

Mpox Alert, 27 August 2024

Africa

Overview: The World Health Organization (WHO) has declared the situation in the Democratic Republic of the Congo (DRC) and other affected African countries a Public Health Emergency of International Concern (PHEIC) on 14 August 2024. This declaration is the second in two years calling for coordinated global efforts, including accelerated vaccine access and increased resources for surveillance and response (World Health Organization, 2024). The six WHO regions have been reporting mpox cases since 1 January 2022, receiving reports of mpox cases from 116 countries involved in the ongoing global outbreak (World Health Organization, 2024). The rise in cases and deaths, particularly among children, is linked to the discontinuation of the smallpox vaccine and high malnutrition rates in affected regions (Reuters, 2024) (npr organisation, 2024).

Sweden confirmed its first case of mpox clade I on 15 August 2024. The patient was infected in a region of Africa experiencing a large outbreak of clade I mpox. The Swedish patient has received appropriate care according to health guidelines. This is the first confirmed case of clade I mpox outside Africa (CNN, 2024).

The Africa Centres for Disease Control and Prevention (Africa CDC) declared the ongoing mpox outbreak a Public Health Emergency of Continental Security (PHECS) on 13 August 2024, marking the first such declaration by the agency. This empowers Africa CDC to lead and coordinate health emergency responses across the continent, including mobilizing resources, enhancing surveillance, and strengthening health systems. (Africa Centres for Disease Control and Preparedness, 2024).

African health officials reported a surge in mpox cases in 2023, warning of a high risk of transmission to neighbouring countries and beyond due to the continent's lack of treatments and vaccines. (United in the Fight Against Mpox in Africa – High-Level Emergency Regional Meeting, 2024) (ABC News, 2024). The situation is concerning due to changing transmission dynamics, a high mortality rate, and the social and economic impacts of the mpox virus. Significant challenges exist in accessing medical countermeasures, such as diagnostics for early detection and prevention. The outbreak poses a common threat to health and economic security, emphasizing the urgent need for all African Union member states to address this issue (United in the Fight Against Mpox in Africa – High-Level Emergency Regional Meeting, 2024).

The outbreak has affected 13 African countries since 1 January 2024, reporting 18 737 cases (3 101 confirmed, 16 636 suspected) and 541 deaths [case fatality ratio (CFR): 18 737/541=2.89%], namely; Burundi, Cameroon, Central Africa Republic (CAR), Congo, Cote d' Ivoire, DRC, Ghana, Kenya, Liberia, Nigeria, Rwanda, South Africa, and Uganda have declared an outbreak of mpox (Africa Centres for Disease Control and Prevention, 2024).

In May 2022, DRC confirmed a mpox outbreak caused by the mpox clade I virus (MSN NEWS, 2024.) (Africa Centres for Disease Control and Prevention, 2024). In June 2024, a mutant strain, clade Ib, was reported along the eastern border with Rwanda, Burundi, and Uganda, causing public health concerns due to its 10% mortality rate and association with miscarriages. Originally spread through sexual contact, the new strain can also be transmitted through close skin contact (UNMC, 2024). The WHO warns of cross-border and international transmission risks. Cases have been reported among schoolchildren, medical staff and entire households (BBC, 2024).



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Democratic Republic of Congo: The DRC Ministry of Health (MoH) continues to report cases of mpox. As of 16 August 2024, 16 794 cases (2 860 confirmed, 14 934 suspected) and 535 deaths (535/16 794, CFR=3.19%) were reported. The outbreak has affected all 26 provinces, with more males affected than females, and the majority of cases seen in children under 15 years old (Africa Centres for Disease Control and Prevention, 2024).

Burundi: Burundi declared a mpox outbreak on 25 July 2024 (Reuters, 2024) (Africa Centres for Disease Prevention and Control, 2024). As of 16 August 2024, 399 cases (100 confirmed, 299 suspected) and no deaths were reported. The clade Ib has been isolated from confirmed cases. Majority (55%) of confirmed cases were males, with children <5 years accounting for 38%. The outbreak has affected 23 of 49 districts (Africa Centres for Disease Control and Prevention, 2024).

Central African Republic: CAR declared an outbreak of mpox on 26 July 2024 (World Health Organization, 2024). As of 16 August 2024, 263 cases (40 confirmed, 223 suspected) and zero deaths have been reported. The outbreak was reported in six of seven health regions of the country. Majority (62%) of the cases were males, with children <5 years accounting for 43% (Africa Centres for Disease Control and Prevention, 2024).

Rwanda: Rwanda declared its first-ever outbrerak of mpox on 27 July 2024 (World Health Organization, 2024).

As of 19 August 2024, four confirmed cases and zero deaths have been reported (Ghana News Agency, 2024)

Nigeria: The Nigerian MoH continues to report mpox cases. As of 16 August 2024, nine confirmed cases and zero deaths have been reported. The outbreak is reported in six of seven health regions of the country. Majority (70%) of the cases were males, with children <10 years accounting for 38% (Africa Centres for Disease Control and Prevention, 2024).

Actions: Africa CDC has partnered with the European Commission and Bavarian Nordic to provide 215 000 doses of the MVA-BN® vaccine, ensuring equitable distribution across affected countries (Africa Centres for Disease Control and Preparedness, 2024).

The WHO has invited manufacturers of mpox vaccines to submit an Expression of Interest for Emergency Use Listing (EUL). This comes after the WHO Director-General initiated the EUL process on 7 August 2024, due to concerning trends in the spread of mpox. The EUL is an emergency use authorization process designed to expedite the availability of unlicensed medical products like vaccines during public health emergencies. It is a temporary recommendation based on a risk-benefit assessment. WHO is asking manufacturers to submit data to ensure the vaccines are safe, effective, of assured quality, and suitable for target populations. Granting an EUL will accelerate vaccine access, particularly for lower-income countries without national regulatory approval. It also enables partners like Gavi and UNICEF to procure and distribute vaccines (WHO, 2024).

The Coalition for Epidemic Preparedness Innovations (CEPI) announced on 28 July 2024, a clinical trial in the DRC and other African countries to assess the effectiveness of the Bavarian Nordic mpox vaccine in preventing disease post-exposure (Coalition for Epidemic Preparedness Innovations, 2024). The trial aims to reduce secondary cases and the severity of illness. The DRC has approved the emergency use of two mpox vaccines, MVA-BN and LC16, for the novel clade I strain, though these are only available within clinical trials (CIDRAP, 2024). The DRC Ministry of Health continues efforts in surveillance, risk communication, and community engagement in affected areas (Africa Centres for Disease Control and Prevention, 2024).

Implications for South Africa: South Africa (SA) is currently experiencing an outbreak of mpox clade II, and has not detected any cases of mpox clade I. Although much remains unknown about the



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new mutated clade 1b strain. As a response to mpox declared as a PHEIC by WHO and PHECS by Africa CDC, South Africa continues to prioritize enhanced surveillance and raising awareness for mpox (The Bulrushes, 2024). Due to travel and trade in Africa and considering the increase of mpox cases, African countries need to enhance their existing frameworks, protocols, strategies, and agreements to improve cross-border solidarity, collaboration, and coordination in addressing infectious disease issues. (United in the Fight Against Mpox in Africa – High-Level Emergency Regional Meeting, 2024).

The relative risk [RR(%)] of importation of cases according to the EpiRisk, looking at the period between 10 days of symptom onset and travel in July 2024, remained below one from the top ten countries reporting high numbers of mpox cases globally and for the 13 African countries currently experiencing outbreaks. Using historic data to inform risk, the population movement from countries reporting mpox in the previous year (July 2023), had Kenya, DRC, Nigeria, and Ghana have the most travellers to South Africa (Stats SA, 2023). Kenya reported mpox clade I in July 2024, and had 2 756 travellers to SA in July 2023 (Stats SA, 2023), RR=0.04, July 2024 (EpiRisk, n.d.). DRC reported mpox clade I in May 2022, and had 1 760 travelers to SA in July 2023 (Stats SA, 2023), RR=0.00, July 2024 (EpiRisk, n.d.). Nigeria reported clade IIb in 2022, and had 1 548 travelers to SA in July 2023 (Stats SA, 2023), RR=0.04, July 2024 (EpiRisk, n.d.). Ghana reported mpox clade IIb on 8 June 2022, and had 1 110 travelers in July 2023, RR=0.04 (Stats SA, 2023), July 2024 (EpiRisk, n.d.).

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