Multi-country outbreak of monkeypox

External Situation Report 7, published 5 October 2022
Data as received by WHO national authorities by 17:00 CEST, 3 October 2022

Risk assessment
Global risk – Moderate
WHO Regional risk

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

Laboratory confirmed cases	Deaths	Countries/ areas/ territories
68 900	25	106

Highlights

- During the week of 26 September to 2 October 2022, the number of monkeypox cases reported in the Regions of Europe and the Americas declined, driving the overall downward trend observed since August 2022.
- Since the last edition published on 21 September 2022, 7147 new cases (11.6% increase in total cases) and three new deaths have been reported.
- On 5 October 2022, WHO launched its Monkeypox Strategic Preparedness, Readiness and Response Plan which outlines the priority actions needed to stop human-to-human transmission of monkeypox, minimize animal-human transmission of the virus in affected countries, and protect vulnerable groups at risk of severe disease.
- WHO reiterates the importance of using standardized case and death definitions and encourages its Member States to adopt and apply the monkeypox death definition as highlighted in the latest version of the monkeypox surveillance guidance.

World Health Organization

Epidemiological Update

Data source: WHO Multi-country Monkeypox Outbreak – Global Trends

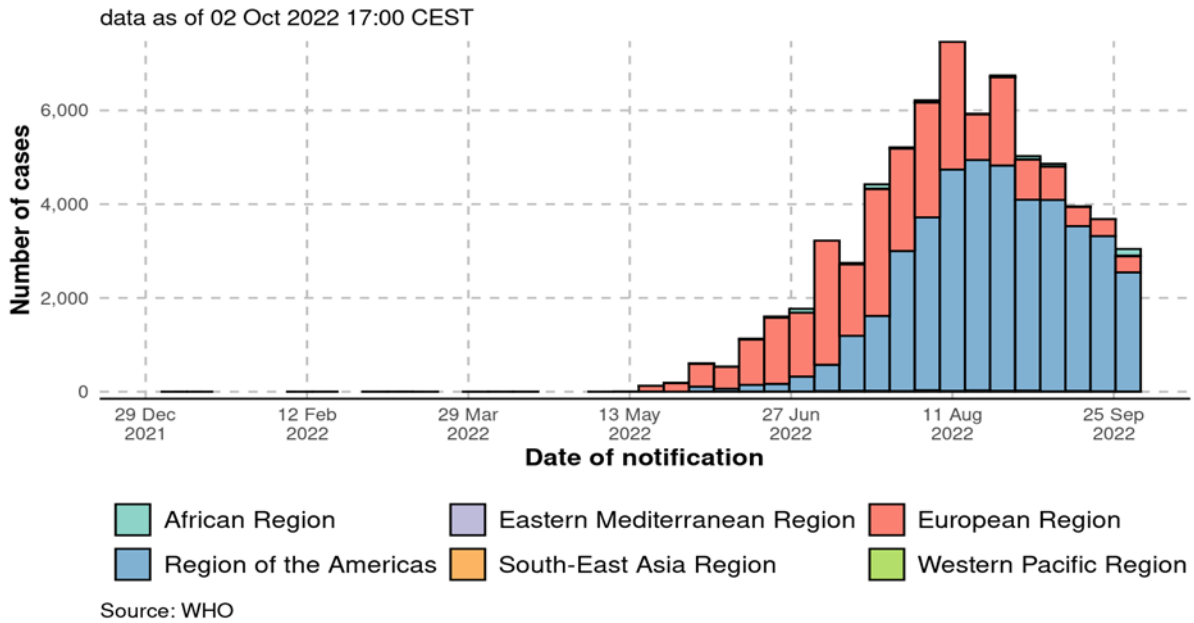
From 1 January through 2 October 2022, 68 900 laboratory-confirmed cases of monkeypox and 25 deaths have been reported to WHO from 106 countries/territories/areas (hereafter 'countries'[i]) in all six WHO Regions (Table 1). Since the last edition published on 21 September 2022, 7147 new cases (11.6% increase in total cases), and three new deaths have been reported.

In the past seven days, 26 countries reported an increase in the weekly number of cases, with the highest increase (44.4%) reported in Nigeria. One new country, Egypt, reported its first case in the past seven days (27 September). Overall, 39 countries have not reported new cases for over 21 days, the maximum incubation period of the disease.

The number of weekly new cases reported globally declined by 16.8% in week 39 (26 Sep – 02 Oct) (n=3045 cases) compared to week 38 (19 - 25 September) (n=3661 cases), with the largest proportional decrease observed in the Region of the Americas (-23%) and in the European Region (-5%). Despite these decreases, the majority of cases reported in the past four weeks were from the Region of the Americas (85.6%) and the European Region (12.8%). From 19 September through 2 October, a total of three deaths have been reported, in the United States of America (n=2), and Czechia (n=1). Overall, the African Region has reported the highest number of deaths among confirmed cases (13/25; 52%).

As of 2 October, the ten countries that have reported the highest cumulative number of cases globally are the United States of America (n = 25 672), Brazil (n = 7869), Spain (n = 7188), France (n = 3999), the United Kingdom (n = 3635), Germany (n = 3625), Peru (n = 2587), Colombia (n = 2042), Mexico (n = 1627), and Canada (n = 1400). Together, these countries account for 86.6% of the cases reported globally.

Figure 1. Epidemiological curve of weekly aggregated confirmed cases of monkeypox by region, from 1 January to 2 October 2022 17:00 CEST*.



*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.**

Table 1. Number of cumulative confirmed monkeypox cases and deaths reported to WHO, by WHO Region, from 1 January 2022 to 2 October 17:00 CEST

WHO Region	Confirmed cases	Deaths
African Region	714	13
Region of the Americas	43 181	6
Eastern Mediterranean Region	64	1
European Region	24 737	4
South-East Asia Region	23	1
Western Pacific Region	181	0
Cumulative	68 900	25

*The number of deaths reported from the Africa region has dropped from 14 in Sitrep #6, to 13 in the current Sitrep#7, and due to retrospective adjustments in the number of deaths in Central African Republic.

Other key epidemiological findings:

- The outbreak continues to affect primarily young men, with 97.5% (36 468/37 417) of cases with available data being men, with a median age of 35 years (Interquartile Range: 29 – 42 years). Less than 1% of cases with age data available are aged 0-17 years, out of which 93 (0.2%) are aged 0-4 years. This proportion differs between regions, with the largest proportion of cases aged 0-17 years being reported from the Region of the Americas (191/328; 58%).
- Among cases with sexual orientation reported, 89.9% (15 592/17 337) identified as gay, bisexual and other men who have sex with men. Of all reported types of transmission, transmission through skin and mucosal contact during sexual activities was most commonly reported, with 10 520 of 12 070 (87.1%) of all reported transmission events.
- Of all settings in which cases reported their likely exposure setting, the most commonly reported was in a party setting with sexual contacts, comprising 3225 of 6612 (48.8%) reported exposure settings.
- Among cases with known HIV status, 49.2% (9476/19 242) are HIV-positive.
- Among the cases who reported at least one symptom, the most common symptom is any rash, and is reported in 83.4% of cases, followed by fever at 57.8%, and systemic and genital rash (49.6% and 45.4%, respectively).

Monkeypox deaths

As of 2 October, there have been 25 monkeypox deaths reported to WHO through IHR notification. Considering the current case count, the crude reported case fatality rate of this multi-country outbreak is very low, approximately 0.04% (25/68 900). In addition to these 25 officially reported deaths, other deaths have been reported from alternative sources such as through media or through the local health authorities among patients affected by monkeypox. In several of these cases, the main cause of the death has been attributed to a more severe underlying health condition and therefore has not been reported as a monkeypox death.

Throughout the current outbreak, some Member States have reclassified previously reported monkeypox deaths as no longer being attributable to monkeypox. WHO reiterates the importance of using standardized definitions and encourages its Member States to adopt and apply the monkeypox death definition as highlighted in the latest version of the monkeypox surveillance guidance. WHO defines a monkeypox death as 'a death resulting from a clinically compatible illness in a probable or confirmed monkeypox case, unless there is a clear alternative cause of death that cannot be related to monkeypox infection (e.g. trauma).' Thus, for monkeypox surveillance

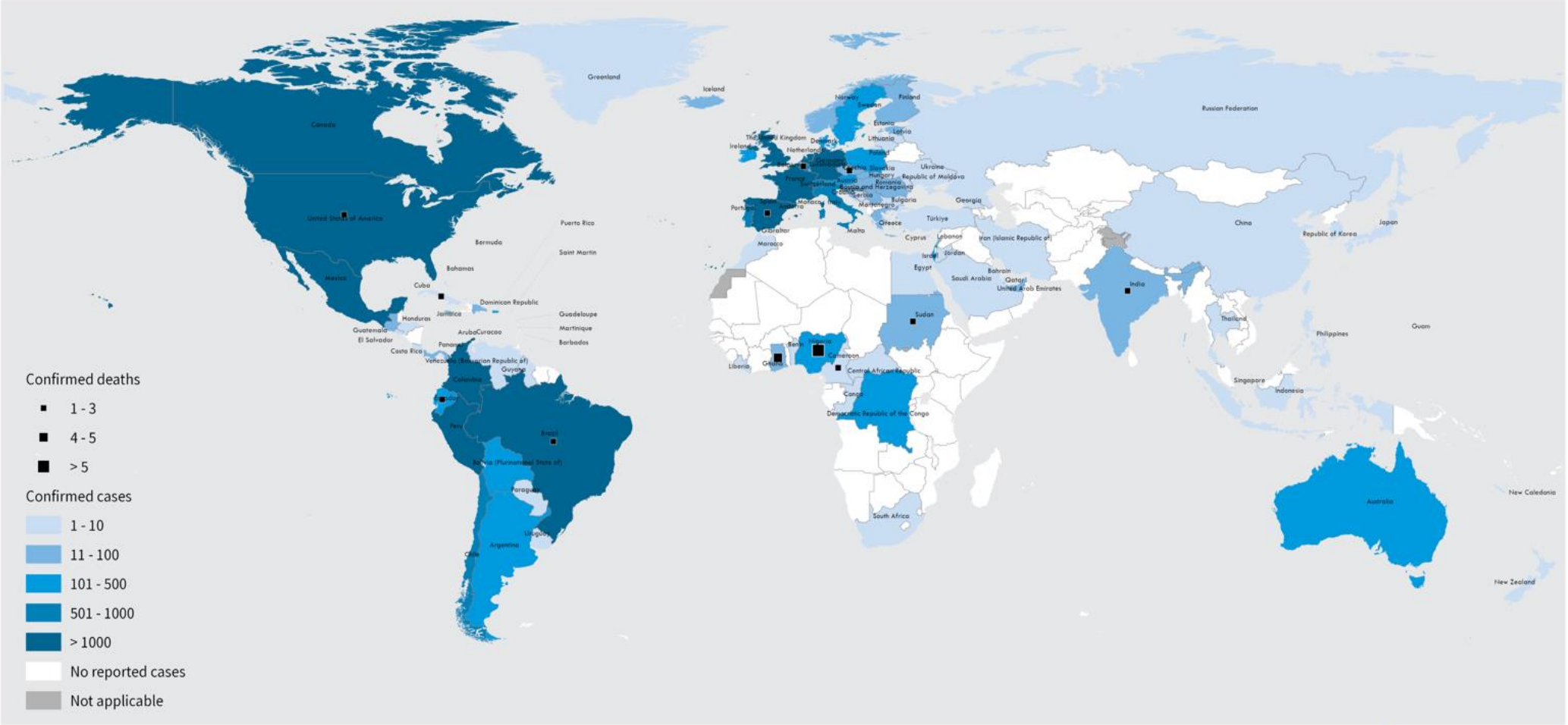
purposes, patients with underlying conditions, whose death is precipitated by monkeypox infection, should be classified as monkeypox deaths; in this regard, the classification of monkeypox death for surveillance purposes may differ from practices used in death certificate coding, wherein the 'underlying' cause of death (e.g. chronic comorbidity) may be considered the most relevant indicator.

WHO continues to report only deaths in probable and confirmed monkeypox cases in its global deaths count (i.e. deaths in suspected cases are not counted, due to the low specificity of the suspected case definition).

Note that countries may use their own case definitions separate from those outlined in the above document.

Nine of the 25 reported deaths (36%) have case-based information available. Among the nine cases for which information was available, the majority, eight out of nine (88%), were male; and six out of six (100%) had self-identified as gay, bisexual, and other men who have sex with men. The median age was 41 years (range 31 – 65 years). Five of the reported deaths were in individuals who were HIV-positive, one person had a negative HIV status, the HIV status was unknown for one case, and for two individuals, the information was missing. The most common symptoms were fever, rash, and genital lesions. Seven out of the nine deceased patients were reported to have been hospitalized, and out of these, four had been admitted to the intensive care unit.

Figure 3. Geographic distribution of confirmed cases of monkeypox reported to or identified by WHO from official public sources from 1 January 2022 to 2 October 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: 4 October 2022

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World Health Organization

Updates and WHO Advice

WHO continues to closely monitor and respond to the outbreak and support international coordination and information sharing with Member States and partners. Clinical and public health incident response have been activated by Member States to coordinate comprehensive case finding, contact tracing, laboratory investigation, supported isolation, clinical management, implementation of infection prevention and control measures, risk communication and community engagement, and vaccination activities, as well as support ongoing epidemiological and countermeasures research.

Surveillance and Laboratory

WHO continues to collect information on the daily number of monkeypox cases and deaths through IHR communication, as well as detailed information through the WHO case reporting form (CRF). Currently, WHO has received the CRF for around 93% of the total confirmed cases reported at the global level, and the latest epidemiological information is included in the online 2022 Monkeypox outbreak: Global trends.

Laboratory confirmation of monkeypox is done primarily using real time polymerase chain reaction (RT-PCR). There are currently few commercially available kits and WHO is working with partners, including the Robert Koch Institute, to validate these assays. To support countries, WHO has procured 39 000 tests for 58 countries. The procurement of more tests is ongoing. WHO has also established a mechanism to ship samples internationally for confirmatory testing, with 85 samples shipped to reference laboratories from ten countries to date. More information on testing can be found in the interim guidance on laboratory testing for the monkeypox virus.

One Health

Monkeypox is a zoonotic disease. In areas where monkeypox is enzootic (occurs in animals), the virus is thought to be maintained through circulation among a number of susceptible mammals, including a range of as well as non-human primates, with occasional spill-over to humans. Infection may occur through exposure to live animals resulting in bites, scratches or direct contact with the body fluids and/or through consumption of insufficiently cooked meat of infected animals. Effective infection prevention practices in interacting with wildlife can reduce the risk of spill over events and research in this area is critical to improving our collective understanding of monkeypox.

In addition to animal-to-human transmission, there is a risk of spillback from infected humans to susceptible animals. As of today, there have been at least two reports of pet dogs suspected of acquiring monkeypox infection through very close contact with their owner. These are the first documented cases of human-to-animal transmission of the monkeypox virus. To avoid spillback into animals and minimize the potential of formation of new animal reservoirs, people who are suspected or confirmed to be infected with monkeypox virus should, whenever possible, avoid close direct contact with animals, including domestic pets, livestock, and other captive animals, as well as wildlife. In addition, always ensure that all waste, including medical waste, is safely disposed of and made inaccessible to rodent or other scavenger animals.

For more information, consult the recently published World Organization for Animal Health (WOAH, founded as OIE) Risk Guidance on Reducing Spillback of Monkeypox Virus from Humans to Wildlife, Pet Animals and other Animals - WOAH - World organization for Animal Health.

Countries are encouraged to report cases of monkeypox in animals to WOAH as significant animal health information, as described in Article 1.1.5 of the Terrestrial Animal Health Code.

Infodemic Management and WHO Information Network for Epidemics (EPI-WIN)

WHO global infodemic monitoring is being conducted weekly, and insights shared on monkeypox revealed that most of the digital conversations on the topic were in USA, followed by the United Kingdom, Colombia, and Nigeria. Narratives that were mostly engaged included a range of issues:

- questions about **transmission**, including whether monkeypox is a sexually transmitted infection
- **access to monkeypox vaccines**, including claims of inequitable vaccine distribution in some of the most affected communities, and concerns over procurement of vaccines
- concerns about **stigma and discrimination**, including in healthcare settings
- concerns about **monkeypox in children**
- confusion about monkeypox and COVID-19, including rumours that monkeypox is a side-effect of COVID-19 vaccines

WHO EPI-WIN held a monkeypox briefing for the multi-faith organization, Religions for Peace, with whom WHO has had a Memorandum of Understanding (MoU) since July 2022, where the important role of faith-based leaders in supporting their communities in this emergency was discussed.

At the request of the Cruise Lines International Association (CLIA), WHO held a briefing with representatives of major global cruise lines and their medical personnel. The briefing emphasized what cruise lines could do to make cruises safe, and how to manage any possible cases. A similar briefing for the travel and tourism sectors took place on 5 October 2022.

Three EPI-WIN Updates were developed in August 2022 on the evolving epidemiological situation, transmission and how to mitigate the risk of monkeypox during small and large gatherings. The update on transmission addressed public queries around how monkeypox is transmitted and the most vulnerable populations, while emphasizing the uncertainty that the science is also evolving and the information is based on what is known so far. EPI-WIN updates on mass gatherings highlighted WHO recommendations in simple terms.

Six EPI-WIN webinars focused on issues pertaining to stigma around monkeypox disease, transmission of the virus, public health measures to put in place for gatherings, and managing monkeypox patients in cruises and in the travel and tourism industry. All webinars included regional perspectives and had participation from over 70 countries. WHO guidance was shared, as well as perspectives from a patient from the European Region and two healthcare professionals from the Region of the Americas.

Gatherings

Common exposure settings for monkeypox include certain gatherings such as parties, pride events, parades, festivals, concerts, and other ways in which people gather that may include activities involving skin-to-skin contact which pose a higher risk for the spread of monkeypox. WHO recommends using a risk-based approach for decision making related to planning, modifying, or postponing gatherings, which should be tailored to the context of the event under consideration, and repeated at regular intervals.

The risk-based approach entails three steps:

1. Risk evaluation: identification and quantification of the baseline risks based on the characteristics of the event, associated activities and the context in which they take place.
2. Risk mitigation: application of a package of precautionary measures aimed at reducing the baseline risk;
3. Risk communication: proactive dissemination of information on the precautionary measures adopted, their rationale and purpose, and on how relevant decisions were taken.

WHO also suggests that health authorities collaborate with event organizers to raise awareness of the risk of monkeypox related to expected planned or spontaneous activities, of the monkeypox epidemiological situation in the host area, and to facilitate the adoption of appropriate public health and social measures (PHSM) intended to reduce the risk of transmission of monkeypox in relation to the event and the activities of attendees. Additionally, it is suggested that health authorities work to instruct event personnel on how to manage possible cases of monkeypox during the event and to facilitate the adoption of appropriate PHSM aimed at reducing the risk of transmission.

It is important to note that postponing or cancelling gatherings in areas where monkeypox cases have been detected is not required as a default measure; rather a risk-based approach can inform the decision-making process in this regard.

Technical guidance and other resources

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

- 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. 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 Guidance and Public Health Advice

- WHO Surveillance, case investigation and contact tracing for Monkeypox: Interim guidance, 25 August 2022. https://www.who.int/publications/i/item/WHO-MPX-Surveillance-2022.3
- WHO Vaccines and immunization for monkeypox: Interim guidance, 24 August 2022. https://apps.who.int/iris/bitstream/handle/10665/361894/WHO-MPX-Immunization-2022.2-eng.pdf
- WHO Global clinical data platform for monkey case report form (CRF), 21 July 2022, https://www.who.int/publications/i/item/WHO-MPX-Clinical_CRF-2022.3
- 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
- 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

Data management

- Case and contact investigation form (CIF), 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
- Monkeypox Case 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)

Risk communication and community engagement

- Risk communication and community engagement public health advice on understanding, preventing and addressing stigma and discrimination related to monkey pox 1 September 2022. https://www.who.int/publications/m/item/communications-and-community-engagement-interim-guidance-on-using-inclusive-language-in-understanding--preventing-and-addressing-stigma-and-discrimination-related-to-monkeypox
- Monkeypox Q&A, 31 August 2022. https://www.who.int/news-room/questions-and-answers/item/monkeypox
- Monkeypox: public health advice for gay, bisexual and other men who have sex with men, 18 July 2022. https://www.who.int/publications/m/item/monkeypox-public-health-advice-for-men-who-have-sex-with-men
- 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
- 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
- Risk communication and community engagement. Public health advice on the recent outbreak of monkeypox in the WHO European Region, 24 May 2022. https://www.euro.who.int/__data/assets/pdf_file/0004/538537/public-health-advice-monkeypox-eng.pdf

EPI - WIN Webinars and Updates

Upcoming EPI-WIN Webinar:

- WHO monkeypox technical briefing. For transport and tourism sector; October 5, 2022 13:00 – 14:15 CET
  Registration at: https://www.who.int/news-room/events/detail/2022/10/05/default-calendar/technical-briefing-on-monkeypox-for-transport-and-tourism-sector

The recordings of the previous EPI-WIN Webinars related to current monkeypox outbreak:

- Managing stigma and discrimination in health-care settings in public health emergencies such as monkeypox (Sept. 22, 2022)
- How is monkeypox spreading? What do we know so far (July 27, 2022)
- Monkeypox outbreak and mass gatherings (June 24, 2022)

EPI-WIN updates

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

Laboratory and diagnostics

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

Disease Outbreak News and situation reports

- Monkeypox outbreak 2022: https://www.who.int/emergencies/situations/monkeypox-oubreak-2022
- Multi-country outbreak of monkeypox, External situation report #6- 21 September 2022: https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--6---21-september-2022
- Multi-country outbreak of monkeypox, External situation report #5- 7 September 2022: https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--5---7-september-2022
- Multi-country outbreak of monkeypox, External situation report #4- 24 August https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--4---24-august-2022
- Multi-country outbreak of monkeypox, External situation report #3 - 10 August 2022: https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--3---10-august-2022
- WHO Multi-country outbreak of monkeypox, External situation report #2 – 25 July 2022: https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--2---25-july-2022
- WHO Multi-country outbreak of monkeypox, External situation report #1 - 6 July 2022: https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--1---6-july-2022
- WHO disease outbreak news: Monkeypox, all items related to multi-country outbreak: https://www.who.int/emergencies/emergency-events/item/2022-e000121
- WHO disease outbreak news: Monkeypox, all previous items including endemic countries and traveler-associated outbreaks: https://www.who.int/emergencies/emergency-events/item/monkeypox

Training and Education

- WHO monkeypox outbreak toolbox, June 2022. https://www.who.int/emergencies/outbreak-toolkit/disease-outbreak-toolboxes/monkeypox-outbreak-toolbox
- WHO factsheet on monkeypox, 19 May 2022. http://www.who.int/news-room/fact-sheets/detail/monkeypox
- 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
- 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

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 monkeypox by WHO region and country from 1 January 2022 to 2 October 2022, 17:00 CEST.

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

WHO Region	Country	Total Confirmed Cases	Total Deaths
African Region	Benin*	3	0
	Cameroon	8	2
	Central African Republic	9	0
	Congo	5	0
	Democratic Republic of the Congo	190	0
	Ghana	91	4
	Liberia *	3	0
	Nigeria	400	7
	South Africa *	5	0
Eastern Mediterranean Region	Bahrain	1	0
	Egypt	1	0
	Iran (Islamic Republic of) *	1	0
	Jordan *	1	0
	Lebanon *	11	0
	Morocco *	3	0

	Qatar	5	0
	Saudi Arabia *	8	0
	Sudan	17	1
	United Arab Emirates *	16	0
European Region	Andorra *	4	0
	Austria	314	0
	Belgium	770	1
	Bosnia and Herzegovina	5	0
	Bulgaria *	6	0
	Croatia	29	0
	Cyprus *	5	0
	Czechia	67	1
	Denmark	185	0
	Estonia *	11	0
	Finland	40	0
	France	3999	0
	Georgia *	2	0
	Germany	3625	0
	Gibraltar *	6	0
	Greece	81	0
	Greenland *	2	0
	Hungary	77	0
	Iceland	14	0
	Ireland	183	0
	Israel	253	0
	Italy	850	0
	Latvia	5	0
	Lithuania *	5	0
	Luxembourg *	55	0
	Malta *	33	0
	Monaco *	3	0
	Montenegro *	2	0
	Netherlands	1219	0
	Norway	92	0
	Poland	188	0
	Portugal	926	0
	Republic of Moldova *	2	0
	Romania	40	0
	Russian Federation *	2	0
	Serbia	40	0
	Slovakia *	14	0
	Slovenia	47	0
	Spain	7188	2
	Sweden	195	0
	Switzerland	513	0
	The United Kingdom	3635	0
	Türkiye *	1	0

	Ukraine	4	0
Region of the Americas	Argentina	396	0
	Aruba *	3	0
	Bahamas *	2	0
	Barbados *	1	0
	Bermuda *	1	0
	Bolivia (Plurinational State of)	200	0
	Brazil	7869	2
	Canada	1400	0
	Chile	915	0
	Colombia	2042	0
	Costa Rica	5	0
	Cuba	4	1
	Curaçao	3	0
	Dominican Republic	31	0
	Ecuador	142	1
	El Salvador	9	0
	Guadeloupe *	1	0
	Guatemala	30	0
	Guyana *	2	0
	Honduras	6	0
	Jamaica	14	0
	Martinique *	1	0
	Mexico	1627	0
	Panama	16	0
	Paraguay	2	0
	Peru	2587	0
	Puerto Rico	186	0
	Saint Martin *	1	0
	United States of America	25 672	2
	Uruguay	8	0
	Venezuela (Bolivarian Republic of)	5	0
South-East Asia Region	India	12	1
	Indonesia *	1	0
	Thailand	10	0
Western Pacific Region	Australia	136	0
	China	5	0
	Guam *	1	0
	Japan *	4	0
	New Caledonia *	1	0
	New Zealand	9	0
	Philippines *	4	0
	Republic of Korea *	2	0
	Singapore	19	0
Cumulative	106 countries/territories/areas	68 900	25