



**REPORT TO:** Co-Chairs and Members of the  
Public Health Social Services Committee

**SUBJECT:** Alcohol: No Ordinary Commodity

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## **RECOMMENDATION**

That this Committee recommend to Regional Council:

That this report be received for information.

## **EXECUTIVE SUMMARY**

The Ministry of Health and Long-Term Care (MHLTC) have released the new *Ontario Public Health Standards (OPHS)* effective January 1, 2009. The purpose of the *OPHS* is to establish requirements for fundamental public health programs and services, which include assessment and surveillance, health promotion and policy development, disease and injury prevention, and health protection.

The *OPHS* specify the requirements to be carried out by each board of health and are based on foundations and program standards that will guide public health work. The foundations consist of four principles Need; Impact; Capacity; and Partnership and Collaboration. These are to be used by boards of health to guide the assessment, planning, delivery, management, and evaluation of public health programs. In addition, Population Health Assessment, Surveillance, Research/Knowledge Exchange and Program Evaluation are areas that need to underlie and support all program standards.

The new *OPHS* also includes outcomes that boards of health will be accountable and responsible for achieving and will focus on changes in awareness, knowledge, attitudes, skills, practices, environments, and policies. Boards of health will also have requirements that will need to be implemented in order to achieve the stated results. For the first time, alcohol is included within the Chronic Disease Prevention Standards, as alcohol is recognized as a risk factor for chronic disease in addition to it being in the Prevention of Injury and Substance Misuse standards.

Alcohol is the most widely used psychoactive drug in Canadian society. Next to tobacco, alcohol creates the most health, social, economic and criminal harm to individuals, families, and communities. The annual economic impact of alcohol use in Ontario is estimated at \$5.3 billion. Alcohol has been linked with over 60 diseases or conditions.

New research supports the relationship of alcohol as a risk factor for chronic diseases. To effectively change behaviour and to reduce the harms associated with alcohol and other drugs, the *OPHS* require a comprehensive health promotion strategy that not only focuses on raising awareness and education and skill building, but also advocating for and building healthy public policy to move Ontario and Niagara residents towards a culture of drinking in moderation.

## **FINANCIAL IMPLICATIONS**

Niagara Region Public Health (NRPH) currently employs one FTE Health Promoter to work on substance misuse prevention within the Chronic Disease and Injury Prevention Division. Staff from other program areas within Public Health such as the Injury Prevention program, Healthy Lifestyles team, Sexual Health program, Child Health program, and Reproductive Health program also implement alcohol related initiatives to their target audiences.

## **PURPOSE**

The purpose of this report is to update Committee and Council on the new *OPHS* and the Board of Health outcomes and requirements, through the new lens of need, impact, capacity, partnership and collaboration.

## **BACKGROUND**

### ***Need***

The importance of using data and information to inform decision-making at a local level in regards to program assessment, planning, delivery, management, and evaluation is essential for Chronic Disease Prevention priorities and implementation.

Next to tobacco, alcohol creates the most health, social, economic and criminal harms to individuals, families, and communities. The global burden of disease is normally defined using Disability Adjusted Life Years (DALYs). The DALY is a health gap measure which includes the potential years of life lost due to premature death (PYLL) and the equivalent years of “healthy” life lost by being in poor health or disability (years lost due to disability or YLD). The World Health Report (2002) listed the leading risk factors for disease in emerging and established economies reporting the DALY percent totals. According to this report, alcohol (9.2%) is listed as the third leading risk factor for disease in developed countries following tobacco (12.2%) and blood pressure (10.9%). Physical inactivity (3.3%) and low fruit and vegetable intake (3.9%) are also risk factors for disease<sup>1</sup>. Alcohol-related death and disability accounted for 4.0% of the global burden of disease which is quantified according to the impact of premature deaths and disability in a population. Alcohol was ranked as the fifth most detrimental risk factor of 26 examined. Alcohol accounted for about the same amount of disease as tobacco<sup>2</sup>.

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<sup>1</sup> The World Health Report (2002). World Health Organization.

<sup>2</sup> The World Health Report (2002). World Health Organization.

The estimated cost of substance abuse in Canada was approximately \$40 billion in 2002 or \$1,267 for every Canadian. Alcohol accounted for about \$14.6 billion in costs representing 36.6% of the total costs of substance abuse. The largest economic costs of alcohol were \$7.1 billion for lost productivity due to illness and premature death, \$3.3 billion in direct health care costs and \$3.2 billion in law enforcement costs. The costs attributed to illegal drugs were estimated to be around \$8.2 billion or 20% of the total costs of substance abuse<sup>3</sup>. The annual economic impact in Ontario of alcohol use is estimated at \$5.3 billion.

### **Alcohol consumption in Canada/Ontario/Niagara:**

Statistics Canada study national alcohol consumption habits. In 1997, Canadians consumed 7.3 litres/per person aged 15 and over. This number increased to 7.9 litres/per person aged 15 and over in 2004. In 2004, Canadian Addiction Survey estimated that 23% of drinkers are consuming at levels above the low-risk drinking guidelines and 17% of past-year drinkers were considered to be drinking hazardously<sup>4</sup>.

In Canada, alcohol is consumed by the majority of the population. Even for those individuals not drinking in a “risky” fashion, the possibility of developing alcohol-related chronic disease still exists. Canadians overall are drinking more and levels of high risk drinking are increasing. In Ontario, 61.2% of grade 7-12 students reported drinking alcohol at least once in the past year. This number peaks at 83% in grade 12. In the Niagara region, 86.1% of secondary school students report drinking alcohol at least once in the past year<sup>5</sup>.

This year, alcohol use in Ontario will be included as an optional module for the Rapid Risk Factor Surveillance System and local data will be available. The questions being asked of Niagara residents are their alcohol use and the amount they’re consuming.

### **Serious and Fatal injuries related to alcohol consumption:**

In Niagara, alcohol impairment is one of the top three primary causes of fatal and serious motor vehicle crashes (MVC). Looked at as a primary cause, it is particularly between the ages of 16 to 40 years. When gender within impairment is looked at as a primary cause, males are involved in 82% vs. females 18%, similar across the age groups (note: males are overrepresented in all fatal and serious such that males vs. females involved in crashes due to all three primary causes = 75% vs. 25%).

Niagara Regional Police Services (NRPS) has recently done a 10-year MVC report (1998 to 2007) that has not yet been released in full. Similar patterns have been identified. This report will provide more detail regarding alcohol impairment as one of the main causal factors of fatal and life-threatening crashes around temporal patterns, gender differences, single vs. multiple vehicle crashes, age groups, roadway type, etc., to assist with programming and enforcement.

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<sup>3</sup> J. Rehm, D. Baliunas, S. Brochu et al. (2006). Canadian Centre on Substance Abuse

<sup>4</sup> Canadian Addictions Survey (2004). Canadian Centre on Substance Abuse, Health Canada, The Canadian Executive Council on Addictions, The Centre for Addictions Research of BC, and the provinces of Nova Scotia, New Brunswick and British Columbia

<sup>5</sup> Ontario Student Drug Use and Health Survey (2007). Centre for Addiction and Mental Health

In addition to road related injuries, alcohol has been linked to other transport injuries, fall, drowning and burning injuries, occupational and machine injuries, self inflicted injuries (suicide), violence and assault injuries.

There are several conditions that are by definition totally attributable to alcohol (e.g., poisoning, drunk driving crashes). For chronic diseases, the attributable fraction has to be calculated using the prevalence of exposure, in this case alcohol consumption and relative risks derived from epidemiologic studies. Most of the research on alcohol-related harm has been conducted with average volume as a measure of exposure. However, patterns of drinking present another dimension of alcohol-related harm, though less rigorously examined. There is strong evidence on the relationship between the patterns of drinking and rates of cardiovascular diseases. Overall, the strength and direction of a relationship between alcohol and chronic diseases depends on average consumption, and for some cardiovascular diseases, on the pattern of drinking. The United States National Toxicology Program and the International Agency for Research on Cancer have both listed alcohol as a human carcinogen.

#### **Alcohol-related health conditions contributing to morbidity and mortality:**

Liver cirrhosis, cholelithiasis, pancreatitis, alcohol poisoning, maternal and perinatal conditions are related to alcohol use, as well consuming alcohol during pregnancy causes brain damage and permanent birth defects in a baby, otherwise known as Fetal Alcohol Spectrum Disorder (FASD). Prenatal exposure to alcohol is the most common cause of learning disabilities in children. In fact, it is estimated that one in every 100 live births in Canada is affected by alcohol use in pregnancy. FASD is 100 percent preventable – a woman drinking alcohol during her pregnancy is the only cause. Low birth weight and intrauterine growth retardation are also factors.

#### **Alcohol and its relationship with specific chronic diseases:**

##### **Cardiovascular Disease (e.g., coronary heart disease and sudden cardiac death)**

Drinking outside of meals is associated with an increased risk for cardiovascular incidents. Drinking in combination with meals has been found to reduce high blood pressure in a number of studies, which might explain the lower risk of cardiovascular disease. Moreover, drinking with meals may also have a positive effect on lipid levels, dissolution of blood clots, and reduce absorption of alcohol in the gastrointestinal tract. All cardiovascular benefits from alcohol occur later in life and cannot be achieved with heavy episodic drinking.

The benefits realized through consumption of alcohol can be attained by other healthy lifestyles choices including healthy eating and physical activity<sup>6</sup>.

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<sup>6</sup> *Alcohol & Chronic Disease: An Ontario Perspective*. M. Roerecke, E. Haydon & N. Giesbrecht (2007) Prepared for the Ontario Public Health Association

## **Cancer**

The increase in cancer risk associated with alcohol typically begins with low levels of consumption and increases with the quantity of total alcohol consumed. The strongest relationships were found for cancer of the oral cavity, pharynx, esophagus, and larynx<sup>7</sup>. Researchers are recommending limiting alcohol drinks in order to decrease cancer risks. If alcoholic drinks are consumed, limit consumption to no more than two drinks a day for men and one drink a day for women.

### **Breast cancer:**

Due to its relatively high prevalence, breast cancer represents the major chronic disease burden from alcohol consumption among women. The evidence shows a positive relationship between risk and increasing average alcohol consumption, or a strong dose-response relationship. Ten grams of pure ethanol per day (less than one standard drink) has been found to increase the risk of breast cancer by 9% while a consumption level of 30-60 grams per day (2-4 standard drinks) showed an elevated risk of 41% compared to abstainers.<sup>8</sup>

### **Colon and rectum cancer:**

Women and men who drink three or more standard alcohol drinks per day, increase their colon and rectum cancer risk by 40%. When alcohol is combined with smoking tobacco, the effects multiply. Heavy alcohol consumption combined with heavy smoking increases the risks of developing breast, colon, and rectum by 16-20 times. Combining heavy smoking and drinking increase the risk of mouth, pharynx, larynx and esophagus cancers<sup>9</sup>.

## **REPORT**

### ***Impact***

The ability to influence broader societal changes is the responsibility of many parties. Boards of health shall assess, plan, deliver, and manage their programs and services by considering the evidence of the effectiveness of an intervention, best practices, within scope of services, consider the barriers, ensuring performance measures are in place and further assess program and service delivery via program evaluations. Public health departments are required to address the adverse health outcomes associated with alcohol use and the illegal use of alcohol. To effectively change behaviour and to reduce the harms associated with alcohol and other drugs, the *OPHS* require a comprehensive health promotion strategy that not only focuses on raising awareness and education and skill building but also advocating for and building healthy public policy to move Ontario and Niagara residents towards a culture of drinking in moderation.

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<sup>7</sup> *Alcohol & Chronic Disease: An Ontario Perspective*. M. Roerecke, E. Haydon & N. Giesbrecht (2007) Prepared for the Ontario Public Health Association

<sup>8</sup> Alcohol and Breast Cancer in Women: A pooled analysis of cohort studies (1998). Smith-Warner; Spiegelman, Yaun, et al., BrBrandt, Folsom, Goldbohm, Graham, Holmberg, Howe, Marshall, Miller, Potter, Speizer, Willett, Wolk, & Hunter. *Journal of the American Medical Association*. 279, 535-540.

<sup>9</sup> Miller, A. (2007). University of Toronto, Department of Public Health Sciences. Powerpoint presentation. October 31, 2007. Alcohol, Cancer and Public Policy: Centre for Addiction and Mental Health.

A comprehensive health promotion strategy to reduce the harms associated with alcohol should include education and awareness raising, skill building, building healthy public policy, creating supportive environments, developing personal skills, strengthening community action, and re-orienting health services.

The National *Framework to Reduce the Harms Associated with Alcohol and Other Drugs and Substances in Canada* (2005) lists 41 recommendations that are known to be effective in changing behaviour and decreasing alcohol-related injuries. At a Federal and Provincial level, overall strategies include the following:

- Increasing alcohol taxes
- Increasing minimum legal purchase/drinking age
- Controlling retail sales
- Lowering Blood Alcohol Concentration (BAC) limits
- Restricting hours and days of sale
- Restricting outlet density.

The proposed Provincial Framework follows the *National Framework* supporting the “four pillar” approach of addressing prevention, harm reduction, treatment and enforcement. In Ontario, the Centre for Addiction and Mental Health (CAHM) is leading a working group which has created a proposed drug strategy framework for Ontario. The vision for this framework is that all people in Ontario live in a society that is increasingly free of the range of harms associated with alcohol, other drugs and substances and supports the health, well-being and safety of individual, families and communities.

The Provincial working group is recommending the following:

- Support Federal and Provincial action to increase alcohol taxes
- Support increasing the minimum legal purchase/drinking age
- Advocate for the continuation of monopolized retail outlets
- Support the decision to lower BAC limits
- Administrative license suspension/enforcement
- Restrictions on hours and days of sale
- Restrictions on outlet density
- Encourage effective server interventions and bar staff training
- Drinking-Driving Countermeasures.

At a local level, the Board of Health Outcomes in the new *OPHS* related to **alcohol only** for the Chronic Disease Prevention and Prevention of Injury and Substance Misuse Standards are:

- The Board of Health is aware of and uses epidemiology to influence the development of healthy public policy and its programs and services for chronic disease prevention and for substance misuse.
- There is an increased awareness among community partners about the factors associated with chronic diseases and substance misuse that are required to inform program planning and policy development.

- Policy-makers have the information required to enable them to amend current policies or develop new policies that would have an impact on the prevention of chronic diseases and substance misuse.
- The public is aware of the importance of reduced alcohol use.
- Community partners are engaged in the prevention of substance misuse.

Board of Health outcomes also include issues around Reproductive and Prenatal Health in the Family Health section of the *OPHS*. It is known that there is no safe level of alcohol intake for pregnant women and it is the only preventable risk factor for FASD.

***Note: The complete OPHS requirements to achieving this standard are included in this report (See Appendix A).***

In attempting to move Canadians towards a culture of drinking in moderation, CAMH has published the Low-Risk Drinking Guidelines (LRDG) to maximize life and minimize risk. The LRDG have been endorsed by many credible agencies. The LRDG are for people of legal drinking age and state the guidelines of drinking in moderation. These guidelines are “low-risk” and are not “no-risk.” To avoid alcohol-related problems, zero alcoholic drinks is recommended. For low-risk, a person should not consume any more than two standard drinks on any one day.

In women, no more than nine standard drinks should be consumed in a week. For men, no more than 14 standard drinks should be consumed in a week. The definition of one standard drink equals 13.6 grams of alcohol, equivalent to 5 oz/142 mL of wine (12% alcohol), 1.5 oz/43 mL of spirits, and 12 oz/341 mL of regular strength beer (5% alcohol). Beverages that contain higher amounts of alcohol, such as coolers or fortified wines, are not considered to be a standard drink.

The LRDG provide tips on how to reduce the risk of alcohol-related harm, such as wait at least one hour between drinks; have something to eat to help absorb the alcohol (on an empty stomach alcohol effects the brain in five minutes); alternate alcoholic beverages with non-alcohol beverages such as water, soft-drinks or fruit juice; keep track of how much you drink; and never drink and drive.

The advocacy efforts of the National and Provincial frameworks on alcohol influenced the The Association of Public Health Agencies (aPHa) and help form their October 2008 resolutions. The outcomes of those resolutions were around policy, enforcement and limiting availability of alcohol and changing alcohol specific legislation.

***Note: The outcome of the aPHa resolutions are included in this report (See Appendix B)***

Since the aPHa resolutions of October 27, 2008, the provincial government is proposing new and tough legislation for novice drivers that would, if passed, changes to Ontario's Graduated Licensing System would mean it would take a new driver up to 36 months to

get a driver's license and the rationale is to give novice drivers better skills and experience to drive safely. The proposed changes also include:

- A zero blood alcohol concentration level for all drivers 21 years of age and younger.
- Tougher penalties for novice drivers that increase with each violation of graduated licensing restrictions, with convictions that result in demerit points or with court-ordered suspensions.
- Tighter restrictions on the number of young passengers teen drivers can carry.
- Other changes proposed in the bill would help keep suspended drivers off Ontario's roads by giving police the power to immediately impound their vehicles for seven days - at the roadside.
- Convicted drunk drivers and those who continue to drive without a court-ordered ignition lock would also be subject to an immediate seven-day roadside impoundment.

### ***Capacity***

Understanding local public health capacity and the resources required to achieve outcomes is essential for effective management of programs and services. All boards of health shall strive to achieve the needed capacity and resources required to meet the standards through measurement of organizational structures and processes; workforce planning, development and maintenance; information and knowledge systems and financial resources.

NRPH currently employs one FTE Health Promoter to work on substance misuse prevention within the Chronic Disease and Injury Prevention Division. In addition, staff from other divisions such as the Sexual Health program, Child Health program and Reproductive Health program also implement alcohol related initiatives to their target audiences. In addition to internal Public Health staff, NRPH works with many community partners who assist us in delivery our alcohol and substance misuse prevention work.

### ***Partnerships/Collaboration***

Public health programs and services involve extensive partnerships within the health sector and public health promotes community capacity building by fostering partnerships and collaborating with community partners. At a local level, NRPH has been involved with the following initiatives as recommended by the *National*:

- Membership on a provincial network creating municipal drug strategies
- Selected as a constituency member for CAMH
- Co-chair of the Niagara Drug Awareness Committee – membership based on best practices to address the issues of substances (i.e., prevention, treatment, enforcement and harm reduction) with police, school board trustees, pharmacist,

addiction counselor, crime prevention, social worker, teacher, academia, consultants for youth engagement, etc.

- Developed provincial networks with Ontario Public Health Association, CAMH and Alcohol Policy Network
- Membership on Regional Road Safety Committee which is a partnership with CAA Niagara, NRPS, Public Works and NRPH, which is currently implementing a regional Think and Drive campaign
- Ontario Community Coalition Against Impaired Driving - community based
- Ontario Students Against Impaired Driving - youth driven, school based
- Policy development such as legions, golf courses, municipal alcohol policies, workplace alcohol policies
- Bar policy workshops and alcohol policy development
- Education and awareness of Sandy's Law – bars, restaurants
- Educating and skill development working with youth
- Promotion of the LRDG.

Submitted by:

Approved by:

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