

Multi-country monkeypox virus outbreak in 2022

About monkeypox

Monkeypox is caused by an orthopoxvirus resulting in skin lesions, general tiredness, swollen lymph nodes, and muscle aches¹. It is transmitted directly from contact with an infected animal or when coming into close contact with an infected human¹. Transmission has also been documented to occur vertically between a mother and child¹. Monkeypox often resolves on its own within 2–4 weeks however, this is not always the case, and it can cause severe, fatal complications particularly for children and those with weaker immune systems¹. Unfortunately, treatment specific to monkeypox does not exist however some antivirals such as tecovirimat have been licensed for use by some regulators¹. Vaccination against smallpox is shown to be 85% effective at preventing monkeypox and has been used to help prevent health workers or close contacts from acquiring monkeypox^{1,2}.

The spread of monkeypox

In 1970, the first human case of monkeypox was identified in a 9-year-old boy in the Democratic Republic of Congo (DRC)¹(Figure 1). Closely after this, cases were reported in eleven other Central and West African countries¹. Between 2016–2018, outbreaks were recorded in Nigeria, Cameroon, and the Central African Republic³. Imported cases of monkeypox have been recorded in countries beyond Central and West Africa. In 2003, the United States of America (USA) reported a cluster of 37 confirmed monkeypox cases believed to be linked to infected animals imported from Ghana⁴. Since then, individual imported monkeypox cases have been reported in the United Kingdom (UK), United States of America (USA), Israel, and Singapore between 2018–2021^{5–8}.

On May 14, 2022, the UK recorded its first case of monkeypox that year from an individual who had recently travelled to Nigeria². Shortly after, four more cases were detected in individuals who had no relation to the first case and no travel history to countries where monkeypox was endemic at that time². Since then, cases have been detected globally in countries that have never previously reported monkeypox. As of July 18, there are 13,340 confirmed cases of monkeypox reported in 69 countries⁹.

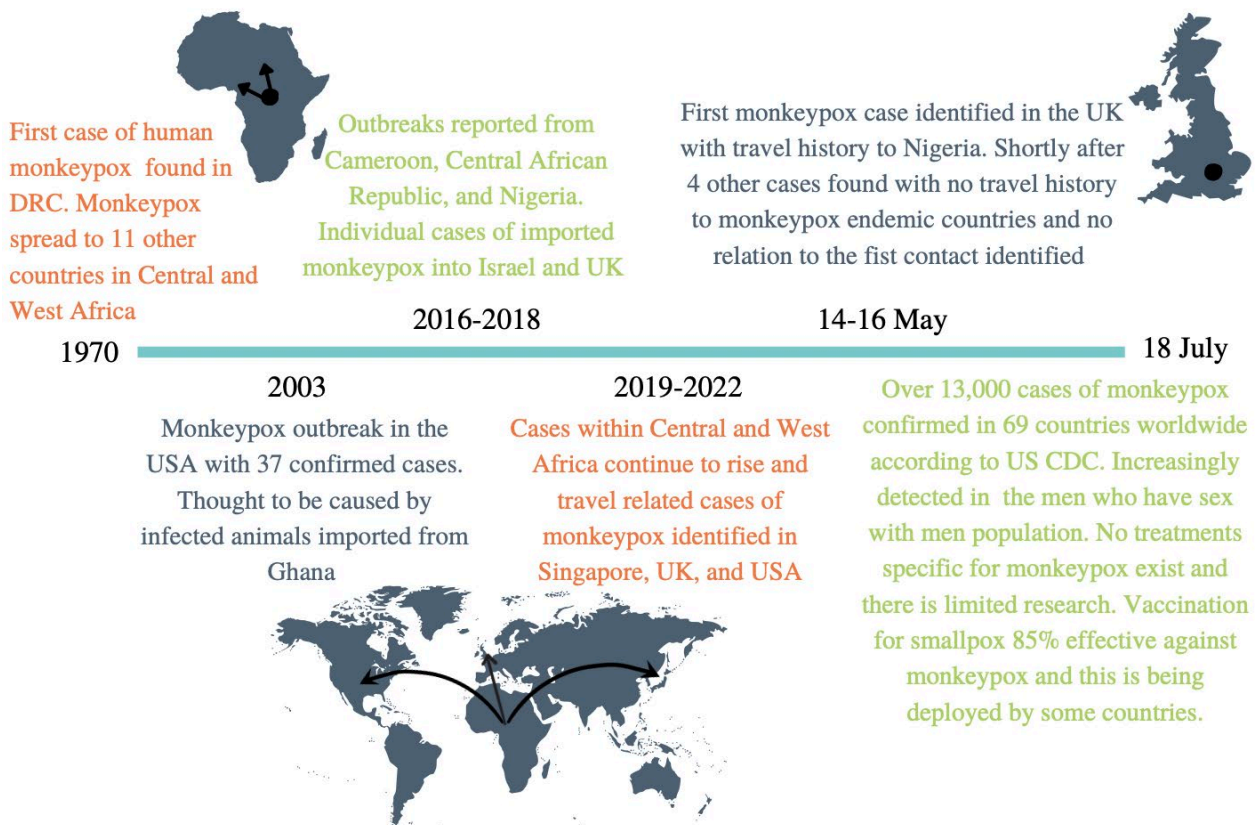


Figure 1: Timeline of the spread of monkeypox cases since 1970 up till June 22, 2022. Figure produced in Canva¹⁰

The 2022 monkeypox outbreak

This is the first time in history that monkeypox has been reported in multiple countries concurrently¹¹. Figure 2 illustrates the widespread cases of monkeypox being reported globally as of June 22, 2022. Of the 50 countries affected by monkeypox, eight are low- and middle-income countries as classified by the World Bank and of these six were countries that had monkeypox cases before 2022^{11,12}. The UK has the highest number of confirmed cases at 793 followed by Germany (521 cases), Spain (520 cases), and Portugal (317 cases)¹¹. It is likely the number of cases in other countries, particularly DRC, is much higher but due to a lack of resources, cases are not being confirmed. According to the weekly [AFRO weekly bulletin](#) on outbreaks and other emergencies, DRC has 1,439 suspected cases of monkeypox from January 1 to May 22, 2022¹³.

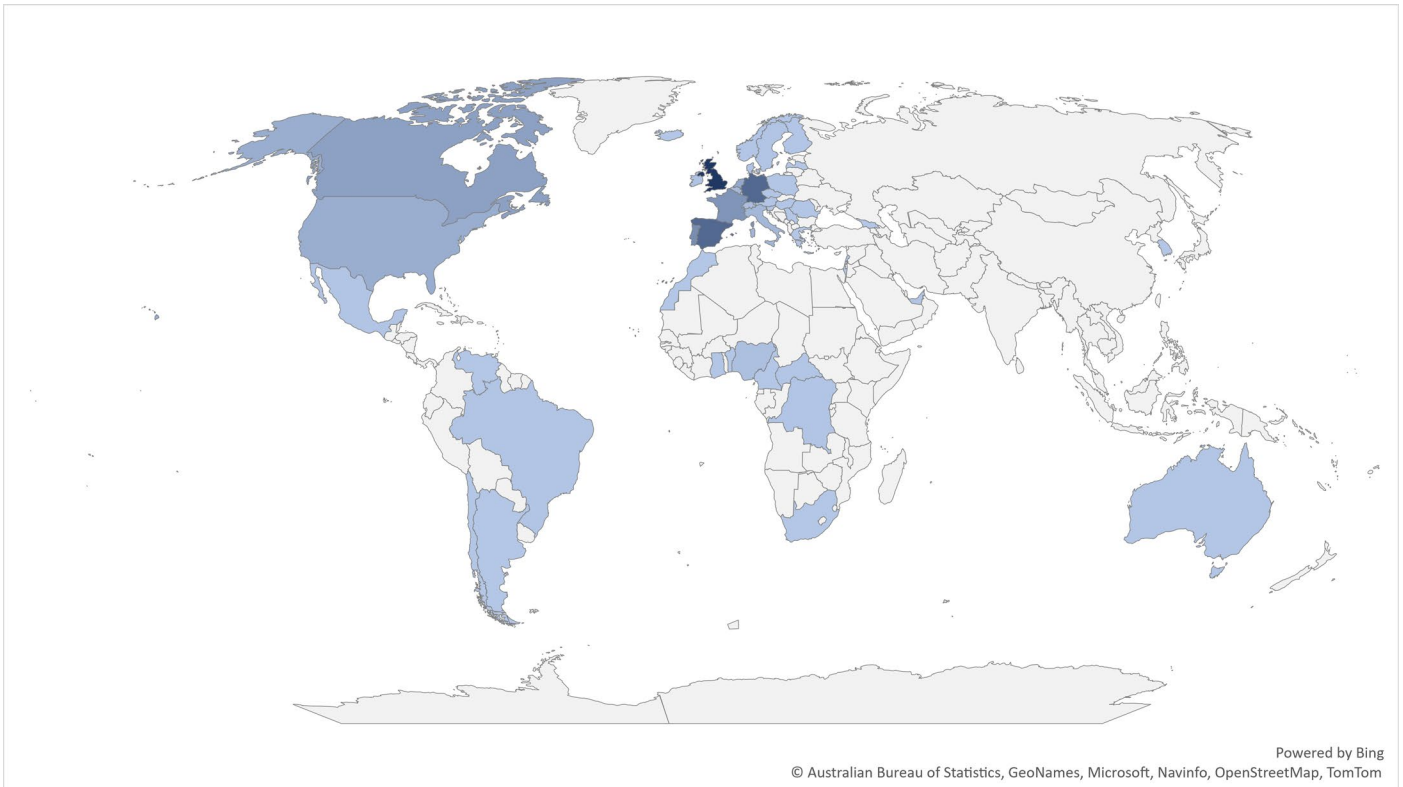


Figure 2: Countries with cases of monkeypox between 1 January to June 22, 2022. The darker the shade of the country, the more cases of confirmed monkeypox reported. Data from WHO multi-country monkeypox outbreak: situation updated (June 27, 2022¹¹)

Monkeypox in the 2022 outbreak is being increasingly identified among the men who have sex with men population presenting with genital skin lesions¹⁴. Clinical presentation has been variable with many cases not conforming to the known clinical presentation¹⁵. Transmission is thought to be occurring through close physical contact during sexual activity¹⁵ and possible sexual transmission is still being investigated¹¹.

The WHO has published several guidance documents in response to the increase in monkeypox which can be found on the [WHO Multi-country monkeypox outbreak: situation update](#)¹¹. On June 23, the International Health Regulations (2005) Emergency Committee advised the WHO Director-General that the current monkeypox situation is not constituted as a Public Health Emergency of International Concern however, the committee acknowledged the immediate need to intensify response efforts and closely monitor the situation as additional information becomes available¹¹.

GloPID-R Response

GloPID-R undertook a rapid review of research projects in the WHO International Clinical Trial Registry Platform (ICTRP) and World RePORT databases to identify existing monkeypox research as of June 8, 2022. There were only three active clinical trials specific to monkeypox identified. This illustrates the limited research available in this area. Much of the data stems from smallpox research and is not specific to monkeypox. There remains a lack of knowledge on transmission, treatment, vaccination, and treatments specific to children who are identified as

at higher risk for severe disease. GloPID-R has shared reports on the 2022 monkeypox outbreak with its members throughout June and is currently mapping members activity and interest in funding research in this area. GloPID-R will be convening those funders active in this area in a discussion forum in July to facilitate coordination and potential joint action.

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