Multi-country outbreak of mpox

External Situation Report 30, published 25 November 2023 Data as received by WHO from national authorities on the situation by 31 October 2023

Mpox long-term risk assessment¹

- The risk for the general population in countries with historical mpox transmission and their neighbouring countries is assessed as moderate.
- The risk for gay men, bisexual men, other men who have sex with men, trans and gender diverse people, and sex workers, is assessed as moderate.
- The risk for the general population in countries not affected prior to the current outbreak is assessed as low.

Deaths Laboratory confirmed cases 167 91 788

Countries/areas/territories 116

Highlights

- The mpox surveillance reporting frequency has shifted from weekly to monthly; therefore, the reporting period of this Situation Report, as well as the various indicators and comparisons, have been adjusted; data should be interpreted with care.
- A total of 668 new laboratory-confirmed cases were reported globally in October 2023 from 29 countries. The most affected regions, ordered by number of cases, were the Western Pacific and European regions. The South-East Asia Region and the Region of the Americas follow with an equal number of cases. Eight laboratory-confirmed cases were reported from the African Region and one case was reported from the Eastern Mediterranean Region.
- Based on the data reported through global surveillance, the outbreak continues at a low level of transmission in the European Region and in the Region of the Americas, while greater transmission is observed in the Western Pacific and South-East Asia regions.
- WHO has published a Disease Outbreak News outlining the ongoing and evolving epidemiology of mpox in the Democratic Republic of the Congo. This summary highlights the reporting since 1 January 2023, of 12 569 suspected (i.e. clinically-diagnosed) cases in the country, and among these, 581 deaths (case fatality ratio 4.6%). Newly identified outbreaks related to sexual transmission of clade I MPXV are also reported. A joint Ministry of Health and World Health Organization mission is underway in the country.

¹ These risks represent population average risks; individual risks will vary depending on individual behaviours, specific geographic location, immune status, and other factors.

Epidemiological Update

Data source: WHO Multi-country mpox outbreak - Global trends

From 1 January 2022 through 31 October 2023, a cumulative total of 91 788 laboratory-confirmed cases of mpox, including 167 deaths, have been reported to WHO from 116 countries/territories/areas (hereafter 'countries') in all six WHO Regions (Table 1). A total of 668 new cases were reported in October, a 23% decline from the number of new cases reported during the previous month. Most cases during the last month were reported from the Western Pacific Region (30%) and the European Region (25%). The Eastern Mediterranean Region reported three cases from one newly-reporting country.

In the last month (1-31 October), 29 countries reported cases, with 13 reporting an increase compared to the previous month (1-30 September). Germany reported the highest relative increase in cases (n = 49 vs n = 14) in the European Region. Vietnam reported the highest relative increase in cases (n = 40 vs n = 2) in the Western Pacific Region. China reported a 61% decline in the number of new cases last month (n = 141 vs n = 365) but continues to influence the high case counts in the Western Pacific Region (Table 1). A decline in reported cases has been observed in the African Region; this is at least in part due to irregular reporting (- for example has not published mpox surveillance data since July 2023).

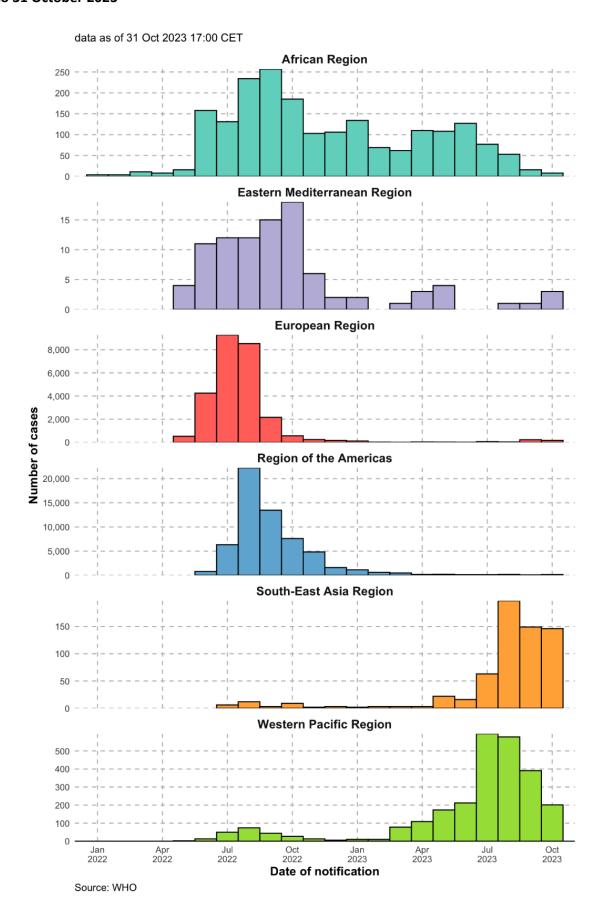
As of 31 October 2023, the ten countries that have reported the highest cumulative number of cases globally are the United States of America (n = 30771), Brazil (n = 10967), Spain (n = 7647), France (n = 4161), Colombia (n = 4090), Mexico (n = 4065), the United Kingdom (n = 3820), Peru (n = 3812), Germany (n = 3757), and China (n = 1935). Together, these countries account for 81.7% 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 31 October 2023

	Total confirmed	Total	Cases in last	Monthly change in
WHO Region	cases	deaths	month	cases (%)
Region of the Americas	60 092	134	146	+85
European Region	26 395	7	164	-28
Western Pacific Region	2 586	1	201	-49
African Region	1 981	22	8	-50
South-East Asia Region	639	2	146	-2
Eastern Mediterranean Region	95	1	3	+200
Total	91 788	167	668	-22.8

The epidemic curves shown in Figure 1 suggest that the outbreak continues at a low level of transmission in the European Region and in the Region of the Americas, while greater transmission is observed in the Western Pacific and South-East Asia regions. The Eastern Mediterranean Region reports sporadic mpox cases.

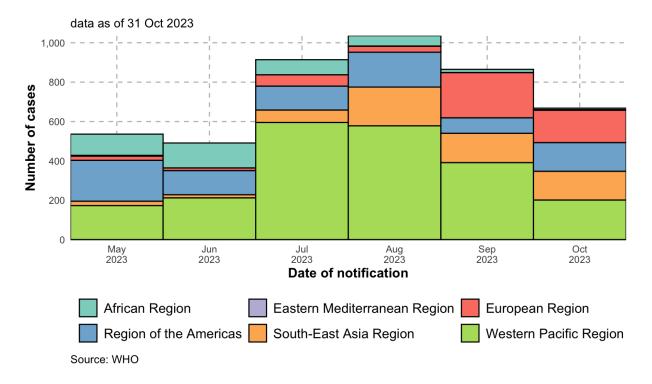
Figure 1. Epidemic curves of monthly aggregated confirmed cases of mpox by WHO Region, from 1 January 2022 to 31 October 2023



*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 laboratory-confirmed mpox cases reported globally in the last six months (1 May 2023 - 31 Oct 2023) has fluctuated between 400 and 1000 cases, with most cases being reported by the Western Pacific Region, followed by the Americas, South-East Asia and Europe.

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



Other key epidemiological findings:

- As of 31 October 2023, 96.3% (81 854 / 84 974) of cases with available data are male, with a median age of 34 years (interquartile range: 29 41 years) The age and sex distributions of cases remain stable.
- Of cases with age data available, 1.3% (1144 / 88 092) are aged 0-17 years, including 333 (0.4%) aged 0-4 years. The majority of cases aged 0-17 years were reported from the Region of the Americas (702 / 1149; 61%). The overall proportion of cases under 18 years of age in the Region of the Americas is 1.2%, similar to the proportion observed globally.
- Of all reported modes of transmission in the global outbreak, sexual encounter is the most common, comprising 17 757 of 21 409 (82.9%) of all reported transmission events, followed by person-to-person non-sexual contact; this pattern has persisted over the last six months, with 96.7% (1258 / 1301) of new cases reporting sexual contact. From October 2023, exposure setting data are no longer collected globally. Detailed information on the routes of transmission is not available for most cases from the WHO African Region, thus the available information on transmission might not fully describe the spread of the virus in this region.
- Among cases where at least one symptom is reported (n = 36 567), the most common symptom is any
 rash, reported in 89.9% of cases, followed by fever (58.4%), and systemic rash or genital rash (54.3% and
 50.1% respectively). The symptomatology of cases has been very consistent over time in this outbreak.
 Information on clinical presentation from countries in West and Central Africa is lacking in the surveillance
 data.
- Around half (17 968 / 34 487; 52.1%) of cases with available information in this outbreak are reported to be in persons living with HIV. This proportion is consistent for cases reported in the last six months (1267 / 2345; 54%).

Special focus: Epidemiological situation of mpox in the Democratic Republic of the Congo

WHO has published a Disease Outbreak News outlining the ongoing and evolving epidemiology of mpox in the Democratic Republic of the Congo. This summary highlights the reporting to date of over 12,569 suspected (clinically diagnosed) cases in the country since 1 January 2023, as well as newly reported outbreaks related to sexual transmission of clade I MPXV. A joint Ministry of Health and World Health Organization mission is underway in the country to assess the situation. The integrated multi-disciplinary mission will undertake visits to four provinces presenting different epidemiological features.

Situation at a Glance

Mpox remains endemic in densely forested regions of West, Central and East Africa, particularly in the northern and central regions of the Democratic Republic of the Congo. Eleven of the 26 provinces of the Democratic Republic of the Congo are identified as endemic for mpox, but in recent years the number of provinces reporting mpox has been growing, to 22 provinces as of November 2023.

There are two known clades of MPXV: clade I, previously known as the Congo Basin clade; and clade II, previously called the West African clade; clade II further has two subclades: clade IIa and clade IIb. The Democratic Republic of the Congo has not reported cases of mpox linked to clade IIb MPXV during the global outbreak to date; only clade I MPXV has been detected in the country. Before April 2023, no formally documented cases of sexual transmission of clade I MPXV were registered globally. The first known case of sexual transmission in this report is of a resident of Belgium who tested positive for clade I in Kwango province during a visit to the Democratic Republic of the Congo. Thereafter, sexual contacts of this case in the Democratic Republic of the Congo also tested positive for clade I MPXV, with closely related viral sequences.

From 1 January through 12 November 2023, a total of 12 569 suspected mpox cases, including 581 deaths (case fatality ratio: 4.6%), have been reported in 156 health zones from 22 out of 26 (85%) provinces in the Democratic Republic of the Congo. This is the highest number of annual cases ever reported, with new cases in geographic areas that had previously not reported mpox, including Kinshasa, Lualaba, and South Kivu. Among suspected cases, 1106 were tested by reverse transcriptase-polymerase chain reaction (RT-PCR), and 714 were positive for MPXV (positivity rate of 65%).

This is the first time that reported clade I MPXV infection is linked to sexual transmission. Another outbreak in the country is also being reported with multiple cases of mpox among sex workers. In the Democratic Republic of the Congo, human-to-human transmission of mpox through close contact has been reported since the 1970s, mostly in small household or community outbreaks following presumed zoonotic transmission. Nonetheless, the dynamics of MPXV clade I transmission in the Democratic Republic of the Congo are not well understood. in 2023. It is important to note that just 9% of the cases reported in the Democratic Republic of the Congo in 2023 are laboratory-confirmed due to limited access to diagnostic testing for remote areas. The suspected case numbers reported reflect specific case definitions used in the country, as well the experience of health workers with a well-known disease, leading to high average test positivity rates, particularly in known endemic areas. These new features of sexual transmission now raise additional concerns over the continuing rapid expansion of the outbreak in the country in a nationally and internationally mobile key population.

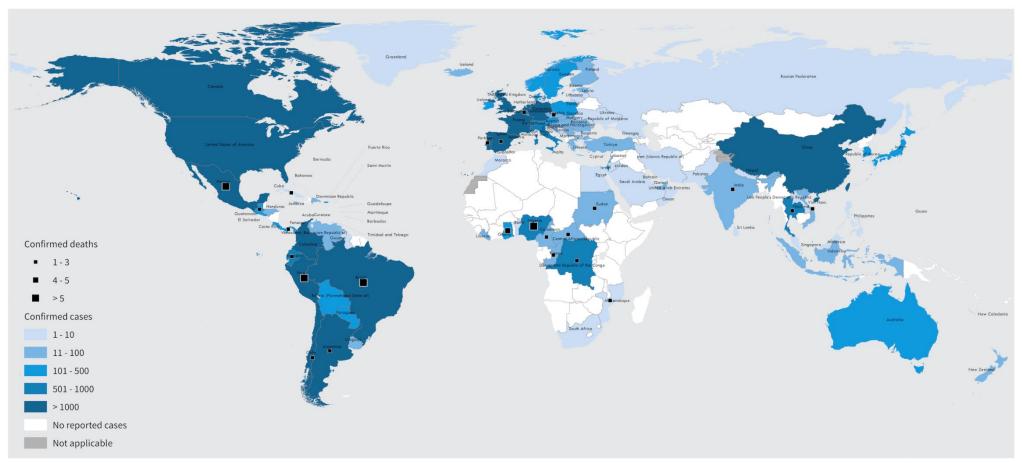
The Disease Outbreak News is accessible through the below links.

- Mpox (monkeypox)-Democratic Republic of the Congo, 23 November 2023
- Variole simienne-République Démocratique du Congo, 23 novembre 2023
- Monkeypox- Democratic Republic of the Congo, 1 October 2020

Further information on mpox case reports in the Democratic Republic of the Congo since 1970 is available here:

• World Health Organization. (2023). Epidemiology of human monkeypox (mpox) – worldwide, 2018–2021. Weekly Epidemiological Record, 98 (03), 29 - 36. World Health Organization.

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 October 2023



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

Data Source: World Health Organization
Map Production: WHO Health Emergencies Programme
Map Date: 21 November 2023



Technical guidance and other resources

Strategic Planning and Global Support

- 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
- 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
- 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)
- 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. <a href="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)
- 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)
- 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
- 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
- WHO Director-General's statement at the press conference following IHR Emergency Committee regarding the multi-country outbreak of monkeypox, 23 July 2022. <a href="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

- 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, 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
- 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

- 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 (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.pdfhttps://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-individuals-and-communities
- Monkeypox Q&A, 31 August 2022. https://www.who.int/news-room/guestions-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: https://who.canto.global/v/UNNOPG0353/folder/K677K?viewIndex=0

EPI - WIN Webinars and Updates

- The recordings of the previous <u>EPI-WIN Webinars</u> 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
 - o 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

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
- Dianostic 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 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 Spillback 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 #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 #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
- 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)
- 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
- 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

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 2022-23 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.

^[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 31 October 2023, 17:00 CEST.

^{*}Countries with no reported cases in the last month

WHO Region	Country	Total Confirmed Cases	Total Deaths#
African Region	Benin*	3	0
	Cameroon	45	3
	Central African Republic*	30	1
	Congo	25	2
	Democratic Republic of the Congo*	889	2
	Ghana*	127	4
	Liberia*	13	0
	Mozambique*	1	1
	Nigeria*	843	9
	South Africa*	5	0
Eastern Mediterranean	Bahrain*	2	0
Region	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	0
	Austria	331	0
	Belgium*	795	2
	Bosnia and Herzegovina*	9	0

Croatia* 33 0		Bulgaria*	6	0
Cyprus* 5			33	0
Czechia*		Cyprus*		0
Estonia*			71	1
Finland			198	0
Finland		Estonia*	11	0
Georgia* 2			43	0
Germany		France	4 161	0
Germany		Georgia*	2	0
Gibraltar* 6 0 Greece* 88 0 Greenland* 2 0 Hungary 81 0 Iceland* 17 0 Ireland 242 0 Israel* 262 0 Italy 966 0 Latvia* 6 0 Lithuania* 5 0 Luxembourg 60 0 Malta 35 0 Monaco* 3 0 Monaco* 3 0 Montengro* 2 0 Norway 102 0 Poland* 217 0 Portugal 1134 1 Republic of Moldova* 2 0 Romania* 47 0 Russian Federation* 1 0 San Marino* 1 0 Slovakia* 14 0 Slovakia* 14 0 Slovakia* 14 0 Slovania* 264 0 Switzerland 562 0 The United Kingdom 3 820 0 Türkiye* 12 0 Ukraine* 5 0 Region of the Americas Argentina 1 135 2 Aruba* 8 ahamas* 3 0 Barbados* 1 0 Bermuda* 1 0 Bellivia (Plurinational State of)* 265 0 Brazil* 10 967 16			3 757	0
Greenland*			6	0
Hungary 81		Greece*	88	0
Iceland*			2	0
Iceland		Hungary	81	0
Israel* 262 0 Italy 966 0 Latvia* 6 0 Lithuania* 5 0 Luxembourg 660 0 Malta 35 0 Monaco* 3 0 Normay 102 0 Poland* 217 0 Portugal 1134 1 Republic of Moldova* 2 0 Russian Federation* 2 0 San Marino* 1 0 Serbia* 47 0 Slovakia* 14 0 Slovakia* 14 0 Slovenia* 264 0 Switzerland 562 0 The United Kingdom 3 820 0 Türkiye* 12 0 Ukraine* 5 0 Region of the Americas Argentina 1 135 2 Aruba* Bahamas* 3 0 Bermuda* 10 0 Bermuda* 10 0 Bermuda* 10 0 Fazzil* 10 967 16			17	0
Israel* 262 0 Italy 966 0 Latvia* 6 0 Lithuania* 5 0 Luxembourg 660 0 Malta 35 0 Monaco* 3 0 Normay 102 0 Poland* 217 0 Portugal 1134 1 Republic of Moldova* 2 0 Russian Federation* 2 0 San Marino* 1 0 Serbia* 47 0 Slovakia* 14 0 Slovakia* 14 0 Slovenia* 264 0 Switzerland 562 0 The United Kingdom 3 820 0 Türkiye* 12 0 Ukraine* 5 0 Region of the Americas Argentina 1 135 2 Aruba* Bahamas* 3 0 Bermuda* 10 0 Bermuda* 10 0 Bermuda* 10 0 Fazzil* 10 967 16				
Latvia*				0
Latvia*				
Lithuania* 5 0 Luxembourg 60 0 Malta 35 0 Monaco* 3 0 Montenegro* 2 0 Netherlands 1 278 0 Norway 102 0 Poland* 217 0 Portugal 1 134 1 Republic of Moldova* 2 0 Romania* 47 0 Russian Federation* 2 0 San Marino* 1 0 Serbia* 40 0 Slovakia* 14 0 Slovakia* 14 0 Slovakia* 47 0 Spain 7 647 3 Sweden* 264 0 Switzerland 562 0 The United Kingdom 3 820 0 Türkiye* 12 0 Ukraine* 5 0 Varuba* 3 <t< td=""><td></td><td>•</td><td>6</td><td>0</td></t<>		•	6	0
Luxembourg 60				
Malta			60	0
Monaco* 3 0				
Montenegro*		Monaco*		0
Netherlands				0
Poland* 217 0			1 278	0
Poland*		Norway	102	0
Portugal			217	0
Republic of Moldova* 2			1 134	1
Romania*			2	0
Russian Federation* 2		-	47	0
San Marino*		Russian Federation*	2	0
Serbia*			1	0
Slovakia*		Serbia*	40	0
Slovenia*			14	0
Spain 7 647 3				
Sweden* 264 0				
Switzerland 562 0 The United Kingdom 3 820 0 Türkiye* 12 0 Ukraine* 5 0 Region of the Americas Argentina 1 135 2 Aruba* 3 0 Bahamas* 3 0 Barbados* 1 0 Bermuda* 1 0 Bolivia (Plurinational State of)* 265 0 Brazil* 10 967 16				
The United Kingdom 3 820 0 Türkiye* 12 0 Ukraine* 5 0 Argentina 1 135 2 Aruba* 3 0 Bahamas* 3 0 Barbados* 1 0 Bermuda* 1 0 Bolivia (Plurinational State of)* 265 0 Brazil* 10 967 16				
Türkiye* 12 0 Ukraine* 5 0 Region of the Americas Argentina 1135 2 Aruba* 3 0 Bahamas* 3 0 Barbados* 1 0 Bermuda* 1 0 Bolivia (Plurinational State of)* 265 0 Brazil* 10 967 16				
Region of the Americas Ukraine* 5 0 Argentina 1135 2 Aruba* 3 0 Bahamas* 3 0 Barbados* 1 0 Bermuda* 1 0 Bolivia (Plurinational State of)* 265 0 Brazil* 10 967 16				0
Region of the Americas Argentina 1 135 2 Aruba* 3 0 Bahamas* 3 0 Barbados* 1 0 Bermuda* 1 0 Bolivia (Plurinational State of)* 265 0 Brazil* 10 967 16				0
Aruba* 3 0 Bahamas* 3 0 Barbados* 1 0 Bermuda* 1 0 Bolivia (Plurinational State of)* 265 0 Brazil* 10 967 16	Region of the Americas		1 135	2
Bahamas* 3 0 Barbados* 1 0 Bermuda* 1 0 Bolivia (Plurinational State of)* 265 0 Brazil* 10 967 16				0
Barbados* 1 0 Bermuda* 1 0 Bolivia (Plurinational State of)* 265 0 Brazil* 10 967 16				
Bermuda* 1 0 Bolivia (Plurinational State of)* 265 0 Brazil* 10 967 16				0
Bolivia (Plurinational State of)* 265 0 Brazil* 10 967 16				
Brazil* 10 967 16				
Canada* 1 496 0		Canada*		-
Chile 1 445 3				

Costa Rica* Cuba* Curaçao * Cominican Republic* Cuador* Cl Salvador* Guadeloupe*	225 8 3 52 557	0 1 0
Curaçao * Dominican Republic* Cuador* Cl Salvador*	3 52	0
Oominican Republic* Cuador* Il Salvador*	3 52	
Oominican Republic* Cuador* Il Salvador*	52	
cuador* I Salvador*		0
l Salvador*		3
	104	0
JUUUCIUUDC	1	0
Guatemala*	405	1
		0
· londuras*	44	0
amaica*	21	0
	7	0
лехico	4 065	32
anama*		1
	126	0
Peru*		20
		0
aint Martin*		0
		0
United States of America	30 771	55
	19	0
	12	0
ndia*	27	1
ndonesia	30	0
lepal*	1	0
•		0
		1
		0
		0
		0
		0
		0
		0
-		0
		0
		0
		0
		0
		0
		167
	inyana* londuras* londuras* londuras* londuras* londuras* londuras* londuras* londuras* londures* londuras* londures* londures lo	1

^{*}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.