

Multi-country outbreak of mpox

External Situation Report 27, published 14 August 2023

Data as received by WHO national authorities by 17:00 CEST, 9 August 2023

Risk assessment	Laboratory confirmed cases	Deaths	Countries/areas/territories
Global risk – Moderate	89 308	152	113

WHO Regional risk

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

Highlights

- Following publication of last Situation Report on [14 July 2023](#), up until 9 August 2023, WHO has received reports of 1020 newly confirmed cases of mpox and three new deaths.
- Transmission of monkeypox virus (MPXV) continues at a low level in most of the countries reporting cases, with the main epidemiological and clinical characteristics of cases remaining stable. As of 9 August 2023, 15 of the 113 affected countries have reported new cases to WHO within the last 21 days.
- A significant increase in cases has been observed in the Western Pacific Region, driven by sustained community transmission in China.
- This situation report includes a special focus on mpox infection among health and care workers in hospital settings, as well as recommended infection prevention and control (IPC) measures to mitigate and control transmission of mpox to these workers.
- The next WHO mpox situation report will be published in the second week of September 2023.

From 1 January 2022 through 9 August 2023, a cumulative total of 89 308 laboratory-confirmed cases of mpox, including 152 deaths, have been reported to WHO from 113 countries/territories/areas (hereafter 'countries') in all six WHO Regions (Table 1). Since the last situation report published on [14 July 2023](#), and up until 9 August 2023, a total of 1020 new cases (1.2% increase in total cases) and three new deaths have been reported. One new country, Trinidad and Tobago, has reported its first three mpox cases. In the last two weeks, reported cases have increased in the Western Pacific, European and American regions (Table 1).

The number of weekly, new cases reported globally declined by 58.9% in week 31 (31 July through 06 August 2023) (n = 37 cases) compared to week 30 (24 July through 30 July 2023) (n = 90 cases). Notably, a batch report of July with 491 new cases in China was reported this week and is currently not reflected in the epidemiological trend analysis.

The Western Pacific Region reported the majority (n=158 / 293; 77.2%) of cases in the past three weeks (17 July through 8 August 2023).

From 28 June through 8 August 2023, eight countries reported an increase in cases in the last three weeks (19 July through 8 August 2023) compared to the three weeks prior (28 June through 18 July 2023), with China (n=140 vs. n= 59; 140%) and Portugal (n = 37 vs. n = 12; 201%) reporting the highest relative increase in cases.

As of 9 August 2023, new cases were reported within the last 21 days, the maximum disease incubation period, from 15 of the 113 affected countries – five each from the Regions of the Americas, Europe and the Western Pacific. Some of these countries continue to have sustained community transmission of mpox, while others only report sporadic cases. From 27 July through 9 August 2023, a total three deaths were reported, all from the United States of America.

As of 9 August 2023, the ten countries that have reported the highest cumulative number of cases globally are the United States of America (n = 30 446), Brazil (n = 10 967), Spain (n = 7560), France (n = 4150), Colombia (n = 4090), Mexico (n = 4045), Peru (n = 3812), the United Kingdom (n = 3771), Germany (n = 3694), and Canada (n = 1496). Together, these countries account for 82.9% 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 9 August 2023, 17:00 CEST

WHO Region	Total confirmed cases	Total deaths	Cases in last three weeks ⁱ	3-week change in cases (%)
Region of the Americas	59 738	123	98	11
European Region	25 989	7	37	48
African Region	1 902	20	0	-
Western Pacific Region	1 442	0	158	72
South-East Asia Region	147	1	0	-
Eastern Mediterranean Region	90	1	0	-
Total	89 308	152	293	-11

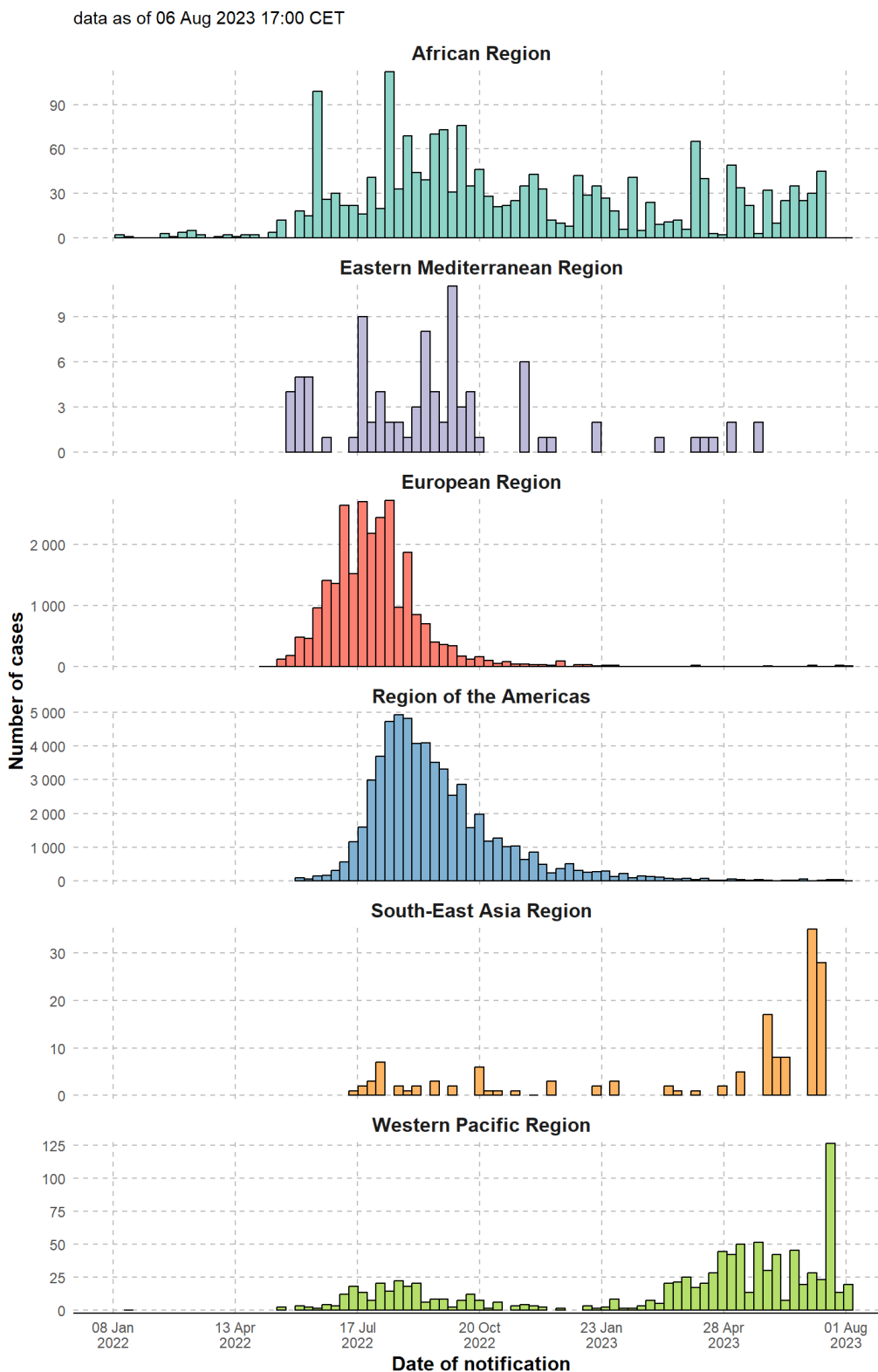
The epidemic curves shown in Figure 1 suggest that the outbreak continues in the European Region, in the Americas, and the Western Pacific. In the African Region, where transmission is more continuous, the number of weekly reported cases fluctuates but does not show a clear trend.

On 9 August, WHO was notified of 491 new cases reported by China CDC, covering the period 1-31 July 2023. These cases are included in the total case count; however, as they cannot be assigned to specific weeks, they

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

are not in the cases of the last three weeks in Table 1, the regional epidemiological curves in Figure 1, nor the epidemic curve of the last 12 weeks in Figure 2.

Figure 1. Epidemiological curves of weekly aggregated confirmed cases of mpox by WHO Region, from 1 January 2022 to 6 August 2023, 17:00 CEST*

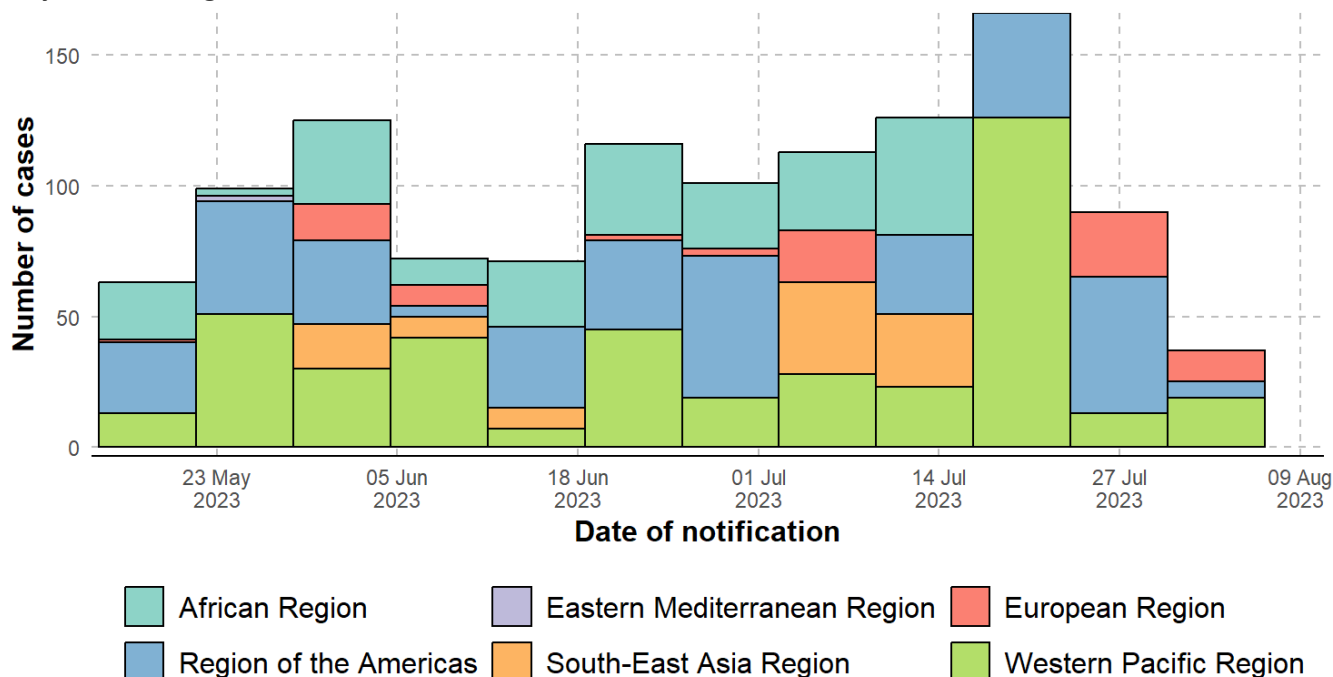


Source: WHO

*Figure 1 shows aggregated weekly data for completed epidemiological weeks ending on Sundays. Data on the current week will be presented in the next situation report. Note the different scales of the y-axes.

Figure 2 shows that the number of weekly mpox cases reported globally in the last 12 weeks (15 May 2023 - 6 August 2023) has fluctuated between 50 and 150 cases, with most cases reported by the African Region, the Region of the Americas and the Western Pacific Region.

Figure 2. Epidemic curve of aggregated number of cases by WHO region, for the last 12 reporting weeks, 15 May 2023 - 6 August 2023.



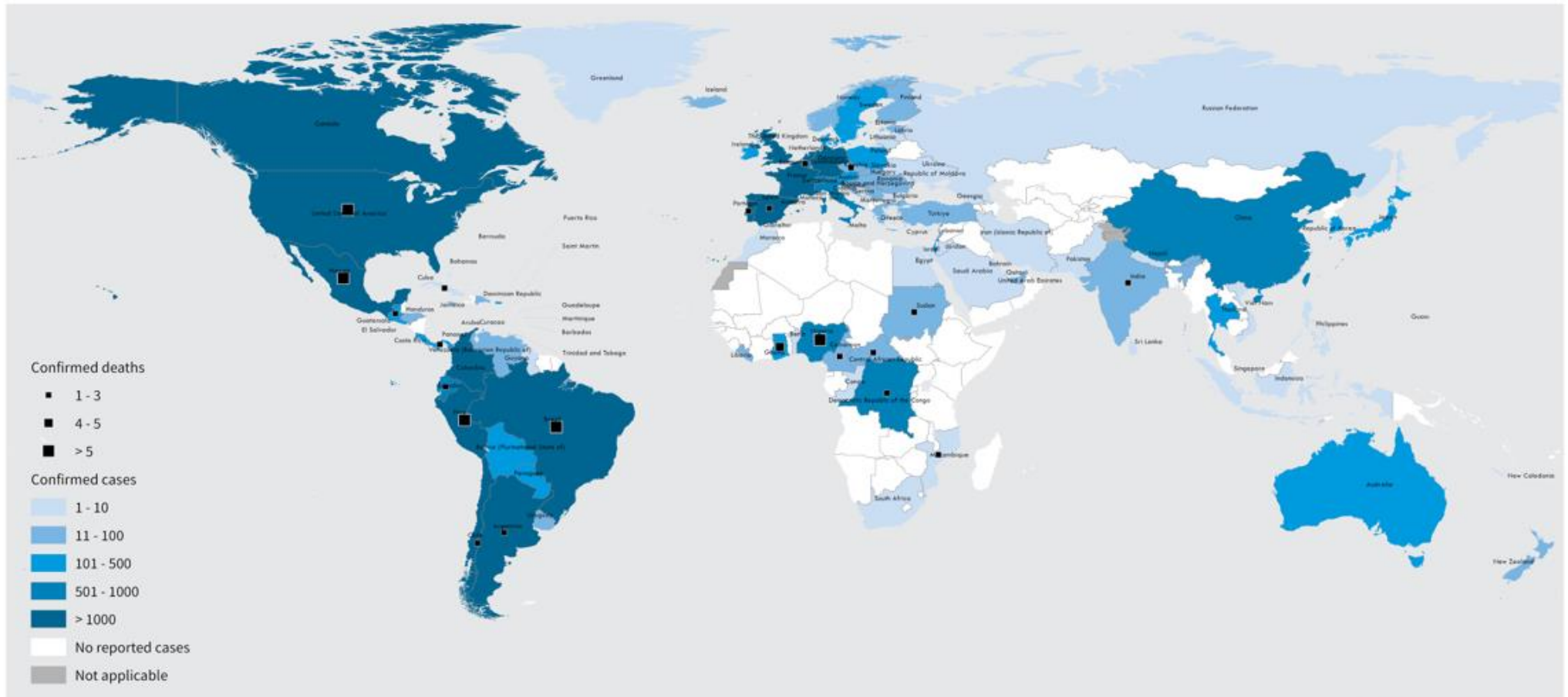
Source: WHO

Other key epidemiological findings:

- As of 9 August 2023, 96.3% (78 580 / 81 640) 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% (1122 / 84 104) are aged 0-17 years, including 330 (0.4%) aged 0-4 years. The majority of cases <18 years were reported from the Region of the Americas (693 / 1122; 61.8%). The overall proportion of child cases in the Region of the Americas is 1.2% (693 / 57 067), similar to the proportion which has been observed globally.
- Of all reported modes of transmission since the start of the outbreak, skin and mucosal contact during sex has been the most reported, in 16 587 of 20 209 (82.1%) reported transmission events, followed by person-to-person non-sexual contact; this pattern has also been observed over the last 12 weeks. Detailed information on the route of transmission is not available for most cases from the WHO African Region, thus the available information on transmission might not fully describe the spread of the virus in the region.
- Where information is available, the most reported exposure setting is a party setting with sexual contact, comprising 4024 of 6096 (66.0%) reported exposure settings. In the last 12 weeks, of 48 cases with a reported exposure setting, the most common one was other (21 cases; 44%) with no further explanation, followed by a party setting with sexual contact (12 cases; 25%), household (10 cases; 1%), workplace (two cases; 4%), a large event with sexual contact (two cases; 4%) and large event with no sexual contact (one case; 2%)
- Among cases where at least one symptom is reported (n = 34 860), the most common symptom is any rash, (90.1% of cases), followed by fever (55.2%), and systemic rash or genital rash (54.0% and 47.6% respectively). The symptomatology of cases has been consistent over time in the countries newly affected in this outbreak.

- Around half (16 682 / 32 104; 52%) of cases with available information in this outbreak have been reported to be in people living with HIV. This proportion is lower for cases reported in the last 12 weeks (75 / 3827; 29%).
- A significant number of cases has been reported by China for the month of July 2023. Based on information shared with WHO, the main demographic characteristics of cases in China are similar to those of the global outbreak. All individuals involved are adult males, primarily consisting of men who have sex with men. The prevalent clinical presentation entails symptoms such as fever, rash, and lymphadenopathy without any severe cases or fatalities documented. These reported cases have been identified as clade IIb MPXV.

Figure 3. Geographic distribution of confirmed cases of mpox reported to or identified by WHO from official public sources from 1 January 2022 to 9 August 2023, 17:00 CEST



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Data Source: World Health Organization
 Map Production: WHO Health Emergencies Programme
 Map Date: 10 August 2023



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Special focus: Recommended infection prevention and control (IPC) measures to mitigate and control transmission of mpox to Health and Care worker

Health and Care workers (health workers) play a pivotal role in the prevention and control of mpox, interacting closely with patients as they diagnose, treat, and support patients with the disease. Given their essential contributions, it is important to prioritize the monitoring and safeguarding of their health and safety.

Occupational exposure to mpox among health workers during the global outbreak

Global mpox surveillance data from 1 January 2022 to 9 August 2023 have shown that among cases with available information, 4.8% (1305 / 28 668) are health workers. Of those for whom transmission details are available, sexual contact is the predominant mode (66%; 236 / 356), followed by non-sexual person to person contact (19%, 67 / 356), healthcare-associated infection (8%, 30 / 356), fomite or indirect contact (4%, 14 / 356), other non-specified contact (2%, 6 / 356) and contact with animals (1%, 3 / 356). It is important to note that surveillance data do not contain detailed case investigation information, so occupational-acquired infections cannot be accurately quantified.

Occupational exposure to mpox is defined as unprotected contact, including non-intact skin, percutaneous or muco-cutaneous exposure to infectious lesions, blood, body fluids, secretions, or excretions, with a person suspected or confirmed to have mpox, or unprotected exposure to contaminated equipment, direct contact with a specimen collection swab or surfaces, that may result from, or be related, to the performance of a worker's duties¹. Occupational exposure can occur in any setting where a health worker is providing care to a patient; this includes hospital settings, outpatient clinics, congregate settings and patient homes, amongst others.

Based on the few cases of occupationally acquired infections reported in the literature, it has been noted that transmission of mpox to health workers in this context has predominantly occurred through sharps injuries, particularly during specimen collection (see Table 1)²⁻⁶ and from surfaces or material contaminated with monkeypox virus.^{7,8} In the majority of cases involving sharps injuries, the initial lesion manifested on the finger of the affected healthcare worker, coinciding with the presumed site of virus exposure.⁹

Understanding the modes through which mpox is transmitted and identifying the specific types of exposure that carry an elevated risk of infection is important in preventing the spread of mpox within both healthcare environments and community settings. The risk of health workers acquiring mpox through occupational exposure is considered low when there is good adherence to IPC measures. These measures include the safe handling and disposal of sharps, as well as the appropriate use of personal protective equipment (PPE); this includes refraining from touching mucosal membranes with contaminated PPE¹⁰⁻¹².

Table 1: Examples of findings from published articles regarding the characteristics of mpox cases among health and care workers with occupational exposures.

	France ⁴	Brazil ³	Portugal ⁶	USA ⁵	Brazil ⁷	Brazil ⁷	USA ⁸	South Korea ²
Exposure								
Type	Needlestick	Needlestick	Needlestick	Needlestick	Fomites	Fomites	Other	Needlestick
Site	R thumb	Thumb	L index finger	Index finger	L ring finger	Forearm	L mid finger	L index finger
PCR results								
Vesicle	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive
Oropharynx	Negative	Positive	Negative	N/A	N/A	N/A	N/A	Negative
Blood	Negative	Positive	Negative	N/A	N/A	N/A	N/A	Negative
Disseminated	No	Yes	Yes	No	Yes	Yes	Yes	No
Vaccination	MVA-BN, < 3 h	No	No	MVA-BN, < 15 h	No	No	No	MVA-BN, <20 h
Symptoms								
Skin lesion	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enlarged LN	No	Yes	Yes	No	Yes	Yes	No	No
Other	Drainage from wound	Fever	Fever, chills, myalgia	No	Hyperemia	Fever	Fever, cough, sore throat	Myalgia

Note: The data presented in the table were sourced from references 2-8. The presented list is not an exhaustive list of all peer-reviewed publications on mpox among health and care workers with occupational exposures.

Recommended IPC measures to prevent and control transmission of mpox in healthcare and community settings:

It is important that Member States support health institutions to adhere to IPC measures to protect health and care workers while caring for persons who may have or are confirmed to have mpox. As an integral part of a broader global strategy to stop human-to-human transmission, as described in [Situation Report#26](#),¹³ it is crucial for countries to strengthen their national and subnational IPC programmes to address this public health concern.

WHO recommends the following IPC measures to prevent and control transmission of mpox in healthcare and community settings:

1. Ensure that all healthcare facilities at the national level are fully compliant and adhere to the minimum requirements for IPC programmes. These requirements are established as IPC standards that should be implemented at the national and facility level. The standards provide minimum protection and safety to patients, health workers and visitors, based on the WHO core components for IPC programmes. For detailed information, refer to the [Minimum requirements for infection prevention and control programmes](#)¹⁴ and [WHO assessment tool for minimum requirements for infection prevention and control programmes at the national level](#).¹⁵
2. Ensure healthcare facilities maintain operational readiness for surges of mpox cases, as outlined in the [WHO Framework and Toolkit for Infection Prevention and Control in Outbreak, Preparedness, Readiness, and Response at the Health Care Facility level](#).¹⁶ This includes ensuring allocations of resources to accommodate a surge capacity, the establishment of a contingency plan, and the implementation of simulation exercises or after-action reviews are undertaken as appropriate.
3. Ensure strict adherence to the latest infection prevention and control guidance within healthcare facilities for managing suspected or confirmed mpox. This includes: 1) implementing both engineering and administrative controls, which involve ensuring proper patient isolation and maintaining adequate bed capacity within health facilities for case management; 2) performing hand hygiene according to the WHO 5 moments for hand hygiene; 3) adhering to cleaning and disinfection protocols in line with recommended procedures; 4) ensuring health workers are compliant with the usage and disposal of personal protective equipment (PPE) during patient care; and 5) ensuring health workers have successfully completed the appropriate IPC training on how to safely care for mpox patients. For detailed guidelines on the IPC measures essential to manage suspected or confirmed cases of mpox, refer to the [WHO Clinical management and infection prevention and control for monkeypox: Interim rapid response guidance, 10 June 2022](#).¹⁰
4. Ensure that health workers perform a comprehensive home assessment when providing home-based care for patients with suspected or confirmed mpox, as outlined in the WHO Clinical management and infection prevention and control for monkeypox: Interim rapid response guidance. The home assessment should involve the identification of potential infection risks and the proactive implementation of IPC measures to mitigate the risk of transmission.
5. Maintain sufficient stock of IPC supplies and equipment essential for the safety of health workers. This includes provisions such as sharps boxes, cleaning and disinfection materials, and PPE, such as gowns, gloves, eye protection, medical masks, and respirators, all aimed at safeguarding health and care workers.
6. Collaborate with occupational health services to improve vaccine uptake among health and care workers at higher risk of infection or severe mpox disease, as stated in the [World Health Organization \(WHO\) interim guidance for vaccines and immunization for monkeypox](#).¹⁷

How to safely collect mpox clinical specimens from skin and mucosal lesions

Sharps-related injuries sustained during the process of clinical specimen collection, for diagnostic purposes, has emerged as a predominant cause of MPXV transmission to health workers. Strict adherence to IPC protocols throughout the process of specimen collection and handling is crucial to mitigating the potential risk of health workers being exposed to MPXV and contracting mpox.

Health workers should undergo training on the guidelines and recommendations pertinent to mpox specimen collection. This training should include the appropriate collection of clinical specimens, the safe handling and appropriate disposal of sharp instruments, adherence to cleaning and disinfection protocols, and the understanding of the proper use and limitations of PPE.

When performing specimen collection, health workers should conduct a comprehensive risk assessment, ensuring the donning of appropriate PPE before entering a patient's environment, and doffing and disposal of the PPE upon exiting. To minimize hazards associated with sharps-related injuries, it is preferred that specimens be collected by vigorously swabbing lesions (i.e. with a swab rather than unroofing the lesions with a needle or using another sharp object). Please refer to [WHO interim guidance for Laboratory testing for the monkeypox virus](#),¹⁸ for further guidance.

If available and appropriate, health workers may consider getting vaccinated as additional protection against mpox. WHO recommends Primary preventive (pre-exposure) vaccination for individuals at high-risk of exposure such as health workers at risk for repeated exposure and Post-exposure preventive vaccination (PEPV) for contacts of cases ideally within four days of first exposure (and up to 14 days in the absence of symptoms).¹⁷ Please refer to the [WHO Vaccines and immunization for monkeypox: interim guidance, 16 November 2022](#).

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- 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.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: <https://who.canto.global/v/UNNOPG0353/folder/K677K?viewIndex=0>

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

EPI-WIN updates

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

Laboratory and diagnostics

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

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

Disease Outbreak News and situation reports

- Monkeypox outbreak 2022: <https://www.who.int/emergencies/situations/monkeypox-oubreak-2022>
- Multi-country outbreak of mpox, External situation report #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 : <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 \(who.int\)](https://www.euro.who.int/en/health-topics/communicable-diseases/surveillance-reports/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.

^[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 9 August 2023, 17:00 CEST.

*Countries with no reported cases for more than 21 days (about 3 weeks)

WHO Region	Country	Total Confirmed Cases	Total Deaths [#]
African Region	Benin*	3	0
	Cameroon	41	3
	Central African Republic*	30	1
	Congo*	5	0
	Democratic Republic of the Congo	834	2
	Ghana*	127	4
	Liberia*	13	0
	Mozambique*	1	1
	Nigeria*	843	9
	South Africa*	5	0
Eastern Mediterranean Region	Bahrain*	2	0
	Egypt*	3	0
	Iran (Islamic Republic of) *	1	0
	Jordan*	1	0
	Lebanon*	27	0
	Morocco*	3	0
	Pakistan*	5	0
	Qatar*	5	0
	Saudi Arabia*	8	0
	Sudan*	19	1
	United Arab Emirates*	16	0
European Region	Andorra*	4	0
	Austria*	328	0
	Belgium*	795	2
	Bosnia and Herzegovina*	9	0
	Bulgaria*	6	0
	Croatia*	33	0
	Cyprus*	5	0
	Czechia*	71	1
	Denmark*	196	0

	Estonia*	11	0
	Finland*	42	0
	France	4 150	0
	Georgia*	2	0
	Germany*	3 694	0
	Gibraltar*	6	0
	Greece*	88	0
	Greenland*	2	0
	Hungary*	80	0
	Iceland*	16	0
	Ireland*	229	0
	Israel	263	0
	Italy*	957	0
	Latvia*	6	0
	Lithuania*	5	0
	Luxembourg*	57	0
	Malta*	34	0
	Monaco*	3	0
	Montenegro*	2	0
	Netherlands*	1 265	0
	Norway	96	0
	Poland*	217	0
	Portugal	1 002	1
	Republic of Moldova*	2	0
	Romania*	47	0
	Russian Federation*	2	0
	San Marino*	1	0
	Serbia*	40	0
	Slovakia*	14	0
	Slovenia*	47	0
	Spain*	7 560	3
	Sweden*	260	0
	Switzerland*	554	0
	The United Kingdom	3 771	0
	Türkiye*	12	0
	Ukraine*	5	0
Region of the Americas	Argentina*	1 129	2
	Aruba*	3	0
	Bahamas	3	0
	Barbados*	1	0
	Bermuda*	1	0
	Bolivia (Plurinational State of)*	265	0
	Brazil	10 967	16
	Canada*	1 496	0
	Chile*	1 442	2
	Colombia*	4 090	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	4 045	30
	Panama	237	1
	Paraguay*	126	0
	Peru	3 812	20
	Puerto Rico*	211	0
	Saint Martin*	1	0
	Trinidad and Tobago	3	0
	United States of America	30 446	46
	Uruguay*	19	0
	Venezuela (Bolivarian Republic of) *	12	0
South-East Asia Region	India*	22	1
	Indonesia*	1	0
	Nepal*	1	0
	Sri Lanka*	4	0
	Thailand	119	0
Western Pacific Region	Australia*	147	0
	China	890	0
	Guam*	1	0
	Japan	194	0
	New Caledonia*	1	0
	New Zealand*	41	0
	Philippines*	5	0
	Republic of Korea	134	0
	Singapore*	26	0
	Viet Nam*	3	0
Cumulative	111 Countries/territories/areas	89 308	152

#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.