COVID-19 AND INDIGENOUS PEOPLES' ACCESS TO STBBI AND RELATED HEALTH SERVICES: *National survey results*

National Collaborating Centre
for Indigenous Health

Centre de collaboration nationale
de la santé autochtone

National Collaborating Centre
for Infectious Diseases

Centre de collaboration nationale
des maladies infectieuses

CHRONIC AND INFECTIOUS DISEASES

Acknowledgements

We would like to acknowledge and thank Dr. Luisa Arroyave and Dr. Keana Shahin for their assistance with the data analyses. We would like to acknowledge and also express our gratitude to the members of the National Indigenous Advisory Committee for guiding and bringing wisdom and expertise to this project, including Savanah Ashton, Jonathan Dunn, Monique Fong Howe, Ashleigh Hrabowy, Neal Kewistep, Alexandra King, Margaret Kisikaw Piyesis, Sandy Laframboise, Teena Legris, Renee Macshing, Albert McLeod, Amy Nahwegahbow, Hollie Sabourin, Lana Thomas, Reyna Uriarte, and Eduardo Vides.

This publication was prepared by Margaret Haworth-Brockman, Susie Taylor, Signy Baragar, Denise Webb, and Regine Halseth. It is available for download at: **nccih.ca** and **nccid.ca**.

La version française est également disponible sur le site Web **ccnsa.ca** sous le titre : *La COVID-19 et l'accès des Autochtones aux services de santé liés aux ITSS : résultats de l'enquête nationale.*

Citation: National Collaborating Centre for Indigenous Health (NCCIH) & National Collaborating Centre for Infectious Diseases (NCCID). (2024). *COVID-19 and Indigenous peoples' access to STBBI and related health services: National survey results.*

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ISBN (print): 978-1-77368-476-5
ISBN (online): 978-1-77368-477-2

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INTRODUCTION

The COVID-19 pandemic strained health care systems across Canada, impairing the availability and accessibility of a variety of health services. Some health services were classified as either essential or non-essential, ultimately regulating their availability. Sexually transmitted and blood-borne infection (STBBI) services, including prevention (such as harm reduction services), testing, and treatment, were often classified as "non-essential" and consequently subject to reduced operating hours, staff, and overall capacity (Gilbert et al., 2022; Public Health Agency of Canada [PHAC], 2022c; Ryu et al., 2023). These conditions posed challenges for offering timely and high quality STBBI health services for providers, clients, and Canada as a whole.

Rates of STBBIs are a significant public health concern across Canada and around the world. In 2018, Canada signed a joint international effort to eradicate STBBIs as a health concern by 2030 (PHAC, 2018). High rates of STBBIs persist despite recent scientific and medical advances in research on and treatment of STBBIs, rendering many STBBI conditions to be preventable and manageable, and some, curable with proper treatment (PHAC, 2018). Harm reduction services, such as supplies for safe sex or safe injection sites, are some of the common strategies often used to control and prevent transmission of STBBIs (PHAC, 2022c); thus, with health system disruptions caused by COVID-19, efforts to reach the international goal have been challenged. Amidst these challenges, health system inadequacies also surfaced during the pandemic, with disruptions felt by some populations more than others.

Indigenous[1] people are disproportionately affected by STBBIs compared to the non-Indigenous population in Canada due to the continued legacy of colonialism and its underlying influence on the structure and operations of health care systems and policies (PHAC, 2018). In 2020, 10.3% (approximately 6,467 persons) of those living with HIV in Canada were Indigenous, despite Indigenous people accounting for just 5% of the total population (approximately 1.8 million persons; PHAC, 2022a). Colonial health systems and systemic inequities that work to withhold access to culturally safe (free of racism and discrimination) and appropriate STBBI health services are key determinants of this imbalance.

In the fall of 2020, the PHAC and the National Collaborating Centres for Indigenous Health (NCCIH) and Infectious Diseases (NCCID) began exploring how the COVID-19 pandemic affected the accessibility of STBBI and related services for First Nations people, Inuit, and Métis people. The three agencies co-hosted a survey of First Nations, Inuit, and Métis teens and adults who sought services and care for STBBIs during the COVID-19 pandemic. Origins of this study formulated within PHAC, with the intent to understand the disruptions to STBBI care and related services caused by the pandemic, and to have the resulting data available to inform health care provision and public health programming and policies in Canada. This survey was administered alongside three other surveys which examined the accessibility of STBBI and harm reduction services during the COVID-19 pandemic among:

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[1] The term 'Indigenous' is used in this report to refer collectively to the original inhabitants of Canada and their descendants, including First Nations peoples, Inuit, and Métis peoples, as defined under Section 35 of the *Constitution Act*, 1982. Wherever possible, clear distinctions are made between these three distinct, constitutionally recognized groups.

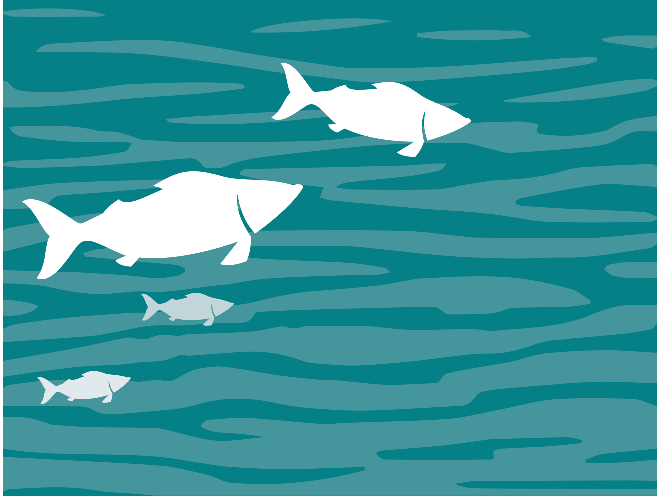
1. STBBI service providers;
2. African, Caribbean, and Black people; and
3. people who use drugs or alcohol.

The findings of these three studies are available on the PHAC website (PHAC, 2023).

This report explores the findings of the national "Impact of COVID-19 Survey" investigating the experiences of First Nations people, Inuit, and Métis people who engaged with STBBI services during the pandemic.[2] It is hoped that this information will advance efforts for future health-related outreach, care, and follow-up during public health emergencies. The following sections of this report will first introduce the National Indigenous Advisory Committee who guided this work, then describe the processes used to prepare and promote the national survey, followed by the survey methods and findings. Considerations for further research and the final conclusions are then discussed. Supplementary data materials may be available upon request from either the NCCIH or NCCID, including results by Indigenous identity, geographical region (urban, rural), and gender identity. It is important to note that the opinions expressed in this report are those of the authors and do not necessarily reflect the views of the Public Health Agency of Canada.

Sexually Transmitted and Blood-borne Infections (STBBIs)

STBBIs are infections that are transmitted via sexual activity or blood, through the exchange of bodily fluids or skin-to-skin contact. STBBIs are a significant public health concern in Canada. The most common STBBIs in Canada are human papilloma virus (HPV), hepatitis C (HCV), Chlamydia, HIV, gonorrhea, syphilis, hepatitis B (HBV), hepatitis A (HAV), lymphogranuloma venereum (LGV), and herpes simplex virus (HSV). According to available national data, injection drug use accounts for most new infections for both HIV and hepatitis C cases among Indigenous populations.



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[2] This report is NCCID project No. 786.

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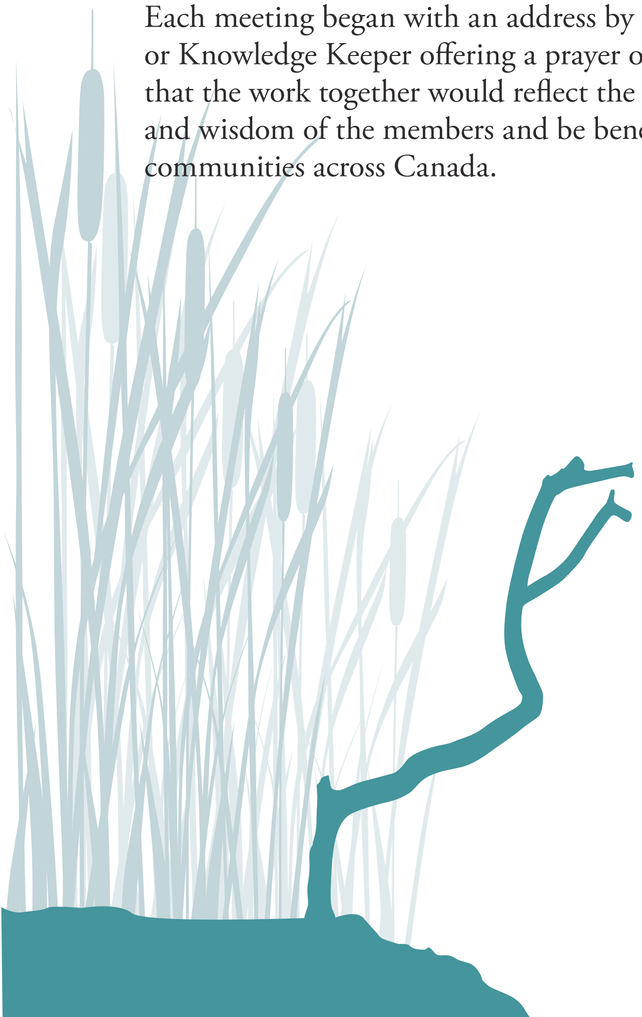
ENGAGEMENT WITH THE NATIONAL INDIGENOUS ADVISORY COMMITTEE

At the study's inception, the NCCIH and NCCID convened a National Indigenous Advisory Committee (hereafter referred to as the "Committee") to guide the research process. Committee membership included representation from the Assembly of First Nations, the Métis National Council, Pauktuutit Inuit Women's Association, the First Nations Information Governance Centre (FNIGC), and the Native Women's Association of Canada, as well as Indigenous scholars with expertise in HIV and other STBBIs. The members graciously gave their time and advice to help ensure that the survey would be conducted from a place of respect and kindness. Each meeting began with an address by an Elder or Knowledge Keeper offering a prayer or blessing that the work together would reflect the knowledge and wisdom of the members and be beneficial for communities across Canada.

In establishing the Committee, it was also the intention to ensure all proceedings of the study aligned with principles of Indigenous data governance and data sovereignty (First Nations Information Governance Centre [FNIGC], 2014); that is, Committee members' engagement in the study created a space to assert and protect Indigenous jurisdiction over data and information (including knowledges) about Indigenous people and how their data and information is to be collected, analyzed, disseminated, stored, and accessed for current and future use. For example, the Committee met regularly in the spring and summer of 2021 to refine the survey, ensure that the final survey questionnaire reflected the anticipated needs of communities, and establish a tone and format for the survey that would be acceptable to respondents and foster a strengths-based analysis. At the same time, the Committee guided the design of the social media and promotional campaign to encourage participation in the survey (Toχʷoχʷ [Becoming Clear] Communications developed the promotional materials for this study).

As the survey results became available, the Committee was asked to review the presentation of the findings in this document and other knowledge products. With the knowledge and approval of the Committee, this study's data is stored using the resources available at the NCCIH and NCCID, although all data continues to be owned and accessed on demand by the Committee.



SURVEY METHODS

The research approach followed a four-step process: creating the survey tool, preparing the survey questions, recruiting survey respondents, and analyzing survey results. Each step is described below.

Creating the survey tool

This study employed a cross-sectional self-administered online survey approach. This approach – online rather than in-person or by telephone interview – was selected due to the public health measures that were in place to reduce COVID-19 transmission. The approach also allowed for individuals across all provinces and territories to participate. The eligibility criteria included any person who: identified as First Nations, Inuit, Métis, or other Indigenous ancestry; resided in Canada; was aged 15 or older; and had current or previous experience with accessing STBBI services. Ethics approval for this study was granted by the Health Canada/PHAC Research Ethics Board.

The online survey, titled “Impact of COVID-19 Survey,” was coordinated by the PHAC. The Impact of COVID-19 Survey assessed the impact of COVID-19 on the delivery and accessibility of sexually transmitted and blood-borne infections (STBBI) prevention and testing services, including harm reduction services, on key populations in Canada.

Preparing the survey questions

Survey questions were prepared under the guidance of the National Indigenous Advisory Committee and tailored to gather an in-depth understanding of the respondents’ background and experience in seeking STBBI care. Committee members’ knowledge about the circumstances facing First Nations people, Inuit, and Métis people during the COVID-19 pandemic informed questions about any changes in daily circumstances, including the availability of community-based outreach supports or cultural activities, such as ceremonies or other events, as well as any changes in how respondents obtained shelter, income, or food. Specific subsets of the survey, such as the use of identifiers, were developed based on existing research and knowledge gaps. For instance, survey questions about gender identity were developed due to growing research evidence suggesting that trans, two-spirit, and other gender non-conforming people have different and distinct needs and experiences compared to others when accessing STBBI testing, counselling, treatment, and follow-up (Gieles et al., 2023; Grey et al., 2023; Min, 2023; Stewart et al., 2022). Overall, the survey collected information on: respondents’ mental and physical wellness during COVID-19; new, existing, or previous STBBI diagnoses; the types of STBBI care received; availability of community-based or cultural supports; and any changes in the use of alcohol or non-prescribed substances. No directly identifying information was collected.

The Committee members were cautious to ensure that questions were not repetitive, and that the overall length of the survey would not be a deterrent for respondents. Moreover, Committee members raised the need to include participants under the age of 18. The original ethics proposal for the survey was amended by the PHAC to reflect this necessity.

Recruiting survey respondents

Recruitment for the survey employed a convenience sampling method, using a list of organizations identified by Committee members, the NCCIH, and the NCCID. National and regional Indigenous organizations and STBBI care providers were asked to promote the survey link to their networks and, if needed, assist clients (or members, patients, etc., as applicable) with entering their responses online. Organizations were compensated for connecting with and helping survey participants.

The survey was launched in July 2021. The survey link was distributed via NCCIH, NCCID, and PHAC social media channels (e.g., Twitter, LinkedIn) and re-posted throughout the data collection period. The initial plan was to keep the survey posted for eight weeks. However, in early September 2021, a federal election was announced, putting Government of Canada departments under the "caretaker convention." As a result, the survey could not be closed and remained posted on the PHAC's website until January 15, 2022. A total of 1,183 final responses were collected.

Analyzing survey results

Descriptive analyses were conducted with the survey data to observe the distribution of the variables of interest to the research objectives, such as current STBBI status, history with STBBIs, access to STBBI services, access to cultural supports, substance or alcohol consumption, and mental health status. Absolute and relative frequencies were reported for the whole sample and disaggregated by Indigenous identity, sex assigned at birth, gender identity, sexual orientation, and area of residence (i.e., rural or urban). Contingency tables and bar charts were created to show the results and are included in this report. All analyses were carried out using Stata (StataCorp. 2021. Stata Statistical Software: Release 17. College Station, TX: StataCorp LLC.). R version 4.2.21.0 was also used to create graphs.

Disaggregated totals of the survey data were used sparingly due to small sample sizes across the different subpopulations. For this reason, and to avoid inadvertent stigmatization, distinctions-based data according to First Nations, Inuit, and Métis Indigenous identity groups and gender identity groups were not reported throughout all results. In certain cases, such as in sample sizes allowing for within-group comparisons, data was stratified by Indigenous identity groups, gender identity groups, or geographic areas to ensure identity-based and geographic differences were addressed in the results. Further supplementary data tables organized by Indigenous identity, sex assigned at birth, gender identity, sexual orientation, and area of residence (i.e., rural or urban) may be available upon request to the NCCIH or NCCID.

RESULTS

This report presents the quantitative findings from the Impact of COVID-19 Survey, conducted from July 2021 to January 2022, at the national level. The following sections provide a demographic description of the survey respondents, then explore the survey results according to the key areas of interest: past and current experiences with STBBIs, access to health care and STBBI services, barriers to STBBI services, substance use and mental wellness, and access to community and cultural supports during the pandemic.

Description of survey respondents

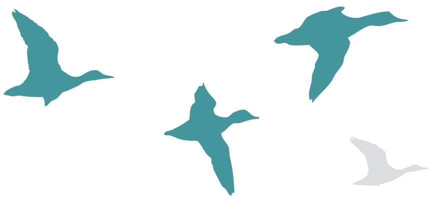
Table 1 provides demographic information about the survey respondents across Canada. In total, 1,183 people responded to the national survey between July 2021 and January 2022; 70.4% identified as First Nations, 23.7% identified as Métis, and 4.5% identified as Inuit. Of the First Nations respondents, 71.8% indicated they did not live on-reserve most of the time. Similarly, most of the Métis respondents (83.9%) did not live in a Métis community or settlement. Among those who identified as Inuk, just over 60.4% indicated they lived away from Inuit Nunangat[3], while the remaining 39.6% lived primarily in the territory.

Most of the respondents (78.8%) identified as women, while only 12.3% identified as men and 5.6% identified as two-spirited. Few respondents identified as gender fluid or non-binary (1.4%), queer (0.6%), questioning (0.4%), or trans (0.3%).

A follow-up question asked respondents about their sexual orientation. Of 1,182 responses, 78.3% identified as heterosexual, 7.9% identified as bi-sexual, 4.3% identified as two-spirited, 3.1% identified as queer, 1.7% identified as gay or lesbian, and 1.2% identified as questioning.

All of the respondents provided information about their education. Most respondents had some kind of post-secondary education (68.1%). A further 18.7% of respondents had a high school or equivalent certificate, while 8.1% of respondents had less than high school equivalency in their formal education.

Nearly all respondents (90.7%) lived in a house or apartment that they owned or rented. Approximately 16.6% of respondents lived with family or friends, while 5.0% stated they were couch-surfing or dividing their time among a number of residences. Motels and hotels were listed as the primary residence of just over 6.0% of respondents. Less than 5.0% of respondents lived in alternative arrangements such as a shelter, hostel, or transition house, among others (see Table 1).



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[3] Inuit Nunangat refers to the region considered the traditional homeland of Inuit. This includes the lands, water, and ice in Nunavut, Nunatsiavut (northern Labrador), Inuvialuit Settlement Region (northern portion of the Northwest Territories), and Nunavik (northern Quebec).

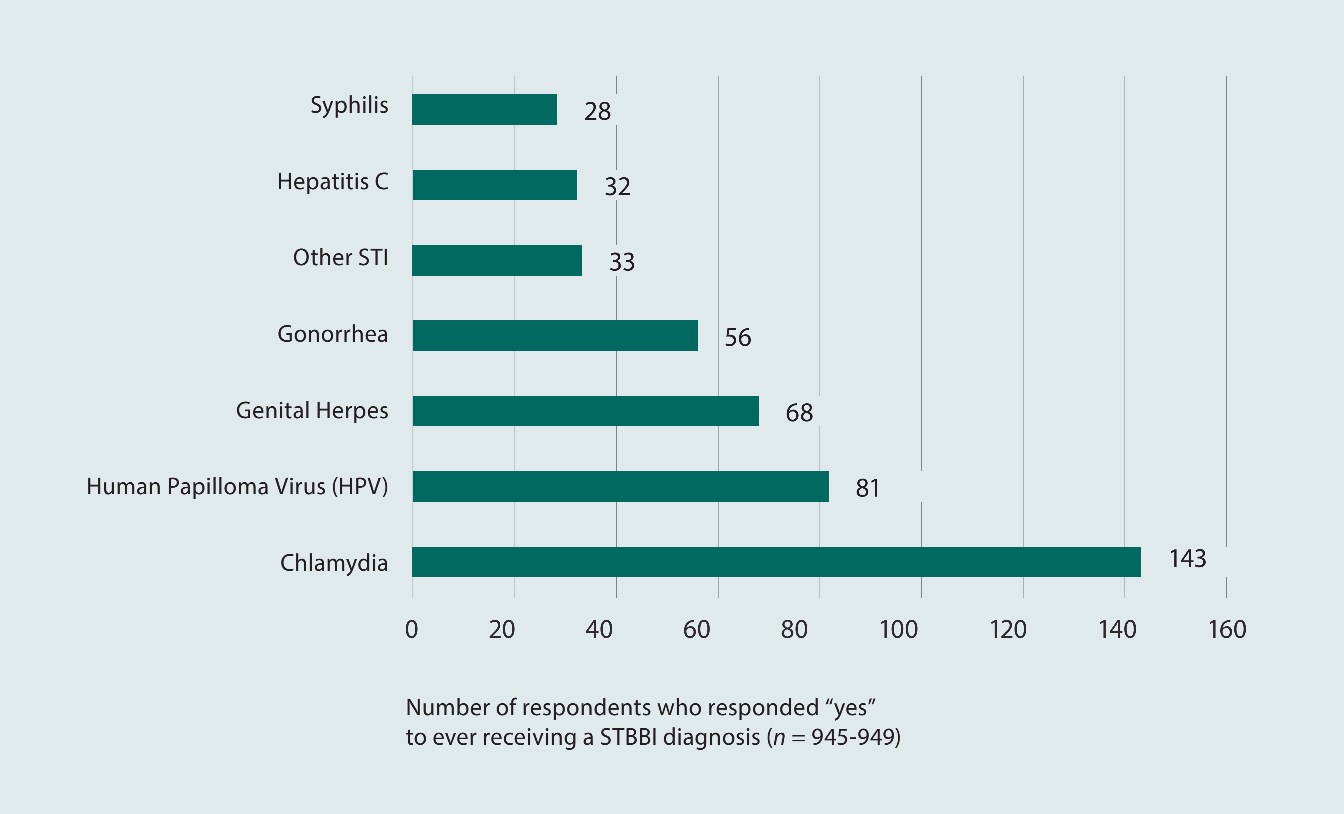
TABLE 1. DEMOGRAPHICS OF SURVEY RESPONDENTS

Baseline characteristic	Frequency (*n*)	Total *N*	Percentage (%)
Indigenous identity			
First Nations including Status & Non-Status	883	1,183	70.4
Métis	280	1,183	23.7
Inuk (Inuit)	53	1,183	4.5
Other Indigenous	17	1,183	1.4
Gender identity			
Female	932	1,183	78.8
Male	146	1,183	12.3
Two-spirit or other cultural identity	66	1,183	5.6
Gender fluid or non-binary	17	1,183	1.4
Queer	7	1,183	0.6
Questioning	5	1,183	0.4
Trans	4	1,183	0.3
Do not know	6	1,183	0.5
Sexual orientation			
Heterosexual	926	1,182	78.3
Bisexual	93	1,182	7.9
Two-spirit	51	1,182	4.3
Queer	36	1,182	3.1
Gay or lesbian	20	1,182	1.7
Questioning	14	1,182	1.2
None of these	37	1,182	3.1
Do not know	5	1,182	0.4

TABLE 1. DEMOGRAPHICS OF SURVEY RESPONDENTS CONTINUED

Baseline characteristic	Frequency (*n*)	Total *N*	Percentage (%)
Education status			
University degree, certificate, or diploma	339	1,183	28.7
College, CEGEP, vocational or trade school, apprenticeship training	306	1,183	25.9
High school or equivalent certificate	221	1,183	18.7
Graduate or professional university degree	160	1,183	13.5
Less than high school	96	1,183	8.1
Prefer not to answer	29	1,183	2.5
Other	24	1,183	2.0
Housing status			
Apartment or house that you rent or own	1,073	1,183	90.7
Family or friend's place	196	1,183	16.6
Hotel or motel room	75	1,183	6.3
Couch surfing, multiple residences	59	1,183	5.0
Shelter or hostel	20	1,183	1.7
Public place, like a street, park, or stairwell	17	1,183	1.4
Rooming or boarding house	15	1,183	1.3
Transition house or halfway house	10	1,183	0.9
Psychiatric or drug treatment facility, like detox or rehab	10	1,183	0.9
Correctional facility, like a jail or prison	7	1,183	0.6
Other	43	1,183	3.6

FIGURE 1. NUMBER OF SURVEY RESPONDENTS WHO HAD EVER RECEIVED A STBBI DIAGNOSIS [4]



Past and current experiences with STBBIs

Survey respondents were asked questions about their prior experiences with STBBIs and if they had received a diagnosis for hepatitis C, syphilis, Chlamydia, gonorrhea, human papilloma virus (HPV), genital herpes, and/or any other sexually transmitted infections (STIs). Respondents could indicate whether they received this diagnosis in the past 12 months or more than 12 months ago. The total number of responses for each individual question varied between 945 and 949 responses. Figure 1 reports the number of those who responded "yes" for each condition regardless of the time of diagnosis.

The findings in Figure 1 suggest that Chlamydia and human papilloma virus (HPV) were the most common STBBIs in which respondents had ever received a diagnosis, while syphilis and hepatitis C were the least common.

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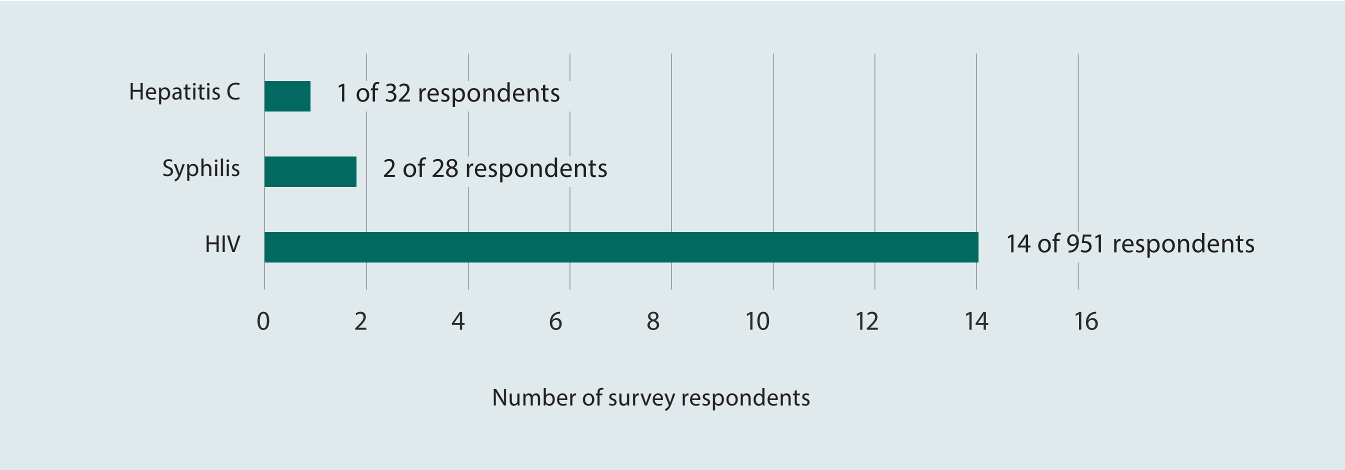
[4] The number of respondents living with HIV were not recorded in Figure 1 because HIV is a lifelong infection once diagnosed. Thus, to avoid duplicate data recording, data pertaining to HIV are recorded in Figure 2, which covers survey respondents' STBBI status at the time of the survey.

FIGURE 2. NUMBER OF SURVEY RESPONDENTS LIVING WITH HIV, HEPATITIS C, AND/OR SYPHILIS AT THE TIME OF THE SURVEY



Survey respondents were then asked about their current STBBI status of HIV, hepatitis C, and syphilis. Figure 2 presents the findings.

Of those who were previously diagnosed with hepatitis C ($n = 32$) or syphilis ($n = 28$), 3.1% and 7.1% reported living with the condition at the time of completing the survey, respectively. On a wider scale of 951 respondents, 1.5% reported living with HIV.

Access to health care and STBBI services

Table 2 provides insight into how and if survey respondents accessed health care services during the pandemic. Respondents were asked about whether the costs of their health care and/or prescription drugs were covered since the start of the pandemic, including any employer-paid or government private insurance, such as the federal non-insured health benefits (NIHB) program for First Nations and Inuit. To this question, 74.3% of 1,181 respondents stated that they did have access, nearly 19% stated that they did not, and 6.9% were not sure.

Respondents were then asked whether they had used health care services since the start of the pandemic and whether they accessed STBBI prevention, testing, treatment, and other community-based services. Of 1,019 respondents, 88.6% had used some kind of health care services and nearly 12.0% of 956 respondents looked for, considered, or wanted to get health care services for STBBI prevention, testing, and/or treatment.

The 114 (11.9%) survey participants who wanted to access STBBI prevention, testing, treatment, and other community-based services were then asked to elaborate on their experiences of accessing such STBBI services. Participants reported either always or sometimes being able to access these services or not being able to access the service despite looking for, considering looking for, or wanting to use the service.

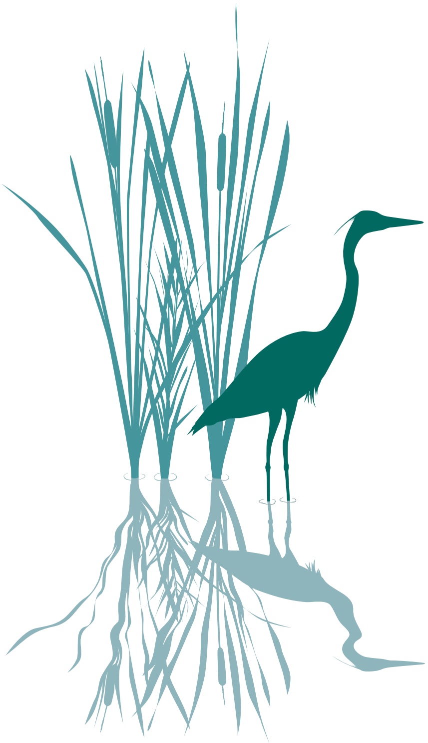


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TABLE 2. SURVEY RESPONDENTS' ACCESS TO AND USE OF HEALTH SERVICES DURING THE COVID-19 PANDEMIC

Service access and use	Frequency (*n*)	Total *N*	Percentage (%)
Access to health care insurance coverage			
Have access	878	1,181	74.3
Do not have access	221	1,181	18.7
Do not know	82	1,181	6.9
Use of health care services since the start of the pandemic			
Used services	903	1,019	88.6
Did not use services	116	1,019	11.4
Access to STBBI prevention, testing, treatment, and other community-based services			
Looked for, considered looking for, or wanted to get services	114	956	11.9
Did not look for, consider looking for, or want to get services	842	956	88.1

Around 110-111 respondents answered questions about accessing STBBI prevention services and measures, including HIV pre-exposure prophylaxis (PrEP) or post-exposure prophylaxis (PEP)[5], condom and/or dental dams, information about safer sex, and STBBI information and education. Within each STBBI prevention service and measure, the majority of respondents reported not wanting or trying to use the service during the pandemic. An exception to this is for condoms and/or dental dams in which the majority (*n* = 62) of 111 respondents wanted or tried to use the preventative measure. Table 3 presents the degree of accessibility for STBBI prevention services and measures among the respondents who sought these services, organized by gender identity.[6] Similarly, Tables 4 and 5 present the degree of accessibility for STBBI testing services (Table 4) and STBBI treatment and other community-based services (Table 5) among respondents who sought these services, by gender identity.

Tables 3, 4, and 5 are reported by gender identity to respond to data gaps regarding gender diverse peoples and their experience in accessing STBBI services. This gap was identified in the preliminary research that informed the study's methods (see the above section "Preparing the survey questions"). It is important to note, however, that small and unbalanced sample sizes within each gender identity group pose a risk of misleading conclusions regarding cross-group comparisons. Therefore, findings for Tables 3, 4, and 5 are examined *within* the three gender identity groups and are not cross compared between the gender identity groups.

According to Table 3, condoms and/or dental dams were the highest sought service (*n* = 62), followed by information about safer sex (*n* = 48), STBBI information and education generally (*n* = 45), and PrEP/PEP medications (*n* = 24) among respondents who wanted or tried to access STBBI prevention services and measures. In terms of the accessibility of these services and measures, condoms and dental dams were identified as the most accessible, as the highest proportion of respondents, 54.8%, reported that they were always able to access this measure. STBBI information and education, including outreach events, were identified as the least accessible service, with 53.3% of survey respondents reporting that they wanted or tried to access this service but were unable to.

Most male respondents were either always or sometimes able to access condoms and/or dental dams (*n* = 8), followed by STBBI information and education (*n* = 5), and information about safer sex (*n* = 4). Of those who looked for PrEP or PEP medications (*n* = 5), most were unsuccessful in accessing these services (60.0%).

Most female respondents were always able to access condoms and/or dental dams (*n* = 21), followed by information about safer sex (*n* = 15) and PrEP or PEP medications (*n* = 5). Of those who looked for STBBI information and education (*n* = 24), most were unsuccessful in accessing these services (58.3%).

Many respondents identifying as two-spirit or another gender non-conforming identity were always able to access condoms and/or dental dams (*n* = 9), followed by information about safer sex (*n* = 7) and PrEP or PEP medications (*n* = 4). Of those who looked for STBBI information and education (*n* = 14), most were unsuccessful in accessing these services (57.1%).

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[5] PrEP and PEP are medications used by those who are HIV-negative to help prevent an HIV infection. PrEP is taken on a regular basis for people who are at ongoing risk of getting HIV, while PEP is taken in emergency situations to prevent an HIV infection after potentially being exposed to HIV (PHAC, 2019).

[6] The gender identity groups included in Tables 3, 4, and 5 have been reduced to three groups: males, females, and two-spirit or other gender non-conforming identity groups. The original data included more gender categories; however, the data has been reduced to three groupings due to the small sample sizes across the other gender identity groups. Further disaggregated data may be available upon request to NCCIH or NCCID.

TABLE 3. ACCESS TO STBBI PREVENTION SERVICES AND MEASURES AMONG RESPONDENTS WHO WANTED OR TRIED TO ACCESS THE SERVICE, BY GENDER IDENTITY

Access to STBBI prevention service	Male		Female		Two-spirit or other gender non-conforming identity		Total	
	n	%	*n*	%	*n*	%	*n*	%
Oral HIV pre-exposure prophylaxis (PrEP) or post-exposure prophylaxis (PEP)								
Always able to use	1	20.0	5	41.7	4	57.1	10	41.7
Sometimes able to use	1	20.0	3	25.0	0	0.0	4	16.7
Wanted or tried to, but was not able to use	3	60.0	4	33.3	3	42.9	10	41.7
Totals	**5**		**12**		**7**		**24**	
Condom and/or dental dam								
Always able to use	4	36.4	21	60.0	9	56.3	34	54.8
Sometimes able to use	4	36.4	7	20.0	2	12.5	13	21.0
Wanted or tried to, but was not able to use	3	27.3	7	20.0	5	31.3	15	24.2
Totals	**11**		**35**		**16**		**62**	
Information about safer sex (postcard, pamphlets, etc.)								
Always able to use	1	20.0	15	51.7	7	50.0	23	47.9
Sometimes able to use	3	60.0	9	31.0	2	14.3	14	29.2
Wanted or tried to, but was not able to use	1	20.0	5	17.2	5	35.7	11	22.9
Totals	**5**		**29**		**14**		**48**	
STBBI information and education including outreach events								
Always able to use	1	14.3	7	29.2	5	35.7	13	28.9
Sometimes able to use	4	57.1	3	12.5	1	7.1	8	17.8
Wanted or tried to, but was not able to use	2	28.6	14	58.3	8	57.1	24	53.3
Totals	**7**		**24**		**14**		**45**	

Note: Table 3 should be interpreted with caution because the number of respondents (*n*) is small and not balanced across male, female, and two-spirit or other gender non-conforming identity groups.

The total number of respondents in Table 4 reporting on each testing service varied. Most respondents reported seeking testing for STIs outside of the options provided (*n* = 91), followed by HIV testing (*n* = 71), syphilis (*n* = 67), hepatitis C (*n* = 55), and self-testing or other POCT (*n* = 41). Testing services that were most frequently selected as always being available included: other STI testing (*n* = 43), syphilis (*n* = 34), HIV (*n* = 32), and hepatitis C (*n* = 29) testing. However, when examining the data by proportions, hepatitis C testing had the highest proportion of respondents reporting that they were always able to use the service (52.7%), followed by syphilis testing (50.7%), other STI testing (47.3%), and HIV testing (45.1%). STBBI self-testing or POCT had the lowest proportion of respondents who were always able to use the service (31.7%) and the highest proportion of respondents reporting that they were unable to access that type of testing (51.2%).

Of the total males who sought STBBI testing services in Table 4 (*n* = 4-14), just four respondents reported using or trying to use self-testing or other point of care testing (POCT), compared to between 10-14 respondents who used or tried to use the other testing services. For each option provided, male respondents were more likely to report always being able to access a testing service than experience challenges with accessing services. An exception to this is with HIV testing, in which male respondents were equally likely to either always access (30.0%) or experience challenges in accessing HIV testing (30.0%).

Female and two-spirit or other gender non-conforming respondents were also more likely to always access a STBBI testing service than experience challenges, across all testing options, apart from STBBI self-testing or other POCT. For STBBI self-testing or other POCT services, female and two-spirit or other gender non-conforming respondents were more likely to experience challenges in accessing these services (56.5% of females and 50.0% of two-spirit or other gender non-conforming people, respectively) than always being able to access these testing services (26.1% of females and 35.7% of two-spirit or other gender non-conforming people, respectively). Moreover, among two-spirit or other gender non-conforming people, differences are observed in the proportion of those who were always able to access hepatitis C and syphilis testing, compared to those who were unable to access despite wanting or trying to access these testing services. For instance, two-spirit or other gender non-conforming people were more than three times more likely to always access hepatitis C (68.8%) and syphilis (61.1%) testing than to experience barriers in accessing these testing services (18.8% and 16.7% for hepatitis C and syphilis testing, respectively).

TABLE 4. ACCESS TO STBBI TESTING SERVICES AMONG RESPONDENTS WHO WANTED OR TRIED TO ACCESS THE SERVICE, BY GENDER IDENTITY

Access to STBBI testing service	Male		Female		Two-spirit or other gender non-conforming identity		Total	
	n	%	*n*	%	*n*	%	*n*	%
HIV testing								
Always able to use	3	30.0	16	43.2	13	54.2	32	45.1
Sometimes able to use	4	40.0	12	32.4	6	25.0	22	31.0
Wanted or tried to, but was not able to use	3	30.0	9	24.3	5	20.8	17	23.9
Totals	**10**		**37**		**24**		**71**	
Hepatitis C testing								
Always able to use	5	45.5	13	46.4	11	68.8	29	52.7
Sometimes able to use	4	36.4	8	28.6	2	12.5	14	25.5
Wanted or tried to, but was not able to use	2	18.2	7	25.0	3	18.8	12	21.8
Totals	**11**		**28**		**16**		**55**	
Syphilis testing								
Always able to use	6	42.9	17	48.6	11	61.1	34	50.7
Sometimes able to use	5	35.7	10	28.6	4	22.2	19	28.4
Wanted or tried to, but was not able to use	3	21.4	8	22.9	3	16.7	14	20.9
Totals	**14**		**35**		**18**		**67**	
Other sexually transmitted infection (STI) testing								
Always able to use	5	35.7	25	49.0	13	50.0	43	47.3
Sometimes able to use	5	35.7	15	29.4	8	30.8	28	30.8
Wanted or tried to, but was not able to use	4	28.6	11	21.6	5	19.2	20	22.0
Totals	**14**		**51**		**26**		**91**	
STBBI self-testing or other point of care testing (POCT)								
Always able to use	2	50.0	6	26.1	5	35.7	13	31.7
Sometimes able to use	1	25.0	4	17.4	2	14.3	7	17.1
Wanted or tried to, but was not able to use	1	25.0	13	56.5	7	50.0	21	51.2
Totals	**4**		**23**		**14**		**41**	

Note: Table 4 should be interpreted with caution because the number of respondents (*n*) is small and not balanced across male, female, and two-spirit or other gender non-conforming identity groups.

TABLE 5. ACCESS TO STBBI TREATMENT AND OTHER COMMUNITY-BASED SERVICES AMONG RESPONDENTS WHO WANTED OR TRIED TO ACCESS THE SERVICE, BY GENDER IDENTITY

Access to treatment and other community-based services	Male		Female		Two-spirit or other gender non-conforming identity		Total	
	n	%	*n*	%	*n*	%	*n*	%
Counselling related to syphilis, hepatitis C, HIV, or other STBBI								
Always able to use	1	16.7	5	29.4	2	20.0	8	24.2
Sometimes able to use	4	66.7	5	29.4	2	20.0	11	33.3
Wanted or tried to, but was not able to use	1	16.7	7	41.2	6	60.0	14	42.4
Totals	**6**		**17**		**10**		**33**	
Community services								
Always able to use	0	0.0	8	25.8	2	13.3	10	19.6
Sometimes able to use	3	60.0	6	19.4	3	20.0	12	23.5
Wanted or tried to, but was not able to use	2	40.0	17	54.8	10	66.7	29	56.9
Totals	**5**		**31**		**15**		**51**	
Interpreter and/or peer health service navigator								
Always able to use	1	33.3	3	17.6	1	10.0	5	16.7
Sometimes able to use	1	33.3	2	11.8	2	20.0	5	16.7
Wanted or tried to, but was not able to use	1	33.3	12	70.6	7	70.0	20	66.7
Totals	**3**		**17**		**10**		**30**	

Note: Table 5 should be interpreted with caution because the number of respondents (*n*) is small and not balanced across male, female, and two-spirit or other gender non-conforming identity groups.

Table 5 presents the degree of accessibility of STBBI treatment and other community-based services among respondents who sought these services, organized by gender identity. Treatment is explored broadly in this context, including counselling, interpreters and/or peer health service navigators to attain treatment or other outreach services as they exist in the community. Of these three broad options, community services were the most sought (*n* = 51), followed by counselling services related to syphilis, hepatitis C, HIV, or other STBBIs (*n* = 33), and interpreter and/or peer health service navigators (*n* = 30). However, each service had a greater proportion of respondents who wanted or tried to access the service but were unsuccessful, compared to the proportion of those who were always or sometimes able to access the service.

The data show a greater proportion for both female and two-spirit or other gender non-conforming respondents who were unable to access treatment or other community-based services despite wanting or trying to access these services, compared to always or sometimes being able to access the service.

Data also shows there was a greater number of male respondents who were sometimes able to access

TABLE 6. STBBI PREVENTION, TESTING, TREATMENT, AND OTHER COMMUNITY-BASED SERVICES THAT RESPONDENTS WERE EITHER ALWAYS OR SOMETIMES ABLE TO USE, BY RURAL VS. URBAN AREA

Access to STBBI prevention, testing, treatment, and other community-based services	Rural			Urban		
	n	Total	%	*n*	Total	%
STBBI prevention services						
Oral HIV PrEP or PEP	4	20	20.0	9	80	11.3
Condom and/or dental dam	10	20	50.0	36	80	45.0
Information about safer sex (e.g., postcard, pamphlets, etc.)	9	20	45.0	25	80	31.3
STBBI information and education including outreach events	6	20	30.0	14	80	17.5
STBBI testing services						
HIV testing	11	20	55.0	41	80	51.3
Hepatitis C testing	7	20	35.0	32	80	40.0
Syphilis testing	9	20	45.0	40	79	50.6
Other STI testing	11	20	55.0	53	80	66.3
STBBI self-testing or other POCT	4	20	20.0	15	80	18.8
STBBI treatment and other community-based services						
Counselling related to syphilis, hepatitis C, HIV, or other STBBI	2	20	10.0	15	79	19.0
Community services	3	20	15.0	16	80	20.0
Interpreter and/or peer health service navigator	1	20	5.0	8	80	10.0

Note: Table 6 reports data from respondents who wanted or tried to access the service. It should be interpreted with caution because the number of respondents (*n*) is small and not balanced across rural and urban areas.

counselling relating to syphilis, hepatitis C, HIV, or other STBBIs, or community services compared to always accessing or encountering barriers to these services.

Table 6 summarizes the proportion of respondents who were either sometimes or always able to access certain STBBI prevention, testing, treatment, and other community-based services. Roughly 100 respondents looked for, considered looking for, or wanted to use these services, although when stratified by geographic area, the number of respondents living in rural areas (*n* = 20) was significantly smaller than those living in urban areas (*n* = 79-80). Therefore, findings are examined within geographic areas rather than forming cross-comparisons.

For respondents from rural areas, condoms and/or dental dams, HIV and other STI testing, and community services were the most accessible preventive, testing, and treatment/other community-based services respectively.

For urban respondents, condoms and/or dental dams, other STI testing, and community services were similarly the most accessible prevention, testing, and treatment/other community-based services available to respondents.

Barriers to STBBI services

A total of 102 survey respondents who sought STBBI services during the pandemic also answered questions about what prevented them from accessing prevention, testing, treatment, and other community-based services (Table 7). Nearly half of these respondents (48.0%) reported that the STBBI service was not available when needed, while 42.2% said that COVID-19-related public health measures restricted access. More than 20.0% of respondents reported anti-Indigenous racism as a barrier to care. Additionally, the inability to travel to a clinic or health care centre, difficulty in using remote services, and cost were identified as barriers to service access for approximately 15.7% to 18.6% of respondents.

The survey then looked at participants' experiences in engaging with services specifically for HIV and other STIs during the pandemic (Table 8). Among 14 respondents who reported currently living with HIV, nearly all (85.7%) indicated they had an HIV clinic or provider before the start of the COVID-19 pandemic. Despite this prior access, however, nine of 14 respondents (64.3%) experienced challenges in accessing HIV care during the pandemic.

Table 9 summarizes the barriers to HIV services chosen by the nine survey respondents. The most commonly selected barriers were COVID-19-related public health measures (44.4%), followed by the difficulty in getting a referral or an appointment, and the unavailability of services when needed, both selected by 33.3% of respondents.

TABLE 7. BARRIERS TO STBBI PREVENTION, TESTING, TREATMENT, AND OTHER COMMUNITY-BASED SERVICES

Service barrier	Frequency (n)	Proportion (%) of $N = 102$ responses
The service was not available when needed	49	48.0
COVID-19-related public health measures restricted access	43	42.2
Difficulty getting a referral or an appointment	34	33.3
Fear of, or concern about exposure to someone with COVID-19	27	26.5
Fear of, concern about or experienced anti-Indigenous racism	23	22.6
Unable to travel to a health centre or clinic	19	18.6
Difficulty using remote services	16	15.7
Cost	16	15.7
Prevented by someone at home	5	4.9
Language barrier	1	1.0
Other	34	33.3

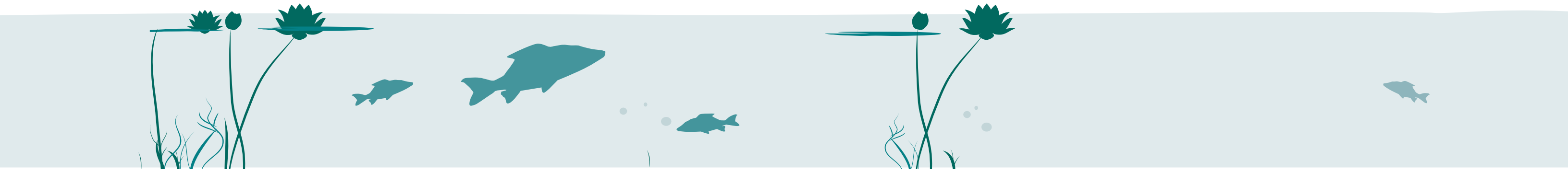
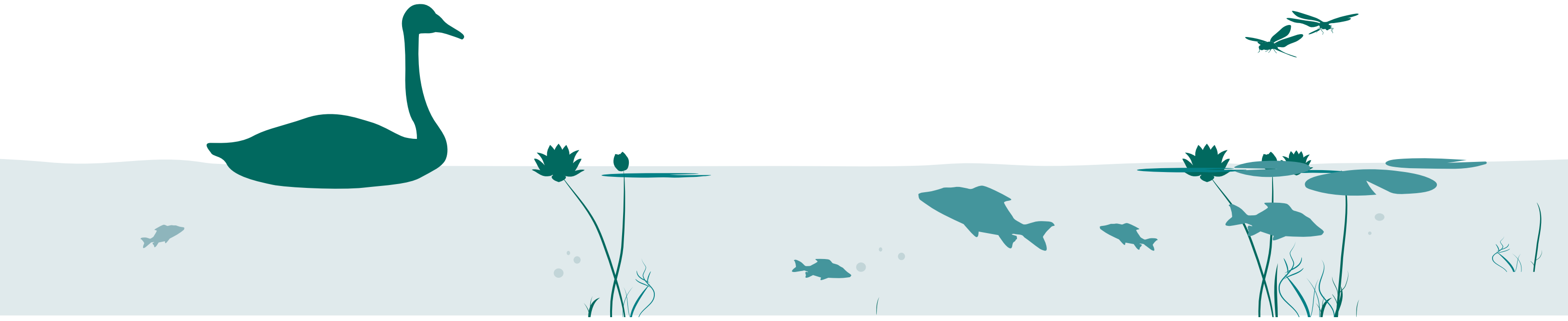


TABLE 8. ACCESS TO HIV PROVIDERS AMONG PARTICIPANTS LIVING WITH HIV

Characteristic	Frequency (*n*)	Proportion (%) of *N* = 14 responses
Had an HIV clinic or provider before the start of the COVID-19 pandemic		
Yes	12	85.7
No	1	7.1
I received a STI diagnosis during the COVID-19 pandemic	1	7.1
Experienced challenges accessing an HIV care provider or clinic since the start of the COVID-19 pandemic		
Yes	9	64.3
No	5	35.7

TABLE 9. BARRIERS TO HIV SERVICES AMONG RESPONDENTS WHO EXPERIENCED CHALLENGES ACCESSING A HIV CARE PROVIDER OR CLINIC DURING THE COVID-19 PANDEMIC

Service barrier	Frequency (*n*)	Proportion (%) of *N* = 9 responses
COVID-19-related public health measures restricted access	4	44.4
Difficulty getting a referral or an appointment	3	33.3
The service was not available when needed	3	33.3
Fear of, concern about or experienced anti-Indigenous racism	2	22.2
Fear of, or concern about exposure to someone with COVID-19	1	11.1
Unable to travel to a health centre or clinic	1	11.1
Other	2	22.2

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Barriers for survey respondents attempting to access services for other STIs, such as care for Chlamydia, gonorrhea, genital warts or human papilloma virus, or genital herpes also varied. Of 251 survey respondents, 119 (47.4%) reported they had access to a STI clinic or provider before the start of the COVID-19 pandemic, of which 46 respondents (18.3%) reported that they experienced challenges in accessing this clinic or provider during the pandemic (Table 10).

Table 11 displays commonly selected barriers to accessing STI services by 47 respondents. The most common barriers were an unavailability of the service when needed (66.0%), difficulty getting a referral or an appointment (48.9%), and COVID-19-related public health measures restricting access (42.6%).

Overall, the three main barriers to STBBI (Table 7), HIV (Table 9), and STI (Table 11) services were the unavailability of the service, difficulty getting a referral or an appointment, and COVID-19-related public health measures restricting access. In accessing STBBI services, the fourth most common barrier was the fear of, or concern about, exposure to someone with COVID-19 (Table 7), while the fear of, concern about, or experience with anti-Indigenous racism was the fourth most common barrier in accessing HIV (Table 9) and STI (Table 11) services.

TABLE 10. ACCESS TO OTHER STI SERVICES

Characteristic	Frequency (*n*)	Proportion (%) of ***N*** = 251 responses
Had a STI clinic or provider before the start of the COVID-19 pandemic		
Yes	119	47.4
No	121	48.2
I received a STI diagnosis during the COVID-19 pandemic	11	4.4
Experienced challenges accessing a STI clinic or provider since the start of the COVID-19 pandemic		
Yes	46	18.3
No	100	39.8
Did not try to go to a clinic or see a care provider	105	41.8

TABLE 11. BARRIERS TO STI SERVICES AMONG RESPONDENTS WHO EXPERIENCED CHALLENGES ACCESSING A STI CLINIC OR PROVIDER DURING THE COVID-19 PANDEMIC

STI service barrier	Frequency (*n*)	Proportion (%) of ***N*** = 47 responses
The service was not available when needed	31	66.0
Difficulty getting a referral or an appointment	23	48.9
COVID-19-related public health measures restricted access	20	42.6
Fear of, concern about or experienced anti-Indigenous racism	14	29.8
Fear of, or concern about exposure to someone with COVID-19	11	23.4
Unable to travel to a health centre or clinic	11	23.4
Difficulty using remote services	10	21.3
Cost	8	17.0
Other	13	27.7

Substance use and mental wellness

The survey also aimed to assess changes in substance use and mental wellness among survey respondents during the pandemic. Figure 3 illustrates the observed changes in substance use according to the proportion of survey respondents who reported an increase in their consumption or use of either: (1) alcohol; (2) cannabis; (3) hallucinogens (e.g., LSD, mushrooms); (4) speed, methamphetamine or meth; (5) cocaine or crack; (6) heroin, fentanyl, or other non-medical opioids; (7) ecstasy; (8) inhalants (e.g., gasoline, glue, paint thinners); and/or (9) other substances.

According to Figure 3, most survey respondents reported an increase in their use of alcohol and cannabis (19.1% - 35.4%), with minimal changes in their use of other substances (<0% - 6.8%). In comparing the results by geographic area, the proportion of respondents from urban areas who reported an increase in their use of cannabis during the pandemic was 16.3 percentage points higher than the proportion of those from rural areas (35.4% vs 19.1% respectively). The proportion of those reporting an increase in the use of alcohol was the same for both urban and rural areas (29.1%). For all other substances, more respondents from urban areas reported an increase in their use compared to those from rural areas. Some substances had a less than 2.0% increase in use across all respondents. These include: heroin, fentanyl, or other non-medical opioids; ecstasy; and inhalants.

The mental health status of survey respondents also changed during the pandemic. Figure 4 summarizes the degree of change that respondents experienced in their mental health, ranging from “much better now” to “much worse now.” The data shows that 42.0% of 1,183 respondents experienced somewhat worsened mental health since the start of the COVID-19 pandemic, compared to just 8.9% who reported somewhat better mental health. Moreover, nearly 20.0% of respondents reported their mental health was much worse since the start of the pandemic, compared to just 3.7% reporting it was much better.

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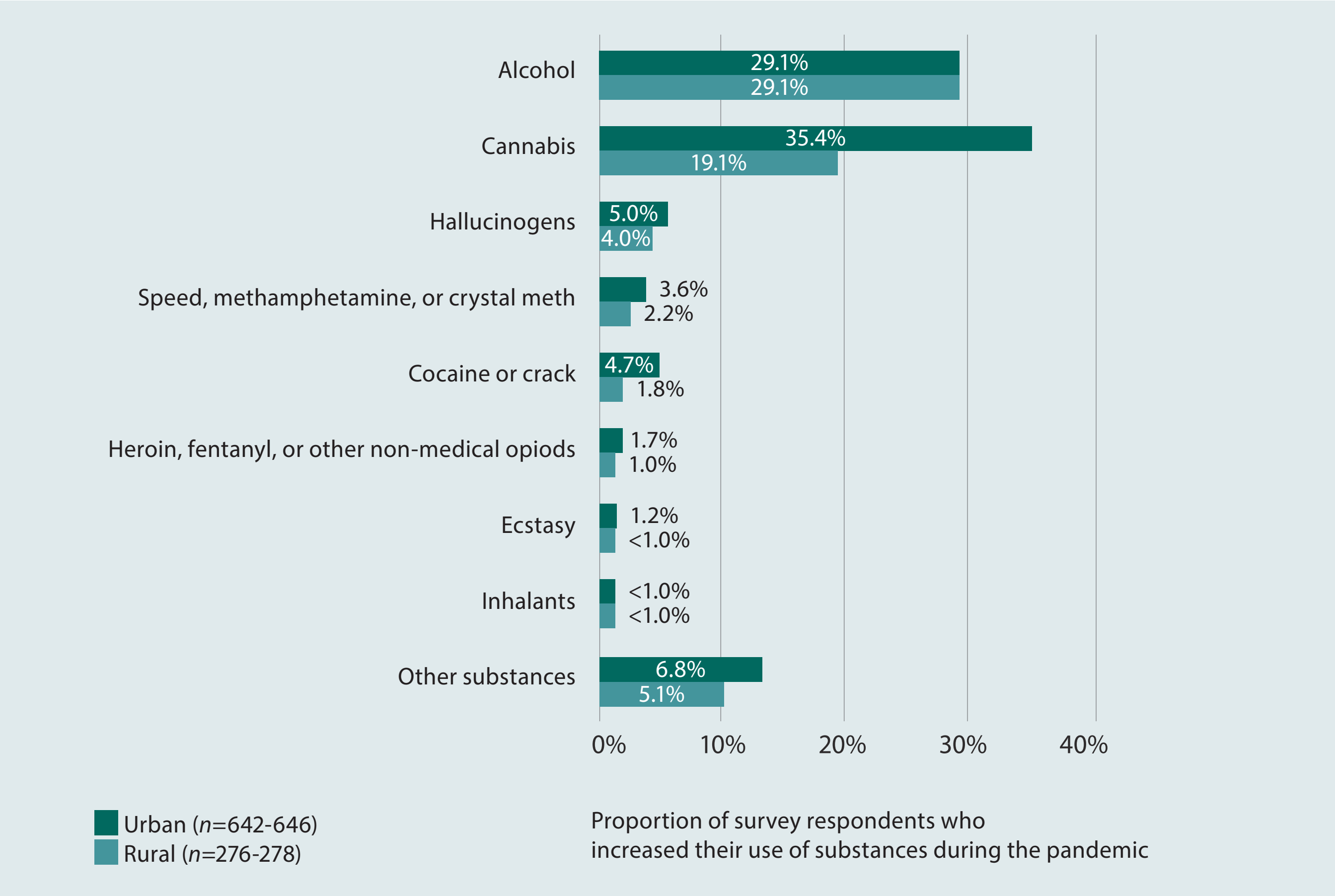
FIGURE 3. SURVEY RESPONDENTS' INCREASE IN SUBSTANCE USE DURING THE PANDEMIC BY GEOGRAPHIC AREA



Note: Figure 3 should be interpreted with caution because the number of respondents (*n*) is not balanced across rural and urban areas.

FIGURE 4. SURVEY RESPONDENTS' CHANGE IN MENTAL HEALTH STATUS SINCE THE START OF THE COVID-19 PANDEMIC

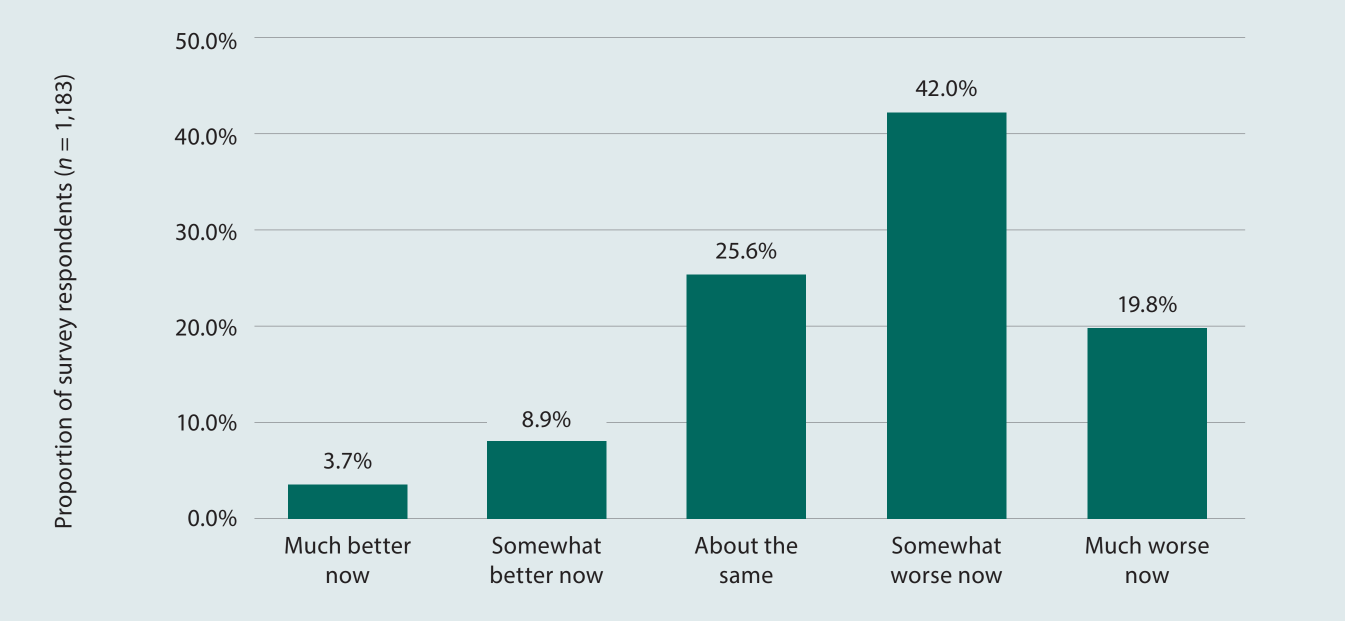
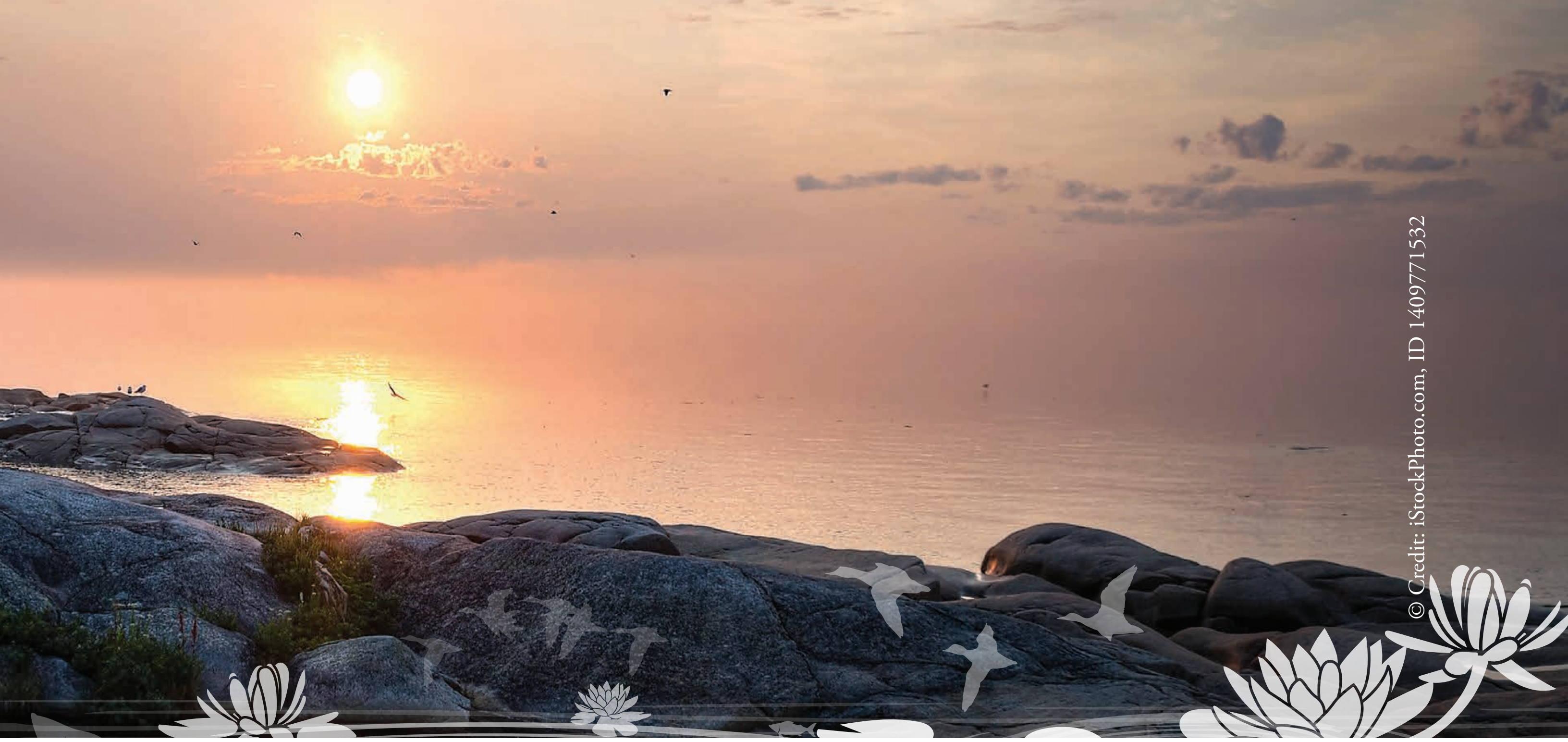


TABLE 12. BARRIERS TO MENTAL HEALTH SUPPORTS BY GEOGRAPHIC AREA

Barriers to mental health supports	Rural (*N* = 158)		Urban (*N* = 381)		Proportion (%) of *N* = 539 responses
	n	%	*n*	%	
Difficulty getting a referral or an appointment	75	47.5	170	44.6	45.5
COVID-19-related public health measures restricted access	66	41.8	175	45.9	44.7
The service was not available when needed	76	48.1	162	42.5	44.2
Cost	35	22.2	119	31.2	28.6
Fear of, or concern about exposure to someone with COVID-19	42	26.6	107	28.1	27.6
Fear of, concern about, or experienced anti-Indigenous racism	29	18.4	104	27.3	24.7
Difficulty using remote services	38	24.1	85	22.3	22.8
Unable to travel to a health centre or clinic	26	16.5	60	15.7	16.0
Language barrier	2	1.3	3	0.8	0.9
Other	16	10.1	63	16.5	14.7

Note: Table 12 should be interpreted with caution because the number of respondents (*n*) is not balanced across rural and urban areas.



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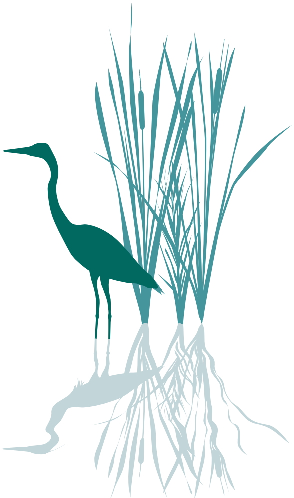
Survey respondents were asked if they sought or wanted to find mental health and wellness services provided by a therapist, counsellor, nurse, social worker, or doctor since the start of the pandemic. Of 1,149 survey respondents, 762 (66.3%) indicated that they sought or wanted to find these services. Respondents were then asked about their access to these services. Of 752 respondents, 514 (68.3%) reported that they were either always or sometimes able to access such mental health supports. Table 12 lists the barriers to accessing mental health supports, stratified by geographical area.

The three most common barriers preventing respondents' access to mental health services, for both rural and urban areas, were: difficulty getting a referral or an appointment (45.5%), COVID-19-related public health measures restricting access (44.7%), and the unavailability of services when they are needed (44.2%). This finding mimics the three most common barriers that were also preventing access to STBBI, HIV, and other STI prevention, testing, and treatment services in Tables 7, 9, and 11, respectively. The fourth and fifth most common barriers to mental health support differed, however, between respondents from rural versus urban areas. Of the respondents from rural areas who answered survey questions about mental health support barriers (n = 158), the fourth most common barrier was the fear of, or concern about, exposure to someone with COVID-19 (26.6%), followed by the difficulty of using remote services (24.1%). In urban areas, the cost of mental health supports (31.2%) was the fourth most common barrier, followed by the fear of or concern about exposure to someone with COVID-19 (28.1%) and the fear of, concern about, or experience with anti-Indigenous racism (27.3%). Here, the concern or experience with anti-Indigenous racism prevented more respondents from urban areas (27.3%) than those from rural areas (18.4%) from accessing mental health supports. Similarly, cost was more frequently cited as a barrier to mental health services in urban areas (31.2%) than in rural areas (22.2%).



Access to community and cultural supports

Of 1,168 survey respondents, 747 (64.0%) reported that they sought, or wanted to find, Indigenous community and cultural supports, such as Elders, ceremonies, on-the-land activities, or feasts, since the start of the COVID-19 pandemic, of which 566 (75.8%) identified as status and non-status First Nations people, 137 (18.3%) as Métis, and 33 (4.4%) as Inuit. Of those who sought cultural supports and reported about service access (*n* = 687), over half (387 respondents) reported that they were sometimes or always able to participate in such community supports, of which 295 (76.2%) identified as status and non-status First Nations people, 70 (18.1%) as Métis, and 16 (4.1%) as Inuit. A total of 672 respondents answered survey questions about barriers to community and cultural supports during the COVID-19 pandemic. Table 13 lists these barriers, stratified by Indigenous identity.

According to Table 13, the most to least frequently selected barriers to community and cultural supports for First Nations, Métis, or Inuit respondents include: COVID-19-related public health measures; fear of, or concern about, exposure to someone with COVID-19; difficulty in meeting Elders or Knowledge Keepers due to self-isolation requirements; inability to travel to ceremonies; and associated costs of supports. For Inuit respondents, the most frequently selected barrier was shared between COVID-19-related public health measures and the fear of, or concern about, exposure to someone with COVID-19, both of which were selected by 54.8% of respondents. The least selected barrier for Inuit respondents, other than the category "Other" (12.9%), was shared between the inability to travel to ceremonies and associated costs for supports, both of which were selected by 19.4% of respondents.

Among respondents who identified as an Indigenous identity other than First Nations, Métis, or Inuit, the most to least frequently selected barriers to community and cultural supports, aside from the category "Other"(66.7%), include: COVID-19-related public health measures (44.4%); fear of, or concern about, exposure to someone with COVID-19 (33.3%); inability to travel to ceremonies (33.3%); difficulty in meeting Elders or Knowledge Keepers due to self-isolation requirements (22.2%); and associated costs of supports (22.2%).

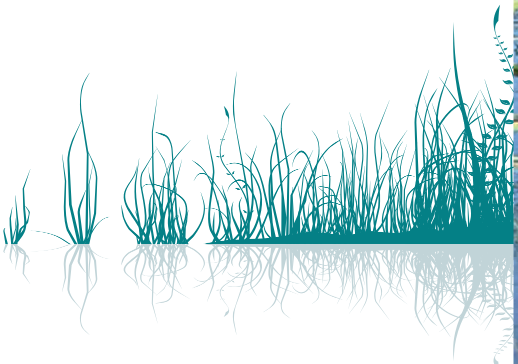


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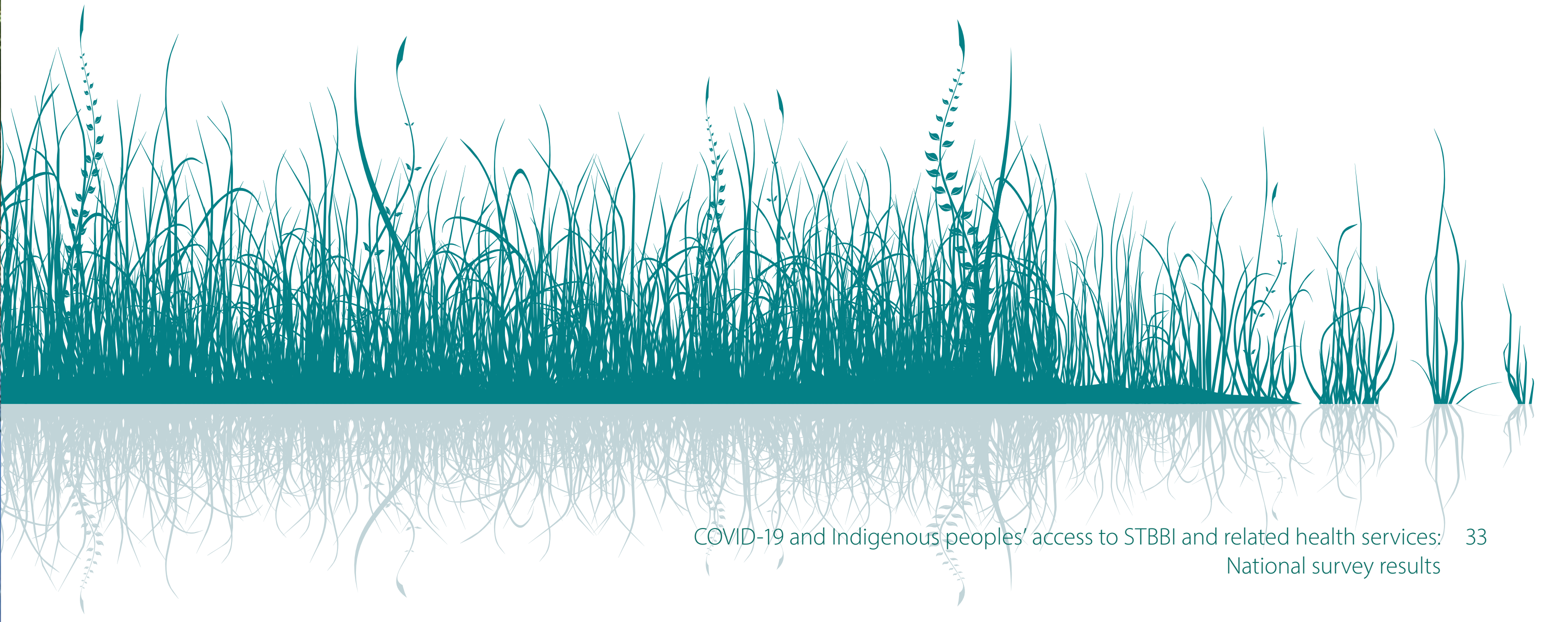
TABLE 13. BARRIERS TO COMMUNITY AND CULTURAL SUPPORTS DURING THE PANDEMIC, BY INDIGENOUS IDENTITY

Barriers to community and cultural supports	Status and non-status First Nations (*N* = 502)		Métis (*N* = 130)		Inuit (*N* = 31)		Other Indigenous identity (*N* = 9)		Proportion (%) of *N* = 672 responses
	n	%	*n*	%	*n*	%	*n*	%	
COVID-19-related public health measures restricted these supports	322	64.1	77	59.2	17	54.8	4	44.4	62.5
Fear of, or concern about exposure to someone with COVID-19	266	53.0	65	50.0	17	54.8	3	33.3	52.2
Difficulty meeting Elders or Knowledge Keepers due to self-isolation requirements	177	35.3	51	39.2	7	22.6	2	22.2	35.3
Unable to travel to a ceremony location	175	34.9	34	26.2	6	19.4	3	33.3	32.4
Cost	154	30.7	29	22.3	6	19.4	2	22.2	28.4
Other	85	16.9	30	23.1	4	12.9	6	66.7	18.6

Note: Table 13 reports data from respondents who wanted or tried to access these supports. It should be interpreted with caution because the number of respondents (*n*) is not balanced across Indigenous identity groups as well as the small number of Inuit and Métis respondents.



DISCUSSION AND FUTURE DIRECTIONS

The findings of this report shed light on how the COVID-19 pandemic affected First Nations people's, Inuit, and Métis people's access to STBBI and related health services. The barriers uncovered in this study may offer insight on how public health practitioners and decision makers might improve STBBI service accessibility. For instance, findings from Table 6 may trigger the development of strategies to promote and increase availability of STBBI prevention services and measures according to urban-based needs, and treatment and other community-based services according to rural-based needs. Additionally, the findings in Table 5 may suggest public health efforts are needed to make inclusive STBBI treatment and other community-based services, especially for female, two-spirit, or other gender non-conforming identity groups.

Moreover, the survey results consistently cited three main barriers to accessing to STBBI, HIV, and other STI prevention, testing, and treatment services, as well as mental health supports during the pandemic:

1. difficulty getting a referral or an appointment;
2. COVID-19-related public health measures restricting access; and
3. the unavailability of services when they were needed.

As such, these findings may also provoke further study into the current state of how STBBI or mental health services and supports may be accessed, such as through practitioner referrals for STBBI, HIV, or mental health appointments, access through primary care community clinics, etc. Studies may also evaluate the weight of consequential impacts to health care access and availability as a result of public health pandemic measures. These considerations are few of many to come out of this study which may be applied to inform further inquiry and public health practice.

Much of the survey findings are echoed in or brought forward from other NCCIH and NCCID knowledge products related to First Nations people, Inuit, and Métis people and STBBIs in Canada. In 2023, the NCCIH produced a background report to provide context for understanding the risk factors for and prevalence of STBBIs as they relate to Indigenous populations (NCCIH, 2024). In 2021-2022, the NCCIH and NCCID completed a qualitative study involving a series of interviews with First Nations, Inuit, and Métis STBBI service users, as well as focus groups with STBBI service providers and policy

and decision makers (hereafter referred to as the qualitative study). The same National Indigenous Advisory Committee who guided this current study also guided the qualitative study. The results from the interviews and focus groups from the qualitative study complement the findings in this report by providing depth and voice to how the COVID-19 pandemic affected the accessibility, availability, and delivery of STBBI health services for Indigenous populations in Canada (NCCIH & NCCID, 2024). There are many intersecting findings across the qualitative study and this report, including: Indigenous people's past and current experiences with STBBIs; reported experiences of racism and discrimination in accessing care; and the accessibility of STBBI prevention and testing services. These intersections may help to theorize, or understand, some of the key findings of this report. Each intersection is discussed below.

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Past and current experiences with STBBIs

According to the results of the survey, Chlamydia was the most common STBBI diagnosis received by survey respondents in the 12+ months prior to completing the survey, while syphilis was the least common (see Figure 1). The number of respondents who reported currently living with HIV was also low, at just 14 of 951 respondents (see Figure 2). These findings differ from what was found in the qualitative study (NCCIH & NCCID, 2024). STBBI service providers and policy-/decision-makers in the qualitative study discussed rising rates of both congenital syphilis and HIV during the pandemic. They noted how congenital syphilis was previously considered rare, and how rising rates of HIV had not been observed in decades (NCCIH & NCCID, 2024). PHAC (2022b) also identified rising rates of syphilis across Canada, particularly in the central provinces. The contrast between how syphilis rates are exhibited by the two studies – measured as low in the survey findings and discussed as high in the qualitative study – begets the question of why the findings differ and what other factors should be considered.

Stigma is one factor to consider when evaluating self-reported syphilis and HIV diagnoses. The NCCIH background report on STBBIs explains the role of stigma in preventing First Nations people, Inuit, and Métis people from coming forward with a STBBI to access STBBI treatment or care (NCCIH, 2024). This stigma is rooted in colonial ideologies that promote abnormality around non-heterosexual relationships and shame around sexual health and behaviour, thus targeting many forms of gender and sexuality (NCCIH, 2024). These colonial ideals have since manifested a sort of taboo around sexual health discussions – a taboo that was not present within Indigenous communities prior to colonialization – and therefore may have played a role in influencing survey respondents' decision to report their STBBI history or current status (Landy & Worthington, 2021). The issue of stigma was also recognized in the qualitative study, as STBBI service users spoke about stigma associated with STBBIs and substance use in the health care system (NCCIH & NCCID, 2024). While neither this study nor the qualitative study directly measured stigma among its participants, it is possible that varying degrees of stigma across the two study's populations contributed to differences in self-reported HIV and syphilis rates. Nevertheless, research is required into STBBI stigma to further break down barriers in STBBI reporting and identify measures to address and reduce stigma.

Experiences of racism and discrimination in accessing care

Anti-Indigenous racism and discrimination in health care systems was identified as a barrier to care by survey respondents across many service settings. For instance, anti-Indigenous racism came up as a barrier for 23 of 102 respondents (22.6%) when attempting to access STBBI prevention, testing, and treatment services (Table 7); for two of nine respondents (22.2%) attempting to access HIV-specific services (Table 9); for 14 of 47 respondents (29.8%) attempting to access STI-specific services (Table 11); and for 133 of 539 respondents (24.7%) attempting to access mental health supports (Table 12).

The qualitative study shares similar observations of racism and discrimination as barriers to health care, although provides some context which may be applied to help interpret the survey findings (NCCIH & NCCID, 2024). Interviews in the qualitative study with STBBI service users discussed how during the pandemic, "stigma and [the way] Indigenous people are treated in health care settings, [was] really amplified", and that more system-level changes are needed to eliminate racism and discrimination in care (Interview participant, as cited in NCCIH & NCCID, 2024). This explanation contextualizes anti-Indigenous racism in care as systemic, existing across health care settings generally. Moreover, some interview participants from smaller communities did not share experiences with anti-Indigenous racism when accessing STBBI care and rather described their experience in accessing their treatment centre as healing due to "healing with [their] people" and "healing at home" (Interview participant, as cited in NCCIH & NCCID, 2024). As such, some experiences of anti-Indigenous racism in the qualitative study appeared to be context-specific to where the STBBI care was received.

Current efforts are taking place across Canada to improve the cultural safety of health care environments (Brooks-Cleator et al., 2018). Together, the findings from the survey and qualitative study may serve as a reminder that approaches to addressing anti-Indigenous racism in health care cannot be uniform and may benefit from systems-level and community-specific strategies.

Access to STBBI treatment and care

This survey assessed respondents' access to STBBI services using "always", "sometimes", and "unable" to access variables. According to Table 3, a greater proportion of survey respondents reported that they were always or sometimes able to access select STBBI preventive services, including condoms or dental dams and information about safer sex, compared to not being able to access the service. STBBI information and education was the only preventative service in which the majority of survey respondents (53.3%) who wanted or tried to access the service were unable to during the pandemic. However, this is with the exception of PrEP or PEP medications, which had equal proportions of survey respondents who were either always or unable to access the medications during the pandemic (41.7%).

The qualitative study and the NCCIH background report echo the finding that STBBI information and education are reportedly difficult to access in public health spaces (NCCIH, 2024; NCCIH & NCCID, 2024). In the qualitative study, STBBI service users spoke about the need to increase STBBI education and awareness, explaining "HIV [and] STDs and STIs [aren't] talked about anymore. It's not brought up and it should be" (Interview participant, as cited in NCCIH & NCCID, 2024). Further, the NCCIH background report found that literature focusing on STBBIs in Indigenous communities also expresses the need for greater STBBI education and general awareness of STBBI prevention, testing, and care, using culturally appropriate methods (NCCIH, 2024; Landy & Worthington, 2021; Lydon-Hassen et al., 2022; Marsdin et al., 2023). For example, the NCCIH background report summarizes calls from the literature for STBBI education strategies that are specific to the needs of First Nations, Inuit, and Métis communities. Recommended strategies include Indigenous-led and youth-involved STBBI education and programs. However, there is a need to address two key barriers to enhancing access to culturally appropriate STBBI education programs in Indigenous communities across Canada – limited health care funding and infrastructure (Marsdin et al., 2023; NCCIH, 2024). In pairing the survey findings with what is known in the literature, the issue of accessing STBBI information and education may in fact be representative of a larger, ongoing public health issue in Canada, that is, the lack of STBBI information and education for First Nations, Inuit, and Métis populations.

The lack of STBBI education and awareness may help to explain the limited use of, or access to, other STBBI services among survey respondents. For instance, of the five STBBI testing services (HIV, hepatitis C, syphilis, self-testing or POCT, and other STI testing), STBBI self-testing or POCT had the largest proportion of respondents (51.2%, $n = 21$) who were unable to use the service despite wanting or trying to use it (Table 4). Survey respondents' interest in POCT is echoed in the findings from the qualitative study, where STBBI service providers spoke about the renewed uptake in self-testing kits for STBBIs during the pandemic, noting that these services were previously met with hesitation by clients (NCCIH & NCCID, 2024). The challenges faced by survey respondents in accessing self-testing or other POCT may be attributed to limited access to STBBI education and information directing clients to these testing services. This issue is discussed at length in the literature, pertaining specifically to the limited awareness surrounding POCT for HIV (see for example Gahagan et al., 2015). In a national action plan, Gahagan et al. (2015) discuss the challenges of limited public awareness of HIV testing and the strain this has on reducing transmission and connecting clients with timely care and treatment at the onset of a HIV diagnosis. Gahagan et al. (2015) explain how limited awareness is compounded by structural issues, such as "proximity to testing sites and availability of testing options such as anonymous testing or access to appropriate follow-up services" (p. 2).

Access to PrEP and PEP medications may also be affected by a lack of awareness, among other cost or health-related barriers. PrEP and PEP are highly effective in the prevention of HIV, yet over 40% (*n* = 10) of 24 survey respondents who wanted or tried to use PrEP or PEP were unable to do so during the pandemic. Literature suggests that cost is a common barrier to PrEP and PEP medications (Lydon-Hassen et al., 2022; Pico-Espinosa et al., 2023); however, cost was only reported by 15.7% of 102 respondents as a barrier to accessing STBBI prevention services and measures, collectively (Table 7). This survey also found that 74.3% of 1,181 respondents reported access to health care insurance coverage, including the First Nations and Inuit Non-Insured Health Benefits program[7] (NIHB), which covers expenses for PrEP and PEP medications. However, knowledge and awareness surrounding the NIHB and its coverage for PrEP and PEP may be limited. Other research investigating barriers to PrEP and PEP medications in Canada identifies associated costs and concerns about adverse effects of the medications, suggesting there may be a general lack of awareness about the qualities of PrEP and PEP medications, thereby also affecting access (Lydon-Hassen et al., 2022; Pico-Espinosa et al., 2023).

Alternatively, other factors may be affecting access to STBBI prevention, testing, and treatment services for First Nations people, Inuit, and Métis people, as well as mental health and cultural supports that have not been measured by the survey. For each table that explores the barriers to such services (see Tables 7, 9, and 11), the "other" category in the provided list consistently includes over 20% of recorded responses (up to 33.3% of responses for barriers to STBBI services generally). This study did not include an option for respondents to elaborate on what may constitute as "other." Moreover, the survey did not provide options for respondents to select barriers related to their knowledge of STBBI services, nor to assess their overall awareness of STBBI services. Future work is thus recommended to explore these unmeasured areas. Further research may explore how the results might have changed if survey respondents were given the option to select awareness-based barriers such as "did not know where to find the service I was looking for" or "did not know if the service I was looking for existed in my community", or the ability to elaborate on their answers. In any case, STBBI education and awareness in Indigenous communities remains an important issue, with ample opportunity for public health research, programs, and policy change.

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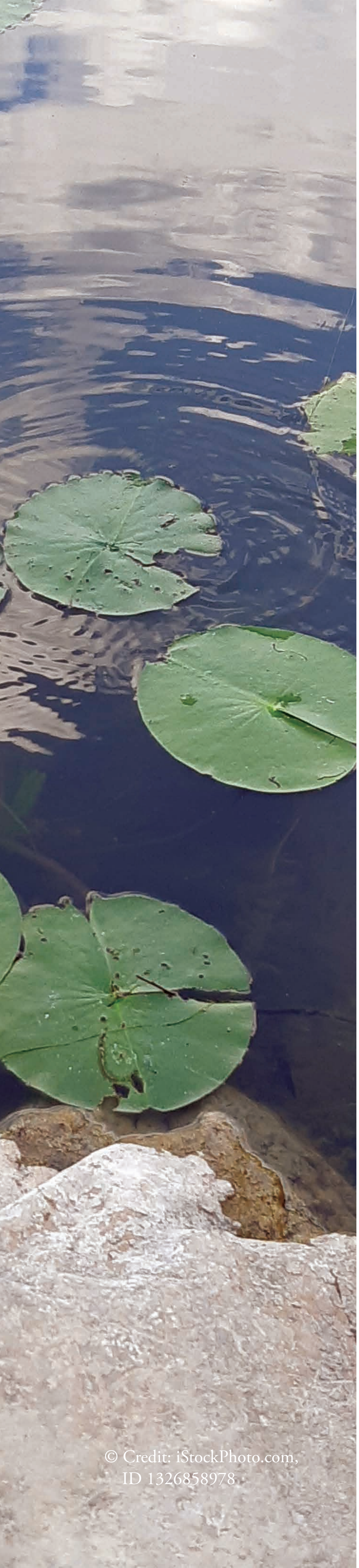
[7] The Non-Insured Health Benefits program (NIHB) is a health coverage program funded by Indigenous Services Canada for status First Nations and Inuit recognized under an Inuit land claim organization (Indigenous Services Canada, 2023).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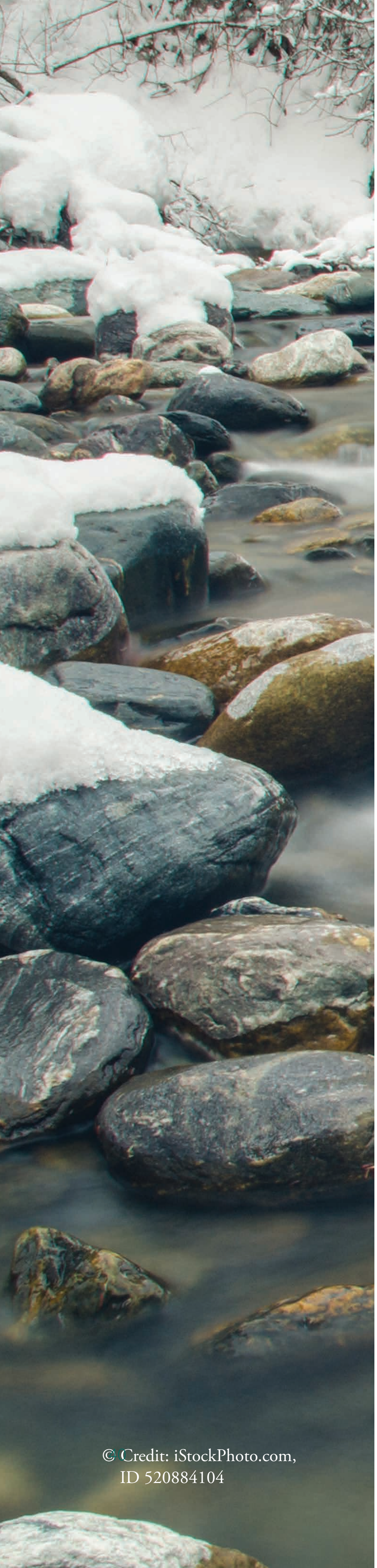
LIMITATIONS

The limitations of this study are threefold. First, this study hoped to recruit a representative sample of Indigenous Peoples of all sexual identities from across Canada; however, in referring to Table 1, responses were low and not representative of the target population across the strata (sexual identity, sexual orientation, Indigenous identity, geographic area, etc.). Sample sizes, particularly within strata, were small, therefore making it difficult to make valid cross-comparisons within and between strata, as well as generalize the findings to all Indigenous people in Canada that use or have used STBBI-related services. One possible variable affecting the small sample sizes could be the public health restrictions during the COVID-19 pandemic, which may have played a role in restricting the number of participants during sampling. As a result, caution must be exercised in interpreting and generalizing the findings.

Second, the study is limited with regards to potential selection and social desirability (response) biases. Because the survey was released virtually, participants without access to a computer or stable internet may have been less likely to participate. Also, the sensitive nature of some questions (e.g., substance use, adverse health conditions, etc.) may have caused some respondents to answer in a way that is viewed as “positive” or “favourable”, rather than responding with their true thoughts or experiences. This may have led to over-reporting of responses that are viewed as “desirable” to the study and under-reporting of responses that are deemed “less desirable” to the study, such as current status or experience with a STBBI.

Third, and lastly, it is important to note that based on the analysis undertaken for this study, a direct causal effect cannot be made regarding the attribution of the COVID-19 pandemic on respondents’ experiences with STBBI-related services.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CONCLUSION

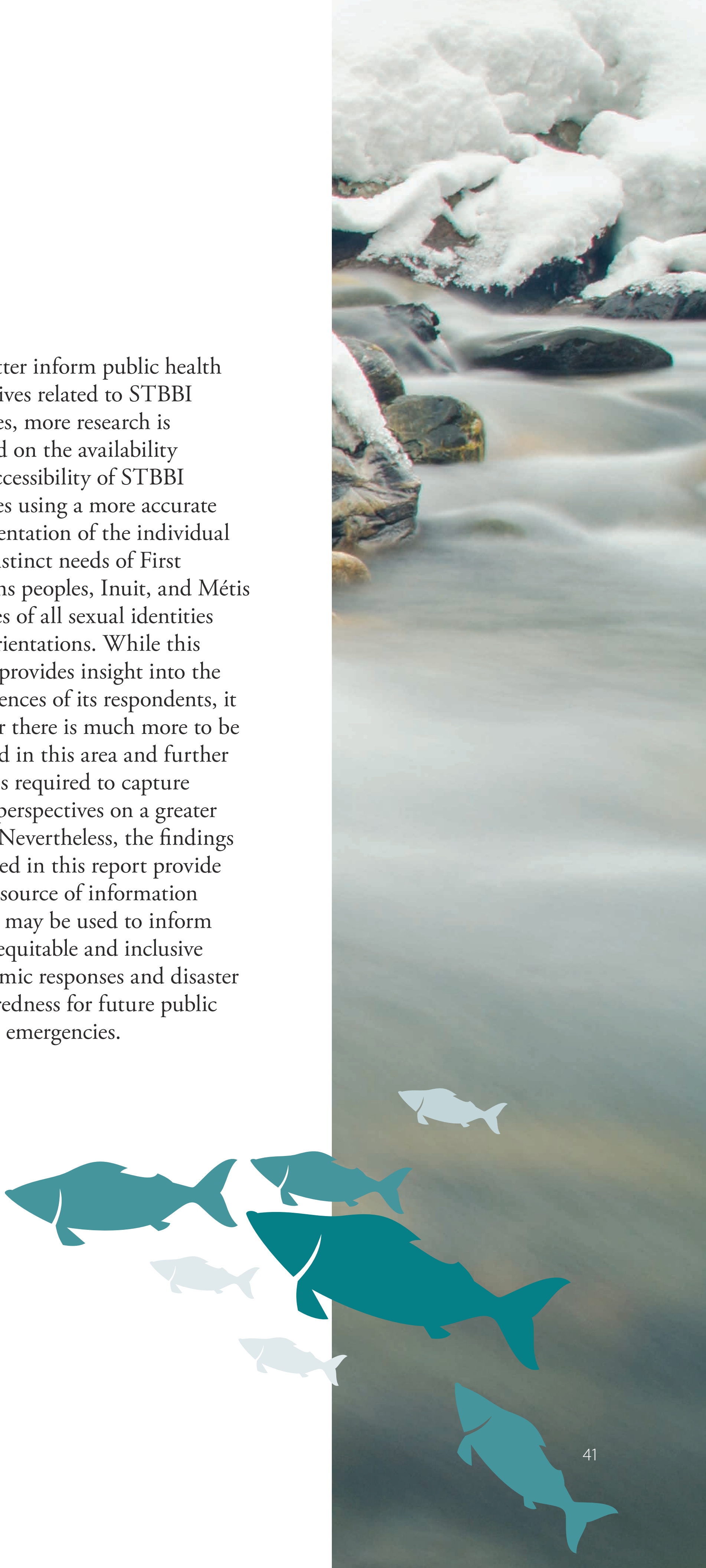
The findings in this study successfully inform the study's objectives of learning from the effects of the COVID-19 pandemic on access to STBBI and related health services for First Nations people, Inuit, and Métis people, as well as understanding how this access can be improved in the future. The survey consistently identified three main barriers that impaired access to STBBI, HIV, and other STI prevention, testing, and treatment services, as well as mental health supports during the pandemic:

1. difficulty getting a referral or an appointment;
2. COVID-19-related public health measures restricting access; and
3. the unavailability of services when they are needed.

For cultural supports, barriers prohibiting access also consisted of COVID-19-related public health measures, in addition to: the fear of, or concern about, exposure to someone with COVID-19; difficulty in meeting Elders or Knowledge Keepers due to self-isolation requirements; the inability to travel to ceremonies; and the associated costs of cultural supports. Other barriers, such as anti-Indigenous racism in care or a lack of STBBI information and education, are also identified as impeding factors to accessing STBBI services, which may also carry additional weight in influencing decisions to seek care or exercising awareness that services exist.

Additionally, the survey findings reveal the most sought out and accessible STBBI prevention, testing, treatment, and other community-based services that respondents accessed during the pandemic. Condoms and dental dams were the most sought out and accessible preventative service for respondents in general (Table 3) and for respondents stratified by geographic area (Table 6). For testing services, testing other than HIV, hepatitis C, syphilis, and self-testing/ POCT were the most sought out service for respondents in general (Table 4) and for respondents stratified by geographic area (Table 6). However, of those who sought each testing service, hepatitis C testing had the highest proportion of respondents reporting that it was always accessible (Table 4). For treatment and other community-based services, community services were the most sought for respondents in general (Table 5) and for respondents stratified by geographic area (Table 6), while counselling related to syphilis, hepatitis C, HIV, or other STBBI had the highest proportion of respondents reporting that the service was always accessible (Table 5). Overall, these findings may allude to which services may be prioritized or built upon to improve STBBI service accessibility for Indigenous people. If condoms and dental dams are accessible for survey respondents, perhaps testing resources, such as POCT materials, can be made available at similar locations or distribution centres. If counseling related to syphilis, hepatitis C, HIV, or other STBBIs is considered accessible by the survey respondents, perhaps STBBI education and information can be embedded in the services outreach. Opportunities for further research and/or to inform public health and decision-making practices within the scope of STBBI service access are embedded throughout this report.

To better inform public health initiatives related to STBBI services, more research is needed on the availability and accessibility of STBBI services using a more accurate representation of the individual and distinct needs of First Nations peoples, Inuit, and Métis peoples of all sexual identities and orientations. While this study provides insight into the experiences of its respondents, it is clear there is much more to be learned in this area and further work is required to capture these perspectives on a greater scale. Nevertheless, the findings explored in this report provide a rich source of information which may be used to inform more equitable and inclusive pandemic responses and disaster preparedness for future public health emergencies.



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