

## Literature Review on the Impacts Associated with Liquor Stores

In review of the literature on the impacts associated with liquor stores, most research approaches the subject from a public health perspective and specifically alcohol-related harms. Alberta Health Services has conducted a literature review and a number of studies on the topic, which are summarized in the *Health Impacts and Alcohol-Related Harm* section below. A number of articles also touch on the costs associated with alcohol impacts, identified in the *Social and Economic Costs* section.

### Health Impacts and Alcohol-Related Harm

In *Off-Premise Alcohol Outlet Density, Alcohol Consumption, and Alcohol-Related Harm: A Brief Review of the Literature*, Alberta Health Services (2016) indicates that research suggests alcohol-related harms and alcohol consumption is related to off-premise alcohol outlet density, with strong associations between outlet density and violence and underage drinking. Alberta Health Services highlights the limitations of their research due to time constraints and limited access to studies providing systematic reviews and longitudinal analysis, such that the study could not

*“establish causation and does not permit changes in health-related measures to be directly attributed to alcohol sales concentration, as a number of confounding variables (e.g., volume of alcohol sales, socio-economic status of the community, intensity of alcohol advertising) cannot always be accounted for.”<sup>1</sup>*

It is further stated that “the complex dynamics of measuring outlet density and how to model the relationship with alcohol-related harms is challenging.”<sup>2</sup>

In consideration of alcohol-related harms, Alberta Health Services (2016) reports that heavy drinking can increase the risk of cancers, stroke, high blood pressure, liver cirrhosis, and accidental serious injury or death; and is also associated with violent crimes.<sup>3</sup> Alberta Health Services also note a number of studies based in British Columbia and Scotland that found a relationship between the number of alcohol outlets and alcohol-related mortality and hospitalizations, such that an increase in private liquor store density was associated with higher levels of hospital admission rates for alcohol-attributable admissions as well as alcohol-attributable mortality.<sup>4</sup>

Alberta Health Services (2016) reference a number of studies that indicate the association between alcohol outlet density and higher rates of crime and harmful

<sup>1</sup> Alberta Health Services. 2016. *Off-Premise Alcohol Outlet Density, Alcohol Consumption, and Alcohol Related Harm: A Brief Review of the Literature*. p. 3

<sup>2</sup> Alberta Health Services. 2016. *Off-Premise Alcohol Outlet Density*. p. 3

<sup>3</sup> Alberta Health Services. 2016. *Off-Premise Alcohol Outlet Density*. p. 5

<sup>4</sup> *Ibid.* p. 5

drinking.<sup>5</sup> Studies indicate that an increase in alcohol outlet density had a more significant impact on adolescents in urban areas compared to rural areas. In a New York study, it was found that the prevalence of binge drinking increased significantly where the density of alcohol outlets exceeded 80 outlets per square mile.<sup>6</sup> In comparison, the two neighbourhoods in Edmonton with the highest number of liquor stores, Oliver (8 liquor stores), and Downtown (9 liquor stores), have 10 and 12 liquor stores per square mile. Citywide, Edmonton has a 0.94 liquor stores per square mile. In a study based in New Zealand, the association of binge drinking and alcohol outlet density increased by 4 percent each time an alcohol outlet increased within 1 kilometre of home.<sup>7</sup>

Campenella and Flanagan (2012) identify some of the social and health impacts associated with the privatization of liquor stores. It was found that there was a significant relationship between liquor privatization and suicide rates, with a permanent increase shown as early as 1985 with the emergence of private wine stores in Alberta.<sup>8</sup> It also found that studies indicated that privatization has not impacted traffic fatalities, and that fatalities related to drinking and driving has declined significantly since the 1970s.<sup>9</sup> This is countered with the argument that a number of anti-drunk driving initiatives may have also had an effect on the statistics, as well as the increase in the liquor store density reducing the distance travelled by impaired drivers.<sup>10</sup>

Similar to the findings by Alberta Health Services (2016), Campenella and Flanagan (2012) note the relationship between liquor store density and alcohol-related mortality, such that in a study between 2003 and 2008 in British Columbia, researchers found that each additional private liquor store per 1,000 residents 15 years of age or older “increased local alcohol-related mortality by 27.5%” and that “an increased proportion of private to public liquor retailers was also linked to increased rates of alcohol-related deaths.”<sup>11</sup>

## Social and Economic Costs

---

<sup>5</sup> Ibid. p. 5 - 6

<sup>6</sup> Alberta Health Services. 2016. *Off-Premise Alcohol Outlet Density*. p. 6

<sup>7</sup> Ibid. p. 6

<sup>8</sup> Campenella, D. and Flanagan, G. 2012. *Impaired Judgement: The Economic and Social Consequences of Liquor Privatization in Western Canada*. Canadian Centre for Policy Alternatives. p. 27-28 Available at: [https://www.parklandinstitute.ca/impaired\\_judgement](https://www.parklandinstitute.ca/impaired_judgement)

<sup>9</sup> Campenella, D. 2012. *Impaired Judgement*. p. 28

<sup>10</sup> Ibid. p. 28

<sup>11</sup> Ibid. p. 28

The Canadian Centre on Substance Abuse (2012) identifies that “the measurable social costs of alcohol fall into two major categories: indirect and direct costs.”<sup>12</sup> The indirect costs include those related to productivity losses, due to “disability or premature death associated with problematic drinking.”<sup>13</sup> Direct costs include “public expenditures on enforcement, health care and other functions (e.g, prevention, research).”<sup>14</sup> In consideration of the economic and social consequences of liquor privatization, Campenella and Flanagan (2012) identify that “liquor prices are too low to allow governments to recoup all the costs related to the public health and social consequences of alcohol consumption.”<sup>15</sup> Campenella and Flanagan (2012) note that when prohibition was repealed throughout Canada, provincial liquor control boards were created to manage the consumption and production of liquor.<sup>16</sup> Through a public monopoly, provincial governments can limit the supply of liquor to promote moderate consumption, and transfer revenues towards social programs, such as “those targeting the harms related to liquor consumption.”<sup>17</sup> However, in a private model, Campenella and Flanagan (2012) argue that the public benefit is forgone.<sup>18</sup>

In their report, Campenella and Flanagan (2012) review the effects of privatization of liquor in Saskatchewan, British Columbia, and Alberta. In comparing liquor prices, it was found that the private liquor stores in British Columbia had the highest prices, followed by Alberta with the second highest prices.<sup>19</sup> Many of the proponents for privatization have argued that non-government operated stores would be able to run stores more efficiently, which would result in lower prices; however, this comparison suggests this is not the case.<sup>20</sup> Furthermore, higher liquor prices in Alberta have not resulted in more revenues for the provincial government. In comparison to British Columbia and Saskatchewan, the government revenue per litre of alcohol sold, between 1993 and 2011, decreased in Alberta, and Alberta was found to have the least effective liquor tax.<sup>21</sup>

In the 2009 provincial budget, Premier Ed Stelmach proposed a mark-up on liquor that would have generated an estimated \$180 million in revenue in the year of its implementation; however, this was rescinded within three months of its implementation.<sup>22</sup> Campenella and Flanagan (2012) suggest that if the mark-up

<sup>12</sup> Thomas, G. 2012. *Analysis of Beverage Alcohol Sales in Canada: Alcohol Price Policy Series, Report 2 of 3*. Canadian Centre on Substance Abuse. p. 11 Available at:

<http://www.ccdus.ca/Resource%20Library/CCSA-Analysis-Alcohol-Sales-Policies-Canada-2012-en.pdf>

<sup>13</sup> Thomas, G. 2012. *Analysis of Beverage Alcohol Sales in Canada*. p. 11

<sup>14</sup> Ibid. p. 12

<sup>15</sup> Campenella, D. 2012. *Impaired Judgement*. p. 5

<sup>16</sup> Campenella, D. 2012. *Impaired Judgement*. p. 9

<sup>17</sup> Ibid. p. 9

<sup>18</sup> Ibid. p. 9

<sup>19</sup> Ibid. p. 10

<sup>20</sup> Ibid. p. 10-11

<sup>21</sup> Ibid. p. 13

<sup>22</sup> Ibid. p. 14

had continued, this would have generated approximately \$150 million in annual revenue, which could have provided “substantial funding for public services such as health care that are burdened by alcohol’s externalities.”<sup>23</sup>

In consideration of the external costs associated with alcohol, Campenella and Flanagan (2012) note that this includes costs associated with “lost productivity, health care, and law enforcement.”<sup>24</sup> In a cost-benefit analysis Campenella and Flanagan (2012) found that in 2002, government revenues generated approximately \$3.9 billion nationally and the social costs amounted to approximately \$7.5 and 14.6 billion.<sup>25</sup> Based on the calculations, Campenella and Flanagan conclude that liquor sales “cost Canadians between \$3.6 and \$10.7 billion in 2002 alone.”<sup>26</sup> In review of the alcohol-related direct costs for prevention, research and transfer payment programs in 2002, Alberta was found to have the 6th largest deficit per capita in comparison to other provinces and territories in Canada.<sup>27</sup> However, in provinces with a population greater than one million, Alberta had the second highest deficit.<sup>28</sup>

### **Strategies to Reduce Harms Associated with Alcohol Consumption**

Alberta Health Services (2016) identifies restrictions on the physical access to alcohol can be used to minimize alcohol-related harms.<sup>29</sup> In the report, it is noted that the type, location and hours of operation of alcohol outlets affect the availability of alcohol, and as the availability of alcohol increases, so does consumption and alcohol-related harm.<sup>30</sup>

In a national study of *Strategies to Reduce Alcohol-Related Harms and Costs in Canada: A Comparison of Provincial Policies*, Giesbrecht et al. (2013) make 10 recommendations to provincial governments to reduce harms related to alcohol consumption.<sup>31</sup> Only one action is directly related to the physical availability of alcohol, indicating there are many more tools available outside of zoning to address harms related to alcohol. These tools range from marketing and advertising restrictions, raising minimum drink prices, pricing alcohol in relation to concentration, raising the minimum drinking age, placing a moratorium on further

---

<sup>23</sup> Ibid. p. 14

<sup>24</sup> Ibid. p. 15

<sup>25</sup> Ibid. p. 15

<sup>26</sup> Ibid. p. 15

<sup>27</sup> Thomas, G. 2012. *Analysis of Beverage Alcohol Sales in Canada*. p. 14

<sup>28</sup> Ibid. p. 14

<sup>29</sup> Ibid. p. 4

<sup>30</sup> Ibid. p. 4

<sup>31</sup> Giesbrecht, N., Wettlaufer, A., April, N., Asbridge, M., Cukier, S., Mann, R., McAllister, J., Murie, A., 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 Health. p. 50 - 54 Available at: [http://madd.ca/media/docs/Strategies-to-reduce-alcohol-related-harms-and-costs\\_ENG\\_FINALrevised.pdf](http://madd.ca/media/docs/Strategies-to-reduce-alcohol-related-harms-and-costs_ENG_FINALrevised.pdf)

privatization of liquor sales, warning labels and signs, and other more stringent provincial liquor policies.<sup>32</sup>

Although focusing on outlet type and numbers, Alberta Health Services notes that Campbell et al. (2009) describes seven characteristics that can influence the impact alcohol has on health, including:

- outlet type (e.g. bars, restaurants, liquor stores) and number of outlets,
- outlet size,
- clustering of outlets,
- outlets associated with illegal activity,
- size of the community,
- neighbourhood characteristics; and
- proximity to places of concern.<sup>33</sup>

In the report *Alcohol Availability, Neighbourhood Deprivation, and Links to Alcohol-related Harms*, Khalili (2017) identifies that moderation in combination with municipal alcohol policies can aid in reducing alcohol-related harm.<sup>34</sup> Some of the strategies Khalili (2017) identifies to reduce alcohol-related harm include regulating the sale and distribution of alcohol, through hours of operation and restrictions on the number of alcohol outlets; and pricing policies that institute minimum pricing and taxes.<sup>35</sup>

In 2007, the National Alcohol Strategy Working Group recommended four areas for action to reduce harms related to alcohol, including:

- health promotion, prevention and education;
- health impacts and treatment;
- availability of alcohol; and
- safer communities.<sup>36</sup>

In regards to the availability of alcohol, the National Alcohol Strategy Working Group (2007) recommends “shoring up the social responsibility mandate of government liquor control boards, reinforcing liquor licensing and enforcement regulations, and harmonizing minimum purchase ages across Canada” as well as “key taxation and pricing policies, as well as controls on advertising promotion.”<sup>37</sup> The safer communities recommendations includes ways “communities can foster a culture of moderation and create safer drinking

<sup>32</sup> Giesbrecht, N. 2013. *Strategies to Reduce Alcohol-Related Harms and Costs in Canada*. p. 50 - 54

<sup>33</sup> Campbell, C. A., Hahn, R. A., Elder, R., Brewer, R., Chattopadhyay, S., Fielding, J., Middleton, J. C. (2009). *American Journal of Preventive Medicine*, 37(6), 556-569. cited in Alberta Health Services. 2016. *Off-Premise Alcohol Outlet Density*. p. 4

<sup>34</sup> Khalili, P. 2017. *Alcohol Availability, Neighbourhood Deprivation, and Links to Alcohol-Related Harms*. Alberta Health Services. p. 1

<sup>35</sup> Ibid. p. 3

<sup>36</sup> National Alcohol Strategy Working Group. 2007. *Reducing Alcohol-Related Harm In Canada: Toward a Culture of Moderation: Recommendations for a National Alcohol Strategy*. Canadian Centre on Substance Use and Addiction. p. iii Available at: <http://www.ccdus.ca/Resource%20Library/ccsa-023876-2007.pdf>

<sup>37</sup> National Alcohol Strategy Working Group. 2007. *Reducing Alcohol-Related Harm In Canada*. p. 2

environments” and “addresses the various physical and social contexts in which harmful drinking patterns occur, including the home, workplace, school, licensed establishments and recreation.”<sup>38</sup>

### Conclusion

The research on the impacts of alcohol consumption on health are extensive and indicate that the impacts are affected by the availability and access to alcohol.

Although the research has identified that since privatization the number of liquor stores has increased, and that the price of liquor is higher when compared to other provinces, the revenue generated from liquor taxes has continued to decrease in Alberta. Further, the Government of Alberta could direct more funding towards social programs, with the aim to reduce the harms associated with alcohol consumption, through a more effective liquor tax regime. Finally, the research suggests the public benefit of a provincial monopoly on the distribution and sale of liquor is sacrificed in a privatized model.

In considering strategies to reduce the harms associated with alcohol consumption, research encourages:

- Reducing access and availability. In addition to limiting the density and the physical location of liquor stores, restrictions on the hours of operation, and increasing the price of liquor, including how it is taxed, are effective strategies to reduce alcohol consumption.
- Providing social programs and policies to protect individuals from the impacts of economic downturns and loss of employment.
- Harm reduction measures and providing safe places for individuals to reduce the consequences of harmful alcohol use.
- The development of municipal alcohol policies.
- Partnering with communities to address local issues.
- Health promotion, prevention and education on responsible alcohol consumption.
- Strengthening the enforcement of drinking and driving.

### References:

Alberta Health Services. 2016. *Off-Premise Alcohol Outlet Density, Alcohol Consumption, and Alcohol Related Harm: A Brief Review of the Literature*. Alberta Health Services. p. 1 -10 Available at: [https://www.edmonton.ca/city\\_government/council\\_committee\\_meetings/city-council-2016.aspx](https://www.edmonton.ca/city_government/council_committee_meetings/city-council-2016.aspx) (View City Council Public Hearing minutes from December 12, 2016, Agenda Item 3.10, Attachment 4)

Campbell, C. A., Hahn, R. A., Elder, R., Brewer, R., Chattopadhyay, S., Fielding, J., Middleton, J. C. (2009). *American Journal of Preventive Medicine*, 37(6), p. 556-569.

---

<sup>38</sup> Ibid. p. 2

Campenella, D. and Flanagan, G. 2012. *Impaired Judgement: The Economic and Social Consequences of Liquor Privatization in Western Canada*. Canadian Centre for Policy Alternatives. p. 1 - 35 Available at: [https://www.parklandinstitute.ca/impaired\\_judgement](https://www.parklandinstitute.ca/impaired_judgement)

Giesbrecht, N., Wettlaufer, A., April, N., Asbridge, M., Cukier, S., Mann, R., McAllister, J., Murie, A., 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 Health. p. 1-84. Available at: [http://madd.ca/media/docs/Strategies-to-reduce-alcohol-related-harms-and-costs\\_ENG\\_FINALrevised.pdf](http://madd.ca/media/docs/Strategies-to-reduce-alcohol-related-harms-and-costs_ENG_FINALrevised.pdf)

Khalili, P. 2017. *Alcohol Availability, Neighbourhood Deprivation, and Links to Alcohol-Related Harms*. Alberta Health Services. Available at: <https://www.albertahealthservices.ca/assets/info/res/if-res-mhr-13-alcohol-availability.pdf>

National Alcohol Strategy Working Group. 2007. *Reducing Alcohol-Related Harm In Canada: Toward a Culture of Moderation: Recommendations for a National Alcohol Strategy*. Canadian Centre on Substance Use and Addiction. p. 1 - 31 Available at: <http://www.ccdus.ca/Resource%20Library/ccsa-023876-2007.pdf>

Thomas, G. 2012. *Analysis of Beverage Alcohol Sales in Canada: Alcohol Price Policy Series, Report 2 of 3*. Canadian Centre on Substance Abuse. p. 1-19 Available at: <http://www.ccdus.ca/Resource%20Library/CCSA-Analysis-Alcohol-Sales-Policies-Canada-2012-en.pdf>

**Note:**

A more comprehensive literature review on neighbourhood deprivation, alcohol consumption and health and social outcomes is provided in:

Khalili, P. 2017. *Neighbourhood Deprivation, Alcohol Consumption and Health and Social Outcomes: A Review of Recent Literature*. Alberta Health Services. Available at: <https://www.albertahealthservices.ca/assets/info/amh/if-amh-amapp-literature-review.pdf>