2021 NSW Gay Asian Men Online Survey: key findings

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Executive Summary

Due to the COVID, survey recruitment in this latest round was done entirely online (previously mainly conducted in physical venues including testing services). Between March and June 2021, a total of 760 valid questionnaires were collected. The survey was mainly promoted through Facebook advertisements, ACON, Multicultural HIV and Hepatitis Service (MHAHS), and assisted by word-of-mouth among colleagues and community members. This round of the survey recruited fewer overseas-born participants compared to the previous round (from 82% in 2018 to 62% in 2021). About 18% (n=140) of participants indicated that they had also participated in the 2021 Sydney Gay Community Periodic Survey.

- Proportions reporting ever tested for HIV and HIV tested within the previous 12 months were 84% and 68% respectively (slightly down from 93% and 77% in 2018). Sexual health clinics remain the most common venue for an HIV test. Although 39% of all non-HIV positive participants were interested in getting a dried blood spot test, only 24% knew how to access a test kit.

- Many participants have switched to PrEP from condom use. Overall, PrEP use in the previous six months increased from 25% in 2018 to 35% in 2021, while consistent condom use with casual partners decreased from 40% in 2018 to 30% in 2021. Nevertheless, among those HIV-negative men who had had sex with a casual partner, the proportion having higher HIV-risk practice (condomless anal sex without either partner using PrEP) remains at 24% (the same as 2018).

- Most PrEP users obtained their PrEP prescription from a doctor in Australia (87%) and purchased the pills in an Australian pharmacy (64%). Sharing of PrEP pills was not uncommon, with 28% of PrEP users had shared their pills with someone with or without their own PrEP prescription.

- Participants who lacked confidence in speaking English, who had earned a weekly income below $1,500, or who were holding a bridging visa were significantly less likely to have ever used PrEP, after adjusting for age, location of residence, and Medicare status.

- Among the small number of HIV-positive participants in this round, 89% reported...
being on antiretroviral treatment, and 72% had an undetectable viral load.

- Only 1 in 4 non-HIV-positive participants were aware of the zero HIV transmission risk of undetectable viral load (“U=U”). More than half of the non-HIV-positive participants indicated that they would avoid having sex with someone with HIV regardless of their viral load.

- About 1 in 4 participants were at risk for serious mental distress or conditions. Predictors of poorer mental health including earning a weekly income of $500, not having any LGBTIQ+ friends in Australia, having experienced domestic violence, and having experienced racism (“always/often”) from members in the general Australian society.
Part 1. Characteristics of participants

**Age, sex, and gender.** The median age of participants was 30 (range 18 to 65). Almost all participants reported being cis-gender men (being assigned male at birth: 97%, n=738; self-identified as a man: 94%, n=716).

**Ethnicity and migration.** Compared to the previous round, fewer participants in this round of the survey were born overseas (62%, n=468; whereas 83% in 2018). The most commonly reported ethnicities of participants were Chinese (34%, n=261), Thai (12%, n=94), Filipino (11%, n=86), Indian (10%, n=74) and multiethnic (9%, n=68). The most commonly reported countries of birth were Australia (38.4%, n=292), mainland China (11%, n=80), Thailand (9%, n=67), and Malaysia (7%, n=50). (Figure 1)

![Birthplace of participants (n=760)](image)

Among the 468 overseas-born participants, 64% (n=298) were Australian citizens or permanent residents (whereas 36% in 2018). One-third (32%, n=149) were recent migrants to Australia who had lived in the country for less than 5 years. One-fifth (21%, n=100) did not have access to Medicare.

Among the 292 Australian-born participants, 75% (n=218) had at least one parent who was born overseas (i.e., second generation immigrants). Third generation immigrants
(i.e., participants whose both parents were born in Australia) accounted for 25% (n=62) of the Australian-born participants.

**Location of residence.** The majority (79%, n=602) of participants reported living in NSW’s metropolitan areas (Greater Sydney region: 73%, n=558; Newcastle and Wollongong: 6%, n=44). About 14% were residing in metropolitan Sydney areas with postcodes indicating >5% populations being gay or other men who have sex with men. Overseas-born participants were more likely to be living in Greater Sydney region compared to Australian-born participants (93% v 73%, p<0.001). Most participants reported living in a suburb overseen by the South-Eastern Sydney Local Health District (27%, n=202), followed by the Sydney Local Health District (21%, n=157), and the Northern Sydney Local Health District (10%, N=74).

**Socioeconomic status.** Most (70%, n=532) participants had attained a bachelor’s or postgraduate degree. Around two-third (62%, n=470) of participants were working full-time. In the past six months, most (71%, n=540) participants reported earning below $1,500 per week on average (Note: average weekly total earning in for Australian males was $1555.3 in May 2021)¹. About a quarter (23%, n=175) earned under $500 per week on average (Note: Australian poverty line was $581 per week in March 2021)²

**Other characteristics.** Half (49%, n=374) of the participants reported being religious/spiritual. Twenty-six (3%) of participants reported living with a disability. Among them, the most reported conditions were mental health conditions (n=8), autism spectrum disorder (n=4), and a physical disability (n=3).

² Poverty Lines: Australia (March Quarter 2021).
Part 2. Health protective practices

2.1 HIV treatment and testing in the context of 2021 COVID epidemic

**Antiretroviral therapy and viral load status among HIV positive participants.**

Thirty-six (5%) participants reported living with HIV. Thirty-two (89%) HIV-positive participants reported currently being on antiretroviral treatment (ART) and 72% (n=26) had an undetectable viral load in their most recent viral load test in the past 12 months.

While caution is needed to interpret this based on a few participants in this large-scale survey. More detailed exploration is warranted to shed some new lights, as the latest rounds of this survey series (since 2018) suggest a relatively low proportion of gay Asian men with sustainable viral suppression.

**Overall HIV testing pattern.** Among all participants, 84% (n=639) had ever had a HIV test (whereas 93% in 2018), and 68% (n=516) had their most recent test done within the last 12 months (whereas 77% in 2018) (Figure 2). The most commonly reported venues for the last HIV test were sexual health clinics (38%, n=246), general practices (including s100 and non-s100 GPs) (25%, n=159), or a hospital (15%, n=99). (Figure 3)
For the 121 never-testers, the most commonly reported reasons for not having an HIV test appeared to be related to lower risk perception: “not at risk for HIV” (50%, n=60), “don’t have symptoms” (47%, n=57), and “in a monogamous relationship” (31%, n=38). (Figure 4)

**Dried blood spot (DBS) HIV test.** Among non-HIV-positive participants, less than half (46%, n=332) were aware of the availability of Dried Blood Spot (DBS) HIV test before the survey. Although 39% (n=282) of all non-HIV-positive participants were interested in getting a DBS, only 24% (n=172) knew how to access a DBS test kit. (Figure 5)
HIV testing among recent migrants (5 years or less). Among the 149 migrants who arrived at Australia in the past 5 years, 60% (n=89) had ever had an HIV test in Australia. Among these 89 testers, 66% (n=59) had their first test in Australia within 1 year after their arrival. (Figure 6)

2.2 STI and hepatitis testing

Overall STI testing pattern. About 58% (n=441) of participants had ever had an STI test or seen a doctor, including 45% (n=339) of participants having an STI test within the past 12 months (Figure 7). The most commonly reported venues for the last STI test were sexual health clinics (44%, n=193), family doctor or general practitioners (29%, n=126), or a hospital (13%, n=58).
Among the 339 participants who had an STI test within the previous 12 months, roughly 30% had had at least three chlamydia and gonorrhoea urine tests (32%, n=108), throat swabs (32%, n=107), rectal swabs (33%, n=111) and/or syphilis blood tests (29%, n=99) (Figure 8). Some 30% (n=103) had been diagnosed with an STI, with the most being diagnosed with chlamydia (20%, n=68), gonorrhoea (14%, n=49), or syphilis (6%, n=20).

**Hepatitis.** Figure 9 below summarises participants’ vaccination and testing patterns for hepatitis A, B and C. For hepatitis A, 59% (n=446) of all participants had been vaccinated. For hepatitis B, about two-thirds of all participants were immune to the virus, either through vaccination (64%, n=489), or past infection (1%, n=11). A few participants (1%) reported having chronic HBV infection. For hepatitis C, about half (49%, n=374) of all
participants had ever been tested for hepatitis C. Compared to hepatitis B, more participants reported they did not know about hepatitis A or hepatitis C.

Figure 9. Vaccination and testing of HAV, HBV and HCV (n=760)

2.3 PrEP and PEP knowledge and usage in the past six months

**PrEP knowledge and usage.** Among non-HIV-positive participants (n=724), 11% (n=77) did not know what PrEP was. About a third (35%, n=269) had used PrEP in the past six months. Among these 269 PrEP users, 42% (n=114) had taken PrEP daily, and 58% (n=155) had taken on-demand PrEP in the past six months. Some 11% (n=77) had used PrEP before but stopped in the past six months. (Figure 10)

Logistic regression model shows that those who used PrEP in the previous six months were significantly more likely to have at least two sex partners (Adjusted Odds Ratio (AOR=3.25, 95%CI=2.05-5.14) in the same period. However, participants who lacked confidence in speaking English (AOR=0.08, 95%CI 0.01-0.63), who earned a
weekly income below $1,500 (AOR=0.54, 95% CI 0.33-0.90), and who were a bridging visa holder (AOR=0.09, 95%CI 0.01-0.76) were significantly less likely to have used PrEP in the previous six months, after adjusting for age, location of residence, and Medicare status. Medicare status was not statistically significant in the multivariable analysis.

For the 269 current PrEP-users, 87% (n=234) got their most recent PrEP prescription from a doctor in Australia and 64% (n=160) brought the pills from a pharmacy in Australia. Some 28% (n=74) had shared PrEP pills with someone else with or without their own PrEP prescription.

The most commonly reported reasons for participants not using PrEP in the past six months included “I do not think I need it.” (65%, n=239), “I prefer condoms.” (26%, n=97), and “I worry about the side effects.” (20%, n=75).

**PEP knowledge and usage.** About 15% (n=112) of non-HIV-positive participants had used PEP in the past six months, and 8% (n=60) did not know what PEP was (Figure 11). For the 112 PEP users, 49% (n=55) got PEP from a sexual health clinic, 30% (n=20) from a GP or private doctor, and 18% (n=20) from an emergency department.
Part 3. Relationships and sexual practices

3.1 Male-to-male sex

**Same-sex relationship status.** Half (50%, n=381) of the participants reported currently being single. Some 15% were in a legally recognised same-sex spousal relationship (de facto: 11%, n=85; married: 4%, n=29). Around 4% (n=31) were involved in relationships with several men.

Among participants in a current relationship with men (n=372), 59% (n=218) reported being in an inter-racial relationship, and 8% (n=31) in a serodiscordant relationship (Table 1). About 72% (n=269) were currently living with their partner and of these, 14% (n=39) had experienced at least one episode of domestic violence (defined as being threatened or abused emotionally, physically, or financially, in a way that made them feel scared) by their partner in the past six months.

<table>
<thead>
<tr>
<th>Participant’s own</th>
<th>Partner’s HIV-status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>HIV-positive 3 (1%)</td>
</tr>
<tr>
<td></td>
<td>non-HIV-positive 20 (5%)</td>
</tr>
<tr>
<td>Non-positive</td>
<td>HIV-positive 11 (3%)</td>
</tr>
<tr>
<td></td>
<td>non-HIV-positive 338 (91%)</td>
</tr>
</tbody>
</table>

**Ethnicity and migration status of sex partners.** Among the 661 participants (87% of the total sample) who had male-to-male sex in the past six months, the most commonly reported ethnic backgrounds of their sex partners were White/European (61%, n=403), East/South-East Asian (44%, n=289), South Asian (17%, n=110), and Middle Eastern (16%, n=103). About 60% (n=395) of all participants had sex with a recent migrant (that is, those who had arrived in Australia within the previous five years at the time of survey).

**Use of mobile dating apps.** About 68% (n=515) participants had used a mobile dating app in the past six months. There was no statistical difference in terms of age between app users and non-app users (mean age: 31.6 vs 32.2, p=0.379). The most reported apps used were Grindr (45%, n=343), Tinder (22%, n=167), Jack’d (20%, n=154) and Scruff (17%, n=131). (Figure 12)
Condom or PrEP use among non-HIV positive participants. In this round of the survey, the concept of “regular sex partners” was further classified into “romantic partners” and “non-romantic regular sex partners”, as opposed to “casual sex partners”. Table 2 presents the pattern of condom and PrEP use among non-HIV positive participants with these three types of partners in the past six months.

Table 2. Condom or PrEP use with different male partners among non-HIV-positive men who had any anal intercourse in the past six months (N=724)

<table>
<thead>
<tr>
<th></th>
<th>Romantic regular (n=374)</th>
<th>Non-romantic regular (n=307)</th>
<th>Casual (n=268)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistent condom use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condom only</td>
<td>25 (7%)</td>
<td>65 (21%)</td>
<td>69 (26%)</td>
</tr>
<tr>
<td>PrEP</td>
<td>16 (5%)</td>
<td>26 (9%)</td>
<td>26 (6%)</td>
</tr>
<tr>
<td>Any condomless anal intercourse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily PrEP</td>
<td>55 (15%)</td>
<td>71 (23%)</td>
<td>67 (25%)</td>
</tr>
<tr>
<td>Non-daily PrEP (on-demand, event-driven)</td>
<td>82 (22%)</td>
<td>52 (17%)</td>
<td>47 (17%)</td>
</tr>
<tr>
<td>Other</td>
<td>196 (52%)</td>
<td>93 (30%)</td>
<td>70 (26%)</td>
</tr>
</tbody>
</table>

Romantic partners. A romantic partner is defined as a male partner with whom a respondent was in a romantic or committed relationship, such as the respondent’s husband, boyfriend, lover, long-term partner, or date.

Around half (52%, n=374) of all 724 non-HIV-positive participants reported having had anal sex with a romantic partner. Among these participants, 52% (n=196) did not consistently use condoms nor use PrEP either daily or when needed (on-demand, event-based). Consistent condom use (i.e., reported using a condom “every time”) with romantic
sex partners was reported by 12% (n=41) and PrEP use was 37% (n=137) of them. (Table 3.2).

**Non-romantic regular sex partners.** A non-romantic regular sex partner is defined as a sex partner with whom a respondent had sex occasionally, but they were not in a romantic or committed relationship, such as friends with benefits and fuckbuddies.

About 42% (n=307) of all non-HIV-positive participants reported having had anal sex with any non-romantic regular sex partners. Among these participants, consistent condom use with non-romantic regular sex partners was reported by 30% (n=91) and PrEP use by 39% (n=123) of them. (Table 3.2)

**Casual sex partners.** A casual sex partner is defined as a non-regular partner such as a casual sex hook-up, a one-night stand partner, a stranger that the respondent just met on an app or in a sauna.

About 35% (n=268) of the 724 non-HIV-positive participants reported having had anal sex with any casual sex partners. Among these participants, consistent condom use with casual partners was reported by 32% (n=95) and PrEP use rate was 42% (n=114) of them. (Table 3.2)

Of all the 760 participants with valid responses in the latest survey round, about 40% (n=306) reported having had a casual sex partner in the past six months. The most common sources for casual sex hook-ups were mobile apps (77%, n=235), saunas (37%, n=114) and social media (28%, n=87). (Figure 13)
Table 3 summarises the overall patterns of behavioural (consistently condom use) or biomedical (participants themselves using PrEP or achieving sustained viral suppression through daily ART use) with casual partners in the past six months in the context of COVID epidemic in 2021. Of note, in the table below, of the 101 men who did not consistently use condoms or PrEP, or without sustained viral suppression, about 45% (n=45) reported themselves being non-HIV-positive and all of their male partners either on PrEP or not knowingly having a detectable viral load.

Table 3. Overview of sexual practices with casual partners in the past six months (N=760)

<table>
<thead>
<tr>
<th>Sexual Practice</th>
<th>All participants (N=760)</th>
<th>Men who had anal sex with any casual partners partner (n=286)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any condomless anal intercourse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>without participants’ own consistent condom use, PrEP use or having sustained</td>
<td>13%</td>
<td>38%</td>
</tr>
<tr>
<td>viral suppression (n=101)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>non-HIV positive using PrEP or HIV-positive with sustained viral suppression</td>
<td>13%</td>
<td>37%</td>
</tr>
<tr>
<td>(n=100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistent condom use (n=85)</td>
<td>11%</td>
<td>32%</td>
</tr>
<tr>
<td>No casual anal sex partners (n=454)</td>
<td>63%</td>
<td>-</td>
</tr>
</tbody>
</table>
3.2 Other sexual practices in past six months

**Overseas male-to-male sex (outside of Australia).** Among all participants, 70% (n=533) have ever had sex outside Australia and 17% (n=130) had sex overseas during the COVID-19 pandemic since 2020. Among those who further provided places of their latest overseas sexual encounter (n=388), the most commonly reported countries for overseas sexual encounters were China (21%), Thailand (19%) and the United States (14%).

Among those who provided further information about their latest overseas sex encounters (n=378), 8% had used recreational drugs. Further, 49% of these 378 men reported consistent condom use and the 34% reported had condomless anal sex with a casual partner overseas. Also, about 40% reported either themselves using PrEP (19%), their casual partners using PrEP (9%), or both parties using PrEP (12%).

**Multiple male sex partners and group sex involving three or more men.** Overall, 45% (n=339) of all participants had at least two male sex partners in the past six months and 23% (n=174) had had engaged in a sex that involved at least two other persons.

**Use of party drugs or other recreational drugs (e.g., party ‘n’ play, ‘Chemsex’).** A fifth (20%, n=155) had used drugs during sex in the past six months. Those who had used were more likely to be aged 30 or younger (24% vs 16%, p=0.007).

**Sex work and transactional sex.** In the past six months, 13% (n=102) of participants had been paid for sex, or had had sex in exchange for housing, food or other items either in Australia (10%, n=76), overseas (2%, n=17), or both (1%, n=9). Similarly, 14% (n=108) of participants had paid for sex or visited a sex worker in Australia (10%, n=78), overseas (2%, n=17), or both (2%, n=13).

**Condom failure and non-consensual sex.** A minority but not negligible participants had experienced condom breakage (9%, n=62) in the past six months. Some 8% (n=50) had had a sex partner secretly removed a condom during sex without their consent (known as ‘stealthing’), and 6% (n=41) had sex with someone without their consent (e.g., being raped, sexually assaulted, or under the influence of alcohol and drugs).

**Sex with women.** About a third (32%, n=240) of participants reported having sexual attraction to women, and 24% (n=182) had had sex with a woman in the past six months.
3.3 Substance use in past six months

**Cigarette smoking.** About 45% (n=339) of participants had smoked, with 19% (n=145) reporting daily/almost daily consumption. Among the smokers, 29% (n=98) reported they smoked more than usual during the COVID pandemic.

**Alcohol.** A large proportion of men (79%, n=603) reported having alcoholic drinks in the past six months, with 36% (n=275) at least once a week. Among the people had alcoholic drinks, 12% (n=71) had more than one episode of being unable to remember what happened the night before due to heavy drinking.

**Recreational drug use: non-prescription drugs, erectile dysfunction drugs, and steroids.** About 41% (n=312) of participants reported using a range of specified illicit and/or erectile dysfunction drugs in the past six months. The most commonly reported drugs used were poppers (26%, n=201), erectile dysfunction (ED) drugs (16%, n=118), and marijuana (12%, n=89). (Figure 14.) Among those who had used drugs, poly-drug (more than one drug type) use was reported by 51% (n=160) of the men. The most common drug combinations were poppers with one of the following three: marijuana (56%, n=89), ecstasy (48%, n=76), or ED drugs (38%, n=60).

About 6% (n=46) of participants reported any drug injection in past six months. Among them, 72% (n=33) had ever tested for hepatitis C. About 5% (n=36) reported having injected steroid to enhance performance or body image.

![Figure 14. Types and frequencies of drugs used in past six months (n=760)](image-url)
Part 4. HIV or STI related knowledge and beliefs

**Source of health information.** Google (53%, n=405), social media (e.g., Facebook and Instagram, 30%, n=226) and LGBTIQ+ events (e.g., Mardi Gras, 23%, n=174) were the most reported channels to receive HIV or STI related information. (Figure 15)

![Figure 15. Channels of receiving HIV and STI information (n=760)](image)

**Knowledge and attitudes regarding “U=U”**. Only 27% (n=191) of non-HIV-positive participants answered correctly that HIV transmission from an HIV-positive person through condomless sex to be “extremely unlikely”. (Figure 17)

![Figure 17. How likely do you think you will get HIV if you have sex without a condom with an HIV-positive person with undetectable viral load: among non-HIV-positive participants (n=724)](image)

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3 The research team acknowledges this should be “no risk of transmission”.

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About 57% (n=414) of the non-HIV-positive participants selected “strongly agree” or “tend to agree” with the statement that “I avoid having sex with HIV positive people, regardless of their HIV viral load”. (Figure 18)

Note: missing=4%

**Attitudes towards and preference for PrEP**. Participants’ attitudes towards condomless anal intercourse in the context of PrEP use were evenly split. Around half of the participants strongly agreed or tended to agree with the statements that “I think it is good that people are now more comfortable to have sex without condoms because of PrEP.” (46%, n=355); and that “General speaking, I prefer having sex with someone who is on PrEP.” (55%, n=416). (Figure 19)

Note: missing=3% for both statements.
Part 5. Psychosocial and mental well being

**Sense of LGBTIQ+ community and socialising.** About 39% (n=295) participants reported spending almost all or most of their free time with other gay or LGBTIQ+ people. Close to half (n=360) reported their gay or LGBTIQ+ friends mostly coming from Australia and a further a fifth (n=158) from Asia (their own home country or other Asian countries).

**Race-based discrimination.** Experiences of any race-based discrimination in the past 12 months were common among participants, as reported by 91% of the sample. In terms of “always”, “often” or “sometimes” having such encounters: slightly over 60% reported these were from white gay men; just over half from members of the general Australian society; approximately half from gay men of neither white nor Asian backgrounds; nearly half from gay men of Asian backgrounds; and last but not the least, close to one-third from health care workers within the 12 month period.

**Mental wellbeing.** Around 23% (n=171) of the participants scored at least 13 points in the standardised K-6 distress scale, meaning they were at risk for serious mental distress or conditions. Predictors of poorer mental wellbeing were earning a weekly income of $500 (AOR=2.47, 95%CI=1.63-3.75), having no LGBTIQ+ friends in Australia (AOR=2.37, 95%CI=1.02-5.52), having experienced domestic violence (AOR=2.61, 95%CI=1.55-4.41), and having “always” or “often” experienced racism from members in the general Australian society (AOR=2.93, 95%CI=1.94-4.42).