

Cite as:
Vujcich D, Reid A, Hosny A, Pillay V, Mao L, Guy R, Brown G, Hartley $L$, Roberts $M$, Wilshin C, Lobo R. Migrant Blood-borne Virus and Sexual Health Survey 2020-2021: Victoria results. Perth: Curtin University.

Version: January 2024

Note:
This report is part of a suite of state-specific reports on the MiBSS project. Some general content, including methodology, may be reproduced across the reports. All reports will be made available at mibss.org/publications

## INTRODUCTION

In Australia, there are significant health disparities between domestic- and overseas-born residents with respect to sexually transmissible infections (STIs) and blood-borne viruses (BBVs). For instance, in 2017 the HIV notification rate in Australia was over three times higher for people born in South East Asia (14 per 100,000) and Sub-Saharan Africa ( 13.5 per 100,000) compared to Australian-born residents (4.0 per 100,000 ) [1]. Of the 27,545 people estimated to be living with HIV in Australia, $9.2 \%(2,529)$ were born in South East Asia and 5.6\% $(1,553)$ were born in Sub-Saharan Africa [1]. With respect to people living with chronic hepatitis B in Australia (estimated prevalence = 233,957), 21.4\% were born in North East Asia and $17 \%$ were born in South East Asia [1].

The Migrant Blood-borne Virus and Sexual Health Survey (MiBSS) was funded by the Australian Research Council, with additional financial contributions from the Western Australian Department of Health, the South Australian Department of Health, the Victorian Department of Health, SHINE SA, and Curtin University. An ASHM Sexual Health Research Grant was also obtained to extend the project to Queensland.

The aim of the project was to investigate the feasibility of a periodic national survey of culturally and linguistically diverse (CaLD) people's knowledge, attitudes, and practices with respect to sexually transmissible infections (STIs) and blood-borne viruses (BBVs), and to collect baseline data.

The process adopted to develop and translate the survey is described in two published articles $[2,3]$ and an article detailing the recruitment process has also been published [4]. All publications and state-level data can be found at at mibss.org/publications. The national data are being prepared for publication in high-impact journals.

The findings reported here relate to data collected through online and paper surveys in Victoria, between September 2020 and May 2021. STATA was used to conduct basic descriptive statistical analysis. Chi-squared tests were used to determine whether differences between groups were statistically significant ( $p<0.05$ ).

# Demographics at a glance 

There were 213 included survey respondents from

Victoria.


The largest proportion of the sample was born in South-East Asia.
$3 \%$ region undisclosed

The majority of survey respondents were between 18 and 39 years old.


The majority of respondents identified as female.
$2 \%$ identified as neither male or female

## Demographics at a glance



A total of 213 survey responses can be identified as originating from Victoria.* As shown in Table 1, 11.73 percent ( $n=25$ ) of all survey respondents' reported being born in a SubSaharan African (SSA) country, 39.90 percent ( $n=85$ ) were born in a North-East Asian (NEA) country and 45.53 percent ( $n=97$ ) were born in a South-East Asian (SEA) country. Six respondents (2.82\%) did not disclose a country of birth.^

Table 1: Number and proportion of respondents ( $n=213$ ), by country and region of birth

|  |  | Number of Respondents (\%) |
| :---: | :---: | :---: |
| Sub-Saharan <br> Africa $(n=25)$ | Northern sub-region (Sudan) | 2 (0.94) |
|  | Eastern sub-region <br> (Burundi, Ethiopia, Kenya, Somalia, South Sudan, Tanzania, Uganda, Zambia, Zimbabwe) | 19 (8.92) |
|  | Middle sub-region <br> (Dem. Rep. Congo, Rep. Congo) | 2 (0.94) |
|  | Southern sub-region (Botswana, South Africa) | 1 (0.47) |
|  | Western sub-region (Ghana. Nigeria) | 1 (0.47) |
| North-East Asia ( $\mathrm{n}=85$ ) | China (includes Hong Kong and Macau) | 42 (19.7) |
|  | Japan | 1 (0.47) |
|  | Korean Peninsula | 39 (18.31) |
|  | Taiwan | 3 (1.41) |

## Table continued on next page

*A survey was deemed to originate from Victoria if it met one of the following conditions: (a) it was a paper survey sent from a Victorian partner; (b) it was an online survey and the answer to the postcode question was a Victorian postcode; (c) it was an online survey and the URL source indicated it had been disseminated by a Victorian partner.
${ }^{\wedge}$ It is assumed that these surveys met the eligibility criteria as the eligible countries were clearly stated on the cover page of the survey and in associated participant information forms and promotional materials.

Table 1 continued: Number and proportion of respondents ( $n=213$ ), by country and region of birth

| Region | Country / UN sub-region | Number of <br> Respondents (\%) |
| :--- | :--- | :---: |
| South-East Asia <br> (n=97) | Brunei | $1(0.47)$ |
|  | Indonesia | $7(3.29)$ |
|  | Myanmar | $0(0.00)$ |
|  | Malaysia | $13(6.10)$ |
|  | Philippines | $42(19.72)$ |
|  | Singapore | $12(5.63)$ |
|  | Thailand | $13(6.10)$ |
|  | Vietnam | $9(4.23)$ |

Table 2: Number and proportion of respondents ( $\mathrm{n}=213$ ), by Visa type

| Visa type | Number of <br> Respondents (\%) |
| :--- | :---: |
| PR - Citizen | $116(54.46)$ |
| Student visa | $68(31.92)$ |
| Work visa | $14(6.57)$ |
| Partner visa | $4(1.88)$ |
| Other | $4(1.88)$ |
| Prefer not to answer | $1(0.47)$ |
| Invalid and missing response | $6(2.81)$ |

# HIV knowlede atacjance 



Of those ...
half were aware that HIV testing is NOT included in ALL blood tests...

... and only $22 \%$ knew that there is medication for people with HIV to live a normal life.

but PrEP knowledge was low among the general population of respondents (23\%)

Table 3: Responses^ to PrEP knowledge question by region ( $\mathrm{n}=192$ )

| Survey question <br> (correct answer) | Region | Correct/ <br> incorrect |  |
| :--- | :--- | :--- | :--- |
|  | Sub-Saharan <br> Africa <br> (n=21) | Correct | $17(33.33)$ |
| Are there <br> medicines that <br> people can take <br> BEFORE SEX to <br> protect themselves <br> against HIV? (Yes) | North-East Asia <br> (n=79) | Incorrect / <br> Don't know | $14(66.67)$ |

${ }^{\wedge}$ All tables related to HIV knowledge exclude respondents who skipped or provided invalid responses to specific knowledge questions, respondents who had not heard of HIV, and respondents who did not report specific demographics related to the question

Table 4: Responses to PrEP knowledge question by gender ( $\mathrm{n}=191$ )

| Survey question (correct answer) | Gender | Correct/ incorrect | n (\%) |
| :---: | :---: | :---: | :---: |
| Are there medicines that people can take BEFORE SEX to protect themselves against HIV? (Yes) | $\begin{aligned} & \text { Men } \\ & (n=72) \end{aligned}$ | Correct | 25 (34.72) |
|  |  | Incorrect / <br> Don't know | 47 (65.28) |
|  | Women$(n=119)$ | Correct | 18 (15.13) |
|  |  | Incorrect / Don't know | 101 (84.87) |
| $P$ value: 0.002 |  |  |  |

Table 5: Responses to PrEP knowledge question by age ( $\mathrm{n}=196$ )

| Survey question (correct answer) | Age | Correct/ incorrect | n (\%) |
| :---: | :---: | :---: | :---: |
| Are there medicines that people can take BEFORE SEX to protect themselves against HIV? (Yes) | $\begin{aligned} & 18-29 \\ & (n=78) \end{aligned}$ | Correct | 19 (24.36) |
|  |  | Incorrect / Don't know | 59 (75.64) |
|  | $\begin{aligned} & 30-39 \\ & (n=75) \end{aligned}$ | Correct | 17 (22.67) |
|  |  | Incorrect / Don't know | 58 (77.33) |
|  | $\begin{aligned} & 40-49 \\ & (n=29) \end{aligned}$ | Correct | 7 (24.14) |
|  |  | Incorrect / Don't know | 22 (75.86) |
|  | $\begin{aligned} & 50-59 \\ & (n=9) \end{aligned}$ | Correct | 2 (22.22) |
|  |  | Incorrect / Don't know | 7 (77.78) |
|  | $\begin{aligned} & 60+ \\ & (n=5) \end{aligned}$ | Correct | 1 (20.00) |
|  |  | Incorrect / Don't know | 4 (80.00) |
| P value: 0.999 |  |  |  |

Table 6: Responses to PrEP knowledge question by sexuality (men only) ( $\mathrm{n}=68$ )

| Survey question <br> (correct answer) | MSM <br> status | Correct/ <br> incorrect | n(\%) |
| :---: | :---: | :---: | :---: |

Table 7: Responses to HIV testing and ART knowledge questions ( $\mathrm{n}=197$ )

| Survey question |
| :---: | :--- | :---: |
| (correct answer) | Correct/ | incorrect |
| :---: | n (\%)

# STI knowledge at aglance 



Of those who had heard of at least one STI...


Table 8: Number and proportion^ of respondents who had heard of individual STIs ( $\mathrm{n}=212$ )

| Survey question | Answer options | Response | n (\%) |
| :--- | :--- | :--- | :--- |
|  | Gonorrhoea | Yes | $127(59.91)$ |
|  | Syphilis | No | $85(40.09)$ |
| Have you heard of <br> the following STIs? <br> (Tick as many as <br> apply) | Chlamydia | Yes | $132(60.26)$ |

[^0]Table 9: Responses to STI knowledge questions ( $\mathrm{n}=183$ )

| Survey question (correct answer) | Correct/ incorrect | n (\%) |
| :---: | :---: | :---: |
| Can a person have an STI without any symptoms? <br> (Yes) | Correct | 116 (63.39) |
|  | Incorrect / Don't know | 65 (33.55) |
| Can a person with ONLY one sexual partner get an STI through sex? (Yes) | Correct | 99 (54.10) |
|  | Incorrect / Don't know | 82 (44.81) |
| Can some STIs make it harder for women to get pregnant? (Yes) | Correct | 121 (66.12) |
|  | Incorrect / Don't know | 60 (32.79) |

# Hepatitis B knowlede at aglance 

$\pi \pi^{n}$Just over one-third "have heard of hepatitis B and know what it is"

## Of those ...


were aware there is a hepatitis B vaccine

## 20907076\% were aware hepatitis B can be passed through sex without a condom


were aware hepatitis B can be passed on by sharing razors

## BUT fewer had knowledge that ...


hepatitis B cannot be passed on by sharing food (65\%)

there is no medication to cure the virus (52\%)

hepatitis B cannot be passed through contaminated water (51\%)

Excluding skipped and invalid responses ( $n=6$ ), just over one-third of respondents ( $n=78$; $36.62 \%$ ) indicated that they "have heard of hepatitis B and know what it is", compared to 32.86 percent $(\mathrm{n}=70)$ who indicated that they had heard of hepatitis but did not know "if it was hepatitis B or another type of hepatitis", and 25.82 percent ( $n=55$ ) who had heard of both hepatitis $B$ and hepatitis $C$ but did not know the difference between them (Table 10).

Table 10: Responses to question "Which of the following best describes you?" (n=213)^

| Response | n (\%) |
| :--- | :---: |
| I have heard of hepatitis but I don't know if it was hepatitis <br> B or another type of hepatitis (for example, hepatitis A or <br> hepatitis C) | $70(32.86)$ |
| I have heard of hepatitis B and hepatitis C but I don't <br> know the difference between them | $55(25.82)$ |
| I have not heard of hepatitis B | $4(1.88)$ |
| I have heard of hepatitis B and I know what it is* | $78(36.62)$ |

[^1]*Only those who selected this response were required to answer specific hepatitis B knowledge questions

Table 11: Responses to Hepatitis $B$ knowledge questions ( $n=78$ )

| Survey question (correct answer) | Correct/ incorrect | n (\%) |
| :---: | :---: | :---: |
| Is there a vaccine (injection) to stop people from getting hepatitis B? (Yes) | Correct | 68 (87.18) |
|  | Incorrect / Don't know | 10 (12.82) |
| Can you get hepatitis B from swallowing food or water containing the faeces (poo) of an infected person? (No) | Correct | 40 (51.28) |
|  | Incorrect / <br> Don't know | 37 (47.44) |
| Is there non-traditional medicine that can make the hepatitis B virus completely go away from a person's body? (No) | Correct | 41 (52.56) |
|  | Incorrect / <br> Don't know | 37 (47.44) |
| Can hepatitis B normally be passed on through sex without a condom? (Yes) | Correct | 60 (76.92) |
|  | Incorrect / <br> Don't know | 18 (23.08) |
| Can hepatitis B normally be passed on by sharing a toothbrush or shaving razor? <br> (Yes) | Correct | 53 (67.95) |
|  | Incorrect / <br> Don't know | 25 (32.05) |
| Can hepatitis B normally be passed on by sharing food with an infected person? (No) | Correct | 51 (65.38) |
|  | Incorrect / <br> Don't know | 27 (34.62) |

# Hepattis Q knowlede ataglance 

初
Just under one third ( $\mathrm{n}=68$ ) of all respondents had heard of hepatitis C and could distinguish it from other forms of hepatitis

Of those who had heard of hepatitis C and answered specific knowledge questions ...

but a higher proportion (95\%) were aware that


Excluding skipped and invalid responses ( $\mathrm{n}=131$ ), just under one-third of respondents ( $n=68 ; 31.92 \%$ ) indicated that they "have heard of hepatitis $C$ ", compared to 6.57 percent ( $n=14$ ) who indicated that they "had not heard of hepatitis C" (Table 12).

Table 12: Responses to question "Which of these statements best describes you?" (n=213)^

| Response |  |
| :--- | :--- |
| I have heard of hepatitis C* | $68(31.92)$ |
| I have not heard of hepatitis C | $14(6.57)$ |

^Excludes skipped/invalid responses
*Only those who selected this response were required to answer specific hepatitis C knowledge questions

Table 13: Responses to Hepatitis $C$ knowledge questions ( $n=68$ )

| Survey question (correct answer) | Correct/ incorrect | n (\%) |
| :---: | :---: | :---: |
| Is there a vaccine (injection) to stop people from getting hepatitis C? (No) | Correct | 41 (60.29) |
|  | Incorrect / <br> Don't know | 27 (39.71) |
| Is there non-traditional medicine that can make the hepatitis C virus completely go away from a person's body? (Yes) | Correct | 13 (19.12) |
|  | Incorrect / <br> Don't know | 55 (80.88) |
| Can hepatitis $C$ be passed on by sharing injecting equipment like needles and syringes? <br> (Yes) | Correct | 65 (95.59) |
|  | Incorrect / <br> Don't know | 3 (4.41) |
| Can someone get hepatitis $C$ more than once in their lifetime? (Yes) | Correct | 34 (50.00) |
|  | Incorrect / <br> Don't know | 34 (50.00) |

# Sexual partners and condom use at a jlance 

The majority of respondents reported only one sexual partner in the previous 12 months


Among respondents reporting sex with $>1$ person in the last 12 months:


The majority of sexually active respondents (84\%) reported being in a committed relationship with their most recent sexual partner


One hundred and fifty five ( $\mathrm{n}=155$ ) respondents provided a valid answer to the question "In the past twelve months, how many people have you had sexual intercourse with (vaginal or anal)?" Of those, 22.58 percent ( $n=35$ ) reported having no sexual partners in the previous 12 months, 56.13 percent ( $n=87$ ) reported one sexual partner only and 20.00 percent ( $n=31$ ) reported at least two sexual partners. A small proportion ( $1.29 \%$; $n=2$ ) reported that they couldn't remember.

Table 14: Reported number^ of sexual partners in past 12 months ( $n=155$ )

| Response | n (\%) |
| :--- | :---: |
| None | $35(22.58)$ |
| One | $87(56.13)$ |
| Two or more | $31(20.00)$ |
| I can't remember | $2(1.29)$ |

$\wedge$ Excludes skipped/invalid responses

The majority ( $84.48 \%$; $n=98$ ) of participants who provided a valid answer to the question "Which of the following best describes the most recent person you had sex with?" reported sex in a committed relationship and 18 (15.52\%) reported sex with a casual sexual partner (Table 15).

Table 15: Reported^ relationship to most recent sexual partner ( $\mathrm{n}=116$ )

| Response | n (\%) |
| :--- | :---: |
| Committed relationship | $98(84.48)$ |
| Not committed | $18(15.52)$ |

[^2]Table 16: Reported^ condom use when last sexual encounter was with a non-committed partner ( $\mathrm{n}=18$ )

| Response | $n(\%)$ |
| :--- | :---: |
| Condom not used / can't remember | $8(44.44)$ |
| Condom used | $10(55.56)$ |

${ }^{\wedge}$ Excludes those who did not report being in a non-committed relationship to most recent sexual partner

Table 17: Reported^ condom use when last sexual encounter was with multiple partners in last 12 months ( $\mathrm{n}=32$ )

| Response | n(\%) |
| :--- | :---: |
| Condom not used / can't remember | $11(34.38)$ |
| Condom used | $21(65.62)$ |

[^3]
## Testine at a jlance

## One third of

 all respondents had been tested for STIs and/or BBVs in the last two years

The most frequently reported reason for getting tested within the last two years was "It was part of my regular health check" ( $\mathrm{n}=20$ )

## Testing at a glance



## 47\%

Okay - STI and BBV testing is normal

## 7\%

Relieved - now I don't have to ask for the tests

## 29\% <br> Worried - Do they think I have an illness?

## 5\%

Offended - why are they asking me?

Table 18 shows that one-third of all respondents who answered the test timing question (33.01\%; n=69) reported having had an STI or BBV test within the last two years.

Table 18: Time since last STI and/or BBV test, $\mathrm{n}=(209)^{\wedge}$

| Time since last STI and/or BBV test | n (\%) |
| :--- | :---: |
| Less than 12 months ago | $36(17.22)$ |
| 1 to 2 years ago | $33(15.79)$ |
| More than 2 years ago | $48(22.97)$ |
| I have never been tested | $78(37.32)$ |
| I don't know | $14(6.70)$ |

${ }^{\wedge}$ Excludes those who did not report time since last test and invalid responses

Among respondents who reported being tested within the last two years and specified the test type ( $n=87$ ), the most commonly reported tests were for HIV and hepatitis B and/or C (42.53\%; n=37), followed by chlamydia and/or gonorrhoea (31.03\%; n=27) (Table 19).

Table 19: Most recent test type in last two years $n=(87)^{\wedge}$

| Test type* | n (\%) |
| :--- | :---: |
| HIV | $37(42.53)$ |
| Chlamydia and/or gonorrhoea | $27(31.03)$ |
| Syphilis | $23(26.44)$ |
| Hepatitis B and/or hepatitis C | $37(42.53)$ |
| I don't know - it was a urine test | $4(4.60)$ |
| I don't know - it was a blood test | $10(11.49)$ |
| I don't know - it was a blood and urine test | $9(10.34)$ |

[^4]The most frequently reported reason for getting tested within the last two years was "It was part of my regular health check" (26.32\%; n=20) followed by "I was pregnant and had a check up" and "It was a requirement for my work / study" (17.11\%; n=13) (Table 20).

Table 20: Reasons for getting tested in last two years $(\mathrm{n}=76)^{\wedge}$

| Reason* | n (\%) |
| :--- | :---: |
| I was applying for permanent residency | $8(10.53)$ |
| I had a new sexual partner | $7(9.21)$ |
| Something happened that may have put me at risk | $5(6.58)$ |
| I was pregnant and had a check up | $13(17.11)$ |
| My doctor / nurse suggested it | $4(5.29)$ |
| I wanted to know if I had an STI or BBV | $8(10.53)$ |
| I had symptoms | $2(2.63)$ |
| It was part of my regular health check | $20(26.32)$ |
| I like to get regular STI / BBV tests | $7(9.21)$ |
| It was a requirement for my work / study^^ | $13(17.11)$ |
| Another reason | $7(9.21)$ |

*Note: Respondents could choose more than one option.
${ }^{\wedge}$ Excludes those who did not report getting tested in last two years or did not specify reason.
${ }^{\wedge \wedge}$ People at occupational risk of hepatitis $B$ are recommended to have serological testing after a primary hepatitis $B$ vaccine course

In response to the question "How would you feel if a doctor in Australia offered you STI and BBV tests during an appointment without you requesting any of these tests?", the most frequent response was "Okay - STI and BBV testing is normal" (Table 21). However, only 4 respondents reported that their reason for testing was because a doctor/nurse suggested it (Table 20).

Table 21: Reaction to offer of opportunistic testing ( $\mathrm{n}=206$ )

| Reaction* | n(\%) |
| :--- | :---: |
| Offended - why are they asking me? | $10(4.85)$ |
| Worried - do they think I have an illness? | $59(28.64)$ |
| Surprised - I wasn't expecting that | $41(19.90)$ |
| Okay - STI and BBV testing is normal | $97(47.09)$ |
| Relieved - now I don't have to ask for the tests | $17(6.80)$ |

*Note: Respondents could choose more than one option.

## REFERENCES

1. The Kirby Institute. HIV, viral hepatitis and sexually transmissible infections in Australia: annual surveillance report 2018. 2018:1-218.
https://kirby.unsw.edu.au/sites/default/files/kirby/report/KI_Annual-Surveillance-Report2018.pdf.
2. Vujcich D, Roberts M, Brown G, et al. Are sexual health survey items understood as intended by African and Asian migrants to Australia? Methods, results and recommendations for qualitative pretesting. BMJ Open 2021;11:e049010. doi: 10.1136/bmjopen-2021-049010.
3. Vujcich D, Roberts M, Gu Z, Kao SC, Lobo R, Mao L, Oudih E, Phoo NNN, Wong H, Reid A. Translating best practice into real practice: Methods, results and lessons from a project to translate an English sexual health survey into four Asian languages. PLoS One. 2021 Dec 17;16(12):e0261074. doi: 10.1371/journal.pone.0261074.
4.1.Vujcich D, Brown G, Durham J, Gu Z, Hartley L, et al. (2022) Strategies for recruiting migrants to participate in a sexual health survey: Methods, results, and lessons. International Journal of Environmental Research and Public Health 19 (19): 12213. https://doi.org/10.3390/ijerph191912213.

[^0]:    ${ }^{\wedge}$ Tables on STI knowledge exclude those who skipped the question and invalid responses

[^1]:    ${ }^{\wedge}$ Excludes skipped/invalid responses

[^2]:    ${ }^{\wedge} E x c l u d e s ~ s k i p p e d / i n v a l i d ~ r e s p o n s e s ~ a n d ~ r e s p o n d e n t s ~ w h o ~ a n s w e r e d ~ " n o n e " ~ t o ~ r e p o r t e d ~ n u m b e r ~ o f ~$ sexual partners question question

[^3]:    ${ }^{\wedge}$ Excludes those who did not report two or more sexual partners in the last 12 months

[^4]:    *Note: Respondents could choose more than one option.
    ${ }^{\wedge}$ Excludes those who did not report getting tested in last two years and those who did not specify test type.

