

# Multi-country outbreak of mpox

External Situation Report 34, published 28 June 2024

Data as received by WHO from national authorities as of 31 May 2024

Mpox long-term risk assessment (as of December 2023) <sup>1</sup>	Laboratory-confirmed cases	Deaths	Countries/areas/territories
<ul style="list-style-type: none"><li>For the general population in countries with historical mpox transmission and their neighbours: <b>MODERATE</b>.</li><li>For gay men, bisexual men, other men who have sex with men, trans and gender diverse people, and sex workers: <b>MODERATE</b>.</li><li>For the general population in countries not affected prior to the current outbreak: <b>LOW</b>.</li><li>For the general population in the Democratic Republic of the Congo: <b>HIGH</b></li></ul>	97 745	203	116

## Report highlights

- In May 2024, a total of 646 new laboratory-confirmed cases of mpox and 15 deaths were reported to WHO from 26 countries, illustrating continuing transmission of mpox across the world. The most affected WHO regions, ordered by number of laboratory-confirmed cases, were the African Region, the European Region, the Region of the Americas, the Western Pacific Region and the South-East Asia Region. The Eastern Mediterranean region did not report any cases in May 2024.
- As reporting from countries to WHO has been declining, the current reported global data most likely underestimate the actual number of mpox cases.
- Within the African Region, the Democratic Republic of the Congo reported most (99%) of the confirmed mpox cases in the reporting month. With limited access to testing in rural areas, 18% of clinically compatible (reported as suspected) cases in the country are tested, therefore the confirmed case counts are underestimates of the true burden.
- This issue also features:
  - An update on the mpox situation in South Africa;
  - An update on vaccines and immunization for mpox, with information from partners.
- WHO welcomes the announcement by the Democratic Republic of the Congo national regulatory authority of the emergency authorization for use of MVA-BN and LC16 mpox vaccines, which will enable the country to import and deploy mpox vaccines for the national outbreak response.

<sup>1</sup> These risks represent population average risk; individual risk varies with behaviour, geographic location, immune status, and other factors.

## Epidemiological Update

Data source: [2022-24 Mpox \(Monkeypox\) Outbreak: Global Trends](#)

From 1 January 2022 through 31 May 2024, a cumulative total of 97 745 laboratory-confirmed cases of mpox, including 203 deaths, were reported to WHO from 116 countries/territories/areas (hereafter 'countries') in all six WHO Regions (Table 1). A total of 646 new cases were reported in May 2024, which represents a 2.3% decline in the number of new cases reported as compared to April 2024, including some cases retrospectively reported for previous months. Most cases in May 2024 were reported from the African Region (43.5%), followed by the European Region (21.8%), and the Region of the Americas (20.4%). All regions reported an increase in case counts in May 2024 compared to the previous month except the Region of the Americas (n = 132 vs 316). No case was reported by the Eastern Mediterranean Region.

WHO continues to encourage all countries to ensure that mpox is a notifiable disease and to report mpox cases, including reporting when no cases have been detected (known as 'zero-reporting', as outlined in the Standing Recommendations on mpox issued by the WHO Director General). This report does not highlight non-reporting countries. Therefore, it should be noted that an absence of reported cases from a country may be due to the country not reporting, rather than having no cases. Reporting to WHO has been declining, therefore, the decline in reported cases should be interpreted with caution.

In May 2024, 15 of 26 (58%) reporting countries showed an increase in cases compared to April 2024. The Democratic Republic of the Congo reported the highest relative increase in the African Region (n = 277 vs 157), France (n = 31 vs 12) reported the highest increase in the European Region, Mexico (n = 12 vs nine) reported the highest increase in the Region of the Americas, Australia (n = 33 vs five) reported the highest increase in the Western Pacific Region, and Thailand (n = 21 vs 19) reported the highest increase in the South-East Asia Region. From 1 January 2022 to of 31 May 2024, the ten countries that reported the highest cumulative number of confirmed cases globally are the United States of America (n = 32 961), Brazil (n = 11 212), Spain (n = 8 030), France (n = 4 249), Colombia (n = 4 238), Mexico (n = 4 109), the United Kingdom (n = 3 952), Germany (n = 3 847), Peru (n = 3 812), and China (n = 2 403). Together, these countries account for 81% of the cases reported globally.

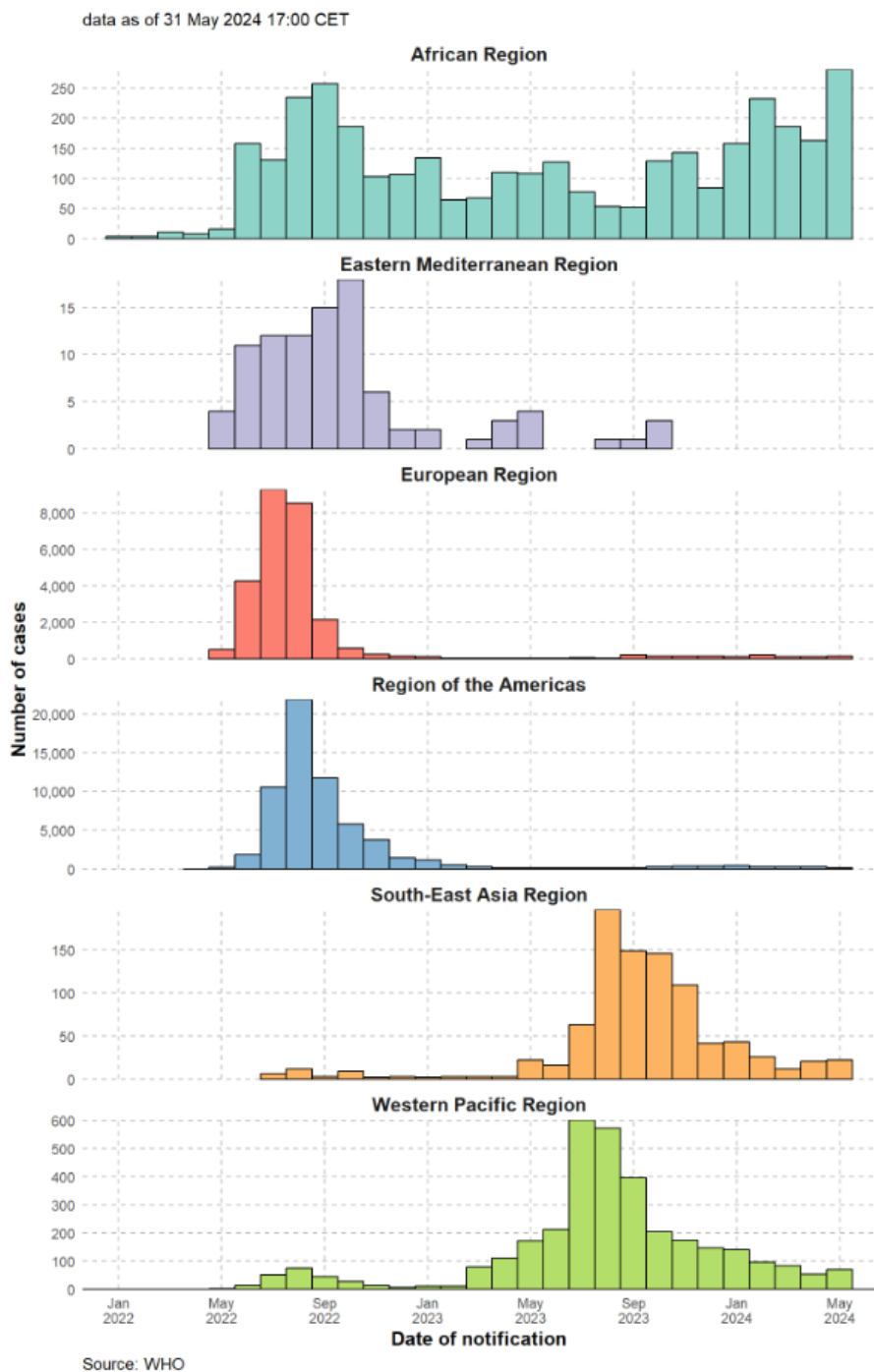
**Table 1. Number of cumulative laboratory-confirmed mpox cases and deaths reported to WHO, by WHO Region, from 1 January 2022 through 31 May 2024**

WHO Region	Total confirmed cases	Total deaths among confirmed cases	New cases reported in April	New cases reported in May	Monthly change in cases (%)
Region of the Americas	62 564	141	316	132	-58.0
European Region	27 429	10	109	141	29.0
African Region	3 383	30	162	281	73.0
Western Pacific Region	3 360	10	53	70	32.0
South-East Asia Region	914	11	21	22	4.8
Eastern Mediterranean Region	95	1	0	0	-
<b>Total</b>	<b>97 745</b>	<b>203</b>	<b>661</b>	<b>646</b>	<b>-2.3</b>

NB. The number of reports for previous months include retroactively assigned case reports received since the report for April

The epidemic curves shown in Figure 1 suggest that the outbreak continues at a low level of transmission in the Region of the Americas, the European Region, the South-East Asian Region, and the Western Pacific. The African region shows fluctuating levels of case reporting with a general rising trend.

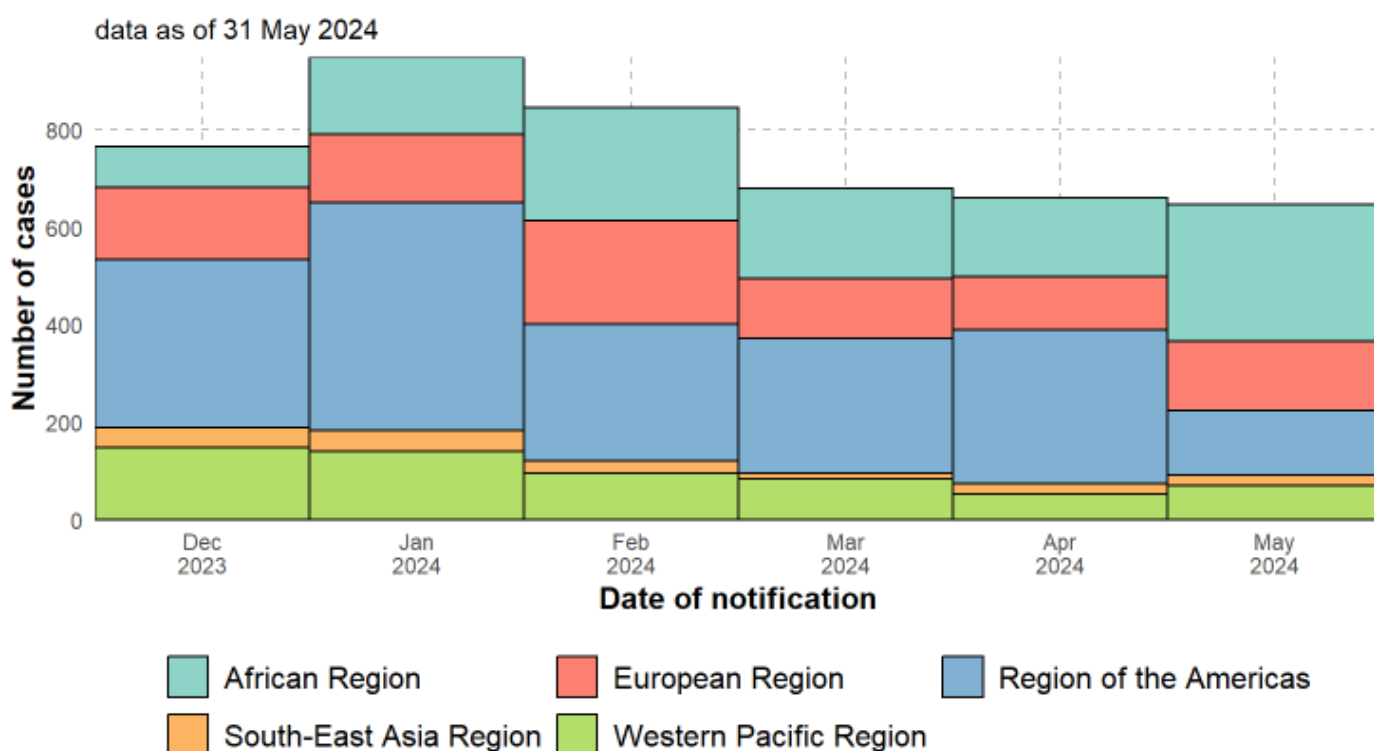
**Figure 1. Epidemic curves of monthly aggregated laboratory-confirmed cases of mpox reported to WHO, by WHO Region, from 1 January 2022 to 31 May 2024**



\*Figure 1 shows aggregated monthly data, ending on the last day of the month. **Note the different scales of the y-axes.**

Figure 2 shows that the number of monthly confirmed mpox cases reported globally in the last six months (1 December 2023 – 31 May 2024) fluctuated between 600 and 1000 cases (averaging 758 cases per month), with most cases reported by the Region of the Americas, followed by the African Region, and the European Region. While May 2024 is the fifth month in a row with a decline in cases compared to preceding months, as previously mentioned, this needs to be interpreted with caution given the usual lag in reporting for some areas, and the decline in global data reporting. Additionally, delayed retrospective reporting, observed in recent months for some countries, could change the overall global trend. It is notable that this is the first time that the African region is confirming more mpox cases than any other, which can be attributed to both the rising case count in the region as well as the concurrent efforts to expand access to laboratory confirmation of cases, particularly in the Democratic Republic of the Congo.

**Figure 2. Epidemic curve of monthly aggregated number of confirmed mpox cases reported by WHO region, for the last six months, 1 December 2023 – 31 May 2024.**



Source: WHO

**Other key epidemiological findings:**

The information presented below is a summary of the main epidemiological characteristics of mpox cases based on a detailed case-based data shared by Member States from 01 January 2022 – 31 May 2024.

- Globally, 96.4% (85 997/89 202) of confirmed cases with available data are male, with a median age of 34 years (interquartile range: 29 - 41 years). The age and sex distribution of cases remain stable over time, especially outside the African Region, as males from 18 - 44 years old continue to be disproportionately affected by this outbreak and account for 79.4% of reported cases.
- Among cases with age data available, 1.3% (1 158 / 91 636) are aged 0 - 17 years, including 334 (0.4%) aged 0 - 4 years. The majority of confirmed mpox cases aged 0 - 17 years were reported from the Region of the Americas (708 / 1 158; 61%). The overall proportion of cases under 18 years of age in the Region of the

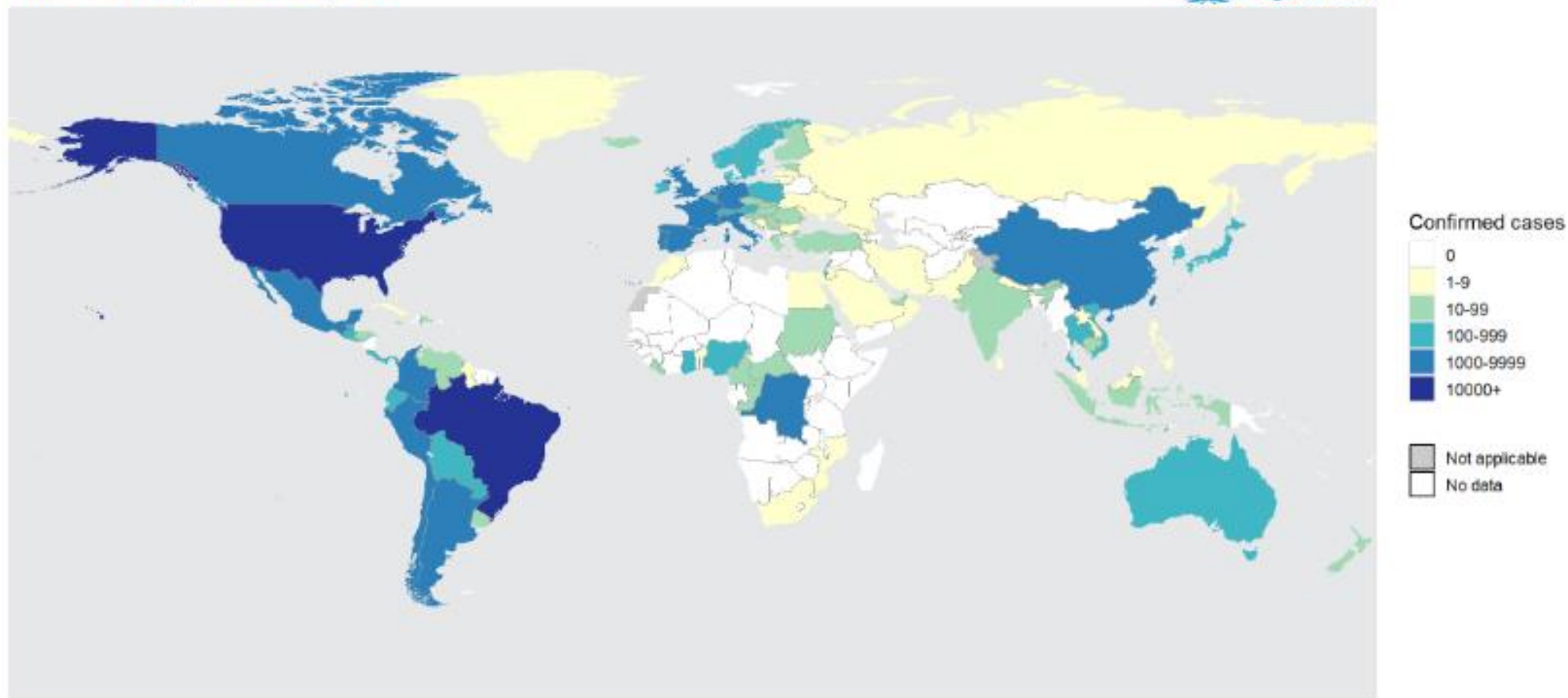
Americas is 1.1%, similar to the proportion observed globally. In newly affected countries, children have been the least affected group in the outbreak. Conversely, in historically affected countries such as the Democratic Republic of the Congo, children under 15 years of age represent most reported mpox cases. Due to improving but still limited access to testing, these are classified in-country as suspected cases (i.e. clinically compatible cases which, following investigation, meet the national case definition for mpox) and are not included in this section of the report.

- Among modes of transmission, sexual contact is the most commonly reported (18 860 of 22 550, 83.6%), followed by person-to-person non-sexual contact. This pattern has persisted over the last six months, with 95.0% (597 / 626) of new cases reporting sexual contact. Detailed information on the routes of transmission is not available for most cases from the African Region, thus, the available information on transmission does not fully describe the spread of the virus in this Region, which is more diverse and includes zoonotic exposure in addition to human-to-human transmission.
- Among cases where at least one symptom is reported (n = 36 155), the most common symptom is any rash (88.6% of cases), followed by fever (58.0%), and systemic rash or genital rash (54.8% and 49.6% respectively). The symptomatology of cases has been very consistent over time in this outbreak. Although information on clinical presentation from countries in East, West and Central Africa is missing in the global surveillance data, other sources of information support rash being the main mpox symptom among cases there as well.
- Around half (18 425 / 35 512, 51.9%) of cases with available information on their HIV status are reported to be in persons living with HIV. This proportion approximates that reported in the last six months (243 / 516; 43.2%) and is related to the common risk factor of sexual exposure between the two conditions. Information on HIV status is not available for most cases in the African Region, and the above description might not be fully representative of cases with different demographics in this region.

Figure 3. Geographic distribution of confirmed cases of mpox reported to or identified by WHO from official public sources, from 1 January 2022 to 31 May 2024

### Total mpox cases

from 1 Jan 2022, as of 31 May 2024



## Spotlight on South Africa

As of 26 June 2024, the Republic of South Africa had notified the WHO of 16 confirmed cases of mpox, including three deaths, during 2024. These cases were confirmed from 8 May 2024 to 23 June 2024 and 15 of the 16 patients were hospitalized. Prior to this, at the height of the multi-country outbreak, the Republic of South Africa had reported five mpox cases and no deaths from June 2022 to August 2022. The new reports represent the first mpox cases detected in the country since August 2022, and the first deaths altogether.

These cases have been reported from three (of nine) provinces: KwaZulu-Natal (eight cases; two deaths), Gauteng (seven cases; one death), and the Western Cape (one case). None of them had reported recent international travel or attendance at events or activities which may have introduced a higher risk of mpox.

The profiles of these cases reflect the well-described features of the 2022 - 2024 multi-country mpox outbreak. All these cases have been in men aged 23 to 43 years. Of these 16 cases, 11 cases were gay, bisexual or other men who have sex with men, and the most commonly reported context of likely exposure was sexual contact. For the five patients whose samples had been sequenced to date, clade IIb monkeypox virus (MPXV) was confirmed.

These cases all experienced extensive skin lesions, and 15 out of 16 cases progressed to severe disease requiring hospitalization. Eleven cases have been reported to be persons living with HIV (PLHIV), with either unmanaged or only recently diagnosed HIV infection. There have been three deaths among the 16 confirmed cases, resulting in a case fatality ratio (CFR) of 19%, much higher than the clade IIb mpox global CFR which was 0.2% overall as at the end of May 2024. This disproportionate burden of HIV, severe mpox disease, and deaths suggests that MPXV is likely circulating in the community and has reached the most susceptible individuals. In a context where there may be stigma associated with sexual behaviour and/or HIV infection, limited access to health care services will be compounded by hesitancy to seek early diagnosis and care for mpox.

In the face of this unusual epidemiological picture, the country has promptly responded to this outbreak, initiating action across several response pillars: surveillance and diagnostics; case management; risk communication and community engagement (RCCE); vaccination; infection prevention and control; operations, finance and logistics, and research. Actions include:

- activation of incident management teams at national and provincial levels to coordinate the response;
- development of national and provincial preparedness and response plans;
- case investigation, contact tracing and contact follow-up for identified cases;
- health worker training on mpox case management;
- securing an initial reserve of antiviral treatment courses for severe cases;
- establishment of a laboratory sample referral network for MPXV testing;
- risk messaging both within the general community and among risk groups;
- provision of policy guidance and initiation of processes to secure vaccines for high-risk groups;
- discussions on public health research objectives and studies to address key knowledge gaps.

## Vaccines and immunization update

WHO and partners continue to support Member States in advancing mpox vaccination as an additional intervention to control ongoing mpox outbreaks. This support is across the vaccine implementation value chain, ranging from policy advice to supply and access and last mile delivery.

On policy, on 31 May 2024, the [WHO Strategic Advisory Group of Experts on Immunization \(SAGE\)](#) released [updated recommendations regarding the use of mpox vaccines](#) following its March 2024 meeting, updating previous guidance from November 2022. SAGE has maintained that vaccination is recommended for persons at high risk of exposure to mpox in an outbreak. To allow the greatest flexibility with respect to local risk assessment, varied modes of transmission and response options, populations to consider for vaccination are to be based on local epidemiology, including, as relevant, members of a geographically defined area or community, including children, with a documented high risk of exposure to mpox. Other populations may include individuals with multiple casual sexual partners, health and care workers at risk of repeated exposure, and contacts of persons with mpox, based on the experience of the ongoing global outbreak of mpox. A WHO position paper on mpox and smallpox vaccines is expected to be released in August 2024. The Regional Immunization Technical Advisory Group (RITAG) for the African Region was also convened recently and reviewed considerations relating to mpox vaccines, building on and adapting the SAGE recommendations for the African context. The full RITAG report will be made publicly available.

To enhance coordinated global action on vaccines and immunization for mpox, WHO has established a *Vaccines and Immunization Working Group* under the umbrella of the *Global Mpox Partnership*. The Working Group aims to sustain and coordinate support for information sharing and guidance for mpox immunization policy, access to vaccines, operational planning and to advance the public health research agenda to generate essential evidence on vaccine effectiveness and for programmatic decision-making.

On regulatory matters, WHO welcomes the announcement by the Democratic Republic of the Congo of the emergency authorization of the use of MVA-BN and LC16 mpox vaccines by the national regulatory authority, l'Autorité congolaise de réglementation pharmaceutique (ACOREP), which will enable the country to import and deploy mpox vaccines for the national outbreak response.

On country support, WHO continues to provide technical assistance to support WHO Member States in operationalizing mpox vaccination strategies and plans, building on experience gained in the context of the ongoing global outbreak. In the Democratic Republic of the Congo, WHO and partners are working closely to support the Ministry of Public Health, Hygiene, and Social Security (MSPHP) to develop a national vaccination plan for mpox response for the different epidemiological contexts in the country.

Regarding supply & access, WHO, UNICEF and Gavi, the Vaccine Alliance (Gavi), are working together to share information and develop mechanisms to support potential mpox vaccine donations. WHO welcomes the Gavi Board approval in June 2024 of financial support for the mpox response, including for a learning agenda, in principle support for a future global mpox vaccine reserve, and support for outbreak response in the Democratic Republic of the Congo and surrounding countries. WHO and partners will work together to operationalize these decisions in the service of Member State priorities and for global health security.

Finally, WHO welcomes all efforts to enhance access to mpox vaccines. Bavarian Nordic has informed WHO that the company will accept product liability and facilitate appropriate indemnification in any country where their MVA-BN vaccine has received authorization for use in emergencies and where the vaccine will be administered in that context and according to the product label of use.



## Technical guidance and other resources

### Strategic Planning and Global Support

- **\*NEW\*** Strategic framework for enhancing prevention and control of mpox- 2024-2027. May 2024. <https://www.who.int/publications/i/item/9789240092907>
- Responding to the global mpox outbreak: ethics issues and considerations: a policy brief, 19 July 2023. [https://www.who.int/publications/i/item/WHO-Mpox-Outbreak\\_response-Ethics-2023.1](https://www.who.int/publications/i/item/WHO-Mpox-Outbreak_response-Ethics-2023.1)
- World Health Organization. (2023). Epidemiology of human monkeypox (mpox) – worldwide, 2018–2021. Weekly Epidemiological Record, 98 (03), 29 - 36. World Health Organization. <https://apps.who.int/iris/handle/10665/365630>
- Lewis RF, Kuppalli K, Hoxha A, Doherty MC. Emergency committee recommendations on mpox - what's next? Bull World Health Organ. 2023 May 1;101(5):300-300A. doi: 10.2471/BLT.23.290134. PMID: 37131950; PMCID: PMC10140684.
- WHO factsheet on monkeypox, 18 April 2022. <https://www.who.int/news-room/fact-sheets/detail/monkeypox>
- New nomenclature for mpox (monkeypox) and monkeypox virus clades - The Lancet Infectious Diseases. Accessed September 19, 2023. [https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(23\)00055-5/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(23)00055-5/fulltext)
- 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, Review Committee and Recommendations of the Director-General

- Standing recommendations for mpox issued by the Director-General of the World Health Organization (WHO) in accordance with the International Health Regulations (2005) (IHR), 21 August 2023. [https://www.who.int/publications/m/item/standing-recommendations-for-mpox-issued-by-the-director-general-of-the-world-health-organization-\(who\)-in-accordance-with-the-international-health-regulations-\(2005\)-\(ihr\)](https://www.who.int/publications/m/item/standing-recommendations-for-mpox-issued-by-the-director-general-of-the-world-health-organization-(who)-in-accordance-with-the-international-health-regulations-(2005)-(ihr))
- Report of the Review Committee regarding standing recommendations for mpox, 16 August 2023. Available at: <https://www.who.int/publications/m/item/report-of-the-review-committee-regarding-standing-recommendations-for-mpox>
- 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

- **\*NEW\*** Meeting of the Strategic Advisory Group of Experts on Immunization (SAGE), 11 – 13 March 2024: conclusions and recommendations. [WHO Weekly Epidemiological Record, 31 May 2024](https://www.who.int/weekly-epidemiological-record/31-may-2024)
- Advisory Group of Experts on Immunization (SAGE) - March 2024. [Highlights from the Meeting of the Strategic Advisory Group of Experts \(SAGE\) on Immunization, 11-13 March 2024 \(who.int\)](https://www.who.int/news/item/11-13-march-2024-sage-meeting-highlights)
- 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

- Surveillance, case investigation and contact tracing for mpox (monkeypox): Interim guidance, 20 March 2024. [Surveillance, case investigation and contact tracing for Monkeypox: Interim guidance \(who.int\)](https://www.who.int/news/item/20-march-2024-surveillance-case-investigation-and-contact-tracing-for-monkeypox-interim-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 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](https://www.who.int/publications/i/item/WHO-MPX-Clinical_CRF-2022.3)
- Technical Guidelines for Integrated Disease Surveillance and Response in the African Region: Third edition: <https://www.afro.who.int/publications/technical-guidelines-integrated-disease-surveillance-and-response-african-region-third>

#### Data management

- Clinical characterization of mpox including monitoring the use of therapeutic interventions: statistical analysis plan, 13 October 2023: [https://www.who.int/publications/i/item/WHO-MPX-Clinical-Analytic\\_plan-2023.1](https://www.who.int/publications/i/item/WHO-MPX-Clinical-Analytic_plan-2023.1)
- 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>
- 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

- Risk communication and community engagement readiness and response toolkit: mpox, 23 April 2024. [Risk communication and community engagement readiness and response toolkit: mpox \(who.int\)](#)
- 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>
- 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](https://www.euro.who.int/data/assets/pdf_file/0009/539046/ECDC-WHO-interim-advice-RCCE-Monkeypox-2-06-2022-eng.pdf)[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)
- Public health advice on mpox and congregate settings: settings in which people live, stay or work in proximity, 20 March 2023: <https://www.who.int/publications/m/item/public-health-advice-on-mpox-and-congregate-settings--settings-in-which-people-live--stay-or-work-in-proximity>
- Public health advice for gay, bisexual and other men who have sex with men and mpox. Version 3. 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:
- 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 to monkeypox. 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>
- 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>
- Mpox Q&A on mpox testing for health workers and individuals. 2 March 2023: <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>
- Monkeypox Q&A, 31 August 2022. <https://www.who.int/news-room/questions-and-answers/item/monkeypox>
- Infographic on getting tested for mpox 27 February 2023: <https://www.who.int/multi-media/details/getting-tested-for-mpox--what-you-need-to-know>
- Mpox infographics: English: <https://www.who.int/multi-media/details/mpox-what-we-know> French: [https://cdn.who.int/media/docs/default-source/documents/emergencies/outbreak-toolkit/mpox-infographic-fr-v03.pdf?sfvrsn=a4dac1d\\_1](https://cdn.who.int/media/docs/default-source/documents/emergencies/outbreak-toolkit/mpox-infographic-fr-v03.pdf?sfvrsn=a4dac1d_1)

#### EPI - WIN Webinars and Updates

- The recordings of the previous [EPI-WIN Webinars](#) related to current monkeypox outbreak:
  - WHO EPI-WIN webinar: Global mpox strategy for elimination and control: open consultation (28 June)" <https://www.who.int/news-room/events/detail/2023/06/28/default-calendar/who-epi-win-webinar-global-mpox-strategy-for-elimination-and-control-open-consultation>
  - WHO EPI-WIN webinar: Changing perspectives of the mpox outbreak (22 February 2023): <https://www.who.int/news-room/events/detail/2023/02/22/default-calendar/who-epi-win-webinar-changing-perspectives-of-the-mpox-outbreak>
  - EPI-WIN webinar: How is Monkeypox spreading? What we know so far (27 July 2022): <https://www.who.int/news-room/events/detail/2022/07/27/default-calendar/WHO-EPI-WIN-webinar-how-is-monkeypox-spreading>
  - EPI-WIN webinar: Monkeypox outbreak and mass gatherings (24 June 2022) : <https://www.who.int/news-room/events/detail/2022/06/24/default-calendar/WHO-EPI-WIN-webinar-monkeypox-and-mass-gathering>
- 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](#) (22 Sept 2022)
- [How is monkeypox spreading? What do we know so far](#) (27 July 2022)
- [Monkeypox outbreak and mass gatherings](#) (24 June 2022)

- 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](https://www.who.int/docs/default-source/coronaviruse/risk-comms-updates/update_monkeypox-.pdf?sfvrsn=99baeb03_1)

#### 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

- Diagnostic testing for the monkeypox virus (MPXV): interim guidance, 10 May 2024. <https://www.who.int/publications/i/item/WHO-MPX-Laboratory-2024.1>
- 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>
- Diagnostic testing for the monkeypox virus (MPXV): interim guidance, 9 November 2023. <https://www.who.int/publications/i/item/who-mpx-laboratory-2023-1>
- 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>

#### Clinical management and Infection, prevention and Control

- Clinical characterization of mpox including monitoring the use of therapeutic interventions: statistical analysis plan, 13 October 2023. [Clinical characterization of mpox including monitoring the use of therapeutic interventions: statistical analysis plan, 13 October 2023 \(who.int\)](#)
- 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>
- [Atlas of mpox lesions: a tool for clinical researchers.](#)
- [mhGAP intervention guide - version 2.0. Geneva: World Health Organization; 2019. mhGAP training manuals for the mhGAP intervention guide for mental, neurological, and substance use disorders in non-specialized health settings. Geneva: World Health Organization; 2017. https://apps.who.int/iris/handle/10665/250239](#)

#### 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

- **\*NEW\*** Mpox – Democratic Republic of the Congo: <https://www.who.int/emergencies/disease-outbreak-news/item/2024-DON522>
- Monkeypox outbreak 2022: <https://www.who.int/emergencies/situations/monkeypox-oubrak-2022>
- Multi-country outbreak of mpox, External situation report #33- 31 May 2024: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report-33--31-may-2024>
- Multi-country outbreak of mpox, External situation report #32- 30 April 2024: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report-32--30-april-2024>
- Multi-country outbreak of mpox, External situation report #31- 22 December 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report-31---22-december-2023>
- Multi-country outbreak of mpox, External situation report #30- 25 November 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report-30---25-november-2023>
- Multi-country outbreak of mpox, External situation report #29- 20 October 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report-29---20-october-2023>
- Multi-country outbreak of mpox, External situation report #28- 19 September 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report-28---19-september-2023>
- Multi-country outbreak of mpox, External situation report #27- 14 August 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report-27---14-august-2023>
- Multi-country outbreak of mpox, External situation report #26- 14 July 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report--26---14-july-2023>
- Multi-country outbreak of mpox, External situation report #25- 24 June 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report--25---24-june-2023>
- Multi-country outbreak of mpox, External situation report #24- 10 June 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report--24---10-june-2023>
- Multi-country outbreak of mpox, External situation report #23- 26 May 2023: <https://www.who.int/publications/m/item/multi-country-outbreak-of-mpox--external-situation-report--23---26-may-2023>
- 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 2022: <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](#)
- 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

- **\*NEW\*** WHO Advisory Committee on Variola Virus Research (ACVVR), Report of the twenty-fifth meeting, Geneva, Switzerland, 25-26 October 2023. World Health Organization. [WHO advisory committee on variola virus research: report of the twenty-fifth meeting, Geneva, Switzerland, 25-26 October 2023](#)
- 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 \(who.int\)](#)
- 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](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
- Monkeypox in the Region of the Americas - Risk assessment. <https://www.paho.org/en/documents/monkeypox-region-americas-risk-assessment>
- mhGAP humanitarian intervention guide (mhGAP-HIG): clinical management of mental, neurological, and substance use conditions in humanitarian emergencies. Geneva: World Health Organization; 2015. <https://www.who.int/publications/i/item/9789241548922>
- WHO. Weekly Bulletin on Outbreaks and Other Emergencies [Internet]. Available from: <https://apps.who.int/iris/bitstream/handle/10665/370961/OEW27-0309072023.pdf>

## Annex 1: Data, table and figure notes

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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. Moreover, at the present stage of the 2022-24 global mpox outbreak, frequency of reporting of cases to WHO has decreased substantially, therefore presented data might not be fully representative of the overall epidemiological situation in several countries.

<sup>[i]</sup>‘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 through 31 May 2024, 17:00 CEST

\*Countries with no reported cases in the last month

WHO Region	Country	Total Confirmed Cases	Total Deaths <sup>†</sup>
African Region	Benin*	3	0
	Cameroon*	54	5
	Central African Republic*	52	1
	Congo*	55	2
	Democratic Republic of the Congo	2 197	8
	Ghana*	131	4
	Liberia*	23	0
	Mozambique*	1	1
	Nigeria*	858	9
	South Africa	9	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
	Oman*	3	0
	Pakistan*	7	0
	Qatar*	5	0
	Saudi Arabia*	8	0
	Sudan*	19	1
	United Arab Emirates*	16	0
	European Region	Andorra*	4
Austria		348	1
Belgium*		809	2
Bosnia and Herzegovina*		9	0
Bulgaria		7	0
Croatia*		34	0
Cyprus*		5	0
Czechia		82	1
Denmark*		198	0
Estonia*		11	0
Finland*		43	0
France		4 249	0
Georgia*		2	0

	Germany	3 847	0
	Gibraltar*	6	0
	Greece	99	0
	Greenland*	2	0
	Hungary*	83	0
	Iceland*	17	0
	Ireland	247	0
	Israel	312	0
	Italy	1 047	0
	Latvia*	6	0
	Lithuania*	5	0
	Luxembourg*	61	0
	Malta*	35	0
	Monaco*	3	0
	Montenegro*	2	0
	Netherlands	1 302	0
	Norway*	106	0
	Poland	223	0
	Portugal*	1 193	3
	Republic of Moldova*	2	0
	Romania*	47	0
	Russian Federation*	4	0
	San Marino*	1	0
	Serbia*	40	0
	Slovakia*	16	0
	Slovenia*	47	0
	Spain	8 030	3
	Sweden	297	0
	Switzerland*	579	0
	The United Kingdom	3 952	0
	Türkiye*	12	0
	Ukraine*	5	0
Region of the Americas	Argentina*	1 149	2
	Aruba*	3	0
	Bahamas*	3	0
	Barbados*	1	0
	Bermuda*	1	0
	Bolivia (Plurinational State of)*	265	0
	Brazil*	11 212	16
	Canada	1 532	0
	Chile*	1 449	3
Colombia*	4 238	0	



	Costa Rica*	225	0
	Cuba*	8	1
	Curaçao *	3	0
	Dominican Republic*	52	0
	Ecuador*	557	3
	El Salvador*	104	0
	Guadeloupe*	1	0
	Guatemala*	405	1
	Guyana*	2	0
	Honduras*	44	0
	Jamaica*	21	0
	Martinique*	7	0
	Mexico	4 109	34
	Panama*	239	1
	Paraguay*	126	0
	Peru*	3 812	20
	Saint Martin*	1	0
	Trinidad and Tobago*	3	0
	United States of America	32 961	60
	Uruguay*	19	0
Venezuela (Bolivarian Republic of) *	12	0	
South-East Asia Region	India*	27	1
	Indonesia	87	0
	Nepal*	1	0
	Sri Lanka*	4	0
	Thailand	795	10
Western Pacific Region	Australia	214	0
	Cambodia*	13	0
	China	2 403	1
	Guam*	1	0
	Japan	247	1
	Lao People's Democratic Republic*	1	0
	Malaysia*	9	0
	New Caledonia*	1	0
	New Zealand	51	0
	Philippines*	9	0
	Republic of Korea*	156	0
	Singapore*	59	0
	Viet Nam	196	8
<b>Cumulative</b>	<b>116 Countries/territories/areas</b>	<b>97 745</b>	<b>203</b>

#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.