

Mpox

Multi-country external situation report no. 45, published 11 January 2025

KEY FIGURES		
Reporting period: last 6 weeks, 25 November 2024 – 5 January 2025		
Main countries with clade Ib	Number of reported confirmed cases	Number of deaths among confirmed cases
Democratic Republic of the Congo¹	2464	5
Burundi	798	0
Uganda	767	8
Rwanda	17	0
Kenya	12	0

Highlights

- The outbreak of clade Ib monkeypox virus (MPXV) continues predominantly in the Democratic Republic of the Congo, Burundi and Uganda, with new travel-related cases identified in previously unaffected countries.
- Recent travel-associated mpox cases highlight the risk of undetected transmission in countries, emphasizing the need for strengthened surveillance and timely reporting to improve global monitoring and prevent international spread.
- The Democratic Republic of the Congo remains the most affected country, experiencing circulation of both clade I MPXV subclades. Despite many of the provinces reporting stable trends in cases, the situation in the country remains concerning with continued high circulation of the virus.
- Burundi and Uganda continue reporting between 100-200 new mpox cases per week, with a plateauing trend, possibly impacted by a decline in surveillance and reporting during the December festive season.
- Since the last update (23 December 2024), Uganda has reported six deaths, bringing the total to 12 deaths among confirmed mpox cases in the country.
- A travel-related case of mpox due to clade Ib MPXV i in Germany (the second importation) led to secondary household transmission.
- Clade Ib MPXV has been detected in three additional countries, Belgium, China and France, directly or indirectly linked to travel to affected countries in Central Africa.
- Kosovo² has reported its first case of mpox. Information on the MPXV clade is not yet available.

¹ The data for DRC is based on the laboratory dataset and covers the last six weeks of complete data available, 18 November – 29 December 2024

² All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999)

In this edition:

- [Contextual description](#)
- [Epidemiological update](#)
 - [Overview of mpox outbreaks by virus clade](#)
 - [Confirmed cases reported in Africa](#)
 - [Focus on the Democratic Republic of the Congo \(clade Ia & Ib MPXV\)](#)
 - [Other countries and territories reporting cases of mpox due to clade I MPXV](#)
 - [Potential undetected mpox transmission and the risk of MPXV importation](#)
- [Global operational updates](#)
 - [Emergency coordination](#)
 - [Collaborative surveillance](#)
 - [Community protection](#)
 - [Safe and scalable care](#)
 - [Access to and delivery of countermeasures](#)
- [Mpox resources](#)
- [Annex 1. Latest Rapid Risk Assessment of November 2024](#)

Contextual description

This report provides an update on:

- The epidemiological situation for mpox in Africa (including countries in the WHO African Region and some in the WHO Eastern Mediterranean Region), with data as of **5 January 2025**.
- Operational response updates and updates on imported mpox cases as of **9 January 2025**.

The latest mpox updates can also be found in the [WHO mpox surveillance report](#).

The epidemiological content of the report is based on information from global mpox indicator-based surveillance set up in 2022. This surveillance system mainly collects data on confirmed and probable mpox cases and deaths reported by Member States (MS) to WHO or reported publicly through official MS resources (webpages, surveillance dashboards, as well as epidemiological and situation reports). Given limited access to Polymerase Chain Reaction (PCR) testing of suspected mpox cases in some settings, particularly in the Democratic Republic of the Congo, WHO has also been reporting suspected (clinically compatible) mpox cases which meet the country's national clinical case definition for mpox since the declaration of the public health emergency of international concern (PHEIC) on 14 August 2024.

The indicator of suspected cases should nevertheless be interpreted with care, as suspected cases that undergo testing are not removed from the overall count of suspected cases. 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. The case definition for suspected mpox in the Democratic Republic of the Congo can be found [here](#).

Information on operational updates has been provided by the global mpox incident management support team at WHO headquarters, and the information on imported cases is based on International Health Regulations (2005) notifications received by WHO from Member States.

For reference purposes, a summary of the latest WHO global mpox rapid risk assessment conducted in November 2024 can be found in [Annex 1](#).

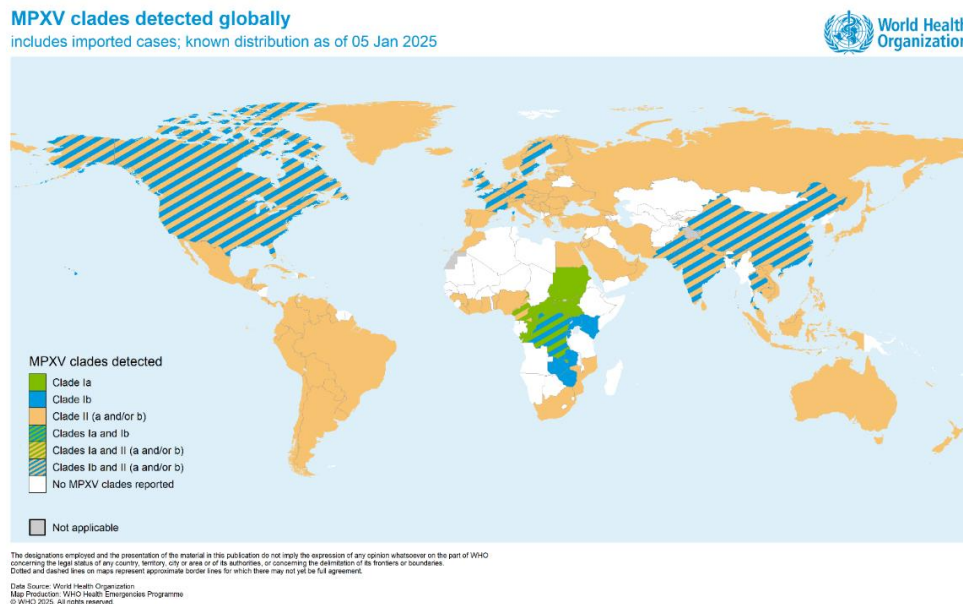
Epidemiological update ^{3, 4}

Global monkeypox virus (MPXV) distribution

As of 5 January 2025, the distribution of reported MPXV clades by country of detection is as shown in Figure 1. This information is compiled from sequencing conducted and shared via different sources, including open-access databases, peer-reviewed publications, reports and direct communication to WHO, including through its Technical Advisory Group on Virus Evolution (TAG-VE).

Since its first detection in September 2023, clade Ib MPXV has been detected in eight provinces of the Democratic Republic of the Congo (in South Kivu, North Kivu, Kinshasa, Kasai, Tshopo, Tanganyika, Haut-Katanga, and Mai-Ndonbe provinces). Within Africa, community transmission has been reported in Burundi, Kenya, Rwanda and Uganda; travel-related cases have been reported from Zambia, and Zimbabwe. In addition, while no cases have so far been confirmed in Tanzania, the identification of mpox cases with a travel-link to Tanzania suggest undetected transmission in the country. Outside of Africa, eleven countries have detected clade Ib MPXV. Sweden, Thailand, the United States of America and Canada have detected one case each among travellers from affected countries in East and Central Africa. Germany has confirmed six cases: three cases among travellers from affected countries in East Africa and three household contacts of one of these travellers. The United Kingdom of Great Britain and Northern Ireland has detected five cases: two cases among travellers from affected countries in East Africa and three household contacts of one of these travellers. China has detected five cases: one with travel history to the Democratic Republic of the Congo and four close contacts of this traveller. Belgium has detected two cases: one case among a traveller from an affected country in Central Africa and one family contact of this traveller. India and Pakistan have each detected a single case among travellers from the United Arab Emirates. No case of mpox due to clade Ib MPXV has been reported by the United Arab Emirates so far, suggesting undetected transmission in the country. France has detected one case without travel history, who reported contact with two individuals with recent travel history to an affected country in Central Africa.

Figure 1. Geographic distribution of MPXV clades reported to WHO, by country, as of 5 January 2025.



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 due to different reporting dates. The Regional Mpox Bulletin is available in the following link: [Mpox \(monkeypox\) | WHO | Regional Office for Africa](#)

Overview of mpox outbreaks by virus clade

This section provides an overview of the major mpox outbreaks by MPXV subclade. It is not intended to be an exhaustive list of outbreaks in all settings; rather, it highlights the main characteristics of some outbreaks and the affected populations. Although there is no documented difference in inherent transmissibility of different MPXV strains to date, they are affecting different populations in different settings, resulting in distinct outbreak dynamics.

Clade Ia MPXV

Clade Ia MPXV is found primarily in the Democratic Republic of the Congo, where it affects endemic provinces and has increasingly been found in previously unaffected provinces in recent years, including the capital Kinshasa. Sporadic cases continue to be reported in neighbouring Central African Republic and in the Republic of Congo. The Democratic Republic of the Congo and the Central African Republic report a higher proportion of children among cases, while in the Republic of Congo, most cases are among adults.

Previously, genomic sequencing analysis had indicated that clade Ia MPXV typically emerged in human populations through zoonotic exposure, leading to limited human-to-human transmission. Current epidemiological data and phylogenetic analysis still suggest that many outbreaks of mpox due to clade Ia MPXV are the result of zoonotic spillover with secondary human-to-human transmission. There is emerging evidence of increasing sustained human-to-human transmission of clade Ia MPXV in sexual networks in Kinshasa following importation from endemic parts of the country. Human-to-human transmission has not yet been documented in the Central African Republic or in the Republic of Congo.

Clade Ib MPXV

Clade Ib MPXV is predominantly spreading in the Democratic Republic of the Congo, and neighbouring countries to the east, with community transmission reported in Burundi and Uganda, clusters of cases reported in Kenya and Rwanda, and mostly travel-related cases in other countries where it is detected. No human case has been substantively linked to a suspected animal exposure for this clade yet, and current genomic sequencing data suggest that it is transmitted only through human-to-human contact. In the Democratic Republic of the Congo, it has been found in eight provinces: South Kivu, North Kivu, Kinshasa, Kasai, Tshopo, Tanganyika, Haut-Katanga and Mai-Ndombe, and it is the fastest expanding MPXV strain. Other most affected countries in Africa are Burundi and Uganda, where transmission has been ongoing in recent months, while smaller clusters have been reported in Kenya and Rwanda. The extent of undetected transmission is unknown. Zambia and Zimbabwe have reported travel-related cases and very limited secondary transmission. Outside of Africa, imported travel-related cases have also been detected (in order of reporting) in Sweden, Thailand, India, Germany, the United Kingdom of Great Britain and Northern Ireland, the United States of America, Canada, Pakistan, Belgium, China, and France. Secondary transmission from these cases has been reported in the United Kingdom of Great Britain and Northern Ireland, Germany, Belgium, China and France.

Imported mpox cases have been among adults who travelled during their incubation periods or with early symptoms and were diagnosed once they arrived in the country. Often, they reported prior sexual contact with a person with known mpox or someone with signs and symptoms suggestive of mpox.

Where initial clusters of mpox due to clade Ib MPXV expand and as the outbreak progresses, transmission patterns appear to evolve, with more spread within households, leading to a progressive shift in age and sex distribution, with a rising proportion of cases among children.

The multi-country outbreak of mpox driven by clade Ib MPXV that began in 2022 showed that sexual contact can sustain community transmission of MPXV. Likewise, subclades Ia and Ib are also spreading through sexual contact; much remains to be understood about transmissibility and sustainability of transmission through non-sexual direct physical contact for all clades. In settings where transmission persists, it is likely driven by a combination of sexual, household, and community contact.

Clade IIa MPXV

In 2024, Côte d'Ivoire, Guinea, and Liberia reported mpox linked to clade IIa MPXV. Both countries have shown evidence of sustained community transmission of this strain, with cases dispersed over wide geographical areas. Outbreaks of clade IIa MPXV are a concerning new phenomenon as human-to-human transmission of this clade

had not been reported before 2024. Furthermore, co-circulation of clade IIa and clade IIb MPXV has been reported for the first time, in both Côte d'Ivoire and Liberia.

Mpox linked to clade IIa MPXV has been reported in adults and children, with many lacking a known epidemiological link, suggesting ongoing, largely undetected community transmission. Limited epidemiological investigations have constrained our understanding of the modes of transmission in these outbreaks and clade IIa MPXV remains the least described MPXV strain in scientific literature. While there is no documented evidence of sexual contact transmission for this strain, it is likely that all forms of close contact contribute to its spread, documented for the first time in 2024.

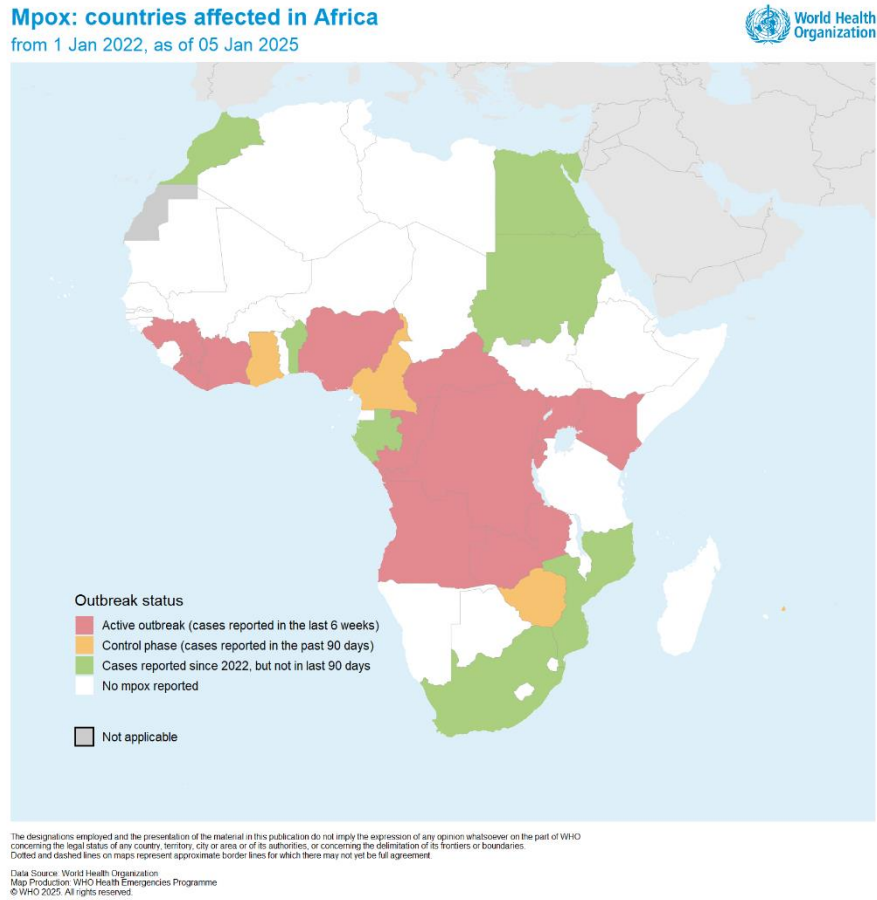
Clade IIb MPXV

Most mpox outbreaks in other parts of West, North and Southern Africa and other parts of the world are due to clade IIb MPXV, a continuation of the multi-country outbreak that began in 2022. Most regions report circulation of clade IIb lineage B.1, while lineage A.1 continues to circulate in Nigeria and some countries in the WHO Eastern Mediterranean Region. The most affected population outside of Africa continues to be men who have sex with men, primarily exposed through sexual contact. In instances where others have been affected, such as women and children, it has not led to sustained transmission, unlike what is being observed for clade I MPXV in the African context. Australia has seen an unprecedented rising trend in cases in recent months while most other reporting countries have reported ongoing low-level transmission mainly in the same population at risk.

Confirmed cases reported in Africa

In Africa, from January 2024 to 5 January 2025, 14 700 confirmed mpox cases, including 66 deaths (CFR – 0.4%), have been reported by 20 countries. The most affected country continues to be the Democratic Republic of the Congo,⁵ followed by Burundi (3035 confirmed cases, including one death) and Uganda (1552 confirmed cases, including 12 deaths). Twelve countries in Africa have reported mpox cases in the last six weeks (two maximum incubation periods of 21 days) and are considered to have active, ongoing outbreaks (Figure 2). Three countries, Cameroon, Ghana, and Zimbabwe have not reported confirmed cases in the last six weeks and would be considered to have transitioned into the control phase of their mpox outbreak, as defined in the [Strategic framework for enhancing prevention and control of mpox 2024-2027](#), if surveillance is deemed to be adequate.

Figure 2. Mpox outbreak status in Africa, by country (1 January 2022 – 5 January 2025).



Focus on the Democratic Republic of the Congo (clade Ia & Ib MPXV)

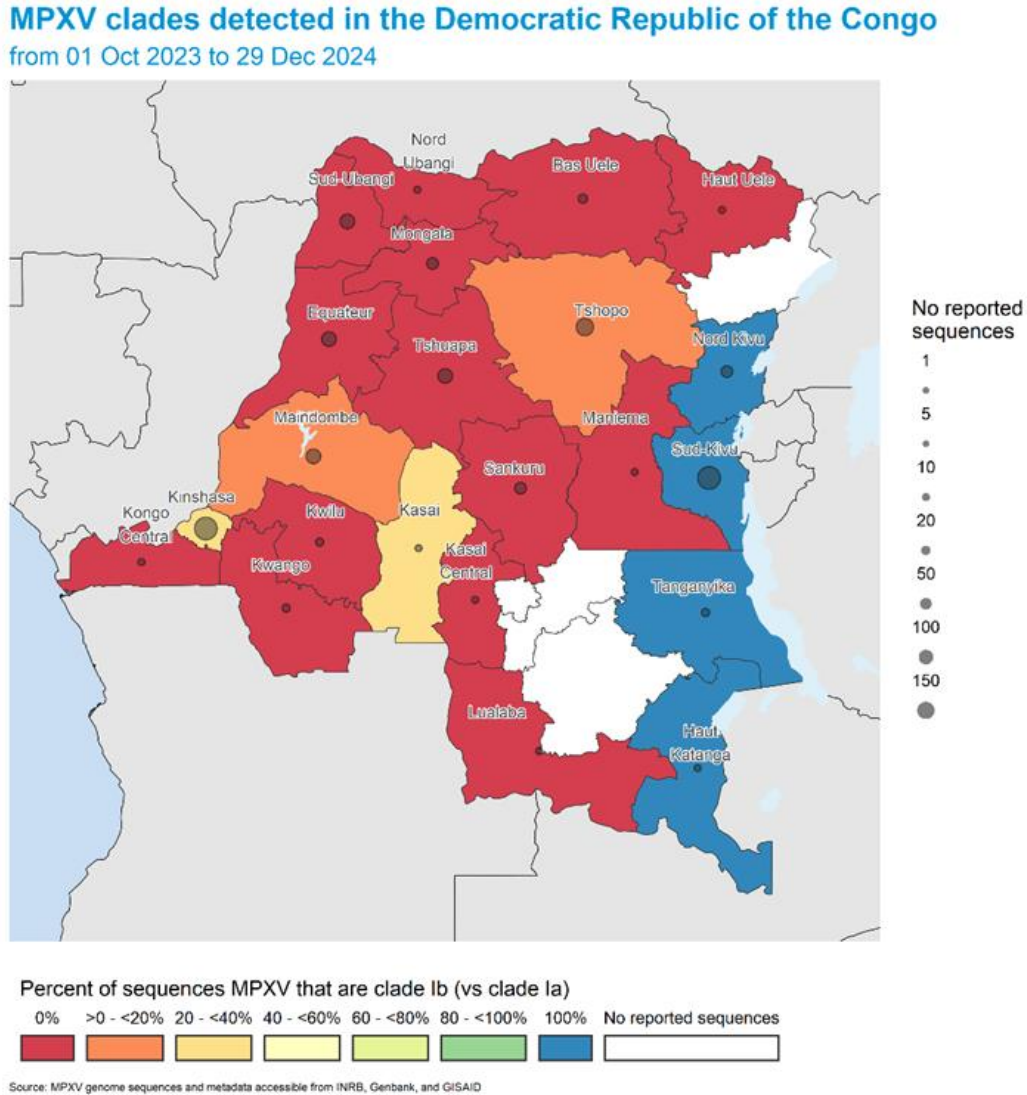
There is an ongoing review of mpox surveillance data in the Democratic Republic of the Congo and the Ministry of Health is currently holding a workshop to harmonize data from the different data sources in the country. While this exercise is ongoing, this section focuses primarily on subnational and not national trends.

Mpox outbreaks in the Democratic Republic of the Congo continue to be driven by both clade Ia and Ib MPXV strains. Most sequenced samples from October 2023 to the end of December 2024 are from the provinces of Kinshasa and South Kivu (Figure 3). Although all provinces have reported confirmed mpox cases during this period, no sequencing has been done for samples from four provinces: Ituri, Kasai Oriental, Lomami and Haut-Lomami. So far, clade Ib MPXV has been detected in eight provinces, and in half of them, it is co-circulating with

⁵ For this edition, the national-level case counts for suspected and confirmed cases reported in the Democratic Republic of the Congo are as at 17 November 2024. Efforts to update this data are ongoing.

clade Ia MPXV. Sequencing data from the Kinshasa outbreak have revealed increasingly sustained human-to-human transmission of clade Ia MPXV with high rates of APOBEC3-driven mutations. This, however, has not yet been demonstrated in the other provinces where clade Ia MPXV is circulating.

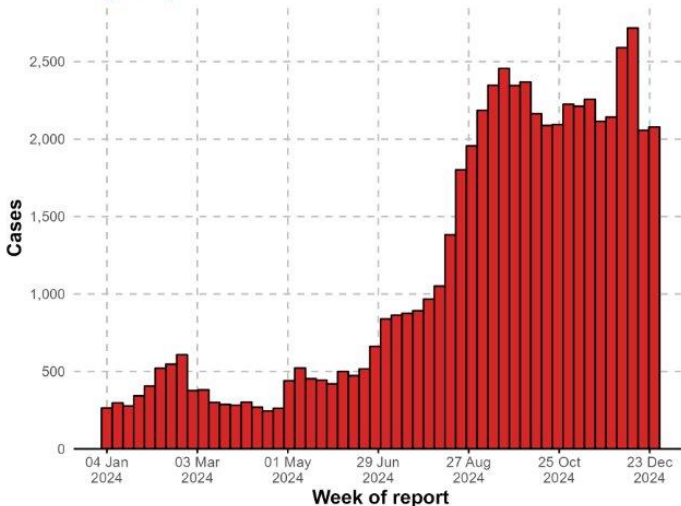
Figure 3. Geographic distribution of clade Ia and Ib MPXV in the Democratic Republic of the Congo, by province, from 1 October 2023 to 29 December⁶ 2024



The epidemic curves of reported suspected mpox cases (left, Figure 4 still shows over 2000 new suspected mpox cases per week. The trend in confirmed cases, (right, Figure 4) right, from the laboratory data, suggests an ongoing increase over time, although the reporting is less consistent due to challenges with testing capacities. However, national trends need to be interpreted in light of very different subnational level dynamics. **Figure 4.** Epidemic curve of suspected (left) and confirmed (right) mpox cases reported in the Democratic Republic of the Congo, 1 January – 29 December 2024.

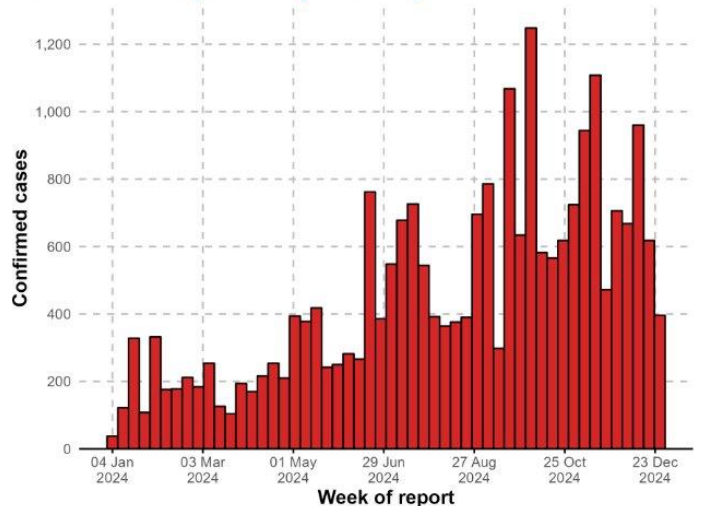
⁶ This is the most recent complete epidemiological week for which subnational data are available.

All cases (IDSR)



Data source: RDC Ministère de la Santé Publique

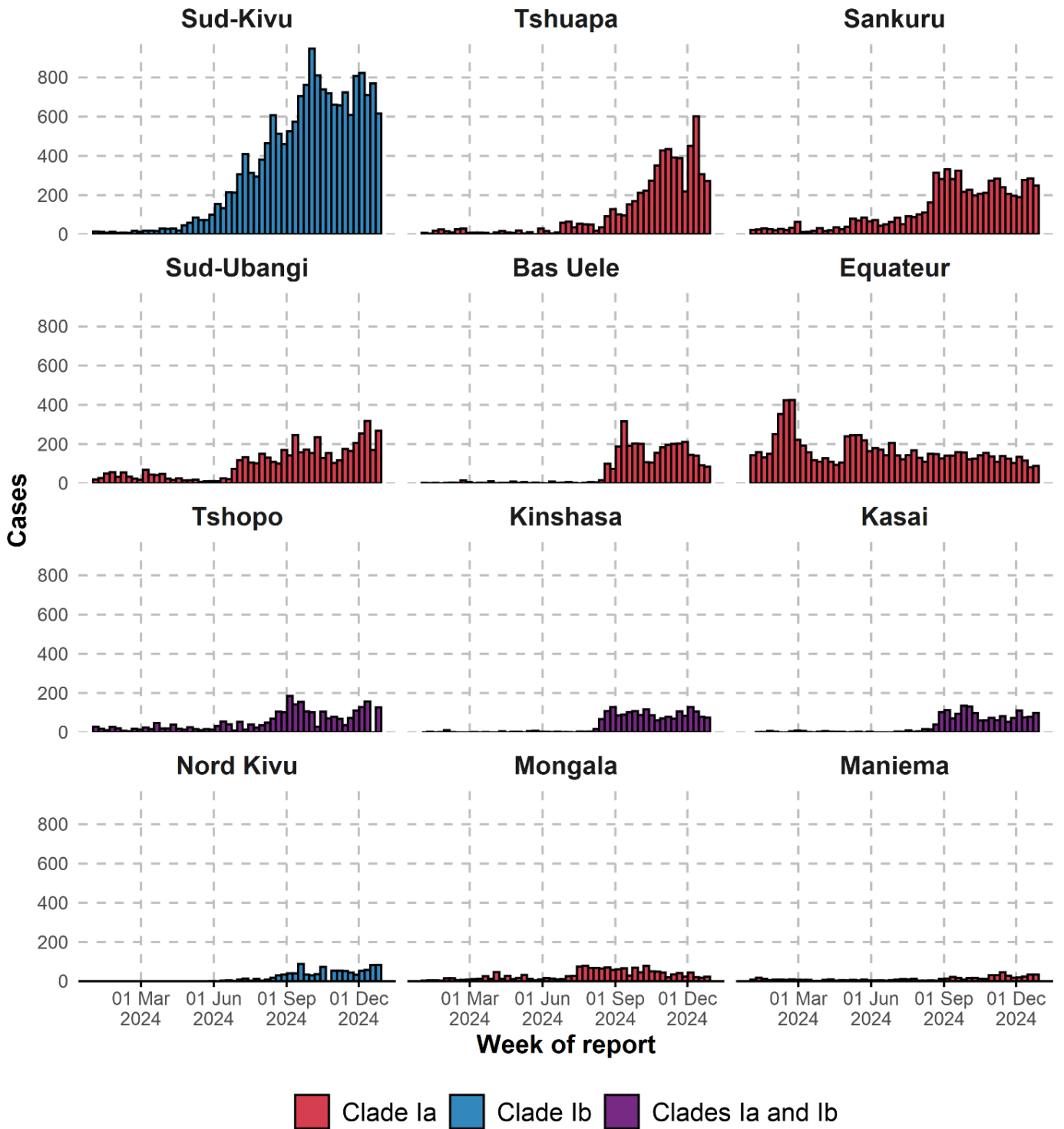
Confirmed cases (Laboratory database)



Data source: RDC Ministère de la Santé Publique

The epidemic curves of suspected mpox cases in the 12 most affected provinces in the Democratic Republic of the Congo show that these provinces have varying outbreak sizes, but for most of them, the trend in recent weeks appears to be relatively stable (Figure 5). Among the provinces reporting only clade Ib MPXV, South Kivu continues to account for most suspected cases in the country, reporting approximately 800 suspected cases per week. Despite never having reported mpox before this outbreak, South Kivu has reported the highest number of suspected mpox cases in 2024. Among the provinces in which only clade Ia MPXV has been detected, Tshuapa has been reporting an increasing trend, while the other provinces have been observing more stable trends in recent months. In Equateur province, historically the province most affected by mpox in the country, the trend has been relatively stable since June 2024, with less than 200 suspected cases per week. Among provinces in which clade Ia and clade Ib MPXV are known to be co-circulating, including the capital Kinshasa, the trend of suspected cases has also been relatively stable in the past months. Despite most of the trends appearing stable, the situation in the country remains concerning since it shows a continued high circulation of the virus.

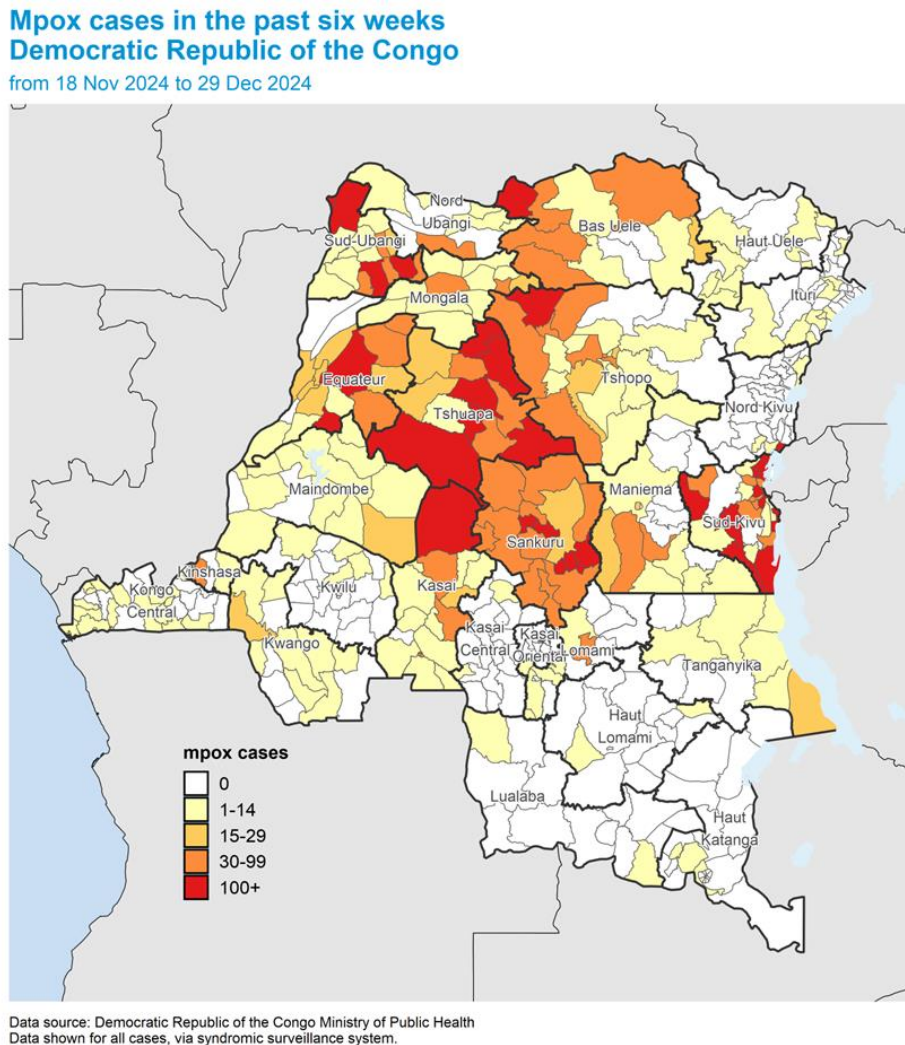
Figure 5. Epidemic curve of reported suspected mpox cases in the most affected provinces of the Democratic Republic of the Congo, 1 January – 29 December 2024.



Data source: Democratic Republic of the Congo Ministry of Public Health
 Data shown for all cases, via syndromic surveillance system.

The sub-provincial geographic distribution of suspected mpox cases in the Democratic Republic of the Congo over the last six weeks (Figure 6) shows wide variation between different health zones. The highest number of affected health zones is the north-west part of the country, historically considered endemic for mpox, while new hotspots can also be observed in South Kivu, as well as Kinshasa. These provinces (South Kivu and Kinshasa) are particularly relevant for the international spread of mpox because they both have international airports, and South Kivu is also highly connected through land borders with Burundi and Rwanda.

Figure 6. Geographic distribution of suspected mpox cases in the past six weeks, by health zone, in the Democratic Republic of the Congo, 18 November – 29 December 2024⁷.



Other countries and territories reporting cases of mpox due to clade Ib MPXV

The clade Ib MPXV outbreak has been expanding from eastern Democratic Republic of the Congo into neighbouring countries, with community transmission reported in Burundi and Uganda, clusters of cases reported in Kenya and Rwanda, and travel-related cases in all other countries in which it has been detected so far, as summarized in Table 1 below.

In some countries with travel-related cases, limited transmission linked to these first introductions of clade Ib MPXV has been documented, without evidence of widespread transmission.

⁷ This is the most recent complete epidemiological week for which subnational data are available.

Table 1. Confirmed mpox cases and deaths linked to clade Ib MPXV outbreaks reported to WHO, by country*, as of 9 January 2025.

Country	Confirmed cases	Confirmed deaths	Date of first country notification to WHO	Distribution/Source
Burundi	3035	1	25 July 2024	Largely concentrated in and around the capitals, Bujumbura and Gitega
Uganda	1552	12	24 July 2024	Multiple districts, but largely concentrated in and around the capital, Kampala
Rwanda	69	0	24 July 2024	Multiple districts, including capital, Kigali
Kenya	31	1	30 July 2024	Multiple counties (including capital Nairobi) along the major transport corridor from the coast to Uganda and Tanzania
Germany	6	0	18 October 2024	One case with history of travel to Rwanda in September 2024
			13 December 2024	One case with history of travel to East Africa in November 2024. Three household contacts became cases
			19 December 2024	One case with history of travel to East Africa in November 2024
UK	5	0	30 October 2024	One case with history of travel to East Africa in October 2024. Three household contacts of this index case became cases.
			29 November 2024	One case with history of travel to Uganda in November 2024
China	5	0	3 January 2025	One case with history of travel to the Democratic Republic of the Congo and 4 subsequent cases among close contacts
Zambia	3	0	8 October 2024	One case with history of travel through multiple districts in Zambia over several weeks. Most time was spent in a district bordering the Democratic Republic of the Congo
			30 December 2024	One case with history of recent travel to a country in Central Africa and one subsequent case among family contacts
Belgium	2	0	18 December 2024	One case with history of travel to Central Africa and one subsequent case among family contacts
Zimbabwe	1	0	18 October 2024	One case with history of travel to Tanzania
Sweden	1	0	15 August 2024	One case with history of travel to East Africa
Thailand	1	0	22 August 2024	One case with history of travel to the Democratic Republic of the Congo
India	1	0	1 October 2024	One case with history of travel to the United Arab Emirates
USA	1	0	18 November 2024	One case with history of travel to East Africa
Canada	1	0	22 November 2024	One case with history of travel to East Africa
Pakistan	1	0	1 December 2024	One case with history of travel to the United Arab Emirates
France	1	0	7 January 2025	One case linked to contact with travelers returning from Central Africa

*The Democratic Republic of the Congo is not included in table 3.

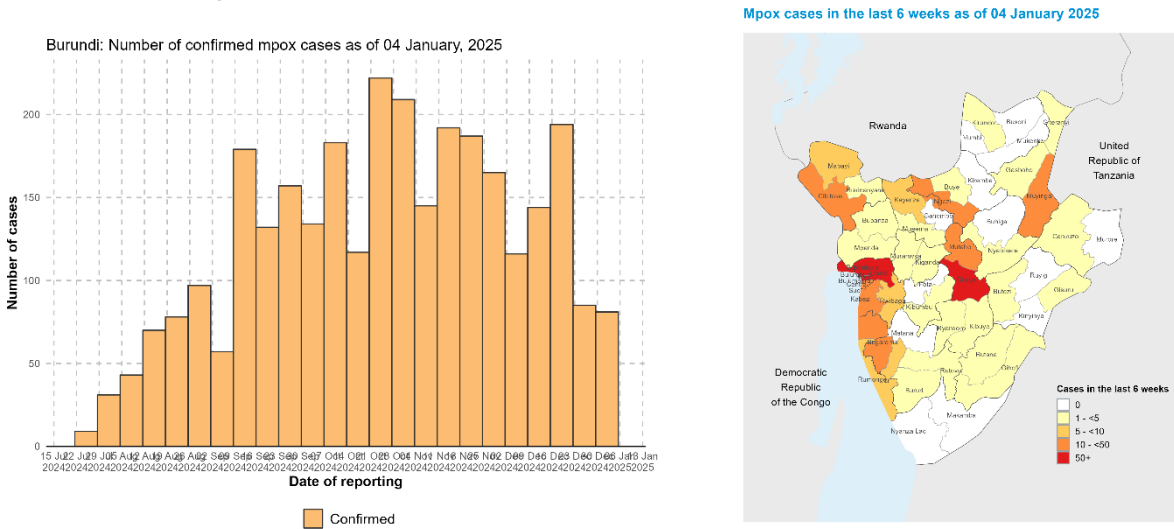
	Sustained community transmission
	Clusters of cases
	Sporadic travel-related cases

Burundi

From the start of the mpox outbreak in July 2024 to 5 January 2024, Burundi has reported 3035 confirmed mpox cases, including one death (CFR – 0.03%). The country is experiencing community transmission, and the national case count has been showing relatively stable trends between 100-200 new confirmed cases per week (left, Figure 7). The downward trend in reported cases during the most recent weeks should be interpreted with caution since the apparent decrease in cases could be due to scaling down of response activities during the festive season at the end of 2024 that might have impacted surveillance and reporting.

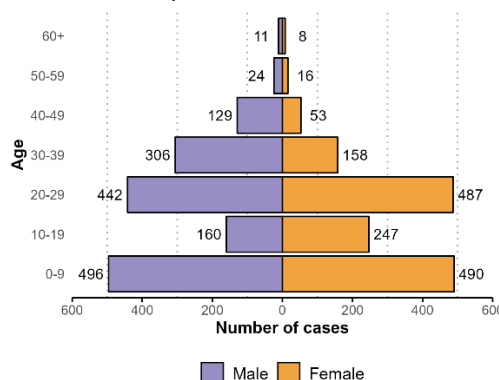
Cases have been reported in at least 94% (46 out of 49) of health districts, but the epidemic remains largely concentrated in and around the largest city of Bujumbura and the capital, Gitega. Almost all suspected mpox cases are tested, and the test positivity rate is approximately 51%. Only clade Ib MPXV, related to the strains circulating in South Kivu, has been detected in the country, and current evidence suggests exclusive human-to-human transmission of the virus.

Figure 7. Epidemic curve of weekly number of confirmed mpox cases, by reporting epidemiological week (left), and geographic distribution of confirmed mpox cases by health district in the last six weeks (25 November – 4 January 2025) (right), in Burundi



Compared to the first month of the outbreak, more recent cases have a bimodal age distribution with higher incidence in young children under 5 years of age and among young adults 20-29 years old. Notably, in recent weeks, the 20 – 29 years age group has replaced the under 5 years age group as the most affected age group in the country (Figure 8). Household transmission, community transmission, and sexual contact transmission have all been reported to contribute to the spread of mpox in the country. However, the relative contributions of each to mpox spread are unclear.

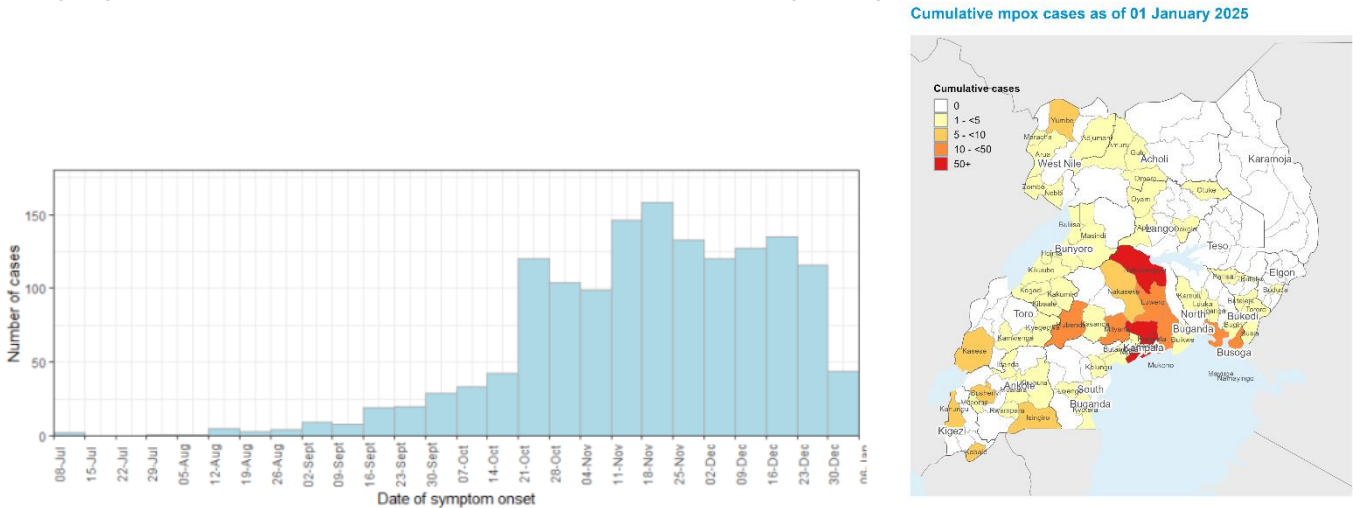
Figure 8. Age and sex distribution of confirmed mpox cases, Burundi, as of 4 January 2025.



Uganda

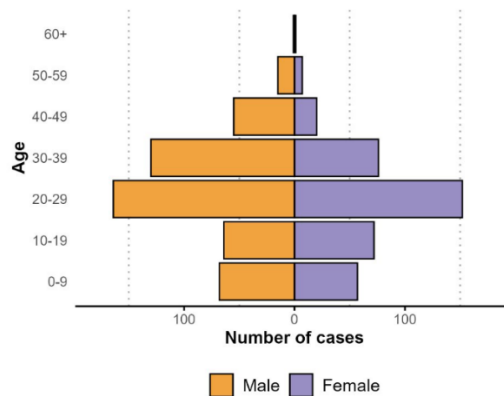
From the start of the outbreak in July to 5 January 2025, the country has reported 1552 confirmed mpox cases, including 12 deaths (CFR 0.8%). The country is experiencing community transmission, and the national case count has been increasing over time, with indications of a plateau in recent weeks (left, Figure 9). Data from most recent weeks need to be interpreted with caution since the apparent decrease in cases could be due to scaling down of response activities during the festive season, which might have affected surveillance and reporting. The districts with the highest number of cases are Kampala (845 cases) and Wakiso (233 cases), while the incidence per population is highest in Kampala and Nakasongola with 45 and 34 cases per 100 000 population (right, Figure 9).

Figure 9. Epidemic curve of weekly number of confirmed mpox cases, by reporting epidemiological week (left) and geographic distribution of confirmed mpox cases in 2024 (right), Uganda, 8 July 2024 – 5 January 2025



Cases have been reported in at least 49% (71 out of 146) of districts in the country, but the epidemic remains largely concentrated in and around Kampala, the capital. So far, only clade Ib MPXV, linked to the outbreak in eastern Democratic Republic of the Congo, has been detected in the country, and current evidence indicates that transmission of the virus is occurring exclusively through close, physical human-to-human contact. Those aged 20 – 29 years are most affected (Figure 10), with sexual contact reported as a major driver of transmission, amplified through networks of sex workers and their clients.

Figure 10. Age and sex distribution of confirmed mpox cases, Uganda, 8 July 2024 – 15 December 2024.



In the last week, the country reported six additional deaths, which occurred primarily among mpox cases living with HIV. Efforts are underway to collect more data on these deaths, including their immune status and their adherence to HIV treatment.

Further importations of clade Ib MPXV reported in Germany

On 13 December 2024 and 19 December 2024, Germany notified WHO of the second and third importations respectively of clade Ib MPXV detected in the country so far.

The second importation involved an adult male who had travelled to an affected country in East Africa from 18 – 26 November 2024, prior to his return to Germany, where he started developing symptoms on 1 December 2024. In the subsequent days, three household contacts started experiencing signs and symptoms, and laboratory testing from 13 – 15 December 2024 confirmed all four individuals to be infected with clade Ib MPXV. No further cases related to this cluster have since been reported.

The third importation involved an adult male who reported travelling to an affected country in East Africa from 6 – 26 November 2024. He developed symptoms in Germany in early December 2024 and was symptomatic for two weeks before diagnosis with mpox on 16 December 2024. Genomic sequencing analysis confirmed clade Ib MPXV on 18 December 2024. No further cases related to this importation have since been reported.

First cases of mpox due to clade Ib MPXV reported in Belgium

On 19 December 2024, Belgium notified WHO of the first case of mpox due to clade Ib MPXV detected in the country so far. The case is an adult male with recent history of travel to an affected country in Central Africa. He reported that symptom onset was on 1 December 2024, just before his return to Belgium on 3 December 2024. Upon arrival in Belgium, he immediately self-isolated, was reviewed in a local emergency department, found to be positive for mpox on 12 December 2024 and confirmed to be infected with clade Ib MPXV on 16 December 2024. A family member who had been in contact with the case also developed signs and symptoms on 21 December 2024 and was confirmed to be infected with clade Ib MPXV on 26 December 2024. No further cases related to this importation have since been reported.

First cases of clade Ib MPXV reported from China

On 3 January 2025, China notified WHO of the first cases of mpox due to clade Ib MPXV detected in the country so far. Following an initial detection, epidemiological investigations revealed a cluster of five cases of mpox due to clade Ib MPXV: an adult male with recent history of travel to the Democratic Republic of the Congo, and four close contacts of this initial case. Epidemiological investigations, along with other response measures, are ongoing in the different locations where the cases were detected.

First case of mpox due to clade Ib MPXV reported in France

On 7 January 2025, France notified WHO of the first case of mpox due to clade Ib MPXV detected in the country so far. The case is an adult female who reported no recent history of travel outside France. Symptom onset was on 16 December 2024, and following medical consultations in the following days, she was found to have mpox on 31 December 2024 and confirmed to be infected with clade Ib MPXV on 2 January 2025. Although she reported no recent history of international travel, she indicated that she had contact with two people who had a history of travel to Central Africa. Epidemiological investigations are underway to identify the primary case and any other possible secondary cases.

First mpox case reported in Kosovo^[1] (clade not yet determined)

On 27 December 2025, Kosovo^[1] notified WHO of the first case of mpox detected in the country. The case is an adult male who reported recent travel to Togo. He reported that symptom onset was on 19 December 2024, prior to his return to Kosovo^[1] on 22 December 2024. Upon his return, he sought medical attention, was hospitalized on 24 December 2024, and confirmed to have mpox on 26 December 2024. Genomic sequencing analysis is underway to determine the MPXV clade.

Togo has not reported mpox previously.

^[1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

Potential undetected mpox transmission and the risk of MPXV importation

In recent weeks, mpox cases have been reported in individuals with history of travel to countries where surveillance systems may not have recently detected clade II MPXV, or may not have ever reported clade I MPXV. The overlap between these individuals' travel periods and the mpox incubation period suggests exposure within the countries they visited. This raises a significant concern: the potential for undetected mpox transmission in countries with limited surveillance, which could become unrecognized sources of international spread. The absence of reported cases in such regions may not accurately reflect the true extent of transmission within their borders.

For instance, mpox cases caused by clade Ib MPXV were identified in Germany and Zimbabwe, both reporting recent travel to Tanzania, a country that has not reported any mpox case so far. Upon WHO's request for more information under the International Health Regulations (2005), the health authorities in Tanzania conducted additional investigations around the case detected in Zimbabwe and concluded that this link could not be verified because they could not trace the individual's entry and stay in the country.

These travel-related mpox cases underscore the challenges posed by varying surveillance capabilities and reporting practices across countries, similar to what continues to be observed with some countries for the ongoing multi-country outbreak of mpox linked to clade IIb MPXV. Some may face challenges such as resource constraints or limited access to diagnostic testing, which can result in underreporting or delays in detection. These gaps hinder efforts to track and manage the disease and increase the risk for global spread.

WHO urges all Member States to sustain and strengthen mpox surveillance to enhance case detection and reporting. Early identification of cases is critical to reducing the risk of international spread and protecting global public health. WHO continues to provide support and technical assistance to countries to strengthen their ability to detect, report, and respond to emerging health threats like mpox.

Global operational updates

The WHO health emergency prevention, preparedness, response and resilience (HEPR) framework underpins both the [Strategic Framework for enhancing prevention and control of mpox \(2024-2027\)](#) and the ongoing emergency response to the mpox Public Health Emergency of International Concern (PHEIC).

Aligned with the HEPR framework, the WHO [Global Strategic Preparedness and Response Plan](#) (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 9 January 2025**.

1. Emergency coordination

- WHO has started operational planning for response activities in 2025, drawing lessons from reviews of activity implementation during 2024.

2. Collaborative surveillance

- Epidemiological data on mpox in Africa are updated weekly and can be accessed on the WHO surveillance report [here](#). The monthly global surveillance update can be found [here](#).

3. Community protection

- Continued coordination across multiple technical areas, including risk communication, community engagement and infodemic management, infection prevention and control (IPC) in community settings, community-based surveillance, and border health.
- WHO has updated the community health worker training package and developed a train-the-trainer package following key learnings from implementation in Pakadjuma, Kinshasa, with an implementation plan for wider dissemination.
- WHO convened technical working groups on 8 January 2025 to further develop interim guidance for social and behavioural research for mpox community protection and advance outcomes from the multi-stakeholder, multi-disciplinary meeting on social and behavioural research for mpox community protection held in Kinshasa on 27 – 28 November 2024.

4. Safe and scalable care

- Continued strengthening of treatment facilities ongoing in all affected countries ensuring required medicines and essential supplies, including for IPC and care, are available.
- Clinical case management webinar series completed five sessions, reaching 3000 registrations from 91 countries, mostly from the African region. A new webinar series is expected to launch this month.
- WHO continues to support the roll-out of the [Mpxv Clinical Data Platform](#) in the Democratic Republic of the Congo and Uganda.
- Therapeutics update: The United States National Institutes for Health (US NIH) - funded randomized trial entitled STOMP trial found tecovirimat did not reduce the time to lesion resolution or pain control in patients with mild or moderate mpox compared to controls. Trial was stopped at interim analysis (75% recruitment) including the open label arm recruiting more severe, high-risk patients. These findings are consistent with results reported earlier this year from a National Institute of Allergy and Infectious Diseases (NIAID)-cosponsored trial PALM 007 of tecovirimat among children and adults with clade I mpox in the Democratic

Republic of Congo. The UNITY trial, also evaluating tecovirimat efficacy will continue to enrol adolescents and adults with mpox. WHO awaits full results of all three trials to review the totality of the evidence in order to update its recommendation. WHO continues to support Member States with access to tecovirimat under the MEURI protocol.

- In December 2024, WHO hosted four Guideline Development Group sessions to update recommendations for mpox IPC and Clinical care. Work is currently underway to update the case management and IPC guidelines ahead of publication planned for early February 2025.
- WHO provided health logistics support to improve and adapt health facilities to care for mpox patients, including support to three treatment facilities in Burundi.

5. Access to and delivery of countermeasures

Access and Allocation Mechanism (AAM)

Vaccines

- WHO has continued to provide technical support to accelerate implementation and uptake of mpox vaccination in affected countries in at-risk groups, in support of controlling the surge in mpox cases on the African continent.
- The AAM partners have continued to monitor the progress of the allocation and delivery process to prevent stock expiry and continue to advocate for targeted vaccination in affected hotspots.
- As of 29 December 2024, 87 158 persons had been vaccinated against mpox with the MVA-BN vaccine in the Democratic Republic of the Congo (55 266 persons with the first dose and 31 892 persons with the second dose).
- Efforts are underway to advance delivery of remaining vaccine doses that were allocated during the first allocation round, to finalize the outstanding shipment arrangements and documentation.
- Over 4.83 million vaccine doses are expected to be available in 2025. The vaccine supply includes contributions from multiple nations and organizations, including 1.73 million dose donations of MVA-BN (150 000 doses from the European Union, 696 200 doses from the United States, 876 300 doses procured through UNICEF/Gavi), 50 000 doses of ACAM2000 vaccine from Emergent BioSolutions, as well as a further 3.05 million doses of LC16m8 vaccine from Japan.
- The AAM partners have continued to work together to ensure countries receive guidance to get operational funds for implementation of the national vaccination plans.

Regulatory oversight:

- Mpox vaccine: WHO is awaiting further information on the ACAM2000 vaccine from the manufacturer to continue its assessment for Prequalification or Emergency Use Listing.
- WHO has continued to provide assistance to countries in issuing regulatory clearance for vaccines as well as use of and training in vaccine safety monitoring tools.
- In January 2025, the Democratic Republic of Congo will start an active vaccine safety surveillance study, using the WHO Cohort Event Monitoring protocol, funded by WHO.

Laboratory and diagnostics

- Mpox diagnostics: Since the opening of the call for Expressions of Interest under the WHO Emergency Use Listing procedure for MPXV diagnostics on 28 August 2024, 67 manufacturers have contacted WHO and 40 pre-submission calls have been scheduled by the end of January 2025. Ten manufacturers were invited to submit their applications. Nine dossiers for Nucleic Acid Amplification assays have been submitted by eight manufactures, three assays have been approved for WHO Emergency Use Listing and [the assessment of five other products](#) is ongoing.

- In the latest version of the [interim guidance on MPXV diagnostics](#) published on 12 November 2024, WHO offers considerations for laboratory testing strategies depending on the epidemiological setting (no cases, sporadic cases, clusters, community transmission) and indicates that available molecular-based near patient Point-of-Care Tests are able to demonstrate a high level of accuracy, comparable to laboratory-based PCR. In addition, it does not recommend the use of rapid antigen tests for detection of MPXV. Notwithstanding, WHO strongly encourages research on rapid antigen tests, since they could be an innovative tool in the effort to expand diagnostics access to remote areas. Multiple countries have started decentralization efforts with near-patient point-of-care diagnostics and WHO has continued to provide strategic and technical support to these efforts and supported correct interpretation of test results.

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. 5 September 2024. Available at: <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

- Second meeting of the International Health Regulations (2005) Emergency Committee regarding the upsurge of mpox 2024, 28 November 2024. [https://www.who.int/news/item/28-11-2024-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-upsurge-of-mpox-2024](https://www.who.int/news/item/28-11-2024-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-upsurge-of-mpox-2024)
- 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](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. [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-\(2005\)-\(ihr\)](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 information products

- WHO Africa Regional Office, Regional Mpox Bulletin: <https://www.afro.who.int/health-topics/mpox-monkeypox>
- Joint Continental Situation Report on the Mpox Epidemic in Africa (23 September- 03 November 2024), 6 December 2024. <https://africacdc.org/download/joint-continental-situation-report-on-the-mpox-epidemic-in-africa-23-september-03-november-2024/>

Surveillance

- Surveillance, case investigation and contact tracing for mpox: Interim guidance, 6 December 2024. <https://www.who.int/publications/i/item/B09169>
- Considerations for wastewater and environmental surveillance for monkeypox virus: Interim guidance, 25 November 2024. <https://www.who.int/publications/i/item/B09178>
- 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-\(crf\)](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

- Diagnostic testing for the monkeypox virus (MPXV): interim guidance, 9 November 2024. <https://iris.who.int/handle/10665/373966>
- WHO issues Emergency Use Authorization for Xpert Mpox, a near-point-of-care real-time PCR test, 30 October 2024. <https://www.who.int/news/item/30-10-2024-who-lists-additional-mpox-diagnostic-tests-for-emergency-use>
- WHO issues Emergency Use Authorization for the Cobas MPXV Qualitative assay, 15 October 2024. <https://extranet.who.int/prequal/news/second-mpox-ivd-listed-under-who-emergency-use-listing-procedure>
- Mpox disease Emergency Use Listing (EUL) for IVDs Product: cobas MPXV Qualitative assay for use on the cobas 6800/8800 Systems: https://extranet.who.int/prequal/sites/default/files/document_files/cobas-mpxv-qualitative-assay-for-use-on-the-cobas-6800-8800-systems-mpxv-12647-046-00-public-report.pdf
- WHO issues the Emergency Use Authorization for 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>
- Mpox disease Emergency Use Listing Procedure (EUL) for IVDs Product: Alinity m MPXV AMP Kit and Alinity m MPXV CTRL Kit Public Report: https://extranet.who.int/prequal/sites/default/files/document_files/alinity-m-mpxv-amp-kit-and-alinity-m-mpxv-ctrl-kit-public-report.pdf
- 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

- Mpox screening tool for health workers. 27 November 2024. <https://www.who.int/multi-media/details/mpox-screening-tool-for-health-workers-poster>
- Mpox lesions differential diagnosis, 27 November 2024. <https://www.who.int/multi-media/details/mpox-lesions-differential-diagnosis-poster>
- Mpox triage and clinical assessment for suspected and confirmed cases, 27 November 2024. <https://www.who.int/multi-media/details/mpox-triage-and-clinical-assessment-for-suspected-and-confirmed-cases-poster>
- Infection prevention and control and water, sanitation and hygiene measures for home care and isolation for mpox in resource-limited settings. Interim operational guide, 18 October 2024. <https://www.who.int/publications/i/item/infection-prevention-and-control-and-water--sanitation-and-hygiene-measures-for-home-care-and-isolation-for-mpox-in-resource-limited-settings>
- WHO mpox screening form for healthcare facilities entrance <https://cdn.who.int/media/docs/default-source/ipc--wash/mpox-screening-form-for-healthcare-facility-entrances.pdf>
 - Posters on screening [?sfvrsn=3893b9b2_3&download=true](https://cdn.who.int/media/docs/default-source/ipc--wash/mpox-screening-form-for-healthcare-facility-entrances.pdf?sfvrsn=3893b9b2_3&download=true)
- 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

- MVA-BN (Modified Vaccinia Ankara – Bavarian Nordic) smallpox and mpox vaccine: interim guidance, 27 November 2024. <https://iris.who.int/handle/10665/379882>
- WHO recommends LC16m8 for Emergency Use Listing for people older than 1 year at high risk, 19 November 2024. <https://www.who.int/news/item/19-11-2024-who-adds-lc16m8-mpox-vaccine-to-emergency-use-listing>
- WHO Emergency Use Listing of LC16m8. <https://extranet.who.int/prequal/vaccines/lc16-kmb>
- Package insert of LC16m8 following WHO Emergency Use Listing. https://extranet.who.int/prequal/sites/default/files/document_files/package-insert_lc16-kmb_20241121_0.pdf
- Report of the WHO Prequalification Vaccine Technical Advisory Group on LC16m8, 19 November 2024. https://extranet.who.int/prequal/sites/default/files/document_files/mpox-lc16m8_tag-report-19-11-2024-final.pdf
- WHO grants prequalification of age-extension for MVA-BN mpox vaccine to adolescents aged 12 to 17 years, 18 October 2024. <https://extranet.who.int/prequal/news/who-grants-approval-use-bavarian-nordics-mpox-vaccine-adolescents>
- WHO AFRO Mpox Vaccination Preparation Roadmap. 27 September 2024. <https://www.afro.who.int/publications/mpox-vaccination-preparation-roadmap-27-september-2024#:~:text=The%20Mpox%20Vaccination%20Preparation%20Roadmap,efficiently%20once%20they%20are%20accessed.>
- MVA-BN (Modified Vaccinia Ankara – Bavarian Nordic) smallpox and mpox vaccine: interim guidance, 27 November 2024. <https://iris.who.int/handle/10665/379882>
- WHO prequalifies MVA-BN mpox vaccine. 13 September 2024. <https://www.who.int/news/item/13-09-2024-who-prequalifies-the-first-vaccine-against-mpox>
- Package insert of MVA-BN (Imvanex) following WHO prequalification. <https://extranet.who.int/prequal/vaccines/p/imvanexr>
Smallpox and mpox vaccine patient information leaflet: [fvp-p-479 mpox 1dose bn pi-2024 1.pdf](fvp-p-479_mpox_1dose_bn_pi-2024_1.pdf) ([who.int](https://www.who.int))
- Safety monitoring of mpox vaccines using cohort event monitoring: a WHO protocol, 03 December 2024. <https://www.who.int/publications/i/item/9789240104068>
- 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>

Community protection public health advice and risk communication and community engagement (RCCE) resources

- Public health advice for people recovering from or caring for someone with mpox at home in low-resource settings, 19 December 2024. <https://www.who.int/publications/m/item/public-health-advice-for-people-recovering-from-or-caring-for-someone-with-mpox-at-home-in-low-resource-settings>
- Mpox Q&A: Preventing and managing mpox in schools and learning spaces, 16 December 2024. <https://www.who.int/news-room/questions-and-answers/item/mpox--preventing-and-managing-mpox-in-schools-and-learning-spaces>
- Community protection for the mpox response: a comprehensive set of actions, 9 December 2024. <https://www.who.int/publications/i/item/B09182>
- Social and behavioural science for the mpox response: what it is and why use it. <https://iris.who.int/handle/10665/379749>
- Considerations for border health and points of entry for mpox: interim guidance, 25 November 2024. <https://www.who.int/publications/i/item/B09144>
- Gatherings in the context of the 2024 mpox outbreak: public health guidance, 22 November 2024. <https://www.who.int/publications/i/item/B09143>
- Public health advice on understanding, preventing and addressing stigma and discrimination related to mpox, 18 November 2024. <https://www.who.int/publications/m/item/public-health-advice-on-understanding-preventing-and-addressing-stigma-and-discrimination-related-to-mpox>
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- Interim Public Health Advice for Mpox-Related Prevention and Control Measures in School Settings), October 2024. <https://www.afro.who.int/publications/interim-public-health-advice-mpox-related-prevention-and-control-measures-school>
- Mpox Q&A, 16 October 2024. <https://www.who.int/news-room/questions-and-answers/item/mpox>
- Public health advice on mpox for people living in camps, refugee populations, internally displaced people and migrants, 14 October 2024. <https://www.who.int/publications/m/item/public-health-advice-on-mpox-for-people-living-in-camps--refugee-populations--internally-displaced-people-and-migrants>
- 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>
- Mpox Factsheet, 26 August 2024. <https://www.who.int/news-room/fact-sheets/detail/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>
- Gatherings in the context of the 2024 mpox outbreak: Public health guidance, 15 October 2024. <https://iris.who.int/handle/10665/379242>
- 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. <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, 16 October 2024. <https://www.who.int/news-room/questions-and-answers/item/mpox>
- Mpox “What we know”: infographics: English: <https://www.who.int/multi-media/details/mpox-what-we-know> French: 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
 - 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.
 - 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://gvs-i-aeftools.org/>
- eLearning courses on vaccine safety monitoring <https://who.csod.com/selfreg/register.aspx?c=aeftools%20causality%20assessment>
 - Vaccines safety basics
 - 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-toolboxes/mpox-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>

Disclaimer: Caution must be taken when interpreting all data presented, and differences between information products published by WHO, national public health authorities, and other sources using different inclusion criteria and different data cut-off times are to be expected. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change. All counts are subject to variations in case detection, definitions, laboratory testing, and reporting strategies between countries, states and territories.

Annex 1. Latest Rapid Risk Assessment of November 2024

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

- Clade Ib MPXV - Mostly affecting non-endemic areas for mpox in the Democratic Republic of the Congo and neighbouring countries, where mpox is spreading mainly through human-to-human close physical contact, including sexual contact. International spread is predominantly linked to sexual contact: **high**.
- Clade Ia MPXV - Mostly affecting mpox-endemic areas in the Democratic Republic of the Congo, with sporadic cases reported in other Central and East African countries, where mpox is linked to zoonotic spillover events, as well as human-to-human transmission mainly through close physical contact, including sexual contact: **high**.
- Clade II MPXV (historically endemic areas) - Nigeria and countries of West and Central Africa where mpox is endemic, affecting children and adults, and is linked to zoonotic spillover events, as well as human-to-human transmission mainly through close physical contact, including sexual contact: **moderate**.
- Clade IIb MPXV* - Global risk, where outbreaks predominantly affect adult men who have sex with men and spread predominantly through sexual contact: **moderate**

**This group represents a very broad geographical area, with countries and regions that have very diverse health systems and response capacities, and, in selected countries or regional blocs in this group, the risk may vary and/or 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.