Managed Alcohol Programs (MAPs)

A Community
Symposium on
Mobilizing Local
Responses in
Victoria, BC

REPORT

March 1st, 2018





Meaghan Brown, Bernie Pauly, Kate Vallance, Brittany Graham & Victoria MAP Working Group



HOSTED
BY THE
VICTORIA MAP
WORKING
GROUP

Bernie Pauly Canadian Institute for Substance Use Research (CISUR)

Meaghan Brown CISUR

Kelly Sharman *Island Health*

Fran Hunt-Jinnouchi Aboriginal Coalition to End Homelessness

Jack Phillips & Indigenous Women's Action Group SOLID

Grey Showler *Victoria Cool Aid Society (VCAS)*

Chris Fraser VCAS

Ami Brosseau VCAS

Alyson McCabe VCAS

Bernice KamanoCircle of Sage

Russell MaynardPortland Hotel Society

Victoria MAP Symposium: COMMUNITY REPORT

BACKGROUND

Since 1996, over 20 Managed Alcohol Programs (MAPs) have proliferated across Canada. MAPs are an almost uniquely Canadian response to reducing the harms associated with chronic homelessness and severe and chronic alcohol use disorder. As a harm reduction approach and alternative to abstinence-based treatment, MAPs involve the provision of controlled access to alcohol as a substitute to non-beverage alcohol use (e.g. mouthwash, rubbing alcohol) and heavy, street-based drinking, often alongside accommodation, health, social, and cultural supports [1].

Individuals suited to MAP services are often in frequent contact with emergency health and police services and experience acute and chronic harms such as assault, injury, alcohol poisoning and seizures, liver disease and other chronic health conditions, cognitive decline and other co-occurring mental health concerns, social exclusion and isolation, premature aging and death [2-5]. MAPs aim to address the needs of a subset of individuals who have often attempted abstinence-based treatment on multiple occasions, face barriers to adequate health or social supports for complex health needs, and lack access to long-term and low-barrier alcohol harm reduction and housing options [1].

CANADIAN MANAGED ALCOHOL PROGRAM STUDY (CMAPS)

The Canadian Managed Alcohol Program Study (CMAPS) (www.cmaps.ca) is a longitudinal mixed-methods study funded by the Canadian Institute for Health Research (CIHR) and led by the Canadian Institute for Substance Use Research (CISUR) (PIs: Dr. Bernie Pauly & Dr. Tim Stockwell). CMAPS works in partnership with approximately 10 MAP sites across Canada, with a focus on evaluating the effectiveness of these programs through investigations of health, police and emergency service use, alcohol consumption, physical and social alcohol related harm, and quality of life of over 200 participants. CMAPS research seeks to identify effective models of MAP implementation and is working to develop best-practices and policy recommendations through in-depth interviews with over 140 staff and program participants. In addition, CMAPS connects and engages communities of practitioners and knowledge-users across communities in discussions of current evidence and protocols for MAP implementation through a Community of Practice (CoP) and Indigenous MAP Advisory and Community of Practice (IAC).

PURPOSE

On Wednesday, March 1st, 2018, the Victoria MAP Working Group with representation from CISUR, Victoria Cool Aid Society (VCAS), Aboriginal Coalition to End Homelessness (ACEH), SOLID, Portland Hotel Society (PHS), and Island Health hosted a community workshop event on MAPs in Victoria, BC at the Royal Jubilee Hospital. This event grew from planning sessions starting in January 2018, when the Victoria MAP Working Group was formed as a result discussions among community health care, housing and social service providers who identified MAP as a gap in service. These providers often interact with a subset of people experiencing chronic homelessness and severe alcohol use disorder in Victoria and who are in need of alternative options to detox, stabilization and treatment.

The Working Group reported that despite mounting evidence which points to the effectiveness and benefits of MAP in other communities, as well as a history of Victoria service providers expressing a need for local intervention, meaningful discussion and concrete action on MAP implementation remains long overdue. The symposium sought to bring together key community members and representatives across health, housing, and peer organizations with interest, knowledge, and/or experience in MAPs or alcohol harm reduction in order to continue a dialogue on pursuing implementation of MAP services for the Victoria community.

SYMPOSIUM OBJECTIVES

- Provide an overview of different models of MAP in Canada
- Discuss and identify the need for MAP services in Victoria
- Discuss and identify opportunities for the development of MAP services in Victoria

Attendance included over 30 individual representing health, housing, and peer-based organizations, including CISUR, VCAS, Our Place Society (OPS), Island Health, ACEH, and SOLID. Guests from the Eastside Illicit Drinkers Group for Education (EIDGE) and PHS attended to share their own expertise on MAP implementation in Vancouver.

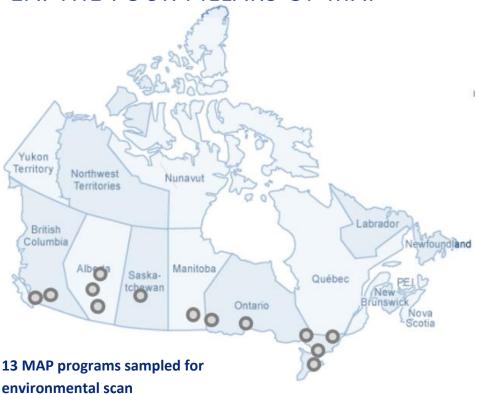


Part one: What Do We Know about MAPs?

The gathering opened with an acknowledgement of the territories of the Songhees, Esquimalt and <u>W</u>SÁNEĆ peoples on which the Royal Jubilee Hospital stands. The day was foregrounded with awareness of the impact of historical and ongoing colonization, systemic racism, and displacement on the health experiences of Indigenous people experiencing homelessness. We heard perspectives on MAP from members of the Aboriginal Coalition to End Homelessness and Indigenous Women's Action Group (SOLID) during this event in recognition of the need to prioritize Indigenous voices, vision and knowledge in any discussions on program design and implementation.

Part one of the symposium included a series of presentations from the CMAPS team, EIDGE, and local panelists from Island Health, the ACEH, and CISUR. The purpose of these presentations was to provide a preliminary snapshot into alcohol related harms among people who experience homelessness in Victoria, as well as to hear from local service providers and organizations who have identified a need for MAPs in Victoria. These presentations also served to identify potential models for program implementation through a review of current MAPs in Canada, including peer-led approaches.

1A. THE FOUR PILLARS OF MAP



Dr. Bernie Pauly presented an overview of MAPs in Canada with a focus on describing the key elements of MAPs (the 'Four Pillars of MAP) and findings to date from CMAPS research. Findings from the environmental scan across 13 programs identified four pillars of MAPs: alcohol intervention, housing intervention, health and social services, and cultural supports.¹

Source: Pauly et al. (2018)¹

Four Pillars of MAP









Alcohol Intervention: Daily (3-4 beers q 3-

4 hours)
Every 60-90
minutes: 5-6 ounces
of white or red wine
Maximum 11-12
doses per day
Protocols to Assess
Intoxication

Housing intervention

Day Programs with Housing support Supportive Housing Transitional Housing Emergency Shelter

Health and Social Services

Provision of Primary Care Services Meal Programs Money Management Recreational Opportunities

Social and Cultural Supports

Meal Preparations
& Sharing
Elders
Ceremony
Drumming
Beading
Family
Reconnection

1B. CMAPS RESEARCH: PILOT AND PRELIMINARY FINDINGS

Pilot and preliminary findings from the national evaluation of 5 programs were presented relative to key outcomes: improved housing stability and satisfaction, quality of life and safety[6], reduced alcohol related physical (e.g. assault, seizure) and social harms [2,7], stabilization and/or reduction in alcohol consumption including non-beverage alcohol consumption (NBA)[2,7], reduced police and emergency health service use[2,7,8,9], as well as cost savings associated with decreased shelter and emergency service use of \$1.09 -1.21 per dollar invested in the Thunder Bay pilot program evaluation[8].

Enrolling in and staying on a MAP means:

- √ safer setting than drinking on the street
- ✓ a safer pattern of consumption: less NBA
- √ drinking on more days per month but lower daily quantities
- ✓ significantly fewer self-reported health and social harms from drinking
- ✓ reductions in police and hospital contacts

1C. LEARNING FROM EXPERIENCE WITH MAPS

Peer-driven approaches: EIDGE (Eastside Illicit Drinkers Group for Education)

EIDGE¹ is a peer run advocacy and education group for people who use illicit alcohol in the Downtown Eastside (DTES) neighborhood of Vancouver. EIDGE members Loretta Brown, Rob Morgan and John Skulsh, alongside coordinator Brittany Graham presented on the successes and challenges of creating and sustaining peer-led alcohol harm reduction programs and policies. EIDGE was established in 2011 with the support of the Vancouver Area Network of Drug Users (VANDU) and the Western Aboriginal Harm Reduction Society (WAHRS) as a response to increased illicit drinking- NBA and street-based use- in their community. EIDGE operates a monthly meeting group that provides a safe place where individuals can connect, learn, and share about issues concerning illicit drinking, as well as a program where individuals can purchase sherry as an alternative to NBA. Through access to safer and cheaper forms of alcohol, peer-to-peer support and education, EIDGE has assisted many individuals to reduce consumption or transition from NBA use.



EIDGE stressed that a lack of low barrier housing and shelter spaces which allow intoxication and/or drinking on site continues to harm their community, with over 40 deaths over 6 years. EIDGE's number one hope is for a 24 hour accessible safe space to drink that is modeled after MAPs but adapted to reflect the needs of their membership as a peer-based, non-residential program. EIDGE knows that a MAP is only part of the solution and believes that policy changes need to occur to reduce the stigma, marginalization and societal harm experience by their community in healthy systems. Currently, EIDGE is working closely with Vancouver Coastal Health and the BC Centre on Substance Use to advocate for changes to policies related to the treatment of alcohol use disorder in emergency and primary care. Despite the challenges, EIDGE continues to work together to improve the lives of their membership by addressing the ongoing discrimination of illicit drinkers through program and policy changes in Vancouver and beyond.

¹¹Learn more about the EIDGE program: http://vancouversun.com/news/local-news/radical-harm-reduction-for-illicit-alcohol-may-save-lives-studies-find

MAPs in Residential Settings: Ottawa, ON

Past Nurse Coordinator of The Oaks² and current CMAPS staff Meaghan Brown presented on The Oaks program as an example of a residential MAP site. The Oaks is 48-bed long term supportive housing program led by Ottawa Inner City Health (OICH) and the Shepherds of Good Hope (SOGH) and supported through a continuum of alcohol harm reduction services, including a transitional shelter-based MAP and a shelter-based and low barrier hospital diversion unit. Partnerships and leveraging of funding across sectors from the City Ottawa, health authority, resident contributions and province of Ontario are integral to the successful implementation and operation of the program.

The Oaks, 48-bed residential MAP in Ottawa, ON

The Oaks program reflects the four pillars of MAP. Wine brewed on site saves program costs and is administered

by staff, typically according to a protocol of 7 ounces of 12% wine for the first dose, followed by 5 ounces hourly for up to 13 hours, although many protocols are individually tailored according to level of dependency and health status. Individuals are asked to take a break from consumption if signs of intoxication are noted. Individuals may transition to self-management over time with support from staff. Residents are also able to detox on-site with withdrawal management. Residents have certainty in stable and secure housing, regardless if they choose to become abstinent, although some may transition to independent housing. The program is intensively supported by an in-house clinical and support team made up of the Medical Director, RN Coordinator, mental health nurse, consulting psychiatrist, peer worker, case manager, recreational worker, client care workers (CCWs) and housing workers. More recently, the program began implementing culturally specific activities and supports by hosting Inuit feasts, throat singing events, and supporting the resident-led Inuit Task Force outreach team. Social connection and building community both inside and outside the program is a strong focus and various recreational and occupational opportunities are available.

Part two: Exploring Need and Potential Models for MAPs in Victoria

2A. FINDINGS FROM UNINTENDED CONSEQUENCES STUDY

As a preliminary means of exploring a potential need for MAP in Victoria, this presentation highlighted responses from a small sample of 38 street-involved adults in Victoria who participated in the 2016 **Unintended Consequences Study**³, a CISUR-led study dedicated to exploring the impact of

² Learn more about The Oaks via CBC The Fifth Estate: https://www.youtube.com/watch?v=3KleSSdjqX0

³ https://www.uvic.ca/research/centres/cisur/projects/active/projects/minimum-prices-street-involved-drinkers.php

alcohol pricing and policies on alcohol related harm and drinking behaviours among street-involved adults in Victoria and Vancouver [10]. Participants were primarily male (81.5%), aged 23-70 years (avg.= 47), with 55.2% identifying as White, 34.2% Indigenous, and 10.5% mixed-ancestry White & Indigenous. Housing status among participants varied: 76.3% were experiencing homelessness and 47.4% reported homelessness 2 or more times in the past 3 years. In the following tables, alcohol consumption patterns and related physical and social harms among the 39 individuals in the Victoria sample are compared to the CMAPS data of 175 MAP participants (65 new MAP participants in <2 months, 109 long term MAP participants in the program ≥ 2 months, and 189 controls)[11].

Alcohol consumption Patterns: Victoria Sample vs. MAP Sample & Controls (Chow et al., 2017; Stockwell et al., 2017)

Alcohol consumption patterns included measures of frequency (self-reported drinking days in the past 30 days) and volume (standard drinks or SDs per drinking day in the past 30 days). While the average frequency and volume of drinking were lower in the Victoria sample when compared to the MAP samples, 21% of participants in the Victoria MAP sample met or exceeded consumption volumes for new MAP participants (>20 standard drinks/day), while surpassing long-term MAP participants.

Sample	Average Drinking Days/ 30 days	Average # Drinks per day
Victoria (n=38)	26	18
Controls (n=189)	23	22
New MAPs (n=65)	27*	20
Long-term MAPs (n=109)	29***	15***

Statistical
significance
levels: *p<0.05,
**p<0.01,
***p<0.001
(MAP controls
are the
comparison
group – Victoria
sample not
included in
significance
test)

Health and Social Alcohol-Related Harms: Victoria vs. MAP Sample & Controls (Chow et al., 2017; Stockwell et al., 2017)

Participants in Victoria sample reported more frequent experiences of alcohol related physical harms in the past 30 days in comparison to long-term MAP participants, and in almost all domains to new MAP participants. Participants in the Victoria sample also reported substantially higher rates of social harms in comparison to both long term and new MAP participants, and higher rates of harm than MAP controls in most domains.

Health Related Harms in past 30 days: Victoria Sample Vs. MAP Participants & Controls

Sample	Physical health	Learning difficulty	Assaults	Seizures	Passed out
Victoria sample (n=38)	68.4%	42.1%	28.9%	10.5%	39.5%
MAP Controls (n=189)	61%	33%	33%	15%	62%
New MAPs (n=65)	41%**	13%*	35%	11%	34%*
Long-term MAPs (n=109)	30%***	18%**	15%*	2%**	26%***

statistical
significance
levels: *p<0.05,
**p<0.01,
***p<0.001
(MAP controls
are the
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Social harms reported in past 30 days: Victoria Sample vs. MAP participants and controls

Sample	Social	Finance	Legal	Work	Housing
Victoria Sample (n=38)	65.8%	71.1%	26.3%	47.4%	50%
Controls (n=189)	43%	68%	40%	29%	36%
New MAPs (n=65)	25%**	45%**	31%*	12%	22%*
Long-term MAPs (n=109)	15%***	29%***	10%***	8%**	9%***

2B. HEARING FROM COMMUNITY SERVICE PROVIDERS

Observing a Need for MAP: The SAMI Outreach and Intensive Case Management Team

The SAMI Outreach and Intensive Case Management Team (Island Health) provides care for individuals with primary substance use disorders who often experience co-occurring housing instability and/or homelessness and are referred to the team due to high emergency services use. The SAMI team shared observations of the extreme barriers to housing for individuals who often have significant health support needs related to long term and chaotic alcohol use. The Team Lead, Kelly Sharman, Nurse Case Manager Lesley Munro and Social Program Officer Kiran Bolaria, described the cyclical trajectory for people experiencing homelessness and severe alcohol use disorder: a process of waking up in the shelter in alcohol withdrawal, experiencing a seizure, fall or assault and ending up in the emergency department or detox, followed by discharge to the street. This consistent cycling, at times punctuated with sobriety when individuals use detox or stabilization, continues for some throughout stages of end stage liver disease or alcohol-related dementia, often resulting frequent emergency presentations, long hospital stays or admission to the Glengarry Treatment Care Unit (GTCU) for extended periods of time. These scenarios are particularly true for individuals drinking non-beverage alcohol, seniors, or non-seniors who are aging prematurely due to chronic alcohol use and homelessness.

Among individuals who are housed, the SAMI team employs what they called an 'unmanaged alcohol program', visiting individuals in their homes, assessing for withdrawal, seizure, fall, and delirium risk, and accompanying individuals to the emergency department as needed. The SAMI team stressed that having a MAP in Victoria would reduce the time spent on crisis and risk management through the integration of alcohol and housing availability and supports. As the team stated, "taking off the table the search for alcohol would be a great gift we could give to clients", facilitating a pathway to recovery for individuals who have tried abstinence-based treatment many times before.

Centering Indigenous Culture and Spirituality: Exploring Possibilities for an Indigenous-led MAP

The Aboriginal Coalition to End Homelessness is an Indigenous-led non-profit organization whose sole focus is to support Indigenous people experiencing homelessness through strategic priorities guided by the voices of the Aboriginal Street Community (ASC) of Victoria and island-wide. Overseen by the Board representing the three tribal groups of Vancouver Island and two Friendship Centres, the goal of the ACEH is to assist the ASC in exiting homelessness and connecting to culturally safe care through the implementation of traditional models of wellness and support rooted in traditional ways of knowing.



Fran Hunt-Jinnouchi, Executive Director of the ACEH, presented on one of the current priorities of the ACEH to support long term quality of care change for the ASC. In 2016-2017 The ACEH held a series of

gatherings with the ASC that sought to identify their priorities for exiting homelessness. Culturally-specific supports for substance use were identified as a significant need. In addition, over two years of implementing culturally supportive housing in partnership with VCAS, the ACEH recognizes that a lack of culturally safe and appropriate care options, particularly for alcohol use. Through funding from the First Nations Health Authority (FNHA) and Island Health, the ACEH is completing a feasibility study and planning event for the implementation of an Indigenous-led MAP. The ACEH acknowledges that planning for this potential program may be a slow process in order to adequately and appropriately deliver a program that is consistent with cultural protocols and guided by the voices of the with the ASC and Indigenous Knowledge Keepers. Based on the results of the feasibility study and workshop event, the ACEH may look to pursue sources of funding for the program at the federal, provincial, and health authority level. If funded, the ACEH will work with CISUR to evaluate the program utilizing Indigenous methodologies.

Part Three: Key Considerations for Action

In part three of the symposium, participants broke into small groups and were asked to reflect on two questions relevant to MAP mobilization in Victoria: (1) What is needed to move forward on MAPs in Victoria?, and (2) What are one to two of your best ideas for making this happen? Four main considerations were elicited from these discussions

- 1. MAP implementation will require adequate, dedicated, and leveraged funding
- 2. MAP implementation will require leadership, commitment, multi-agency partnerships and meaningful peer-inclusion
- 3. Program model(s) and location(s) must address a spectrum of local needs
- 4. Program(s) must be equipped with adequate health, social, cultural, and peer supports

1. MAP implementation will require adequate, dedicated, and leveraged funding

- There was considerable agreement that the MAP will need proper, guaranteed, and ongoing funding. Participants raised that the current funding environment is conducive to innovative initiatives such as MAPs, and questioned if the new Ministry of Mental Health and Addiction would support a program.
- Many acknowledged that the current costs associated with emergency and health care are high for this population and suggested that it will be important to demonstrate potential cost savings of MAPs to facilitate buy-in among decision makers

Some identified unique ideas for supplementing program costs through donations (e.g. alcohol donations from breweries), while others felt that funding should include supplies for the program

2. MAP implementation will require leadership, commitment, multi-agency partnerships, and meaningful peer inclusion

- There was a common acknowledgement that there must be willingness and commitment to have a conversation and dialogue about MAPs, with some reflecting in frustration on 15 years of discussion without action towards MAP implementation
- Articipants universally called for increasing partnerships and collaboration across multiple agencies in order to pursue a MAP, with some specifically calling upon Island health to participate and lead conversations on MAPs with community collaboration
- Many felt strongly that the program must be peer driven. While the definition of 'peer-driven' should be determined, some participants specifically identified that peers must be involved and given leadership roles as experts in planning for the program
- The knowledge and expertise of other MAPs was appreciated. Some participants suggested that program planning should draw on experience and mentorship from other MAPs

3. Program model(s) and location(s) must address a spectrum of local needs

Participants identified a variety of potential models for a MAP. While there was variation and differences in opinion on what or where a MAP should or should not be, there was recognition of the need for future dialogue and collaboration across agencies and with peer input into planning:

- Some participants voiced a need for a continuum of alcohol harm reduction services for Victoria that are flexible enough to ensure that all complex, unique, and different needs are met, including drop-in day programs and non-beverage alcohol exchange programs, as well as connection to existing residential and shelter sites to provide wrap-around supports.
- Conversely, others felt that MAPs should not be shelter-based, although shelters could be a point of connection for a MAP. For example, there could be a drop-in sherry exchange for non-beverage or high-potency alcohol in shelters. This group felt that the MAP would be best suited in a residential or assisted living facility.
- Some participant raised that a MAP could be added to an existing site to reduce costs, such as the Sobering Assessment Centre (SAC) or Island Health residential sites.

4. Program(s) must be adequately equipped with health, social, cultural, and peer supports

- Many participants raised that the program needs to be staffed and supported by individuals who are empathetic, understanding, non-judgmental, and non-stigmatizing
- There was a specific call for Indigenous front-line staff who are part program delivery, as well as culturally embedded supports and opportunities to connect to culture and spirituality
- ❖ A need for adequate clinical support was generally acknowledged. Nursing home care supports should be embedded in the program. One suggestion was to incorporate outreach and case management support by repurposing the SAMI team.
- Again, it was stressed that beyond peer-to-peer support services should be available in the program and that the program should foster a sense of community and purpose

NEXT STEPS

To conclude the event, the group was asked to identify the next steps necessary to keep MAPs on the radar in Victoria. With a view towards appropriate representation and facilitation of buy-in, the group brought forward ideas on the potential contributions of their respective organizations and identified other voices that should to be present in discussion on MAPs:

- Communities of individuals who experience street-based alcohol use and homelessness and/or housing instability need to be asked: What do you think about MAPs?
- Emergency service providers such as ER staff, paramedics, and police are often in high-contact with MAP eligible populations and may be able to speak to the need for MAP from a resource perspective
- The Victoria MAP Working group needs to expand to include peer voices and input
- ❖ In order to keep MAPs on the radar, the Working Group needs to include membership from senior level executive from Island Health, the new Ministry of Mental Health and Addiction, and the First Nations Health Authority

Some members of the group identified concrete follow up steps towards identifying resources for MAP within their organizations:

- Members from Island Health will bring forward a discussion on MAP with management from Mental Health and Substance Use Residential Services, with a view towards identifying if any existing Island Health sites would be suitable for a MAP
- ❖ Once a model for a MAP is developed, Victoria Cool Aid Society would like to explore areas where resources can be leveraged to support a MAP in order to present this to the board of Island Health

In closing the discussion, there was recognition and acknowledgement of this event in bringing together multiple organizations as a start to MAP planning and implementation. Many also reflected on the growing body of promising CMAPS research as a 'turning point' in acquiring funding for MAP. Having learned about various models of MAPs and preliminary data on street-based alcohol use, attendees voiced that the catalyst for action on MAPs lies in promoting buy-in across organizational decision making levels, with little question about the need or potential efficacy of MAP services in Victoria.

ACKNOWLEDGEMENTS

We would like to kindly thank the Canadian Institute for Health Research (CIHR) for funding this event, Island Health for providing a venue and assisting in coordinating, the Eastside Illicit Drinkers Group for Education (EIDGE) and Indigenous Women's Action Group from SOLID for sharing their wisdom, as well as all participants, panelists, and presenters for listening, sharing, and brainstorming.

For more information on MAPs and research to date, visit the Canadian Managed Alcohol Program Study website at:

www.cmaps.ca



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References

- 1. Pauly, B., Vallance, K., Wettlaufer, A., Chow, C., Brown, R., Evans, J., ... Stockwell, T. (2018). Community managed alcohol programs in Canada: Overview of key dimensions and implementation. Drug and Alcohol Review, 37 (1), S132-139. https://doi.org/10.1111/dar.12681
- 2. Vallance, K., Stockwell, T., Pauly, B., Chow, C., Gray, E., Krysowaty, B., ... Zhao, J. (2016). Do managed alcohol programs change patterns of alcohol consumption and reduce related harm? A pilot study. Harm Reduction Journal, 13(1), 1-8. https://doi.org/10.1186/s12954-016-0103-4
- 3. Podymow, T., Turnbull, J., Coyle, D., Yetisir, E., & Wells, G. (2006). Shelter-based managed alcohol administration to chronically homeless people addicted to alcohol. CMAJ, 174(1), 45–49. https://doi.org/10.1503/cmaj.1041350
- 4. Rehm J, Mathers C, Popova S, Thavorncharoensap M, Teerawattananon Y, Patra J.(2009). Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *Lancet*, *373*(9682):2223-33.
- 5. Fazel, S., Khosla, V., Doll, H., & Geddes, J. (2008). The prevalence of mental disorders among the homeless in western countries: Systematic review and meta-regression analysis. Plos Medicine, 5(12), 1670-1681. doi:10.1371/journal.pmed.0050225
- 6. Stockwell, T., Pauly, B., Chow, C., Erickson, R. A., Krysowaty, B., Roemer, A., ... Zhao, J. (2017). Does managing the consumption of people with severe alcohol dependence reduce harm? A comparison of participants in six Canadian managed alcohol programs with locally recruited controls. Drug and Alcohol Review, (October 2016), 1–8. https://doi.org/10.1111/dar.12618
- 7. Pauly, B. B., Gray, E., Perkin, K., Chow, C., Vallance, K., Krysowaty, B., & Stockwell, T. (2016). Finding safety: a pilot study of managed alcohol program participants' perceptions of housing and quality of life. Harm Reduction Journal, 15(1), 15. https://doi.org/10.1186/s12954-016-0102-5
- 8. Kendall Hammond, M. P. A., Lynda Gagne, C. G. A., & Pauly, B. (2016). A Cost-Benefit Analysis of a Canadian Managed Alcohol Program. Canadian Institute for Substance Use Research: Victoria, BC. Retrieved online: https://www.uvic.ca/research/centres/cisur/assets/docs/report-a-cost-benefit-analysis-of-a-canadian-map.pdf
- 9. Alberta Health Services & Niginan Housing Ventures. (Report in Preparation). Ambrose Place Evaluation: Preliminary Results. Alberta Health Services: Edmonton, AB
- 10. Chow, C., Stockwell, T., Zhao, J., Vallance, K., Pauly, B., Barber, K. & Ivsins, A. (2017, June). Do increased alcohol prices create unintended negative consequences for unstably housed heavy drinkers? Paper presented at the 43rd annual Kettil Bruun Society for Social and Epidemiological Research on Alcohol (KBS), Sheffield, United Kingdom.
- 11. Stockwell, T., Pauly, B., Chow, C., Erickson, R., Krysowaty, B., Roemer, A., Vallance, K., Wettlaufer, A., & Zhao, J., (2017). Does managing the consumption of people with severe alcohol dependence reduce harm? A comparison of participants in six Canadian managed alcohol programs with locally recruited controls. *Drug and Alcohol Review, 51*(37), S159-166. https://doi.org/10.1111/dar.12618