



# ASEAN BIODIASPORA VIRTUAL CENTER

## DISEASE ALERT

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ASSOCIATION  
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First alert: 15 August 2024 | Mpox in Democratic Republic of the Congo

### SUB-LOCATIONS AFFECTED

Province du Nord-Kivu (Goma), South Kivu Province (Kamituga)

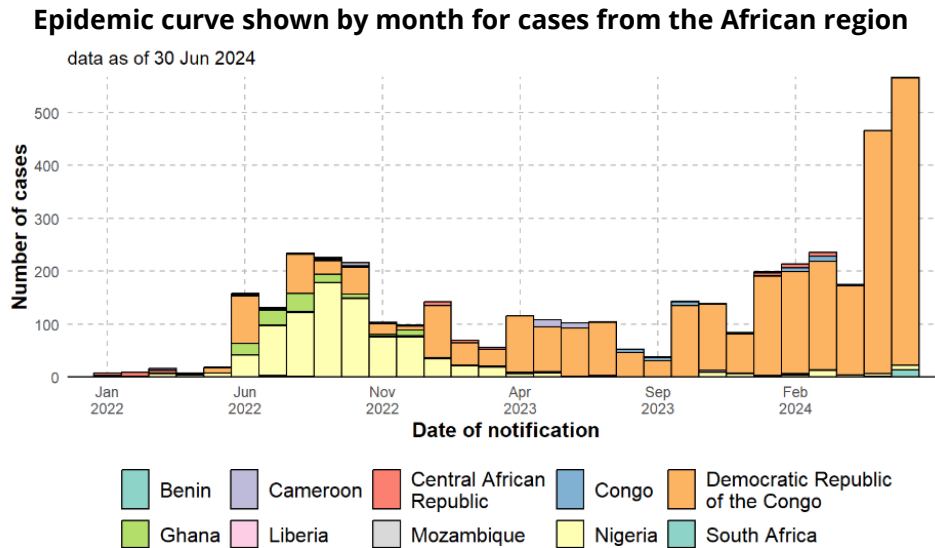


Figure 1. A nurse takes a sample from a child suspected of having mpox. Credit: Arlette Bashizi/Reuters  
Source: <https://www.nature.com/articles/d41586-024-02607-y>

### Event Description

The World Health Organization (WHO) has declared the rise and spread of mpox cases a Public Health Emergency of International Concern (PHEIC) for the second time, with the Democratic Republic of Congo (DRC) at the heart of this crisis. The declaration follows the Africa Centres for Disease Control and Prevention (CDC)'s unprecedented move to name the mpox outbreaks a public health emergency of continental security on August 13, 2024. This new mpox PHEIC declaration, the 8th since 2009, was prompted by the alarming increase in mpox cases in the DRC and their spread to at least 12 other African countries. The DRC has become the epicenter of the outbreak, primarily driven by the newly emerged Clade Ib. This unique situation has created a multifaceted epidemiological landscape that challenges traditional understanding and control measures.

As of May 26, 2024, the Democratic Republic of the Congo (DRC) reported a total of 7,851 mpox cases, with 384 fatalities, resulting in a case fatality rate (CFR) of 4.9%. The outbreak has affected 177 out of 519 health zones (34%) across 22 of the country's 26 provinces (85%). With the recent case identified in Goma, the number of affected provinces has risen to 23 out of 26 (88%). In 2024, the provinces experiencing the highest impact from the mpox outbreak are Equateur, Sankuru, and South Kivu.



Source: WHO

Figure 2. Epidemic curve shown by month for cases from the African region reported up to 30 Jun 2024

## Epidemiological Information in DRC

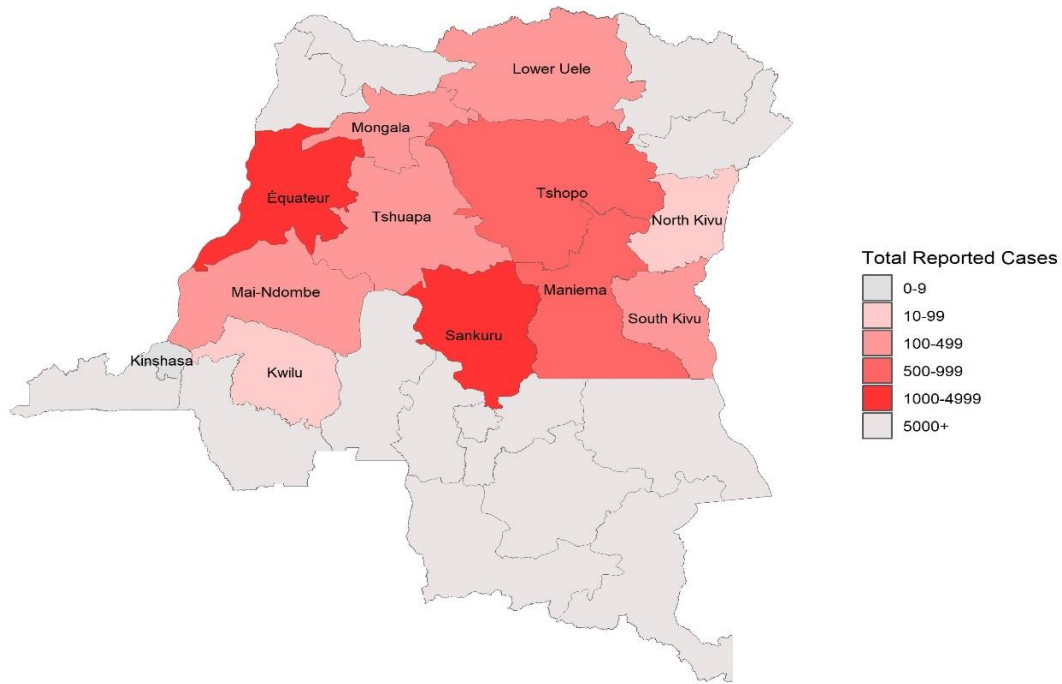
### Case distribution

The Mpox outbreak in the Democratic Republic of the Congo is exhibiting significant geographical disparities, with certain regions experiencing higher concentrations of cases. The visualizations highlight both the total number of reported cases and their relative percentages across different provinces, which is critical for understanding the epidemic's dynamics and implementing effective control measures.

- Equateur Province is experiencing the highest burden of Mpox cases, with a total reported count exceeding 4,000 cases. This province accounts for a substantial portion of the national case total, making it a critical area for public health intervention.
- The intense red shading on the map and the sharp peak in the bar chart underscore the urgency of addressing the outbreak in Equateur to prevent further spread.
- Provinces such as Mai-Ndombe, Maniema, Sankuru, and Tshuapa also show significant case numbers but to a lesser extent than Equateur. These regions, highlighted with varying shades of red on the map, indicate areas of concern that require continued monitoring and resource allocation.
- The variability in reported cases across provinces suggests differences in exposure, transmission, or detection capacity, warranting tailored interventions based on local contexts.

- Other provinces, including Kinshasa City, Kwilu, and North Kivu, report lower numbers of cases, as shown by the lighter shading on the map. While these areas currently report fewer cases, ongoing surveillance and preparedness are necessary to quickly respond to any potential increases.

DRC Map of Mpox Cases by Region



x

Source: BlueDot

Figure 3. The distribution of Mpox Cases in DRC

### Three distinct clades of mpox virus are of particular concern in the DRC:

1. Clade II: This variant, responsible for the global outbreaks in 2022, primarily spreads through sexual networks of men who have sex with men. While present in many countries, its role in the DRC outbreak is less prominent.
2. Clade I: Historically, this clade has been associated with animal-to-human transmission. It often affects children, likely through household contact, although data on this transmission route is limited. This clade represents the "traditional" pattern of mpox spread in the region.
3. Clade Ib: This newly emerged variant is causing significant concern. Unlike its predecessors, Clade Ib is spreading through sexual contact between individuals of the opposite sex. This novel transmission pattern represents a significant shift in the epidemiology of mpox in the DRC.

## 1. MPXV Clade I:

- From January 1 to June 27, 2024, at least 14,600 MPXV cases and 654 associated fatalities were reported, the highest figures ever recorded according to official data.
- The estimated case fatality ratio (CFR) stands at 4.47%.
- Cases have been reported across 177 of the 519 (34%) health zones in 22 out of the 26 provinces (85%) of the DRC.
- The provinces most affected include Equateur, Sud Ubangi, Sankuru, and South Kivu.
- No Clade IIb MPXV cases (associated with the global outbreak) have been confirmed in the DRC as of this date.
- Testing for Clade II MPXV was introduced in the national laboratory in late 2023 and is used only for new cases/clusters in previously unaffected provinces.

## 2. MPXV Clade Ib:

- Sexual transmission of MPXV Clade I was first documented in April 2023 in Kwango province, DRC.
- An outbreak centered in the Kamituga region of South Kivu province since August 2023 further established the sexual transmission of MPXV Clade I.
- The outbreak involves sexual contact, non-sexual direct contact, and household and healthcare facility transmission. No zoonotic transmission has been reported in the province.
- Due to its distinct characteristics, a new designation, Clade Ib, was proposed in early 2024.
- Clade Ib carries an APOBEC3-type mutation, indicating adaptation to human-to-human transmission.
- While its transmissibility and severity compared to other Clade I strains are unknown, Clade Ib has gene deletions affecting standard diagnostic methods in the DRC.
- On June 1, 2024, the first case of MPXV was confirmed in Goma, North Kivu Province.
- The case involved a 19-year-old woman with various symptoms including genital lesions.
- 45 close contacts were identified for follow-up.
- Epidemiological investigations linked the case to sexual contact and recent travel to South Kivu Province

## Response Measures:

- The Ministry of Health (MoH), supported by WHO and other partners, is enhancing surveillance, clinical case management, and laboratory capabilities. It is also working to improve infection prevention and control practices in healthcare facilities, conducting risk communication and community engagement in affected provinces, and developing vaccination strategies for emergency response.
- Genome sequencing of viruses from clinical specimens is being increased, particularly for South Kivu, to detect new variants from cases and gain a better understanding of the circulating viral strains.

- Mpox surveillance is being enhanced nationwide, with a focus on eight priority provinces—Equateur, Mai’Ndombe, Maniema, Sankuru, South Kivu, Sud Ubangi, Tshopo, and Tshuapa—as outlined in the national response plan.
- Details about confirmed mpox cases enrolled in a treatment clinical trial in two provinces have been shared with the incident management team’s surveillance pillar and added to the national surveillance database.
- Messages incorporating information about the sexual transmission of mpox have been created to aid in risk communication and community engagement. These messages have been translated into local languages.
- Awareness campaigns have begun in affected communities in the provinces of Equateur, Kinshasa, Kwango, South Kivu, and Tshopo
- A national behavior change communication plan for mpox has been developed.
- In February 2024, the national immunization technical advisory group (Groupe Technique Consultatif Indépendant sur la Vaccination, GTCV) recommended the use of both LC16 and MVA-BN vaccines for emergency response.
- At the request of the Essential Programme on Immunization on 8 May 2024, the national regulatory authority (Autorité Congolaise de Réglementation Pharmaceutique, ACOREP) is currently reviewing the dossiers for the LC16 and MVA-BN vaccines to authorize their temporary use for emergency purposes.
- The Institut National de Recherche Biomédicale (INRB) is coordinating the development of clinical study protocols for mpox vaccines to address knowledge gaps regarding vaccine efficacy, especially in children.
- Efforts are ongoing to develop vaccination strategies for emergency response and to launch clinical vaccine studies. These studies aim to address gaps in knowledge about mpox vaccines and include research on immunogenicity, efficacy, and safety.
- Logistical support has been provided for collecting, transporting, and analyzing samples from suspected cases. GeneXpert cartridges have been acquired for use in the provinces of Equateur (Ingende, Mbandaka), North Kivu (Goma), Tshopo (Kisangani), Tshuapa (Boende), and South Kivu (Bukavu, Kamituga).
- The PHEIC declaration will facilitate the mobilization of resources, including funding, enhanced surveillance, laboratory testing, and human resource capacities across Africa.
- It also enables Africa CDC to implement a One Health approach, integrating human, animal, and environmental health strategies.
- The declaration highlights the need for improved surveillance and diagnostic capabilities, given the surge in cases and potential under-reporting. Concerns have been raised about the link between mpox fatalities and HIV, which elevates the outbreak’s implications, given that there is a large prevalence of people living with HIV in the DRC.
- Africa CDC has formed a 25-member Incident Management Team and partnered with the European Commission and Bavarian Nordic to secure over 215,000 doses of the MVA-BN® vaccine, ensuring equitable distribution across affected countries.
- The declaration is seen as a critical step in addressing the escalating mpox crisis in Africa, calling for global collaboration and support.

## Additional context

- In the current outbreak, while 96% of the total cases have been reported in the DRC, several other African countries have reported their first-ever mpox outbreaks, including Burundi, Kenya, Rwanda, and Uganda. The presence of Clade Ib has also been confirmed in each country.
- For Uganda, Rwanda, and Kenya travel to eastern parts of the DRC has been linked to some of the initial confirmed cases.
- Other countries in the African region are also reporting re-emerging outbreaks. This includes Côte d'Ivoire, that had reported no cases since the start of the multi-country outbreak in 2022, and the Central African Republic.

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