

This draft document is intended as a reference document within Foundry and YWHO to support service development and delivery. It is neither appropriate to or intended for publication.

For young people who identify as 2SLGBTQ

Tailored substance use services and issues related to accessing them

Rapid Evidence Review | 2021





Qualifier for Rapid Evidence Reviews

This report is a Rapid Evidence Review, i.e., an assessment of the evidence that has a shortened time frame and a specified scope as compared with a full systematic review. The goal is to provide accessible evidence in a timely and practical manner for busy decision makers. Rapid evidence reviews contain elements of comprehensive ("systematic") evidence reviews with modifications to processes such as timeline, literature searching, appraising and reporting.

In a rapid evidence review, the following modifications are typically made:

- The project timeline is short (weeks rather than months or years);
- One reviewer conducts the literature appraisal, rather than two or more reviewers;
- The reviewer queries one database (MEDLINE/PubMed), limited to English language articles only, with a search focused on recent publications, e.g., past 5 years; and
- The reviewer does not conduct a formal quality assessment of included materials.

Note that rapid reviews aim to accurately report what appears in the literature in an unbiased way. To this end, the information is uncensored and, to as great an extent possible, does not reflect interpretations flowing from author's or reviewers' opinions.

Production of this document has been made possible through a financial contribution from Health Canada, as part of the Substance Use and Addiction Program funding. The views expressed herein do not necessarily represent the views of Health Canada

This document was created by Foundry (Providence Health Care) in partnership with Youth Wellness Hubs Ontario.

Content may not be reproduced, modified or shared in whole or in part, by photocopy or other eans, without the prior written permission of Providence Health Care Society, carrying on activities under the name Foundry.

Foundry and Youth Wellness Hubs Ontario would like to acknowledge, with much gratitude, that our work takes place on the traditional and unceded territories of many First Nations and Métis peoples across the two provinces in which our initiatives operate, Ontario and British Columbia.

We would like to thank the young people advising the work of this partnership who provided invaluable feedback and input into the rapid review process and the final content of this document

Executive Summary

Background

There is a growing body of literature on the characteristics of the population of sexual minority youth. Statistics Canada 2015 data reported that 1.7% of boys and young men ages 15-24 identified as being gay and 1.9% identified as bisexual. For girls and women, the respective prevalence rates were 1.8% and 6.2%. Similarly, a large 2019 USA survey of grades 9-12 students reported that 3% self-identified as being gay or lesbian and 9% as bisexual. Unfortunately, these young people are more likely to be bullied, excluded or assaulted at school and less likely to have access to family support.

Report objective

To assess the evidence related to substance use (SU) prevention and treatment services for young people (approximately ages 12-24) who identify as two-spirit, lesbian, gay, bisexual, trans or queer (2SLGBTQ) and issues around access to these services.

Methods

An Ovid MEDLINE literature search and a grey literature search were run on October 27, 2020. One author assessed the material and prepared the report.

Findings

Prevention

In terms of SU prevention, four reviews and five primary studies contributed information, primarily American, with a list of possible preventive initiatives below.

Prevention suggestions	Details
Parents and caregivers	
Provide family support and affirmation	Move beyond ignoring or tolerating. This may involve open communication, inviting a teen's LGBTQ friends to join family activities, taking a teen to LGBTQ events, etc.
Educators and other youth-serving professionals	
Ensure safe schools	Important because harassment by peers drives SU; schools where LGBTQ students are treated with respect can help close the SU gap.
Ensure caring teachers and adults	Besides providing individual support to LGBTQ teens, supportive adults can shape a school climate where anti-LGBTQ harassment is not tolerated.
Create an LGBTQ-affirming environment	Reduce gender separation and stereotypes, highlight gender and sexual diversity in lessons and use LGBTQ-inclusive language.
Address bias and bullying	Speak up against anti-LGBTQ bias.
Support LGBTQ teens directly	Become familiar with the wide range of terms used to describe sexual orientations and gender identities and build trust and rapport with teens who are LGBTQ.
Support school-based gay-straight alliance	Consider helping students organize a school-based gay-straight alliance or get involved in advising an existing one.
Provide teaching about SU	Convey key information and messages about alcohol and other drugs.
Policy-makers and advocates	
Oppose zero-tolerance policies	Do not support unfair sanctions for teens who break anti-drug rules—"zero-tolerance" policies and other harsh, punishment-oriented practices are biased against LGBTQ teens.
Expand services addressing LGBTQ youth homelessness	Communities critically need programs that can prevent homelessness, safely shelter LGBTQ teens and young adults and promote family reconciliation.
Fund prevention research	Explore the increased risk of SU and how to prevent it, and develop prevention programs

Treatment

There was less published information about SU treatment for young people who are members of sexual minorities. A single-author narrative review tailored for pediatricians discussed screening for SU using well-established tools for youth (e.g., CRAFFT or AUDIT) as well as commonly used types of therapy delivered in a welcoming and non-judgmental environment, e.g., motivational enhancement therapy and cognitive behavioural therapy. A second review noted that sexual minorities have been overlooked in SU prevention and treatment intervention research, perhaps due to SU stigma and homophobia. Online materials cover resources such as Ontario clinics providing medical transition support services to young people in sexual minorities, as well as the recently established Trans Care BC program. Finally, a pilot study has successfully shown the feasibility of conducting a larger randomized controlled trial (RCT) of a web-based game intervention aimed at improving help-seeking and coping among sexual minority youth, with a number of outcomes to be tracked including impact on SU.

Access issues

There was no information on issues accessing services, aside from the observation that sexual minority clients generally prefer to seek alternative forms of treatment, especially if they do not closely identify with mainstream heterosexual beliefs.

Summary

This report identified evidence related to SU prevention and treatment services for young people who identify as 2SLGBTQ. A number of studies and sources report on populations of sexual minority youth, although the focus is on documenting the size and nature of these populations. Attention to prevention of SU has identified a number of possible approaches with the dominant theme being increased acceptance and support. This carries through to treatment, although not much material on tailored treatment was found, and there was no information on specific issues with accessing preventive or treatment services.

Acronyms and Abbreviations

2SLGBTQ two-spirit, lesbian, gay, bisexual, trans, gender diverse and queer

BCAHS British Columbia Adolescent Health Survey

CADTH Canadian Agency for Drugs and Technologies in Health

CMHA Canadian Mental Health Association

HRCF Human Rights Campaign Foundation

Partnership for Drug-Free Kids **PDFK**

RCT randomized controlled trial

screening, brief Intervention and referral to treatment **SBIRT**

SU substance use

SUD substance use disorder

Contents

Qı	ualifier for Rapid Evidence Reviews	2
E	xecutive Summary	3
A	cronyms and Abbreviations	6
1.	Background	8
	1.1. Definitions	8
	1.1.1. Rainbow Health Ontario (2020)	8
	1.1.2. Statistics Canada (2019)	9
	1.2. Population information	9
	1.3. SU in young people who are 2SLGBTQ	10
	1.4. Risk factors for SU for young people who are LGBTQ	11
2.	Objective of this Report	12
3.	Methods	12
4.	Results	13
	4.1. SU prevention initiatives in young people who are 2SLGBTQ	13
	4.1.1. Reviews	13
	4.1.2. Primary studies	14
	4.2. Treatment initiatives in young people who are 2SLGBTQ	16
	4.2.1. Reviews	16
	4.2.2. Web-based information	16
	4.2.3. Primary (pilot) study	17
	4.3. Issues accessing SU initiatives for young people who are 2SLGBTQ	17
5.	Summary	18
6.	References	19
Aı	ppendix A: MEDLINE Search Strategy	21

1. Background

This report is focused on people who are young (ages 12–24) and self-describe as 2SLGBTQ (two-spirit, lesbian, gay, bisexual, trans, gender diverse and queer).1

1.1. Definitions

1.1.1. Rainbow Health Ontario (2020)

Terms are defined in Table 1.

Table 1: 2SLGBTQ definitions glossary (Rainbow Health Ontario 2020)

TERM	DEFINITION
Bisexual	A person who is emotionally, physically, spiritually and/or sexually attracted to people of more than one gender, though not necessarily at the same time.
Cis/cis-gender	A person's gender identity is in line with or matches the sex they were assigned at birth.
Gay	A person whose enduring physical, romantic, spiritual, emotional and/or sexual attractions are to people of the same gender. The word can refer to men or women, although some women prefer lesbian. Sometimes used as an umbrella term for the LGBTQ community.
Gender	Gender is based on the expectations and stereotypes about behaviours, actions and roles linked to being a "man" or "woman" within a particular culture or society. The social norms related to gender can vary depending on the culture and can change over time.
Gender identity	A person's internal and individual experience of gender, i.e., sense of being a woman, a man, both, neither or anywhere along the gender spectrum. A person's gender identity may be the same as, or different from, their birth-assigned sex and it is fundamentally different from, and not related to, their sexual orientation.
Lesbian	A woman who is emotionally, physically, spiritually and/or sexually attracted to women.
Queer	Formerly a derogatory term, some members of the LGBT community have embraced and reinvented this term as a positive and proud political identifier when speaking among and about themselves.
Questioning	A period where a person explores their own sexual and/or gender identity, reflecting on such things as upbringing, expectations and inner landscape. The person may not be certain if they are gay, lesbian, bisexual or trans and may be trying to figure out how to identify themselves.
Trans/transgender	Umbrella terms that describe people with diverse gender identities and gender expressions that do not conform to stereotypical ideas about what it means to be a girl/woman or boy/man in society. "Trans" can mean transcending beyond, existing between or crossing over the gender spectrum. It is not limited to people who identify as transgender, transsexual or gender non-conforming.
Two-spirit	A term used by Indigenous People to describe, from a cultural perspective, people who are gay, lesbian, bisexual, trans or intersex. For some, the term two-spirit describes a societal and spiritual role that certain people played within traditional societies. They were often mediators and keepers of certain ceremonies. They transcended accepted roles of men and women and filled a role as an established middle gender.

Definitions of 2SLGBTQ vary—this one was taken from the City of Vancouver website: vancouver.ca/people-programs/lgbtqcommunity.aspx. Likewise, acronyms vary but 2SLGBTQ is used in this report except when authors use a specific term or acronym and when direct quotes are used.

1.1.2. Statistics Canada (2019)

Sexual orientation in research has been assessed on the basis of self identity, sexual behaviour or sexual attraction (Gilmour 2019):

- Sexual identity refers to an individual's social identity, such as whether they consider themselves to be heterosexual, homosexual or bisexual.
- Sexual behaviour denotes whether sexual partners are of the same or opposite sex.
- Sexual attraction refers to feelings, independent of behaviours.

1.2. Population information

Statistics Canada published Sexual orientation and complete mental health in November 2019, based on the concept of sexual identity, with categories being lesbian, gay, bisexual or heterosexual (Gilmour 2019). Data came from the 2015 Canadian Community Health Survey of people aged 15+? SU was not separately reported but was subsumed under "complete mental health." Data for four age groups were reported, including 15–24 years (Table 2).

Without consideration of age group, the report's overall findings were: (a) gay men had significantly lower unadjusted odds of complete mental health, although this association was no longer significant when controlled for sociodemographic factors (income and marital status) and chronic illness; (b) the likelihood of complete mental health was not significantly different for lesbians than for heterosexual women; and (c) both bisexual men and bisexual women had significantly lower odds of complete mental health.

Table 2: Canadian population 2015 based on sexual orientation (Gilmour 2019)

Boys and Men Aged 15 to 24 (%)		
Heterosexual	2,045,000 (96.4%)	
Gay	35,000 (1.7%)	
Bisexual	40,800 (1.9%)	
Girls and Women Aged 15 to 24 (%)		
Heterosexual	1,745,000 (92%)	
Lesbian	33,900 (1.8%)	
Bisexual	117, 600 (6.2%)	

Excluded from the survey were people living in the Territories: Indigenous settlements; fulltime members of the Canadian Armed Forces; youth aged 12 to 17 living in foster homes; people in institutions; and people living in several health regions in northern Quebec. These groups made up <3% of the surveyed population.

In the USA, the Youth Risk Behavior Surveillance System, the country's largest public health surveillance system, collects youth health behavior data to help monitor the effectiveness of public health interventions designed to promote adolescent health (Underwood et al 2020). Students in grades 9-12 are surveyed and in 2019, about 14,000 questionnaires were completed in 136 schools. In this survey, 84% of students self-identified as heterosexual, 3% as gay or lesbian, 9% as bisexual and 5% said they were not sure of their sexual identity. Also, 52% of students reported sexual contact, of which 87% were with only the opposite sex, 4% were with only the same sex and 10% were with both sexes.

1.3. SU in young people who are 2SLGBTQ

In teens, alcohol, marijuana and prescription drugs are the substances most likely to be tried, while other drugs (hallucinogens, opiates and "club drugs" like ecstasy and methamphetamine) are less common (HRCF 2016).

Many people begin using alcohol and drugs in adolescence, with 20% of adults with a substance use disorder (SUD) having started before age 20; adolescence and young adulthood are also periods of identity exploration and consolidation, including sexual orientation and gender identity (Kidd et al 2018).

Young people who identify as sexual and gender minorities are twice as likely to be bullied, excluded or assaulted at school, and they are 40% less likely to have an adult in their family to whom they can turn (HRCF 2016). Lack of family support may be a salient risk factor, as this population reports lower levels of parental closeness and higher rates of abuse and homelessness versus heterosexual youth (Schuler et al 2018). These young people are at significantly higher risk for SU than are their heterosexual peers (Kidd et al 2018).

A meta-analysis of 18 studies reported that adolescents (mean age in the included studies was 18 or less) who are 2SLGBTO had the following odds for SU compared to heterosexuals: 1.3 times for heavy alcohol use, 1.6 times for marijuana, 2.9 times for injection drugs and 3.3 times for cocaine (Marshal et al 2008). Also, versus young people who are heterosexual, 2SLGBTQ youth have markedly increased odds of lifetime SU (i.e., alcohol, tobacco, marijuana and other drug use) in the range of two to six times³ (Coulter et al 2019a).

The same is true for mental health problems and violence victimization with increased odds versus heterosexual youth for mental health problems of 82% to 317%, and violence victimization (school victimization, physical abuse, sexual abuse) of 20% to 280% (Coulter et al 2019a).

Sex confers greater risk for SU, with 2SLGBTQ females being at heightened risk. Young people who are bisexual and those with both same-sex and other-sex attractions are at greater risk for SU disparities compared to monosexual youth (e.g., heterosexual, gay and lesbian) and those with other-sex or same-sex attractions (Mereish 2019).

In a study using data from the 2013 British Columbia Adolescent Health Survey (BCAHS),4 with some data updated in 2018, the authors noted that although SU is not always a problem, research has shown that harmful SU behaviours such as heavy drinking among teens have been linked to academic, physical and social problems. Further, growing evidence indicates that disparities in SU behaviours are widening for some 2SLGBTQ young people (Watson et al 2020).

1.4. Risk factors for SU for young people who are LGBTQ

The disparities experienced by this population have been explained by the "minority stress theory" which suggests that stressors shape negative mental health outcomes and associated coping behaviours, including SU. Minority stress theory identifies "proximal stressors" (i.e., intrapersonal such as self-stigma and expectations of rejection) and "distal stressors" (i.e., interpersonal relationships and discrimination) (Felner et al 2019). The realities of social life may be added factors, e.g., the ubiquitous availability of substances within 2SLGBTQ social settings; differences in SU norms (more tolerance of use); and a perception of lower risk associated with SU by this population (Jun et al 2019).

The research on risk factors for SU (excluding tobacco) in the LGBTQ population aged under 25 was reviewed by Kidd et al (2019). Main points:

- The review covered 97 studies published between 2013 and 2017 that mainly focused on individual-level minority stress risk factors, particularly stigma.
- Minority stress predictors dominated the risk literature, i.e., 36% of the included articles examined minority stress as an SU predictor.
- Enacted stigma (e.g., assault, homophobia, discrimination) and anti-LGBTQ policies were directly associated with overall SU and adverse SU-related outcomes such as family conflict, car accidents and legal consequences.
- School-based victimization was associated with heavier and more frequent SU-related consequences, partially explained by differences in peers' SU norms.

The BCAHS sample included all grade 7-12 classrooms across the province in the 56 (of 59) participating school districts, stratified by grade and region, from which classrooms were randomly sampled. Hard copy surveys were administered by public health nurses and nursing students during class time. The sample included 2,684 sexual minority students from 274 BC schools, which represents an estimated provincial population of 24,624 students who self-identified on the survey as lesbian, gay, bisexual, mostly homosexual or mostly heterosexual.

2. Objective of this Report

This report is specific to young people (generally ages 12-24) who identify as 2SLGBTQ and who participate in SU. Of interest are SU services tailored for this group and issues around access to the services. To guide this report, the population, interventions, comparators and outcomes (PICO) were defined in advance (Table 3).

Table 3: Project PICO (Population, Interventions, Comparators and Outcomes)

Population	Young people aged 12–24 who identify as 2SLGBTQ and who participate in SU
Interventions	(a) Tailored SU services(b) Issues related to access to SU services
Comparators	Not applicable
Outcomes	Any
Search parameters	Ovid MEDLINE—English language, 2016 forward; grey literature (primarily via CADTH <i>Grey Matters</i>); and selective review of bibliographies

3. Methods

An experienced health information specialist used the PICO guidance to design an Ovid MEDLINE literature search that was run on October 27, 2020. The search strategy (Appendix B) used the National Library of Medicine's MeSH (Medical Subject Headings) controlled vocabulary, limited to the English language from 2016 forward in order to capture the most recent evidence. A structured grey literature search sought additional materials from 2016 forward using the Canadian Agency for Drugs and Technologies in Health (CADTH) Grey Matters checklist. One author assessed the material and prepared the report.

CADTH Grey Matters covers government information and reports that not published commercially and that may be $in accessible\ via\ bibliographic\ databases:\ cadth. ca/sites/default/files/is/Grey\% 20 Matters_EN-2019. docestible\ via\ bibliographic\ databases:\ cadth. ca/sites/default/files/is/Grey\% 2$

4. Results

4.1. SU prevention initiatives in young people who are 2SLGBTQ

4.1.1. Reviews

- Kidd et al 2018: Regarding prevention of excessive alcohol and drug use, beneficial factors were higher educational attainment, school engagement, earlier selfidentification and adaptive personality traits, e.g., being ambitious, open to new experiences and less narcissistic. Connection to the sexual minority community was protective in one included study, although other studies found no association. Overall, the review's findings suggested that individual coping strategies and institutional policies and programs that promote acceptance of young LGBTQ people can protect against risky SU, with peer and parental support also partially mitigating this risk.
- Aromin 2016 and also Mereish 2019: Both reviews noted that school-based initiatives can provide benefits for sexual minority teens, such as overall student engagement in school, school-level organizations focused on sexual minority issues, affirmative school climates in the local jurisdictions and state- or federal-level inclusive policies and legislation.
- **Human Rights Campaign Foundation & Partnership for Drug-Free Kids 2016:** These USA organizations (Washington DC and New York) produced a review document called Preventing substance abuse among LGBTQ teens. Suggestions were offered for various stakeholders including parents and caregivers, educators and other youth-serving professionals, and policy-makers and advocates (Table 4 on page 14).

In addition, a report was prepared for Children's Aid Society of Toronto on the health impacts of parental support for trans youth aged 16-24 (Trans PULSE 2012). Survey data were collected in 2009-2010 from 84 trans youth who had socially transitioned or had begun to. Results showed that parental support of youth's gender identity and expression was directly associated with how trans youth rated their health and general well-being.

The report authors noted that, as the experience of having a child come out as trans can be overwhelming, there is a need for parents to find adequate support for themselves so they can provide the strong support that their children need, e.g., a non-judgmental counsellor and/or peer support from other parents of trans youth, online or in person. "Our data indicate that it is parents and caregivers who provide the foundation for their children's health and well-being with their support. Therefore, policy-makers and service providers need to ensure effective services are available directly for parents and caregivers of trans youth."

Table 4: SU prevention suggestions for LGBTQ teens (HRCF & PDFK 2016)

Prevention suggestions	Details
Parents and caregivers	
Provide family support and affirmation	Family support for sexual orientation, gender identity and gender expression is one of the primary influences on SU—move beyond ignoring or tolerating. This may involve open communication, inviting a teen's LGBTQ friends or partners to join family activities, taking a teen to LGBTQ events and appreciating clothing or hairstyle choices that might not be gender-typical.
Educators and other youth-serving professionals	
Ensure safe schools	Important because harassment by peers drives SU; schools where LGBTQ students are treated with respect can help close the SU gap.
Ensure caring teachers and adults	Besides providing individual support to LGBTQ teens, supportive adults can shape a school climate where anti-LGBTQ harassment is not tolerated.
Create an LGBTQ-affirming environment	Reduce gender separation and stereotypes, highlight gender and sexual diversity in lessons and use LGBTQ-inclusive language.
Address bias and bullying	Speak up against anti-LGBTQ bias.
Support LGBTQ teens directly	Become familiar with the wide range of terms used to describe sexual orientations and gender identities and build trust and rapport with teens who are LGBTQ.
Support school-based gay-straight alliance	Consider helping students organize a school-based gay-straight alliance or get involved in advising an existing one.
Provide teaching about SU	Convey key information and messages about alcohol and other drugs.
Policy-makers and advocates	
Oppose zero-tolerance policies	Do not support unfair sanctions for teens who break anti-drug rules—"zero-tolerance" policies and other harsh, punishment-oriented practices are biased against LGBTQ teens, leading to a downward spiral rather than a path to recovery.
Expand services addressing LGBTQ youth homelessness	The trauma of homelessness is a major risk factor for SU—communities critically need programs that can prevent homelessness, safely shelter LGBTQ teens and young adults and promote family reconciliation.
Fund prevention-oriented research	Explore what causes the increased risk of SU for LGBTQ teens and how to prevent it, and develop and rigorously test prevention programs tailored to LGBTQ teens.

NOTE: Using data from the 2015 USA National Youth Risk Behavior Survey (n=15,524), Caputi et al (2018) observed that bisexual females reported SU rates about 50% higher than their peers, suggesting this group should be prioritized for prevention maneuvers. The findings and suggestions related to bisexual females and SU were echoed by Talley et al (2019).

4.1.2. Primary studies

Five studies explored some aspect of SU prevention in sexual minority youth (Table 5 on page 15). In short, these studies showed that education and a supportive family and/or community (e.g., LGBTQ resources) led to enhanced coping skills as well as lower rates of SU.

Table 5: Studies of SU preventive initiatives in sexual minority youth

Lead author (year); location	Study objective	Included population	Description of the initiative	Results
Schwinn (2015); New York	Via an RCT, to test the efficacy of tailored intervention content on SU and associated risk factors among sexual-minority youth	236 LGBTQ youth recruited nationally via FB; mean age 16 years; White 62%	3-session online intervention included interactive games, role-playing and writing activities covering identifying and managing stress, making decisions and drug use rates and refusal skills. Sessions took ~15 minutes and mean time to complete the intervention per student was 4 weeks.	At 3-month follow-up, versus controls, intervention-arm youth reported less stress; reduced peer drug use; lower rates of past 30-day SU; and higher coping, problem solving and drug-use refusal skills. (NOTE: A follow-up RCT is underway to report in 2023, n=1,216, registered as NCT01813123.)
Gower (2018); Minnesota Also Eisenberg (2017)—same research group	To identify modifiable protective factors for sexual minority teens to inform efforts to eliminate disparities in depression, suicidality and SU	2,168 teens grades 9 (59%) and 11 (41%) who identified as transgender or gender diverse (TGD); birth-assigned sex = male 32%; White 59%	Secondary data analysis of a 2016 state survey (the MSS) examined associations between 8 protective factors (connectedness to parents, adult relatives, friends, adults in the community and teachers; youth development opportunities; and feeling safe in the community and at schools) and depression, suicidality and SU (alcohol, binge drinking, marijuana, nicotine).	Each protective factor was associated with lower odds of emotional distress and SU. When protective factors were bundled, parent connectedness was protective for all measures. Feeling safe at school and connected to adults in one's community protected against depression and suicidality; teacher connectedness buffered SU risk.
Gamarel (2019); Michigan	To examine whether resilience resources (community support, LGBTQ resources) were associated with SU rates	720 young sexual minority men; mean age 21 years; 50% self-identified as Black, 66% self-identified as gay	Data were drawn from a survey on structural changes and exposure to HIV conducted in 7 large USA cities. Participants were asked about availability and satisfaction with community resources and LGBTQ resources; SU included alcohol, marijuana, other drugs.	Findings supported the protective effects of resilience resources for young sexual minority men and highlighted the importance of ensuring availability of community resources to meet the needs of sexual minority youth.
Watson (2020); BC data	To understand how environmental factors (e.g., school and community climate) may be associated with SU risk	2,678 sexual minority teens	Assessed lifetime SU (alcohol, illegal drugs, marijuana, tobacco, etc.) and community-level predictors (community and school LGBTQ supportiveness) using data from the BC Adolescent Health Survey and community-level data from LGBTQ-specific environments.	Sexual minority adolescents living in communities with more LGBTQ supports (e.g., Pride events and other LGBTQ-related events) had lower odds of lifetime illegal SU versus their counterparts living in communities with fewer LGBTQ supports.

Key: FB = Facebook; LGBTQ = lesbian, gay, bisexual, trans, queer; MSS = Minnesota Student Survey; RCT = randomized controlled trial; SU = substance use; TGD = transgender or gender diverse 4.2Treatment initiatives in young people who are 2SLGBTQ

4.2. Treatment initiatives in young people who are 2SLGBTQ

Scant information was available about SU treatment for young people who identify as 2SLGBTQ. Included below is information from two reviews, a web-based resource and a small pilot study.

4.2.1. Reviews

- Aromin 2016: This single author narrative review was developed for pediatricians. It promoted some widely used SU screening tools (CRAFFT or AUDIT) for young patient populations, including sexual minorities. Commonly used types of therapy were also suggested, delivered in a welcoming and non-judgmental environment: (a) screening, brief intervention and referral to treatment (SBIRT) as part of routine examination to identify those needing targeted assessment and treatment; (b) motivational enhancement therapy, alone or in combination with cognitive behavioural therapy and relapse prevention and family therapy; and (c) traditional programs like Alcoholics Anonymous where there is a 12-step program for teens that may need modification for sexual minority patients.
- Blume 2016: Another single author narrative review (not specific to youth) noted that people in sexual minorities have been overlooked in SU prevention and treatment intervention research, perhaps due to SU stigma and homophobia. It was noted that sexual minority clients generally prefer to seek alternative, rather than mainstream, forms of treatment, especially if they do not closely identify with mainstream heterosexual beliefs. An example of an adapted mainstream treatment program was provided, Real Men Are Safe, a group-based program that emphasizes motivational enhancement, didactics and skills training.

4.2.2. Web-based information

The Canadian Mental Health Association (CMHA) has an online resource called Mental health services for gender-diverse and sexual-minority youth, focused on Ontario-based supports and resources for youth and their families. Two Ontario clinics provide medical transition support services to youth including the Transgender Youth Clinic at Toronto's

⁶ It was noted that for LGBT youth who are nondisclosed, who are unsure of their identity or who have concerns about adverse family or peer reactions to issues of sexual orientation or gender that cannot be disentangled from SU issues, a clinician must weigh these factors carefully in the treatment plan, bearing in mind the ethical and legal guidelines regarding privileges of confidentiality. Also, "for patients who have entrenched drug use problems and poor insight or motivation for seeking care, leverage for treatment from external sources, such as protective agencies. Youth Service Bureaus, case managers, or probation may be necessary" (Aromin 2016 p. 1065).

ontario.cmha.ca/documents/mental-health-services-for-gender-diverse-and-sexual-minority-youth/

SickKids Hospital (available at: sickkids.ca/AdolescentMedicine/What-We-Do/Programs/ Transgender-Youth-Clinic/index.html) and the Gender Diversity Clinic in Ottawa at the Children's Hospital of Eastern Ontario (available at: www.cheo.on.ca/en/clinics-servicesprograms/gender-diversity-clinic.aspx). A number of other resources are listed as well.

The BC Provincial Health Services Authority's Trans Care BC program website lists resources for transgender services for patients and professionals, including supports for family and friends, information for schools and peer and professional support: bcchildrens.ca/health-info/coping-support/gender-resources. The 2019–2020 annual report includes information for providers caring for people who are 2SLGBTQ, such as detail about in-person training, practice support tools and collaborative activities with Foundry (Trans Care BC 2020).

4.2.3. Primary (pilot) study

Coulter et al 2019b (clinical trial NCT03501264): This pilot RCT was designed to assess the feasibility of conducting a larger RCT of a web-based game intervention aimed at improving help-seeking and coping among sexual minority youth. Enrolled in the feasibility pilot were 240 LGBTQ youth aged 14-18 years (52% gay or lesbian, 27% bisexual, 24% queer and 12% another non-heterosexual identity). The intervention is a computer-based role-playing game with three primary components: (a) encouraging helpseeking behaviors; (b) encouraging use of productive coping; and (c) raising awareness of web-based resources. Young people in the control arm received only a list of resources.

Planned outcomes of interest in the larger RCT include help-seeking intentions, selfefficacy and behaviors; productive coping strategies and coping flexibility; knowledge and use of web-based resources; bullying and cyberbullying victimization; loneliness, mental health issues, SU (alcohol, cigarettes and marijuana); and internalized sexual and gender minority stigma.

Regarding results, this pilot study showed a study is feasible, with the next step being implementation of a larger RCT to determine impact. (It is unclear whether the study is underway as the last study update at clinicaltrials.gov was in October 2019).

4.3. Issues accessing SU initiatives for young people who are 2SLGBTQ

No specific information on this topic was found, aside from the comment that sexual minority clients generally prefer to seek alternative forms of treatment, especially if they do not closely identify with mainstream heterosexual beliefs (Blume et al 2016).

5. Summary

This report assessed the evidence related to SU prevention and treatment services and issues around access to these services for young people who identify as 2SLGBTQ.

- A number of recent studies and sources reported on populations of sexual minority youth, although it appears to be "early days" as the focus is on documenting the size and nature of these populations rather than SU prevention and treatment services.
- Attention to prevention of SU in young people who are members of sexual minorities has identified a number of possible approaches. Within families, schools and the larger community, the dominant theme is acceptance and support. Examples are strategies to: prevent/manage harassment, bullying and bias; reduce gender separation and stereotypes; and provide support to individuals and groups. Positive initiatives emphasize education, supportive school environments, gender and sexual diversity in language and activities and atmospheres of respect.
- This paradigm carries through to treatment, although not much material on tailored treatment was found.
- There was no information on specific issues related to accessing prevention or treatment services, aside from a comment that people of sexual minorities may prefer alternative forms of treatment, especially if they do not closely identify with mainstream heterosexual beliefs.
- Limited information was found about co-design of services with young people who identify as 2SLGBTQ. As well, future work is needed to prioritize the youth voice in research, practice design and policy.
- In addition to the SU prevention suggestions outlined, youth input suggests future work is needed to understand the importance of: (a) respecting pronouns and preferred names; and (b) addressing specific challenges for transgender students in gym class/athletics regarding safe changing facilities and who can join school sports teams.

6. References

Aromin RA Jr. Substance abuse prevention, assessment, and treatment for lesbian, gay, bisexual, and transgender youth. Pediatr Clin North Am. 2016 Dec;63(6):1057-77.

Blume AW. Advances in substance abuse prevention and treatment interventions among racial, ethnic, and sexual minority populations. Alcohol Res. 2016;38(1):47-54. Available at: https://www.ncbi. nlm.nih.gov/pmc/articles/PMC4872612/pdf/ arcr-38-1-47.pdf

Canadian Mental Health Association (CMHA). Mental health services for gender-diverse and sexualminority youth [Website]. 2020. Available at: https:// ontario.cmha.ca/documents/mental-health-servicesfor-gender-diverse-and-sexual-minority-youth/

Caputi TL. Sex and orientation identity matter in the substance use behaviors of sexual minority adolescents in the United States. Drug Alcohol Depend. 2018 Jun 1;187:142-8. Available from Google Scholar.

Coulter RWS, Egan JE, Kinsky S, et al. Mental health, drug, and violence interventions for sexual/gender minorities: A systematic review. Pediatrics. 2019a Sep;144(3):e20183367. Available at: https://www. ncbi.nlm.nih.gov/pmc/articles/PMC6855817/pdf/ PEDS_20183367.pdf

Coulter RW, Sang JM, Louth-Marquez W, et al. Pilot testing the feasibility of a game intervention aimed at improving help seeking and coping among sexual and gender minority youth: Protocol for a randomized controlled trial. JMIR Res Protoc. 2019b Feb;8(2):e12164. Available at: https://www. researchprotocols.org/2019/2/e12164/pdf

Eisenberg ME, Gower AL, McMorris BJ, et al. Risk and protective factors in the lives of transgender/gender nonconforming adolescents. J Adolesc Health. 2017 Oct;61(4):521-6. Available at: https://www. ncbi.nlm.nih.gov/pmc/articles/PMC5626022/pdf/ nihms878334.pdf

Felner JK, Wisdom JP, Williams T, et al. Stress, coping, and context: Examining substance use among LGBTQ young adults with probable substance use disorders. Psychiatr Serv. 2020 Feb 1;71(2):112-20. Available from Google Scholar.

Gamarel KE, Nelson KM, Heinze J, et al. The moderating role of resilience resources in the association between crime exposure and substance use among young sexual minority men. Subst Use Misuse. 2019;54(11):1787-98. Available at: https:// www.ncbi.nlm.nih.gov/pmc/articles/PMC6692916/ pdf/nihms-1534242.pdf

Gilmour H. Sexual orientation and complete mental health. Statistics Canada Health Reports ISSN 1209-1367. 2019 Nov. Available at: https:// www150.statcan.gc.ca/n1/pub/82-003-x/2019011/ article/00001-eng.htm

Gower AL, Rider GN, Brown C, et al. Supporting transgender and gender diverse youth: Protection against emotional distress and substance use. Am J Prev Med. 2018 Dec;55(6):787-94. Available at: https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC6501838/pdf/nihms-1527781.pdf

Human Rights Campaign Foundation (HRCF) & Partnership for Drug-Free Kids. Preventing substance abuse among LGBTQ teens. 2016. Available at: https://drugfree.org/download/preventing-substanceabuse-among-lgbtq-teens/

Jun HJ, Webb-Morgan M, Felner JK, et al. Sexual orientation and gender identity disparities in substance use disorders during young adulthood in a United States longitudinal cohort. Drug Alcohol Depend. 2019 Dec 1;205:107619. Available from Google Scholar.

Kidd JD, Jackman KB, Wolff M, et al. Risk and protective factors for substance use among sexual and gender minority youth: A scoping review. Curr Addict Rep. 2018 Jun;5(2):158-73. Available at: https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC6214200/pdf/nihms-989150.pdf

Marshal MP, Friedman MS, Stall R, et al. Sexual orientation and adolescent substance use: a meta-analysis and methodological review. Addiction. 2008 Apr;103(4):546-56. Available at: https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC2680081/pdf/nihms-101961.pdf

Mereish EH. Substance use and misuse among sexual and gender minority youth. Curr Opin Psychol. 2019 Dec;30:123-7.

Rainbow Health Ontario. LGBT2SQ glossary. 2020. Available at: https://www.rainbowhealthontario. ca/news-publications/glossary/

Schuler MS, Rice CE, Evans-Polce RJ, Collins RL. Disparities in substance use behaviors and disorders among adult sexual minorities by age, gender, and sexual identity. Drug Alcohol Depend. 2018 Aug 1;189:139-46. Available at: https://www. ncbi.nlm.nih.gov/pmc/articles/PMC6083846/pdf/ nihms-979095.pdf

Schwinn TM, Thom B, Schinke SP, Hopkins J. Preventing drug use among sexual-minority youths: Findings from a tailored, web-based intervention. J Adolesc Health. 2015 May;56(5):571-3. Available from Google Scholar.

Talley AE, Turner B, Foster AM, Phillips G 2nd. Sexual minority youth at risk of early and persistent alcohol, tobacco, and marijuana use. Arch Sex Behav. 2019 May;48(4):1073-86. Available at: https://www. ncbi.nlm.nih.gov/pmc/articles/PMC6993957/pdf/ nihms-1067095.pdf

Trans Care BC. Program update April 2019 to April 2020. 2020 Sep. Available at: http://www. phsa.ca/our-services-site/Documents/TCBC_ ProgramUpdate_2020_Final.pdf

Trans PULSE. Impacts of strong parental support for trans youth. 2012. Available at: http:// transpulseproject.ca/wp-content/uploads/2012/10/ Impacts-of-Strong-Parental-Support-for-Trans-Youth-vFINAL.pdf

Underwood JM, Brener N, Thornton J, et al. Overview and methods for the Youth Risk Behavior Surveillance System—United States, 2019. MMWR Suppl. 2020 Aug 21;69(1):1-10. Available at: https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC7440204/pdf/su6901a1.pdf

Watson RJ, Park M, Taylor AB, et al. Associations between community-level LGBTQsupportive factors and substance use among sexual minority adolescents. LGBT Health. 2020 Feb/ Mar;7(2):82-9. Available at: https://www.ncbi. nlm.nih.gov/pmc/articles/PMC7138604/pdf/ lgbt.2019.0205.pdf

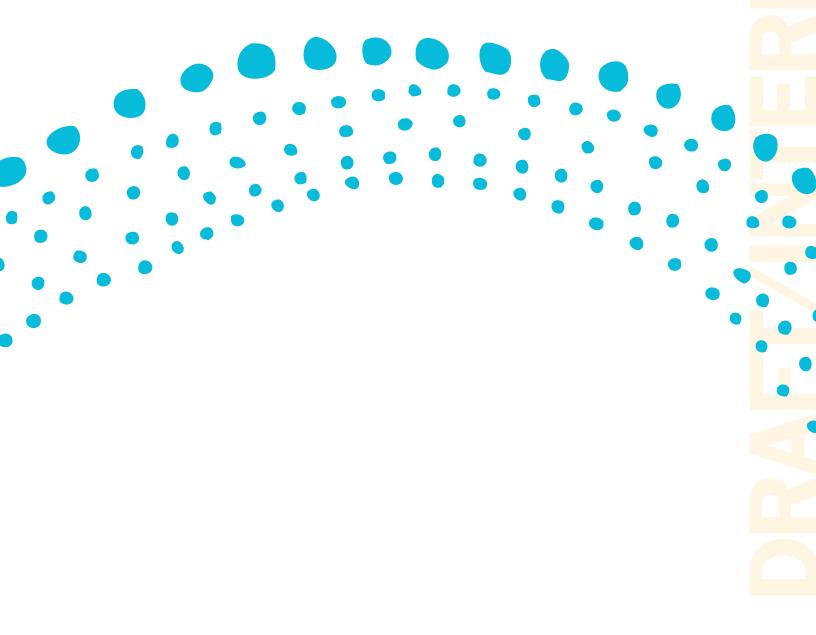
Appendix A: MEDLINE Search Strategy

SEARCH: Database(s): Ovid MEDLINE(R) 1946 to October 27, 2020

NOTE: This search was conducted for BIPOC and 2SLGBTQ populations and filtered by the report author (see search lines 13 to 20 for gender-related search terms).

TERM		# HITS
1	exp *Ethnic Groups/	88045
2	exp *African Continental Ancestry Group/	45284
3	exp *Asian Continental Ancestry Group/	30098
4	exp *American Native Continental Ancestry Group/	15117
5	*Oceanic Ancestry Group/	7093
6	*Health Services, Indigenous/	2538
7	(BIPOC? or (people adj2 (color* or colour*)) or "people of color" or "people of colour").ti,kf.	157
8	(ethnic? or ethnicit* or arab? or palestinian? or bedouin? or black? or negro* or puerto rican? or hispanic? or latina? or latino? or chicana? or chicano?).ti,kf.	102555
9	(Aleut? or eskimo? or First Nation* or indian? or indigenous* or Inuit? or Kalaallit? or native?).ti,kf.	80633
10	(aboriginal* or aborigine? or (oceanic adj2 (ancest* or descent* or descendant?)) or pacific islander? or pacific island american?).ti,kf.	6835
11	(African-American? or AfricanAmerican? or African-Canadian? or Asian-American? or AsianAmerican? or Asian-Canadian? or Asian-Canadian? or Cambodian-American? or Cambodian-Canadian? or Cambodian-Canadian? or Cambodian-Canadian? or Chinese-American? or Chinese-American? or Chinese-Canadian? or Chinese-Canadian? or Cuban-Canadian? or Cuban-Canadian? or Cuban-Canadian? or Cuban-Canadian? or Filipino-American? or Filipino-Canadian? or Filipino-Canadian? or Hmong-Canadian? or Hmong-Canadian? or Indian-Canadian?	25559
12	((African? or Asian? or Cambodian? or Chinese or Cuban? or Filipino? or Hmong? or Indian? or Japanese or Korean? or Mexican? or Spanish or Vietnamese) adj2 (American? or Canadian? or ancest* or descent* or descendant?)).ti,kf.	31933
13	exp *"Sexual and Gender Minorities"/	5471
14	*Bisexuality/	2702
15	exp *Homosexuality/	19499
16	*Transsexualism/	3137
17	exp *Gender Dysphoria/	451
18	exp *Gender Identity/	10510
19	*Health Services for Transgender Persons/	102

TERM	IS	# HITS
20	(2SLGBTQ? or bisexual* or bi-sexual* or gay? or (gender? adj (independent* or minorit*)) or GLBT or GLBTQ or homosexual* or homo-sexual* or intersex* or inter-ex* or lesbian? or lesbigay or lesbi-gay or LBG or LGBT or LGBTQ or "men who have sex with men" or non-heterosexual* or nonheterosexual* or pansexual* or pan-sexual* or queer? or (sexual* adj3 (dissident? or minorit* or question*)) or trans or transgender* or trans-gender* or two-spirit* or transsexual* or trans-sexual* or "women who have sex with women").ti,kf.	58979
21	or/1-20	352689
22	exp *Substance-Related Disorders/ not *"Tobacco Use Disorder"/	205449
23	((alcohol* or cocaine* or cannabis* or crack or drug? or glue? or hash* or heroin or inhalant? or marijuana* or marihuana* or medication? or medicine? or morphine* or narcotic? or nicotine? or opiate* or opioid* or opium* or pharmaceutical* or phencyclidine? or prescription? or substance?) adj2 (abus* or addict* or dependen* or disorder? or misuse* or mis-use* or overdos* or over-dos* or smok* or use? or using)).ti,kf.	128146
24	(addiction* or (binge? adj drinking) or ((co-occur* or concurrent) adj (disorder? or substance?))).ti,kf.	24140
25	or/22-24	271013
26	21 and 25	8574
27	limit 26 to ("adolescent (13 to 18 years)" or "young adult (19 to 24 years)")	3765
28	(adolescenc* or adolescent? or ((college* or undergraduate* or under-graduate* or universit*) adj5 (age? or student?)) or teen? or teenage* or teen-age* or (young* adj2 adult*) or youth?).ti,kf.	287753
29	(("14" or "15" or "16" or "17" or "18" or "19" or "20" or "21" or "22" or "23" or "24") adj3 year? adj old*).ti,ab.	143491
30	28 or 29	412900
31	26 and 30	1672
32	27 or 31	4082
33	exp animals/	23537850
34	exp animal experimentation/ or exp animal experiment/	9516
35	exp models animal/	575628
36	exp vertebrate/ or exp vertebrates/	22871214
37	or/33-36	23539795
38	exp humans/	18788830
39	exp human experimentation/	12501
40	or/38-39	18789485
41	37 not 40	4750935
42	32 not 41	4081
43	limit 42 to (english language and yr="2016 -Current")	1315







foundrybc.ca | youthhubs.ca