

International Perspectives on Public Policy on Alcohol: Evidence & Challenges

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Outline

- Responding to alcohol-related harm
 - Goals
 - Strategies
- Prevention, health promotion & harm reduction
 - Population-level strategies
 - Focused interventions
- Challenges & How to address them

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Goals of an Alcohol Control Strategy

1. Reduce overall consumption
2. Reduce % drinking in a high-risk manner
3. Reduce alcohol-related trauma, chronic disease, social problems & harm to others from alcohol

Progress on goals 1 and 2 contributes to reducing harm from alcohol.

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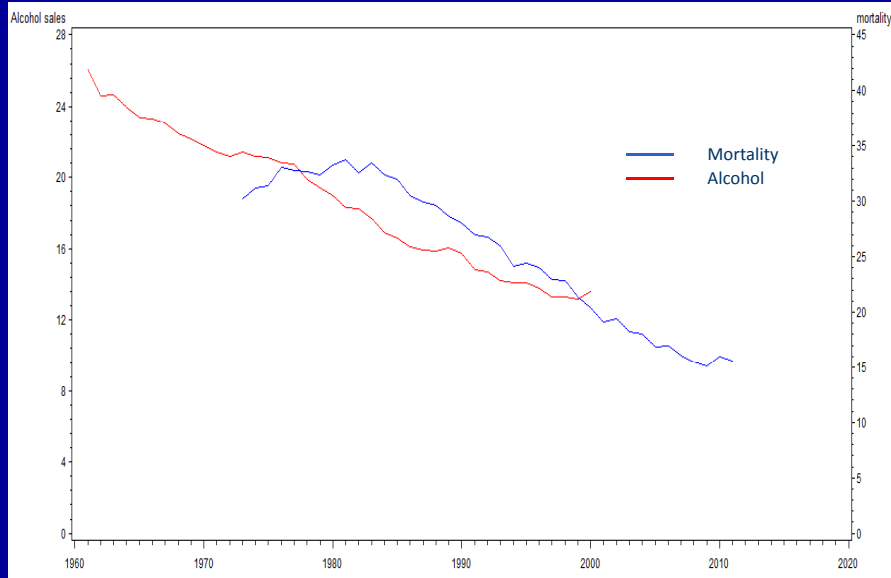
Total consumption is important:

e.g. Alcohol Consumption & Cancer Mortality

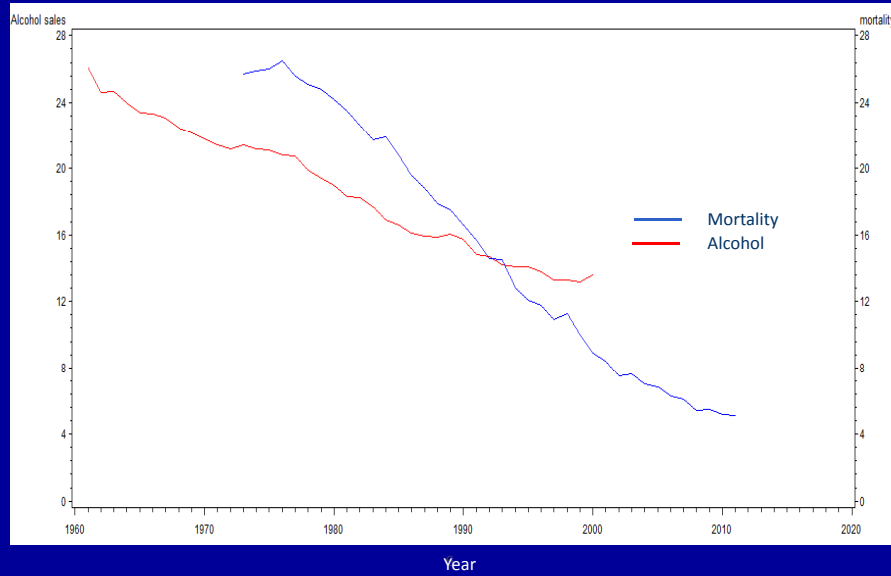
- Population-level consumption has been linked with long-term trends in mortality: suicide, homicide, traffic crashes, chronic disease -- studies in Canada, Europe & USA
- Current research by N. Schwartz et al. (2015) focuses on 17 countries: annual sales in alcohol over several decades in connection cancer mortality among males: larynx; esophageal and lip, oral cavity and pharynx (LOCP).
- We found significant associations between alcohol sales and cancer mortality in the majority of countries examined, which remained after controlling for tobacco use.
- Significant associations were observed with rising, declining or stable trends in alcohol consumption and corresponding lagged trends in mortality from specific cancer types

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LOCP mortality and alcohol (12 year lag), France



Larynx mortality and alcohol (12 year lag), France



Global Strategy on Alcohol (WHO, 2010) Recommended action in 10 areas

1. Leadership, awareness & commitment
2. Health services response
3. Community action
4. Drink-driving & counter-measures
5. Availability of alcohol
6. Marketing of alcoholic beverages
7. Pricing policies
8. Reducing the negative consequences of drinking & alcohol intoxication
9. Reducing the public health impact of illicit alcohol & informally produced alcohol
10. Monitoring & surveillance

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CPHA Position Paper on Alcohol

- **Population-based policies & interventions**
 - Alcohol pricing policies
 - Controlling physical & legal availability
 - Regulating and monitoring alcohol control systems
 - Curtailing alcohol marketing
- **Targeted Policies & Interventions**
 - Countering drinking & driving
 - Changing the drinking context
 - Educating and promoting behaviour change
 - Increasing access to screening and brief interventions and referral programs

(Canadian Public Health Association, 2011)

Strategies to Reduce Alcohol-Related Harms and Costs in Canada: A Comparison of Provincial Policies

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Aims of the project

- Collecting, assessing and disseminating up-to-date alcohol policy information.
- Highlighting exemplary efforts in Canada.
- Working with stakeholders to support knowledge exchange activities and implementation of effective alcohol policies.

In order to encourage evidence-based approaches to alcohol policy in Canada

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Design & Methods

1. Selecting the 10 policy dimensions and indicators

A review of the literature and best practices including:

T. Babor et al 2010, Oxford U. Press; P. Anderson et al. 2009 Lancet;
Canadian Centre on Substance Abuse, 2007, National Strategy;
WHO 2010 Global Strategy on Alcohol, and other resources

2. Development of the scoring rubric

Scaled indicator scores (10 dimensions and 75 indicators)

Weighted policy dimensions (reach x effectiveness)

Review by three external international experts

3. Data collection

Standardized data collection template including policies & regulations up to October 2012

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Design & Methods

4. Data verification

--Ministry of Health, Ministry responsible for Alcohol Retailing and/or Control, Ministry of Finance in all provinces

5. Pilot testing and final scoring

- Blinded data
- Scoring reliability checks (data scored twice)

6. Calculating the final policy and weighted scores

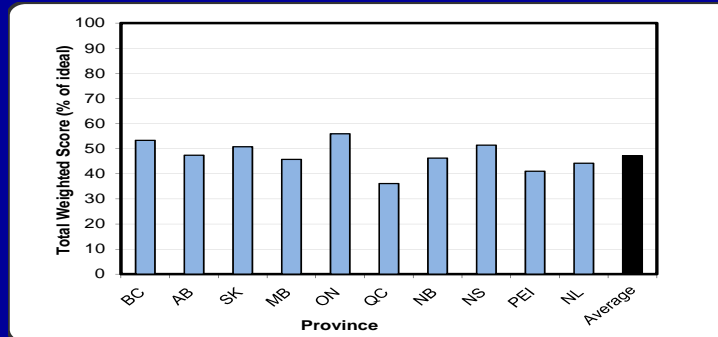
- Percent of ideal score
- Weighted by effectiveness and scope

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Weighting the policy dimensions

Policy Dimension	Effectiveness (out of 5)	Scope (out of 5)	Total Product
1. Pricing	4	5	20
2. Control System	3	5	15
3. Physical Availability	3	5	15
4. Drinking and Driving	4	3	12
5. Marketing and Advertising	2	5	10
6. Legal Drinking Age	4	2	8
7. Screening & Brief Intervent.	4	2	8
8. Server Training and Challenge and Refusal Programs	2	3	6
9. Provincial Alcohol Strategy	1	5	5
10. Warning Labels and Signs	1	4	4
Total:			103

Overall Results: Comparing the provinces on all 10 policy dimensions – based on weighted scores



Policy dimensions: pricing; alcohol control system; physical availability; drinking & driving; marketing & advertising; legal drinking age; screening, brief intervention & referral; server training & challenge and refusal; provincial alcohol policy; warning labels and signs.

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Overall Results: Across all provinces

- Average national score of 47%
- Québec 36 %
- Overall inter-provincial differences are not dramatic
- All provinces can learn from each other
- Top 5 policy dimensions, that is with the greatest potential for impact, all fall below 60% of a perfect score
 - Alcohol prices
 - Type of retail control system
 - Controls on physical availability
 - Drinking & driving interventions
 - Controls on alcohol marketing and advertising

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Alcohol Pricing Strategies

- Minimum or floor price for all on-premise & off-premise venues, indexed to keep pace with inflation
- Pricing by alcohol content in standard drink -- e.g. 341 ml of 6.5% beer is priced higher than 3.5%
- Average price keeps pace with cost of living, Consumer Price Index

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Alcohol Pricing

Meta-analysis :112 studies on alcohol price and tax levels:
Beverage alcohol prices and taxes are inversely related to drinking. Public policies that raise prices are an effective means to reduce drinking. (A. Wagenaar et al. 2009)

Systematic review: 50 articles showed alcohol prices have significant effects on alcohol-related disease and injury rates
(A. Wagenaar et al. 2010)

Finland, 2004: Following the reduction of alcohol prices, drinking increased among men and women aged 45-64, including increased heavy episodic drinking
(S. Helakorpi et al. 2010)

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Minimum Prices - Saskatchewan

Intervention:

- In April 2010 the Saskatchewan Liquor and Gaming Authority (SLGA) introduced a comprehensive set of new and increased minimum prices.
- These applied directly to all liquor stores and indirectly alcohol sold in bars and restaurants.
- The price was \$1.16 and \$1.84 per standard drink and among the highest in Canada at the time.

Impact:

- A 10% increase in minimum prices significantly reduced consumption of beer by 10.06%, spirits by 5.87%, wine by 4.58%, and all beverages combined by 8.43%.
- Consumption of higher-strength beer & wine declined the most

(T. Stockwell et al. 2012)

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Minimum prices – British Columbia

Intervention:

- Increase in minimum prices of distilled spirits in: August 2004; September 2006; January 2008 and April 2009.
- Increase in minimum price of packaged and draft beer in May 2006 and January 2008.
- Overall a 10% increase in average minimum prices.

Impact:

- A 9% decrease in acute alcohol-attributable admissions and a 9% reduction in chronic alcohol-attributable admissions.
- A 19% reduction in alcohol-related traffic violations, a 9% reduction in crime against persons, a 9% reduction in total crime outcomes examined.

(T. Stockwell et al. 2013 & 2015)

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Recommendations: Alcohol Pricing

- Adjust federal excise tax to CPI & apply duties based on alcohol strength
- Revise provincial & territorial tax according to alcohol content
- Strengthen minimum reference price for alcohol sales & index regularly
- Insure that prices at U-brew are consistent with minimum price
- Implement provincial surtax on alcoholic beverages disproportionately consumed by youth
- Close loopholes: e.g. discounts, free samples

(CPHA, 2011; Giesbrecht et al. 2015)

Physical Availability of Alcohol

- Density
 - Number of alcohol outlets per capita or per sq. kilometer
- Hours of sale: stores and licensed places
- Opening days
- Longer hours for special events – e.g. World Cup, Olympics, film festivals

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Physical Availability of Alcohol

Systematic review. 44 studies on density of alcohol outlets and 15 studies on hours and days of sale were examined. The majority found that alcohol outlet density and hours and days of sale had an impact on one or more of the three main outcome variables -- overall alcohol consumption, drinking patterns and damage from alcohol.

(S. Popova et al. 2009)

Melbourne: Alcohol outlet density measures for three different types of outlets (hotel/pub, packaged liquor, on-premise) were examined. Alcohol outlet density was associated significantly with rates of domestic violence, over time. The effects were particularly large for packaged liquor outlets (M. Livingston 2011)

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Recommendations: Controlling Physical & Legal Availability

- Have a moratorium on retail outlets or increase in hours until review is completed
- Do not permit sales in corner stores, or do not expand network if currently permitted
- Maintain legal age of 19 and consider increasing age where is 18
- Ensure compliance with legal age with valid ID

(CPHA, 2011)

Type of Alcohol Control & Retailing System Several Options

- Public monopoly: all retail stores are government
- Mixed system: some are government stores others are private
- Private – limited: Alcohol only sold in private liquor stores
- Private – expanded: Alcohol sold in private liquor stores, grocery stores, supermarkets, corner stores, etc.

Also variations by type of beverages via type of outlet

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Type of Alcohol Control & Retailing System

Québec 1978 & 1984, higher access to wine: A significant and permanent effect of the policy change in 1978. The sale of wine increased by 10%, but the effect was not so large as to affect total sales. In 1983 to 1984, no immediate significant increase in sales of wine was found. (B. Trolldal, 2005)

Alberta, 1984-1995, privatization: The analyses focused on three stages of privatization. It demonstrated that most of the privatization events resulted in either temporary or permanent increases in suicide mortality rates. (R. Flam Zalcman & R.E. Mann, 2007)

B.C. 2003-2008: The rapidly rising densities of private liquor stores in British Columbia from 2003 to 2008 was associated with a significant local-area increase in rates of alcohol-related death, especially in privatization areas. (T. Stockwell et al. 2011)

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Recommendations: Alcohol Control Systems

- Maintain present government control on sale of alcoholic beverages
- Support liquor authorities to balance financial incentives with public health and safety considerations

Alcohol Marketing and Advertising

- Volume of advertising
- Content - links to images of violence, sexual adventures, financial success, etc.
- Media & mechanism – print, billboards, on transit vehicles, TV, radio, electronic media, internet, on-site in bars/stores, sports venues
- Youth – access & targeting
- Sponsorship by beverage companies or licensed premises
- Links with price & other dimensions of alcohol accessibility

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Alcohol Marketing and Advertising

- Consensus is widespread- exposure to alcohol advertising should be limited (Brit. Med. Assoc. 2009; CCSA, 2007; US Dept. of Health & Human Services, 2007; P. Anderson et al., 2009, 2009b)
- Evaluation of U.S. Beer Advertising code: 35% to 74% of ads during NCAA basketball games had code violations. Industry self-regulatory framework is ineffective in preventing content violations, code can be improved with new rating procedures (T.F. Babor et al. 2013)
- Alcohol advertising influenced brand choice among underage youth (M. Siegel et al. 2015)
- Among under-age participants the alcohol advertising receptivity score independently predicted onset of drinking, onset of binge drinking & onset of hazardous drinking (S. E. Tanski et al. 2015)

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Curtailing Alcohol Marketing

- Restrict alcohol advertising, promotion and sponsorship incrementally with aim to have system similar to tobacco control
- Regulate all forms of marketing, including Internet, social media, product placement, type of TV program or event, proximity to schools for youth or treatment centres.
- Explore legal options for provincial/territorial restrictions on advertising, promotion & sponsorship
 - including content and volume restrictions

Population-based policies & interventions

- Alcohol pricing policies
- Controlling physical & legal availability
- Regulating and monitoring alcohol control systems
- Curtailing alcohol marketing

Action on all four is essential to harm reduction, health promotion & prevention

CHALLENGES OF IMPLEMENTING EFFECTIVE ALCOHOL POLICIES

1. Alcohol is our favorite drug
2. Myths & misconceptions
3. Vested interests
4. Media is not a good ally of sound policy

1. ALCOHOL IS OUR FAVOURITE DRUG

- About 75-82% of Canadians are current drinkers
- Extensively promoted, advertised, and used in sponsorship – sports and culture
- Alcohol products, drinking and drunkenness an essential or frequent tool in movies and TV shows
- Used to promote contributions to charities, such as cancer prevention, and other fund-raising

2. MYTHS & MISCONCEPTIONS

- There is not sufficient evidence to act
- Education is the solution
- Alcohol industry will self-regulate – “trust us”
- Policies only penalize the responsible moderate drinker and heavy drinkers don’t respond
- In European countries where alcohol is easily available, there are fewer alcohol problems

3. VESTED INTERESTS

- Alcohol industries typically have a cozy relationship with policy makers
- Higher risk drinkers and alcohol policy:
 - Are most supportive of increasing access to alcohol
 - Least likely to support pricing controls and other effective interventions
 - May include decision-makers
- Support for popular vs. evidence-based
- Emerging & essential markets: Youth & young women
- Profit & revenue linked to heavy drinking:
 - Estimated that 50% of alcohol is consumed by 10-15% that drink the most

4. MEDIA IS NOT GOOD ALLY OF SOUND ALCOHOL POLICY

- Tend to emphasize the dramatic, sensational, individual
- Population level or in-depth analyses of policy process are uncommon
- New policy initiatives superficially assessed, mainly from producer/retailer user perspective

Addressing Challenges

Documentation & knowledge transfer: Document provincial and local harm from alcohol, and make available to policy-makers.

Assessment: Existing and new policies – evidence-based, scope of impact, provide more effective alternatives

Leadership: Advocate for public health leaders at the alcohol policy decision tables – locally, provincially, federally.

Addressing Challenges

Media advocacy: encourage in-depth analyses of benefits or harms of existing and proposed policies.

Partnership: Work with cancer & other chronic disease charities to raise awareness, train advocates.

Voices of victims: Those harmed by others' drinking provide an authentic voice supporting effective policies.

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References

Anderson, P., Chisholm, D., & Fuhr, D. (2009a) Alcohol and Global Health 2: Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol. *Lancet*, 373, 2234–46.

Anderson, P., De Bruijn, A., Angus, K., Gordon, R., & Hastings, G. (2009b). Impact of alcohol advertising and media exposure on adolescent alcohol use: a systematic review of longitudinal studies. *Alcohol and Alcoholism*, 44(3), 229-243.

Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Grube, J., Hill, L., Holder, H., Homel, R., Livingston, M., Österberg, E., Rehm, J., Room, R. & Rossow, I. (2010). *Alcohol: No ordinary commodity – research and public policy – Revised edition*. Oxford: Oxford University Press.

Babor, T.F. Xuan, Z. Damon, D., Noel, J. (2013) An empirical evaluation of the US Beer Institute's Self-Regulation Code Governing the Content of Beer Advertising. *American Journal of Public Health*, 103, 10: e45-e51.

British Medical Association Board of Science. (September, 2009). Under the influence: The damaging effect of alcohol marketing on young people. UK: British Medical Association. Retrieved from: http://www.alcohollearningcentre.org.uk/library/undertheinfluence_tcm41-1900621.pdf

References - 2

Canadian Centre on Substance Abuse [CCSA]. (April, 2007). *Reducing Alcohol-Related Harm in Canada: Toward a Culture of Moderation*. Recommendations for a National Alcohol Strategy. Alberta Alcohol and Drug Abuse Commission, Canadian Centre on Substance Abuse & Health Canada, 2007.

Canadian Public Health Association (December, 2011) *Too High a Cost - A public health approach to alcohol policy in Canada*. Ottawa, ON: Canadian Public Health Association.

Flam Zalcman R. and Mann R.E. (2007) Effects of privatization of alcohol sales in Alberta on suicide mortality rates. *Contemporary Drug Problems* 34: 589-605.

Giesbrecht, N. (2007). Reducing alcohol-related damage in populations: rethinking the roles of education and persuasion interventions. *Addiction*, 102, 1345-1349.

Giesbrecht, N., Stockwell, T., Kendall, P., Strang, R. and Thomas, G. (2011) Alcohol in Canada: Reducing the toll through focused interventions and public health policies. *Canadian Medical Association Journal* Feb. 7. 2011

Giesbrecht, N., Wettlaufer, A. April, N., Asbridge, M., Cukier, S., Mann, R., McAllister, J., Murie, A., Pauley, C., Plamondon, L., Stockwell, T., Thomas, G., Thompson, K., & Vallance, K. (2013) *Strategies to Reduce Alcohol-Related Harms and Costs in Canada: A Comparison of Provincial Policies*. Toronto: Centre for Addiction and Mental.

References - 3

Giesbrecht, N., Wettlaufer, A., Thomas, G., Stockwell, T., Thompson, K., April, N., Asbridge, M., Cukier, S., Mann, R., McAllister, J., Murie, A., Pauley, C., Plamondon, L. and Vallance, K. (2015) Pricing of alcohol in Canada: A comparison of provincial policies and harm-reduction opportunities. *Drug and Alcohol Review*. Published on-line.

Helakorpi, S. Mäkelä, P., Uutela, A. (2010) Alcohol consumption before and after a significant reduction in alcohol prices in 2004 in Finland: Were the effects different across population subgroups? *Alcohol and Alcoholism* 45(3): 286-292.

Livingston, M. (2011) A longitudinal analysis of alcohol outlet density and domestic violence. *Addiction* 106: 919-925.

Popova, S., Giesbrecht, N., Bekmuradov, D. and Patra, J. (2009) Hours and days of sale and density of alcohol outlets: Impacts of alcohol consumption and damage: A systematic review. *Alcohol and Alcoholism* 44 (5): 500-516.

Schwartz, N., Nishri, D., Cheong, S.C. Giesbrecht, N. and Klein-Geltink J. The association between trends in alcohol consumption and cancer mortality: findings from a multi-country analysis. (manuscript)

Siegel, M., Ross, C.S., Albers, A.B., DeJong, W., King, C. III, Naimi, T.S., Jernigan, D.H. (2015) The relationship between exposure to brand-specific alcohol advertising and brand-specific consumption among underage drinkers – United States, 2011-2012. *The American Journal of Drug & Alcohol Abuse* ISSN 0095-2990 (print) 1097-9891 (Online)

References - 4

Stockwell, T., Zhao, J., Macdonald, S., Pakula, B., Gruenewald, P., & Holder, H. (2009). 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*, 104(11), 1827-1836.

Stockwell, T., Zhao, J., MacDonald, S., Vallance, K., Gruenewald, P., Ponicki, W., Holder, H., & Treno, A. (2011). 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*, 106(4), 768 – 776.

Stockwell, T., Zhao, J., Giesbrecht, N., Macdonald, S., Thomas, G. & Wettlaufer, A. (2012) The raising of minimum alcohol prices in Saskatchewan, Canada: Impacts on consumption and implications for public health. *American Journal of Public Health* 102(12): e103-110.

Stockwell, T., Zhao, J., Martin, G., Macdonald, S., Vallance, K., Treno, A., Ponicki, W., Tu, A. & Buxton, J. (2013) Minimum alcohol prices and outlet densities in British Columbia, Canada: Estimated impacts on alcohol attributable hospital admissions. *American Journal of Public Health* April 18, 2013: e1–e7. doi:10.2105/AJPH.2013.301289

References - 5

Stockwell, T., Zhao J., Marzell, M., Gruenewald, P.J., Macdonald, S., Ponicki, W.R., and Martin, G. (2015). Relationships between minimum alcohol pricing and crime during the partial privatization of a Canadian government alcohol monopoly. *Journal of Studies on Alcohol & Drugs* 76: 628-634.

Tanski, S.E., McClure, A.C., Zhigang, L., Jackson, K., Morgenstern, M., Li, Z., Sargent, J. D. (2015) Cued recall of alcohol advertising on television and underage drinking behaviour *JAMA Pediatrics* 169 (3): 264-271,

Trolldall, B. (2005) The privatization of wine sales in Quebec in 1978 and 1983 to 1984. *Alcoholism: Clinical and Experimental Research* 29 (3): 410-416.

U.S. Department of Health and Human Services. (2007). *The Surgeon General's call to action to prevent and reduce underage drinking*. U.S. Department of Health and Human Services, Office of the Surgeon General.

Wagenaar, A., Salois, M., & Komro, K. (2009) Effects of beverage alcohol price and tax levels on drinking: A meta-analysis of 1003 estimates from 112 studies. *Addiction* 104(2):179-190.

Wagenaar, A., Tobler, A., & Komro, K. (2010) Effects of alcohol tax and price policies on morbidity and mortality: A systematic review. *American Journal of Public Health* 100:2270-2278.

World Health Organization [WHO] (2010). *Global Strategy to Reduce the Harmful Use of Alcohol*. Geneva: World Health Organization.