

# Multi-country outbreak of mpox

External Situation Report 25, published 24 June 2023

Data as received by WHO national authorities by 17:00 CEST, 19 June 2023

Risk assessment	Laboratory confirmed cases	Deaths	Countries/areas/territories
Global risk – Moderate	87 972	147	112

## WHO Regional risk

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

## Highlights

- Since the last situation report published on [10 June 2023](#), and as of 19 June, 114 new confirmed or probable mpox cases and one new death in a confirmed case have been reported to WHO.
- Virus transmission continues at a low pace in several countries, and the main epidemiological and clinical characteristics of cases are stable over time. Nineteen countries are reporting cases.
- This report includes recommendations for the care of pregnant individuals with mpox. Persons with mpox who are pregnant, were recently pregnant or could become pregnant, should have access to person-centered, respectful, and skilled care during and after pregnancy.
- The next WHO mpox situation report will be published in the second week of July and monthly thereafter.

## Epidemiological Update

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

From 1 January 2022 through 19 June 2023, a cumulative total of 87 972 laboratory-confirmed cases of mpox, including 147 deaths, have been reported to WHO from 112 countries/territories/areas (hereafter 'countries') in all six WHO Regions (Table 1). Since the last situation report published on [10 June 2023](#), there have been 114 new cases (0.1% increase in total cases) and one new death reported. However, the total difference in the case count from the previous situation report to this is lower, 43 additional cases and one death, due to retrospective adjustments in the number of reported cases by Member States, affecting the previous two months.

The number of new cases reported weekly declined by 42% in week 24 (12 June through 18 June 2023) (n = 41) compared to week 23 (5 June through 11 June 2023) (n = 71). The Western Pacific Region has reported the largest proportion of cases (74 cases, 31%) in the past three weeks (29 May through 18 June 2023), followed by the Americas (67 cases, 28%) and the African Region (41 cases, 17%). Nine countries reported an increase in cases over the last three weeks compared to the three weeks prior (8 through 28 May 2023).

In the past 7 days, one country reported its first case: Nepal (16 June).

As of 19 June 2023, 19 of the 112 affected countries have reported new cases within the last 21 days, the maximum disease incubation period. Six of these countries are in the Region of the Americas, five are in the European Region, three are in the South-East Asia Region, three are in the Western Pacific Region, and two are in the African Region. Some of these countries continue to have sustained community transmission of mpox, while others report sporadic cases.

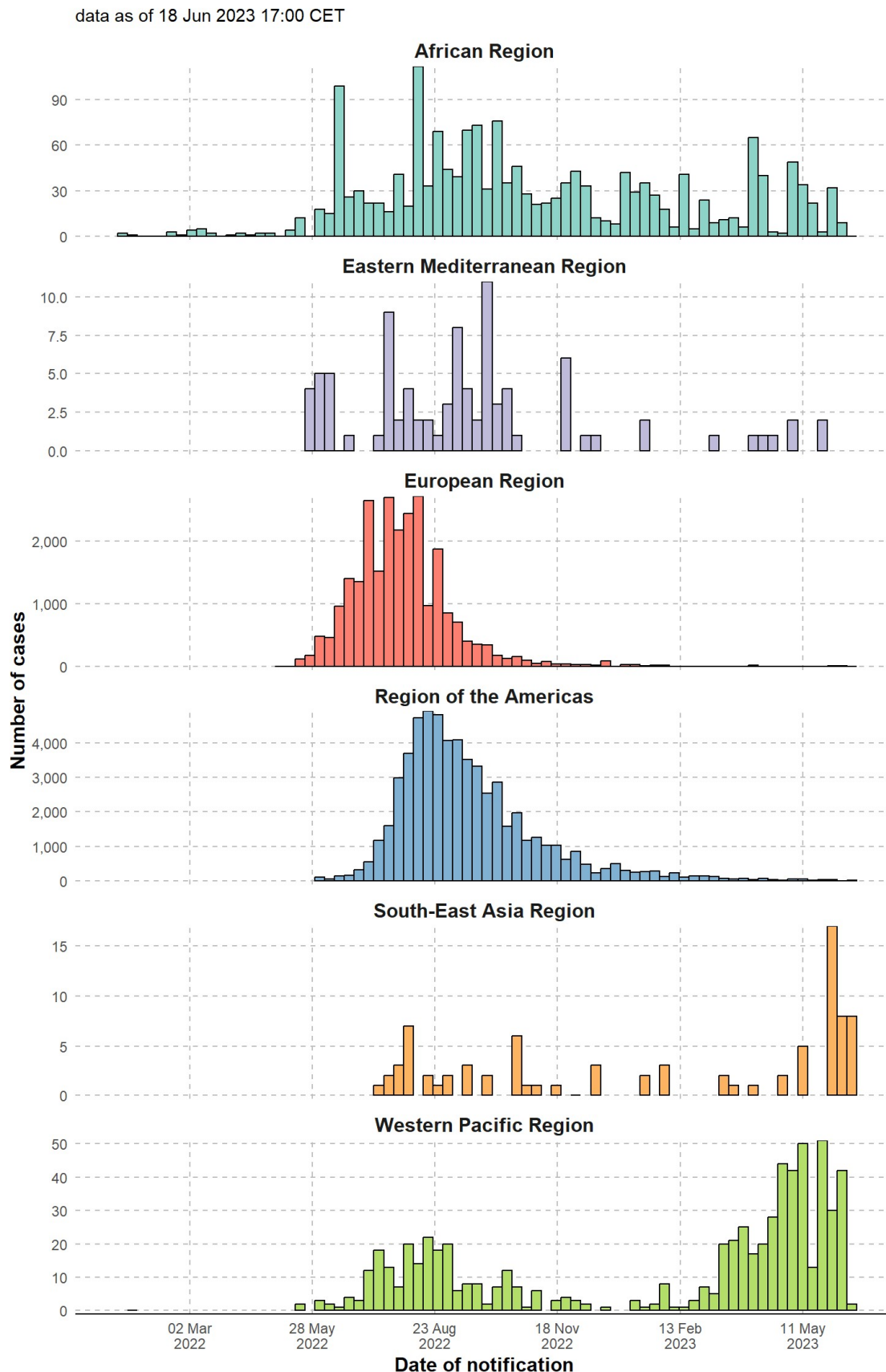
As of 19 June 2023, the ten countries that have reported the highest cumulative number of cases globally remain the United States of America (n = 30 267), Brazil (n = 10 950), Spain (n = 7559), France (n = 4146), Colombia (n = 4090), Mexico (n = 4026), Peru (n = 3800), the United Kingdom (n = 3753), Germany (n = 3691), and Canada (n = 1496). Together, these countries account for 83.9% 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 19 June 2023, 17:00 CEST**

WHO Region	Total confirmed cases	Total deaths	Cases in last three weeks <sup>i</sup>	3-week change in cases (%)
Region of the Americas	59 480	117	67	-50
European Region	25 912	7	22	214
African Region	1 741	21	41	-61
Western Pacific Region	665	0	74	-30
Eastern Mediterranean Region	90	1	0	-
South-East Asia Region	84	1	33	560
Total	87 972	147	237	-34

<sup>i</sup> Using the three most recently completed international standard weeks (Monday - Sunday)

**Figure 1. Epidemiological curves of weekly aggregated confirmed cases of mpox by WHO Region, from 1 January 2022 to 18 June 2023, 17:00 CEST\***



Source: WHO

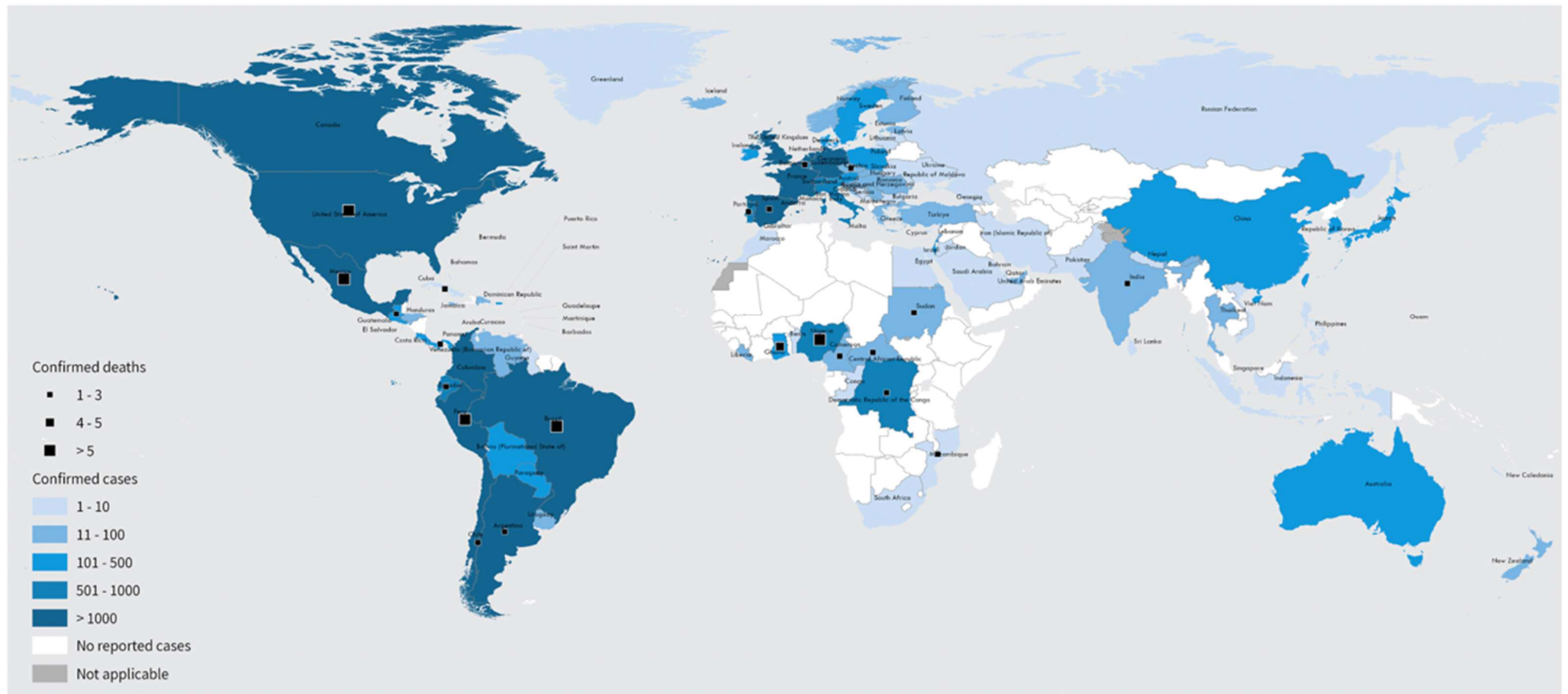
\*This figure shows aggregated weekly data for completed epidemiological weeks ending on Sundays. Data on the current week will be presented in the next situation report. Note the different scales of the y-axes.

The epidemic curves shown in Figure 1 suggest that the outbreak continues with very low levels of transmission in the European Region, low transmission in the Americas, and an increase in transmission in the South-East Asia Region. In the African Region, where transmission is more continuous, the number of weekly cases fluctuates but does not show a clear trend. The Western Pacific region, which has experienced more cases in recent months, is now showing the first potential signs of decrease.

#### Other key epidemiological findings:

- As of 19 June 2023, 96.2% (76 324 / 79 334) of confirmed and probable cases with available data are men, with a median age of 34 years (interquartile range: 29-41 years). The age and sex distribution of cases remain stable.
- Of cases with age data available, 1.4% (1106 / 81 778) are aged 0-17 years, including 325 (0.4%) aged 0-4 years. The majority of cases <18 years of age have been reported from the Region of the Americas (677 / 1106; 61%). The overall proportion of cases in this age group in the Region of the Americas is 1.1% (677 / 59 480), similar to the proportion which has been observed globally.
- Among cases with information available, 84.1% (26 004 / 30 917) have self-identified as gay, bisexual and other men who have sex with men. This proportion, while slightly fluctuating over time, has consistently been above 75%, highlighting that most transmission continues to occur in this community. When information about sexual orientation of cases is lacking, a high proportion occurring in men may be, in some settings, indicative of transmission occurring among men who have sex with men.
- Of all reported modes of transmission since the start of the outbreak, skin and mucosal contact during sex has been the most reported, in 16 459 of 20 067 (82.0%) of all reported transmission events, followed by person-to-person non-sexual contact, a pattern also 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 3997 of 6027 (66.3%) reported exposure settings. In the last 12 weeks, the setting of exposure is more diversified than what was observed at the beginning of the outbreak: available information for 54 cases shows that the main setting of exposure is reported as Other (not specified) for 22 (41%) cases, party setting with sexual contact for 13 (24%) cases, household for 11 (20%) cases, large event with sexual contact for four (7%) cases, workplace for two (4%) cases, party setting without sexual contact for one (2%) case, and large event with no sexual contact for one (2%) case.
- Among cases where at least one symptom is reported (n = 34 720), the most common symptom is any rash, reported in 90.0% of cases, followed by fever (55.2%), and systemic rash or genital rash (53.9% and 47.6% respectively). The symptomatology of cases has been consistent over time in the countries newly affected in this outbreak.

**Figure 2. Geographic distribution of confirmed cases of mpox reported to or identified by WHO from official public sources from 1 January 2022 to 19 June 2023, 17:00 CEST**



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: 20 June 2023

### Summary of available epidemiological data

Data on mpox infection during pregnancy continues to be limited. It is unknown if pregnant people are more susceptible to infection or severe disease, although adverse pregnancy outcomes have been reported, such as loss of the pregnancy, stillbirth, preterm birth or neonatal infection<sup>1-3</sup>. However, the association between severity of maternal illness and adverse perinatal outcomes remains unclear<sup>4</sup>. Limited data suggest monkeypox virus (MPXV) can be transmitted from pregnant people to children *in utero* during pregnancy or by close contact with the newborn during and after birth. It is also currently not known whether MPXV can be spread through body fluids, such as semen, vaginal fluids or breast milk.<sup>1</sup>

Before 2022, seven cases of mpox in pregnancy were described in the literature from two countries – the Democratic Republic of the Congo and Nigeria<sup>5-8</sup>. All women had symptomatic mpox infection during the first or second trimester of their pregnancy. They tested positive for MPXV by polymerase chain reaction (PCR) and required hospital admission due to severe illness. Five pregnancies resulted in pregnancy losses before 26 weeks of gestation. One fetus had hydrops fetalis (marked fetal hepatomegaly and peritoneal effusion) and generalized maculopapular skin rashes, including on the palms and soles, with no congenital malformations or deformities, nor gross abnormalities in the placenta, placental membranes or umbilical cord<sup>7</sup>. Two pregnancies resulted in liveborn neonates, of which one baby had generalized skin rash consistent with mpox and died of malnutrition six weeks after birth<sup>7,8</sup>.

Between 1 January 2022 to 11 June 2023, 58 cases were reported to be pregnant or recently pregnant in the mpox global surveillance data. Five cases were in their first trimester, 12 in their second trimester, and 10 in their third trimester (31 with unknown trimester). Thirteen of these cases were known to be hospitalized, and none admitted to ICU or known to have died. The most common mode of transmission reported was through sexual encounter (four of nine cases where the route was known). The most common exposure setting was the household (four of four cases where the setting was known). As the above is based on surveillance data, no information is available on pregnancy outcomes. Two infants, one probable and one confirmed case, were reported to have acquired infection from the mother during pregnancy or at birth<sup>9</sup>. Most of the cases during pregnancy have been reported in Brazil and the USA.<sup>10,11</sup>

In the USA, during the period 11 May to 7 November 2022, 21 cases of mpox during pregnancy were reported, all among cisgender women:<sup>11</sup> three during the first trimester, four during the second trimester, three during the third trimester, and two cases postpartum within three weeks of pregnancy. Rash was present in all cases. Genital lesions were reported by four cases, however none reported genital lesions near the time of childbirth. Four were hospitalized due to symptoms; none required intensive care, intubation, or unplanned delivery. Among those with available exposure data, the mode of transmission was reported as sexual contact (n = 9) or household contact (n = 3). Two full-term births without complications (including no transmission to the infant) and one spontaneous abortion at 11 weeks' gestation were reported among three cases with pregnancy outcomes data. Three women reported symptoms within 3-4 days after birth, and their newborns developed lesions within one week of their symptom onset.

In Brazil<sup>10</sup>, from June 2022 to up to April 30, 2023, 22 pregnant women with confirmed or probable mpox have been reported, two during the first trimester, 11 during the second trimester, and eight during the third trimester (gestational age in one case was unknown). The epidemiological profile of pregnant women does not differ from other confirmed or probable cases of mpox in the country. Two pregnant women were hospitalized, one for clinical management and the other for isolation.

A case of neonatal monkeypox virus infection after peripartum transmission within a family cluster was also reported in the UK<sup>12</sup>. In this case, transplacental transmission could not be ruled out. A similar case has been reported in the last week from the WHO South-East Asia Region.

## WHO guidance: clinical management and prevention of mpox during and after pregnancy

If you are pregnant, avoid close contact with anyone who has mpox. Anyone who has close contact with someone who is infectious can get mpox, regardless of who they are. If you think you have been exposed to or are showing symptoms that could be mpox, contact your healthcare provider. They will help you get tested and access the care you need<sup>13</sup>.

Individuals and women who are pregnant along, young children and persons who are immunosuppressed are at high risk of severe disease or complications ([WHO clinical management of mpox](#)), despite limited data available. The recommendations for the care of pregnant women during mpox are highlighted below.

Pregnant and recently pregnant women, transgender men and other gender-diverse persons who could become pregnant, and who have mpox should have **access to person-centred, respectful, skilled care throughout and after their pregnancy**. This refers to care organized for and provided to all persons in a manner that maintains their dignity, privacy and confidentiality, ensures freedom from harm and mistreatment, and enables informed choice.

**Individuals' choices and rights to sexual and reproductive health care should be respected, including access to contraception, safe abortion and sexual health information.** Individuals should be advised to abstain from sex until all symptoms have disappeared, and the last scab from any remaining skin lesion has fallen off. Wearing a condom won't fully protect from mpox, but it may reduce the risk or extent of exposure. Persons with mpox are advised to use condoms for 12 weeks after they recover.

**Pregnant or postpartum individuals who have recovered from mpox should be enabled and encouraged to receive routine antenatal, postpartum, or abortion care, as appropriate.** Pregnant individuals with or recovering from mpox should be provided with information related to the potential risk of adverse pregnancy outcomes, and offered counselling should they request or desire it.

WHO currently recommends post-exposure preventive vaccination for people who have been close contacts of someone who has mpox. Primary preventive (pre-exposure) vaccination (PPV) is recommended for those considered at higher risk of exposure to mpox. During pregnancy, where consideration is given to primary or post-exposure preventive vaccination, non-replicating vaccine (MVA-BN) should be used.

If you have confirmed or suspected mpox and you are breastfeeding, talk to your healthcare provider for advice. They will assess the risk of transmitting the virus as well as the risk of withholding breastfeeding from your infant. If it is possible for you to continue to breastfeed and have close contact, they will advise you on how to reduce the risk by taking other measures, including covering up lesions<sup>13</sup>.

**Newborns born to individuals infected with MPVX should be monitored closely for evidence of potential congenital or perinatal exposure to the virus.** The known risks associated with withholding the protection conferred by breastfeeding and the distress caused by separation of mother and infant, must be given greater weight in a risk/benefit calculation than the potential and unknown risk of infection in the infant from infection in the mother. Infant feeding practices, including whether to stop breastfeeding in a mother with mpox, should be assessed on a case-by-case basis, considering the general physical status of the mother and severity of disease, which could impact on the risk of transmission of mpox from mother to infant. If the infant is separated from the mother, the infant should be fed with donor human milk or appropriate breastmilk substitutes, informed by feasibility, safety, sustainability, cultural context, acceptability and service availability. If the mother of an infant or young child has been exposed to MPVX and has no symptoms suggestive of infection, the infant or child should not be separated. General infection prevention and control measures should be taken by mothers with mpox when handling and feeding their infants, including covering up lesions.

For more on clinical management and prevention of mpox, please refer to:

[Clinical management and infection prevention and control for monkeypox: Interim rapid response guidance, 10 June 2022 \(who.int\)](#)

[Vaccines and immunization for monkeypox: Interim guidance, 16 November 2022 \(who.int\)](#)

[Public health advice on mpox and congregate settings: settings in which people live, stay or work in proximity, 20 March 2023.](#)

[Mpox \(Monkeypox\) Questions and answers, 12 May 2023](#)

Other relevant WHO guidelines on maternal and abortion care:

[WHO recommendations on antenatal care for a positive pregnancy experience](#)

[WHO recommendations: intrapartum care for a positive childbirth experience](#)

[WHO recommendations on maternal and newborn care for a positive postnatal experience](#)

[Abortion care guideline \(who.int\)](#)

## References:

1. Ubom AE, Oiwoh SO, Ajiboye AD, et al. Mpox in pregnancy: Management, risks and challenges in Africa and lessons from the COVID-19 pandemic. *Int J Gynecol Obstet.* n/a(n/a). doi:10.1002/ijgo.14810
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3. Schwartz DA, Ha S, Dashraath P, Baud D, Pittman PR, Waldorf KA. Monkeypox Virus in Pregnancy, the Placenta and Newborn: An Emerging Poxvirus with Similarities to Smallpox and Other Orthopoxvirus Agents Causing Maternal and Fetal Disease. *Arch Pathol Lab Med.* Published online February 27, 2023. doi:10.5858/arpa.2022-0520-SA
4. Jamieson DJ, Jernigan DB, Ellis JE, Treadwell TA. Emerging Infections and Pregnancy: West Nile Virus, Monkeypox, Severe Acute Respiratory Syndrome, and Bioterrorism. *Clin Perinatol.* 2005;32(3):765-776. doi:10.1016/j.clp.2005.04.008
5. Ogoina D, Iroezindu M, James HI, et al. Clinical Course and Outcome of Human Monkeypox in Nigeria. *Clin Infect Dis Off Publ Infect Dis Soc Am.* 2020;71(8):e210-e214. doi:10.1093/cid/ciaa143
6. Outbreak of human monkeypox in Nigeria in 2017-18: a clinical and epidemiological report - PubMed. Accessed June 19, 2023. <https://pubmed.ncbi.nlm.nih.gov/31285143/>
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8. Jezek Z, Gromyko AI, Szczeniowski MV. Human monkeypox. *J Hyg Epidemiol Microbiol Immunol.* 1983;27(1):13-28.
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10. Monkeypox Epidemiological Bulletin No. 22 (COE) — Ministry of Health. Accessed June 19, 2023. <https://www.gov.br/saude/pt-br/centrais-de-conteudo/publicacoes/boletins/epidemiologicos/variola-dos-macacos/boletim-epidemiologico-de-monkeypox-no-22-coe/view>
11. Mpox Cases Among Cisgender Women and Pregnant Persons — United States, May 11–November 7, 2022 | MMWR. Accessed June 20, 2023. <https://www.cdc.gov/mmwr/volumes/72/wr/mm7201a2.htm>



12. Ramnarayan P, Mitting R, Whittaker E, et al. Neonatal Monkeypox Virus Infection. *N Engl J Med*. 2022;387(17):1618-1620. doi:10.1056/NEJMc2210828
13. WHO. Mpox (monkeypox), Questions and answers, 12 May 2023. Accessed June 22, 2023. <https://www.who.int/news-room/questions-and-answers/item/monkeypox>

## Technical guidance and other resources

### Strategic Planning and Global Support

- Weekly epidemiological record (WER) no.98, January 2023, 2018-2021: <https://apps.who.int/iris/handle/10665/365630?show=full>
- Emergency committee recommendations on mpox- what's next: <https://www.who.int/publications/journals/bulletin>.
- WHO factsheet on monkeypox, 18 April 2022. <https://www.who.int/news-room/fact-sheets/detail/monkeypox>
- WHO commentary on the naming of mpox disease and monkeypox virus clades has been published in the Lancet Infectious Diseases. 6 February 2023. [New nomenclature for mpox \(monkeypox\) and monkeypox virus clades](https://www.lancet.com/article/S1473-3099(23)00066-1)
- WHO recommends new name for monkeypox disease-28 November 2022 <https://www.who.int/news/item/28-11-2022-who-recommends-new-name-for-monkeypox-disease>
- Monkeypox Strategic Preparedness, Readiness and Response Plan (SPRP) Operational planning guidelines – 2 November 2022 <https://www.who.int/publications/m/item/monkeypox-strategic-preparedness--readiness--and-response--operational-planning-guidelines>
- WHO Emergency Appeal: Monkeypox - July 2022 – June 2023, 13 October 2022 <https://www.who.int/publications/m/item/who-emergency-appeal--monkeypox---july-2022---june-2023>
- Monkeypox Strategic Preparedness, Readiness, and Response Plan (SPRP)- 5 October 2022, [https://www.who.int/publications/m/item/monkeypox-strategic-preparedness--readiness--and-response-plan-\(sprp\)](https://www.who.int/publications/m/item/monkeypox-strategic-preparedness--readiness--and-response-plan-(sprp))
- Invited comment. Why the monkeypox outbreak constitutes a public health emergency of international concern. Ghebreyesus TA. *BMJ* 2022;378:o1978. 09 August 2022. <https://www.bmj.com/content/378/bmj.o1978>

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

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

### WHO Interim technical guidance

- 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-\(crf\)](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.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: <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: Changing perspectives of the mpox outbreak (22 February 2023)
- WHO monkeypox technical briefing for the transport and tourism sector, 5 October 2022: <https://www.who.int/news-room/events/detail/2022/10/05/default-calendar/technical-briefing-on-monkeypox-for-transport-and-tourism-sector>
- [Managing stigma and discrimination in health-care settings in public health emergencies such as monkeypox](#) (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

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

#### One Health and animal health

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

#### Disease Outbreak News and situation reports

- Monkeypox outbreak 2022: <https://www.who.int/emergencies/situations/monkeypox-outrage-2022>
- 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 \(who.int\)](#)
- 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
- Clinical management and infection prevention and control for monkeypox: Interim rapid response guidance, 10 June 2022. <https://www.who.int/publications/i/item/WHO-MPX-Clinical-and-IPC-2022.1>
- Monkeypox in the Region of the Americas - Risk assessment. <https://www.paho.org/en/documents/monkeypox-region-americas-risk-assessment>
- [Atlas of mpox lesions: a tool for clinical researchers.](#)
- 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>
- [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>

## 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 19 June 2023, 17:00 CEST.

\*Countries with no reported cases for more than 21 days

WHO Region	Country	Total Confirmed Cases	Total Deaths <sup>#</sup>
African Region	Benin*	3	0
	Cameroon	40	3
	Central African Republic*	30	1
	Congo*	5	0
	Democratic Republic of the Congo	675	3
	Ghana*	127	4
	Liberia*	13	0
	Mozambique*	1	1
	Nigeria	842	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*	4 146	0
	Georgia*	2	0
	Germany*	3 691	0
	Gibraltar*	6	0
	Greece*	88	0
	Greenland*	2	0
	Hungary*	80	0
	Iceland*	16	0
	Ireland*	229	0
	Israel*	262	0
	Italy*	957	0
	Latvia*	6	0
	Lithuania*	5	0
	Luxembourg*	57	0
	Malta*	34	0
	Monaco*	3	0
	Montenegro*	2	0
	Netherlands	1 265	0
	Norway*	95	0
	Poland*	217	0
	Portugal*	953	1
	Republic of Moldova*	2	0
	Romania*	47	0
Russian Federation*	2	0	
San Marino*	1	0	
Serbia*	40	0	
Slovakia*	14	0	
Slovenia*	47	0	
Spain	7 559	3	
Sweden*	260	0	
Switzerland	554	0	
The United Kingdom	3 753	0	
Türkiye*	12	0	

Region of the Americas	Ukraine*	5	0
	Argentina*	1 129	2
	Aruba*	3	0
	Bahamas*	2	0
	Barbados*	1	0
	Bermuda*	1	0
	Bolivia (Plurinational State of)*	265	0
	Brazil	10 950	16
	Canada	1 496	0
	Chile*	1 441	2
	Colombia*	4 090	0
	Costa Rica	225	0
	Cuba*	8	1
	Curaçao *	3	0
	Dominican Republic*	52	0
	Ecuador*	533	3
	El Salvador*	104	0
	Guadeloupe*	1	0
	Guatemala*	405	1
	Guyana*	2	0
	Honduras*	44	0
	Jamaica*	21	0
	Martinique*	7	0
	Mexico	4 026	29
	Panama	235	1
	Paraguay	126	0
	Peru*	3 800	20
	Puerto Rico*	211	0
	Saint Martin*	1	0
United States of America	30 267	42	
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	56	0
Western Pacific Region	Australia*	145	0
	China	160	0
	Guam*	1	0
	Japan	181	0
	New Caledonia*	1	0
	New Zealand*	41	0
	Philippines*	5	0
	Republic of Korea	104	0
	Singapore*	25	0
Viet Nam*	2	0	
<b>Cumulative</b>	<b>111 Countries/territories/areas</b>	<b>87 972</b>	<b>147</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.