

A new form of mpox that may spread more easily found in Congo's biggest outbreak

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A family nurse practitioner prepares a syringe with the Mpox vaccine for inoculating a patient at a vaccination site in the Brooklyn borough of New York, on Tuesday, Aug. 30, 2022. Scientists say a new form of mpox detected in a mining town in Congo might more easily spread among people. Already, Congo is seeing its biggest mpox outbreak with more than 19,000 suspected infections and 900 deaths. . Credit: AP Photo/Jeenah Moon, File

Congo is struggling to contain its biggest mpox outbreak, and scientists say a new form of the disease detected in a mining town might more easily spread among people.

Since January, Congo has [reported](#) more than 4,500 suspected mpox cases and nearly 300 deaths, numbers that have roughly tripled from the same period last year, according to the World Health Organization. Congo recently declared the outbreak across the country a [health emergency](#).

An analysis of patients hospitalized between October and January in Kamituga, eastern Congo, suggests recent genetic mutations in mpox are the result of its continued transmission in humans; it's happening in a town where people have little contact with the wild animals thought to naturally carry the disease.

"We're in a new phase of mpox," said Dr. Placide Mbala-Kingebeni, the lead researcher of the study, who said it will soon be submitted to a journal for publication. Mbala-Kingebeni heads a lab at Congo's National Institute of Biomedical Research, which studies the genetics of diseases.

The lesions reported by most patients are milder and on the genitals, Mbala-Kingebeni said, making the disease trickier to diagnose. In previous outbreaks in Africa, lesions were mostly seen on the chest, hands and feet. He also said that the new form seems to have a lower death rate.



This 1997 image provided by the CDC during an investigation into an outbreak of monkeypox, which took place in the Democratic Republic of the Congo (DRC), formerly Zaire, depicts the dorsal surfaces of the hands of a monkeypox case patient. Scientists say a new form of mpox detected in a mining town in Congo might more easily spread among people. Already, Congo is seeing its biggest mpox outbreak with more than 19,000 suspected infections and 900 deaths Credit: CDC via AP, File

In a [report](#) on the global mpox situation this week, WHO said the new version of the disease might require a new testing strategy to pick up the mutations.

With experts pointing out that fewer than half of people in Congo with mpox are tested, Mbala-Kingebeni said, "The risk is that unless patients

themselves come forward, we will have a silent transmission of the disease and nobody will know."

Mbala-Kingebeni said most people were infected via sex, with about a third of mpox cases found in sex workers. It was not until the 2022 global emergency of mpox that scientists established the disease was spread via sex, with most cases in gay or bisexual men. In [November](#), WHO confirmed sexual transmission of mpox in Congo for the first time.

There are two kinds, or clades, of mpox, which is related to smallpox and endemic to central and west Africa. Clade 1 is more severe and can kill up to 10% of people infected. Clade 2 triggered the 2022 outbreak; more than 99% of people infected survived.



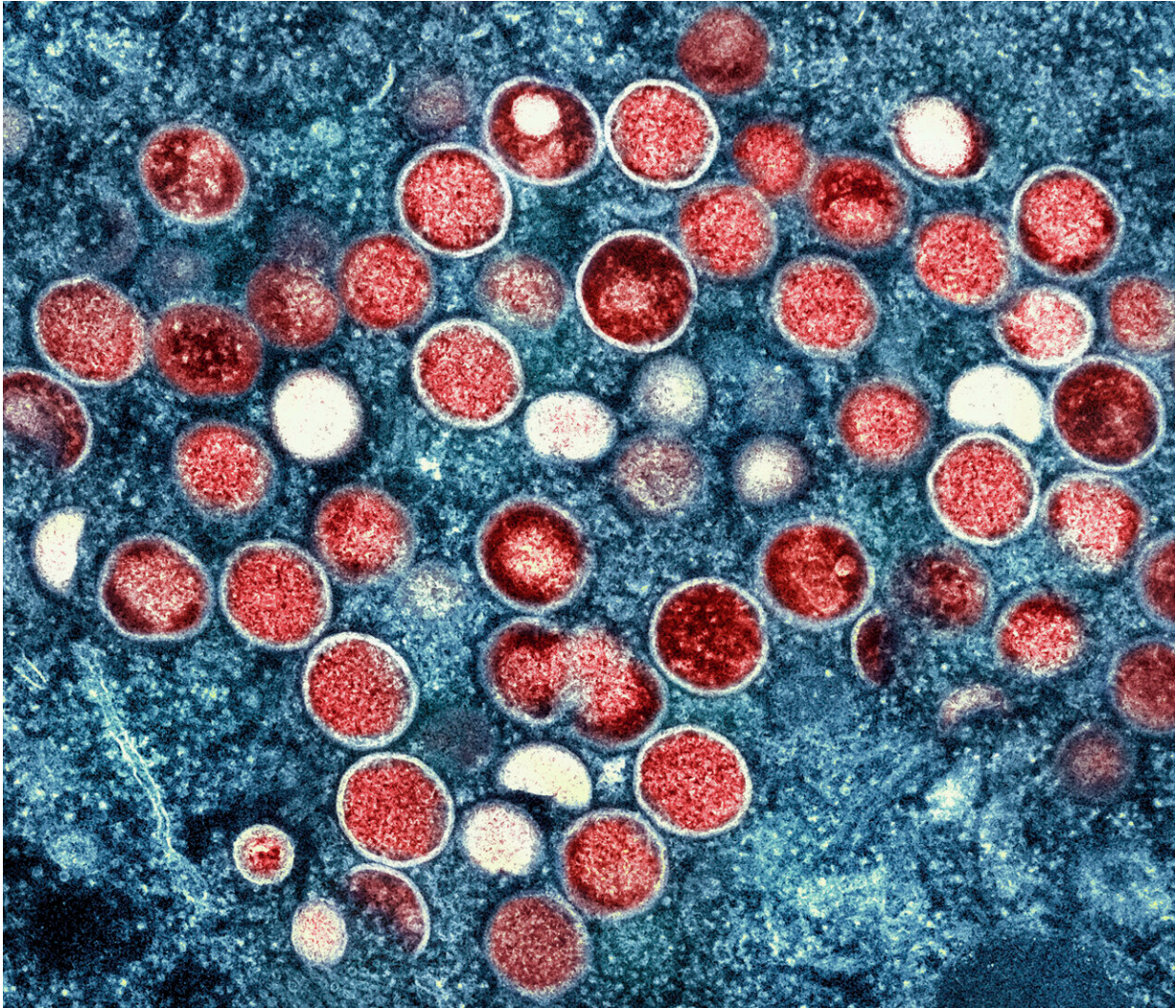
Vials of single doses of the Jynneos vaccine for monkeypox are seen from a cooler at a vaccinations site on Aug. 29, 2022, in the Brooklyn borough of New York. Scientists say a new form of mpox detected in a mining town in Congo might more easily spread among people. Already, Congo is seeing its biggest mpox outbreak with more than 19,000 suspected infections and 900 deaths. Credit: AP Photo/Jeenah Moon, File

Mbala-Kingebeni and colleagues said they have identified a new form of clade 1 that may be responsible for more than 240 cases and at least three deaths in Kamituga, a region with a significant transient population traveling elsewhere in Africa and beyond.

Dr. Boghuma Titanji, an [infectious diseases](#) expert at Emory University who is not connected to the research, said the new mutations are concerning.

"This suggests the virus is adapting to spread efficiently in humans and could cause some pretty consequential outbreaks," she said.

Although the mpox epidemics in the West were contained with the help of vaccines and treatments, barely any have been available in Congo. Congo's minister of health has authorized the use of vaccines in high-risk provinces, said Cris Kacita Osako, coordinator of Congo's Monkeypox Response Committee. He said officials are in talks with donor countries like Japan to help buy the shots.



This image provided by the National Institute of Allergy and Infectious Diseases (NIAID) shows a colorized transmission electron micrograph of monkeypox particles (red) found within an infected cell (blue), cultured in the laboratory that was captured and color-enhanced at the NIAID Integrated Research Facility (IRF) in Fort Detrick, Md. Scientists say a new form of mpox detected in a mining town in Congo might more easily spread among people. Already, Congo is seeing its biggest mpox outbreak with more than 19,000 suspected infections and 900 deaths. Credit: NIAID via AP, File

"Once a sufficient quantity of vaccines is available ... vaccination will

be implemented as part of the response," Kacita Osako said.

Dr. Dimie Ogoina, an mpox expert at Niger Delta University, said the new research is an unsettling reminder of an earlier—but different—outbreak.

"The notable spread among sex workers is reminiscent of the early stages of HIV," he said, explaining that prejudices attached to treating sexually transmitted infections and the reluctance of people with mpox to come forward were worrying.

WHO's emergencies chief, Dr. Michael Ryan, said last week that despite the ongoing spread of mpox in Africa and elsewhere, "there has not been a single donor dollar invested."

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