

Mpox

Multi-country external situation report no. 39, published 6 October 2024

KEY FIGURES						
Reporting period: 01 Ja	nuary 2022 – 31 Aug	just 2024				
Area	Number of reported confirmed cases		Number of deaths among confirmed cases		Number countries reporting cases	
Global	106 310			234		123
Reporting period: 01 Ja	nuary – 29 Septemb	er 2024				
Area	Number of reported confirmed cases	Number of deaths among confirmed cases		Number of reported suspected cases		Number of deaths among suspected cases
Africa	6 754	32		35 525		996
Democratic Republic of the Congo¹	5 610	25		30 766		990
Burundi ¹	853	0		2 188		0
Reporting period: last (weeks, 19 August -	- 29 Septe	mber 2024			
Africa	1 810	0		11 933		304
Democratic Republic of the Congo ¹	1 005	0		9 748		304
Burundi ¹	700	0		1 368		0

Highlights

- As of 29 September, 14 countries on the African continent have reported mpox cases in the last six weeks and are considered to have active outbreaks. The most affected country in 2024 continues to be the Democratic Republic of the Congo (5610 confirmed cases, 25 deaths), followed by Burundi (853 confirmed cases, no deaths), and Nigeria (78 confirmed cases, no deaths).
- This edition provides a detailed subnational focus on the Democratic Republic of the Congo province of North Kivu where about a third (34%) of the reported confirmed cases are individuals living in camps for Internally Displaced People (IDP) and approximately 75% of mpox cases are among children 0 17 years old, evenly distributed between males and females. Currently, available case investigation and sequencing data suggest that mpox transmission in this province is exclusively human-to-human, with about a third (34%) of the cases reporting sexual contact as the mode of transmission, and among these cases, over half are reported to be sex workers (52%).
- The report includes information about the first mpox case due to clade Ib MPXV notified in India. This is
 the second imported case of clade Ib MPXV infection in the WHO South-East Asia Region (SEAR) and
 the third outside the African Region.
- Operational updates as of 4 October 2024 are included. WHO approved the first mpox diagnostic test
 for emergency use, the Alinity m MPXV, on 3 October 2024 and 265 000 doses of MVA-BN vaccines
 have been dispatched from Kinshasa to several "hubs" in the Democratic Republic of the Congo.

¹ In some countries, suspected cases that undergo testing are not removed from the overall count of suspected cases, regardless of whether the test result is positive (confirmed case) or negative (discarded case).

In this edition:

- Situation overview
- Epidemiological update
 - o Situation in Africa
 - o Focus on North Kivu, the Democratic Republic of the Congo
 - o Detection of clade Ib in India
- Global operational updates
- Mpox resources

Situation overview

This report provides an update on the epidemiological situation for mpox in Africa (including countries in the WHO African Region and some countries of the WHO Eastern Mediterranean Region), with data as of **29 September 2024**.

Recent global updates for mpox can also be found in the WHO mpox surveillance report.

WHO conducted the latest global mpox rapid risk assessment in early August 2024. Based on information available at the time, the mpox risk of geographical spread and potential impact on health were assessed as follows:

- In the eastern Democratic Republic of the Congo and neighbouring countries: high.
- In areas of the Democratic Republic of the Congo where mpox is endemic: high.
- In Nigeria and other countries of West, Central and East Africa where mpox is endemic: moderate.
- In all other countries in Africa and around the world: moderate (while in individual countries or regional bloc assessments may vary, and the risk may be assessed as low).

Individual-level risk is largely dependent on individual factors such as exposure risk and immune status, regardless of geographic area, epidemiological context, biological sex, gender identity or sexual orientation.

This situation update in Africa presents reported confirmed mpox cases and deaths,² as described in the WHO case definitions published in the <u>Surveillance</u>, <u>case investigation and contact tracing for mpox interim guidance</u>. It also presents nationally reported suspected mpox cases, as defined by the countries that have reported them, to provide the reader with more information on epidemiological trends in countries with limited testing, such as the Democratic Republic of the Congo.

Note: The indicator of suspected cases should be interpreted with caution, as these are recorded according to varying national case definitions, and in some countries, suspected cases that undergo testing are not removed from the overall count of suspected cases, regardless of whether the test result is positive (confirmed case) or negative (discarded case). In the absence of more detailed information, it is currently not possible to correctly subtract confirmed cases from the total number of suspected cases reported; therefore, the confirmed cases represent a subset of suspected cases.

Definitions of suspected mpox cases for the Democratic Republic of the Congo and Burundi can be found here.

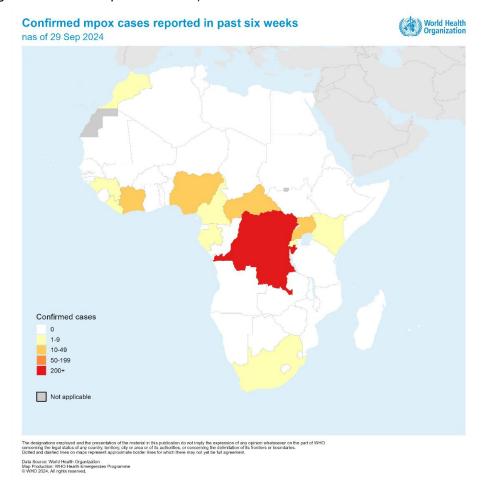
² For the WHO European region, both confirmed and probable cases are included within confirmed case counts and detailed case data.

Epidemiological update

Situation in Africa in 2024^{3, 4}

As of 29 September,14 countries on the African continent have reported mpox cases in the last six weeks (2 incubation periods of 21 days) and are considered to have active, ongoing outbreaks (Figure 1). The most affected country in 2024 continues to be the Democratic Republic of the Congo (5610 confirmed cases, 25 deaths), followed by Burundi (853 confirmed cases, no deaths), and Nigeria (78 confirmed cases, no deaths).

Figure 1. Geographic distribution of reported confirmed mpox cases, by country, Africa, 2024 in the last six weeks (19 August 2024 – 29 September 2024).



The epidemic curve of confirmed cases in Africa by country in Figure 2 shows a decline in the number of reported cases in the Democratic Republic of the Congo in recent weeks, while the number of cases is increasing in Burundi. The decreasing trend of confirmed cases in the Democratic Republic of the Congo should be interpreted with caution, considering the reports of limited testing and stockout of testing supplies in recent weeks. From January to September 2024, around 40% of suspected cases in the Democratic Republic of the Congo have been tested, with a test positivity of about 50%.

³ On the African continent there are 47 Member States in the WHO African Region and seven in the Eastern Mediterranean Region.

⁴ Slight discrepancies in epidemiological data are expected between this report and the WHO Africa Regional Office, Regional Mpox Bulletin: 20 September 2024 due to different reporting dates. The Regional Mpox Bulletin is available in the following link: Mpox (monkeypox) | WHO | Regional Office for Africa

Bracket at end of curve indicates potential reporting delays in recent weeks of data. Data as of 29 Sep 2024 400 Number of cases 12 Feb 2024 29 Mar 2024 14 May 2024 28 Dec 29 Jun 2024 14 Aug 2024 29 Sep 2024 2023 Date of notification Burundi Central African Republic Congo Cameroon Democratic Republic of the Congo Côte d'Ivoire Gabon Guinea

Figure 2. Epidemic curve of weekly reported confirmed mpox cases in Africa, by reporting country, 1 January 2024 – 29 September 2024

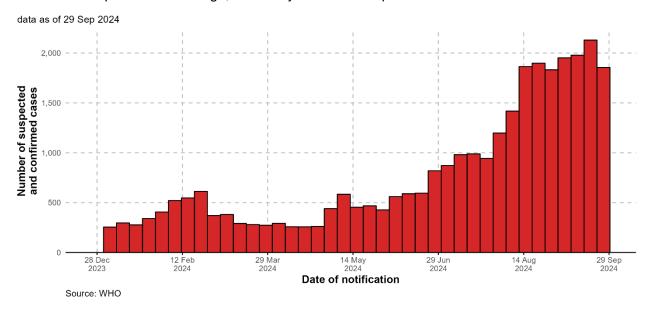
When considering the epidemic curve of suspected mpox cases in the Democratic Republic of the Congo (Figure 3), the number of cases shows an overall increasing trend. The epidemiological situation in the country needs to be interpreted considering both Figure 2 and 3.

Morocco

Uganda

Nigeria

Figure 3. Epidemic curve of weekly reported suspected mpox cases (tested and untested) in the Democratic Republic of the Congo, 1 January 2024 – 29 September 2024.



Focus on North Kivu, the Democratic Republic of the Congo

Kenya

Rwanda

Source: WHO

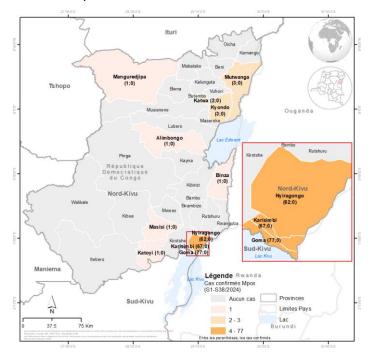
Liberia

South Africa

As of 28 September 2024, in the Democratic Republic of the Congo province of North Kivu, 323 confirmed mpox cases, including two confirmed deaths (case fatality ratio [CFR] 0.6%) have been reported. The outbreak was first detected in May 2024 and genomic sequencing analysis revealed clade Ib monkeypox

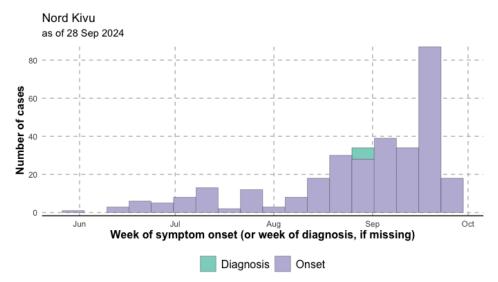
virus (MPXV) similar to the strains circulating in South Kivu province. Of 34 health zones in North Kivu, 14 have reported confirmed mpox cases, and the most affected zones are Goma, Karisimbi and Nyiragongo (Figure 5).

Figure 4. Geographic distribution of reported confirmed mpox cases in North Kivu, Democratic Republic of the Congo, 01 May 2024 – 28 September 2024.



So far, 1108 suspected mpox cases in North Kivu have been tested for MPXV with a test positivity of 29%. The number of confirmed cases in the province has been increasing in recent weeks (Figure 6).

Figure 5. Epidemic curve of reported confirmed mpox cases in North Kivu, Democratic Republic of the Congo, 01 May 2024 – 28 September 2024. Note that cases in recent weeks may not be complete due to delays between symptom onset and reporting.

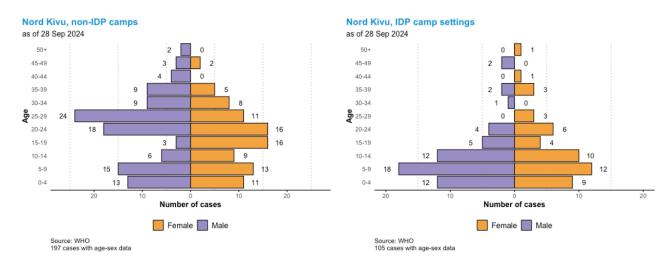


Among confirmed cases, 117 (36%) are individuals living in camps for Internally Displaced People (IDP), all localized in the three most affected health zones, Goma, Karisimbi and Nyiragongo. Thirteen IDP camps have reported at least one mpox case, and the most affected are Munigi, Mugunga, Rusayo, and Kanyaruchinya.

Eight of the 14 IDP camps (57%) have reported only one mpox case, suggesting sporadic introduction of the virus likely from outside the camp, while transmission may be sustained in the remaining six which show more cases over time.

In North Kivu, around 50% of confirmed mpox cases are among adults and 54% of total cases are male (Figure 6). In IDP camps, approximately 75% of mpox cases are among children 0-17 years old and they are evenly distributed between males and females.

Figure 6. Age and sex distribution of reported confirmed mpox cases in non-camp and camp settings, North Kivu, Democratic Republic of the Congo, 01 May – 28 September 2024.



Currently available case investigation and sequencing information suggest that mpox transmission in North Kivu is exclusively human-to-human, mainly at the community level, and 36% (117 of 323) of cases have a known epidemiological link.

The mode of transmission for 109 cases (34%) is reported being sexual contact, and among these cases, 52% (57 of 109) are reported being female sex workers.

Most cases (216 of 323, 67%) have recovered from the disease and 109 continue to be in isolation, 33 in the household and 76 in healthcare facilities. Only 19 (9%) cases have presented complications and two have died in the hospital.

Detection of clade lb in India

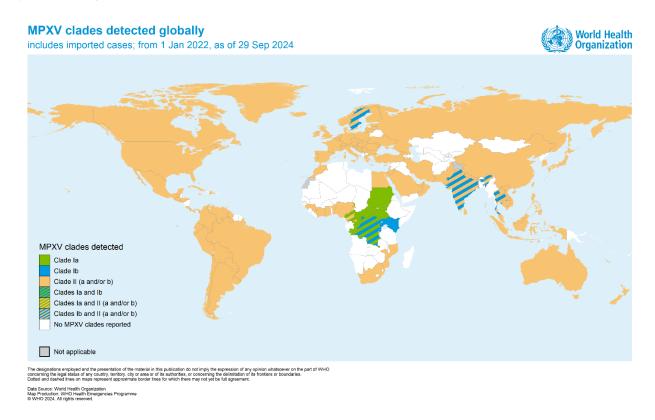
On 1 October 2024, the Ministry of Health and Family Welfare of India notified WHO of the first mpox case due to MPVX clade lb.

As per the India IHR NFP, the case of mpox due to clade Ib MPXV is an adult male, Indian national with a recent history of international travel to the United Arab Emirates (UAE). The patient developed mpox symptoms on 8 September 2024 while in UAE. On 13 September, he arrived in India and on 16 September was admitted to a public hospital. On 19 September, samples were tested at the National Institute of Virology (NIV) in Pune, India and confirmed MPXV infection. Genomic sequencing analysis confirmed clade Ib MPXV infection. The patient recovered without complications and was discharged on 30 September 2024. The UAE health authorities are conducting a detailed case and contacts investigation and will finalize the comprehensive verification and validation process as per IHR procedures.

At the global level, this is the second reported case of clade Ib MPXV infection in the WHO South-East Asia Region (SEAR) and the third reported case of clade Ib MPXV infection outside the African Region. The first case of clade Ib MPXV infection in SEAR was reported in Thailand, and the other case of clade

Ib MPXV infection detected outside the African Region was reported in Sweden (Figure 4). Both these cases had a recent history of travel to affected countries in Africa, while this latest case did not.

Figure 4. Geographic distribution of MPXV clades by country, as of 29 September 2024.



Global situation

The mpox global situation update is provided monthly. For the latest information (as of **August 2024**) please refer to the following report: <u>Multi-country outbreak of mpox</u>, <u>External situation report #37 - 22 September 2024 (who.int)</u>

Global operational updates

The WHO health emergency prevention, preparedness, response and resilience (HEPR) framework underpins both the <u>Strategic Framework for enhancing prevention and control of mpox (2024-2027)</u> and the current emergency response to the mpox Public Health Emergency of International Concern (PHEIC).

Aligned with the HEPR framework, the WHO <u>Global Strategic Preparedness and Response Plan</u> (SPRP) for mpox focuses on strengthening five core components—the **5Cs**:

- 1. Emergency coordination: Efficient coordination for timely crisis response.
- 2. Collaborative surveillance: Real-time data integration for early threat detection.
- 3. Community protection: Engaging communities in prevention and resilience-building measures.
- **4. Safe and scalable care:** Equipping health systems to provide essential care with scalable capacity.
- **5.** Access to and delivery of countermeasures: Ensuring equitable distribution of medical countermeasures.

This section provides updates on the WHO global mpox response as of 4 October 2024.

1. Emergency coordination

- The WHO Global Incident Management Team (IMST) at HQ and Regional level (AFRO) tightened
 alignment with the Continental IMT in the Democratic Republic of the Congo by appointing on site or
 remote technical leads for response.
- Technical groups continued coordination meetings including: a webinar on Mpox Response and Phased Vaccination Planning with countries and regional stakeholders.
- A detailed planning process is scheduled from 16 to 18 October in Brazzavile; Mpox Vaccination senior Leaders Group meeting was held with a joint statement to be released soon on Access and Allocation Mechanism (AAM).
- WHO regional IMST and Countries IMS weekly meeting and Continental IMS meeting with partners took place. WHO emphasized the need for further scale up of field intervention including ensuring laboratory capacity is accessible in the most affected areas

2. Collaborative surveillance

- Epidemiological data on mpox updated weekly can be accessed on the WHO surveillance report here.
- On 26 September 2024 an <u>EPI-WIN on collaborative surveillance</u> for mpox was organized including WHO and Africa Centers for Disease Control and Prevention (CDC) epidemiologist working on the mpox surveillance of the response.
- A webinar on the mpox situation in the Democratic Republic of the Congo was held on 4 October 2024 by the <u>Collaboratory</u> network.
- WHO convened the Technical Advisory Group on Virus Evolution (TAG-VE) to review available data on clade Ib MPXV and evaluation the risk of this sub-clade.

3. Community protection

- Continued coordination of and responsive technical support to regions and countries through 3-level and bilateral calls.
- Finalization of interim public health advice for mpox-related prevention and control measures in school settings, slated for dissemination through the WHO African Regional Office (AFRO).
- Development of operational guidance for home care and isolation of persons with mpox in low resource settings.
- Information, Education, and Communication (IEC) materials on how to make 0.05% chlorine solution for disinfection at home developed to accompany the public health advice for people recovering from or caring for someone with mpox at home. Additional derivative products are being considered for development.

Key multi-partner and civil society engagement and advocacy activities were held in the reporting period:

- Engagement of the Community Protection Partners Network on how to sensitize and equip communities and key stakeholders to fight stigma and discrimination.
- Continued coordination of the delivery of Risk Communication and Community Engagement (RCCE) for public health emergencies through the Collective Service interagency initiative between WHO, the International Federation of Red Cross and Red Crescent Societies (IFRC), United Nations Children's Fund (UNICEF), and the Global Outbreak Alert and Response Network (GOARN).

4. Safe and scalable care

- Provision of strategic and technical support to countries and WHO AFRO for implementation of infection, prevention and control (IPC) and water, sanitation and hygiene (WASH) in affected countries.
- Development of a healthcare facility screening tool for screening of all persons at all entrances of affected healthcare facilities.
- Development of a health and care worker mpox exposure form for use by any health and care workers determined to have had an occupational exposure.
- Development of a training package, including IPC and WASH, for community health advocates and community health workers.
- Development of IPC and WASH training modules for health and care workers.
- Review and finalization of mpox blueprint kit for tent structures housing suspected, probable, or confirmed mpox cases.
- Development of the essential IPC and WASH supply list for home care, schools and healthcare facilities in collaboration with UNICEF.

5. Access to and delivery of countermeasures

Vaccines

- WHO is finalizing the issuance of prequalification age extension of the Modified Vaccinia Ankara-Bavarian Nordic (MVA-BN) vaccine product for persons 12-17 years old following the European Medicines Agency's authorization.
- Provision of strategic and technical support to the African Vaccine Regulatory Forum (AVAREF) and national regulatory authorities with the issuance of emergency use authorization for the MVA-BN vaccine product.
- Engagement with AFRO, the Democratic Republic of the Congo, Ghana, Nigeria, Rwanda, Tanzania on harmonization of the cohort safety event monitoring protocol following mpox vaccination and to ensure global data collection.
- The statement on mpox vaccines developed by the <u>WHO Global Advisory Committee on Vaccine Safety from the meeting on 20 September</u> was published.
- Engagement of all affected countries to update them on the current epidemiological situation, response and coordination strategy and initiate the process to support countries in micro-planning of control strategies.
- 265 000 doses of the MVA-BN vaccine have been dispatched from Kinshasa to several "hubs" in the Democratic Republic of the Congo. Further dispatch to vaccination locations will take place this week by road, boat or helicopter.

Diagnostics

- WHO issued the <u>Emergency Use Authorization for the first mpox diagnostic test</u>, the Alinity m MPXV assay, on 3 October 2024.
- WHO is conducting three other assessments (two abridged and one full assessment procedure) of candidates for EUL of MPXV diagnostic products.

Therapeutics

 Member States have been briefed on the Monitored Emergency Use of Unregistered and Investigational Interventions (MEURI) process to access tecovirimat.

Operational Challenges

- Among the main challenges of the global mpox response are the limited funds and human resources
 (as pledged resources are progressively being converted to available funds) required to ensure
 prompt development and dissemination of operational guidance requested by countries.
- WHO Offices at the three levels (headquarters, region, country) are working with national health authorities and partners to translate technical guidance into integrated field response in hotspots with surge of human resources in critical response areas and deployment of equipment and supplies.

Mpox resources

Strategic planning and global support

- WHO mpox global strategic preparedness and response plan. Updated 6 September 2024. Available at: https://www.who.int/publications/m/item/mpox-global-strategic-preparedness-and-response-plan
- Mpox continental preparedness and response plan for Africa: https://africacdc.org/download/mpox-continental-preparedness-and-response-plan-for-africa/
- WHO appeal: mpox public health emergency 2024, 27 August 2024. Available at: https://www.who.int/publications/m/item/who-appeal--mpox-public-health-emergency-2024
- Strategic framework for enhancing prevention and control of mpox (2024-2027). May 2024. Available at: https://www.who.int/publications/i/item/9789240092907

International Health Regulations Emergency Committee, Review Committee and recommendations of the Director-General

- First meeting of the International Health Regulations (2005) Emergency Committee regarding the
 upsurge of mpox 2024, 19 August 2024. https://www.who.int/news/item/19-08-2024-first-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-upsurge-of-mpox-2024
- Extension of the standing recommendations for mpox issued by the Director-General of the World health organization (WHO) in accordance with the International Health Regulations (2005) (IHR), 21 August 2024. Extension of the standing recommendations for mpox issued by the Director-General of the World health organization (WHO) in accordance with the International Health Regulations (2005) (IHR)
- Standing recommendations for mpox issued by the Director-General of the World Health Organization
 (WHO) in accordance with the International Health Regulations (2005) (IHR), 21 August 2023.
 <a href="https://www.who.int/publications/m/item/standing-recommendations-for-mpox-issued-by-the-director-general-of-the-world-health-organization-(who)-in-accordance-with-the-international-health-regulations-(2005)-(ihr)

Regional mpox bulletin

 WHO Africa Regional Office, Regional Mpox Bulletin: 27 September 2024. https://www.afro.who.int/health-topics/mpox-monkeypox

Surveillance

- Surveillance, case investigation and contact tracing for mpox: Interim guidance. 20 March 2024. https://www.who.int/publications/i/item/WHO-MPX-Surveillance-2024.1
- Mpox Case Investigation Form (CIF) and minimum dataset Case Reporting Form (CRF), 5 September 2024. https://www.who.int/publications/m/item/monkeypox-minimum-dataset-case-reporting-form-(crf)
- WHO Go.Data: Managing complex data in outbreaks. https://www.who.int/tools/godata
- Technical Guidelines for Integrated Disease Surveillance and Response in the African Region: Third edition, March 2019. https://www.afro.who.int/publications/technical-guidelines-integrated-disease-surveillance-and-response-african-region-third

Laboratory and diagnostics

- WHO issued the Emergency Use Authorization of the Alinity m MPXV, 03 Oct 2024.
 https://www.who.int/news/item/03-10-2024-who-approves-first-mpox-diagnostic-test-for-emergency-use--boosting-global-access
- WHO Guidance on regulations for the transport of infectious substances 2023 2024, 13 June 2024. https://www.who.int/publications/i/item/789240089525

- Diagnostic testing for the monkeypox virus (MPXV): interim guidance, 10 May 2024. https://www.who.int/publications/i/item/WHO-MPX-Laboratory-2024.1
- Genomic epidemiology of mpox viruses across clades. https://nextstrain.org/mpox/all-clades
- WHO Biohub System. https://www.who.int/initiatives/who-biohub
- Mpox Q&A on mpox testing for health workers, 11 December 2023. https://www.who.int/news-room/questions-and-answers/item/testing-for-mpox--health-workers

Clinical management and infection, prevention and control

- Posters for health and care workers.
 - Steps to put on PPE for mpox (16 August 2024)
 - Steps to remove PPE for mpox (16 August 2024)
- Clinical characterization of mpox including monitoring the use of therapeutic interventions: statistical analysis plan, 13 October 2023. https://www.who.int/publications/i/item/WHO-MPX-Clinical-Analytic_plan-2023.1
- The WHO Global Clinical Platform for mpox. https://www.who.int/tools/global-clinical-platform/monkeypox
- Atlas of mpox lesions: a tool for clinical researchers, 28 April 2023.
 https://apps.who.int/iris/bitstream/handle/10665/366569/WHO-MPX-Clinical-Lesions-2023.1-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, 12 April 2022. https://www.who.int/publications/i/item/9789240041745
- WHO 5 moments for hand hygiene. https://www.who.int/campaigns/world-hand-hygiene-day

Vaccination

- WHO prequalifies mpox vaccine. 13 September 2024. News brief.
- Smallpox and mpox (orthopoxviruses): WHO position paper. 23 August 2024. https://www.who.int/publications/i/item/who-wer-9934-429-456
- Meeting of the Strategic Advisory Group of Experts on Immunization (SAGE), 11 13 March 2024: conclusions and recommendations. https://iris.who.int/handle/10665/376934
- 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

Risk communication and community engagement and public health advice

- Mpox Factsheet, 26 August 2024. https://www.who.int/news-room/fact-sheets/detail/mpox
- Mpox Q&A, 17 August 2024. https://www.who.int/news-room/questions-and-answers/item/mpox
- Risk communication and community engagement readiness and response toolkit: mpox, 23 April 2024. https://www.who.int/publications/i/item/9789240091559
- Mpox Q&A on mpox testing for individuals and communities, 11 December 2023.
 https://www.who.int/news-room/questions-and-answers/item/testing-for-mpox--individuals-and-communities
- 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
- Public health advice for sex workers on mpox, 18 September 2024.
 https://www.who.int/publications/m/item/public-health-advice-for-sex-workers-on-monkeypox
- 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-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.
 https://www.who.int/publications/m/item/public-health-advice-on-mpox-%28monkeypox%29-and-sex-on-premises-venues-and-events
- 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
- 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

One Health and animal health

- World Organization for animal health (WOAH) statement on novel mpox, 23 August 2024. https://www.woah.org/en/woah-statement-on-novel-mpox/
- WOAH Risk guidance on reducing spillback of monkeypox virus from humans to wildlife. Pet Animals and other Animals, September 2022. https://www.woah.org/app/uploads/2022/12/woah-mpox-guidelines-en.pdf
- WOAH Website and FAQs on mpox, 12 August 2022. https://www.woah.org/en/disease/mpox/

Training and education

- Health topics mpox: https://www.who.int/health-topics/monkeypox
- Mpox Fact Sheet, 26 August 2024. https://www.who.int/news-room/fact-sheets/detail/mpox
- Mpox Q&A, 17 August 2024. https://www.who.int/news-room/questions-and-answers/item/mpox
- Mpox "What we know": infographics: English: https://cdn.who.int/media/docs/default-source/documents/emergencies/outbreak-toolkit/mpox-infographic-fr-v03.pdf?sfvrsn=a4dac1d_1
- OpenWHO. Online training module. Monkeypox: Introduction. https://www.who.int/health-topics/monkeypox#tab=tab_1
 - o English: https://openwho.org/courses/monkeypox-introduction
 - Français: https://openwho.org/courses/variole-du-singe-introduction
- OpenWHO. Extended training. Monkeypox epidemiology, preparedness and response. 2021.
 - o English: https://openwho.org/courses/monkeypox-intermediate
 - Français: https://openwho.org/courses/variole-du-singe-intermediaire
- OpenWHO. Mpox and the 2022-2023 global outbreak
 - English: https://openwho.org/courses/mpox-global-outbreak-2023
- VigiMobile training video: https://www.youtube.com/watch?v=UBfnBKRkAu0
- Adverse Event Following Immunization (AEFI) causality assessment methodology:
 https://www.who.int/publications/i/item/9789241516990

 Adverse Event Following Immunization (AEFI) causality assessment software: https://gvsi-aefi-tools.org/
- eLearning courses on vaccine safety monitoring https://who.csod.com/selfreg/register.aspx?c=aefi%20causality%20assessment
 - Vaccines safety basics
 - o Adverse Event Following Immunization (AEFI) data management
 - AEFI investigation
 - AEFI causality assessment

Other resources

- WHO mpox outbreak toolbox, July 2024. https://www.who.int/emergencies/outbreak-toolkit/disease-outbreak-toolbox
- Responding to the global mpox outbreak: ethics issues and considerations: a policy brief, 19 July 2023. https://www.who.int/publications/i/item/WHO-Mpox-Outbreak_response-Ethics-2023.1
- WHO AFRO Weekly Bulletin on Outbreaks and Other Emergencies. https://www.afro.who.int/health-topics/disease-outbreaks/outbreaks-and-other-emergencies-updates

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