

Multi-country outbreak of mpox

External Situation Report 23, published 26 May 2023

Data as received by WHO national authorities by 17:00 CEST, 22 May 2023

Risk assessment	Laboratory confirmed cases	Deaths	Countries/areas/territories
Global risk – Moderate	87 529	141	111

WHO Regional risk

- African Region, Eastern Mediterranean Region, European Region, Region of the Americas – Moderate
- South-East Asia Region, Western Pacific Region – Low

Highlights

- Since the last situation report published on [11 May 2023](#), and as of 22 May, 152 new mpox cases (0.2% increase in total cases) and one new related death have been reported to WHO.
- Overall, there has been a significant decrease in reported cases in the last week in all regions. For the first time since May 2022, fewer than 50 new cases have been reported in a week. However, this needs to be interpreted with caution, due to delays in reporting, especially in the African Region.
- On 11 May 2023, after the fifth mpox Emergency Committee meeting, the WHO Director-General accepted the advice of the committee members that mpox no longer constitutes a Public Health Emergency of International Concern (PHEIC) under the International Health Regulations.
- This report presents a summary of possible cases of reinfection with mpox reported in peer-reviewed literature since the start of the outbreak. Overall, these few reported cases of mpox recurrence or re-infection underscore the importance of ongoing data collection and reporting globally, particularly as our understanding of mpox continues to evolve.
- This report also presents a summary of reported mpox cases in vaccinated persons and factors that could explain this finding, which include a high vaccination coverage in the group of persons at risk.
- On 17 May 2023, on the mark of one year of mpox response in the WHO European region, WHO/Europe launched the campaign '[Eliminating mpox: Placing affected populations at the heart of our response](#)' to spur sustained action by communities, civil society organizations, health authorities and providers to control and eliminate mpox in the WHO European Region. It will run until 30 September 2023. As of 22 May, the campaign has reached over 16 million people on social media, and over 240 million people through media outreach.

Epidemiological Update

Data source: [WHO Multi-country mpox outbreak - Global trends](#)

From 1 January 2022 through 22 May 2023, a cumulative total of 87 529 laboratory-confirmed cases of mpox, including 141 deaths, have been reported to WHO from 111 countries/territories/areas (hereafter 'countries') in all six WHO Regions (Table 1). Since the last situation report published on [11 May 2023](#), there have been 152 new cases (0.2% increase in total cases) and one new death reported.

The number of new cases reported weekly at the global level has declined by 61% in week 20 (15 May through 21 May 2023) (n = 41 cases) compared to week 19 (8 May through 14 May 2023) (n = 106). For the first time since May 2022, fewer than 50 new cases have been reported in a week. Most of the cases in the last week were reported by the Region of the Americas, followed by the Western Pacific Region. The lack of cases from the African Region may be due to delays in data reporting from the countries.

The Western Pacific Region has reported an increase in cases (n = 106) in the last three weeks compared to the three weeks prior (n = 65), driven by outbreaks of mpox affecting mainly men in Japan, China, and the Republic of Korea, with sustained local transmission. In the last week, the number of cases in the region has decreased for the first time in several weeks, although this could also be due to a delay in data reporting to WHO. In the past three weeks, the South-East Asia Region has reported an increase in cases, primarily driven by reports from Thailand (n = 5) (Table 1).

Fifteen countries have reported an increase in cases when comparing the last three weeks (1 May through 21 May 2023) to the three weeks prior (10 April through 30 April 2023), with the highest relative increase reported in Mexico (n = 52 vs n = 9).

As of 22 May 2023, 24 of the 111 affected countries reported new cases within the last 21 days, the maximum disease incubation period, highlighting the fact that the multi-country outbreak is not over. Nine of them are in the Americas, six in the European Region, six in the Western Pacific Region, one in the African Region, one in the Eastern Mediterranean Region, and one in the South-East Asia Region. Some of these countries continue to have sustained community transmission of mpox, while others only report sporadic cases.

In the last week, one new death was retrospectively reported to WHO, from Portugal.

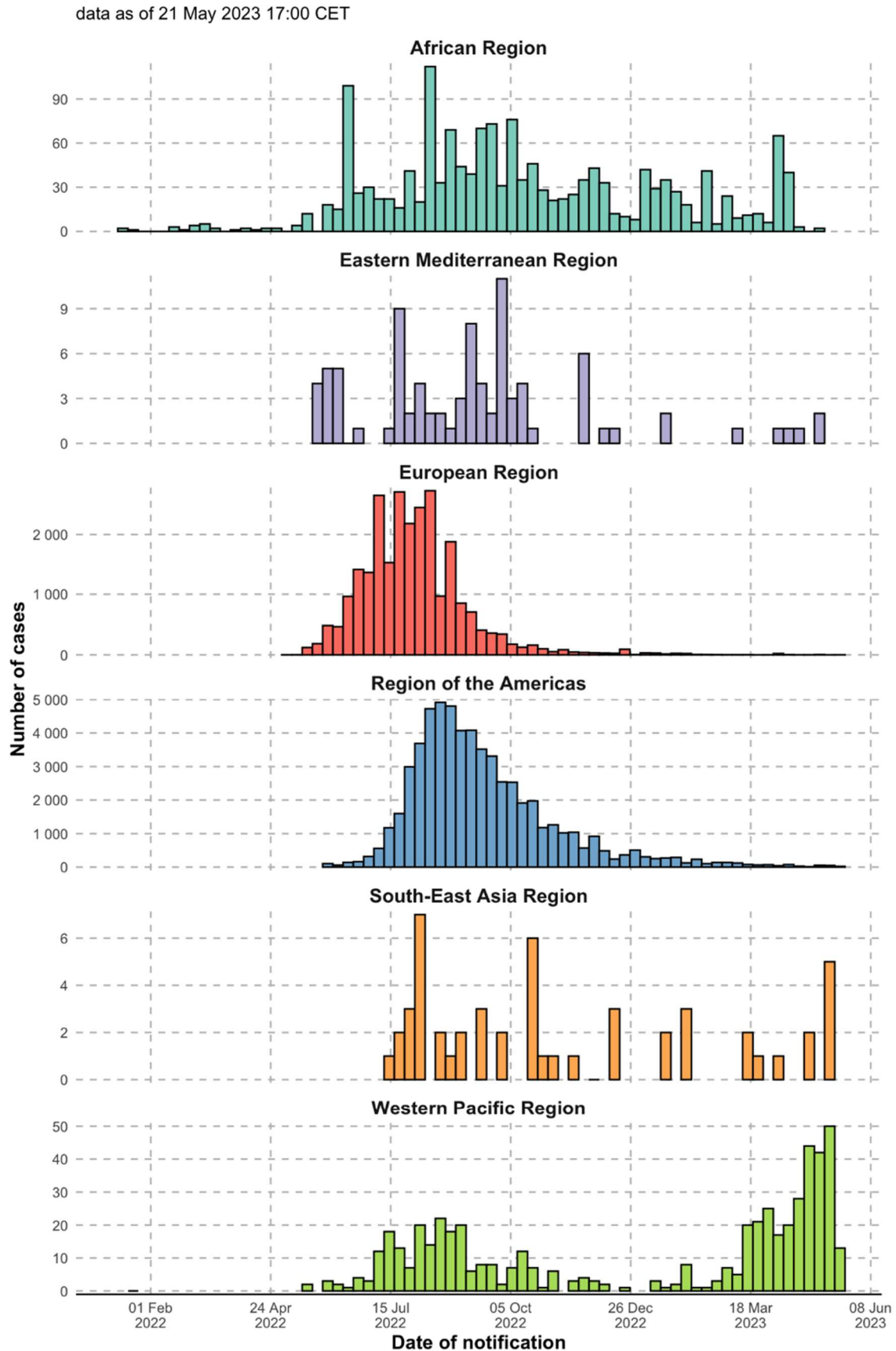
As of 22 May 2023, the ten countries which have reported the highest cumulative number of cases globally continue to be the United States of America (n = 30 194), Brazil (n = 10 941), Spain (n = 7551), France (n = 4146), Colombia (n = 4090), Mexico (n = 4017), Peru (n = 3800), the United Kingdom (n = 3742), Germany (n = 3691), and Canada (n = 1484). Together, these countries account for 84.2% of the cases reported globally.

Table 1. Number of cumulative confirmed mpox cases and deaths reported to WHO, by WHO Region, from 1 January 2022 to 22 May 2023, 17:00 CEST

WHO Region	Total Confirmed Cases	Total Deaths	Cases in last 3 weeks ⁱ	3-week change in cases (%)
Region of the Americas	59 370	114	133	-15%
European Region	25 888	7	7	-74%
African Region	1 592	18	2	-98%
Western Pacific Region	540	0	105	62%
Eastern Mediterranean Region	88	1	2	-33%
South-East Asia Region	51	1	5	400%
Total	87 529	141	254	-29%

ⁱ Using the three most recently completed international standard weeks (Monday - Sunday)

Figure 1. Epidemiological curves of weekly aggregated confirmed cases of mpox by WHO Region, from 1 January 2022 to 21 May 2023, 17:00 CEST*



Source: WHO

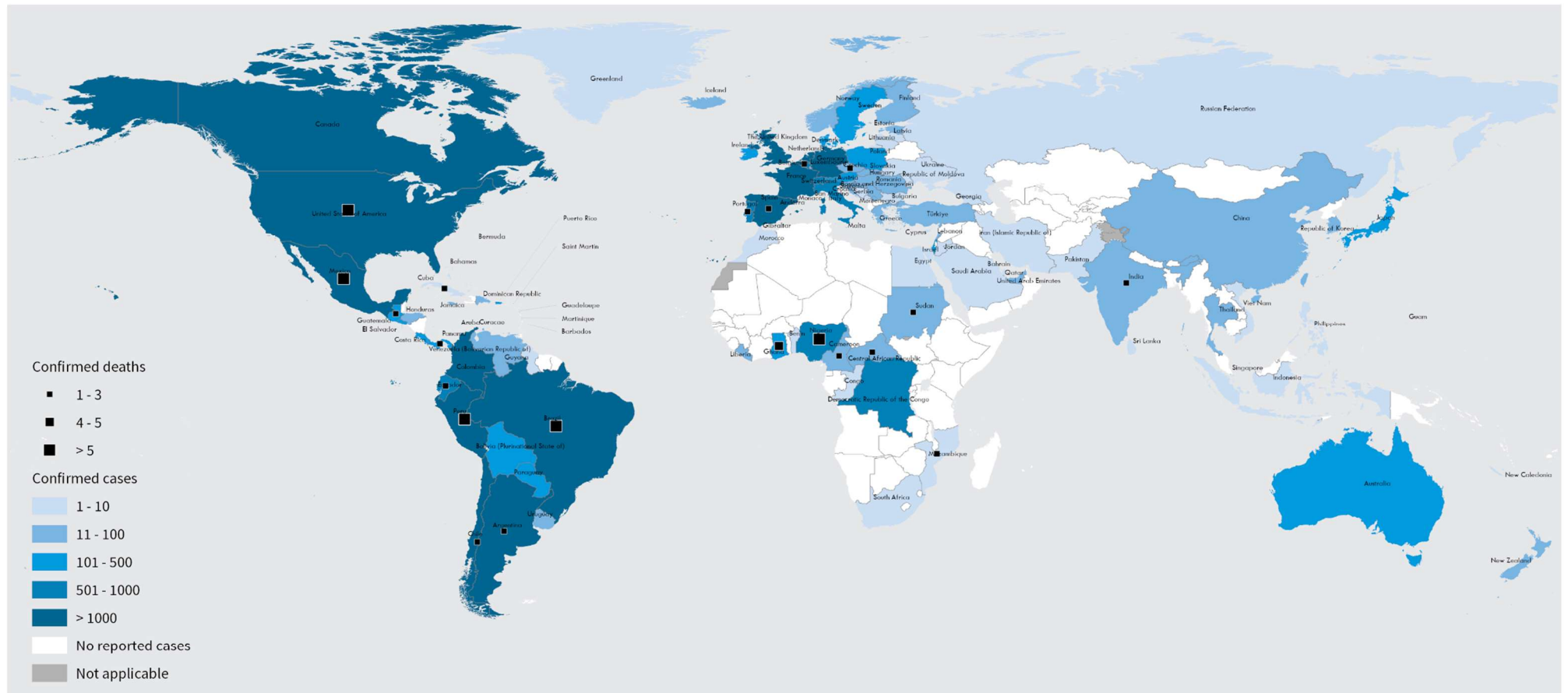
*This figure shows aggregated weekly data, for completed epidemiological weeks ending on Sundays. Data on the current week will be presented in the next situation report. Note the different scales of the y-axes.

The epidemic curves shown in Figure 1 suggest that the outbreak continues with low levels of transmission in the European and Americas Regions and has decreased in the last week in the Western Pacific Region following several weeks of rising reported cases. In the Eastern Mediterranean Region, Pakistan has reported three confirmed cases to WHO between 19 April and mid-May, all of whom reported travel history to Saudi Arabia during their incubation period. Saudi Arabia reported its last mpox case to WHO at the end of August 2022.

Other key epidemiological findings:

- As of 22 May 2023, 96.2% (77 953 / 80 997) of cases with available data are men, with a median age of 34 years (interquartile range: 29-41 years). The age and sex distribution of cases continues to remain stable over time.
- Of cases with age data available, 1.3% (1114 / 83 545) are aged 0-17 years, including 325 (0.4%) aged 0-4 years. The majority of cases <18 years have been reported from the Region of the Americas (687 / 1114; 61.7%). The overall proportion of cases <18 years in the Americas is 1.2% (687 / 56 726), similar to the proportion observed globally.
- Among cases with information available, 84.1% (25 904 / 30 810) have self-identified as gay, bisexual and other men who have sex with men. This proportion, while slightly fluctuating over time, has consistently been above 75%, highlighting that most transmission continues to occur in this community. When information about sexual orientation of cases is lacking, a high proportion of cases occurring in men may be indicative of transmission occurring among men who have sex with men.
- Of all reported modes of transmission since the start of the outbreak, skin and mucosal contact during sex was the most reported, in 16 417 of 20 018 (82.0%) of all reported transmission events, followed by person-to-person non-sexual contact. The same pattern has been observed over the last 12 weeks. Detailed information on the route of transmission is not available for most cases from the WHO African Region, and available information on transmission might not fully describe the epidemiological spread of the virus in the region.
- Where information is available, the most reported exposure setting is a party setting with sexual contact, comprising 3985 of 5994 (66.5%) reported exposure settings. In the last 12 weeks, the setting of exposure is more diversified than what was observed at the beginning of the outbreak: available information for 66 cases shows that the main setting of exposure is reported as Other (not specified) for 19 (29%) cases, party setting with no sexual contact for 15 (23%) cases, party setting with sexual contact for 13 (20%) cases, household for 10 (15%) cases, large event with sexual contact for six (9%) cases and workplace for three (4%) cases.
- Among the cases who reported at least one symptom (n = 34 247), the most common symptom is any rash, reported in 80.6% of cases, followed by fever (59.2%), and generalized or genital rash (47.5% and 44.0% respectively). The symptomatology of cases has been consistent over time in the countries newly affected in this outbreak.
- The new cases reported in the Western Pacific Region have similar characteristics to the majority of cases previously described in the epidemic. They are young adult males and, when information is available, most of them identify as men who have sex with men who have had sexual contact with a person with mpox. Currently no common exposure has been reported and the cases have not been linked to any known gathering events.

Figure 2. Geographic distribution of confirmed cases of mpox reported to or identified by WHO from official public sources from 1 January 2022 to 22 May 2023, 17:00 CEST



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Data Source: World Health Organization
 Map Production: WHO Health Emergencies Programme
 Map Date: 23 May 2023



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Special focus – Can someone have mpox more than once?

The duration of immunity following primary mpox infection and protection from re-infection are currently unknown. Recent reports in the literature have noted cases where individuals previously diagnosed with mpox developed disease for a second time, raising questions regarding the nature of these occurrences. The distinction between re-infection (i.e. a new infection after complete clearance of the virus) and recrudescence of a prior infection (in which the virus has remained dormant in the body) is not well characterized for mpox. In this special focus, WHO has summarized peer-reviewed publications reporting cases of mpox re-infection, which can also be found in the mpox systematic literature review conducted by the Public Health agency of Canada. Table 2 below provides an overview of these cases and their main associated features as reported in these publications. These cases reported from countries in Europe are presented for discussion and do not represent all cases globally that may pertain to a second or subsequent diagnosis of mpox in the same person.

All six reported cases of presumed re-infection were in men and one of these was in a person living with HIV. The time elapsed between the two mpox diagnoses ranged from 20 days to 7 months. Among the cases reported, two individuals presumed to have hybrid immunity acquired through both vaccination and mpox infection still experienced a second episode of mpox^{1,2}. Three other cases had low neutralizing antibody (nAb) titers, indicating a poor humoral immune response to the initial mpox infection, and were not vaccinated³⁻⁵. In only one of these cases, genomic sequencing confirmed infection with a different strain 97 days after resolution of primary symptoms⁵, whereas for the others comparative genomic analysis was not available. In three cases, comparative analysis could not be performed due to inability to isolate virus from samples during the second mpox episodes, likely due to the low viral loads as indicated by high PCR cycle threshold values.

Among the reported cases, one individual had both primary syphilis and mpox², while four individuals experienced concurrent infections with *Neisseria gonorrhoeae* (GC) and/or *Chlamydia trachomatis* (CT)³⁻⁶. Three of these cases involved rectal infections with GC and/or CT at the same time as mpox symptoms affecting the genitourinary tract^{3,4,6}. Understanding the role of STIs and their potential to exacerbate or facilitate mpox infection is of utmost importance. As observed with other viral infections, this understanding becomes particularly relevant in cases involving the rectum, for which it is important to explore the role of mucosal immunity, and how disruptions to the mucosa may affect initial mpox infection or potential relapse, and whether monkeypox virus (MPXV) persists in tissue reservoirs. By elucidating the role of STIs in mpox infection we can enhance knowledge of the disease and develop effective strategies to care for patients.

Overall, these reported cases of recurrent mpox underscore the importance of ongoing data collection and reporting on the clinical course of mpox and any associated co-infections. These cases highlight the need to establish a standard case definition for mpox re-infection, which should incorporate a specified timeframe between the initial infection and onset of new symptoms; and a standard case definition for mpox recrudescence of an initial infection. Clinical data should be combined with genomic sequencing to determine whether the same or different strains of MPXV are causing the recurrent symptoms. Further research is needed to gain a comprehensive understanding of risk factors for recurrent mpox. Key areas that require investigation include:

- identification of factors that influence the development of neutralizing antibodies, such as disease severity and immune status;
- evaluation of vaccine-induced, infection-induced and hybrid immunity and their potential role in preventing recurrent mpox disease;
- exploration of the significance of cell-mediated immunity and mucosal immunity in the context of mpox;
- understanding the role of STIs and their potential to exacerbate or enhance mpox infection;
- identifying potential latent virus reservoir organs in the body and their role in recurrent mpox disease.

By conducting in-depth studies in these areas, we can enhance our knowledge of the underlying mechanisms involved in recurrent mpox disease and develop strategies to mitigate its occurrence.

Finally, it is imperative for healthcare providers and patients to remain vigilant regarding mpox and acknowledge that prior infection may not guarantee full protection from future recurrence. Therefore, if an individual presents with clinical symptoms suggestive of mpox, it is crucial for them to promptly seek medical attention, undergo testing for mpox along with HIV and other STIs as indicated, and receive appropriate medical care. By maintaining awareness and taking proactive measures, we can effectively address mpox and mitigate its impact on individuals and communities.

Table 2: Characteristics of recurrent mpox cases published in literature articles

	United Kingdom (1)	Spain(2)	Italy #1(3,4)	Italy #2(3,4)	Switzerland (6)	France (5)
Initial mpox case presentation						
Diagnosis date	July 2022	July 2022	May 2022	July 2022	May 2022	Not reported
Clinical features	rectal pain rectal discharge inguinal lymphadenopathy	penile lesions lymphadenopathy	asthenia odynophagia fever tenesmus	Proctitis lymphadenopathy lip lesion	penile lesions	two penile lesions
Second mpox case presentation						
Time since resolution of primary infection	4 months	4 months	4 months	20 days	7 months	97 days
Clinical features	headache back and neck pain anal sore aphthous mouth ulcer	penile lesions lymphadenopathy	penile ulcer	proctitis	perineal pain Inguinal lymphadenopathy	multiple penile lesions inguinal lymphadenopathy fever, headache myalgias
Risk factors						
Sex	Male	Male	Male	Male	Male	Male
HIV status	negative	negative	-positive - on ART - CD4 1099 cells/μL -VL < 20 copies/mL	negative	negative	negative
Vaccination status	MVA-BN x 2	as a child	unvaccinated	unvaccinated	unvaccinated	unvaccinated
Mpox Neutralizing Ab	unknown	unknown	<u>Initial case</u> 1/40 <u>2nd occurrence</u> 1/40	<u>Initial case</u> 1/20 <u>2nd occurrence</u> 1/160	unknown	<u>Initial case</u> 1/20
Co-infections	<u>Initial case</u> None <u>2nd occurrence</u> None	<u>Initial case</u> None <u>2nd occurrence</u> primary syphilis	<u>Initial case</u> rectal CT <u>2nd occurrence</u> rectal CT	<u>Initial case</u> none <u>2nd occurrence</u> rectal GC rectal CT SARS-CoV-2	<u>Initial case</u> urinary CT <u>2nd occurrence</u> rectal CT	<u>Initial case</u> None <u>2nd occurrence</u> pharyngeal GC
Genomic Sequencing (reported PCR information)	<u>Initial case</u> No <u>2nd occurrence</u> No	<u>Initial case</u> No <u>2nd occurrence</u> No (High Ct value, low viral load)	<u>Initial case</u> Yes [no clade details provided] <u>2nd occurrence</u> No (High Ct value, low viral load)	<u>Initial case</u> Yes [no clade details provided] <u>2nd occurrence</u> No (High Ct value, low viral load)	<u>Initial case</u> Clade IIb, Lineage B.1 <u>2nd occurrence</u> No	<u>Initial case</u> Clade IIb, Lineage B.1 <u>2nd occurrence</u> 14 nucleotide substitutions (of which 8 led to amino acid changes) One 8 nucleotide tandem repeat insertion One 13 nucleotide deletion (Low genome coverage)

*Lymphadenopathy: swollen lymph nodes, ART: Anti-retroviral therapy, GC: *Neisseria gonorrhoeae*, CT: *Chlamydia trachomatis*, Ct = cycle threshold

Special focus – Why do mpox outbreaks include cases in vaccinated persons?

Vaccination constitutes one of the major response strategies to protect against mpox infection. Orthopoxvirus vaccines have been developed with improved safety profiles compared to first-generation smallpox vaccines used for the eradication of smallpox. Among these newer products, those known as third and fourth generation vaccines have been licensed for the prevention of mpox in various regional and national jurisdictions; two third-generation vaccines (MVA-BN and LC16-KMB) have been deployed in response to the global mpox outbreak with no significant safety issues raised so far.⁷ In addition to prevention of mpox infection, mpox vaccines also help to reduce disease severity and hospitalization in vaccinated persons⁸.

WHO currently recommends vaccination of persons at risk for mpox, including for⁹:

1. Primary preventive or pre-exposure vaccination for individuals at high-risk of exposure in the ongoing global mpox outbreak:
 - Gay, bisexual, or other men who have sex with men (MSM) with multiple sexual partners
 - Individuals with multiple casual sexual partners
 - Sex workers
 - Health workers at risk of repeated exposure and laboratory personnel working with orthopoxviruses; clinical laboratory and health care personnel performing diagnostic testing for mpox; and outbreak response team members.
2. Post-exposure preventive vaccination (PEPV) is recommended for contacts of cases, ideally within four days of first exposure (and up to 14 days in the absence of symptoms).

Where available, vaccines for outbreak response have been offered primarily to the most affected and at-risk communities, most often gay, bisexual, or other men who have sex with men (MSM) with multiple partners. Several studies are ongoing to provide data on vaccine effectiveness in this group during the global response^{9,10}. Current vaccine effectiveness (VE) estimates for MVA-BN vaccine against mpox range from 36% to 86% for vaccination with a single dose and 66% to 89% for vaccination with two doses (WHO ongoing review, unpublished).

In addition, a case-control study of men aged ≥ 18 years who received a diagnosis of mpox during July 24–October 31 in New York compared to matched controls with rectal gonorrhoea or primary syphilis found an adjusted combined 1-dose (received ≥ 14 days earlier) or 2-dose VE of 75.7%. Another study evaluated the effectiveness of a single, subcutaneous dose of MVA-BN (third generation smallpox vaccine) in an observational, retrospective cohort study of 2054 male individuals who met vaccine eligibility criteria, including 1037 (50.5%) who had been vaccinated.¹¹ The study found that five and 16 infections were confirmed in vaccinated and unvaccinated individuals, respectively. The adjusted VE for one dose administered sub-cutaneously was estimated at 86% (95% confidence interval, 59–95%).

Recent reports have noted mpox occurring in persons who have been vaccinated. For instance, a cluster of 19 mpox cases in early 2023 (between 1 January and 3 April) was reported in the Centre-Val de Loire region in France;^{12,13} of these, 95% (18/19) of the cases (median age 40 years, range 24–56) self-identified as men who have sex with men and several reported having had several sexual partners. Of these cases, 53% (n = 10) had received two vaccine doses: five were vaccinated against smallpox in childhood and in 2022 received MVA-BN vaccine, and five were vaccinated in 2022 with two doses of MVA-BN. The proportion of those who received two doses of any vaccine in this cluster (53%) is higher than what was reported between October 2022– February 2023 at national level (25%).

Similarly, a cluster of 12 confirmed cases of mpox and one probable case occurred in the city of Chicago from 17 April 17 to 5 May 2023, as reported by the Chicago Department of Public Health.¹⁴ All the cases were among men with symptoms (median age 34 years, range 24–46 years). A total of 69% (nine of 13) cases were among men who had received two MVA-BN vaccine doses. None of the patients was hospitalized.

The significance of these ‘breakthrough’ infections needs to be explored, as several factors may contribute. These include the following:

1. **High vaccination coverage in the group most at risk:** Where there is high vaccination coverage in a group at risk of a particular infectious disease, when an outbreak occurs there are few unvaccinated susceptible persons left in the group; it is then expected that most new cases will occur amongst those vaccinated who did not develop full immunity with the first dose or series of doses. The outbreaks remain small as most vaccinated persons are fully protected and there are few unvaccinated individuals.¹⁵ This apparent paradox is one possible explanation for the breakthrough cases being seen for mpox, where vaccination may be high in the most affected group and vaccine effectiveness reported is good (e.g. 80%), but not total (100%). Vaccinated persons may nonetheless be protected from severe disease — the small numbers of cases in these outbreaks make this difficult to confirm without further study. The effect described above has been documented for measles, with an overall low measles incidence among all vaccinated individuals being associated with a high proportion of vaccinated persons amongst the ongoing cases^{16,17}. In one review,ⁱⁱ breakthrough cases of measles accounted for less than 10% of all cases in endemic regions, but more than 10% in areas with high immunization coverage¹⁶. To better understand this phenomenon for mpox, it will be important to gather data on immunization coverage achieved in high-risk groups during the outbreak.
2. **Primary vaccine failure** can occur in some individuals, as outlined above, where immunity is not generated by the vaccine after the recommended series of doses. This could be due to certain characteristics of the person being vaccinated, as for example being immunocompromised may contribute to failure to mount an immune response to a vaccine. Alternatively, the vaccine may have good but not perfect vaccine effectiveness even in immune competent populations, or can lose potency over time, such as when it has not been stored in accordance with the requirements for that product.
3. **Loss of vaccine-induced immunity over time:** Vaccination against smallpox was known to produce long-lasting and sometimes life-long immunity against that disease and breakthrough cases were rare. Smallpox vaccines were also shown to prevent mpox in field studies. For persons vaccinated before 1980, the extent of residual immunity to mpox after more than four decades is unknown. In one small outbreak described here, half the patients had reported childhood vaccination decades earlier. The duration of immunity following immunization with third-generation mpox vaccines is also not yet known. A study of MVA-BN among health workers in the Democratic Republic of the Congo revealed that while peak immune response occurred at 2 weeks after the second dose and declined thereafter, most vaccinees still had residual IgG antibody after two years of follow-up. Infections which occur in a period of waning immunity after an initial effective vaccination (referred to as secondary vaccine failure) often present as clinically less severe, have lower viral load and may be less transmissible. Studies to assess the nature and duration of protection from mpox vaccines and booster doses are underway¹⁸. It will be important to also ascertain if a booster dose can offer additional protection for those who may need it during outbreaks.
4. **Delayed post-exposure vaccination:** The timing of post exposure vaccination (PEPV) is important to its efficacy. WHO recommends that PEPV for mpox be administered within four days of exposure to a case or infected materials, or latest within 14 days in the ongoing absence of symptoms; however, the longer the delay in vaccination after exposure, the greater the likelihood that infection may take hold before vaccine immunity has developed. Infection in the presence of delayed post exposure vaccination may thus appear to be a case of vaccine breakthrough infection. It is therefore important to document the timeline from presumed or certain disease exposure to administration of PEPV, and to eventual onset of disease symptoms.
5. **Immune evasion of monkeypox virus strains** is also a possibility which could explain a lower-than-expected vaccine effectiveness in an outbreak. Nonetheless, so far the cases to date in these clusters are reported to be of the same clade IIb, lineage B as for most cases in the global outbreak.

Continued exposure to monkeypox virus puts all persons at risk, and it is likely that cases with fewer symptoms come to medical attention less often, thereby also creating a bias as vaccinated persons may be more likely to seek care than those not previously vaccinated.

ⁱⁱ This reference provides a technical explanation of why this apparent paradox occurs.

WHO recommends that all eligible persons at risk continue to be offered mpox vaccination while efforts to understand vaccine effectiveness and duration of immunity continue. Previous studies have also suggested that mpox vaccines are effective when combined with other preventive measures. It is important to continue to promote and implement all appropriate public health measures irrespective of vaccination status.

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Regional update: South-East Asia Region

Mpox situation update: South- East Asia Region

The first case of mpox in the South-East Asia Region was notified from India on 14 July 2022. As of 22 May 2023, a total of 51 laboratory-confirmed cases of mpox, including one death, have been reported from four of the eleven Member States in the Region: India, Indonesia, Sri Lanka, and Thailand. Of the 51 confirmed cases, 51% (n = 26) were reported from Thailand, followed by 43% (n = 22) from India, 4% (n = 2) from Sri Lanka and 2% (n = 1) from Indonesia.

Of the 51 cases with information available, 67% (n = 34) were males and 33% (n = 17) were females. The highest percentage of cases were reported among those 18-29 years of age (45%; n = 23) followed by 30-39 years (37%; n = 19). A total of 38 cases had information available on sexual orientation, of which 55% (n = 21) identified as heterosexual, 39.5% (n = 15) identified as men who have sex with men (MSM) and 5% (n = 2) reported as another sexual orientation. Sexual orientation is not known for 25.5% (n = 13) of cases. Among the cases with known HIV status (n = 23), 30% (n = 7) were HIV-positive. Of the cases for which information on the mode of transmission was available (n = 27), sexual encounters were reported in 96% (n = 26) of cases. A total of 35% (n = 18) of the 51 cases reported a history of international travel within the three weeks prior to symptom onset.

A total of 30 cases (58.5%) were known to be hospitalized, of whom 27 (90%) were hospitalized for treatment and three for isolation. None of the cases was known to be admitted to intensive care. One case died. The three most common symptoms were skin or mucosal lesions excluding oral or anogenital areas (n = 38; 74.5%), fever (n = 36; 71%) and anogenital dermatological skin/mucosal lesions (n = 30; 59%).

According to a recent country survey conducted by WHO (data were available from nine Member States for measures for cases, and 10 for contacts), six Member States required cases to be isolated at a hospital or managed facility; two at home; and one in either a hospital or managed facility, or at home. Two Member States required all contacts to be isolated, while five recommended that they limit their movement; for two, there is no measure.

WHO response to mpox in the WHO South-East Asia Region

Laboratory

Within three months of the onset of the global outbreak, WHO rapidly developed and disseminated technical guidance for the proper collection, storage, transportation and testing of specimens and provided molecular diagnostic reagents, positive controls and supplies to eight Member States to establish national testing capacities. WHO established a regional sample referral mechanism at the start of the outbreak to provide testing and characterization services to the Region. Four reference laboratories were identified, in India, Thailand and Australia. A regional webinar was co-hosted with the WHO Collaborating Centre at the Indian Council of Medical Research, the National Institute of Virology in Pune, India to provide training on monkeypox virus diagnostic modalities; the correct use of these assays is being supported through a new training programme being delivered both on-site and remotely. A global external quality assessment (EQA) programme for monkeypox virus testing is being arranged with 12 laboratories from 10 enrolled countries.

Clinical Management

Member States have developed national guidelines for the clinical management of mpox, supported by the WHO interim guidance. Clinicians and healthcare workers are encouraged to self-train using the WHO online course on mpox which was supplemented by global and regional webinars. India, Myanmar, Nepal and Thailand have provided an expression of interest to be a recipient of tecovirimat under the Monitored Emergency Use of Unregistered and Investigational Interventions (MEURI) protocol.

Infection Prevention and Control

IPC at healthcare facilities, as well as isolation and quarantine, has been largely strengthened to some extent to cope with respiratory and contact transmission, through the COVID-19 pandemic. These have significantly benefitted the IPC response to mpox. WHO engaged with Member States to review the draft outline of Global Strategy on infection prevention and control (IPC) in both health and long-term care settings, 2023–2031 which also provided an opportunity to reinforce the importance of IPC for mpox. Many Member States are working towards developing or strengthening and revising existing national IPC guidelines in line with WHO interim guidance on IPC. WHO and Member States in the Region have been reinforcing messaging on the importance of IPC in Health Care Facilities (HCF) during significant occasions and on important platforms (e.g., the World Hand Hygiene Day and following the recent upsurge of cases of COVID-19 in the region).

Technical guidance and other resources

Strategic Planning and Global Support

- WHO factsheet on monkeypox, 18 April 2022. <https://www.who.int/news-room/fact-sheets/detail/monkeypox>
- WHO commentary on the naming of mpox disease and monkeypox virus clades has been published in the Lancet Infectious Diseases. 6 February 2023. [New nomenclature for mpox \(monkeypox\) and monkeypox virus clades](#)
- WHO recommends new name for monkeypox disease-28 November 2022 <https://www.who.int/news/item/28-11-2022-who-recommends-new-name-for-monkeypox-disease>
- Monkeypox Strategic Preparedness, Readiness and Response Plan (SPRP) Operational planning guidelines – 2 November 2022 <https://www.who.int/publications/m/item/monkeypox-strategic-preparedness--readiness--and-response--operational-planning-guidelines>
- WHO Emergency Appeal: Monkeypox - July 2022 – June 2023, 13 October 2022 <https://www.who.int/publications/m/item/who-emergency-appeal--monkeypox---july-2022---june-2023>
- Monkeypox Strategic Preparedness, Readiness, and Response Plan (SPRP)- 5 October 2022, [https://www.who.int/publications/m/item/monkeypox-strategic-preparedness--readiness--and-response-plan-\(sprp\)](https://www.who.int/publications/m/item/monkeypox-strategic-preparedness--readiness--and-response-plan-(sprp))
- Invited comment. Why the monkeypox outbreak constitutes a public health emergency of international concern. Ghebreyesus TA. *BMJ* 2022;378:o1978. 09 August 2022. <https://www.bmj.com/content/378/bmj.o1978>

International Health Regulations Emergency committee and Temporary Recommendations of the Director-General

- WHO Fifth meeting of the International Health Regulations (2005) (IHR) Emergency Committee regarding the multi-country outbreak of mpox (monkeypox), 10 May 2023. [https://www.who.int/news/item/11-05-2023-fifth-meeting-of-the-international-health-regulations-\(2005\)-\(ihr\)-emergency-committee-on-the-multi-country-outbreak-of-monkeypox-\(mpox\)](https://www.who.int/news/item/11-05-2023-fifth-meeting-of-the-international-health-regulations-(2005)-(ihr)-emergency-committee-on-the-multi-country-outbreak-of-monkeypox-(mpox))
- WHO fourth meeting of the International Health Regulations (2005) (IHR) Emergency Committee regarding the multi-country outbreak of monkeypox, 15 February 2023. [https://www.who.int/news/item/15-02-2023-fourth-meeting-of-the-international-health-regulations-\(2005\)-\(ihr\)-emergency-committee-on-the-multi-country-outbreak-of-monkeypox-\(mpox\)](https://www.who.int/news/item/15-02-2023-fourth-meeting-of-the-international-health-regulations-(2005)-(ihr)-emergency-committee-on-the-multi-country-outbreak-of-monkeypox-(mpox))
- WHO Third meeting of the International Health Regulations (2005) (IHR) Emergency Committee regarding the multi-country outbreak of monkeypox, 1 November 2022. [https://www.who.int/news/item/01-11-2022-third-meeting-of-the-international-health-regulations-\(2005\)-\(ihr\)-emergency-committee-regarding-the-multi-country-outbreak-of-monkeypox](https://www.who.int/news/item/01-11-2022-third-meeting-of-the-international-health-regulations-(2005)-(ihr)-emergency-committee-regarding-the-multi-country-outbreak-of-monkeypox)
- WHO Second meeting of the International Health Regulations (2005) (IHR) Emergency Committee regarding the multi-country outbreak of monkeypox, 23 July 2022. [https://www.who.int/news/item/23-07-2022-second-meeting-of-the-international-health-regulations-\(2005\)-\(ihr\)-emergency-committee-regarding-the-multi-country-outbreak-of-monkeypox](https://www.who.int/news/item/23-07-2022-second-meeting-of-the-international-health-regulations-(2005)-(ihr)-emergency-committee-regarding-the-multi-country-outbreak-of-monkeypox)
- WHO Director-General's statement at the press conference following IHR Emergency Committee regarding the multi-country outbreak of monkeypox, 23 July 2022. <https://www.who.int/director-general/speeches/detail/who-director-general-s-statement-on-the-press-conference-following-ihr-emergency-committee-regarding-the-multi-country-outbreak-of-monkeypox--23-july-2022>

WHO Interim technical guidance

- Surveillance, case investigation and contact tracing for mpox (monkeypox): interim guidance, 22 December 2022. <https://www.who.int/publications/i/item/WHO-MPX-Surveillance-2022.4>
- WHO Vaccines and immunization for monkeypox: Interim guidance, 16 November 2022. <https://apps.who.int/iris/bitstream/handle/10665/364527/WHO-MPX-Immunization-2022.3-eng.pdf>
- Clinical management and infection prevention and control for monkeypox: Interim rapid response guidance, 10 June 2022. <https://www.who.int/publications/i/item/WHO-MPX-Clinical-and-IPC-2022.1>
- Emergency use of unproven clinical interventions outside clinical trials: ethical considerations: <https://www.who.int/publications-detail-redirect/9789240041745>
- WHO Technical brief (interim) and priority actions: enhancing readiness for monkeypox in WHO South-East Asia Region, 7 July 2022. <https://cdn.who.int/media/docs/default-source/searo/whe/monkeypox/searo-mpx-tbrief22.pdf>

Surveillance

- WHO Global clinical data platform for monkeypox case report form (CRF), 21 July 2022, https://www.who.int/publications/i/item/WHO-MPX-Clinical_CRF-2022.3

Data management

- Monkeypox Case and contact investigation form (CIF) and minimum dataset Case reporting form (CRF). 19 August 2022. [https://www.who.int/publications/m/item/monkeypox-minimum-dataset-case-reporting-form-\(crf\)](https://www.who.int/publications/m/item/monkeypox-minimum-dataset-case-reporting-form-(crf))
- The WHO Global Clinical Platform for monkeypox, 14 June 2022. <https://www.who.int/tools/global-clinical-platform/monkeypox>
- WHO Go.Data: Managing complex data in outbreaks. <https://www.who.int/tools/godata>

Risk communication and community engagement and Public Health Advice

- Updated (V3) Public health advice for gay, bisexual and other men who have sex with men and mpox 9 March 2023: <https://www.who.int/publications/m/item/monkeypox-public-health-advice-for-men-who-have-sex-with-men>
- Public health advice on mpox and sex-on-premises venues and events 01 March 2023: [https://www.who.int/publications/m/item/public-health-advice-on-mpox-\(monkeypox\)-and-sex-on-premises-venues-and-events](https://www.who.int/publications/m/item/public-health-advice-on-mpox-(monkeypox)-and-sex-on-premises-venues-and-events)
- Infographic on getting tested for mpox 27 February: <https://www.who.int/multi-media/details/getting-tested-for-mpox--what-you-need-to-know>
- Mpox Q&A on mpox testing for health workers and individuals: <https://www.who.int/news-room/questions-and-answers/item/testing-for-mpox--health-workers> & <https://www.who.int/news-room/questions-and-answers/item/testing-for-mpox--individuals-and-communities>

- Public health advice for sex workers on monkeypox 30 September 2022. <https://www.who.int/publications/m/item/public-health-advice-for-sex-workers-on-monkeypox>
- Risk communication and community engagement public health advice on understanding, preventing and addressing stigma and discrimination related to monkey pox 1 September 2022. <https://www.who.int/publications/m/item/communications-and-community-engagement-interim-guidance-on-using-inclusive-language-in-understanding--preventing-and-addressing-stigma-and-discrimination-related-to-monkeypox>
- Monkeypox Q&A, 31 August 2022. <https://www.who.int/news-room/questions-and-answers/item/monkeypox>
- Risk communication and community engagement (RCCE) for monkeypox outbreaks: Interim guidance, 24 June 2022. <https://www.who.int/publications/i/item/WHO-MPX-RCCE-2022.1>
- Public health advice for gatherings during the current monkeypox outbreak, 28 June 2022: <https://www.who.int/publications/i/item/WHO-MPX-Gatherings-2022.1>
- Interim advice for public health authorities on summer events during the monkeypox outbreak in Europe, 2022. 14 June 2022. <https://www.who.int/europe/publications/m/item/interim-advice-for-public-health-authorities--on-summer-events-during-the-monkeypox--outbreak-in-europe--2022>
- Interim advice on Risk Communication and Community Engagement during the monkeypox outbreak in Europe, 2022. Joint report by WHO Regional office for Europe/ECDC, 2 June 2022. https://www.euro.who.int/_data/assets/pdf_file/0009/539046/ECDC-WHO-interim-advice-RCCE-Monkeypox-2-06-2022-eng.pdf
- WHO Monkeypox outbreak: update and advice for health workers, 26 May 2022. https://www.who.int/docs/default-source/coronaviruse/risk-comms-updates/update_monkeypox-.pdf?sfvrsn=99baeb03_1

EPI - WIN Webinars and Updates

- The recordings of the previous [EPI-WIN Webinars](#) related to current monkeypox outbreak:
- WHO EPI-WIN webinar: Changing perspectives of the mpox outbreak (22 February 2023)
- WHO monkeypox technical briefing for the transport and tourism sector, 5 October 2022: <https://www.who.int/news-room/events/detail/2022/10/05/default-calendar/technical-briefing-on-monkeypox-for-transport-and-tourism-sector>
- [Managing stigma and discrimination in health-care settings in public health emergencies such as monkeypox](#) (Sept. 22, 2022)
- [How is monkeypox spreading? What do we know so far](#) (July 27, 2022)
- [Monkeypox outbreak and mass gatherings](#) (June 24, 2022)

EPI-WIN updates

- [Update 79: Monkeypox outbreak update: Situation - transmission - countermeasures](#)
- [Update 78: Monkeypox and mass gatherings](#)
- [Update 77: Monkeypox outbreak, update and advice for health workers](#)

Laboratory and diagnostics

- Monkeypox: experts give virus variants new names, 12 August 2022. <https://www.who.int/news/item/12-08-2022-monkeypox--experts-give-virus-variants-new-names>
- WHO Laboratory testing for the monkeypox virus: Interim guidance, 23 May 2022. <https://apps.who.int/iris/handle/10665/354488>
- WHO Guidance on regulations for the transport of infectious substances 2021-2023, 25 February 2021. <https://www.who.int/publications/i/item/9789240019720>
- Genomic epidemiology of monkeypox virus. <https://nextstrain.org/monkeypox?c=country>

One Health and animal health

- [WOAH Risk Guidance on Reducing Spillover of Mpox \(Monkeypox\) virus from Humans to Wildlife, Pet Animals and other Animals](#)
- [WOAH Website and FAQs on Monkeypox in animals](#)

Disease Outbreak News and situation reports

- Monkeypox outbreak 2022: <https://www.who.int/emergencies/situations/monkeypox-oubreak-2022>
- Multi-country outbreak of mpox, External situation report #22- 11 May 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report--22---11-may-2023>
- Multi-country outbreak of mpox, External situation report #21- 27 April 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report-21---27-april-2023>
- Multi-country outbreak of mpox, External situation report #20- 13 April 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report--20--13-april-2023>
- Multi-country outbreak of mpox, External situation report #19- 30 March 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report--19--30-march-2023>
- Multi-country outbreak of mpox, External situation report #18- 16 March 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report--18---16-march-2023>
- Multi-country outbreak of mpox, External situation report #17- 2 March 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report---17---2-march-2023>
- Multi-country outbreak of mpox, External situation report #16- 16 February 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report--16---16-february-2023>
- Multi-country outbreak of mpox, External situation report #15- 2 February 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report-15--2-february-2023>
- Multi-country outbreak of mpox, External situation report #14- 19 January 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report-14--19-january-2023>
- Multi-country outbreak of mpox, External situation report #13- 5 January 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report--13---5-january-2023>

- Multi-country outbreak of mpox, External situation report #12- 14 December 2022: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox-external-situation-report-12--14-december-2022>
- Multi-country outbreak of mpox, External situation report #11- 1 December 2022: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report--11---1-december-2022>
- Multi-country outbreak of monkeypox, External situation report #10- 16 November 2022: <https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--10---16-november-2022>
- Multi-country outbreak of monkeypox, External situation report #9- 2 November 2022: <https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--9---2-november-2022>
- Multi-country outbreak of monkeypox, External situation report #8- 19 October 2022: <https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--8---19-october-2022>
- Multi-country outbreak of monkeypox, External situation report #7- 5 October 2022: <https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--7---5-october-2022>
- Multi-country outbreak of monkeypox, External situation report #6- 21 September 2022: <https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--6---21-september-2022>
- Multi-country outbreak of monkeypox, External situation report #5- 7 September 2022: <https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--5---7-september-2022>
- Multi-country outbreak of monkeypox, External situation report #4- 24 August <https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--4---24-august-2022>
- Multi-country outbreak of monkeypox, External situation report #3 - 10 August 2022: <https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--3---10-august-2022>
- WHO Multi-country outbreak of monkeypox, External situation report #2 – 25 July 2022: <https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--2---25-july-2022>
- WHO Multi-country outbreak of monkeypox, External situation report #1 - 6 July 2022: <https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--1---6-july-2022>
- WHO disease outbreak news: Monkeypox, all items related to multi-country outbreak: <https://www.who.int/emergencies/emergency-events/item/2022-e000121>
- WHO disease outbreak news: Monkeypox, all previous items including endemic countries and traveler-associated outbreaks: <https://www.who.int/emergencies/emergency-events/item/monkeypox>

Training and Education

- WHO monkeypox outbreak toolbox, June 2022. <https://www.who.int/docs/default-source/documents/emergencies/outbreak-toolkit/monkeypox-toolbox-20112019.pdf>
- Health topics – Monkeypox: <https://www.who.int/health-topics/monkeypox>
- Open WHO. Online training module. Monkeypox: Introduction. 2020
 - English: <https://openwho.org/courses/monkeypox-introduction>
 - Français: <https://openwho.org/courses/variole-du-singe-introduction>
- Open WHO. Extended training. Monkeypox epidemiology, preparedness and response. 2021.
 - English: <https://openwho.org/courses/monkeypox-intermediate>
 - Français: <https://openwho.org/courses/variole-du-singe-intermediaire>

Other Resources

- WHO AFRO Weekly Bulletin on Outbreaks and Other Emergencies, all previous items: <https://www.afro.who.int/health-topics/disease-outbreaks/outbreaks-and-other-emergencies-updates>
- WHO 5 moments for hand hygiene. <https://www.who.int/campaigns/world-hand-hygiene-day>
- WHO One Health. <https://www.who.int/health-topics/one-health>
- World Organisation for Animal Health, founded as OIE: Monkeypox. <https://www.woah.org/en/disease/monkeypox/>
- Joint WHO Regional Office for Europe - European Centre for Disease Prevention and Control, Monkeypox surveillance bulletin [Situation reports \(who.int\)](https://www.who.int/europe/publications/m/item/monkeypox-surveillance-bulletin)
- Joint WHO Regional Office for Europe - European Centre for Disease Prevention and Control, Monkeypox Resource toolkit to support national authorities and event organizers in their planning and coordination of mass and large gathering events. <https://www.who.int/europe/tools-and-toolkits/monkeypox-resource-toolkit-for-planning-and-coordination-of-mass-and-large-gathering-events/>
- WHO. Monkeypox & mass gatherings. Recommendations for mass gatherings during a monkeypox outbreak. https://cdn.who.int/media/docs/default-source/epi-win/update78_monkeypox-mass-gatherings.pdf?sfvrsn=dfc9ee5a_1&download=true
- WHO European Region Interim advice for public health authorities on summer events during the monkeypox outbreak in Europe, 2022 <https://www.who.int/europe/publications/m/item/interim-advice-for-public-health-authorities--on-summer-events-during-the-monkeypox--outbreak-in-europe--2022>
- Weekly epidemiological record (WER) no.11, 16 March 2018, Emergence of monkeypox in West Africa and Central Africa 1970-2017. <http://apps.who.int/iris/bitstream/handle/10665/260497/WER9311.pdf;jsessionid=7AB72F28D04CFE6CE24996192FC478FF?sequence=1> Jezek Z., Fenner F.: Human Monkeypox. Monogr Virol. Basel, Karger, 1988, vol 17, pp 1-5. doi: 10.1159/isbn.978-3-318-04039-5
- Clinical management and infection prevention and control for monkeypox: Interim rapid response guidance, 10 June 2022. <https://www.who.int/publications/i/item/WHO-MPX-Clinical-and-IPC-2022.1>

- Monkeypox in the Region of the Americas - Risk assessment. <https://www.paho.org/en/documents/monkeypox-region-americas-risk-assessment>
- Atlas of mpox lesions: a tool for clinical researchers. <https://apps.who.int/iris/bitstream/handle/10665/366569/WHO-MPX-Clinical-Lesions-2023.1-eng.pdf>

Annex 1: Data, table and figure notes

Caution must be taken when interpreting all data presented. Differences are to be expected between information products published by WHO, national public health authorities, and other sources using different inclusion criteria and different data cut-off times. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change. Case detection, definitions, testing strategies, reporting practice, and lag times differ between countries/territories/areas. These factors, amongst others, influence the counts presented, with variable underestimation of true case and death counts, and variable delays to reflecting these data at the global level.

^[i]‘Countries’ may refer to countries, territories, areas or other jurisdictions of similar status. The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Annex 2: Confirmed cases of mpox by WHO region and country from 1 January 2022 to 22 May 2023, 17:00 CEST.

*Countries with no reported cases for more than 21 days

WHO Region	Country	Total Confirmed Cases	Total Deaths [#]
African Region	Benin*	3	0
	Cameroon*	18	3
	Central African Republic*	30	1
	Congo*	5	0
	Democratic Republic of the Congo*	556	0
	Ghana*	125	4
	Liberia*	12	0
	Mozambique*	1	1
	Nigeria	837	9
	South Africa*	5	0
Eastern Mediterranean Region	Bahrain*	2	0
	Egypt*	3	0
	Iran (Islamic Republic of) *	1	0
	Jordan*	1	0
	Lebanon*	27	0
	Morocco*	3	0
	Pakistan	3	0
	Qatar*	5	0
	Saudi Arabia*	8	0
	Sudan*	19	1
	United Arab Emirates*	16	0
European Region	Andorra*	4	0
	Austria*	328	0

	Belgium*	793	2
	Bosnia and Herzegovina*	9	0
	Bulgaria*	6	0
	Croatia*	33	0
	Cyprus*	5	0
	Czechia*	71	1
	Denmark*	196	0
	Estonia*	11	0
	Finland*	42	0
	France	4 146	0
	Georgia*	2	0
	Germany*	3 691	0
	Gibraltar*	6	0
	Greece	88	0
	Greenland*	2	0
	Hungary*	80	0
	Iceland*	16	0
	Ireland	229	0
	Israel*	262	0
	Italy*	957	0
	Latvia*	6	0
	Lithuania*	5	0
	Luxembourg*	57	0
	Malta*	34	0
	Monaco*	3	0
	Montenegro*	2	0
	Netherlands	1 264	0
	Norway*	95	0
	Poland*	217	0
	Portugal*	953	1
	Republic of Moldova*	2	0
	Romania*	47	0
	Russian Federation*	2	0
	San Marino*	1	0
	Serbia*	40	0
	Slovakia*	14	0
	Slovenia*	47	0
	Spain	7 551	3
	Sweden*	260	0
	Switzerland*	552	0
	The United Kingdom	3 742	0
	Türkiye*	12	0
	Ukraine*	5	0
Region of the Americas	Argentina	1 129	2
	Aruba*	3	0
	Bahamas*	2	0
	Barbados*	1	0
	Bermuda*	1	0
	Bolivia (Plurinational State of)*	265	0
	Brazil	10 941	16

	Canada*	1 484	0
	Chile	1 441	2
	Colombia*	4 090	0
	Costa Rica	222	0
	Cuba*	8	1
	Curaçao *	3	0
	Dominican Republic*	52	0
	Ecuador*	533	3
	El Salvador*	104	0
	Guadeloupe*	1	0
	Guatemala	405	1
	Guyana*	2	0
	Honduras	44	0
	Jamaica*	21	0
	Martinique*	7	0
	Mexico	4 017	26
	Panama	232	1
	Paraguay*	125	0
	Peru*	3 800	20
	Puerto Rico*	211	0
	Saint Martin*	1	0
United States of America	30 194	42	
Uruguay*	19	0	
Venezuela (Bolivarian Republic of) *	12	0	
South-East Asia Region	India*	22	1
	Indonesia*	1	0
	Sri Lanka*	2	0
	Thailand	26	0
Western Pacific Region	Australia	145	0
	China	91	0
	Guam*	1	0
	Japan	149	0
	New Caledonia*	1	0
	New Zealand*	41	0
	Philippines	5	0
	Republic of Korea	80	0
	Singapore	25	0
	Viet Nam*	2	0
Cumulative	111 Countries/territories/areas	87 529	141

#Only deaths among confirmed cases are reported here; the reported number of deaths due to mpox among suspected cases is available at regional or national level.