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Strategies to Reduce Alcohol-Related Harms and Costs in Canada: A Review of Federal Policies

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ACKNOWLEDGEMENTS

We would like to thank all of the individuals working across a variety of relevant federal agencies who provided policy information in support of this report. We are grateful support provided for the analysis of federal law provided by Caitlin Stockwell, University of Victoria. We thank also the Public Health Agency of Canada for their financial support. The views and opinions expressed in this report are those of the authors and do not necessarily reflect the perspectives of the organisations acknowledged.

Suggested citation: Wettlaufer, A., Vallance, K., Chow, C., Stockwell, T., Giesbrecht, N., April, N., Asbridge, M., Callaghan, R.C., Cukier, S., Hynes, G., Mann, R., Solomon, R., Thomas, G., Thompson, K. (2019). Strategies to Reduce Alcohol-Related Harms and Costs in Canada: A Review of Federal Policies. Victoria, BC: Canadian Institute for Substance Use Research, University of Victoria.

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EXECUTIVE SUMMARY

Rationale and Objectives

The annual economic costs of alcohol use in Canada for 2014 are estimated to be \$14.6 billion (1), mostly as a result of impacts on health services, law enforcement and workplace productivity. These costs have been steadily increasing and exceed those of tobacco, opioids, cannabis or other psychoactive substances. Contributing to these costs in 2014, there were 14,800 alcohol-attributable deaths, 87,900 hospital admissions and 139,000 years of productive life lost (1). A substantial body of research is available on the effectiveness of different policies to reduce these harms and costs. In this report, we provide detailed assessments of the extent to which the federal government is implementing evidence-based policies that may reduce alcohol-related harm in Canada.

Methodology

The methods employed for this exercise were developed as part of a larger project to evaluate alcohol policy implementation in all Canadian jurisdictions. Giesbrecht et al. (2013, 2016) (2, 3) provided the first assessment of the implementation of effective alcohol policies across Canada's ten provinces. In this report we apply an updated analysis with an emphasis on policies the federal government is directly responsible for or has some indirect influence upon. A companion report assesses the implementation of 11 evidence-based alcohol policies in each of the Canadian provinces and territories (see, Stockwell et al., 2019)(4). The current federal assessment assesses 10 of the 11 identified alcohol policy domains with an emphasis on policies for which the federal government is directly responsible.

The co-investigative team includes academic researchers with general and specific content expertise on alcohol policies and public health. On the basis of published systematic and comprehensive literature reviews, seven policy domains with strong evidence for effectiveness were identified: pricing and taxation; physical availability of alcohol; impaired driving countermeasures; marketing and advertising controls; minimum legal drinking age (MLDA); screening, brief intervention and referral (SBIR); and liquor law enforcement. The investigative team independently rated the strength of evidence for effectiveness of these policies as well as their scope or population reach. As the federal government is not directly responsible for liquor law enforcement activities this policy domain was only rated in the companion report on provincial/territorial policies. Four other policy domains were identified as being important components of a comprehensive response to reducing alcohol-related harms, primarily for their capacity to facilitate implementation of other directly effective policies. These four policies include: regulation of the alcohol control system, a national alcohol strategy, monitoring and reporting, and health and safety messaging. These four policies were independently rated for

their capacity to facilitate implementation of other evidence-based policies as well as their scope or population reach. There was strong agreement across the independent ratings for each policy domain among the investigative team and consensus was reached on any discrepant ratings. Final ratings were used to calculate domain weightings, which determined how much the score from an individual domain contributed to the overall final score, see Appendix A.

A detailed set of indicators to measure the extent of implementation in each of the ten policy domains was developed, see Appendix B. Each indicator score was based on publicly available information and/or advice from key informants within relevant government departments, with data collected up until June 30th, 2018. With one exception, data summaries were validated by contacts in relevant departments in the federal government. A rubric was developed by the investigative team and used for blind scoring with any discrepancies resolved through consensus.

Results and Discussion

On the basis of this assessment, we concluded that the federal government is exercising just over one third (38%) of its potential to reduce alcohol-related harm through the implementation of effective policy as of mid-2018. There was significant variation in implementation across the 10 policy domains leading to a wide range in scores. The final scores obtained are listed in the table below:

FEDERAL GOVERNMENT IMPLEMENTATION OF ALCOHOL POLICIES AND STRATEGIES			
POLICY DOMAIN	DOMAIN SCORE	MAXIMUM POSSIBLE SCORE	DOMAIN SCORE (%)
<i>Policies with direct evidence of effectiveness</i>			
1. Pricing and Taxation	5.88	25	23.5
2. Physical Availability	4.00	4	100.0
3. Impaired Driving Countermeasures	7.50	15	50.0
4. Marketing and Advertising Controls	3.00	15	20.0
5. Minimum Age (MLDA)	0.00	12	0.0
6. Brief Intervention (SBIR)	8.33	9	92.5
7. Liquor Law Enforcement	N/A	N/A	N/A
<i>Indirect strategies that support effective policies</i>			
8. Alcohol Control System	10.00	25	40.0
9. National Alcohol Strategy	4.00	20	20.0
10. Monitoring and Reporting	16.35	20	81.8
11. Health and Safety Messaging	1.20	12	10.0
<i>All alcohol policies and strategies combined</i>			
Total policy implementation score	60.25	157	38.4

Notable strengths of existing federal policies include: a recent small increase in alcohol excise tax rates and the reintroduction of annual cost of living increases to alcohol excise tax rates after almost 30 years of no effective increase; strong ongoing funding and support for screening, brief intervention and referral programs; upcoming introduction of random breath testing to test for alcohol impairment in drivers; and facilitation of a number of different repositories of national data on alcohol-related costs and harms.

There were many areas where new policies could be introduced or existing ones strengthened, including: calculating federal alcohol taxes at a rate per litre of ethanol rather than per litre of beverage regardless of alcohol its alcohol content; implementation of indexed minimum unit prices for alcohol sold on federally controlled land/waters in order to encourage a standardised national minimum price for all alcohol e.g. \$1.75 per standard drink (=13.45 g of ethanol); updating alcohol advertising regulations and applying them to digital media with meaningful and enforceable sanctions; introducing federal BAC limits of .05% for driving; legislating a minimum legal purchase age; and implementing alcohol-specific trade law exemptions to better protect health and safety.

Conclusion

This report provides an overview of key policies and related strategies available to the government of Canada to better protect citizens from alcohol-related harms and an assessment of the extent to which these policies have been implemented. Given that the federal government is currently reaching only a third of its full policy potential, we hope this document provides a useful starting place for a range of federal ministries, departments and agencies to consider how to most effectively move towards promoting and protecting the health of its citizens by reducing the harms of alcohol in Canada.

Recommendations

In order to facilitate consideration and implementation of these evidence-based alcohol policies, we recommend that materials be developed which translate our detailed scoring criteria into practical advice on effective policy implementation. We also offer the following specific recommendations for priority actions to reduce harm from alcohol in Canada with additional recommendations for each policy domain included at the end of the report:

1. Pricing and Taxation

- GST on alcoholic beverages is replaced with an increase in alcohol excise taxes
- Excise taxes are applied as a rate per litre of ethanol for all alcoholic beverages
- A standardized national minimum price per standard drink is negotiated with all provinces and territories for all alcoholic beverages

2. Marketing and Advertising

- The CRTC advertising code is updated and expanded to include promotions used by manufacturers and retailers on digital and social media platforms

3. A new National Alcohol Strategy

- The federal government initiates a process to develop a new national strategy for reducing alcohol-related harm that is guided by evidence and independent of vested commercial interests

4. An Alcohol Act for Canada

- Recognising that alcohol is responsible for more economic costs in Canada than either cannabis or tobacco, both substances which have their own Acts, a federal Alcohol Act is needed that could include the indexation of excise taxes which are based on alcohol content, comprehensive alcohol advertising restrictions, mandatory health and safety labeling for alcohol products and a minimum legal drinking age.

INTRODUCTION

Rationale

In 2015, 77% of Canadians reported consuming an alcoholic beverage in the previous year (5). While most Canadians consume alcohol at or under recommended levels¹, approximately 15-20% of those 15 years and older who drink alcohol do so above the Canadian Low-risk Drinking Guidelines (LRDG) for short-term and long-term effects (5). However, when adjusted for under-reporting, these estimates increase to approximately 39% for short-term harm and 27% for long-term harm (6, 7). Additionally, young adults demonstrate riskier patterns of alcohol consumption compared to youth and adults older than 25 years (5, 6, 8).

Alcohol is associated with the development of many chronic diseases as well as a broad range of acute harms including injury and poisoning (9, 10). Consumption of alcohol has been increasing in some Canadian jurisdictions (11) and there is strong evidence that as alcohol consumption and hazardous drinking patterns go up, so too do a wide range of alcohol-related harms to self and others (6, 12-18). The estimated cost of alcohol consumption in Canada as of 2014 was \$14.6 billion. From 2007 to 2014, costs attributable to alcohol increased by approximately 12% per year (1), likely associated with continuing trends towards privatisation of liquor sales, easier access to alcohol, pervasive marketing and the normalisation of drinking in Canadian culture (19-23).

Objectives

The objectives of this report are to: 1) identify evidence-based alcohol policies and practices available to the federal government that have been shown to reduce alcohol consumption and/or improve public health and safety; 2) assess the extent to which these policies have been implemented at the federal level as of mid-2018 using objective, publicly verifiable indicators selected for each of the policy domains; and 3) highlight key areas of strength and areas for improvement so as to support effective current practices and facilitate the implementation of other effective measures.

Audience

The impact of alcohol consumption in Canada is far reaching and therefore requires a “whole of government approach” to effectively implement national policies applicable to all provinces and territories. Therefore, while the main audience for this report includes federal ministries, departments and agencies, the findings are also relevant to provincial and territorial governments. Parallel policy domains at the provincial and territorial level have been evaluated

¹ As per the Canadian Low-Risk Drinking Guidelines, to reduce your long-term health risks from alcohol, drink no more than 10 drinks a week for women, with no more than 2 drinks a day most days and 15 drinks a week for men, with no more than 3 drinks a day most days. To reduce your risk of injury and harm, drink no more than 3 drinks (for women) or 4 drinks (for men) on any single occasion (35).

in a companion report (4), as part of a follow up to the 2013 report (2), which is in turn relevant to the federal government. The intended audience for this report also includes a wide variety of stakeholders and influential groups, such as the National Alcohol Strategy Advisory Committee (NASAC), who are involved in policy analysis and development at the federal, provincial and territorial levels. This report is also relevant to non-governmental organisations (NGOs) and charities focused on social and health problems in which alcohol is implicated.

The following list identifies the main federal ministries, departments and agencies that have a significant governance role involving alcohol-related issues in Canada as well as the policy domains we assess in this report:

- Department of Justice Canada
- Transport Canada
- Canadian Border Services Agency
- Canadian Radio/Television and Telecommunications Commission (CRTC)
- Department of Finance Canada
- Canadian Food Inspection Agency
- Bureau of Policy, Intergovernmental and International Affairs
- Department of Indigenous Services Canada
- Global Affairs Canada
- Correctional Services Canada
- Public Health Agency of Canada
- Health Canada
- Office of Drug Policy Science and Surveillance

Overall Study Design

The study design is based on a similar model conceived and implemented by MADD Canada assessing the progress of policy measures to reduce impaired driving (24). Our team of experts originally adapted the MADD Canada concept to apply to the alcohol policy field for provincial jurisdictions as part of the evaluation project that was published in 2013 (2, 3). A Health Canada-funded project was recently completed to update the 2013 report with a revised protocol, new indicators and the addition of the three Canadian territories (4).

While some key aspects of alcohol control fall predominantly to the provinces and territories there are other strategies and policies which the federal government is able to implement that can further prevent and reduce alcohol-related harms. The policies and practices being evaluated here encompass policy areas over which the federal government has direct responsibility (e.g., excise taxation) or areas where they can more indirectly facilitate implementation at the provincial or territorial level (e.g., providing incentives for uptake of specific policies and programs or through recommendations in a federally-endorsed national alcohol strategy). The information presented in this report elucidates the current extent and

status of federal alcohol policies and programs in Canada and identifies those under provincial and territorial control which the federal government can help strengthen through national coordination and moves towards standardisation. Detailed assessment of the parallel policies at the provincial and territorial level are presented in the 2019 companion report (4).

METHODS

Alcohol Policy Domains

The policy domains included in the current federal assessment were selected on the basis of published evidence of effectiveness including systematic and thematic literature reviews as well as other policy analysis frameworks. Additionally, the selected policy domains correspond closely to other strategic documents such as the World Health Organisation's global strategy on alcohol (25) and the Canadian Public Health Association's position paper on alcohol (26). The 2013 report (2) and the 2019 provincial and territorial companion report (4) provide detailed summaries of the evidence-base supporting each of the selected policy domains considered.

It should be noted that the federal government was rated on only 10 of the 11 identified policy domains in the companion report, as one of the policy domains (Liquor Law Enforcement) falls within the purview of the provincial and territorial governments. The majority of the policy domains (7 of 11) included in these assessments were selected as having strong direct evidence of effectiveness as a means of reducing population level consumption of alcohol and/or related harms. This determination was based on rigorous systematic reviews of the public health and safety impacts of alcohol policy measures (e.g., Anderson et al., 2009; Babor et al., 2010)(12, 13). Updated thematic literature reviews were conducted for each of the policy domains to ensure the domain indicators were informed by the most current evidence. Additionally, extensive alcohol policy analysis frameworks (27, 28) and policy recommendations from the *WHO Global Strategy to Reduce the Harmful Use of Alcohol*, to which Canada is a signatory, were incorporated (25).

These seven direct policy domains include: alcohol pricing and taxation; physical availability; impaired driving countermeasures; marketing and advertising controls; minimum legal drinking age (MLDA); screening, brief interventions and referrals (SBIR); and liquor law enforcement with this report assessing the first six policy domains. This report also assesses four indirect policy domains, which are a set of evidence-based strategies that can facilitate implementation of the aforementioned direct policy domains. The indirect policy domains include: alcohol control system; a national alcohol strategy; monitoring and surveillance of alcohol-related harms; and health and safety messaging.

Alcohol Policy Domain Weights

In order to establish the list of federal policy domains to be included in the assessment, we convened a meeting of the co-investigators of the 2019 provincial and territorial project to adapt the provincial and territorial alcohol policy rubric specifically for the federal government. All of the policy domains that form part of the evaluation are evidence-informed and the co-investigators determined the domain weights by rating them on a five-point scale according to each policy's degree of effectiveness or facilitation and its scope, see Table 1. The definitions of effectiveness, facilitation and scope used here are the same as those in the provincial and territorial assessment.

To determine the weights of the direct domains assessed for this report (domains 1 through 6), ratings of effectiveness (out of 5) were made based on the breadth and strength of research evidence for a policy domain's potential to reduce alcohol-related harms under optimal implementation conditions. **Effectiveness** ratings take into account: published evidence with special emphasis on systematic reviews and meta-analyses; theory and principles established in other areas of prevention and health policy. For the indirect domains (8 through 11), ratings of the domains' ability for **facilitation** were also based on prevention and health policy theory but additionally on their potential to facilitate implementation of one or more of the six direct policy domains. For **scope**, ratings for all domains were based on the approximate proportion of the population, affected either by their own or others' alcohol use, that could potentially be reached if the policy or practice was fully implemented. The outcomes of the effectiveness/facilitation and scope ratings were then used to determine the domain weighting. There was a high degree of inter-rater reliability across the investigative team and a follow-up meeting was held to discuss and reach consensus on a small number of discrepant ratings. The domain weightings determine the maximum possible policy score for each domain.

As an example, the Pricing and Taxation policy domain received the maximum rating of five for both effectiveness and for scope, giving it an overall weight, or maximum possible score, of 25 (5x5). The evidence for effectiveness of pricing policies, such as minimum pricing and taxation, is strong (effectiveness rating of 5 out of 5) and policies such as excise taxes impact all alcohol sold in Canada (scope rating of 5 out of 5). In contrast, the Physical Availability domain received lower ratings given the more limited scope for federal action in this domain resulting in an overall weight of four (4x1). Although evidence indicates that policies controlling the physical availability of alcohol are effective at reducing harmful consumption and related harms (effectiveness rating of 4 out of 5), the types of these policies falling under federal control were very limited in their ability to impact a significant proportion of the population (scope rating 1 out of 5).

Table 1: Federal Policy Domain Weights

Direct Policy Domain	Effectiveness (out of 5)	Scope (out of 5)	Maximum Possible Score ² (out of 25)	Maximum Possible Score ³ (%)
1. Pricing and Taxation	5	5	25	16
2. Physical Availability	4	1	4	3
3. Impaired Driving Countermeasures	5	3	15	10
4. Marketing and Advertising Controls	3	5	15	10
5. Minimum Age (MLDA)	4	3	12	8
6. Brief Intervention (SBIR)	3	3	9	6
7. Liquor Law Enforcement	3	0	0	0
Indirect Policy Domain	Facilitation (out of 5)	Scope (out of 5)	Maximum Possible Score ⁴ (out of 25)	% Maximum Possible Score ²
8. Control System	5	5	25	16
9. National Alcohol Strategy	4	5	20	13
10. Monitoring and Reporting	4	5	20	13
11. Health and Safety Messaging	3	4	12	8
Overall maximum possible score			157	100

Alcohol Policy Domain Indicators and Point Values

Each policy domain is comprised of at least one policy or practice indicator that can be used to measure implementation of specific gold standard best practice policies relevant to that domain. The research team operationalised the indicators after consultation with project co-investigators and other experts in alcohol policy to determine the extent to which the federal government had regulatory control or significant influence over particular policies. A scoring rubric modelled on the 2013 report was developed for each policy domain and associated indicators with each domain assigned a maximum of ten points. Within each domain the ten points were scaled to

² Maximum possible score= Effectiveness * Scope

³ % Maximum possible score= (maximum possible score/sum of all maximum possible scores)

E.g. % Maximum possible score for Pricing= (25/157)=16%

⁴ Maximum possible score= Facilitation * Scope

reflect each indicator's relative capacity to reduce alcohol-related harms; determinations were finalised through multiple team consultations. A legal expert (R. Solomon) then peer-reviewed the full scoring rubric and feedback on successive versions was integrated into the final consensus document, See Appendix B for full scoring rubric.

DIRECT POLICY DOMAINS – Indicator Summary

Pricing and Taxation policy indicators assessed the application of federal alcohol taxes (excise and GST) for whether they directly reflected alcoholic strength. Minimum pricing policies were also assessed for lands/waters under federal control (e.g. military).

Physical Availability policy indicators included legislated restrictions for limits on duty exemptions for imported alcohol to discourage cross border shopping.

Impaired Driving Countermeasures policy indicators assessed incorporation of a blood-alcohol concentration of .05% in the *Criminal Code* and implementation of random breath testing.

Marketing and Advertising Controls policy indicators reflected the comprehensiveness, coverage, enforcement and monitoring of alcohol marketing and advertising restrictions. In particular, the indicators reflected the extent to which national advertising codes were applied to the full range of both electronic and digital media.

Minimum Legal Drinking Age (MLDA) policy indicators assessed implementation and level of a federal minimum legal purchase age for alcohol.

Screening, Brief Intervention and Referral (SBIR) policy indicators looked at whether there was federal support for SBIR programs and implementation of national SBIR initiatives for a range of populations.

Liquor Law Enforcement was not assessed in the present federal policy assessment exercise as this domain is under provincial or territorial control.

INDIRECT POLICY DOMAINS – Indicator Summary

Control System policy indicators examined the protection of government control systems for alcohol in Canada, federal regulation of duty-free outlets and trade law exemptions, specific to alcohol.

National Alcohol Strategy policy indicators assessed the implementation of an up-to-date federally-endorsed and funded national alcohol strategy with identified leadership. The extent to which the above evidence-based policies were recommended and whether the strategy was arms-length from organisations with a financial interest in the sale of alcohol.

Monitoring and Reporting policy indicators assessed implementation of a federally-funded national alcohol monitoring program with regular reporting intervals, transparency of reporting as a condition of funding and tracking of key indicators of alcohol consumption and harm.

Health and Safety Messaging policy indicators assessed implementation of federally-mandated alcohol labelling on products sold in all jurisdictions including health and safety messaging, standard drink information and low-risk drinking guidelines. Indicators included comprehensiveness of federal health messaging on alcohol including endorsement and promotion of national low-risk drinking guidelines, comprehensive multi-media campaigns and mandated health messaging in all advertising and marketing. While under direct Federal control, such policies are only indirectly effective for reducing alcohol harms.

Data Collection and Validation

Detailed data collection templates were developed based on the 10 federally relevant policy domains and associated indicator criteria. Research Coordinators (RCs) conducted online document and website searches to collect all publicly available policy information. When no data were available, a note to indicate the lack of available information on that particular policy indicator was entered. An external legal consultant was enlisted to interpret and advise on certain specialised legal information (e.g., trade law) beyond the expertise of the team to ensure that accurate and complete data were collected. Once the RCs completed their searches of publicly available policy information, a key contact in the federal government was enlisted to help identify stakeholders in relevant departments who could a) provide additional policy information that was not available in the public domain, and b) complete validation of the data collected by the RCs. Stakeholders from various federal departments, agencies and branches as well as from the Canadian Radio/Television and Telecommunications Commissions (CRTC) and other non-government organisations were sent the relevant data for validation, see Table 2. Any revisions or updates provided by the validation contacts were incorporated into the final data spreadsheets up to and including June 30th 2018, in advance of scoring.

Table 2: Federal Alcohol Policy Contacts Involved in Data Validation

Direct Policy Domains:	Validation contacts:
1. Pricing and Taxation	Department of Finance Canada
2. Physical Availability	Global Affairs Canada
3. Impaired Driving Countermeasures	Department of Justice Canada
4. Marketing and Advertising Controls	Canadian Radio/Television and Telecommunications Commission; Office of Drug Policy, Controlled Substances Directorate, Health Canada
5. Minimum Age (MLDA)	Bureau of Policy, Intergovernmental and International Affairs
6. Brief Intervention (SBIR)	Drugs Program; Department of National Defense; Correctional Service Canada
7. Liquor law Enforcement	N/A, not under Federal jurisdiction
Indirect Policy Domains:	Validation contacts:
8. Control System	Global Affairs Canada; Canadian Border Services Agency
9. National Alcohol Strategy	Health Canada; National Alcohol Strategy Advisory Committee
10. Monitoring and Reporting	Office of Drug Policy Science and Surveillance
11. Health and Safety Messaging	Intergovernmental and International Affairs

Data Scoring and Weighting

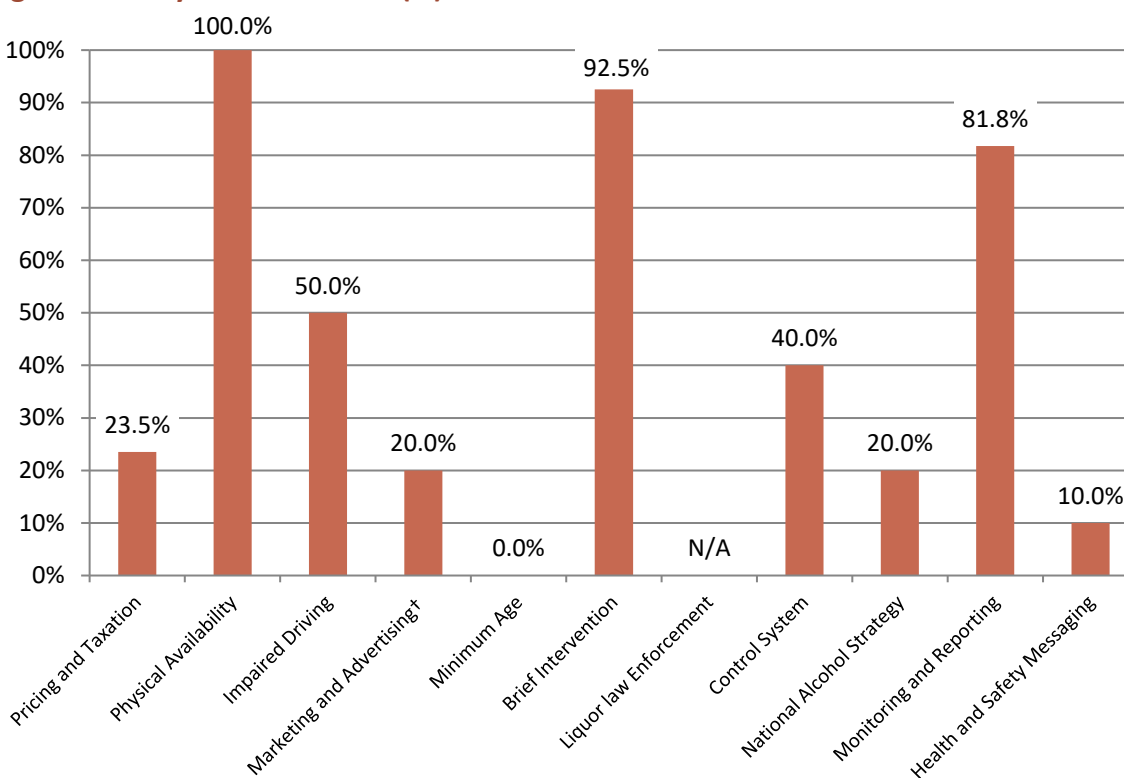
With the rubric serving as a guide, scoring across the 10 federal policy domains was completed independently by three members of the research team. One of the RCs reviewed the scores and identified any discrepancies which were then resolved together by both the original scorers and the principal investigators (T. Stockwell and N. Giesbrecht). As per the overall study protocol (including both the 2013 and 2019 reports), any instances where no policy information could be found in the public domain or provided by the project contacts, it was assumed that no policy was in place and a conservative score of zero was applied. There were no instances in the current federal assessment where a lack of policy information resulted in a score of zero.

An example of how final Policy **Domain Scores** were calculated is provided in Appendix A. In Step 1, unadjusted domain scores were calculated by summing the indicator scores for each policy domain out of a maximum of 10. In Step 2, these scores out of 10 were weighted by their maximum possible score value, see weights used in Table 1. Next, the **Total Policy Implementation Score** was calculated by summing the Domain Scores.

RESULTS

The Policy Domain Scores for the 10 federal domains ranged from 0% for Minimum Legal Drinking Age to 100% for Physical Availability among policy domains with evidence of direct effectiveness. Among the policy domains that indirectly support effective policies the range was from 10% for Health and Safety Messaging to 81.8% for Monitoring and Reporting, see Figure 1.

Figure 1: Policy Domain Scores (%)



† denotes policy domains for which not all indicator information was validated by key informants

The Total Policy Implementation Score for the 10 policy domains showed that Canada's federal government is reaching just over one third (38.4%) of its overall potential for implementing effective alcohol policies to reduce alcohol-related harm at the population level, see Table 3. The federal government achieved a slightly lower score (35.9%) for the six policies over which it has direct control compared with (41%) for the four over which it has only indirect influence.

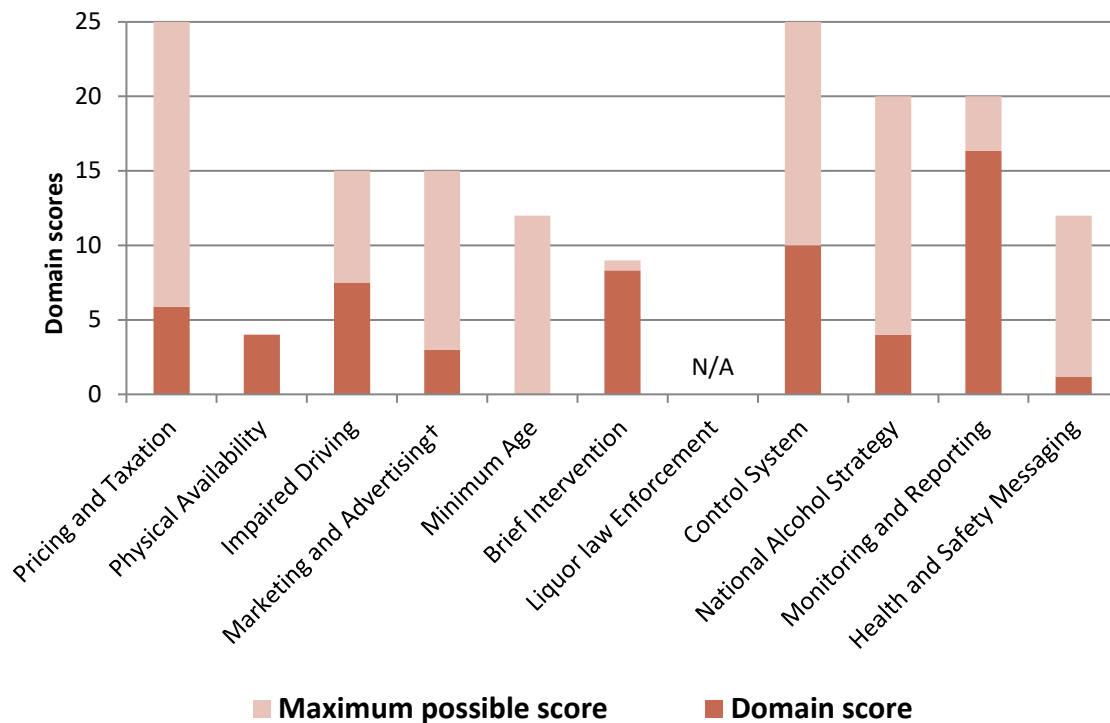
Table 3: Summary of Domain Scores for Federal Alcohol Policy Domains

Policy Domains	Domain score	Maximum Possible Score	Domain score (%)
DIRECT POLICY DOMAINS			
1. Pricing and Taxation	5.88	25	23.5
2. Physical Availability	4.00	4	100.0
3. Impaired Driving Countermeasures	7.50	15	50.0
4. Marketing and Advertising Controlst†	3.00	15	20.0
5. Minimum Age (MLDA)	0.00	12	0.0
6. Brief Intervention (SBIR)	8.33	9	92.5
7. Liquor law Enforcement	N/A	N/A	N/A
INDIRECT POLICY DOMAINS			
8. Control System	10.00	25	40.0
9. National Alcohol Strategy	4.00	20	20.0
10. Monitoring and Reporting	16.35	20	81.8
11. Health and Safety Messaging	1.20	12	10.0
TOTAL POLICY IMPLEMENTATION SCORE	60.25	157	38.4

† Denotes policy domains for which not all indicator information was validated by key informants

It is important to note that while high percentage scores were achieved for some domains such as Physical Availability (score of 4 out of a maximum possible of 4) and Brief Intervention (SBIR) (score of 8.33 out of a maximum possible of 9), these domains had low weights reflecting the investigative team's ratings of the extent of evidence for their effectiveness and/or scope, see Figure 2.

Figure 2: Policy Domain Scores Achieved versus Maximum Possible Scores



† Denotes policy domains for which not all indicator information was validated by key informants

Direct Policy Domain Results

1. Pricing and Taxation domain score: 23.5%

There are currently no federal minimum pricing policies for federally controlled lands/waters and the majority of federal taxes are collected as a ‘flat tax’ i.e. they are calculated on the basis of litres of beverage rather than litres of alcohol. While the federal government recently reintroduced annual indexation of excise taxes, these are not volumetric for the majority (68%) of beverages sold and there exist significant exemptions and discounts.

2. Physical Availability domain score: 100%

The federal government has legislated limits on duty-exempt importation of alcohol across national borders at levels which discourage excessive personal import of duty-exempt alcohol.

3. Impaired Driving Countermeasures domain score: 50%

The federal government recently passed a bill to allow for random breath testing which became effective in December 2018. The federal BAC limit for driving still remains at the .08% level.

4. Marketing and Advertising Controls domain score: 20%

The code for broadcast advertising of alcoholic beverages is not enforced by an authority independent from the alcohol industry, does not require pre-clearance of advertisements, has limited capacity to impose meaningful sanctions and does not produce any publicly available monitoring or reporting of alcohol marketing activities.

5. Minimum Legal Drinking Age domain score: 0%

Unlike the situation with both cannabis and tobacco, there is no federal legislation dictating a minimum purchase age for alcohol in Canada.

6. Screening, Brief Intervention and Referral domain score: 92.5%

There is currently extensive federal funding available for all Canadian jurisdictions to support SBIR programs. The federal government also provides access to SBIR-related resources for the general population and specific at-risk groups and conducts SBIR programs for specific groups such as federal prison populations, the military and federal civil servants.

7. Liquor Law Enforcement domain: Not Scored

This domain was not scored for federal policy implementation as liquor laws are under provincial and territorial jurisdiction. See Stockwell et al., (2019)(4) for ratings of provincial and territorial policy implementation.

Indirect Policy Domain Results

8. Alcohol Control System domain score: 40%

The federal government's *Importation of Intoxicating Liquors Act* provides a mechanism for controlling the import and distribution of alcohol by the provinces in Canada (not including the territories). The Act is one measure that may help preserve the public alcohol monopolies by controlling who may import and sell alcohol in Canada. Additionally, there are international health and safety trade law exemptions in place although they are not specific to alcohol and there are several challenges in having them invoked. While the Duty-free outlets are government licensed, they are privately owned and run.

9. National Alcohol Strategy domain score: 20%

The existing ten-year-old National Alcohol Strategy (NAS) recommendations have never been endorsed by the federal government (29), although Health Canada did provide partial funding for its development. The NAS did not exclude input from the alcohol industry and did not include recommendations for all relevant alcohol policy domains.

10. Monitoring and Reporting domain score: 81.8%

While there exist a number of federally-funded sources of alcohol-related data from different organisations, data are not available on a consolidated federal platform, data are often produced ad hoc and public reporting is often not mandatory.

11. Health and Safety Messaging domain score: 10%

There is currently little alcohol-related health and safety messaging produced by the federal government. Health messaging is not mandatory in alcohol advertising and alcohol containers are not required to be labeled with standard drink information, low-risk drinking guidelines or health and safety messages; national low-risk drinking guidelines are not federally endorsed.

DISCUSSION

Overall the federal government was assessed as having achieved just over one third of its potential to implement effective national policies to reduce alcohol-related harm in Canada, suggesting there are significant unrealized opportunities for reducing alcohol harm. Each of the 10 policy domains are discussed below highlighting positive progress made, areas falling short of gold standard best practice and opportunities for strengthening Canadian alcohol policies (see Appendix B for domain-specific scoring breakdowns) which is then followed by overall reflections.

Direct Policy Domains

1. Pricing and Taxation

In spring 2018 the federal government announced a small increase in excise tax rates and also the reintroduction of annual indexation after almost 30 years of no effective overall change in federal excise tax rates and, hence, billions of dollars of lost government revenue.

Unfortunately, the excise taxes collected on the great majority of alcohol sold in Canada (beer and wine) are still “flat taxes” calculated at a per litre of product, as opposed to a “volumetric tax” calculated per litre of ethanol. It is the ethanol in alcoholic beverages that poses risks for both acute and chronic alcohol-related harms and excise taxes are a perfect medium for providing financial incentives for manufacturers to create lower strength, less hazardous products and for consumers to purchase them. Canada's Standing Committee on Health recently recommended that the federal government implement indexed volumetric excise taxes for all alcoholic drinks (30). At present, these are only applied to products made from distilled spirits that have an alcohol content greater than 7%. Canada's existing excise tax rates also have significant loopholes that further undermine the effectiveness of the policy e.g. they are not applied to UBrew or UVin products and there are exemptions on local products.

The 5% Canada Goods and Services Tax (GST) is the other main form of federal alcohol taxation. This has the advantage of automatically reflecting the effects of inflation on some of the costs of producing alcoholic beverages, it has the disadvantage of being unrelated to the alcohol content and hence risk from alcoholic drinks. Public health and safety around alcohol use would be enhanced if the GST was to be scrapped and replaced with an increase in excise tax rates calculated per litre of ethanol and indexed at least annually to the cost of living.

Finally, there are no minimum prices set by the federal government for alcohol sold on federally controlled lands and waters. Implementing a federal minimum price for these jurisdictions would not only help to reduce overall consumption and alcohol-related harms but it would also set precedent for a standardised minimum price across the provinces and territories.

2. Physical Availability

While the federal government has limited jurisdiction over the physical availability of alcohol and this domain contributed a small percentage of the Total Policy Implementation Score, this was the only domain to achieve a 100% score. Contributing to this important aspect of alcohol policy, Canada imposes legislated limits on duty-exempt importation of alcohol across national borders. In addition, duty-exempt limits are currently set to a level which discourages excessive personal import of alcohol. The fact that some provincial premiers have recently indicated a desire to loosen the laws limiting the amount of alcohol that can be transported across provincial borders highlights the importance of maintaining the integrity of existing provincial and territorial alcohol policies. Aside from cross-border duty-free exemption limits, the federal government has limited control over the physical availability of alcohol (i.e., number and location of stores) which is primarily managed at the provincial and territorial level.

3. Impaired Driving Countermeasures

The federal government scored 50% on the Impaired Driving Countermeasures domain. While there is promising work currently underway at the federal level in the area of impaired driving policies, some key policies have not yet been implemented. A consultation led by the Minister of Justice aimed at reducing the *Criminal Code* of Canada BAC limit from .08% to .05% took place in summer 2017. However, this plan appears to have stalled and no changes have yet been proposed to the *Criminal Code*. Significant progress has, however, been made towards introducing random breath testing. In June 2018 Bill C-46 received royal assent and random breath testing was implemented in December 2018.

4. Marketing and Advertising Controls

The federal government was assessed as having achieved only one fifth of its potential in this policy domain. Alcohol marketing and advertising is currently regulated federally by the Canadian Radio, Television and Broadcasting Commission's (CRTC) Code for Broadcast Advertising of Alcoholic Beverages (CBAAS). The CBAAS has content-specific restrictions that

apply to all licensees (i.e., licensed radio stations, television stations, and licensed discretionary services) making it the licensees' responsibility to ensure that advertising content does not violate the code. Licensees themselves can be penalised for violations as opposed to penalizing the producers of non-compliant advertisements.

As the main federal body regulating broadcast advertising and marketing of alcohol, the CRTC, is very limited in scope as it does not govern any of the more recent and ubiquitous forms of sponsorship and social media, many of which have predominantly youthful audiences (23). CBAAS restrictions on alcohol marketing only apply to traditional broadcast media unless stipulated by the provincial and territorial governments; there are no quantity- or volume-specific regulations for any media to reduce overall exposure to alcohol marketing. The CRTC does not require pre-clearance for ads, is not enforced by a non-industry affiliated independent authority which can levy meaningful sanctions and there is no evidence of any type of monitoring or public reporting of alcohol industry marketing activities. Ad Standards is the agency responsible for responding to complaints about content in advertisements on TV and radio that violate the CRTC code. However, this highlights an inherent conflict of interest since members of Ad Standards include transnational corporations that also form part of the alcohol industry. The Standing Committee on Health recently recommended the federal government direct the CRTC to review the existing code to determine if it should also apply to digital marketing such as social media (30).

Aside from CRTC controls, alcoholic beverage are subject to the *Food and Drugs Act* and the *Consumer Packaging and Labelling Act*, under which there are general prohibitions against labelling, packaging, treating, processing, selling or advertising any food in a manner that is false, misleading or deceptive or is likely to create an erroneous impression regarding its character, value, quantity, composition, merit or safety. The Canadian Food Inspection Agency has the authority to enforce these prohibitions, including recalling products that violate these provisions, although there is no evidence that the alcohol industry and the marketing materials they produce are monitored in this regard.

5. Minimum Legal Drinking Age

Minimum Legal Drinking Age is the only domain where the federal government received a score of zero. Despite current Canadian evidence demonstrating substantial benefits from delaying legal access to alcohol beyond age 19 (31-33), there is no federal legislation dictating a minimum purchase age. The absence of this federal legislation has likely led to the lack of standardisation of MLDAs at the provincial and territorial level. By contrast, the Tobacco Act prohibits the

provision of tobacco or vaping products to persons 18 years or younger⁵. Similarly, there is a federal minimum purchase age of 18 for cannabis.

6. Screening, Brief Intervention and Referral

The federal government scored very well on SBIR, reaching over 90 percent of its capacity for this domain. Health Canada currently has federal funding available to support evidence-informed and innovative health promotion, prevention, harm reduction and treatment initiatives to address substance use issues related to licit and illicit psychoactive substances, including alcohol. Importantly, this funding is open to all provinces and territories. The federal government offers programs for problematic substance use to specific groups such as incarcerated populations (run by Correction Services of Canada), the military (run by the Canadian Armed Forces and the Department of National Defense) and federal civil servant employee assistance programs.

The College of Family Physicians of Canada⁶ and the Canadian Centre on Substance Use and Addiction⁷ received unrestricted funds from NASAC members to develop an evidence-informed SBIR tool for health care professionals that incorporates Canada's Low-Risk Drinking Guidelines. This screening tool is accompanied by additional resources for different at-risk sub-populations such as women during pregnancy and while breastfeeding, youth and young adults, older adults, patients at risk for chronic conditions and individuals living with alcohol dependence.

7. Liquor Law Enforcement

The federal government was not rated directly on this policy domain though its potential for indirectly influencing the quality of enforcement of provincial and territorial liquor laws is recognised by including this is an important area of focus for a National Alcohol Strategy, see below.

⁵ Source: Tobacco and Vaping Products Act, Part II Access 8 (1). <http://laws-lois.justice.gc.ca/PDF/T-11.5.pdf>

⁶ The College of Family Physicians of Canada is a federal professional organization responsible for the training and certification of Canadian physicians

⁷ the Canadian Centre on Substance Use and Addiction is a registered national charity whose mission is to address issues of substance use in Canada by providing national leadership and harnessing the power of evidence to generate coordinated action.

Indirect Policy Domains

8. Control System

The federal government was assessed as having achieved about 40 percent of its capacity to reduce alcohol-related harm by the means of influencing alcohol control systems. The federal *Importation of Intoxicating Liquors Act* grants power to the provincial jurisdictions⁸ to import alcohol. While the Act itself may not present an incentive to maintain the provincial monopolies it does provide a mechanism which may protect remaining public monopolies. Duty-free outlets selling alcohol are licensed by the federal government, however all of the stores are privately owned and operated, thus limiting oversight and enforcement of individual outlet practices.

There are currently federal trade law exemptions designed to protect public health and safety but they are not specific to alcohol and have historically been difficult to apply in practice. Trade law requires that exemption measures cannot be arbitrary or discriminatory (i.e. they must apply to all products equally) and must be established as necessary (showing that the exemption is effective and that no other alternative policy exists that would be less restrictive to trade). While federal provisions for health and safety exemptions exist, adding alcohol-specific exemptions would also require cooperation from Canada's international trade partners (24).

9. National Alcohol Strategy

The federal government's score for the National Alcohol Strategy (NAS) domain only reached 20 percent of the optimum. There currently exists a set of Canada-specific recommendations that were developed for a NAS under the leadership of the National Alcohol Strategy Working Group, a multi-sectoral working group funded and co-chaired by Health Canada (with the Canadian Centre on Substance Use and Addiction). Health Canada continues to be represented on the NAS Advisory Committee and provides partial funding to support selected alcohol-related projects, however, the recommendations were never federally endorsed or adopted as Canada's official NAS. Despite strong efforts by the NASAC to implement the different components of the strategy, the lack of federal endorsement and only partial funding of the NAS has limited the extent of implementation thereby reducing the strategy's overall effectiveness and the influence of its recommendations.

The involvement of the alcohol industry in the development of the recommendations and ongoing participation as members of the advisory committee overseeing implementation of the NAS is also problematic and has further limited the effectiveness of the strategy (34). By contrast, tobacco industry involvement in a national public health policy would not be considered acceptable. The need for the alcohol industry to maximise profits and hence consumption levels is inconsistent with the public health objective of minimising alcohol

⁸ Note: the Constitution of Canada gives this power to the Territories.

consumption and related harm. For example, Canadian alcohol industry representatives have recently opposed the indexation of alcohol excise tax rates and the provision of health messages to consumers on alcohol containers.

The recommendations developed for the NAS cover the majority of our direct policy domains including: implementing volumetric minimum prices and indexing them to inflation; surveilling the physical availability of alcohol; strengthening impaired driving laws and programs such as graduated licensing and remedial programs for impaired driving offenders; standardizing the MLDA; developing SBIR tools; enhancing liquor law enforcement; and are only missing recommendations around restriction of alcohol marketing and advertising.

While the NAS could further be strengthened by including more up-to-date, evidence-based components in its recommendations, federal endorsement of the NAS recommendations would not only signal the government's commitment to change but would also prioritise resources to support the implementation of the strategy. As the recommendations developed for the NAS are now more than ten years old, endorsing an updated version of the strategy free of industry input would provide timely federal leadership encouraging the provinces and territories to fund and implement alcohol strategies in their own jurisdictions.

10. Monitoring and Reporting

Monitoring and reporting was another strong domain with the federal government scoring about 80 percent of the ideal. While there is currently no single comprehensive source for national data on alcohol consumption and related harms in Canada, there are a significant number of different discrete sources publicly providing this information. The Canadian Institute for Health Information (CIHI) released a report in 2017 that focused on wholly alcohol-attributable hospitalisations at the provincial and territorial level (14). CIHI also produces an indicator of the number of hospitalisations entirely caused by alcohol which is updated annually, though this indicator does not capture hospitalisations partially attributable to alcohol. Information for all provinces and territories is available on CIHI's [*Your Health System Tools*](#) interactive web based tool, which has annual hospitalisation rates for health regions, provinces and territories available separately by sex.

With funding from Health Canada, the Canadian Institute for Substance Use Research (CISUR) in partnership with the Canadian Centre for Substance Use and Addiction (CCSA) will provide a portal in late 2018 providing annual data for all Canadian jurisdictions on health harms and economic costs of alcohol use. This resource had not been completed at the time the assessment was conducted. Indicative estimates for 2014, however, are available in the recent report economic costs of substance use in Canada (1).

There are also national surveys that measure self-reported alcohol use such as the Canadian Tobacco, Alcohol and Drugs Survey (CTADS), the Canadian Community Health Survey (CCHS), and the Canadian Health Measures Survey (CHMS) although the number of alcohol-related questions within those survey instruments have been significantly reduced in recent years limiting their utility as an effective monitoring tool. Statistics Canada reports on alcohol sales data but these data are limited to alcohol products sold through the liquor authorities and do not capture liquor sold through other channels in each jurisdiction such as ferment on premise outlets. Availability of alcohol-related crime data at the federal level is particularly limited and currently only captures alcohol-related homicides and impaired driving crimes. Because of the dispersed nature of the existing datasets, a federally-produced annual report that collates the information on alcohol consumption, mortality and morbidity related to alcohol would be a valued resource to many stakeholders including NGOs, public health and safety specialists, academics and governments.

11. Health and Safety Messaging

Achieving just ten percent of their potential score, health and safety messaging was one of the weakest domains for the federal government. Health Canada does not currently disseminate clear, comprehensive and consistent federally-endorsed alcohol health and safety messaging to the public. The majority of dissemination has been limited to online website content and social media platforms with varying messages around impaired driving harms, the dangers of over consumption with a focus on youth, and the risks associated with mixing alcohol and other substances.

There are currently no legislated mandatory health messages in alcohol advertisements or mandatory health and safety messaging on alcohol products sold in Canadian jurisdictions resulting in a lack of consistency and clarity in the types of health messaging being promoted across the different provinces and territories. The absence of any mandated health information on alcohol containers sends an implicit message to consumers that the potential consequences of consumption are not serious. By legislating mandatory health and safety messaging related to alcohol, the federal government could better support existing initiatives or those under consideration in provinces or territories. The Standing Committee on Health recently recommended that Health Canada require all alcoholic beverages be labeled with standard serving information (30).

Standardisation of health and safety messaging at the federal level, including endorsement of Canada's Low-Risk Drinking Guidelines (LRDG), would be extremely beneficial for increasing public awareness of the health harms related to alcohol consumption. A number of other federal organisations such as the Council of Chief Medical Officers of Health, the Canadian Association of Chiefs of Police, the College of Family Physicians of Canada, MADD Canada, Public Health

Physicians of Canada and the Public Health Agency of Canada have all officially endorsed the LRDGs (35).

Overall Reflections

Among the 10 policy domains evaluated for this report, there were a number of strong evidenced-based policies such as recent increases to excise taxes and broad funding for screening and brief intervention programs that are already in place at the federal level. The current monitoring system, while somewhat fragmented, does include several sources of comprehensive data on alcohol consumption and related harms in Canada. Another key impaired driving policy is random breath testing which was implemented in December 2018. Also, the existing recommendations for a national alcohol strategy include several important and effective recommendations such as the indexation of minimum prices reflecting alcohol content within each beverage class and introducing comprehensive standard drink labelling. Many of the recommendations developed for the NAS provide clear direction for the federal government to strengthen their alcohol policies and further support the provincial and territorial jurisdictions in reducing alcohol-related harms.

Despite some federal policy domains showing promising achievements, there are others with significant room for improvement. Low scores in key domains such as Pricing and Taxation, a National Alcohol Strategy and the Alcohol Control System are particularly worrying. These policies variously have strong evidence of effectiveness, can facilitate the implementation of other affected policies and have a broad reach across the Canadian population. For example, there is currently no federally set minimum price per standard drink for alcohol sold on federal lands/waters, and over two thirds of federal taxes are not alcohol volumetric i.e. there are no financial incentives for manufacturing, promoting or purchasing lower strength beverages. Being an ad valorem tax, the GST is not directly related to alcohol content (i.e. a cheap, high-alcohol content drink will be subject to low GST charges). It would be advantageous to reduce or eliminate GST on alcohol and replace it with higher excise taxes charged per litre of alcohol and indexed of the cost of living. If these types of policies were implemented, alcohol consumption would likely decrease thereby affecting rates of alcohol-related hospitalisations and deaths within the population (21, 22).

The fact that the current recommendations developed for the NAS have never been federally endorsed or fully funded remains problematic and the National Alcohol Strategy Advisory Committee remains limited in its power to implement the different components of the strategy. By contrast, an up-to-date federally endorsed and funded national alcohol strategy free of alcohol industry influence would be in keeping with the WHO global alcohol strategy which considers such leadership as essential (25).

Legislating a federal minimum legal purchase age for alcohol would strengthen existing enforcement levers at both the federal and provincial/territorial levels. Within the control system domain, while alcohol distribution falls largely to the provincial and territorial jurisdictions, the federal government can play a crucial role in preserving the provincial control systems. A significant number of provinces and territories are moving towards privatisation of alcohol sales, which is associated with an increase in consumption and related harms (4, 21, 36). The federal government also has an important role in ensuring alcohol specific trade law exemptions are invoked as appropriate.

LIMITATIONS

The selection of indicators for each policy domain included in the scoring rubric may not represent an entirely exhaustive list. The policies selected were based on a review of the literature, team members' expertise and legal expertise specific to the legislative jurisdiction of the Canadian government for each of the 10 domains. While the current project aimed to assess the implementation of effective alcohol policies, it was beyond our scope to assess enforcement of each policy. Every effort was made to have policy data reviewed for accuracy and to identify omissions during the validation process undertaken with key federal contacts. We were unable to obtain complete validation of some of the data for a small number of indicators included in the alcohol marketing and advertising controls domain.

CONCLUSIONS

This report provides an overview of the types of federal policies and related strategies available to the government to better protect Canadians from alcohol-related harms. By using an established framework of different evidence-based alcohol policy indicators across 10 separate domains, we were able to quantify and assess the extent to which these policies have been implemented in Canada. Currently, the federal government is reaching just over one third (38.4%) of its full potential for implementing evidence-based policies and practices that can reduce harmful alcohol consumption and related harms. By outlining the extent to which specific evidence-based alcohol policies and strategies have been implemented at the federal level, we hope that this report provides a useful starting place for stakeholders to consider how to most effectively move towards promoting and protecting the health of Canada's citizens by reducing the harms of alcohol.

RECOMMENDATIONS

The list of recommendations included below provides guidance for how to strengthen and improve existing federal alcohol policies. Potential next steps could include federal initiatives to convert this evaluation into a variety of knowledge translation materials with concrete direction for supporting implementation of the policy indicators included in each of the 10 domains.

- 1. Pricing and Taxation:** GST on alcoholic beverages should be replaced with an increase in excise taxes. Excise taxes on all alcoholic drinks should be calculated at a rate per litre of ethanol with equivalent rates across different beverage classes. A standardized national minimum price should be negotiated across all provinces and territories at a rate per standard drink (e.g. \$1.75 per Canadian standard drink). The standardisation of minimum prices could be encouraged by first setting a federal minimum price for alcohol sold on all federally controlled lands and waters.
- 2. Physical Availability:** Federal legislation which limits the amount of duty exempt alcohol transported across national borders should be maintained.
- 3. Impaired Driving Countermeasures:** The *Criminal Code* of Canada BAC limit of .08% for driving should be lowered to .05%.
- 4. Marketing and Advertising Controls:** The scope of the CRTC code should be broadened to include digital media and should include quantity or volume restrictions. Pre-clearance for ads should be mandatory and enforced by an authority independent from industry able to levy meaningful sanctions for violations. Monitoring and public reporting of alcohol industry marketing activities and violations should be introduced. Increased evidence of oversight from the Canadian Food Inspection Agency via the *Food and Drugs Act* and *Consumer Packaging and Labelling Act* to ensure products are not marketed in a false or harmful manner.
- 5. Minimum Legal Drinking Age:** A minimum legal purchase age should be legislated at the federal level, ideally for age 21, to further standardise MLDA's at the provincial and territorial level.
- 6. Screening, Brief Intervention and Referral:** Funding for evidence-informed treatment initiatives to address issues related to alcohol use should be maintained and continue to be available for all provinces and territories. Specific alcohol screening tools and programs should be made available for specific at-risk populations and general problematic substance use counselling programs should continue to be made available to relevant sub-populations and groups that fall under federal jurisdiction such as incarcerated populations, the military and federal employees.

- 7. Liquor Law Enforcement:** The federal government can encourage strong enforcement programs and activities at the provincial and territorial level by including evidence-based recommendations to strengthen these systems in a fully funded and federally endorsed National Alcohol Strategy.
- 8. Control System:** Seek to implement international trade law exemptions specific to alcohol for protecting public health and safety. Increase restrictions on privately-owned duty-free outlets to prohibit marketing activities such as volume-based promotions and provision of free samples.
- 9. National Alcohol Strategy:** An updated National Alcohol Strategy should be developed that includes evidence-based strategies in the policy domains identified in this report. This process should be multi-sectoral but should not include representatives from private commercial entities (such as alcohol producers or their representatives) with a conflict of interest due to involvement in the production, sale or marketing of alcohol products.
- 10. Monitoring and Reporting:** Implement a single comprehensive platform for national data on alcohol consumption and related harms (including a range of crimes as well as both wholly and partially attributable alcohol-related conditions) in Canada that is updated annually and publicly accessible. Produce an annual federal report on alcohol consumption, alcohol-related crimes, and alcohol-related morbidity and mortality in Canada.
- 11. Health and Safety Messaging:** Increase provision of clear, consistent and comprehensive health messaging via multiple channels including digital media. Implement mandatory health messaging in alcohol advertisements and on all alcohol products sold in all Canadian jurisdictions, including standard drink information. Federally endorse and promote Canada's Low-Risk Drinking Guidelines.

Recognising that alcohol is responsible for more economic costs in Canada than either cannabis or tobacco, both substances which have their own Acts, a federal Alcohol Act is also needed that could include the indexation of excise taxes based on alcohol content, alcohol advertising restrictions, mandatory labeling that includes standard drinking information, low-risk drinking guidelines and health-specific messaging and a minimum legal drinking age.

REFERENCES

1. Canadian Substance Use Costs and Harms Scientific Working Group. Canadian substance use costs and harms (2007–2014). Ottawa, Ont.: Canadian Centre on Substance Use and Addiction. 2018.
2. Giesbrecht N, Wettlaufer A, Simpson S, April N, Asbridge M, Cukier S, et al. Strategies to reduce alcohol-related harms and costs in Canada: A comparison of provincial policies. Centre for Addiction and Mental Health; 2013.
3. Giesbrecht N, Wettlaufer A, Simpson S, Vallance K, Stockwell T, Asbridge M, et al. Strategies to reduce alcohol-related harms and costs in Canada: A comparison of provincial policies. *International Journal of Alcohol and Drug Research*. 2015;5(2):33-45.
4. Stockwell T, Wettlaufer A, Vallance K, Chow C, Giesbrecht N, April N, et al. Strategies to reduce alcohol-related harms and costs in Canada: a comparison of provincial and territorial policies. Victoria, BC: Canadian Institute for Substance Use Research, University of Victoria; 2019.
5. Canadian Tobacco Alcohol and Drug Survey (CTADS). 2015 [Available from: <https://www.canada.ca/en/health-canada/services/canadian-tobacco-alcohol-drugs-survey/2015-summary.html>].
6. Public Health Agency of Canada. The chief public health officer's report on the state of public health in Canada, 2015: Alcohol Consumption in Canada. Ottawa. 2015.
7. Zhao J, Stockwell T, Thomas G. An adaptation of the Yesterday Method to correct for under-reporting of alcohol consumption and estimate compliance with Canadian low-risk drinking guidelines. *Canadian Journal of Public Health*. 2015;106(4):e204-e9.
8. Lalomiteanu A, Adlaf E, Mann R, Rehm J. CAMH Monitor eReport: Addiction & Mental Health Indicators Among Ontario Adults, 1977-2007. Toronto, ON: Centre for Addiction & Mental Health; 2009.
9. Rehm J, Mathers C, Popova S, Thavorncharoensap M, Teerawattananon Y, Patra J. Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *The Lancet*. 2009;373(9682):2223-33.
10. World Health Organization. Global status report on alcohol and health 2018. Geneva: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO. 2018.
11. Statistics Canada. Table 10-10-0010-01. Sales of alcoholic beverages types by liquor authorities and other retail outlets, by value, volume, and absolute volume 2018 [Available from: https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1010001001&request_locale=en].
12. Anderson P, Chisholm D, Fuhr D. Alcohol and Global Health 2 Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol. *Lancet*. 2009;373:2234 - 46.
13. Babor T, Caetano R, Casswell S, Edwards G, Giesbrecht N, Grube J, et al. Alcohol: No ordinary commodity – research and public policy – Revised edition. Oxford: Oxford University Press 2010.

14. Canadian Institute for Health Information. Alcohol harm in Canada. Examining hospitalizations entirely caused by alcohol and strategies to reduce alcohol harm. Ottawa, ON: CIHI; 2017.
15. Norström T. Alcohol Consumption and All-Cause Mortality in the United States, 1950–2002. *Contemporary Drug Problems*. 2007;34(3):513-24.
16. Ramstedt M. Alcohol and fatal accidents in the United States--a time series analysis for 1950-2002. *Accident; analysis and prevention*. 2008;40(4):1273-81.
17. Rossow I. Alcohol Consumption and Homicides in Canada 1950-1999. *Contemporary Drug Problems*. 2004;31:20.
18. Skog OJ. Alcohol consumption and fatal accidents in Canada, 1950-98. *Addiction*. 2003;98(7):883-93.
19. Giesbrecht N, Stockwell T, Kendall P, Strang R, Thomas G. Alcohol in Canada: reducing the toll through focused interventions and public health policies. *Can Med Assoc J*. 2011;183(4):450-5.
20. Rehm J, Baliunas D, Brochu S, Fischer B, Gnam W, Patra J, et al. The costs of substance abuse in Canada 2002. Ottawa: Centre for Addiction and Mental Health; 2006.
21. Stockwell T, Zhao JH, Macdonald S, Vallance K, Gruenewald P, Ponicki W, et al. Impact on alcohol-related mortality of a rapid rise in the density of private liquor outlets in British Columbia: a local area multi-level analysis. *Addiction*. 2011;106(4):768-76.
22. Stockwell T, Zhao J, Martin G, et al. Minimum alcohol prices and outlet densities in British Columbia, Canada: Estimated impacts on alcohol attributable hospitalisations. *Am J Public Health*. 2013:e1-e7.
23. Wettlaufer A, Cukier SN, Giesbrecht N. Comparing Alcohol Marketing and Alcohol Warning Message Policies Across Canada. *Subst Use Misuse*. 2017;52(10):1364-74.
24. Solomon R. Legal Memorandum. March 15, 2018.
25. World Health Organization. Global strategy to reduce the harmful use of alcohol. Geneva, Switzerland 2010 [Available from: http://www.who.int/substance_abuse/activities/gsrhua/en/].
26. Canadian Public Health Association. Too high a cost: A public health approach to alcohol policy in Canada. Canadian Public Health Association Position Paper. Ottawa: Canadian Public Health Association; 2011.
27. Burton R, Henn C, Lavoie D, O'Connor R, Perkins C, Sweeney K, et al. A rapid evidence review of the effectiveness and cost-effectiveness of alcohol control policies: an English perspective. *The Lancet*. 2017;389(10078):1558-80.
28. Nelson TF, Xuan Z, Babor TF, et al. Efficacy and the Strength of Evidence of U.S. Alcohol Control Policies. *Am J Prev Med*. 2013;45(1):19-28.

29. Canadian Centre on Substance Use and Addiction. Official Supporters of Canada's Low-Risk Alcohol Drinking Guidelines. 2018.
30. Canada P, Senate. Standing Committee on Health,. Report on Highly Sweetened Pre-Mixed Alcoholic Beverages. 42nd Parl., 1st sess. Rept. 18. 2018.
31. Callaghan RC, Sanches M, Gatley JM. Impacts of the minimum legal drinking age legislation on in-patient morbidity in Canada, 1997–2007: a regression-discontinuity approach. *Addiction*. 2013;108(9):1590-600.
32. Callaghan RC, Gatley JM, Sanches M, Asbridge M. Impacts of the Minimum Legal Drinking Age on Motor Vehicle Collisions in Québec, 2000–2012. *Am J Prev Med*. 2014;47(6):788-95.
33. Callaghan RC, Gatley JM, Sanches M, Asbridge M, Stockwell T. Impacts of drinking - age legislation on alcohol - impaired driving crimes among young people in Canada, 2009–13. *Addiction*. 2016;111(6):994-1003.
34. McCambridge J, Mialon M, Hawkins B. Alcohol industry involvement in policymaking: a systematic review. *Addiction*. 2018;113(9):1571-84.
35. Butt P, Beirness D, Gliksman L, Paradis C, Stockwell T. Alcohol and health in Canada: A summary of evidence and guidelines for low-risk drinking. Ottawa, ON: Canadian Centre on Substance Abuse. Available from URL: <http://www.ccsa.ca/2011%20CCSA%20Documents/2011-Summary-of-Evidence-and-Guidelines-for-Low-Risk%20Drinking-en.pdf>. Accessible 18 September 2012; 2011.
36. Stockwell T, Zhao J, Macdonald S, Pakula B, Gruenewald P, Holder H. Changes in per capita alcohol sales during the partial privatization of British Columbia's retail alcohol monopoly 2003-2008: a multi-level local area analysis. *Addiction*. 2009;104(11):1827-36.

APPENDIX A: Domain Scoring and Weighting Calculations

The following illustrates how the policy implementation scores were calculated using the Pricing and Taxation domain as an example.

Step 1: Calculating the unweighted domain score

The three indicator scores were summed to obtain a total unweighted Pricing and Taxation domain score out of a maximum of 10 points.

Indicator 1: Minimum pricing for federal jurisdictions (out of 1.5)	Indicator 2: Volumetric taxation (out of 3.0)	Indicator 3: Volumetric excise tax (out of 5.5)	Unweighted Domain Score (out of 10) Ind.1 + Ind. 2+ Ind. 3
0	0.96	1.39	= 0 + 0.96 + 1.39 = 2.35/10 or 23.5%

Step 2: Weighting the total unweighted domain scores to calculate the policy domain score

Next the Pricing and Taxation domain score was weighted by 25, see Table 1, to reflect its high ratings for both effectiveness (5/5) and scope (5/5) relative to the other 10 policy domains.

Unweighted Score (out of 10)	Maximum Policy Score Effectiveness (=5) X Scope (=5)	Policy Domain Score Unweighted Score X Weight
2.35	25	(2.35/10)*25 = 5.88 5.88 out of 25

Step 3: Calculating the total policy implementation score

The total policy implementation score was calculated by summing together the 10 policy domain scores out of a maximum possible score of 157, see Table 1.

APPENDIX B: Federal Alcohol Policy Domain and Indicator Scoring Rubric and Scores

1. PRICING AND TAXATION	INDICATOR DETAILS	INDICATOR POINT VALUES AND SCORES	INDICATOR SCORING
1. Minimum Pricing for alcohol sold on federally controlled lands/waters	<p>1a. The jurisdiction was scored on whether they implement indexed minimum unit pricing (iMUP) for all liquor sold on federally controlled lands and waters (i.e. parks, military installations, boats owned by Canadian persons or businesses)</p> <p>1b. Discounting: The jurisdiction was scored on whether they allow for any discounting or iMUP loopholes on federally controlled lands/waters</p>	0/1.5	<p>1a. iMUP for liquor sold in federally control areas (0-0.75) 0= No iMUP on federal controlled land/waters 0.2= Some components of iMUP implemented in federally controlled land /waters 0.75= iMUP fully implemented in federally controlled land/waters</p> <p>1b. Federal iMUP loopholes and discounting (0-0.75) 0= no minimum prices or loopholes that undermine iMUP on federally controlled lands/waters 0.75= No iMUP loopholes</p>
2. Volumetric taxation	2. The jurisdiction was scored on the proportion of federal alcohol taxes that are volumetric versus not (i.e. GST).	0.96/3.0	2. Proportion of volumetric taxation (0-3.0) A maximum of 3 points were awarded based on the proportion of federal alcohol taxes collected by volumetric excise versus sales tax or flat excise tax.
3. Volumetric excise tax	3. The jurisdiction was scored on the degree to which the excise tax reflects alcohol content within each major beverage type.	1.39/5.5	<p>3. Excise taxes tied to alcohol content within a beverage type (0-5.5) 0= flat excise taxes A maximum of 4 points for volumetric excise taxes, with no loopholes (e.g. no discounts or exemptions), for beer wine and spirits, weighted to reflect their proportion of sales based on estimated ethanol content by beverage type. In the case of excise tax exemptions or discounts, a score of zero was applied to the proportion of</p>

			products that would benefit from the discount and exemption. 1.5 additional points were awarded for having the same rate per litre of ethanol applied across all beverage types.
2. PHYSICAL AVAILABILITY	INDICATORS DETAILS	INDICATOR POINT VALUES AND SCORES	INDICATOR SCORING
1. Importing of alcohol into the country (cross national borders)	<p>1. The jurisdiction was scored on whether they:</p> <p>1a. impose restrictions on permitted duty exempt import volumes across national borders that are inscribed in legislation</p> <p>1b. set maximum duty exempt import volumes that effectively discourage cross border shopping</p>	10/10	<p>1a. Legislated alcohol import volumes (0-5) 0= Import volumes are not inscribed in legislation 5= Limits on the import volumes of alcohol products are inscribed in legislation</p> <p>1b. Import volumes to discourage cross border shopping (0-5) 0= No restrictions on import volumes or import volumes set to a level that could encourage cross-border shopping 5= Import volumes are set to effectively discourage cross-border shopping</p>

3. IMPAIRED DRIVING COUNTER-MEASURES	INDICATORS DETAILS	INDICATOR POINT VALUES AND SCORES	INDICATOR SCORING
1. Impaired driving code (e.g. federal <i>Criminal Code</i> limit at .05)	1. The jurisdiction was scored on whether they had made it a criminal offence to drive with a BAC of .05% or higher	0/3	1. Impaired driving <i>Criminal Code</i> (0-3) 0= The <i>Criminal Code</i> threshold for driving under the influence is set higher than a BAC of .05% 3= It is a criminal offence to drive with a BAC of .05% or higher.
2. Random breath testing	2. The jurisdiction was scored on whether they had enacted random breath testing legislation	5/7 See footnote ⁹	2. Random breath testing legislation (0-7) 0= No random breath testing legislation 7= Random breath testing legislation is in place
4. MARKETING/ ADVERTISING CONTROLS	INDICATORS DETAILS	INDICATOR POINT VALUES AND SCORES	INDICATOR SCORING
1. Comprehensiveness of alcohol marketing and advertising restrictions	1. The jurisdiction was scored on the comprehensiveness of their alcohol marketing and advertising regulations, including whether they had: 1a. Content-specific restrictions 1b. Location-specific restrictions 1c. Event specific restrictions (i.e. sponsorship)	1/3	1a-c. Comprehensiveness of alcohol marketing regulations (0-3) 1 point each for alcohol marketing regulations pertaining to: a. content, b. location, c. specific events

⁹ On June 21 2018 Bill C-46 received royal assent. Random breath testing came into effect in December 2018.

<p>2. Coverage of alcohol marketing and advertising restrictions</p>	<p>2. The jurisdiction was scored on the coverage of their alcohol marketing and advertising regulations, including whether they had:</p> <p>2a. advertiser-specific restrictions</p> <p>2b. medium- or channel-specific restrictions,</p> <p>2c. quantity/volume restrictions</p>	<p>1/3</p>	<p>2a-c. Coverage of alcohol marketing restrictions (0-3) 1 point each for alcohol marketing regulations pertaining to: a. all advertisers, b. all channels of advertising, c. the volume of marketing</p>
<p>3. Enforcement of advertising and marketing regulations</p>	<p>3. The jurisdiction was scored on whether:</p> <p>3a. they had an independent authority, to i. implement, ii. monitor, iii. enforce, and iv. report on compliance with the law or, in the absence of legislation, industry self-regulatory codes</p> <p>3b. the independent authority had a mandatory process for submitting marketing materials for pre-clearance by an independent authority</p> <p>3c. the independent authority had an established system for receiving complaints</p>	<p>0/3</p>	<p>3a. Advertising Authority (0-1) 0.00= no independent authority 0.25 point each for an independent authority that i. implements, ii. monitors, iii. enforces and iv. reports on compliance.</p> <p>3b. Pre-screening system (0-0.5) 0.0= no mandatory pre-screening or voluntary pre-screening only 0.5= mandatory pre-screening by an independent authority</p> <p>3c. Complaint system (0-0.5) 0.0= no formal complaint process 0.5= a formal complaint process</p>

	3d. the independent authority has sufficient enforcement powers, including the ability to levy meaningful sanctions that are commensurate with the violation and that escalate with the frequency of the violation.		3d. Penalties for violation (0-1) 0.0= no penalties 0.5= penalties commensurate with the violations 1.0= penalties commensurate with the violations and that escalate for repeat violations
4. Monitoring	4. The jurisdiction was scored on whether the agency collects information from the alcohol industry on marketing activities, including expenditures and areas of activity and, in the interest of transparency, whether this information is made public to support evaluation and research	0/1	4. Monitoring and Reporting (0-1) 0.5 points each for a. monitoring the alcohol industry on marketing activities and b. making the information publicly available
5. MINIMUM LEGAL DRINKING AGE	INDICATORS DETAILS	INDICATOR POINT VALUES AND SCORES	INDICATOR SCORING
1. Purchase Age	1a. The jurisdiction was scored on whether they set a federal minimum legal purchase age under the <i>Criminal Code</i> 1b. The jurisdiction was scored on the level of the federal minimum legal purchase age for alcohol.	0/10	1a. Federal purchase age (0-2.5) 0= no federal purchase age for alcohol 2.5= federal purchase age for alcohol 1b. Level of federal minimum legal purchase age (0-7.5) 0= no minimum purchase age or age below 19 2.5= minimum purchase age of 19 5.0= minimum purchase age of 20 7.5= minimum purchase age of 21

6. SCREENING, BRIEF INTERVENTION AND REFERRAL	INDICATORS DETAILS	INDICATOR POINT VALUES AND SCORES	INDICATOR SCORING
1. Federal support for SBIR programs	<p>1a. The jurisdiction was scored on whether they provide funding for provincial and/or territorial level SBIR activities either specifically or as part of a comprehensive mental health or substance misuse package.</p> <p>1b The jurisdiction was scored on whether they provide tools to support SBIR activities across the P/Ts.</p>	4.5/4.5	<p>1a. Federal funding for SBIR activities (0-1) 0= no federal funding available 1= federally funding available to provinces and/or territories for alcohol SBIR activities</p> <p>1b. Federal SBIR tools (0-3.5) 0= no tools available 1.16 points each for federal SBIR tools for implementation with the general population, women of child bearing age and pregnant women, and other at risk groups.</p>
2. Federal SBIR initiatives	<p>2. The jurisdiction was scored on whether they conduct SBIR within populations under federal control, such as:</p> <ul style="list-style-type: none"> a. Corrections populations, b. Military population, c. Federal employees 	4.75/5.5	<p>2. SBIR activities for populations under federal control</p> <p>a-b. For federally incarcerated individuals and military population (0-4): 1.5 points each for general counselling programs only, 2 points each for alcohol SBIR program</p> <p>c. For federal employees (0-1.5): 0.75 points for general counselling programs, 1.5 points for alcohol SBIR program</p>

7. LIQUOR LAW ENFORCEMENT	INDICATORS DETAILS	INDICATOR POINT VALUES AND SCORES	INDICATOR SCORING
N/A	N/A	N/A	N/A
8. CONTROL SYSTEM	INDICATORS DETAILS	INDICATOR POINT VALUES AND SCORES	INDICATOR SCORING
1. Protecting government control and public health	<p>1a. The jurisdiction was scored on whether they provide federal incentives or measures for maintaining government control over the retail sale and distribution of alcohol</p> <p>1b. the jurisdiction was scored on whether there are trade law exemptions, including those specifically for alcohol, that are permitted in the interests of protecting public health and safety. (Note: focused on NAFTA)</p>	4/8	<p>1a. Federal incentives for government control of alcohol sales and distribution (0-4) 0=No federal incentives to encourage government control of the distribution and sale of alcohol 2= federal measures to preserve the public monopolies are in place 4= Federal incentives to encourage government control of the distribution and sale of alcohol</p> <p>1b. Trade law exemptions (0-4) 0= no trade law exemptions to protect public health and safety 2= trade law exemptions do exist in order to protect public health and safety 4= trade law exemptions, specific to alcohol, exist in order to protect public health and safety</p>
2. Regulation of Duty Free outlets	2. The jurisdiction was scored on whether Duty Free outlets are government run for the purposes of minimising health and safety harms	0/2	2. Government control of Duty Free outlets (0-2) The jurisdiction was scored on the proportion of Duty Free outlets that were government licensed, owned and run, versus government licensed and privately owned and run.

9. NATIONAL ALCOHOL STRATEGY	INDICATORS DETAILS	INDICATOR POINT VALUES AND SCORES	INDICATOR SCORING
1. Implementation of a national alcohol strategy (NAS)	<p>1. The national alcohol strategy was scored on:</p> <p>1a. Whether the National Alcohol Strategy is funded</p> <p>1b. Whether the National Alcohol Strategy has an identified leader</p> <p>1c. Whether the National Alcohol Strategy leadership and committee does not include private industry (e.g. manufacturers, and private retailers)</p> <p>1d. Recency of the National Alcohol Strategy</p>	0/4	<p>1a. National alcohol strategy funding (0-2) 0= No national alcohol strategy or strategy is not funded 1.0= Strategy is partially funded (e.g. no project/activity funding) 2.0= Strategy is fully funded</p> <p>1b. National Alcohol Strategy Leadership (0-2) 0= No national alcohol strategy or strategy exists but has no leadership 1.0= Clearly identified leadership 2.0= Clearly identified leader that includes formal multisector partnerships</p> <p>1c. Independence of the national alcohol strategy (penalty of 0-2) 0= No involvement of industry in the NAS development 2= Involvement of industry in the NAS development</p> <p>1d. Recency of the strategy (penalty of 0-1) 0 points were deducted from the total score for implementation of the strategy if the strategy was</p>

			<p>created or updated in the past 5 years 0.5 points were deducted from the total score for implementation of the strategy if the strategy was developed or last updated 6-9 years ago. 1.0 point was deducted from the total score for implementation of the strategy if the strategy was developed or last updated 10 or more years ago.</p>
2. Evidence-based NAS recommendations	<p>2. Jurisdictions were scored on whether the above mentioned strategy included a wide range of evidence-based alcohol policy interventions. E.g. (a.) Pricing & taxation, (b.) physical availability, (c.) impaired driving countermeasures, (d.) marketing and advertising controls, (e.) minimum legal drinking age, (f.) screening brief intervention and referral, and (g.) liquor law enforcement</p>	2/6	<p>2. Evidence based strategy recommendations (0-6) 50% penalty if recommendations that are not federally endorsed 0= no strategy that includes alcohol 1= strategy includes recommendations from 1-2 evidence-based alcohol policy areas listed in column B 2= strategy includes recommendations from 3-4 evidence-based alcohol policy areas listed in column B 4= strategy includes recommendations from 5-6 evidence-based alcohol policy areas listed in column B 6= strategy includes recommendations from all 7 evidenced-based alcohol policy areas listed in column B</p>

10. NATIONAL MONITORING AND REPORTING	INDICATORS DETAILS	INDICATOR POINT VALUES AND SCORES	INDICATOR SCORING
1. Federal funding for a National Alcohol Monitoring program	<p>1. The jurisdiction was scored on whether they provide federal funding for a national alcohol monitoring program that:</p> <p>1a. Tracks the following indicators:</p> <ul style="list-style-type: none"> i. Alcohol consumption by sales and survey data ii. Alcohol-related morbidity iii. Alcohol-related mortality iv. Alcohol-related crime v. Alcohol-related costs <p>1b. Provides reporting at regular intervals</p>	8.175/10	<p>1a. Alcohol indicator tracking (0-4) 0= no funding for reporting activities 0.25 points for each alcohol indicator that is partially tracked (e.g. a few relevant measures are tracked) 0.5 points for each alcohol indicator that is somewhat comprehensively tracked (e.g. several measures are tracked but the set of measures fails to provide a complete picture of the issue) 0.75 points for each alcohol indicator that is comprehensively tracked. 0.375 points for each alcohol indicator that is partially tracked (e.g. only specific alcohol-related crimes and/or health conditions). An additional 0.25 points for a comprehensive monitoring program that captures all 5 alcohol indicators.</p> <p>1b. Frequency of reporting (0-4) 0= no funding for reporting activities 0.20 points per alcohol indicator for reporting every 6 years or longer 0.40 points per alcohol indicator for reporting every</p>

	1c. Requires transparency of reporting as a condition of funding		<p>4-5 years 0.60 points per alcohol indicator for reporting every 2-3 years 0.80 points per alcohol indicator reported annually</p> <p>1c. Funding conditional on transparency of reporting (0-2) 0= no funding for reporting activities 2= Making information publicly available is a condition of funding</p>
11. HEALTH/SAFETY MESSAGING	INDICATORS DETAILS	INDICATOR POINT VALUES AND SCORES	INDICATOR SCORING
1. Alcohol labelling	<p>1a. The jurisdiction was scored on whether they had mandatory alcohol labels that included the following components:</p> <ul style="list-style-type: none"> i. a warning message ii. standard drink information iii. the low-risk drinking guidelines. <p>1b. The jurisdiction was scored on the quality of the alcohol label components</p>	0/3	<p>1a. comprehensiveness of labelling components (0-2) 0= No alcohol labelling 0.66 pts for warning messages pertaining to any of the following alcohol-related risks: pregnancy/FASD, impaired driving/injury, underage drinking and chronic disease; 0.66 points for standard drink information; 0.66 points for LRDG information (link to LRDG website earns half points)</p> <p>1b. labelling component quality (0-1) 0= No alcohol labelling 0.25 points each for any of the following quality indicators: large labels; prominent labels; coloured/contrast labels; pictogram or graphic to support text</p>

<p>2. Health and Safety Messaging</p>	<p>2. Scored on the comprehensiveness of health messaging, including:</p> <p>2a. Federal endorsement and promotion of the LRDGs</p> <p>2b. Comprehensiveness of current evidence-based alcohol messaging on Health Canada website with regards to: pregnancy/FASD; impaired driving/injury; underage drinking; acute effects; chronic disease; treatment resources</p> <p>2c. Federal requirement for the inclusion of a clear evidenced based standardised health and safety message in all alcohol advertising and marketing activities</p>	<p>1/7</p>	<p>2a. Federal endorsement and promotion of the LRDGs (0-1) 0= No national LRDGs 0.5= LRDGs developed by a credible organisation but have not been federally endorsed or promoted 0.75= federal endorsement of LRDGs, but no promotion 1= LRDGs have been federally endorsed and widely promoted at the federal level</p> <p>2b. Comprehensiveness of alcohol messaging on Health Canada website (0-0.5) 0= fewer than half the topics covered 0.25= between 4-5 topics covered 0.5= all topics covered</p> <p>2c. Mandatory health and safety messages (0-0.5) 0= no mandatory or voluntary suggested health and safety message(s) 0.25= suggested voluntary health and safety message(s) 0.5= mandatory health and safety message to be included in all alcohol advertising and marketing</p>
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	<p>2d. Multi-media campaigns to raise awareness were assessed based on:</p> <p>i. The variation in messaging. i.e. whether a jurisdiction had messaging around a variety of alcohol-related health and safety topics.</p> <p>ii. The quality of the message(s) i.e. whether the message contained a clear health messages and was accompanied by graphics</p> <p>iii. Main media for health & safety messaging by Health Canada: a checklist of media types was the basis for measuring this indicator:</p> <ol style="list-style-type: none"> 1) Posters 2) Pamphlets 3) Billboards 4) Online content (websites) 5) Print Advertising 6) TV/Radio advertisements 7) Social media (Twitter, Facebook, etc.) <p>Other: _____</p>	<p>2di. Variation in messaging (0-2) (0.4 points max for each messaging category)</p> <ul style="list-style-type: none"> -Fetal Alcohol Spectrum Disorder (FASD)/pregnancy -Drinking and driving or acute injury -Minors -Chronic disease, cancer or health -Moderate consumption (Low-Risk Drinking Guidelines) <p>ii. Quality of messages (0-2) (0.4 points max for each messaging category)</p> <p>Quality is assessed by the precision of the message, the health focus, accompanying graphics etc.</p> <ul style="list-style-type: none"> -Fetal Alcohol Spectrum Disorder (FASD)/pregnancy -Drinking and driving or acute injury -Minors -Chronic disease, cancer or health - Moderate consumption (LRDGs) <p>iii. Main media for health & safety (HS) messaging (0-1)</p> <p>0.00= no HS messaging 0.25= HS messaging using 1-2 media 0.50= HS messaging using 3-4 media 0.75= HS messaging using 5-6 media 1.00= HS messaging using 7 or more media</p>
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