Self-reported vaccine uptake across six infectious diseases among gay, bisexual, transgender and non-binary individuals in Australia: findings from a 2024 national survey

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Background:

Gay and bisexual men who have sex with men (GBMSM) and trans and gender diverse people (TGD) are disproportionately affected by several vaccine-preventable diseases. However, research on vaccine uptake for both sexually transmitted and non-sexually transmitted infections among GBMSM and TGD remains limited. Understanding differences in uptake between selective (e.g., hepatitis A, meningococcal, HPV, mpox) and universal (e.g., influenza, COVID-19) vaccines can inform immunisation policies and strategies.

Methods:

From July to November 2024, we conducted a cross-sectional survey among GBMSM and TGD people living in Australia, examining past vaccine uptake. Participants were recruited from sexual health clinics, GP clinics, geosocial networking apps and social media, who self-reported their vaccination status for COVID-19, influenza, hepatitis A, hepatitis B, human papillomavirus (HPV),

meningococcal disease and mpox. Vaccine uptake was calculated and stratified by age group, HIV status, and PrEP use, gender, education, Medicare status, region of birth and jurisdiction.

Results:

The study included 2095 participants (median age 39 years, IQR: 31-50). Most identified as cisgender men (94.7%). Overall, the COVID-19 vaccine had the highest uptake (97.5%), followed by hepatitis A/B (80.6%), influenza (72.8%), mpox (64.0%), HPV (35.9%) and meningococcal disease (30.3%). In general, HIV-negative participants not using PrEP had lower vaccine uptake compared with HIV-negative PrEP users and people living with HIV. Higher education attainment and Medicare card ownership were associated with an overall increased vaccine uptake.

Conclusion:

Vaccine uptake among GBMSM and TGD people in Australia was high for universal vaccines but lower for selectively recommended vaccines. Higher uptake was observed among people living with HIV, PrEP users, those with higher education, and access to Medicare. These findings highlight disparities in vaccine coverage and the need for targeted outreach to increase uptake of selectively recommended vaccines.

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