Mpox

Multi-country external situation report no. 42, published 9 November 2024

KEY FIGURES				
Reporting period: 01 January 2022 – 30 September 2024				
Area	**Number of reported confirmed cases**	**Number of deaths among confirmed cases**	**Number countries reporting cases**	
Global	**109 699**	**236**	**123**	
Reporting period: 01 January – 3 November 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	**11 148**	**53**	**46 794**	**1081**
Democratic Republic of the Congo[1]	**8662**	**43**	**39 501**	**1073**
Burundi[1]	**1726**	**0**	**NA**[2]	**NA**[2]
Uganda	**359**	**1**	**NA**[2]	**NA**[2]
Reporting period: last 6 weeks, 23 September – 3 November 2024				
Africa	**3119**	**12**	**13 721**	**198**
Democratic Republic of the Congo[1]	**1647**	**9**	**10 875**	**196**
Burundi[1]	**1030**	**0**	**NA**[2]	**NA**[2]
Uganda	**324**	**1**	**NA**	**NA**

Highlights

- Since the last situation report, three additional countries have confirmed travel-related cases of clade Ib MPXV: the United Kingdom of Great Britain and Northern Ireland, Zambia and Zimbabwe.
- For the first time, local transmission of clade Ib MPXV was reported outside of Africa, in the United Kingdom of Great Britain and Northern Ireland, where three (all) household members of the initial case (who had travelled to affected East African countries with clade Ib) were confirmed to have mpox.
- The number of mpox cases in Africa shows a general rising trend, driven mainly by cases reported from the Democratic Republic of the Congo, Burundi, and Uganda.
- As of 3 November 2024, Clade Ib monkeypox virus (MPXV) has been detected in six provinces in the Democratic Republic of the Congo: South Kivu, North Kivu, Kinshasa, Kasai, Tshopo and Tanganyika, with no new areas known to be affected since the last update. Additionally, 11 other countries have also reported clade Ib MPXV cases.
- In the Democratic Republic of the Congo, the overall number of new reported mpox cases appears to be plateauing in South Kivu, which is still reporting the most cases in the country. In other provinces there are mixed epidemiological trends, with a few hotspots often driving the increase in case reports. Testing challenges in several provinces in the country persist, hindering an understanding of the evolving epidemiology.

[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).

[2] The vast majority (>95%) of mpox suspected cases in Burundi are tested hence only confirmed cases are reported.

- Further details about the epidemic dynamics in the Democratic Republic of the Congo (DRC) and other countries can be found in the WHO mpox surveillance report, which now also displays subnational data for the DRC.
- The first round of mpox vaccination has concluded in the Democratic Republic of the Congo, with around 51 500 people vaccinated across six provinces: Equateur, South Kivu, Nord Kivu, Sankuru, Sud Ubangi and Tshopo.
- In Burundi, the epidemic continues to be driven by clade Ib, with more than 200 laboratory-confirmed cases reported in each of the last two weeks. The epidemic remains largely concentrated in and around the city of Bujumbura, with two main age groups primarily affected, similar to what is observed in South Kivu (young children <5 years and young adults between 20-29 years), suggesting similar epidemic dynamics.
- The epidemic is rapidly expanding in Uganda, where in the last week more than 100 new confirmed mpox cases were reported. Transmission is driven by close intimate contact, involving sexual contact and sex work networks. The vast majority of cases reported are among adults.
- Rwanda has also reported a rising number of cases affecting adults, most of whom reported sexual contact with a person with mpox.
- Mauritius reported its first-ever mpox case; clade information is not yet available.
- Regarding global guidance and tools, the mpox screening tool for rapid identification, notification and isolation of suspected cases at health facilities was published.
- The Mpox Vaccines Access and Allocation Mechanism (AAM) endorsed the recommendation by an independent Technical Review Committee (TRC) to allocate 899 000 doses of MVA-BN vaccine to nine countries across the African region that are affected by the current mpox surge: the Central African Republic, Côte d'Ivoire, the Democratic Republic of the Congo, Kenya, Liberia, Nigeria, Rwanda, South Africa and Uganda.
- A third mpox diagnostic test, a near-point-of-care real-time PCR test, was listed for EUL on 25 October.
- On 22 November 2024, WHO will convene the Emergency committee on mpox to advise the WHO Director-General if mpox continues to constitute a public health emergency of international concern.

In this edition:

Contextual description

This report provides an update on the epidemiological situation of mpox in Africa (including countries in the WHO African Region and some countries in the WHO Eastern Mediterranean Region), with data as of **3 November 2024**.

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 PCR testing of suspected mpox cases in some settings, WHO has also been reporting suspected (clinically compatible) mpox cases which meet the national clinical case definition for mpox for countries in Africa, since the declaration of the public health emergency of international concern (PHEIC) on 14 August.

The indicator of suspected cases should nevertheless 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.

The summary table at the top of the document includes all reported suspected cases from African countries. However, the rest of the document only refers to suspected cases when describing the trend for the Democratic Republic of the Congo the country with the highest number of reported suspected cases, many of which never get tested.

A summary of the WHO global mpox rapid risk assessment conducted in August 2024 can be found in Annex 1.

Epidemiological update [3, 4]

Global monkeypox virus (MPXV) distribution

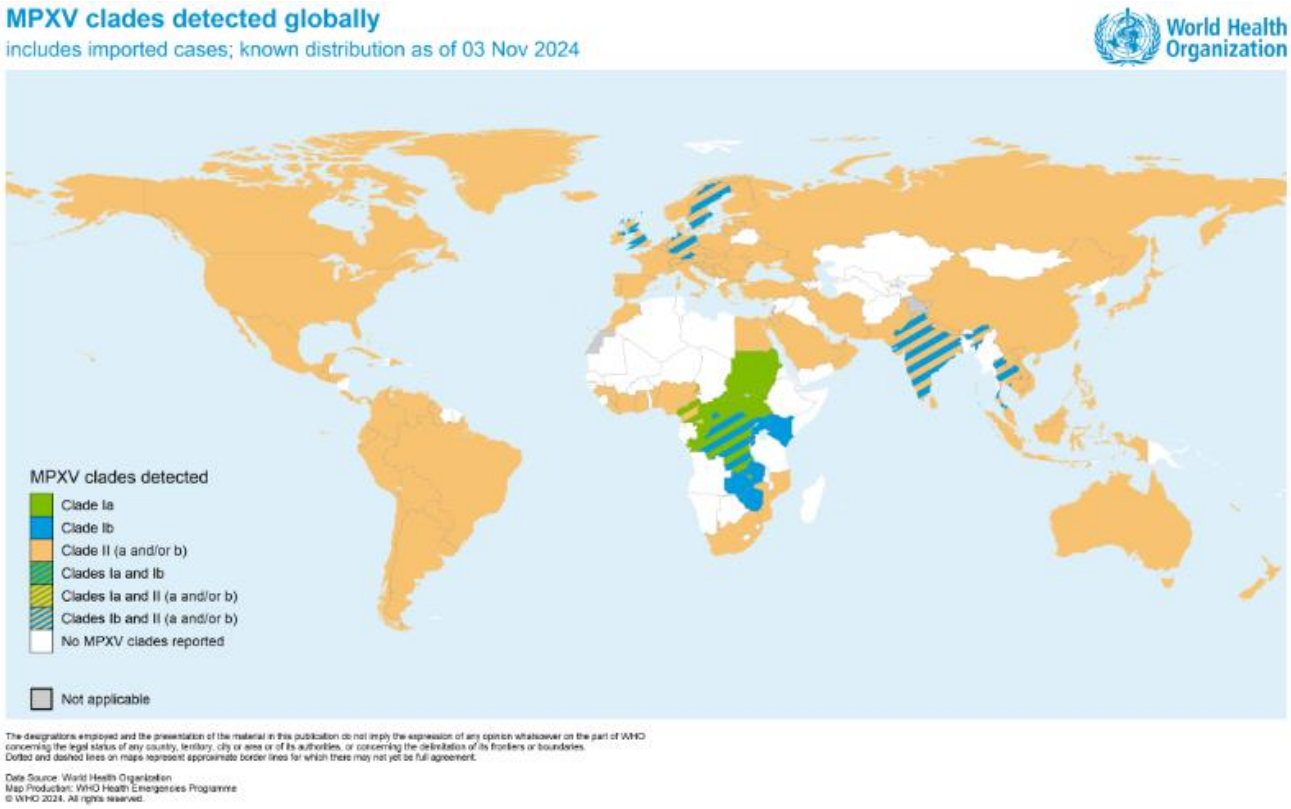
As of 3 November 2024, the distribution of reported monkeypox virus (MPXV) clades by country of detection is shown in Figure 1. This information is compiled from sequencing conducted and shared via different sources, including open-access databases, peer-reviewed publications, reports, as well as direct communication to WHO, including through its Technical Advisory Group on Virus Evolution.

To date, only five countries outside of Africa have detected clade Ib MPXV: Sweden, Thailand and Germany have each detected one case of mpox due to clade Ib MPXV in travellers from Africa, the United Kingdom has four cases of clade Ib MPXV – one case is a traveller from East Africa and three are household contacts of the traveller – and India has detected one case of clade Ib MPXV in a traveller from the United Arab Emirates (UAE). No case of clade Ib MPXV has been reported so far by the UAE.

In Africa, countries in western, northern and southern Africa have reported clade II MPXV, countries in central and eastern Africa have reported clade I MPXV, and Cameroon has reported both clades – clade I in the eastern part of the country and clade II in the west.

To date, clade Ib MPXV in Africa has been detected in the Democratic Republic of the Congo (in South Kivu, North Kivu, Kinshasa, Kasai, Tshopo and Tanganyika provinces), Burundi, Kenya, Rwanda, Uganda, Zambia, and Zimbabwe.

Figure 1. Geographic distribution of MPXV clades reported to WHO, by country, as of 3 November 2024.



[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 the different MPXV strains, 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 (where mpox cases have been reported for five consecutive years) and has increasingly been found in newly affected provinces in recent years, including Kinshasa Province, as well as in the neighbouring Central African Republic, with cases also reported in the Republic of Congo this year. Cases in the Democratic Republic of the Congo and the Central African Republic involve a higher proportion of children among cases, while in the Republic of Congo, the majority of cases are among adults.

Previous genomic sequencing analysis had indicated that clade Ia strains typically emerge in human populations through zoonotic exposure. However, there is now some indication that there is also sustained human-to-human transmission of clade Ia MPXV in sexual networks in Kinshasa following importation from endemic parts of the country. This may reflect sexual transmission in other provinces, of which we first saw evidence in a cluster of cases in mid-2023.

Clade Ib MPXV

This strain is predominantly spreading in the eastern provinces of the Democratic of the Congo, and neighbouring countries, including Burundi, Kenya, Rwanda, Uganda, Zambia and Zimbabwe. No animal sample of this clade was ever detected, and current data suggest that it is transmitted only through human-to-human contact. In the Democratic Republic of the Congo, it has been detected in six provinces: South Kivu, North Kivu, Kinshasa, Kasai, Tshopo and Tanganyika. Community transmission of clade Ib is ongoing in Burundi and Uganda, where it is the only strain reported and smaller clusters have also been noted in Kenya and Rwanda, while Zambia and Zimbabwe have reported only travel related cases. Imported travel related cases have also been detected outside of Africa, in Sweden, Thailand, India, Germany and the United Kingdom of Great Britain and Northern Ireland.

The spread of clade Ib MPXV to new areas occurs through transmission among young adults from close contact, especially sexual contact. Where initial clusters expand and as the outbreak progresses, transmission patterns appear to change, with more spread within households and communities through close direct contact, 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 IIb MPXV that began in 2022 showed that sexual contact can sustain community transmission of MPXV, but much remains to be understood about transmissibility and sustainability of transmission through non-sexual direct contact. In settings where transmission persists, it is likely driven by a combination of sexual, household, and community contact.

Clade IIa MPXV

In 2024, Guinea, Liberia, and Côte d'Ivoire have reported clade IIa MPXV. Côte d'Ivoire is currently the only country showing sustained community transmission of this clade, with the virus detected in 32 districts including the capital, Abidjan. Cases have been reported in adults and children, with many lacking a known epidemiological link, suggesting community transmission. The modes of transmission are not fully understood and clade IIa remains the least described in the 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 being documented for the first time in 2024.

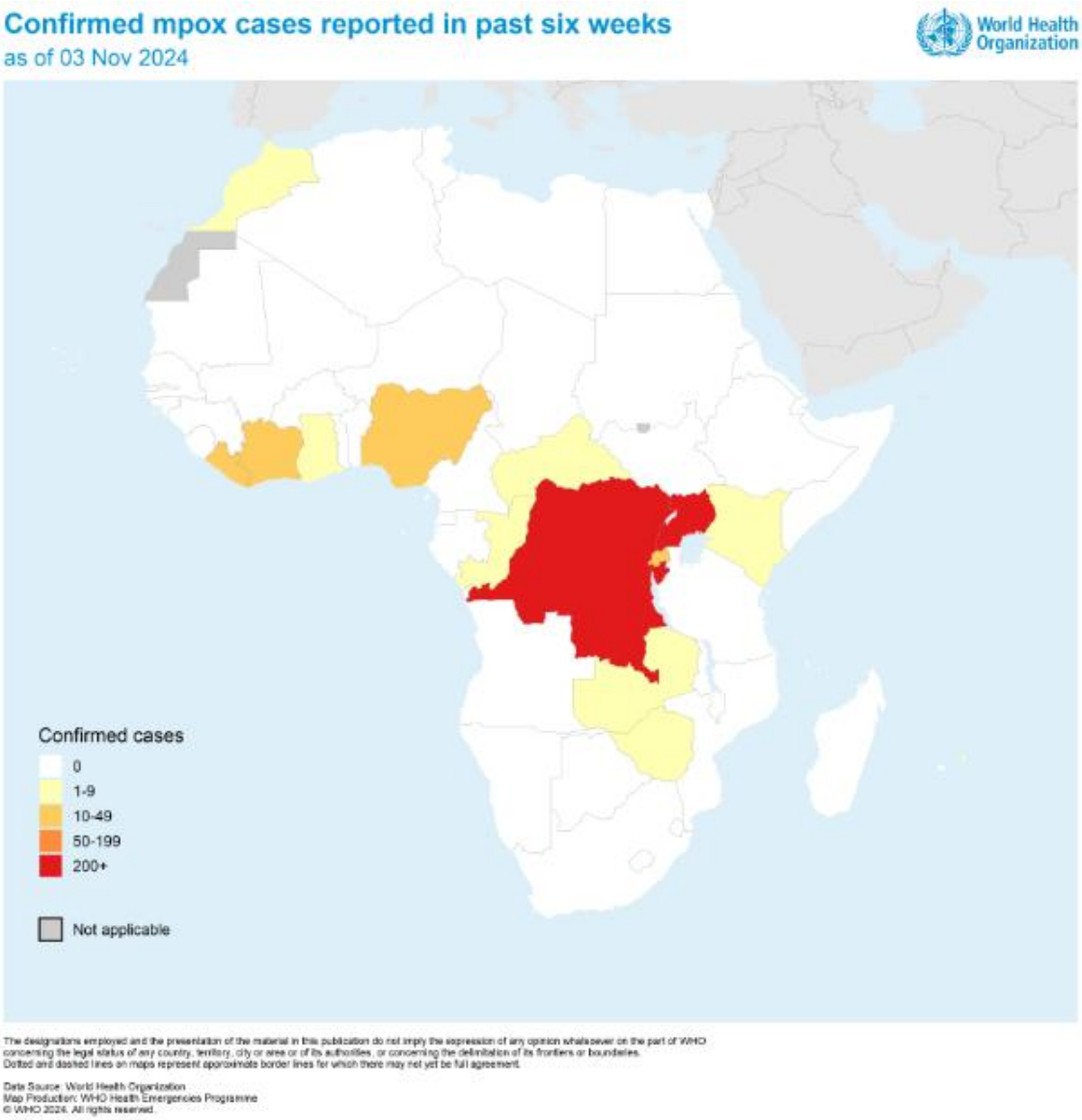
Clade IIb MPXV

Most mpox outbreaks outside of Africa 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, though lineage A.1 is also circulating in Nigeria and some countries in the Eastern Mediterranean Region. The most affected population continues to be adult 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. Australia has seen an unprecedented rising trend in cases in recent months, with 756 confirmed cases reported to WHO in 2024 as of 30 September 2024.

Confirmed cases reported in Africa

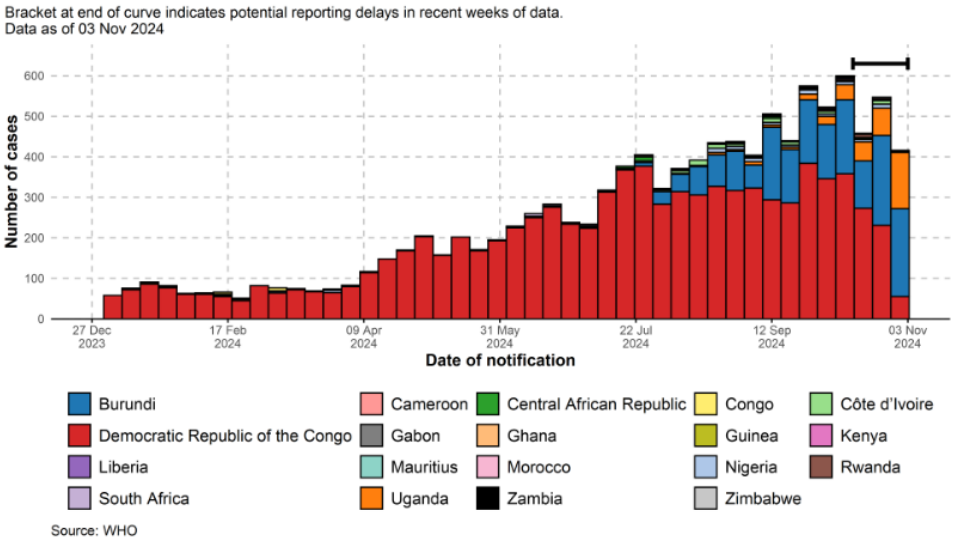
In Africa, as of 3 November, 11 148 confirmed cases, including 53 deaths (Case Fatality Ratio or CFR of 0.5%), have been reported by 19 countries in 2024. The most affected country continues to be the Democratic Republic of the Congo (8662 confirmed cases, 43 deaths), followed by Burundi (1726 confirmed cases, no deaths) and Uganda (359 confirmed cases, one death). Fifteen 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). Four countries, Cameroon, Gabon, Guinea, and South Africa, have not reported confirmed cases in the last six weeks and could 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. One country, Mauritius, reported its first mpox case ever recorded; clade information is not yet available.

Figure 2. Geographic distribution of reported confirmed mpox cases in Africa, by country, in the last six weeks (23 September 2024 – 3 November 2024).



There is a general rising trend in confirmed mpox cases reported by African countries in 2024 (Figure 3), driven mainly by cases in the Democratic Republic of the Congo, Burundi, and more recently, Uganda. Data in recent weeks for the Democratic Republic of the Congo might suggest that the overall number of reported cases is stabilizing but this should be interpreted with caution, given the likely delays in reporting, and recurrent stockouts of testing supplies in the country, which hinder the capacity to confirm mpox cases.

Figure 3. Epidemic curve of weekly reported confirmed mpox cases in Africa, by reporting country, 1 January 2024 – 3 November 2024

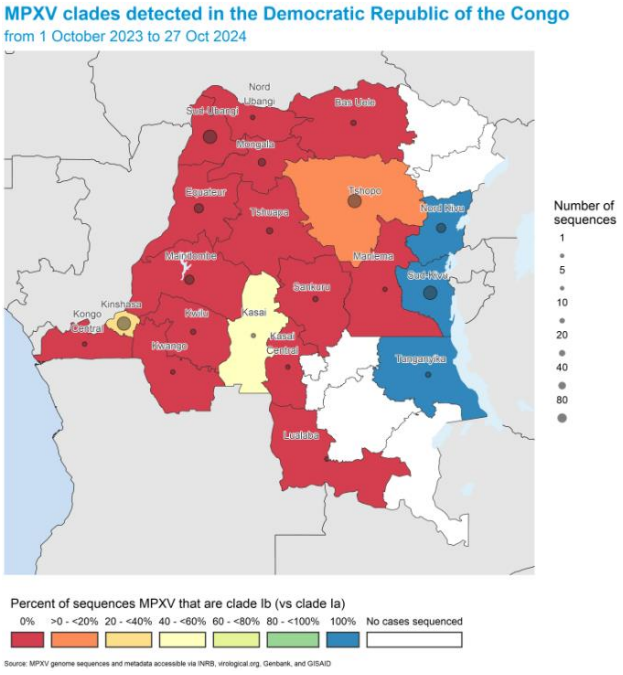


Focus on the Democratic Republic of the Congo (clade Ia & Ib MPXV)

Mpox outbreaks in the Democratic Republic of the Congo are driven by both clade Ia and Ib MPXV strains, which have been detected in different provinces of the country (Figure 4). So far, clade Ib MPXV has been detected in South Kivu, North Kivu, Kinshasa, Kasai, Tshopo and Tanganyika provinces. Most of the other provinces have only reported clade Ia MPXV so far, and a few have not yet sequenced the MPXV genome from clinical samples.

In 2024, around 10% of MPXV PCR-positive samples in the country have been sequenced, in line with the country's testing strategy, but these are not representative of the affected provinces. Places with better capacity to transport specimens to the national laboratory are more likely to have samples sequenced than those with more limited access to the national lab, therefore, the virus clade distribution could be broader and more nuanced than is presented in Figure 4.

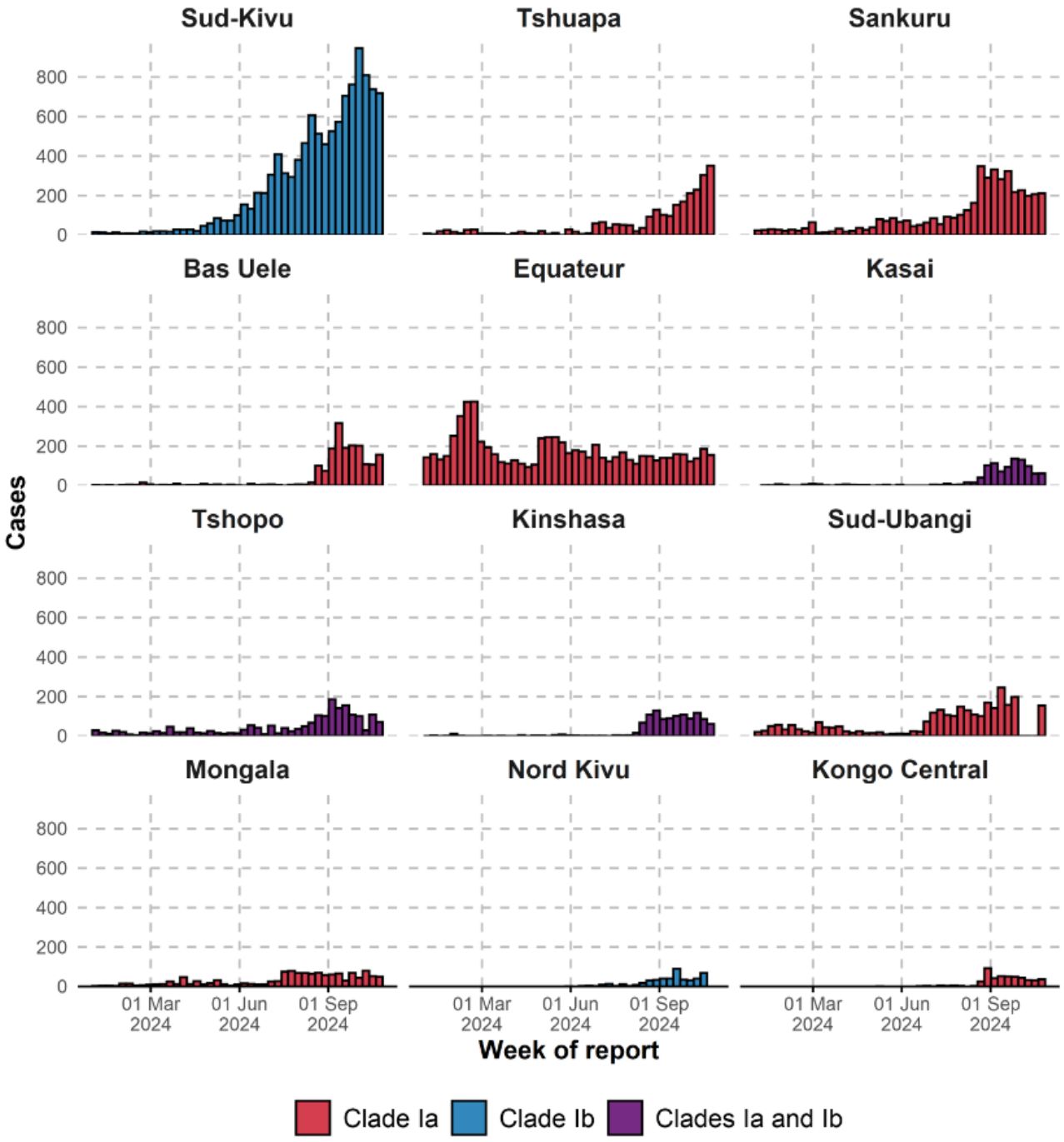
Figure 4. Geographic distribution of clade I MPXV in the Democratic Republic of the Congo, by province, from 1 October 2023 to 27 October [5] 2024



[5] This is the more recent complete epi week for which subnational data is available.

Data on suspected mpox cases in the most affected provinces of the Democratic Republic of the Congo suggest relatively stable epidemic trends in recent weeks in many of these provinces (Figure 5). Whereas declining trends are seen in South Kivu, which continues to account for most suspected cases in the country, with more than 700 suspected cases in the last week with complete data available, this trend might be influenced by delays in reporting and needs to be corroborate in the coming weeks. Stable trends, with fewer than 200 new suspected cases per week, have also been observed in recent months in Equateur, which has historically been the province most affected by mpox in the country.

Figure 5. Epidemic curve of reported suspected mpox cases in the most affected provinces of the Democratic Republic of the Congo, 1 January – 27 October[6] 2024.

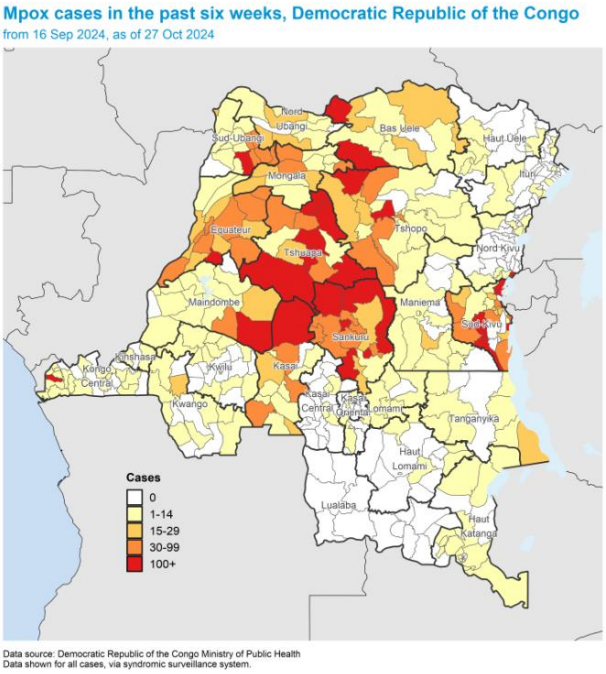


Data source: Democratic Republic of the Congo Ministry of Public Health
Data shown for all cases, via syndromic surveillance system.

[6] This is the more recent complete epi week for which subnational data is available.

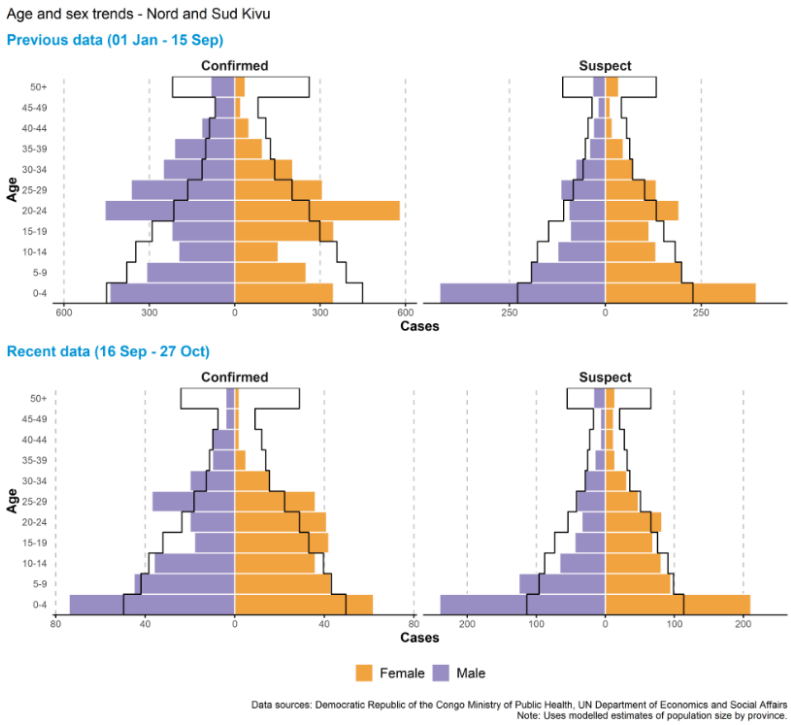
The distribution of cases is not homogeneous within these provinces, and transmission is ongoing in a few hotspots within the affected health zones with active outbreaks (Figure 6).

Figure 6. Geographic distribution of suspected mpox cases in the past 6 weeks, by health zone, in the Democratic Republic of the Congo, 16 September – 27 October 2024.



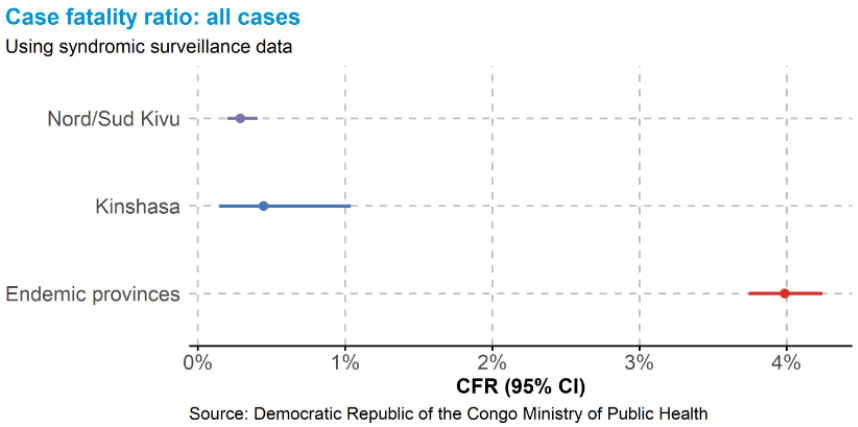
The outbreak in South Kivu is driven by close human-to-human contact, including sexual contact, and direct close contact in households and communities. While the initial phase of the clade Ib epidemic in the eastern part of the country was mostly affecting adults, as clusters expand in the community and the virus enters more households, the epidemic is now affecting both adults and children, reflecting wider community transmission through close contact. This is seen in the age and sex distribution which, in the last six weeks, has seen an increasing proportion of children affected compared to earlier phases of the epidemic, particularly among confirmed cases (Figure 7).

Figure 7. Age and sex distribution of confirmed and suspected mpox cases in the South and North Kivu provinces, Democratic Republic of the Congo, 1 January – 27 October 2024.



Data on the CFR of all suspected cases reported in the country in 2024 suggest a difference in the CFR estimates for endemic provinces (~4%) affected mainly by clade Ia, Kinshasa (~0.5%) where both subclades are circulating, and North and South Kivu (<0.5%) where clade Ib is circulating (Figure 8). It is currently unclear if this difference in case fatality ratio is due to the viral clade or differences in factors such as population vulnerability, healthcare access, demographic characteristics, and case reporting, among others. Of note, the majority of deaths in endemic provinces are reported among suspected (clinically compatible) cases, owing to limited access to diagnostic testing in some remote areas.

Figure 8. Mpox case fatality ratio estimates and confidence intervals for suspected mpox cases in different areas of the Democratic Republic of the Congo, 1 January – 27 October 2024.



As of 1 November 2024, the first phase of mpox vaccination in the country concluded. A total of 51 659 individuals were vaccinated with one dose of MVA-BN vaccine across 6 provinces: Equateur, South Kivu, Nord Kivu, Sankuru, Sud Ubangi and Tshopo.

The priority groups for vaccination included frontline workers, contacts of mpox cases, key populations (sex workers, men who have sex with men and transgender individuals), hunters, forest guards and veterinarians.

Other countries reporting cases of mpox due to clade Ib MPXV

As of 6 November 2024, beyond the Democratic Republic of the Congo, 11 countries have reported at least one case of mpox due to clade Ib MPXV (Table 1).

Among these countries, only Kenya and Uganda have reported one death each among confirmed mpox cases linked to the outbreak due to clade Ib MPXV. Both individuals who died had advanced HIV disease.

Table 1: Reported confirmed mpox cases and deaths linked to clade Ib MPXV outbreaks reported to WHO, by country*, as of 6 November 2024.

Country	Number reported confirmed cases	Number of deaths among reported confirmed cases	Geographic distribution
Burundi	1726	0	Most health districts; Largely concentrated in and around the capital
Uganda	359	1	Multiple districts; Largely concentrated in and around the capital
Rwanda	26	0	Multiple districts, including capital
Kenya	14	1	Multiple counties (including capital) along the major road transport corridor from the coast to Uganda and Tanzania
United Kingdom	4	0	Index case had travel history to Africa; Three subsequent cases had shared a household contact with the index case

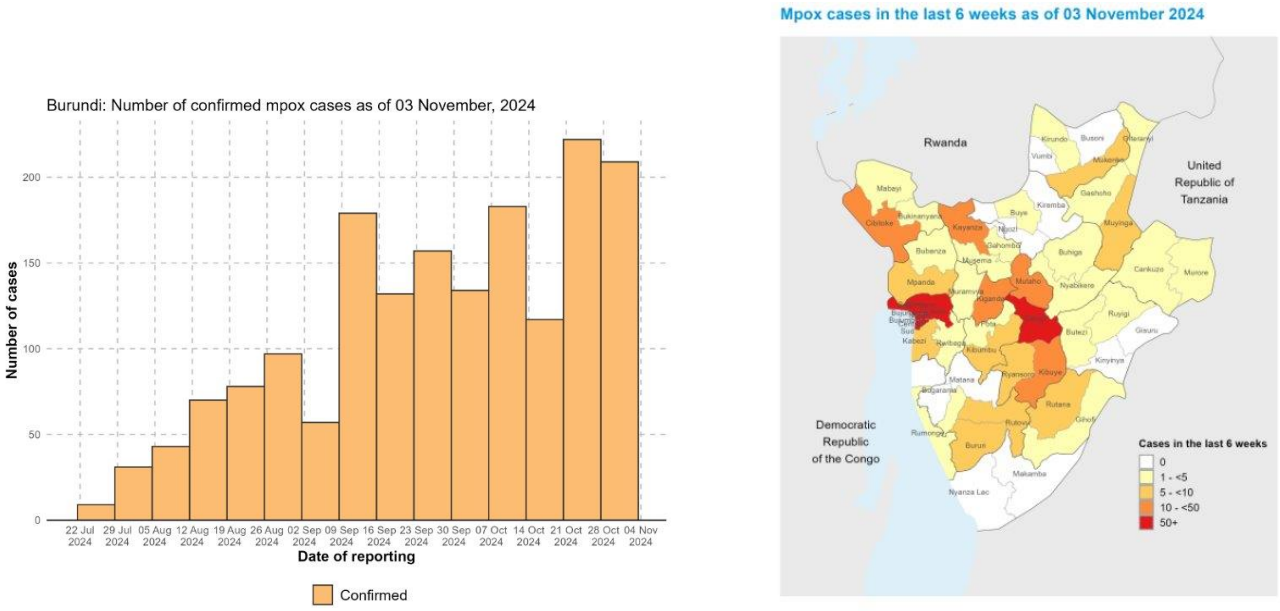
Zimbabwe	2	0	One case with travel history to South Africa and another case with travel history to Tanzania
Zambia	1	0	One province
Sweden	1	0	Travel to East Africa
Thailand	1	0	Travel to East Africa
India	1	0	Travel to UAE
Germany	1	0	Travel to East Africa

*The Democratic Republic of the Congo is not included in table 1; it has reported cases of both clade Ia and Ib MPXV.

Burundi

From the start of the mpox outbreak in July 2024 to 3 November, Burundi has reported 1726 confirmed mpox cases, and no deaths so far. The number has been increasing over time, with a potential plateau in more recent weeks (Figure 9).

Figure 9. Epidemic curve of weekly number of confirmed mpox cases, by reporting epidemiological week (left), and geographical distribution of confirmed mpox cases by district in the last 6 weeks (23 September-3 November) (right), in Burundi.

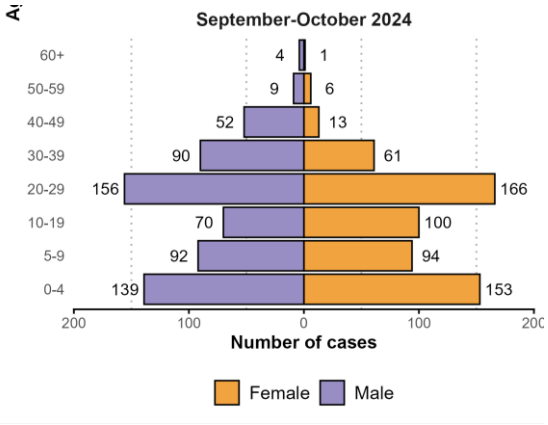


Cases have been identified in 43 out of 49 districts, and 37 among them are considered to have currently active outbreaks (Figure 9). Almost all suspected mpox cases are tested, and test positivity is approximately 45%. All sequenced samples have identified clade Ib MPXV, related to the strains circulating in South Kivu, and current evidence suggests exclusive human-to-human transmission of the virus.

The epidemic remains largely concentrated in and around Bujumbura, with a bimodal age distribution similar to what is observed overall in South Kivu (higher incidence in young children <5 years and among young and middle-aged adults), suggesting similar epidemic dynamics (Figure 10). Notably, in recent weeks, the 20 – 29 years age group has replaced the <5 years age group as the most affected age group in the country.

Community transmission, through close physical contact, including sexual contact, as well as household transmission have been reported in the country.

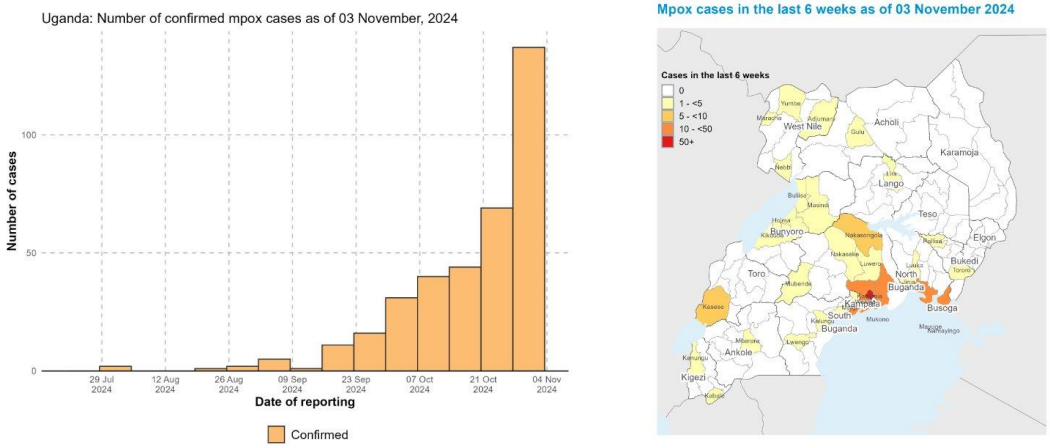
Figure 10. Age and sex distribution of confirmed mpox cases, Burundi, September-October 2024.



Uganda

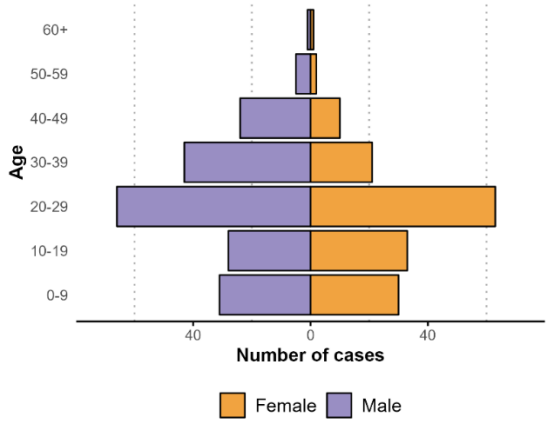
From July to 3 November 2024, the country has reported 359 confirmed mpox cases and one death across 19 affected districts (Figure 14). The death was reported in an immunocompromised adult living with HIV. In recent weeks there has a been a significant increase in the number of cases reported weekly (Figure 11), driven by close human-to-human contact.

Figure 11. Epidemic curve of weekly number of confirmed mpox cases, by reporting epidemiological week (left) and geographical distribution of confirmed mpox cases in the last in the last 6 weeks (23 September-3 November) (right), in Uganda.



So far, only clade Ib MPXV, linked to the outbreak in eastern Democratic Republic of the Congo, has been detected in the country, suggesting that all transmission is due to human-to-human contact. The majority of infections reported is among adults (Figure 12), and there is evidence of sexual contact transmission, identified in at least three hotspot districts, particularly involving sex workers and their networks.

Figure 12. Age and sex distribution of confirmed mpox cases, Uganda, 8 July – 3 November 2024.



As the outbreak expands and the virus spreads to more households, the number of cases reported among children is increasing. This shift in transmission dynamics from cases among adults associated with sexual contact towards household and community transmission has also been previously observed in South Kivu and Burundi. There is ongoing sustained human-to-human transmission of mpox in the country.

In **Rwanda**, as of 3 November 2024, 26 confirmed mpox cases and no deaths had been detected. Eleven of these cases (42%) have travel links to the Democratic Republic of the Congo, while the others do not. Genomic sequencing analysis has identified clade Ib MPXV, suggesting exclusive human-to-human transmission.

The most affected districts include Rusizi (bordering the Democratic Republic of the Congo), Gasabo and Kicukiro (including located in the capital, Kigali), as well as Kirehe (bordering Tanzania).

Although the exact routes of transmission in the case clusters in Rwanda are not fully elucidated, six cases (23%) are in female sex workers, and half (13 of 26 cases) have reported sexual contact with a person with mpox who was a known case.

Zimbabwe has shared new MPXV clade information since the last report. Genomic sequencing analysis has revealed that one of the two reported mpox cases, an adult male with recent history of travel to Tanzania (for more details, refer to previous situation report here), had mpox due to clade Ib MPXV. Zimbabwe is thus one of three new countries to report detection of clade Ib MPXV since the previous situation report. Clade information for the other reported case is still unavailable. No mpox cases have been reported by neighbouring Tanzania.

Zambia has shared new MPXV clade information since the last report. Genomic sequencing analysis has revealed that the case reported in Zambia, an adult (for more details, refer to previous situation report here), had mpox due to clade Ib MPXV. Zambia is thus one of three new countries to report detection of clade Ib MPXV since the previous situation report.

First cases of mpox due to clade Ib MPXV in the United Kingdom of Great Britain and Northern Ireland

On 30 October 2024, the United Kingdom notified WHO of a case of mpox due to clade Ib MPXV. The case, detected in London, reported a recent history of international travel to three countries in East Africa, including two that have reported cases of mpox due to clade Ib MPXV.

Following this initial detection, three more cases of mpox were confirmed in the United Kingdom, bringing the total number of cases in the country to four. The three subsequent cases are all household contacts of the index case who had recently travelled to Africa. This is the first time that local transmission of the clade Ib MPXV takes place in a country outside of Africa.

All four cases detected have been isolated in hospital settings and are receiving specialist care. The contacts of these cases are being followed up and are offered testing and vaccination as appropriate. There has been extensive planning to ensure healthcare professionals are equipped and prepared to respond to any further confirmed cases. The country assessed the risk of further spread as low.

Detection of first mpox case in Mauritius

On 26 October 2024, Mauritius reported its first confirmed case of mpox. The patient arrived in Mauritius from Nigeria on 23 October 2024 and reported a history of fever which had started on 19 October followed by widespread mucosal lesions that started on 21 October 2024, prior to travel. During the patient's stay in Mauritius, public health authorities were notified, and a Rapid Response Team was deployed to investigate on 25 October 2024. The patient was transferred into hospital care, samples were collected and referred to the Central Health Laboratory for analysis and found to be positive for MPXV on 26 October. Sequencing is ongoing to determine the clade. The patient is currently receiving treatment and being closely monitored by a multidisciplinary team.

The country has initiated public health action for this event, including intensifying surveillance and contact-tracing activities especially at ports of entry, mobilising medical countermeasures, and distributing vaccines.

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 8 November 2024.**

1. Emergency coordination

- WHO is coordinating ongoing preparations for the second meeting of the IHR Emergency Committee (EC) on upsurge of mpox 2024. For more details, please refer to the Special Focus section of this report.
- In October 2024, WHO and partners, in collaboration with Member States, activated the Global Health Emergency Corps (GHEC) for the first time to provide support to countries affected by mpox. In collaboration with the International Association of National Public Health Institutes, GHEC is assessing the emergency workforce capacities in 8 countries, including the Democratic Republic of the Congo and Burundi, the two most affected countries. More details can be found here.

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.
- The WHO Hub for Pandemic and Epidemic Intelligence convened the Collaboratory Mpox Analytics Community for its biweekly community call on 31 October 2024. The focus for the session was a deep dive into the mpox situation in Burundi, with presentations on recently published papers describing the evolution of the outbreak in the country.
- Provision of technical support to the Democratic Republic of the Congo in the preparation for expansion of mpox diagnostic laboratories to new provinces.
- Provision of technical support to the Democratic Republic of the Congo in the validation of Standard Operating Procedures (SOPs) for the integration of HIV and syphilis testing in the mpox response.

3. Community protection

- The community protection cluster supports community-centred response to mpox through coordination across technical areas, including risk communication and community engagement (RCCE), infodemic management, community service delivery, community-based infection prevention and control (IPC) and water, sanitation and hygiene (WASH), human-animal interface, surveillance at border crossings and points of entry, and vaccination.
- An EPI-WIN webinar on operationalizing the guidance for home care and isolation in resource- limited settings was held on 29 October 2024.
- A Community Protection Global Partners' meeting on internally displaced persons (IDPs), refugees and those living in camps and camp-like settings was held on 1 November 2024, with the participation of representatives from the Office of the United Nations High Commissioner for Refugees (UNHCR), International Organization for Migration (IOM), and WHO for all from the three levels of respective organizations.
- The "Considerations for border health and points of entry for mpox: interim guidance" was published.

- French version of the “Gatherings in the context of the 2024 mpox outbreak: Public health guidance” was published.

4. Safe and scalable care

- The Case Management Webinar series continues, with a session on 15 October 2024 on skin care and hydration and on 29 November 2024 about oral lesions and nutrition of patients with mpox.
- The clinical platform for mpox is actively training and enrolling more contributors – the Democratic Republic of the Congo and Uganda have started contributing data.
- The essential item estimator tool for mpox online is ready to be used to calculate the personal protective equipment (PPE), medications, consumables and biomedical equipment in a treatment centre for mpox patients.
- Mpox screening tool for rapid identification, notification and isolation of suspected cases at health facilities was published.
- WHO course on improvement of WASH services in healthcare facilities (WASH FIT) was published.
- IPC/WASH rapid assessment tool was used to assess 175 healthcare facilities in the Democratic Republic of the Congo with average score of less than 49% which highlights the urgent actions to improve the IPC measures and basic WASH services availability in healthcare facilities. This tool is implemented in other affected countries as well.

5. Access to and delivery of countermeasures

Vaccines

- The first round of mpox vaccination has concluded in the Democratic Republic of the Congo, with around 51 500 people vaccinated across six provinces: Equateur, South Kivu, Nord Kivu, Sankuru, Sud Ubangi and Tshopo.
- The mpox vaccines Access and Allocation Mechanism (AAM) endorsed the recommendation by an independent Technical Review Committee (TRC) to allocate 899 000 doses of MVA-BN vaccine to Central African Republic, Côte d’Ivoire, the Democratic Republic of the Congo, Kenya, Liberia, Nigeria, Rwanda, South Africa and Uganda. These doses come from vaccine pledges of Canada, Gavi (the Vaccine Alliance), countries of the European Union (Austria, Belgium, Croatia, Cyprus, France, Germany, Luxemburg, Malta, Netherlands, Poland, Portugal and Spain), the European Union Health Emergency Response Authority, and the United States of America in support of controlling the surge in mpox cases on the African continent.
- Over 5.85 million vaccine doses are expected to be available to the Mpox Vaccines AAM by the end of 2024. The supply includes contributions from multiple nations and organizations, including 1.85 million dose donations of MVA-BN from the European Union, United States, and Canada, 500 000 doses Gavi procured through the First Response Fund, 500 000 doses procured through UNICEF, as well as a further 3.05 million doses of LC16m8 vaccine from Japan.
- The first phase targets the vaccination of approximately 1.4 million persons at risk including contacts of cases by the end of 2024, with an initial 2.8 million doses of MVA-BN to be allocated for this effort.
- A WHO Technical Advisory Group met on 28 October to assess Emergency Use Listing (EUL) of the LC16m8 vaccine product. An official report with the TAG recommendation will be available in the coming two weeks.
- A WHO cohort event monitoring master protocol has been finalized for publication. The Democratic Republic of the Congo has already revised their protocol following the WHO master protocol. Countries introducing MVA-BN vaccines are encouraged to tailor the WHO master protocol for their local context for standardized safety data collection. It is critical for all countries to submit the collected data to the WHO global database for comprehensive safety signal analysis.
- WHO is providing technical support to countries, upon request, to assist their regulatory authorization / clearance of MVA-BN vaccine.

Diagnostics

- The third mpox diagnostics, Xpert Mpox, a near-point-of-care real-time PCR test, was listed by WHO for emergency use (EUL) on 25 October. Xpert Mpox supports decentralized testing as it is easy to

operate, delivers results in less than 40 minutes and is designed for use on compatible GeneXpert systems. Two other dossiers are being assessed for EUL.

- WHO EUL public reports for in vitro diagnostics (IVDs) have been published: Alinity m MPXV AMP Kit and Alinity m MPXV CTRL Kit and cobas MPXV Qualitative assay.
- As WHO currently does not recommend antigen-detection rapid diagnostics tests, the EUL assessments continue to focus on uncleic acid amplification test (NAAT) assays. WHO has so far received more than 60 expressions of interest from manufacturers of MPXV NAAT assays and held 37 pre-submission calls with those manufacturers which responded to screening questionnaires.
- WHO continues to provide technical support to countries for regulatory approval of EUL listed mpox diagnostics upon request.

Special focus

WHO IHR Emergency Committee for mpox: second meeting

On 22 November, the Director-General of WHO will convene the second meeting of the IHR Emergency Committee (EC) regarding the upsurge of mpox 2024 to provide advice on whether the upsurge of mpox continues to constitute a public health emergency of international concern (PHEIC) and, if so, on the proposed temporary recommendations to States Parties to respond to the event. This meeting will reflect on the ongoing global efforts to monitor and respond to the upsurge of mpox in States Parties in the African continent in the context of the global outbreak of mpox ongoing since 2022. The EC will review the most current epidemiological data, the global evolution of the event since its first meeting on 14 August 2024, and the response activities undertaken, including the implementation by States Parties of the temporary recommendations issued on 19 August 2024.

The decision by the Director-General of WHO to extend or terminate the PHEIC will also factor in the need for continuing coordinated international collaboration for response, the need for ongoing implementation of national and local public health measures, and the need to continue to mobilize resources quickly to stop the upsurge of mpox.

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

- 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)
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Regional information products

- WHO Africa Regional Office, Regional Mpox Bulletin: https://www.afro.who.int/health-topics/mpox-monkeypox
- WHO, African Centres for Disease Prevention and Control (CDC): Mpox Joint Africa CDC – WHO SITREP, 16 October 2024. https://africacdc.org/download/mpox-epidemic-in-africa-01-september-29-september-2024/

Surveillance

- 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)
- 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
- 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 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

- 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
- 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 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.
- 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
- Smallpox and mpox vaccine patient information leaflet: fvp-p-479_mpox_1dose_bn_pi-2024_1.pdf (who.int)
- 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

- Considerations for border health and points of entry for mpox: interim guidance, 23 October 2024. https://www.who.int/publications/i/item/B09144
- Public health advice for mpox prevention and control in school settings (WHO African regional office). October 2024, Interim Public Health Advice for Mpox-Related Prevention and Control Measures in School Settings https://www.afro.who.int/publications/interim-public-health-advice-mpox-related-prevention-and-control-measures-school
- 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
- 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
- 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, 17 August 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
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- OpenWHO. Mpox and the 2022-2023 global outbreak
  - English: https://openwho.org/courses/mpox-global-outbreak-2023
- OpenWHO.
- 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
  - 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. Additional context and latest Rapid Risk Assessment

On 14 August 2024, under the International Health Regulations (2005), the WHO Director-General declared that the increase in mpox cases in the Democratic Republic of the Congo and its expansion to neighboring countries constitutes a public health emergency of international concern (PHEIC). This spread represents a public health risk to other Member States and requires a coordinated international response.

This increase in mpox cases, particularly in eastern Democratic Republic of the Congo, is associated with the emergence of clade Ib MPXV, which is spreading through sustained human-to-human transmission without evidence of zoonotic exposure. Although genomic sequencing capacity is low in some settings, clade Ib appears to be the predominant strain in the North and South Kivu provinces of the Democratic Republic of the Congo, Burundi, Rwanda, Kenya and Uganda, and has been confirmed in imported cases in Sweden, Thailand and India.

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**
  (in selected countries or regional bloc assessments, 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.