SUBSTANCE ABUSE ISSUES AND PUBLIC POLICY IN CANADA: V. ALCOHOL AND RELATED HARMS

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INTRODUCTION

After tobacco, alcohol is the psychoactive substance that causes the greatest harms in terms of health, legal, social and economic costs and problems. A recent study estimated the total social costs (death, illness and economic cost) of substance abuse in Canada to be \$39.8 billion in 2002. Alcohol accounted for 36.6% (\$14.6 billion) of the total estimate, whereas tobacco accounted for 42.7% (\$17 billion) and illegal drugs for 20.7% (\$8.2 billion). (2)

This paper summarizes the most recent information on the prevalence of alcohol use and abuse in Canada and its related harms. Statistical data are drawn primarily from the 2004 Canadian Addiction Survey⁽³⁾ and other data collected through the Northwest Territories Addiction Survey (NWT Survey 2004), the 2005 Ontario Student Drug Use Survey, the Canadian Community Health Survey (CCHS, 2002), the Health Behaviour in School-Aged Children Survey (2001-2002) and the National Longitudinal Survey of Children and Youth (NLSCY, 1998-1999). The document also includes a brief section on reducing alcohol-related harms and best overall policy practices and activities undertaken by the federal government in addressing the harms caused by alcohol in Canada.

⁽¹⁾ This document is the fifth in a series entitled *Substance Abuse Issues and Public Policy in Canada* by the same author. The others are: *I. Canada's Federal Drug Strategy*, PRB 06-15E; *II. Parliamentary Action* (1987-2005), PRB 06-05E; *III. What, When, Who and Why?*, PRB 06-11E; and *IV. Prevalence of Use and Its Consequences*, PRB 06-19E, Parliamentary Information and Research Service, Library of Parliament, Ottawa, 2006.

⁽²⁾ J. Rehm *et al.*, *The Costs of Substance Abuse in Canada 2002, Highlights*, Canadian Centre on Substance Abuse, March 2006, http://www.ccsa.ca/CCSA/EN/Research/Research_Activities/TheCostsofSubstanceAbuseinCanada.htm.

⁽³⁾ The prevalence of use and abuse of substances outlined in this section is based mainly on the Canadian Addiction Survey, a national telephone survey that was conducted in all provinces. It should be noted that this type of survey does not include data on hard-to-reach populations such as street-involved youth, Aboriginals in remote and rural communities, other groups without a telephone, etc. Some of the hard-to-reach populations are among those who are at high risk of using and abusing licit and illicit substances. Prevalence rates must be analyzed in this context with an understanding that the actual rates may be much higher.

THE CONTROL AND SALE OF ALCOHOL

The control and sale of alcohol in Canada is regulated by provincial and territorial governments. Different models range from total government control to a sharing of responsibility by both the government and private-sector stakeholders. In 2003-2004, sales of alcoholic beverages in Canada totalled \$16.1 billion (50.7% of sales attributed to beer, 24.7% to spirits and 24.6% to wine), up 4.9% from the previous year. The total net income of provincial and territorial liquor authorities and government revenue from the control and sale of alcohol (not including revenue from provincial sales taxes) reached \$4.3 billion in 2003-2004, up from \$4 billion the previous year.

PREVALENCE OF USE AND ABUSE OF ALCOHOL

A. Consumption of Alcohol in Canada

According to the 2004 Canadian Addiction Survey, 79.3% of the Canadian population aged 15 years and older consumed alcohol in the year prior to the survey. Most Canadians drink in moderation. Of those who reported drinking alcohol in the past year, 44% indicated drinking at least once a week and 9.9% consumed alcohol four or more times a week. The pattern of drinking of 16% of those who drank in the previous year was associated with an increased risk of developing alcohol-related problems (usual pattern of consuming five or more drinks in a drinking day). The survey also revealed that 6.2% of past-year drinkers

⁽⁴⁾ The government-run monopolies for the retail distribution of alcohol have recently come under scrutiny in many provinces. For more information on the issues raised in the government control vs. privatization debate, see Centre for Addiction and Mental Health, Retail Alcohol Monopolies and Regulation: Preserving the Public Interest, Position paper, 16 January 2004, http://www.camh.net/Public_policy/Public_policy_papers/Retail_Alcohol_Monopolies/retail_alcohol_p aper0104.pdf. See also the July 2005 report of the Beverage Alcohol System Review Panel (Ontario), which concluded that government monopolies are not necessary to ensure the socially responsible sale and use of beverage alcohol, http://www.fin.gov.on.ca/english/consultations/basr/report.html. As well, some studies have looked at the results of the privatization of the alcohol retailing industry in Alberta. For example, see Greg Flanagan, Sobering Result: The Alberta Liquor Retailing Industry Ten Years after Privatization, Canadian Centre for Policy Alternatives and Parkland Institute, June 2003, http://www.policyalternatives.ca/documents/National Office Pubs/sobering result.pdf. For an economic point of view, see Valentin Petkantchin, Is government control of the liquor trade still justified? Montreal Economic Institute Research Papers, "Regulation" Series, October 2005, http://www.iedm.org/uploaded/pdf/oct05_en.pdf.

⁽⁵⁾ Statistics Canada, "Control and sale of alcoholic beverages," in *The Daily*, Thursday, 8 September 2005.

engaged in heavy drinking (five drinks or more in a single sitting for males and four or more drinks for females) at least once a week and 25.5% reported this pattern of drinking at least once a month. Moreover, based on the Alcohol Use Disorder Identification Test, which identifies hazardous patterns of alcohol use and indications of alcohol dependency, 17% of current drinkers were considered high-risk drinkers. Most heavy and hazardous drinkers were young males under the age of 25.⁽⁶⁾

As to the prevalence of alcohol dependence, the 2002 Canadian Community Health Survey revealed that 2.6% of Canadians aged 15 and over (3.8% males and 1.3% females) reported symptoms consistent with alcohol dependence, at some time during the 12 months prior to the survey. Of those reporting heavy drinking at least monthly, 26.9% admitted being drunk or hungover at work or school, or while caring for children. Some 26.2% reported taking alcohol in larger amounts or for longer periods than intended. Almost 17% stated that they had been in a situation while drunk or hungover that increased their probability of injury, and slightly over 16% indicated that they had developed an increased tolerance to alcohol. (8)

B. Consumption of Alcohol in the Northwest Territories

The prevalence of heavy and hazardous drinking is much higher in the Northwest Territories than in the provinces. According to the 2004 Northwest Territories Addiction Survey, of the 77.9% of respondents 15 years of age and older who indicated they had drunk alcohol in the year prior to the survey, 46.4% reported that they had consumed five or more drinks on a single occasion at least once a month and 14.6% stated that they had engaged in such heavy drinking at least once a week. Another 40% of current drinkers indicated that they normally consumed five or more drinks on a typical drinking day. Based on the Alcohol Use Disorder Identification Test, 41.3% of current drinkers in the Northwest Territories had engaged in hazardous drinking in the 12 months prior to the survey. As reported in the rest of Canada, heavy drinkers were more likely to be young males than females. (9)

⁽⁶⁾ E. M. Adlaf, P. Begin and E. Sawka (eds.), Canadian Addiction Survey (CAS): A national survey of Canadians' use of alcohol and other drugs, Prevalence of Use and Related Harms, Detailed report, Canadian Centre on Substance Abuse, March 2005, pp. 20-35, http://www.ccsa.ca/NR/rdonlyres/6806130B-C314-4C96-95CC-075D14CD83DE/0/ccsa0040282005.pdf.

⁽⁷⁾ Michael Tjepkema, *Alcohol and Illicit Drug Dependence*, Statistics Canada, *Supplement to Health Reports*, Volume 15, 2004, Catalogue 82-003, p. 13.

⁽⁸⁾ *Ibid*.

⁽⁹⁾ Northwest Territories Health and Social Services, *Northwest Territories Addiction Survey*, January 2006, pp. 5-13, http://www.hlthss.gov.nt.ca/content/Publications/Reports/addictions/2006/nwt addiction survey.pdf.

C. Consumption of Alcohol by Youth

With regard to alcohol consumption by youth under the legal drinking age, data from the 1998-1999 National Longitudinal Survey of Children and Youth showed that 42% of children aged 12 to 15 reported that they had consumed at least one drink of alcohol in the past, and 22% stated that they had been drinking to intoxication at least once. Data from the Health Behaviour in School-Aged Children survey showed that 34% of boys and 23% of girls in grade 10 reported weekly alcohol use in 2002. Furthermore, 46% of boys and 42% of girls in grade 10 indicated that they had been "really drunk" at least twice. The children surveyed were age 15 or younger and thus below the legal age for purchasing and consuming alcohol in Canada.

More recent data from the 2005 Ontario Student Drug Use Survey (OSDUS) showed that 62% of students in grades 7 to 12 reported drinking alcohol in the previous year, ranging from 31.4% of grade 7 students to 81.8% of students in grade 12. These percentages are high but are lower than the previous data of 66% recorded in 2003. The prevalence of consumption of alcohol does not differ between males and females. Among those who reported drinking, 39% indicated that they drank only on special occasions and 16% reported drinking at least once a week. Twenty-three percent of students engaged in binge drinking at least once during the month prior to the survey; 8% reported binge drinking two to three times during the same period; and another 5% reported drinking four or more times. More males than females reported binge drinking (25% and 20%, respectively). Overall, 16% of students reported drinking at a hazardous level. The early onset of alcohol use has, however, significantly decreased since 2003 when 42% of students reported having used alcohol by grade 6, whereas 29% of students reported using alcohol at such a young age in 2005. (12)

⁽¹⁰⁾ Tina Hotton and Dave Haans, *Alcohol and Drug Use in Early Adolescence*, Statistics Canada, *Health Reports*, Volume 15, No. 3, Catalogue 82-003, May 2004, p. 11.

⁽¹¹⁾ Data from the Health Behaviour in School-Aged Children Survey are analyzed and reported in William Boyce, *Young people in Canada: their health and well-being*, Health Canada, 2004, http://www.phac-aspc.gc.ca/dca-dea/publications/hbsc-2004/hbsc-summary-e.html.

⁽¹²⁾ Edward M. Adlaf and Angela Paglia-Boak, *Drug Use Among Ontario Students*, OSDUS Highlights 1997-2005, Centre for Addiction and Mental Health, CAMH Research Document Series No. 17, 2005, p. 9, http://www.camh.net/Research/Areas_of_research/Population_Life_Course_Studies/OSDUS/OSDUS20 05 HighlightsDrug final.pdf.

ALCOHOL-RELATED HARMS

Research has shown that alcohol, when taken in moderation, has some health benefits, such as reducing the risk of cardiovascular problems, particularly for men over the age of 45.⁽¹³⁾ However, a recent meta-analysis of benefit studies has challenged the widely accepted cardiac benefit assertions. The findings of this analysis suggest "that the cardiac protection afforded by alcohol may have been overestimated."⁽¹⁴⁾ On the other hand, research has clearly shown that heavier alcohol consumption⁽¹⁵⁾ is linked to a number of health problems, such as liver cirrhosis and damage to other organs (e.g., heart, lungs, and kidneys); alcohol dependence syndrome; neuropsychiatric diseases; diabetes; cardiovascular and gastrointestinal diseases; and various forms of cancer. Long-term, regular consumption and even moderate drinking with occasional heavy drinking episodes may also lead to health problems.

Alcohol consumption affects the nervous system, impairs judgement, concentration and coordination, and lowers inhibitions. Drinking to intoxication and binge drinking increase the risk of alcohol poisoning; accidents and injuries (e.g., falls, fires, motor vehicle accidents, accidents in the workplace); violent and criminal behaviour; ⁽¹⁶⁾ suicide; unsafe sex; unwanted pregnancies; and the use of other psychoactive substances, as well as the probability of problems in the workplace (e.g., absenteeism, arriving late for work or making mistakes due to a hangover or impairment). In 2002, the costs of alcohol abuse in Canada were estimated at \$14.6 billion in additional health care, law enforcement, and loss of productivity in the workplace or at home. ⁽¹⁷⁾

⁽¹³⁾ Gerald Thomas, *Alcohol-related Harms and Control Policy in Canada*, Canadian Centre on Substance Abuse, November 2004, http://www.ccsa.ca/NR/rdonlyres/EF556B91-72B8-4FB5-AB3D-ADDD96A9D895/0/ccsa0048402004.pdf.

⁽¹⁴⁾ Kaye Middleton Fillmore *et al.*, "Moderate alcohol use and reduced mortality risk: Systematic error in prospective studies," in *Addiction Research and Theory*, Volume 14, Number 2, April 2006, pp. 101-132.

⁽¹⁵⁾ Based on scientific evidence, it is recommended that women should not consume more than nine alcohol drinks a week on a regular basis and men not more than fourteen. No one should consume more than two alcohol drinks a day. Drinking five or more drinks at a single sitting for men or four or more drinks on a single occasion for women is considered heavy drinking.

⁽¹⁶⁾ Recent studies undertaken by Correctional Service Canada have shown that at the time of intake to federal correctional facilities, approximately 80% of offenders were reported to have abused alcohol and/or drugs during the six months prior to their arrest. Substance abuse problems are particularly prevalent among Aboriginal offenders. A study published by the Canadian Centre on Substance Abuse also found that "alcohol-dependent federal inmates were much more likely to have committed a violent crime than were drug-dependent inmates." The study also showed that 38% of federal inmates committed their most serious crime at least in part under the influence of alcohol. See Kai Pernanen et al., Proportions of Crimes Associated with Alcohol and Other Drugs in Canada, Canadian Centre on Substance Abuse, April 2002.

⁽¹⁷⁾ Rehm *et al.* (2006), p. 1.

Alcohol use during pregnancy can cause birth defects, Fetal Alcohol Syndrome (FAS), Fetal Alcohol Effects (FAE) and alcohol-related neurodevelopmental disorders (ARND) that have lifelong consequences for individuals, their families and society as a whole. These physical and/or mental disabilities related to prenatal exposure to alcohol are grouped under the umbrella term of Fetal Alcohol Spectrum Disorder (FASD).

A. Hospitalizations and Deaths

According to the study on the costs of substance abuse in Canada, it is estimated that alcohol abuse accounted for \$3.3 billion in direct health care costs in 2002. (18) Hospitalizations and deaths are two key indicators that show the toll of alcohol abuse on Canadian society.

Based on data collected by the Canadian Institute for Health Information (CIHI), there were 27,084 hospital admissions involving alcohol-related conditions in 2000-2001. The vast majority of the patients were men (19,067) and most were hospitalized for disease conditions such as alcohol dependence or abuse, alcoholic psychosis, liver-related diseases and other (15,447).⁽¹⁹⁾

CIHI data also revealed that in 2002-2003 more than half (783) of the alcohol-related severe trauma hospitalizations in Canada were the result of motor vehicle collisions. The other two causes of alcohol-related severe trauma were falls (21%) and assaults and homicides (18%). Of those admitted to a specialized trauma hospital due to alcohol-related injuries, 27% were between the ages of 10 and 24, and another 22% were aged 25 to 29 years old. Other data from the CIHI showed that young adults under the age of 25 were involved in over 30% of alcohol-related motor vehicle collisions in 2002-2003. "Among youth, 62% of severe trauma deaths related to alcohol were the result of a motor vehicle collision, and 30% of these fatalities occurred in people younger than the legal drinking age."

⁽¹⁸⁾ *Ibid*.

⁽¹⁹⁾ Thomas (2004), pp. 12-13.

⁽²⁰⁾ Canadian Institute for Health Information, "More Than Half of All Alcohol-Related Severe Injuries Due to Motor Vehicle Collisions," News release, 22 June 2005, www.cihi.ca/cihiweb/dispPage.jsp?cw_page=media_22jun2005_e.

⁽²¹⁾ *Ibid*.

As for deaths attributed to alcohol-related road crashes, the Traffic Injury Research Foundation of Canada estimated that 1,055 persons died in alcohol-related road crashes in Canada in 2002. The vast majority were men (80%). Over two-thirds were the drivers of the vehicle (68.3%). The number of motor vehicle deaths directly involving a drinking driver was estimated to be 850, down significantly from the 1,296 estimated deaths in a similar study conducted in 1995. (23)

Alcohol also plays a key role in snowmobile accidents. According to the CIHI, alcohol was a factor in almost half of the hospitalizations for snowmobile-related trauma in 2003-2004. "Of those with positive alcohol levels, 91% were driving the snowmobile. More than one in three (39%) of these individuals required mechanical ventilation and on average stayed in hospital more than three times as long (33 days) as those who had no alcohol in their blood and were admitted to a specialized trauma unit with snowmobile-related injuries." (24)

According to data on the causes of deaths recorded in Canada in 2003, 666 people died as a result of mental and behavioural disorders due to the use of alcohol. The main cause of death was alcohol dependence syndrome (328 deaths); followed by deaths caused by the harmful use of alcohol (155 deaths) and deaths caused by acute intoxication (77 deaths). The vast majority of people who died of alcohol-related mental and behavioural disorders in 2003 were men (507 males, 159 females). That same year, another 818 people died of alcoholic cirrhosis of the liver. Again more males than females died (615 as opposed to 203), and the vast majority (81.5%) were 50 years and older. A little over 58% of deaths attributed to alcoholic cirrhosis of the liver involved people between the ages of 50 and 69. Finally, poisoning by and exposure to alcohol was the cause attributed to another 106 deaths. (25)

⁽²²⁾ Traffic Injury Research Foundation of Canada, *Alcohol-Crash Problem in Canada:* 2002, prepared for Canadian Council of Motor Transport Administrators Standing Committee on Road Safety Research and Policies, and Transport Canada, October 2004, pp. 14-16, http://www.ccmta.ca/english/committees/rsrp/strid/pdf/alcohol crash02 e.PDF.

⁽²³⁾ *Ibid.*, p. 34.

⁽²⁴⁾ Canadian Institute for Health Information, "Most snowmobile-related injuries occur in February: Youth are the most likely to sustain serious snowmobile-related injuries," News release, 25 January 2006, http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=media_25jan2006_e.

⁽²⁵⁾ Statistics Canada, *Causes of Deaths 2003*, Data Tables, Catalogue No. 84-208-XIE, http://www.statcan.ca/english/freepub/84-208-XIE/2005002/tables.htm.

B. Impaired-driving Offences and Accidents

Close to 79,000 incidents of impaired driving were reported by Canadian police forces in 2004, ⁽²⁶⁾ a rate 33% lower than a decade ago. ⁽²⁷⁾ Although the number of impaired driving offences has been generally declining for over two decades, these offences accounted for two-thirds of all *Criminal Code* traffic offences in 2004. In Canada, impaired driving is prohibited under the *Criminal Code*. If convicted, impaired drivers face various penalties ranging from a mandatory minimum driving prohibition period and a fine and/or jail term that could be up to life imprisonment, depending on the seriousness of the offence committed and whether the person convicted of the offence is a repeat offender. As well, license suspensions and other sanctions (e.g., vehicle impoundment, mandatory participation in a rehabilitation program) can be imposed in various jurisdictions across the country. ⁽²⁸⁾

Even though surveys reveal that the prevalence of impaired driving has been declining over the last decade, a small percentage of Canadian drivers still pose a serious threat to their personal safety and that of others on the road. The *Road Safety Monitor 2005* said that 3% of Canadian drivers would account for the vast majority of all impaired driving trips. In 2005, 14.7% of Canadian drivers reported that they had driven a vehicle within two hours of consuming alcohol during the month prior to the survey, down from 16.7% from 2001. As well, 6.7% of drivers indicated that in the past year they had driven when they were probably over the legal blood alcohol content (BAC) limit, down from 7.3% in 2001. (29)

As for young drivers, findings from the 2005 Ontario Student Drug Use Survey showed that 13.6% of all drivers in grades 10 to 12 reported driving within an hour of consuming two or more drinks at least once in the previous year. Contrary to findings in the adult population, rates of drinking and driving among youth have remained stable since 1999.

⁽²⁶⁾ Impaired driving incidents include impaired operation of a motor vehicle, boat or aircraft causing death or bodily harm; driving with a blood alcohol content (BAC), over 0.08; and failing to provide a breath and/or blood sample when requested by a police officer. They also include instances of police issuing road-side suspensions rather than a formal charge. See Julie Sauvé, "Crime Statistics in Canada, 2004," *Juristat*, Vol. 25, No. 5, Canadian Centre for Justice Statistics, Statistics Canada, 2005, http://dsp-psd.pwgsc.gc.ca/Collection-R/Statcan/85-002-XIE/0050585-002-XIE.pdf.

⁽²⁷⁾ *Ibid*.

⁽²⁸⁾ An administrative suspension of a driver's license can be given in all provinces and territories except Quebec for 12 or 24 hours if a driver has a BAC level between 0.04 and 0.079. In most jurisdictions, except New Brunswick and Nunavut, an automatic suspension of a driver's licence for 90 days is given to drivers who have a BAC level of 0.08 or above or who refuse to provide a breath sample.

⁽²⁹⁾ Douglas J. Beirness *et al.*, *The Road Safety Monitor 2005: Drinking and Driving*, Traffic Injury Research Foundation, December 2005, pp. 7-11, http://www.trafficinjuryresearch.com/whatNew/newsItemPDFs/Drinking and Driving RSM 2005.pdf.

However, there has been a significant decline compared to the late 1970s and early 1980s. Another 28.8% percent of students in grades 7 to 12 indicated being a passenger at least once in the previous year in a vehicle driven by someone who had been drinking alcohol, which is not significantly lower than the 30.9% rate reported in 2001. (30)

C. Fetal Alcohol Spectrum Disorder

Fetal Alcohol Spectrum Disorder (FASD) is a leading cause of preventable birth defects resulting in developmental and cognitive disabilities among Canadian children. A recent study of the direct and indirect costs associated with FASD estimated that the "cost of FASD annually to Canada of those 1 to 21 years old, was \$344,208,000."⁽³¹⁾

Little is known as to the prevalence of FASD in Canada as there are no official national statistics. Most researchers and stakeholders agree however that FASD is grossly under-diagnosed and under-reported. Research in the United States estimates the incidence of FASD to be one to nine per 1,000 live births. Health Canada suggests that the prevalence of FASD in Canada would be similar to that in the United States. The prevalence of Fetal Alcohol Syndrome/Fetal Alcohol Effects among high-risk populations, including First Nations and Inuit communities and other populations living in chronic poverty or marginalized conditions, is estimated to be much higher. However, until more data are available, we cannot establish the overall prevalence of FASD in Canada or determine its incidence within any population subgroups.

Until recently, there was no comprehensive approach to diagnosing FASD-related conditions in Canada. In March 2005, the first Canadian guidelines for the diagnosis of FASD prepared by the Subcommittee of the Public Health Agency of Canada's National Advisory Committee on Fetal Alcohol Spectrum Disorder were published. These guidelines were based on vast consultations with stakeholders and experts in the field. The implementation of these guidelines should facilitate the collection of data on FASD in Canada.

⁽³⁰⁾ Edward M. Adlaf and Angela Paglia-Boak, *Drug Use Among Ontario Students*, Detailed OSDUS Findings 1977-2005, Centre for Addiction and Mental Health, CAMH Research Document Series No. 16, 2005, pp. 190-195, http://www.camh.net/Research/Areas_of_research/Population_Life_Course_Studies/OSDUS/OSDUS20_05_DrugDetailed_final.pdf.

⁽³¹⁾ Brenda State *et al.*, "The Burden of Prenatal Exposure to Alcohol: Measurement of Cost," in *Journal of FAS International*, Vol. 4, February 2006, p. 1.

⁽³²⁾ Albert E. Chudley *et al.*, "Fetal alcohol spectrum disorder: Canadian guidelines for diagnosis," in *Canadian Medical Association Journal*, 1 March 2005, 172, S1 – S21, http://www.cmaj.ca/cgi/content/full/172/5_suppl/S1?maxtoshow=&HITS=10&hits=10&RESULTFOR MAT=&fulltext=fetal+alcohol&andorexactfulltext=and&searchid=1&FIRSTINDEX=0&sortspec=relevance&resourcetype=HWCIT#R15-1.

Some data are currently available on the levels of awareness of FASD and on alcohol use during pregnancy. According to the *Canadian Perinatal Health Report 2003*, the percentage of self-reported alcohol consumption during pregnancy declined from 17.4% in 1994-1995 to 14.6% in 1998-1999. The prevalence rate varied across regions from a low of 7.7% in the Atlantic provinces to a high of 25.1% in Quebec. As to levels of awareness, a national survey of women aged 18 to 40 and their partners conducted in March 2002 on behalf of Health Canada revealed that the vast majority (98%) of respondents knew that the more alcohol a woman drinks during pregnancy, the more harm that could be done to the baby. The safety of drinking in moderation during pregnancy was not so clear. Sixty-eight percent of respondents indicated that they believe any amount of alcohol use during pregnancy can harm the baby. Sixty-two percent of women surveyed stated that they would stop drinking alcohol if they were to become pregnant. Another 9% of women indicated that they would lower their intake of alcohol and 5% reported that they would not modify their alcohol use. (33)

REDUCING ALCOHOL-RELATED HARMS

A. Best Policy Practices

In Canada, many levels of governments, stakeholders, non-governmental organizations, researchers, policy analysts and the alcohol industry share the responsibility for creating and implementing initiatives and measures that will prevent and reduce alcohol-related harms. There are two basic approaches: "1) the population health approach, which targets overall drinking rates and 2) the harm reduction approach, which targets high-risk drinking patterns at the individual level." These approaches complement each other and are part of a mix of policies employed by most countries to address alcohol-related harms. Ten best practices reflecting these approaches have been identified in a recent study conducted by an international project team of 15 researchers who reviewed 31 public policies aimed at reducing alcohol-related harms. These best practices are:

⁽³³⁾ Environics Research Group Limited, *Alcohol Use during Pregnancy and Awareness of Fetal Alcohol Syndrome: Results of a National Survey*, Final Report, prepared for Health Canada, July 2002, pp. 5-6.

⁽³⁴⁾ Thomas (2004), p. 2.

⁽³⁵⁾ Babor et al. quoted in Thomas (2004).

- instituting a minimum legal drinking age (in Canada, the age is 19 except in Manitoba, Alberta and Quebec where it is 18);
- restricted hours and days of sale (in Canada, there is a relatively strict control but in recent years many provinces have extended both their hours and days of sale);
- public monopolies on the production and/or distribution of alcohol (in Canada, each province and territory has established a liquor authority responsible for the control and sale of alcohol);
- outlet density restrictions (e.g., zoning laws to limit the clustering of retail alcohol outlets in a particular area);
- alcohol taxes (e.g., in Canada, federal excise tax; provincial markups and environmental taxes; federal and provincial sales taxes);
- sobriety check points (random or selective testing of drivers at roadside checkpoints);
- lowered BAC limits (in Canada, 0.08 (*Criminal Code*) and lower in most provinces (0.05 range));
- administrative licence suspension (in Canada, suspension may be imposed administratively for a period ranging from 12 hours to 90 days);
- graduated licensing for novice drivers (in Canada, this policy is established in all provinces and territories, except Prince Edward Island and Nunavut); and
- brief interventions for hazardous drinkers (early intervention designed to motivate high-risk drinkers to moderate their use of alcohol). (36)

B. Canada's Drug Strategy

At the federal level, Canada's Drug Strategy includes a number of activities to reduce alcohol-related harms to individuals, families and communities. In cooperation with the provinces and territories, Health Canada contributes \$14 million each year toward the development of substance abuse treatment and rehabilitation through its Alcohol and Drug Treatment and Rehabilitation Program. (37) Alcohol and drug abuse treatments are also offered to inmates in federal correctional institutions. Health Canada's First Nations and Inuit Health

⁽³⁶⁾ Thomas (2004), pp. 4-5.

⁽³⁷⁾ Alcohol and other drug abuse treatment and rehabilitation programs in Canada fall under provincial or territorial jurisdiction. It is estimated that at least 50% of all substance abuse treatment in Canada involves alcohol.

Branch oversees the National Native Alcohol and Drug Abuse Program, which spends approximately \$30 million in support of alcohol and other drug abuse community-based prevention programs targeted at First Nations People and Inuit. (38)

Alcohol prevention programs are also funded under the Drug Strategy Community Initiatives Fund. As well, funding provided under the strategy has led to the creation of a Web site targeted specifically at youth. *Be Drug Wise* provides easily accessible facts about drugs and alcohol, their impact, and related laws. Finally, Canada's Drug Strategy provides funding for public awareness campaigns, surveys, research, and the dissemination of knowledge and best practices. (39)

C. Alcohol Policy Initiatives

As to the development of specific alcohol-related public policies, Health Canada and the Canadian Centre on Substance Abuse co-hosted a National Thematic Workshop on Alcohol Policy in November 2004. Major stakeholder groups have identified priority areas for a collaborative approach to alcohol policy. These areas are:

- promoting the use of routine screening and brief interventions for people who drink in hazardous ways or are at risk of hazardous drinking;
- developing and promoting policies to reduce chronic diseases related to alcohol misuse, including FASD;
- addressing the drinking context and using targeted interventions;
- structuring alcohol taxes in a discerning and purposeful manner; and
- developing a culture of moderation rather than a culture of intoxication for both youth and adults in Canada. (40)

⁽³⁸⁾ The National Native Alcohol and Drug Abuse Program funds approximately 729 positions in alcohol and other drug abuse community-based prevention programs. For more information, see the program's Web site at http://www.hc-sc.gc.ca/fnih-spni/pubs/ads/nnadap_rev-pnlaada_exam/index_e.html.

⁽³⁹⁾ For more information on Canada's Drug Strategy see Chantal Collin, *Substance Abuse and Public Policies in Canada: I. Canada's Federal Drug Strategy*, PRB 06-15E, Parliamentary Information and Research Service, Library of Parliament, Ottawa, 2006.

⁽⁴⁰⁾ Gerald Thomas, *Key messages emerging from the National Thematic Workshop on Alcohol Policy, 18-19 November 2004*, Canadian Centre on Substance Abuse, June 2005, p. 4, http://www.ccsa.ca/NR/rdonlyres/514597CC-3A8A-4B13-90AE-F428016EAB1B/0/ccsa0111362004.pdf.

A National Alcohol Strategy Working Group (NASWG) was established to address priority issues identified during the workshop. This group is co-chaired by Health Canada, the Alberta Alcohol and Drug Abuse Commission and the Canadian Centre on Substance Abuse. Its membership include non-governmental organizations, federal partners in Canada's Drug Strategy, representatives of provincial and territorial governments, retail alcohol monopolies and regulators, and the alcohol industry, as well as academics and researchers. The NASWG was expected to unveil a national alcohol strategy in the summer of 2006. (41)

Other round tables on substance use and abuse were also held across Canada in 2004. These consultations led to the presentation of a National Framework for Action to Reduce the Harms Associated with Alcohol and Other Drugs and Substances in Canada at a national forum held in June 2005. Stakeholders present at the forum agreed on the principles, goals and priorities outlined in this framework. Individuals who took part in the drafting of the framework are now seeking its endorsement by their ministers, boards and governing bodies. A meeting to discuss progress made in this regard is expected early in 2007. (42)

D. Fetal Alcohol Spectrum Disorder (FASD) Initiatives

Key stakeholders who participated in the 2004 National Thematic Workshop on Alcohol Policy identified FASD as an area requiring further action. Thus far, the Government of Canada is involved through several initiatives. It created a National FASD Initiative in 1999, followed by the establishment of a National Advisory Committee on Fetal Alcohol Syndrome/Fetal Alcohol Effects in May 2000. In December 2003, following consultations with organizations across the country, Health Canada published a guide for future action on FASD in Canada entitled *Fetal Alcohol Spectrum Disorder (FASD): A Framework for Action*. Since its creation in September 2004, the Public Health Agency of Canada has overseen the implementation of the FASD initiative. Health Canada's First Nations and Inuit Health Branch also delivers a program aimed at reducing the incidence of FASD births and improving the quality of life of those affected in First Nations persons living on reserves and in Inuit

⁽⁴¹⁾ Canadian Centre on Substance Abuse, "NASWG vows to have a national alcohol strategy by summer," in *Action News*, Vol. XV, No. 3, September 2005, p. 2, http://www.ccsa.ca/NR/rdonlyres/34411372-9C0E-40CC-9666-E1C61EAF8155/0/ccsaactnew15n32005e.pdf.

⁽⁴²⁾ More information on past and future activities related to the National Framework is available on-line at http://www.ccsa.ca/CCSA/EN/Partnerships/National Framework/NationalFramework.htm.

communities.⁽⁴³⁾ As well, Health Canada funding made possible the creation of a National Database of FASD and Substance Use during Pregnancy Resources administered by the Canadian Centre on Substance Abuse.⁽⁴⁴⁾ More recently, under Canada's Drug Strategy, \$2 million (\$1 million in 2004-2005 and another million in 2005-2006) in additional funding was invested in the National FASD Initiative "to accelerate the development and dissemination of diagnostic guidelines and screening tools, as well as training and education resources for health care providers."⁽⁴⁵⁾

CONCLUSION

As noted earlier in this paper, the sale of alcohol clearly contributes to the national economy of Canada. Moderate alcohol consumption may also have some health benefits, particularly in terms of prevention of cardiovascular diseases. However, as this hypothesis is now under review, policy makers and other stakeholders should give pause before accepting that moderate alcohol use has a cardiac protection benefit. On the other hand, alcohol use and abuse also contribute to a number of social, legal, economic and health problems. Alcohol consumption is a factor in the development of numerous diseases, as well as being a cause of injuries, disability, and premature deaths. Alcohol abuse affects not only those who drink to excess but also those close to them and society as a whole. The cost of alcohol abuse in Canada has recently been estimated at \$14.6 billion annually.

Research on impaired driving, its related harms, and public policies has shown that some policies can significantly reduce the occurrence of alcohol-related harms. Major groups of stakeholders from all sectors of Canadian society have recently agreed on priority areas that should be the target of alcohol policy development and action. They established a National Alcohol Strategy Working Group, which is currently developing a comprehensive, integrated, and inclusive national approach to alcohol in Canada. A national alcohol strategy is expected to be released in 2006. This strategy will be an important step toward a more coordinated approach to the use and control of alcohol in Canada that will likely promote a responsible use of alcohol and assist in reducing alcohol-related harms.

⁽⁴³⁾ For more information on FASD programming delivered by the First Nations and Inuit Health Branch, see its Web site at http://www.hc-sc.gc.ca/fnih-spni/famil/preg-gros/intro e.html.

⁽⁴⁴⁾ The database is accessible on-line on the Canadian Centre on Substance Abuse's FASD Web site at http://www.ccsa.ca/fas/.

⁽⁴⁵⁾ Public Health Agency of Canada, "Backgrounder on Government of Canada and FASD," last updated 9 September 2005, http://www.phac-aspc.gc.ca/fasd-etcaf/goc-bg-e.html.