

WHO Declares Mpox an International Public Health Emergency

Clade I mpox has not yet been reported in the U.S., but with cases surging in Africa, the CDC urges people at higher risk to get vaccinated.

August 16, 2024 By [Liz Highleyman](#)

On the recommendation of a global committee of independent experts, the World Health Organization (WHO) declared on August 14 that the upsurge of mpox (formerly monkeypox) in the Democratic Republic of the Congo (DRC) and other countries in Africa is a [public health emergency of international concern](#). The Africa Centres for Disease Control and Prevention [made a similar move](#) the day before. Advocates say the burgeoning outbreak is worsened by neglect from wealthy countries and inequitable access to mpox vaccines.

The current outbreaks in the DRC involve Clade I mpox, a strain of the monkeypox virus that has historically had a higher mortality rate than Clade II, which was responsible for the global outbreak in 2022. Clade I has not yet been detected in the United States—so far, [Sweden is the only country outside of Africa](#) to report a confirmed case, a person who recently travelled to Africa—but health officials warn that international spread is likely because viruses do not recognize borders.

“The detection and rapid spread of a new clade of mpox in eastern DRC, its detection in neighboring countries that had not previously reported mpox and the potential for further spread within Africa and beyond is very worrying,” WHO director-general Tedros Adhanom Ghebreyesus, PhD, said at a news briefing. “It’s clear that a coordinated international response is essential to stop these outbreaks and save lives.”

The emergence of a new clade of [#mpox](#), its rapid spread in eastern [#DRC](#), and the reporting of cases in several neighbouring countries are very worrying.

On top of outbreaks of other mpox clades in DRC and other countries in Africa, it's clear that a coordinated international... pic.twitter.com/u2DSV6fitj
— Tedros Adhanom Ghebreyesus (@DrTedros) [August 14, 2024](#)

The U.S. Centers for Disease Control and Prevention (CDC) considers the risk of Clade I mpox to be low in the United States, according to an [August 7 health alert](#), but the agency urges clinicians and health officials to “maintain a heightened index of suspicion” for mpox in people with symptoms who have recently been in the DRC or neighboring countries.

Meanwhile, Clade II mpox [continues to circulate at a low level](#) in the United States, with some cities reporting detection of the virus in wastewater. As of early March, the CDC had tallied [more than 32,000 U.S. cases](#), resulting in 58 deaths. Mpox cases declined dramatically in the latter half of 2022, and WHO lifted its previous emergency declaration in May 2023.

The Clade II global outbreak has primarily affected men who have sex with men. The steep decline in cases has been attributed to a combination of [sexual behavior change](#), vaccination and [natural immunity after infection](#). The CDC continues to urge people at higher risk—including gay and bisexual men, transgender people and others in their sexual networks—to get vaccinated even if cases in their area are low. Evidence to date suggests that the Jynneos vaccine (also known as Imvamune or MVA-BN) protects against both Clade I and Clade II mpox, but the former has been less extensively studied.

Mpox in the DRC

Prior to the 2022 global outbreak, mpox was known as an uncommon disease in western and central Africa, where it largely affected children. It was often linked to contact with wild animals, and it was not thought to spread easily between people.

According to an [August 12 WHO situation report](#), there are concurrent ongoing outbreaks in the DRC. Clade I mpox has long been endemic in the country—the virus was first identified in humans there in 1970— but [cases began to rise in 2023](#). So far this year, more than 15,000 cases and over 500 deaths have been reported, according to WHO, and experts think this is just the tip of the iceberg. Due to inadequate health care infrastructure and civil conflict, mpox testing has been limited, and there are wide discrepancies between suspected and laboratory-confirmed cases.

In areas of the DRC and other countries in Africa where the virus is endemic, the traditional picture

still holds. Clade Ia mpox is transmitted through multiple routes, primarily close physical contact and contact with animals. Children have accounted for a majority of cases and deaths.

At the same time, [an outbreak in eastern DRC](#) caused by the newly identified Clade Ib mpox appears to be spreading predominantly through sexual contact. This more closely resembles the transmission pattern of the Clade II global outbreak, except heterosexual contact plays a bigger role, and cases have included similar numbers of men and women, many of whom are sex workers and their clients. Cases among women can lead to adverse pregnancy outcomes and possibly mother-to-child transmission. Genomic analysis suggests that Clade Ib mpox may spread more readily from person to person than Clade Ia. Beyond the DRC, Clade Ib has been reported recently in nearby Burundi, Kenya, Rwanda and Uganda.

Historically, Clade I mpox has been more deadly than Clade II. During the 2022 Clade II outbreak, the overall fatality rate was much lower—around 0.2%—than previously reported estimates in African countries, which range up to 10%. However, even Clade II mpox can be [more severe in people with advanced HIV](#), and [most people who died in the U.S.](#) have been Black gay men with AIDS.

To date, the Clade I outbreaks in the DRC appear to have a fatality rate higher than the global Clade II global outbreak but lower than historical reports from Africa. Importantly, mpox mortality depends on the availability of medical care, so divergent fatality rates in low-income and high-income settings are not only due to different viral subtypes.

Mpox Vaccination and Treatment

Mpox is mainly transmitted through skin-to-skin contact, including sexual activity, hands-on caregiving without protective equipment and contact between members of a household. It can also spread through saliva, respiratory droplets at close range and contact with materials such as clothes or bedding used by people with mpox lesions. In endemic areas, it can spread via contact with wild animals or their meat. Airborne transmission without close contact appears to be rare.

The CDC [currently assesses the risk](#) posed by the DRC outbreak as “very low” for the U.S. general population and “low to moderate” for gay and bisexual men and those in their sexual networks. Experts “do not believe that a similar scenario of transmission is likely in the United States” for several reasons, including limited travel from the DRC, smaller and less crowded households, better access to improved sanitation and health care and the lack of animal reservoirs.

The CDC [now recommends routine vaccination](#) for people at higher risk for mpox, whether or not an outbreak is currently underway. In the U.S., this includes sexually active gay and bisexual men, transgender and gender diverse individuals, people in their sexual networks regardless of sex or gender identity and people living with HIV or on pre-exposure prophylaxis (PrEP). Vaccination is not recommended for the general population. To date, only about 25% of people at higher risk have received two doses of the Jynneos vaccine, and most of the recent mpox cases in the U.S. have involved [people who are not fully vaccinated](#).

U.S. health officials continue to recommend two vaccine doses, without additional boosters. The doses should be given at least four weeks apart, but people who received only a single dose in 2022 can get the second dose at any time and do not need to restart the series.

When the Jynneos vaccine was in short supply in 2022, the Food and Drug Administration authorized an [intradermal injection method](#) that allows a single vial to be split into five doses. Evidence suggests that both intradermal and standard subcutaneous injections are [similarly effective](#). Mpox antibody levels do wane over time, however, and further research is needed to determine whether boosters might be required in the future, especially for people with HIV and others with compromised immunity.

The antiviral drug TPOXX (tecovirimat) is recommended for mpox treatment. The drug is effective against Clade II mpox, but [interim data released this week](#) suggest it may not work as well against Clade I. TPOXX did not reduce the duration of mpox lesions among adults and children hospitalized in the DRC, although it offered more benefit if started soon after symptom onset. However, the overall mortality rate among study participants—whether they received TPOXX or not—was about half the rate reported for all cases in the DRC (1.7% versus 3.6%), indicating that better outcomes can be achieved with good supportive care.

Need for Equitable Access

Tragically—as seen before with HIV and COVID-19—mpox vaccines and treatment have been slow to reach the DRC and other countries in Africa. The need is urgent during a rapidly expanding outbreak as vaccines may work as post-exposure prophylaxis to protect close contacts of people with mpox.

“The limited access to vaccines, tecovirimat and other essential health commodities this far into the current outbreak is yet another demonstration that the existing global health system cannot guarantee the human rights to health and scientific progress for all. Major reforms and a reallocation of resources are necessary,” [the Treatment Action Group said in a statement](#). “In TAG’s view, the present situation is at least partially the consequence of lingering inequalities from responses to the 2022 mpox outbreak, which saw vaccines and other resources concentrate in the global north with relatively little attention devoted to addressing the drivers of mpox in the DRC and other endemic areas.”

WHO recently implemented emergency use measures to accelerate vaccine access for lower-income countries that have not yet issued their own national regulatory approval. The U.S. government said it will [donate 50,000 doses](#) of the Jynneos vaccine from its Strategic National Stockpile to the DRC. The European Union is donating 215,000 doses. Bavarian Nordic, which makes Jynneos, indicated that it has about 500,000 doses ready and can make another 2.4 million this year. WHO is also seeking access to a Japanese vaccine dubbed LC16. But cost, stigma, transportation and distribution logistics, overstretched health facilities and displacement of refugees present barriers to testing, vaccination and treatment.

“There is an urgent need to continue searching [for] both therapeutic and preventive measures for all mpox virus clades and to foster a unified global health response to ensure a coordinated and equitable approach to this crisis, which disproportionately affects low- and middle-income countries,” International AIDS Society president Beatriz Grinsztejn, MD, PhD, [said in a statement](#).

WHO is currently working with countries, partner organizations such as GAVI and UNICEF and manufacturers “to facilitate equitable access to diagnostics, vaccines, supplies for clinical care and other tools,” [Tedros said](#). The agency anticipates an initial funding requirement of \$15 million to support surveillance, preparedness and response activities.

“The current upsurge of mpox in parts of Africa, along with the spread of a new sexually transmissible strain of the monkeypox virus, is an emergency, not only for Africa, but for the entire globe,” said Dimie Ogoina, MBBS, of Niger Delta University, who chaired the emergency committee that recommended the WHO declaration. “Mpox, originating in Africa, was neglected there, and later caused a global outbreak in 2022. It is time to act decisively to prevent history from repeating itself.”

Click here for [more news about mpox](#).