplets or through contact with respiratory fluids. The pneumonic plague disease type has the highest mortality rate when compared to the bubonic plague type but is similar to the septicemic form of the disease.

Source: Insights by BlueDot – [NewsMedia](#)

Varicella

Greece - A confirmed case of varicella (chicken pox) has been reported in Greece in 2022. The case was initially reported as a suspected case of monkeypox on May 23 prior to laboratory testing. The affected individual is a 29-year-old British tourist who developed a rash often associated with suspected monkeypox cases. Results of testing revealed the individual to be positive for varicella which presents with similar symptoms to monkeypox. Details regarding their vaccination status have not been reported. Varicella was a mandatory notifiable disease in Greece until 2004, when it was replaced by varicella cases with complications. According to the Directorate of Epidemiological Surveillance and Interventions for Infectious Diseases for Greece, the mean annual number of varicella cases with complications reported in Greece between 2004 and 2021 is 13 with a total of 232 cases reported between 2004 and 2021. Greece recommends universal varicella vaccination among children at the national level and is reminding the public to ensure their vaccinations are up-to-date.

Source: Insights by BlueDot – [News Media](#)

Meningococcal Meningitis

Lithuania - Cases of meningococcal meningitis have been reported in Lithuania in 2022. All affected individuals come from the Vilnius County in eastern Lithuania, bordering Belarus. Additionally, the first associated death in the country since 2019 has also been reported this year. Case demographics are unknown; however, media reports indicate that the patient was a minor. After the introduction of routine childhood immunization against meningococcal B infections in 2018, the number of yearly reported cases has been declining, with 11 cases and zero fatalities reported in 2021. According to the National Center for Public Health, Lithuania had a vaccination coverage of 75% in 2021, which was below the 90% set threshold by the country for disease management.

Source: Insights by BlueDot - [NewsMedia](#)

Tick borne encephalitis

Austria - Cases of tickborne encephalitis (TBE) have been reported in Austria in 2022. Cases have recently increased with 25 of the 27 cases reported in 2022 reported between mid-May and mid-June. During the same period in 2021, just 15 cases of the disease were reported. Cases have been on an upward trend over the past 10 years in Austria. In 2012, 52 cases were reported whereas in 2020 and 2021, 216 and 128 were reported, respectively. The large number of cases reported in 2020 was attributed to individuals vacationing within the country in regions where the risk of tick exposure and TBE is higher during the COVID-19 pandemic. The majority of cases are reported in Upper Austria, Tyrol, Salzburg, and Styria in the more western regions of the country. While cases have been reported across all age groups, more than 50% of the cases have occurred among individuals who are 50 years and older. To reduce their risk of contracting TBE, residents are advised to be vaccinated against TBE, which is reported to be 95-99% effective at preventing TBE among those bitten by infected ticks. In Austria, the vaccination rate is reported to be over 80%, however, it is important to ensure booster shots are maintained and kept up to date to ensure protection.

Source: Insights by BlueDot – [News Media](#)

Lyme Disease

Estonia - According to Estonia's National Institute for Health Development, cases of Lyme disease continue to be reported in 2022. This year to date, Estonia has seen a decrease of 1.5% in cases, when compared to the same period in 2021.

Luxembourg - According to Luxembourg's Ministry of Health, cases of Lyme disease continue to be reported in 2022. Since the start of 2022, the Ministry has only received one notification of a case of Lyme disease, in 2021 the Ministry received notification of 13 cases.

Source: Insights by BlueDot – [NewsMedia](#); [NewMedia](#)

Listeria

Denmark - An outbreak of listeria has been reported in Denmark in 2022. Between May 13 and 29, 2022, eight individuals contracted listeria, of which three have died. The age of the affected individuals range from 33 to 93 years and all are reported to have comorbidities or immunodeficiencies which made them particularly vulnerable to the disease. All affected individuals were hospitalized. Seven of the eight individuals are reported to be from the Hovedstaden region in eastern Denmark. Whole genome sequencing has revealed that the strains of listeria among the affected are closely related. The Danish State Serum Institute, the Danish Veterinary and Food Authority, and the DTU Food Institute are investigating to try to find the source of the outbreak. Throughout the month of May 2022, a total of 15 cases of listeriosis were reported which is an increase compared to the average of four cases typically reported each month across the country.

Source: Insights by BlueDot – [ProMed](#)

Cutaneous Anthrax

Italy - Human cases of cutaneous anthrax have been reported in the Calabria Region of southwest Italy in 2022. Three cases have been reported, all of which were involved with the transport of a single infected young bull (bullock) to the slaughterhouse. The affected individuals include a 41-year-old truck driver and two slaughterhouse workers aged 45 and 42. All three individuals were hospitalized for necrotic lesions on their arms associated with edema and a high fever. Laboratory testing confirmed the presence of Bacillus anthracis in the young bull as well all three patients. In addition, the truck driver reported an intense headache and following further testing health authorities confirmed a presumptive diagnosis of meningitis following the detection of B. anthracis in cerebrospinal fluid, which is a rare outcome. Following diagnosis, all affected individuals received the necessary medical attention. Human disease with anthrax is rare in Italy with just six cases reported between 2004 and 2019. Cases are primarily reported among veterinary professionals or farmworkers. Animal anthrax is also rare but sporadic outbreaks can occur in the country.

Source: [ProMed](#)

Emergency in Ukraine

WHO external situation report #15, published 16 June 2022: reporting period: 2–15 June 2022



7.3 million
REFUGEES



7.1 million
INTERNALLY
DISPLACED



10046
CIVILIAN
CASUALTIES



4481
CIVILIAN
DEATHS

Key updates

- According to [WHO's Surveillance System for Attacks on Health Care](#), there have been 295 attacks on health care, resulting in 59 injuries and 76 deaths, reported between 24 February and 15 June. Attacks on health care include those against health facilities, transport, personnel, patients, supplies and warehouses. These attacks deprive people of urgently needed care, endanger health-care providers, and undermine health systems.
- One in four people in Ukraine is over 60, and the impact of the ongoing war on older people, including those with disabilities, has been substantial. Essential life-saving support, as well as necessary evacuation assistance, should be provided to those who have not been able or willing to leave their homes, including those living in care institutions.
- Between 13 March and 12 June Emergency Medical Teams (EMTs) in Ukraine responded to 4604 outpatient visits, of which 16% (736 outpatient visits) were infectious diseases and 14% (644 outpatient visits) were trauma. Among infectious diseases, the majority (640 outpatient visits) were acute respiratory infections.
- As of 14 June at least 641 patients (78% of the requests) have been evacuated for medical reasons from Poland, the Republic of Moldova, Slovakia and Ukraine via the EU Civil Protection Mechanism to 13 European countries (Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Romania, Spain and Sweden).

Access to Health care in Ukraine

Ukraine's health system is facing multiple challenges. Access to health care is severely impacted due to security concerns, restricted mobility, broken supply chains and mass displacement. Health care continues to come under attack (which includes attacks against health facilities, transport, personnel, patients, supplies and warehouses), with a total of 295 attacks¹ on health care, resulting in 59 injuries and 76 deaths, reported between 24 February and 15 June.² Further attacks are being verified. These attacks deprive people of urgently needed care, endanger health-care providers, and undermine health systems. Through engagement with the MoH, national health authorities, partners and donors, WHO has been able to provide populations with life-saving supplies, equipment and medicines. However, reaching some of the hardest-hit areas, where health systems have been severely disrupted, remains a challenge.

Health information and operations

The health sector response continues to prioritize saving lives and protecting mental health. Actions focus on ensuring access to emergency health care and priority essential health services for wounded people and others affected by the armed conflict, COVID-19, poliomyelitis, and other health threats – including technological, industrial, and chemical, biological, radiological, and nuclear hazards. Continuity of treatment and care for people with noncommunicable diseases – including diabetes and cancer – is a top priority.

Priority public health concerns
















Current health priorities are listed below (more details on each of these public health concerns can be found in the [previously published WHO situation reports](#)).

Conflict-related trauma and injuries	Civilian casualties continue to rise, largely due to the use of explosive weapons. Disruption of health-care facilities and closure of many pharmacies in Ukraine has limited access to trauma care.
Maternal and newborn health	While only limited data are available on the current situation of maternal and newborn health, access to antenatal, intrapartum and postnatal care have been disrupted due to the ongoing conflict.
Management of chronic diseases and noncommunicable diseases (NCDs)	Provision of care for cancer patients continues in Ukraine, despite disruptions in health-care services.
Risk of emergence and spread of infectious diseases	<p>The risk of disease outbreaks, such as cholera, measles, diphtheria or COVID-19, has been exacerbated due to lack of access to water, sanitation and hygiene, crowded conditions in bomb shelters and collective centres, and suboptimal coverage for routine and COVID-19 immunizations.</p> <p>Between 26 May and 15 June no new cases and deaths were reported. This could be due to reporting challenges resulting from the ongoing conflict.</p> <p>Between 23 February and 12 June, the overall number of beds available and beds occupied by patients with COVID-19 decreased by 49% and 95%, respectively, reflecting potential challenges in accessing hospitals, limited data reporting, and a potential decrease in actual hospitalizations. The most notable decrease was reported in the Luhansk oblast (100%), followed by the Vinnytsya (88%) and Chernivtsi (84%) oblasts.</p>
Protection issues: risk of human trafficking and escalated risk of sexual and gender-based violence (SGBV)	People fleeing Ukraine, particularly women and girls, continue to face challenges and vulnerability risks as they seek safety in neighbouring countries. Prevention and protection from gender-based violence, trafficking, sexual exploitation and abuse remain key concerns.

Mental health and psychosocial support (MHPSS)	Psychosocial support is much needed, particularly in view of a likely increase in negative coping mechanisms, including abuse and self-harm. The MoH of Ukraine estimated that 15 million people might require psychological support and treatment due to war-related trauma and stress. Of the 15 million, 3-4 million people potentially require medication-assisted treatment. Concerns have been raised about the long-term mental health impact of the war in Ukraine.
Technological hazards and health risks	<p>Potential nuclear hazards</p> <p>There are both operational and decommissioned nuclear facilities in Ukraine. In addition, numerous radioactive sources are used in industry and in health-care facilities. According to the International Atomic Energy Agency's analysis, the current nuclear safety situation appears under control. However, the ongoing armed conflict puts nuclear installations at risk of accidental or deliberate damage and jeopardizes the security of radioactive sources.</p> <p>WHO has developed technical guidance and public communication materials on this subject. Training programmes focusing on first response to radiation emergencies are also being developed in collaboration with national partners in Ukraine.</p> <p>Potential chemical hazards</p> <p>The Governor of the Luhansk oblast reported that the nitric acid tank at a chemical plant was shelled. Nitric acid fumes can irritate the respiratory tract and cause bronchitis, lower respiratory tract infections and pulmonary oedema.</p>
Food security and nutrition	The conflict is affecting food security within and outside Ukraine. According to World Food Programme, one in three households in Ukraine is now food-insecure, with an estimated 600 000 people in need of nutrition support in Ukraine between March and August 2022.
















Summary of information on the individual national Corona restrictions

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

NATO Member State (click on country for official COVID-19 information)		Approved vaccines											
		Comirnaty	Spikevax	Janssen	Vaxzevria	Nuvaxovid	Sputnik V	CoronaVac	Covishield	Convidecia	Covilo	Turkovac	
	Albania	X			X		X	X					
	Belgium	X	X	X	X	X							
	Bulgaria	X	X	X	X	X							
	Canada	X	X	X	X				X				
	Croatia	X	X	X	X	X							
	Czech Republic	X	X	X	X	X							
	Denmark	X	X	X		X							
	Estonia	X	X	X	X	X							
	France	X	X	X	X	X							
	Germany	X	X	X	X	X							
	Great Britain	X	X	X	X								
	Greece	X	X	X	X	X							
	Hungary	X	X	X	X	X	X		X	X	X		EMA Authorized
	Italy	X	X	X	X	X							
	Iceland	X	X	X	X	X							EMA & FDA Authorized

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NATO Member State (click on country for official COVID-19 information)		Approved vaccines										
		Comirnaty	Spikevax	Janssen	Vaxzevria	Nuvaxovid	Sputnik V	CoronaVac	Covishield	Convidecia	Covilo	Turkovac
	Latvia	X	X	X	X	X						
	Lithuania	X	X	X	X	X						
	Luxembourg	X	X	X	X	X						
	Montenegro				X		X			X		
	Netherlands	X	X	X	X	X						
	North Macedonia	X			X		X			X		
	Norway	X	X	X		X						
	Poland	X	X	X	X	X						
	Portugal	X	X	X	X	X						
	Romania	X	X	X	X	X						
	Slovakia	X	X	X	X	X						
	Slovenia	X	X	X	X	X						
	Spain	X	X	X	X	X						
	Turkey	X					X	X				X
	USA	X	X	X								

EMA
Authorized

EMA & FDA
Authorized