

THE INCLUSION OF MPOX VACCINES IN ONGOING SEXUAL HEALTH CLINICAL CARE

9 May 2024

Executive Summary

- Small numbers of ongoing, unlinked, locally acquired mpox cases are being detected.
- Mpox continues to pose the potential risk of an epidemic in Australia.
- Clade II-b caused the 2022-23 outbreak in Australia amongst GBMSM.
- A more recent mpox virus outbreak in the Democratic Republic Congo including sexual transmission has been caused by clade I which has a higher mortality rate.
- Australia's mpox vaccine coverage is inadequate to protect against future epidemics.
- Continued mpox vaccination planning is critical to prevent further outbreaks, particularly amongst newly sexually active people and people that have experienced a shift in their sexual behaviour.

Recommendations

To address the continued detection of mpox outbreaks in Australia, this statement emphasises the need for **ongoing mpox vaccination planning** and roll-out across all state and territory governments. In particular, **the planning needs to consider** the heightened risk of transmission amongst **newly sexually active people and people that have experienced a shift in their sexual behaviour**.

Context

In 2022, the outbreak of mpox clade1 II-b [1] ushered a rapid public health response in several English-speaking countries[1]. In Australia, the outbreak was limited to gay and bisexual men and men who have sex with men (GBMSM).

Mpox had been a risk in the Democratic Republic of Congo (DRC) and other parts of Africa and South America since 2017[1]. More recently, the World Health Organisation (WHO) recorded 12,569 suspected cases in 2023 in the DRC[2] with the outbreak being attributed to mpox clade I which has a higher mortality rate and is more transmissible than its clade II counterpart and therefore poses a greater pandemic risk. Sexual transmission has been identified, although there is likely under-reporting. The possibility of clade I outbreaks in high income countries with large mobile LGBTQIA+ communities cannot be ruled out.

Some countries in Europe and North America with large sustained mpox outbreaks, for example the UK and Canada, were able to access vaccine early and, as a result, achieved higher vaccine coverage before the outbreaks

¹ Clade - A group of mpox viruses believed to have a shared common ancestor. Strains of mpox belong within a clade and are descended from the same ancestor.

subsided: it is estimated[3] that 68% of eligible persons in UK have received at least one dose. Nevertheless, the UK recommends continuation of the vaccination program although this is not being operationalised.

Transmission modelling from the US has indicated that a vaccination coverage above 50% is required to reduce the risk of minor outbreaks[4]. For Australia, the coverage of mpox vaccination after the 2022-23 immunisation campaign is still below 50% among people at risk of contracting mpox[5][6].

Many countries are seeing rises in cases in 2024 compared to 2023[7], suggesting vaccine immunity or retention of public health messaging may be waning.

Unique to Australia is the large movement of people between countries in our region (including islands in the Torres Strait and the Pacific islands to our northeast) with low or absent vaccination and where mpox outbreaks occurred much later than in Europe or North America.

Considerations

The vaccine coverage in Australia required to suppress an epidemic does not provide protection against ongoing outbreaks. With the increasing number of cases attributed to mpox clade II in DRC and the insufficient rate of vaccine coverage, the Australian mpox response requires ongoing and sustained mpox vaccinations.

Similar to the response to the 2022 outbreak of mpox, vaccination accessibility, readiness and public education of mpox are essential. Emerging priority groups within the GBMSM community, including newly sexually active people and people that have experienced a shift in their sexual behaviour should be considered as part of ongoing public health response for mpox.

References

- [1] C. R. MacIntyre, 'Mpox, smallpox and the increasing threat of orthopoxvirus epidemics', *Global Biosecurity*, vol. 6, Apr. 2024, doi: 10.31646/gbio.268.
- [2] World Health Organisation, 'Mpox (monkeypox) - Democratic Republic of the Congo'. Nov. 23, 2023. Accessed: May 06, 2024. [Online]. Available: <https://www.who.int/emergencies/disease-outbreak-news/item/2023-DON493>
- [3] Government of the UK, Department of Health and Social Care, 'JCVI statement on mpox vaccination as a routine programme'. Accessed: May 09, 2024. [Online]. Available: [https://www.gov.uk/government/publications/mpox-vaccination-programme-jcvi-advice-10-november/jcvi-statement-on-mpox-vaccination-as-a-routine-programme#:~:text=Targeted%20pre%2Dexposure%20vaccination%20commenced,eligible%20\(Ogaz%20and%20others\).](https://www.gov.uk/government/publications/mpox-vaccination-programme-jcvi-advice-10-november/jcvi-statement-on-mpox-vaccination-as-a-routine-programme#:~:text=Targeted%20pre%2Dexposure%20vaccination%20commenced,eligible%20(Ogaz%20and%20others).)

- [4] E. D. Pollock *et al.*, 'Potential for Recurrent Mpox Outbreaks Among Gay, Bisexual, and Other Men Who Have Sex with Men — United States, 2023', *MMWR Morb. Mortal. Wkly. Rep.*, vol. 72, no. 21, pp. 568–573, May 2023, doi: 10.15585/mmwr.mm7221a1.
- [5] J. MacGibbon *et al.*, 'Mpox (monkeypox) knowledge, concern, willingness to change behaviour, and seek vaccination: results of a national cross-sectional survey', *Sex. Health*, vol. 20, no. 5, pp. 403–410, Aug. 2023, doi: 10.1071/SH23047.
- [6] E. P. F. Chow *et al.*, 'Mpox knowledge, vaccination and intention to reduce sexual risk practices among men who have sex with men and transgender people in response to the 2022 mpox outbreak: a cross-sectional study in Victoria, Australia', *Sex. Health*, vol. 20, no. 5, pp. 390–402, Jul. 2023, doi: 10.1071/SH23075.
- [7] Government of the UK, Department of Health and Social Care, 'Mpox outbreak: Epidemiological Overview'. Accessed: May 09, 2024. [Online]. Available: <https://www.gov.uk/government/publications/monkeypox-outbreak-epidemiological-overview>