

Given the circulation of the variant of clade I of mpox virus (MPXV) in the African Region, which is associated in the African Region with sustained transmission and the occurrence of cases in a wider range of age groups, including children, the Pan American Health Organization/World Health Organization (PAHO/WHO) encourages Member States to remain vigilant to the possibility of introduction of this variant in the Americas, and to continue their surveillance efforts, including genomic sequencing of detected cases, with special emphasis on high-risk groups.

Summary of the situation

On 23 July 2022, the World Health Organization (WHO) Director General determined that the multi-country outbreak of mpox constituted a public health emergency of international concern (PHEIC) (1, 2). The number of cases reported globally peaked in August 2022 and then began a steady decline until April 2023. On 11 May 2023, after considering the significant reduction in the global spread of mpox, given the progress in controlling the outbreak in several countries, the WHO Director-General determined that the event no longer constituted a PHEIC, and the standing recommendations for mpox were issued in August 2023 (3, 4).

In the Americas Region, between 2022 and as of 1 July 2024, 62,572 cases of mpox, including 141 deaths, were reported in 31 countries and territories (5, 6). Most of the cases reported in the Region of the Americas were identified through human immunodeficiency virus (HIV) patient care services, sexual health services, or primary and/or secondary health care facilities, involving primarily, but not exclusively, men who have sex with men (MSM) (7). Genomic surveillance identified clade IIb in all cases analyzed, which remains the only one detected to date.

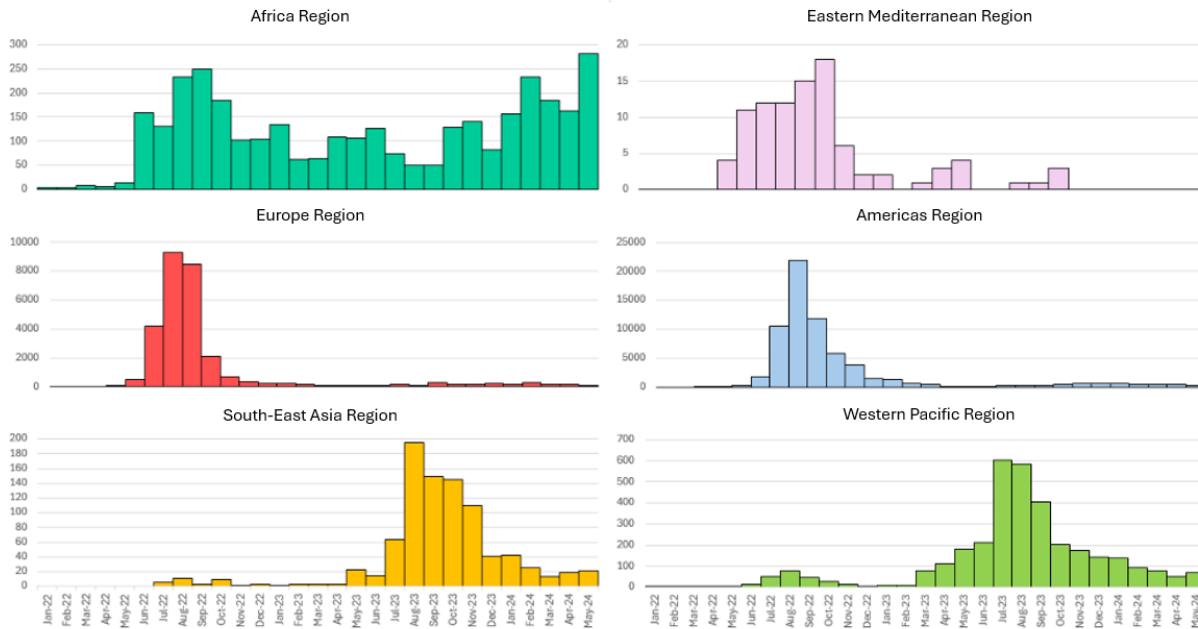
In December 2022, the **Democratic Republic of the Congo** declared a nationwide outbreak of mpox and since September 2023 the outbreak that affected South Kivu province has spread and affected several provinces. As part of the outbreak investigation, a new variant of mpox virus clade I (MPXV) was identified and is estimated to have emerged around mid-September. The variant was associated with the significant increase in cases of mpox in that country, and sexual transmission was the main mode of infection in most of the reported cases (8).

The clade I variant contains predominantly APOBEC3-type mutations, indicating an adaptation of the virus due to intense circulation in humans (8). Person-to-person transmission has been continuous since its detection, and this is the first time that sustained community transmission of the virus has been described in the country (8).

Since the beginning of 2024, as of the last report on 26 July 2024, the Democratic Republic of the Congo Ministry of Health reported 14,479 cases of mpox (2,715 confirmed; 11,764 suspected) and 455 deaths (case fatality rate: 3.1%), affecting 25 of the country's 26 provinces. Children under 15 years of age accounted for 66% of cases and 82% of deaths. Of the confirmed cases, 73% were males (9).

Globally, between 1 January 2024 and 31 May 2024, according to the WHO Regions, the highest number of reported cases of mpox is in the Africa Region (Figure 1) (10). The Democratic Republic of the Congo accounts for more than 90% of the cases reported in the Africa Region (11). The neighboring countries of Rwanda and Uganda have reported cases of the new variant. Kenya has also confirmed cases of the new variant. In Burundi, testing is underway to determine whether the reported cases are due to the new variant (11).

Figure 1. Laboratory-confirmed cases of mpox reported to WHO, by WHO Region, by month of reporting, between 1 January 2022 and 31 May 2024.



Source: Adapted from World Health Organization. Multi-country outbreak of mpox, external situation report 34, 28 June 2024. Geneva: WHO; 2024. Available from: https://cdn.who.int/media/docs/default-source/health-emergency-information-risk-assessment/20240628_mpox_external-sitreps_34.pdf.

Recommendations

Although no cases of mpox belonging to the new clade I variant have been reported to date outside the WHO Africa Region, sporadic introduction into the Americas Region cannot be ruled out, and health authorities are encouraged to continue their surveillance efforts to characterize the situation and respond rapidly in the event of an introduction of this or a new variant of MPXV.

The standing recommendations issued by the Director General in August 2023 for mpox under the International Health Regulations (2005) (IHR) remain in effect (4).

Member States are reminded of the main recommendations for surveillance, clinical management, prophylaxis, and risk communication.

Surveillance

The main objectives of mpox surveillance and case investigation are the rapid detection of cases and clusters of cases in order to provide appropriate clinical care; isolation of cases to prevent onward transmission; identification, management, and follow-up of contacts to recognize early signs or symptoms of infection; identification of groups at risk of infection and severe disease; protection of front-line health care workers; and adoption of effective control and prevention measures (12).

It is crucial to maintain epidemiological surveillance based on laboratory testing and timely reporting of confirmed and probable cases. This includes the follow-up of clinical pictures compatible with mpox in existing surveillance programs, and the implementation of clear case definitions for suspected, probable, confirmed, and reinfected cases according to ongoing guidance (12, 3).

Integration of mpox surveillance, detection, prevention, care, and research into HIV and other sexually transmitted infection (STI) prevention and control programs and services will facilitate early detection of outbreaks, reduce barriers to health services, and improve the response to HIV-MPXV coinfection (13).

The implementation of genomic surveillance is key to determine the circulating clades and their evolution, and at the same time contribute to knowledge by sharing genetic sequence data for relevant public health actions.

Diagnosis and laboratory

Detection of viral DNA by polymerase chain reaction (PCR) is the laboratory test of choice for mpox. The best diagnostic samples are taken directly from the rash (skin, fluid, or crusts) collected by vigorous swabs (14). In the absence of skin lesions, testing can be performed with oropharyngeal, anal or rectal swabs (14). However, while a positive oropharyngeal, anal, or rectal swab result is indicative of mpox, a negative result is not sufficient to exclude MPXV infection. Blood testing is not recommended. Antibody detection methods can be used for retrospective case classification, but not for diagnosis. It should be restricted to reference laboratories and may not be useful, as it often does not distinguish between different orthopoxviruses (14).

Clade I, which is currently increasing transmission in Africa, has been reported to have a deletion in the genome that has not been reported in clade II (15). Although molecular detection using the recommended generic PCR protocol (only to detect the virus) still works well, clade I-specific PCR does not detect the virus (15). Therefore, after initial detection with the (generic) detection protocol, if the clade identification PCR is negative for both clade I and clade II, the samples should be sequenced. So far, clade I has not been detected outside Africa (15).

Vaccination

PAHO/WHO reminds Member States that mass vaccination against mpox in the population is neither required nor recommended; every effort should be made to control the spread of mpox from person to person through early detection and diagnosis of cases, isolation, and contact tracing (7).

The PAHO technical advisory group on Vaccine Preventable Diseases welcomes WHO recommendations that vaccination should only be offered to close contacts of a confirmed case of mpox (7, 16).

Post-exposure vaccination with locally available vaccine (should ideally be administered within four days of exposure) can be considered for high-risk close contacts (16).

All decisions on immunization with mpox vaccines should be based on a case-by-case assessment of risks and benefits through shared clinical decision making. Implementation of vaccination should be accompanied by robust pharmacovigilance, and vaccine efficacy studies under clinical trial protocols are recommended (16).

Clinical management

Identifying mpox can be challenging given the similarity to other infections and conditions. It is important to distinguish mpox from chickenpox, measles, bacterial skin infections, scabies, herpes, syphilis, other sexually transmitted infections (STI), and drug-associated allergies. A person with mpox may also simultaneously have another sexually transmitted infection, such as herpes. Alternatively, a child or adult with suspected mpox may also have chickenpox. For these reasons, testing is key to getting people treated as soon as possible and to prevent further spread (17).

Treatment is based on rash care, pain control and prevention of complications. In addition, specific antiviral drugs, such as tecovirimat, can be used in the treatment of mpox, particularly for severe cases or persons at increased risk of complications (17).

During the care of suspected, probable and/or confirmed cases of mpox, early identification is required through screening protocols adapted to local settings. These cases should be isolated immediately and require prompt implementation of appropriate infection prevention and control (IPC) measures, testing to confirm the diagnosis, symptomatic management of patients with mild or uncomplicated mpox, and follow-up and treatment of severe complications and conditions (17).

Patients with mpox with mild to moderate clinical presentation who are able to receive home care require careful assessment of ability to safely isolate themselves and maintain required IPC precautions at home to prevent transmission to other household and community members. Precautions (isolation and IPC measures) should be maintained until a new layer of skin has formed under the scabs (17).

Risk communication

- Promote the dissemination of public health messages aimed at health personnel, the general population, and in particular the population with the highest prevalence of HIV and other STIs, in order to inform and educate the target population on prevention measures and improve early recognition, reporting, and prompt initiation of treatment of these cases. Continue efforts to raise awareness among authorities and health personnel about the ongoing outbreak in the Democratic Republic of the Congo and the possibility of travel-associated cases of mpox (18).
- Simple information, education, and communication (IEC) materials on transmission, symptoms, prevention and treatment can be disseminated through various media (including social networks, dating apps, or close-circuit television in health care facilities with services for populations with higher prevalence of HIV and other STIs).
- Among the key messages, it is recommended to highlight that the WHO suggests the constant use of condoms during sexual activity (receptive and insertive oral/anal/vaginal) during the 12 weeks following recovery from a confirmed case, to reduce the potential transmission of mpox by this route, considering that this risk is still unknown (19).
- Prevent the spread of rumors and false or incorrect misinformation about mpox. It is important that public health authorities systematically listen to and analyze information shared through social media to identify key questions and information gaps and develop communication strategies based on this. The public should be encouraged to obtain information only from official sources (19).
- Continue risk communication and community engagement activities and work with civil society organizations to engage with key affected populations such as gay, bisexual, and other MSM (19).

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