Mpox declared a public health emergency



A scrabble for vaccines is likely to take place amid the spread of clade 1b mpox. Paul Adepoju reports.

Mpox has once again surged to global attention as WHO and the Africa Centres for Disease Control and Prevention (CDC) declare it a public health emergency. With the Democratic Republic of the Congo at the epicentre of this outbreak, the virus's spread beyond Africa has raised international alarm, particularly with the emergence of a new clade, 1b. Health authorities are scrambling to contain the virus amid limited vaccine supplies, inadequate testing, and the need to balance responses to multiple public health threats.

Mpox was declared a Public Health Emergency of International Concern (PHEIC) on Aug 14 by WHO Director-General Tedros Adhanom Ghebreyesus and a Public Health Emergency of Continental Security (PHECS) on Aug 13 by Africa CDC Director-General Jean Kaseya. Ghebreyesus cited the substantial rise in mpox cases, which has the potential to spread across and beyond Africa, as the primary reason for the declaration, combined with the emergence and rapid spread of clade 1b of mpox. Clade 1b of mpox is of particular concern due to its higher transmissibility and potential for more severe clinical outcomes. Kaseya noted that this declaration, the first of its kind by Africa CDC, underscores the urgent need for swift and decisive action. According to an epidemic intelligence report issued by the Africa CDC on Aug 16, there have been 18737 mpox cases (3101 confirmed and 15636 suspected) across 12 African countries since the beginning of the vear, resulting in 541 deaths. In contrast, throughout 2023, Africa recorded 14838 mpox cases (1665 confirmed and 13173 suspected) across seven countries, with 738 confirmed deaths.

The Democratic Republic of the Congo accounts for 95% (17794) of

the reported cases and 99% (535) of the deaths from mpox in 2024, making it the main focus of the response. The PHEIC and PHECS declarations, along with the confirmation of the first mpox case with clade 1b outside Africa in Sweden and Pakistan, have raised alert levels globally. In making the declaration, WHO's expert advisory committee called for a coordinated international response to prevent further spread and save lives.

This is not the first time a PHEIC has been declared for mpox. In response to the 2022 global mpox outbreak, Ghebreyesus made a similar declaration, despite the International Health Regulations (IHR) Emergency Committee failing to reach a consensus on the matter. "Sometimes, when a split vote like that happens, which is very close, I can act as a tiebreaker", Ghebreyesus told The Lancet. He described the declaration as effective in raising awareness about mpox, noting the mobilisation of stakeholders and progress in the tools now being deployed to respond to the current outbreak.

Unlike the 2022 mpox outbreak, which predominantly affected men

who have sex with men, the 2024 outbreak is impacting a broader demographic. The virus, primarily spreading through direct contact, has been reported among men, women, and children. In the Democratic Republic of the Congo, where mpox cases have been reported in all 26 provinces, children younger than 15 years account for 66% of reported cases and more than 82% of deaths.

"Mpox is endemic in our region, and with endemic diseases, exposure is inevitable. Children are particularly vulnerable due to contact, malnutrition, and compromised immunity. The lack of smallpox vaccination, which could have provided some protection, also contributes", Merawi Aragaw Tegegne, Acting Head of the Division of Emergency Preparedness & Response at Africa CDC, told *The Lancet*.

However, a severe lack of testing and surveillance is obscuring the full picture of the outbreak. Dimie Ogoina, WHO's IHR Committee Chair, highlighted the significant testing challenge, particularly in the Democratic Republic of the Congo, where less than 30% of cases might be tested. "Members of the IHR Committee emphasised the



A child gets treatment for mpox at a hospital near Goma, eastern Democratic Republic of the Congo



A health warning poster outside the Munigi mpox treatment centre in North Kivu, Democratic Republic of the Congo

need for health authorities to invest in improving diagnosis, especially in the Democratic Republic of the Congo. Without comprehensive testing, we are essentially working blind", Ogoina told *The Lancet*. He attributed this to logistical challenges in transporting samples from collection sites to laboratories.

Maria Van Kerkhove, WHO's Acting Director for Epidemic and Pandemic Preparedness, stressed the need for robust surveillance and accurate diagnostics. She mentioned ongoing efforts to review the use of current PCR tests and other tools to distinguish between mpox virus clades while ensuring access. "We saw during COVID-19 a lack of access, particularly in low- and middle-income countries, and we're seeing that here as well. Our work focuses on improving access to vaccines, therapeutics, and diagnostics", Kerkhove told The Lancet. She also called for effective contact tracing to prevent further spread.

WHO's Strategic Advisory Group of Experts on Immunization has identified two vaccines for mpox, and the process for their emergency use listing has been initiated. The Democratic Republic of the Congo and Nigeria have already granted regulatory approval for these vaccines. WHO, Africa CDC, and Gavi, the Vaccine Alliance, are in discussions with manufacturers to address Africa's mpox vaccine requirement

of 10 million doses, although only 200 000 are currently available.

In a statement, Gavi declared the mpox outbreak a regional emergency, enabling the repurposing of available funds for operational costs and waiving the formal independent review process for new vaccine introductions and campaigns. "From a vaccine perspective, the main challenge is supply. We are still weeks away from any vaccine being approved for emergency use by WHO, and even then, it will take time for manufacturers to supply doses in large quantities", Gavi Chief Executive Officer Sania Nishtar told *The Lancet*.

Nishtar noted that supply constraints mean that donations are the best short-term solution. "As soon as a formal request is received from the Democratic Republic of the Congo, Gavi is ready to send 65,000 doses into the country", Nishtar told *The Lancet*. This is sufficient for the first phase of the country's plan.

The Africa CDC has secured donations of more than 200 000 doses for 2024, with more expected in 2025. The European Commission's Health Emergency Preparedness and Response Authority (HERA) is procuring and donating 175 420 doses of the MVA-BN mpox vaccine to respond to the outbreak in Africa. Bavarian Nordic, the vaccine manufacturer, is also donating 40 000 doses to HERA. The Africa CDC will distribute the vaccines according to regional needs.

Recently, the US Government announced the donation of 50 000 doses of the JYNNEOS mpox vaccine to the Democratic Republic of the Congo, whereas the manufacturer received nearly US\$157 million from the US Government for additional vaccine production. Nigeria is also receiving 10 000 doses of the JYNNEOS vaccine donated by the USA.

Nishtar stressed that the world currently does not have enough vaccines to protect everyone at risk, making it crucial to ensure that the available supplies reach those in greatest need. "It's vital that other available countermeasures are also deployed where effective. The lessons of COVID-19 are still fresh, and I urge all partners to collaborate and act swiftly to contain this suffering", Nishtar told *The Lancet*.

Jide Idris, Director-General of the Nigeria Centre for Disease Control and Prevention, emphasised the importance of ensuring that the mpox outbreak does not divert attention from other health issues being monitored, such as cholera and Lassa fever, particularly because more cases and deaths are being recorded from these conditions.

"In light of the higher number of cholera and Lassa fever cases compared to mpox, the messaging should emphasise a data-driven, integrated approach to public health, ensuring that resources are allocated proportionately to address the most severe and prevalent diseases. While mpox is acknowledged as a concern, the focus remains on managing all health threats simultaneously, without neglecting any, to maintain comprehensive health security. An integrated approach in disease management is key", Idris told The Lancet. 39 mpox cases have been confirmed in Nigeria in 2024 with no deaths, whereas nearly 6000 suspected cholera cases and 176 deaths have been reported, with children younger than 5 years being the most affected.

Paul Adepoju