

## TraX Six Month MPOX Report: Report period 10 October 2022 to 26 March 2023

This report summarises data collected during the first six months the TraX Study. Data are collected weekly on MPOX (formerly monkeypox) vaccine uptake, infection, and sexual behaviours among people considered at high risk of infection in Australia.

### Summary

- 2834 people across Australia participated in the TraX study during the reporting period. Most participants were from New South Wales (83.8%).
- The monthly testing for MPOX remains consistently at around 1.0%.
- At study entry, 22.4% of participants reported being unvaccinated against MPOX, 50.0% had received one and 27.6% had received two MPOX vaccinations.
- As at 26 March 2023, the proportion of people who reported being unvaccinated against MPOX had reduced by half to 9.7%, leaving 275 participants unvaccinated. The proportion who reported having received one MPOX vaccination also fell to 12.2% and the proportion who received both MPOX vaccinations increasing to 78.1%.
- At study entry, nine participants reported prior MPOX infection.
- No new cases of MPOX were reported during the study period, precluding any calculations on vaccine effectiveness.

### Recruitment source

The largest proportion of participants were recruited through the NSW Ministry of Health expression of interest (NSW MoH EOI) list (35.0%). This list was compiled by the NSW MoH while awaiting the readiness of vaccines and rollout. Approximately one in three (30.1%) were recruited through NSW MPOX clinics. Crown Street Vaccination Clinic has recruited most of the clinic-based sample and were the first clinic to commence recruitment. Victorian clinics began clinic-based recruitment in mid-November 2022. Just under one-quarter (23.6%) of participants were recruited through consent given in previous Kirby Institute/Centre for Social Research in Health studies to participate in future research.

Table 1. Recruitment source by study month

N (%)	Month 01 10-Oct-22 to 6-Nov-22 N=1582	Month 02 7-Nov-22 to 4-Dec-22 N=619	Month 03 5-Dec-22 to 1-Jan-23 N=236	Month 04 2-Jan-23 to 29-Jan-23 N=200	Month 05 30-Jan-23 to 26-Feb-23 N=151	Month 06 27-Feb-23 to 26-Mar-23 N=46	Total N=2834
NSW MoH EOI	948 (59.9)	28 (4.5)	8 (3.4)	7 (3.5)	1 (0.7)	1 (2.2)	993 (35.0)
Social media	11 (0.7)	14 (2.3)	1 (0.4)	2 (1.0)	0 (0.0)	0 (0.0)	28 (1.0)
Hook-up apps	4 (0.3)	42 (6.8)	10 (4.2)	0 (0.0)	0 (0.0)	0 (0.0)	56 (2.0)
NSW MPOX clinics	183 (11.6)	194 (31.3)	154 (65.3)	166 (83.0)	121 (80.1)	34 (73.9)	852 (30.1)
Victoria MPOX clinic	0 (0.0)	34 (5.5)	20 (8.5)	9 (4.5)	12 (7.9)	4 (8.7)	79 (2.8)
a[TEST]	11 (0.7)	1 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	12 (0.4)
Consent from other studies	360 (22.8)	282 (45.6)	16 (6.8)	4 (2.0)	7 (4.6)	1 (2.2)	670 (23.6)
Unpaid advertising	65 (4.1)	24 (3.9)	27 (11.4)	12 (6.0)	10 (6.6)	6 (13.0)	144 (5.1)

**Suggested citation:** Hammoud MA, MacIntyre CR, Grulich AE, for the TraX Study Investigators. TraX Six Month MPOX Report: Report period 10 October 2022 to 26 March 2023. Sydney, Australia. Kirby Institute, UNSW, Sydney. 2023

## Sample characteristics at study entry

The median age was 40 years, and ages ranged from 19 years to 80 years. About two-thirds (64.0%) of participants were born in Australia. The great majority of participants identified as cis (94.4%) or trans men (0.6%), and most (85.7%) identified as gay. Most (82.7%) reported an HIV negative status and 8.5% were living with HIV. Most (83.8%) participants resided in New South Wales, which was expected given most participants were recruited through the NSW MoH EOI list, NSW MPOX clinics, and through consent from studies conducted by the Sydney-based Kirby Institute and Centre for Social Research in Health. A recent STI diagnosis in the last 6 months was reported by 23.5% of participants.

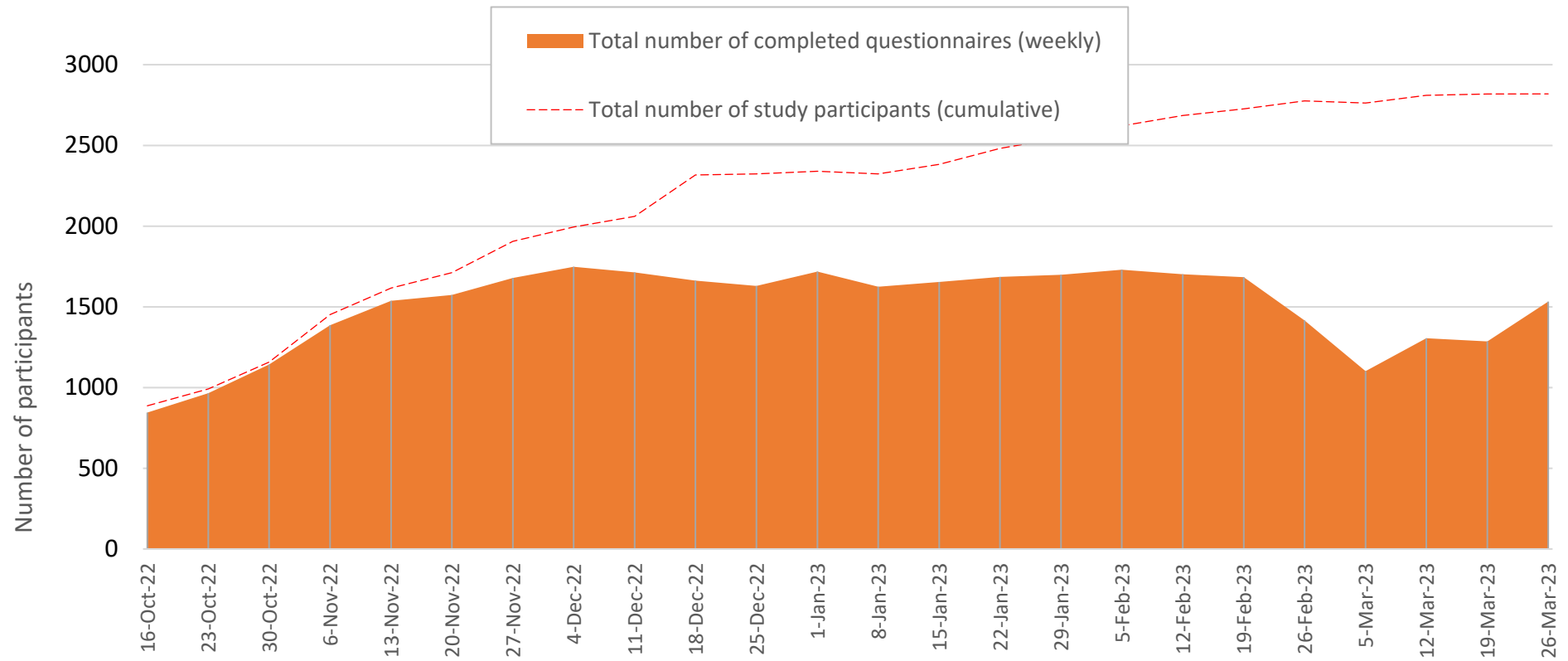
Table 2. Sample characteristics at study entry (N=2834)

	N (%)		N (%)
<b>Age</b>		<b>Gender</b>	
19-29	440 (15.5)	Cis men	2674 (94.4)
30-39	923 (32.6)	Trans men	16 (0.6)
40-49	674 (23.6)	Cis women	39 (1.4)
50-59	494 (17.4)	Trans women	18 (0.6)
60+	295 (10.4)	Non-binary people	67 (2.4)
Did not answer	8 (0.3)	Other	20 (0.7)
<b>Country of birth</b>		<b>Sexuality</b>	
Australia	1813 (64.0)	Gay	2428 (85.7)
Elsewhere	1021 (36.0)	Lesbian	10 (0.4)
<b>State of residence</b>		Bisexual/pansexual	222 (7.8)
New South Wales	2374 (83.8)	Heterosexual	37 (1.3)
Victoria	244 (8.6)	Queer/other term	137 (4.8)
Queensland	94 (3.3)	<b>HIV status</b>	
Northern Territory	14 (0.5)	Positive	242 (8.5)
Western Australia	23 (0.8)	Negative	2345 (82.7)
South Australia	26 (0.9)	Untested/unknown	247 (8.7)
Australian Capital Territory	48 (1.7)	<b>STI diagnosis in past six months</b>	
Tasmania	11 (0.4)	Gonorrhoea	365 (12.9)
<b>Aboriginal or Torres Strait Islander</b>		Chlamydia	437 (15.4)
Yes	75 (2.6)	Syphilis	146 (5.2)
No	2759 (97.4)	Unsure	12 (0.4)
		Other	42 (1.5)

## Follow-up and participation over time

Rates of completion of a study questionnaire ranged from the lowest at 39.9% on the 5th of March 2022 to the highest at 98.6% on the 30th of October 2022. Low retention corresponds with Sydney World Pride events.

Figure 1. Follow-up and participation over time



% indicates retention rate.

## MPOX sexual risk behaviours

Sexual risk behaviours remained consistent during the reporting period.

Figure 2. Non-relationship sexual behaviours with cis or trans men over time



Sexual behaviours with cis and trans men are reported separately. The proportions above combine sexual behaviours reported with both cis and trans men.

## MPOX testing

The monthly testing for MPOX remains consistently at around 1.0%. Throughout the study period, 98 (3.5%) of participants reported having an MPOX test in the previous week.

Table 3. MPOX testing in the previous week by study month (N = 2834)

N (%)	Study entry N=2834	Month 01 10-Oct-22 to 6-Nov-22 N=1582	Month 02 7-Nov-22 to 4-Dec-22 N=2031	Month 03 5-Dec-22 to 1-Jan-23 N=1999	Month 04 2-Jan-23 to 29-Jan-23 N=1972	Month 05 30-Jan-23 to 26-Feb-23 N=1974	Month 06 27-Feb-23 to 26-Mar-23 N=1752
Not tested for MPOX	2822 (99.6)	1574 (99.5)	2008 (98.9)	1970 (98.5)	1953 (99.0)	1951 (98.8)	1734 (99.0)
Tested for MPOX	12 (0.4)	8 (0.5)	23 (1.1)	29 (1.5)	19 (1.0)	23 (1.2)	18 (1.0)

## MPOX vaccination

At study entry, 22.4% who reported being unvaccinated against MPOX. Half (50.0%) reported having received one MPOX vaccination and 27.6% had received both MPOX vaccinations.

Table 4. MPOX vaccination at study entry (N = 2834)

Recruitment source	None	First dose	Second dose
NSW MoH EOI	216 (21.8)	574 (57.8)	203 (20.4)
MPOX clinics	28 (3.0)	525 (56.4)	378 (40.6)
Other	391 (43.0)	319 (35.1)	200 (22.0)
Total	635 (22.4)	1418 (50.0)	781 (27.6)

By the 26<sup>th</sup> March 2023, the proportion of study participants who reported being unvaccinated against MPOX had reduced by half to 9.7%, leaving 275 participants unvaccinated. The proportion who reported having received one MPOX vaccination also fell to 12.2% with the proportion who received both MPOX vaccinations increased to 78.1%.

Table 5. MPOX vaccination at 26 March 2023 (N = 2834)

Recruitment source	None	First dose	Second dose
NSW MoH EOI	42 (4.2)	101 (10.2)	850 (85.6)
MPOX clinics	2 (0.2)	144 (15.5)	785 (84.3)
Other	231 (25.4)	102 (11.2)	577 (63.4)
Total	275 (9.7)	347 (12.2)	2212 (78.1)

## Vaccine effectiveness

All 9 cases of MPOX reporting in this cohort were reported at baseline; therefore, we cannot calculate vaccine effectiveness.