

Prevention of Substance Misuse

Guidance Document

Standards, Programs & Community Development Branch Ministry of Health Promotion May 2010

Working Group Co-Chairs Daina Mueller Nancy Langdon Working Group Members Wendy Kirkos Cathy Edwards Vanessa Trumpickas Liz Janzen Working Group Writer
Daria Parsons

Editor
Diane Finkle Perazzo

ISBN: 978-1-4435-2916-7 © Queen's Printer for Ontario, 2010

Published for the Ministry of Health Promotion

Table of Contents

Acknowledgements	5
1) Section 1. Introduction	6
a) Development of MHP's Guidance Documents	6
b) Content Overview	7
c) Intended Audience and Purpose	7
2) Section 2. Background	8
a) The Cost of Substance Misuse	8
b) Definition of Substance Misuse	8
c) Degrees of Use	9
d) Why Focus on Alcohol for Substance Misuse?	9
i) Provincial Data	11
e) Other Drug Use	11
f) Risk Factors for Substance Misuse	12
g) Mental Health and Addictions Strategy	12
h) Low-Risk Drinking Guidelines	13
i) Creating a Culture of Moderation	14
j) Implications for Public Health	14
3) Section 3. OPHS Prevention of Substance Misuse Requirements	15
Requirement 1	
Requirement 2	16
(a) Public Health Actions/Interventions Considering Social Determinants	
of Health	16
(b) Situational Assessment	
(c) Policy	
(d) Program and Social Marketing	19
(e) Evaluation and Monitoring	20
(f) Resources	22
Requirement 3	23
a) Youth as a Priority Population	23
i) Key Development Stages	24
ii) Public Health Actions/Interventions Pertaining to Mental Health Protective	
Factors and Resilience Considerations	24
iii) Public Health Actions/Interventions Considering Social Determinants of Health	24
iv) Situational Assessment	25
v) Partnerships	25
vi) Building Assets /Resiliency	26
vii) Resiliency Initiatives	26
viii) Youth Engagement	27

b) Policy	27
c) Program and Social Marketing	28
i) School Settings	28
ii) Post-Secondary Settings	29
iii) Policies for Post-Secondary Settings	30
iv) Brief Intervention Counselling	31
v) Resources	31
vi) Community-Based Interventions	31
vii) Targeted Interventions for Vulnerable Families	31
viii) Parenting Adolescents: A Creative Experience	32
d) Evaluation and Monitoring	32
e) Resources	33
Requirement 4	35
(a) Situational Assessment	35
(b) Policy	37
(c) Resources	38
(d) Program and Social Marketing	38
(e) Evaluation and Monitoring	39
Requirement 5	
(a) Situational Assessment	
(b) Policy	42
(c) Program and Social Marketing	
(d) Evaluation and Monitoring	
(e) Resources to Support Implementation	
) Section 4. Alcohol and Chronic Disease Prevention Re	equirements48
i) Alcohol and Chronic Disease Prevention – Commun	•
Requirement 6	
(a) Background	48
(b) Situational Assessment	
(c) Policy	
(d) Program and Social Marketing	
(e) Evaluation and Monitoring	
(f) Resources to Support Implementation	
ii) Alcohol and Chronic Disease Prevention – Workplac	
Requirement 7	
(a) Background	
(b) Situational Assessment	
(c) Policy	
(d) Program and Social Marketing	
(e) Resources	
(f) Evaluation and Monitoring	
(g) Resources to Support Implementation	
(g) hesources to support implementation	
Section 5. Conclusion	55
, 222.011 0. 0011010011111111111111111111	
Appendix A: Linkages between Prevention of Substance	
Misuse Requirements and Others	
mouse requirements and Others	

Acknowledgements

The Prevention of Substance Misuse Working Group would like to thank program staff from Public Health Units for their contribution of program examples to the development of this Guidance Document.

Guidance and editorial support from the project Steering Committee members, Cancer Care Ontario and Ontario Ministry of Health Promotion staff was also greatly appreciated.

Section 1. Introduction

Under Section 7 of the *Health Protection and Promotion Act* (HPPA), the Minister of Health and Long-Term Care published the *Ontario Public Health Standards* (OPHS) as guidelines for the provision of mandatory health programs and services by the Minister of Health and Long-Term Care. Ontario's 36 boards of health are responsible for implementing the program standards, including any protocols that are incorporated within a standard. An Order in Council (OIC) has assigned responsibility to the Ministry of Health Promotion (MHP) for four of these standards: (a) Reproductive Health; (b) Child Health; (c) Prevention of Injury and Substance Misuse; and (d) Chronic Disease Prevention. The Ministry of Children and Youth Services has an OIC pertaining to responsibility for the administration of the *Healthy Babies Healthy Children* components of the *Family Health* standards.

The OPHS are guided by the following four principles: need; impact; capacity; and partnership and collaboration. One *Foundational* standard focuses on four specific areas: (a) population health assessment; (b) surveillance; (c) research and knowledge exchange; and (d) program evaluation. These principles and the *Foundational* standard should be utilized in conjunction with this Guidance Document.

a) Development of MHP's Guidance Documents

The MHP has worked collaboratively with local public health experts to draft a series of Guidance Documents. These Guidance Documents will assist boards of health to identify issues and approaches for local consideration and implement the standards. While the OPHS and associated protocols published by the Minister under Section 7 of the HPPA are legally binding, Guidance Documents that are not incorporated by reference to the OPHS are not enforceable by statute. These Guidance Documents are intended to be resources to assist professional staff employed by local boards of health as they plan and execute their responsibilities under the HPPA and the OPHS. Both the social determinants of health and the importance of mental health are also addressed.

In developing the Guidance Documents, consultation took place with staff of the Ministries of Health and Long-Term Care, Children and Youth Services, Transportation and Education. The MHP has created a number of Guidance Documents to support the implementation of the four program standards for which it is responsible, e.g.:

- Child Health
- Child Health Program Oral Health
- Comprehensive Tobacco Control
- Healthy Eating/Physical Activity/Healthy Weights
- Nutritious Food Basket
- Prevention of Injury
- Prevention of Substance Misuse
- Reproductive Health
- School Health

This particular Guidance Document provides specific advice about the *OPHS Requirements* related to the PREVENTION OF SUBSTANCE MISUSE.

b) Content Overview

<u>Section 2</u> of this Guidance Document provides background information relevant to the prevention of substance misuse, including the significance and burden of this specific public health issue, a brief overview about provincial policy direction, strategies to reduce the burden and the evidence and rationale supporting the direction. The background section also addresses mental well-being and social determinants of health considerations in the public health approach to the issue.

Section 3 provides a statement of each program requirement in the OPHS (2008) and discusses evidence-based practices, innovations and priorities within the context of situational assessment, policy, program and social marketing and evaluation and monitoring. Examples of how this has been done in Ontario or other jurisdictions are provided. Crossover areas with other programs are identified, including identification of opportunities for multilevel partnerships, suggested roles at each level (provincial, municipal/board of health, community agencies and others) and identification of collaborative opportunities with other strategies and programs such as the Smoke-Free Ontario Strategy and Healthy Babies Healthy Children. Section 3 also identifies key tools and resources that may assist staff of local boards of health to implement the respective program standards and to evaluate their interventions.

<u>Section 4</u> provides further explanation of the alcohol requirements under *Chronic Disease Prevention in the OPHS* (2008) and discusses evidence-based practices, innovations and priorities within the context of situational assessment, policy, program and social marketing and evaluation and monitoring, with examples.

Section 5 is the conclusion.

c) Intended Audience and Purpose

This Guidance Document is intended to be a tool that identifies key concepts and practical resources that public health staff may use in health promotion planning. It provides advice and guidance to both managers and front-line staff in supporting a comprehensive health promotion approach to fulfill the *OPHS Requirements* (i.e., *Chronic Disease Prevention, Prevention of Injury and Substance Misuse, Reproductive Health, Child Health)*.

In the event of any conflict between this Guidance Document and the *Ontario Public Health Standards* (2008), the *Ontario Public Health Standards* will prevail.

Section 2. Background

The prevention of substance misuse has been a focus of intervention for public health units since prior to the 1997 Mandatory Guidelines. The *Ontario Public Health Standards* (2008) and the creation of this Guidance Document provide a further opportunity for health units across Ontario to work together to effectively and comprehensively apply best and promising practices in their efforts to prevent substance misuse.

a) The Cost of Substance Misuse

According to the Canadian Centre on Substance Abuse, the economic burden of alcohol approaches that of tobacco. (1) A recent Canadian cost study, based on 2002 data, estimated the overall social cost of substance misuse to be \$39.8 billion, representing a cost of \$1,267 for every Canadian. Tobacco accounts for about \$17 billion (42.7% of the total estimate), alcohol accounts for about \$14.6 billion (36.6%) and illegal drugs for about \$8.2 billion (20.7%). The social costs included in the 2006 study encompass the direct costs of health care, enforcement, research and prevention and the indirect costs of lost productivity in the workplace or at home. The evidence shows that a significant toll of death, injury and illness could be reduced for future generations by implementing effective interventions to prevent substance misuse.

In Ontario, alcohol misuse costs were estimated at \$5.3 billion, or 37.2%, of all costs (tobacco, alcohol and illegal drugs) and illegal drugs accounted for \$2.9 billion, or 20.4%, of all costs.

Alcohol is a drug that is readily accessible and legal to consume. Illicit drugs are illegal and although the use of illegal drugs presents significant health risks, the direct costs of alcohol present a more substantial issue for Ontarians. As epidemiological evidence and research suggests that public health efforts focusing on reducing the rates of alcohol consumption are required, this Guidance Document will primarily focus on evidence-based research to reduce rates of alcohol use.

b) Definition of Substance Misuse

Substance use refers to the ingestion or administration of any substance that is psychoactive (i.e., alters consciousness). (2,3) Psychoactive substances include alcohol, tobacco, caffeine, illegal drugs, some medications, solvents and glues. The use of psychoactive substances is an almost universal human cultural behaviour since the beginning of recorded human history.

Substance use may range from beneficial to problematic, depending on the quantity, frequency, method or context of use. Substance misuse refers to instances or patterns of substance use not consistent with legal or medical guidelines associated with physical, psychological, economic or social problems, or use that constitutes a risk to health, security or the well-being of individuals, families or communities. (4) This includes potentially harmful types of behaviours that may not constitute clinical disorders, such as impaired driving, using a substance while pregnant, heavy consumption and routes of administration (i.e., ways of taking a substance into one's body) that increase harm. Substance misuse also includes substance use disorders (e.g., clinical conditions defined by medical diagnostic criteria, including dependence or addiction). Substance misuse is not solely related to the legal status of the substance used, but to the amount used, the pattern of use, the context in which it is used and, ultimately, the potential for harm. (4)

Heavy drinking or binge drinking is defined as 5 or more drinks on one occasion, at least once a month in the past 12 months. (4,5) All current Canadian professional standards of practice recommend that there is no known safe level of alcohol consumption during pregnancy. (2)

Underage drinking can also be considered a form of misuse because it is both illegal and often involves consumption in quantities and settings that can lead to serious immediate and long-term consequences. (6)

c) Degrees of Use

Substance use falls within a continuum of potentially problematic behaviours based on frequency, intensity and degree of dependency. (2) This continuum includes the following range of types of use:

- Experimental: Use is motivated by curiosity and limited to only a few exposures.
- Social/Recreational: The person seeks out and uses a substance to enhance a social occasion. Use is irregular
 and infrequent and usually occurs with others.
- Situational: There is a definite pattern of use and the person associates use with a particular situation. There is some loss of control, but the person is not yet experiencing negative consequences.
- Intensive: Also called "binging," the person uses a substance in an intense manner. They may consume a large amount over a short period of time, or engage in continuous use over a period of time.

Substance dependence can be physical, psychological, or both. (7) Physical dependence consists of tolerance (needing more of the substance for the same effect) or tissue dependence (cell tissue changes so the body needs the substance to stay in balance). Psychological dependence occurs when people feel they should use the substance in particular situations or to function effectively. There are degrees of dependence that range from mild to compulsive, with the latter being characterized as addiction.

d) Why Focus on Alcohol for Substance Misuse?

While illegal drugs create much public concern and discussion, the literature indicates that legal substances such as tobacco and alcohol usually cause the greatest amount of individual and societal harm. (8) These are followed (in terms of burden of disease) by prescription and illegal drug use. (2) Substances that contribute the greatest harm can be identified from the distribution of their burden of disease; alcohol accounts for 10% of the burden of disease and illegal substances account for 2%.

Alcohol is the most widely used psychoactive drug. In Ontario, 82% of adults 18 years and over report using alcohol in the past 12 months. (9)

In 2002, the World Health Organization (WHO) identified alcohol as a leading risk factor for chronic disease and ranked it third overall with respect to Disability Adjusted Life Years (DALYS) in developed countries. (1)

There is a growing body of evidence linking alcohol to (10,11):

- More than sixty diseases and conditions
- Cancers (e.g., mouth and oropharyngeal cancer, esophageal cancer, liver cancer, female breast cancer, colorectal
 cancer) (established by the International Agency for Research on Cancer; part of WHO evaluation in 2007)
- Hypertension, coronary heart disease, ischemic and hemorrhagic stroke
- Diabetes

Major alcohol-related health conditions contributing to morbidity and mortality (11,12) include:

- Gastrointestinal conditions (e.g., alcoholic liver cirrhosis, cholelithiasis, pancreatitis)
- Maternal and perinatal conditions (e.g., low birth weight, FASD (Fetal Alcohol Spectrum Disorder))
- Neuropsychiatric conditions (e.g., alcohol abuse, alcohol dependence, depression, anxiety disorder, organic brain disease)
- Unintentional injuries (e.g., road and off-road vehicle injuries, falls, drowning and fire-related injuries, occupational and machine injuries)
- Intentional injuries (e.g., suicide, assault) (13)

Alcohol consumption by women during their childbearing years can cause significant harm, placing them at risk for adverse perinatal and fetal outcomes. Fetal Alcohol Spectrum Disorder (FASD) is the leading cause of preventable developmental disability among Canadian children.

Worldwide, alcohol causes 1.8 million deaths and 58.3 million DALYs. Alcohol consumption has increased in recent decades (mainly in developing countries).

Heavy drinking also increases the risk of violence, (14) vandalism, (15) sexual assault and unprotected sexual encounters with the potential for unplanned pregnancy or infection from sexually transmitted infections. (16)

Alcohol misuse is associated with significant economic impacts (17):

- Lost productivity due to morbidity
- Premature mortality
- Social services costs
- Law enforcement costs
- Direct health care costs (18)

The literature points to several key developmental periods that provide opportunities to enhance protective factors and thus reduce vulnerabilities to substance misuse (19):

- Prenatal, postpartum period
- Transition to school
- Adolescence and the transition to high school
- Transition to independence (college or entering the workforce)
- Transition relating to family and occupation, including retirement

i) Provincial Data

According to Statistics Canada, 16% of the Ontario population aged 12 and over are considered heavy drinkers (22% males and 9% females). Heavy drinking is defined as five or more drinks on one occasion, at least once a month in the past 12 months. (20,21)

In 2007, 37% of Ontarians aged 20 years and older reported consuming at least five or more drinks on at least one occasion in the last 12 months. Based on 36 public health units in Ontario, the highest proportion of heavy drinkers in the last 12 months was 54% and the lowest was 24% of adults aged 20 years and older. (17)

It is estimated that 10% of all deaths in Ontario directly or indirectly result from alcohol misuse. (22) Alcohol misuse is involved in about 40% of all traffic collisions (23) and results in a large number of potential years of life lost because of the relatively young age of those killed. (24)

According to the Ontario Trauma Registry Report: Major Injury in Ontario, 2007-2008, (25) in 2007/2008, there were 4,354 cases hospitalized with major trauma in 11 participating facilities across 14 sites in Ontario. More than half of these cases (56%) qualified for blood alcohol testing, which is recommended by the Trauma Advisory Committee on all trauma patients older than 10 years of age when the patient is admitted within 12 hours of the incident. Of those tested, 706 (29%) had a blood alcohol concentration greater than zero and 22% had an alcohol concentration defined as greater than or equal to 17.4 mmol/L, reflecting the legal positive blood alcohol limit. Among these cases, 50% were admitted due to motor vehicle collisions, 26% were admitted due to unintentional falls and 19% were admitted due to injury purposely inflicted by another person.

e) Other Drug Use

Although the 2005 CAMH Monitor survey has found that fewer adults use cannabis than alcohol, the reported use of cannabis has increased from 9% in 1996 to 14% in 2005. (26) This increase is evident for both men and women and among all age groups. A substantial increase in cannabis use has also occurred among 18-29 year olds, from 18% in 1996 up to 38% in 2008.

Although a small percentage of adults and youth self-identify use of illicit drugs and misuse of prescription drugs, there is growing anecdotal evidence that, in some Ontario communities, use of methamphetamines and oxycodone by adults is more common than stimulant drugs such as ecstasy and cocaine. (27) Adults are also more likely to use prescription drugs for non-medical reasons and to binge drink.

Misuse of prescription medications is also a cause for concern and can lead to significant harm. (28) Problems related to medications stem from a variety of inappropriate uses, such as under-treatment, over-treatment, use for reasons other than as prescribed and adverse effects of the medication even if given according to recommendations. In one British Columbia study, it was found that the pattern of utilization of benzodiazepines appears inconsistent with the recommendations of educational groups, regulators and manufacturers.

f) Risk Factors for Substance Misuse

There are a variety of risk factors that contribute to substance misuse, and addiction may develop if these factors act together. (2) Risk factors for substance misuse include a genetic, biological, or physiological predisposition, as well as external psychosocial factors (e.g., community attitudes including school, values and attitudes of peers or social group and family situation) and internal factors (e.g., poor coping skills and lack of resources).

Factors such as social environment, culture, income and social status have an impact on rates of use. (9) Groups at high risk for substance misuse include youth and adults who are homeless, lesbian, gay, bisexual and transgendered, Aboriginal people, people with concurrent disorders, sex workers and people in jail.

There is little known about certain groups who use alcohol and other drugs, especially those who are vulnerable or do not come in contact with the service system. This can also include people who have the resources to acquire and use drugs in private. It is suspected that many people use substances without their family or friends ever knowing.

g) Mental Health and Addictions Strategy (29)

In 2008, the Ontario government made a commitment to strengthen mental health and addiction services in the province and a Mental Health and Addictions Strategy is currently under development. The goals of the strategy are to:

- Improve the health and well-being of Ontarians.
- Reduce the incidence of mental illness and addictions.
- Identify mental illness and addiction early and intervene appropriately.
- Provide high-quality, effective, integrated, culturally competent person-directed services and supports.

The strategy will outline a comprehensive approach to mental health and addiction, leading to better services for Ontarians by transforming mental health and addiction services and promoting healthy communities and resiliency. It will look beyond health and will include collaboration across ministries, including Health Promotion, Education, Community and Social Services, Citizenship and Immigration, Community Safety and Correctional Services and the Attorney General.

Research in the United States has suggested that the prevalence of alcohol dependence in those with psychiatric disorders is almost twice as high as in the general population; similar levels are reported for the UK. (30) Similarly, research shows that people with alcohol dependency are more at risk of suicide (31) and have higher levels of depressive and affective problems, schizophrenia and personality disorders. (32)

While mental health is correlated with addictions, it is also important to note that individuals are predisposed to risk through behaviours such as binge drinking and heavy drinking.

h) Low-Risk Drinking Guidelines

The Low-Risk Dinking Guidelines were developed to minimize the risk for problematic substance use and consist of the following (4):

- No more than one to two standard drinks per day.
- No more that nine standard drinks per week for women.
- No more than fourteen standard drinks per week for men.

The guidelines do not apply if the individual:

- Has health problems, such as liver disease or mental illness
- Is taking medications, such as sedatives, painkillers or sleeping pills
- Has a personal or family history of drinking problems
- Has a family history of cancer or other risk factors for cancer
- Is pregnant, trying to get pregnant, or breastfeeding
- Will be operating vehicles such as cars, trucks, motorcycles, boats, snowmobiles, all-terrain vehicles or bicycles
- Needs to be alert (e.g., if operating machinery or working with farm implements or dangerous equipment)
- Will be playing sports or involved in other physical activities where they need to be in control
- Is responsible for the safety of others at work or at home
- Has been told not to drink for legal, medical or other reasons (http://www.lrdg.net/guidelines.html)

For men and women, almost one in three drinkers (32%) consume alcohol at levels exceeding the *Low-Risk Drinking Guidelines*. (4) While these guidelines help prevent alcohol misuse, to prevent chronic diseases such as cancer and diabetes, alcohol consumption guidelines actually may be lower.

Strategies that help reduce the burden of illness attributed to alcohol misuse are outlined in recommendations from the *National Alcohol Strategy* and consist of the following broad areas (33):

- Health promotion, prevention and education with particular focus of promoting Low-Risk Drinking Guidelines to encourage a culture of moderation
- Health impacts and treatment
- Limiting availability of alcohol
- Safer communities through development of municipal alcohol policies and programs that address local issues and reduce rates of impaired driving

i) Creating a Culture of Moderation

Due to the burden of illness resulting from alcohol misuse, experts have stressed the need to create a culture of moderation with relation to alcohol consumption. (34)

The following policy strategies contribute to a culture of moderation and are effective in creating a safer drinking environment (37,38):

- Taxation or price increases (Requirement 2)
- Increases in minimum drinking age (Requirement 3)
- Zero tolerance laws that apply a lower illegal blood alcohol concentration for younger or inexperienced drivers (Requirement 3)
- Graduated licensing (Requirement 3)
- Evidence exists for responsible beverage service programs (specifically those mandated by reduction of liability)
 (Requirement 2)
- Evidence on advertising restrictions is conflicting for youth (Requirement 4) (38)

j) Implications for Public Health

Research has established that effective public health strategies and interventions to reduce the harms associated with alcohol misuse are needed to influence levels of consumption in the general population, as well as those that influence high-risk behaviours that are associated with alcohol-related problems. (11)

Within a broader community context, and to impact the underlying causes of alcohol misuse, methods must be linked very closely to initiatives promoting emotional well-being and resiliency (e.g., community-based interventions, programs in schools, parenting initiatives, healthy public policy that modify drinking environments and *Low-Risk Drinking Guidelines* and treatment interventions to develop a comprehensive approach or developing evidence informed initiatives in targeted communities). (11) It is well known that comprehensive approaches are required to reduce substance misuse rather than stand alone programs or social marketing.

Of all forms of substance misuse, alcohol has the highest impact in terms of human harm and financial costs. Many of these harms and costs are preventable. While this Guidance Document has intentionally focused on alcohol, health units should also identify the scope, scale and patterns of drug use in their communities to best address their local issues. This includes working with partners in the community to develop a comprehensive approach, or developing evidence-informed initiatives in targeted communities.

Section 3. OPHS Prevention of Substance Misuse Requirements

Requirement 1

The board of health shall conduct epidemiological analysis of surveillance data, including monitoring of trends over time, emerging trends and priority populations, in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current) in the areas of:

- Alcohol and other substances;
- Falls across the lifespan;
- Road and off-road safety; and
- Other areas of public health importance for the prevention of injuries.

The use of substances, such as alcohol and other drugs, and the associated personal, social and economic harms are a concern for the community, for health and social services, for law enforcement officials and for government. http://www.toronto.ca/health/drugstrategy/

Public health units have utilized data and information on substance misuse from the following sources:

- Centre for Addiction and Mental Health (CAMH), specifically the Ontario Student Health and Drug Use and Health Survey (OSDUHS). (27) The 2009 OSDUHS data will facilitate the development and evaluation of programs for substance misuse.
- CAMH Monitor¹
- Canadian Addiction Survey²
- Rapid Risk Factor Surveillance System (RRFSS, http://www.rrfss.ca)³
- Canadian Community Health Survey⁴
- Canadian Campus Survey⁵
- Ontario Trauma Registry⁶
- Local enforcement data (e.g., police, Alcohol and Gaming Commission of Ontario)⁷

Linkages with other programs can be found in Appendix A.

¹ "The CAMH Monitor, first conducted in 1977, is the longest ongoing addiction and mental health survey among adults in Canada. The survey is designed to serve as the primary vehicle for monitoring substance use and mental health problems among Ontario adults. The CAMH Monitor provides epidemiological trends in alcohol, tobacco, and other drug use, problem use, public opinion regarding drug issues and policies and mental health among Ontarians. About 2,200 Ontario adults are interviewed each year using random-digit-dialling. The survey consists of 12 independent monthly surveys (January–December), averaging about 200 completions each month." http://www.camh.net/research/camh_monitor.html

² The CAS is one of the most detailed and extensive surveys ever conducted on how Canadians aged 15 years and older use alcohol, cannabis and other drugs and the impact that use has on their physical, mental and social well-being. This information, when compared with past studies, indicates trends in drug use and harms associated with use." http://www.ccsa.ca/eng/priorities/research/CanadianAddiction/Pages/default.aspx

³ The current RRFSS (http://www.rrfss.ca/) data collection, analysis, reporting and dissemination processes, at a limited number of health unit jurisdictions across Ontario, provides the opportunity to locally monitor injury modules.

⁴ Public health units receive the "share" file of record-level CCHS data on Ontario respondents who have agreed their data can be shared with provincial health ministries. This is distributed to public health units by the Ministry of Health and Long-Term Care (MOHLTC), Health Analytics Branch. Public health units also receive the CCHS Public Use Microdata File (PUMF) of record-level data, where some of the responses are grouped into categories to ensure anonymity. This arrangement is through Statistics Canada, on the advice of MOHLTC, Health Analytics Branch. PHUs can use these data files to cross-tabulate the use of substances variables with the socio-demographic or health behaviour variable. Correlation found among them is helpful for planning misuse of substance prevention programs.

Requirement 2

The board of health shall work with community partners, using a comprehensive health promotion approach, to influence the development and implementation of healthy policies and programs and the creation or enhancement of safe and supportive environments that address the following:

- Alcohol and other substances;
- Falls across the lifespan;
- Road and off-road safety; and
- Other areas of public health importance for the prevention of injuries as identified by local surveillance in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current).

The term "supportive environment" refers to both physical and social aspects. It includes where people live, their local community, their home and where they work and play. (35) Action to create supportive environments has many dimensions, including physical, social, spiritual, economic and political. Each of these dimensions is inextricably linked to the others in a dynamic interaction. (36) Safe and supportive environments in relation to alcohol and other substances focus on strategies that modify the environment in which these substances are used. Modification of the environment can be achieved through policy, community-based efforts, enforcement and legislation.

(a) Public Health Actions/Interventions Considering Social Determinants of Health

Specific characteristics of persons or places in an area may encourage problems; (38) for example, the layout of a neighbourhood can contribute to criminal activity. (38) Community-based interventions that focus on neighbourhood-specific strategies are effective. In order to incorporate a social determinants of health framework in activities related to substance misuse, it is useful to build partnerships between public health, community members, service providers and crime prevention to address the social and physical contexts that contribute to substance misuse. Public health staff should develop relationships with community partners who understand the neighbourhood mechanisms thought to account for community variation in outcomes, (38) such as a crime prevention committee and other service providers.

⁵ "Funded by the Canadian Institutes of Heath Research, the overall objective of the 2004 Canadian Campus Survey is to build understanding regarding the individual, social and environmental determinants of hazardous drinking. This preliminary report describes the prevalence of alcohol use, other drug use, mental health and gambling problems among Canadian undergraduates interviewed in 2004, relationships between these outcomes and student characteristics, and whether such outcomes have changed since 1998." http://www.camh.net/Research/Areas_of_research/Population_Life_Course_Studies/CCS_2004_report.pdf.

⁶ An overview of CAMH population life course studies: http://www.camh.net/research/areas_of_research/Population_life_course_studies/population_life_course.html

⁷ Information about the Ontario Trauma Registry is available at (http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=services_otr_e)
Alcohol and Gaming Commission of Ontario, http://www.agco.on.ca/

(b) Situational Assessment

Using surveillance data, identify and foster collaborative partnerships with local, provincial and national community partners, such as, but not limited to:

Local

- School boards (see School Health Guidance Document for guidance on how to effectively work in the school setting, including opportunities for alignment with the education sector)
- Community leaders (formal/informal)
- Police services
- Municipal leaders
- Municipal departments (e.g., licensing, recreation, planning)
- Licensed establishments
- Hospitals
- Addictions services
- Local Health Integrated Networks (LHINs)
- Regional planners
- Mothers Against Drunk Driving (MADD)
- Business owners
- Health practitioners/Family Health Teams
- Workplaces
- Emergency Medical Services (EMS)

Provincial

- Alcohol and Gaming Commission of Ontario (AGCO)
- Liquor Control Board of Ontario (LCBO)
- Correctional services
- Ministry of Transportation Ontario (MTO)
- Centre for Addiction and Mental Health (CAMH)
- Mothers Against Drunk Driving (MADD)
- Ontario Injury Prevention Resource Centre (OIPRC)
- Insurance Bureau of Canada
- Other provincial ministries
- Safe Communities Canada
- Ontario Public Health Association (OPHA) Alcohol Policy Network
- Association of Local Public Health Agencies (alPHa)
- Association of Municipalities of Ontario (AMO)
- Ontario Drug Awareness Partnership (Healthy Communities Consortium)
- Heart and Stroke Foundation of Ontario
- Cancer Care Ontario
- Parent Action on Drugs (PAD)
- Arrive Alive Drive Sober
- Association to Reduce Alcohol Promotion in Ontario (ARAPO)

Health unit staff members should seek out additional relevant local data sources, either those collected by local organizations, or those collected locally by external organizations at the provincial or federal level. Where local data are lacking or limited, staff should seek to engage local partners in improving data collection or sharing relevant data.

Using surveillance data, public health units can identify local policies, programs and environmental supports being developed or implemented within the community, focusing on those that modify the drinking environment.

(c) Policy

Public health role:

- Policy development for broad based population health approaches that promote a culture of moderation.
- Targeted interventions that address specific community needs.

Systems Changes to Address the Availability of Alcohol (34)

There are a variety of systems changes that can maintain current systems of control over alcohol sales. (P/T governments) Under these systems, it will be important to:

- Require liquor control boards to maintain a social-responsibility frame of reference for all matters pertaining to their operations and governance, and to maintain or increase their spending and programming in this area.
- Enhance staff training at outlets and implement ongoing enforcement compliance programs to ensure that alcohol is consistently sold in a socially responsible way and in accordance with the law.
- Encourage the systematic re-examination and analysis of hours and days of alcohol sales and outlet density, recognizing that increased physical availability of alcohol can lead to increased harm.
- Collaborate with liquor control boards to ensure alcohol cost and availability in high-risk communities are managed in a socially responsible manner. (P/T and municipal governments)
- Request all liquor licensing authorities and liquor control boards to collect and make public detailed information
 on both off-premise and on-premise alcohol-outlet density. (P/T governments)
- Implement server-training programs in Ontario as a pre-condition for receiving and/or renewing licenses for serving alcohol. These training programs should include regular recertification of servers, ongoing enforcement compliance checks and periodic program evaluations to sustain and improve impacts over time. In addition, server training and compliance checks should be conducted more frequently for establishments with a history of service-related problems. (P/T and municipal governments, First Nation communities)
- Conduct research on the nature and extent of underage access to alcohol, including in licensed venues and implement appropriate programs and policies to respond to the issue. (P/T governments)
- Strengthen enforcement and sanctions for people producing or using false identification. (P/T governments)

www.nationalframework-cadrenational.ca/uploads/files/FINAL_NAS_EN_April3_07.pdf

Although several of these recommendations are primarily provincial actions, local boards of health, together with community partners, can advocate that the province acts in accordance with these recommendations.

Cross-over flag:

- Municipal Alcohol Policy (MAP) is an evidence-based practice that is further described in the Chronic Disease
 Prevention standard. There is both an implementation guide and an evaluation: The Municipal Alcohol Policy
 Guide. (37)
- Injury Prevention and Reproductive Health program standards (FASD prevention) are also related to this activity.

(d) Program and Social Marketing

There is evidence that community actions can reduce problems related to alcohol use and youth substance use. (38) Coalitions and partnerships have become a popular vehicle for community action. The following examples are evaluated community-based programs:

The Sacramento Neighbourhood Alcohol Prevention Project

Community Trials Intervention to Reduce High-Risk Drinking is a multi-component, community-based program developed to alter the alcohol use patterns and related problems of people of all ages. (39) The program incorporates a set of environmental interventions that assist communities in:

- Using zoning and municipal regulations to restrict alcohol access through alcohol outlet density control.
- Enhancing responsible beverage service by training, testing and assisting beverage servers and retailers in the development of policies and procedures to reduce intoxication and driving after drinking.
- Increasing law enforcement and sobriety checkpoints to raise actual and perceived risk of arrest for driving after drinking.
- Reducing youth access to alcohol by training alcohol retailers to avoid selling to minors and those who provide alcohol to minors.
- Forming the coalitions needed to implement and support interventions that address each of these prevention components. The program aims to help communities reduce alcohol-related accidents and incidents of violence and the resulting injuries. Typically, the program is implemented over several years, gradually phasing in various environmental strategies.

The Midwestern Prevention Project (MPP)

The Midwestern Prevention Project helps youth recognize the tremendous social pressures to use drugs and provides training skills in how to avoid drug use and drug use situations. These skills are initially learned in the school program and reinforced through the parent, media and community organization components. (Cross-over flag: School Health Guidance Document)

The MPP disseminates its message through a system of well-coordinated, community-wide strategies: mass media programming, a school program and continuing school boosters, a parent education and organization program, community organization and training and local policy change regarding tobacco, alcohol and other drugs. (40) These components are introduced to the community in sequence at a rate of one per year, with the mass media component occurring throughout all the years. The central component for drug prevention programming, however, is the school.

Safer Bars

Safer Bars is an evidence-based CAMH program shown to reduce alcohol-related violence in bars, clubs and other licensed establishments. (41) The program involves a bar risk assessment, the provision of information on alcohol liability and the law and violence prevention training for bar management and staff. Since the fall of 2006, an ad hoc group with representatives from the Toronto Drug Strategy Secretariat, Toronto Public Health, the Toronto Police Service, the Alcohol and Gaming Commission of Ontario, the city's Community Safety Secretariat and CAMH have met to develop strategies to promote Safer Bars with a starting focus on Toronto's entertainment district. For more information, visit http://www.camh.net\About_camh\health_promotion\community_health_promotion\strat_prevalcprob_bars04.pdf

(e) Evaluation and Monitoring

Substance misuse information can be augmented through local cross-sectoral collaborative partnerships that share data in order to determine success measures and methods for monitoring. Partnerships with police services and municipal licensing will enhance this activity.

A strategy should be developed to address local issues that facilitate partnerships and the establishment and evaluation of outcome measures (e.g., municipal drug strategy). The Federation of Canadian Municipalities (FCM) has published the *Municipal Drug Strategy Phase III report*, A Summary Evaluation of Pilot Projects, outlining recommendations that draw from lessons learned from nine communities. This approach requires municipal government support, as well as the involvement of community stakeholders. (42) The key to a good strategy is to agree on a common mission and an action plan derived from local priorities. The FCM has prepared an evaluation framework that provides guidance to evaluate municipal drug strategy.

Durham Region Safer Bars and Communities Strategy to Reduce Alcohol Misuse in Durham Region

In 2001, Durham Region Health Department conducted a focus group with stakeholders in the community on risk factors associated with alcohol misuse. Results indicated that interventions were required at the source of alcohol intake and with those serving alcohol. Licensed establishments were also surveyed, and they identified alcohol intake and violence as key problems. The Durham Region Safer Bars and Communities Coalition was created to address these issues. As a member of the coalition, the Health Department facilitated the implementation of an integrated approach involving skill-development, supportive environments, capacity building and policy development.

The coalition consists of representatives from a wide variety of disciplines, including government regulatory bodies, enforcement services, researchers, alcohol prevention advocates, municipalities, commercial host liability experts and service industry professionals. Interventions for the *Durham Region Safer Bars Strategy* include:

Skill Development Workshops

Workshop topics include: managing aggression, alcohol liability and house policy development, emergency first responders and "Ask an Expert."

■ Reduce Your Risk Newsletter

This newsletter has been developed to inform participants about current issues, upcoming training opportunities, resources and communication campaigns.

Capacity Building and Supportive Environments

This intervention includes interaction and collaboration with establishments, transit, police, municipal facilities, private citizens and work places. Communication campaigns throughout the year are developed and implemented with the community and coalition partners in the form of posters and designated driver cards with "Don't Drink and Drive," "Celebrate Safely and Responsibly" and "Please Drink Responsibly" messages. A Facebook group has been developed to encourage communication and networking.

Policy Development

Resources such as sample staff and house alcohol policies have been developed for adaptation, as necessary.

Assistance with the development and review of policies for municipalities and licensed establishments is provided.

Community groups across the province have adapted coalition resources and activities as templates for their own communities. For further information, please contact the Durham Region Health Department.

Toronto Safer Bars Program

The City of Toronto is currently exploring by-laws that would require the *Safer Bars Program* as a requirement of licence renewal and new licences. (43) Once a response is made public, it would be up to individual health units to undertake a similar initiative in their catchment area. The Toronto backgrounder is available electronically at http://www.toronto.ca/legdocs/mmis/2009/ls/bgrd/backgroundfile-17944.pdf

Public health role:

- Implement policies and programs outlined in the Guidance Document based on identified local need.
- Provide policy direction through best practices to influence decision-makers at the local, provincial and national level.
- Introduce evidence-based practices specific to community responses to local problems.
- Advocate for alignment of local and provincial efforts to promote a culture of moderation.
- Advocate for continued government controls on access and cost of alcohol.
- Advocate for appropriate resources to continue studying and monitoring substance misuse in Ontario.
- Share best practices through a supportive public health network.
- Collaborate with other public health practitioners.

Identification of Key Linkages to Other OPHS and Government Strategies and Programs

In Ontario, in 2009, the Minister's Advisory Group on Mental Health and Addictions released a discussion paper on the development of a ten-year strategy for mental health and addictions in the province: *Every Door is the Right Door.* (29) The paper will be followed with online and in-person consultation.

Cross-over flag:

- Child Health
- Reproductive Health
- Chronic Disease Prevention

(f) Resources

The following organizations contribute to prevention efforts in Ontario.

Centre for Addiction Mental Health

http://www.camh.net

Produces bi-monthly Population Studies e-Bulletins that contain information regarding behaviours and attitudes
of youth and the population at large, both on consumption of alcohol and other drugs and policy matters.

Alcohol Policy Network

http://www.apolnet.ca/Index.html

- Produces Alcohol in the News and Issues to Watch.
- Provides Alcohol no ordinary commodity annual forum.
- The network works with public and community health professionals to ensure they acquire the skills and knowledge for more effective alcohol prevention.

Healthy Communities Consortium - Ontario Drug Awareness Partnership (ODAP)

http://www.ohcc-ccso.ca/en/healthy-communities-consortium

Provides support to networks and coalitions with an interest in substance and alcohol misuse.

- Collaborates with other organizations to offer the Newbie Teleconference about substance misuse prevention.
- Disseminates resources and key messages that stakeholders, including public health, could use in their communities.
- Note: ODAP is currently a member of the Healthy Communities Consortium, which will provide training and support services for Healthy Communities Ontario.

Parent Action on Drugs (PAD)

http://www.parentactionondrugs.org

- Develops resources and programs on alcohol and other drug prevention such as What's With Weed and Hook-up to Breast Cancer Prevention.
- PAD works with professionals, parents and caregivers to help youth understand the risks related to these issues and how to reduce or prevent harm.

Public health units should be familiar with the many recommendations proposed in the National Framework for Action to Reduce the Harms Associated with Alcohol and Other Drugs and Substances in Canada and should monitor developments to which they could contribute. For more information, visit http://www.nationalframework-cadrenational.ca/index_e.php?orderid_top=2

City of Vancouver's Four Pillars Drug Strategy Program; for more information, visit http://www.vancouver.ca/fourpillars/

The Health Communication Unit's *Developing Health Promotion Policies Workbook*, pg. 49-50 www.mdfilestorage.com/thcu/pubs/539372877.pdf

Canadian Centre on Substance Abuse's National Framework for Action to Reduce the Harms Associated with Alcohol, Other Drugs and Substances in Canada; for more information, visit http://www.ccsa.ca/2007% 20CCSA%20Documents/ccsa-023876-2007.pdf

Requirement 3

The board of health shall use a comprehensive health promotion approach to increase the capacity of priority populations to prevent injury and substance misuse by:

- Collaborating with and engaging community partners;
- Mobilizing and promoting access to community resources;
- Providing skill-building opportunities; and
- Sharing best practices and evidence for the prevention of injury and substance misuse.

This Requirement is consistent with evidence-based practice and should be considered when planning public health activities to implement the priority population requirement. To be considered comprehensive, any intervention directed at a priority population must take into consideration environmental factors. For example, an intervention aimed at delaying the age of onset of first use of alcohol through enhancements to the school curriculum will be hampered if there are no additional interventions directed at the adult population outside the school system; at alcohol marketing practices in the community; at retail sales of alcohol; or at the availability of social supports. This is the community systems approach, where alcohol and other drug problems are viewed as the outcomes of processes driven and sustained by the community at large (not just individuals). The intention is to reduce the collective risk to populations through appropriate interventions affecting these processes. (38)

a) Youth as a Priority Population

Youth, defined as individuals from 12-24 years of age, are a priority population because youth who use substances predispose themselves to a number of risks, such as injury and other chronic diseases. (44) They are an important focus for substance misuse because delaying the age when youth begin to use substances is a critical harm reduction strategy.

Young people express their independence by testing their limits and developing their own social networks. Although many adults are concerned about adolescent experimentation with illegal psychoactive substances, the most common patterns of risky substance use are with more familiar substances such as tobacco and alcohol. The use of these socially sanctioned substances has generated increasing concern, especially due to evidence of increased "binge" drinking by teenagers in Canada, the United Kingdom, Europe and Australia. (45–48) There has also been a marked increase in these countries in the use of cannabis, ecstasy and injectable drugs, such as heroin, cocaine and various amphetamine-type drugs, over the past three decades. (46)

High risk/vulnerable youth are an important priority population requiring specific attention. (49) Vulnerable youth are defined as those with a history of family member misusing substances, those with behavioural, mental health or social problems, those that are excluded from school, young offenders, those who are homeless, those involved in commercial work and those from minority ethnic groups. Vulnerable youth are at greater risk of substance misuse and require targeted interventions.

i) Key Development Stages

Reducing the patterns of harmful drinking among youth will require influencing key transitions, such as the move from elementary to secondary school and secondary to post-secondary education. A range of prevention strategies and services is necessary and should be carried out in collaboration with government, school and community partners to address protective and risk factors at critical points along the lifespan. Efforts should be in partnership with school boards and community groups for children and youth and should focus on smooth transitions to school, middle school, high school and post-secondary education. (50) Universal approaches to preventing substance misuse are essential to ensure that all young people, not just those at risk, are the focus of prevention efforts.

Cross-over flag:

School Health Guidance Document

ii) Public Health Actions/Interventions Pertaining to Mental Health Protective Factors and Resilience Considerations

The literature on healthy youth development recommends a shift toward interventions that enhance and facilitate adaptive qualities in youth and away from interventions that reduce risk factors and negative behaviour. (51) Protective factors that buffer risky environments and lead to resilience among youth include the development of competence across domains, confidence in oneself, connections to all elements of the community, character and moral commitment and a sense of caring and compassion. (49) Healthy boundaries, constructive use of time and social competencies are additional developmental assets. (2,29) Efforts should focus on resiliency and protective factors. (50)

Key developmental stages are highlighted in the literature as opportunities to enhance protective factors and reduce vulnerabilities. Many of the protective factors at key developmental stages reduce vulnerabilities and are also the basis for mental health promotion. As a result, there is a need for strong linkages with new MOHLTC mental health and addictions strategy, particularly in examining risk factors for youth and ensuring that activities proposed within the strategy are aligned with activities at a local level. For more information, visit www.health.gov. on.ca/english/public/program/mentalhealth/minister_advisgroup/minadvis_fag.html

iii) Public Health Actions/Interventions Considering Social Determinants of Health

There are specific groups of youth who are at much higher risk than their peers for heavy use, multi-drug use and substance misuse. These include runaway and street-involved youth, youth in custody, adolescents with co-occurring disorders, sexually-abused and exploited youth, gay, lesbian, bisexual and questioning teens and First Nation, Inuit and Métis youth. Fortunately, not all youth exposed to these higher risks end up with chronic substance misuse or dependence disorders. There is growing evidence that protective factors and assets in the lives of even the most vulnerable may buffer their risk and support resilience and healing. Connectedness to school, positive relationships with caring adults within or outside of the family and supportive peers seem to reduce the likelihood of the distress and difficulties in coping that lead to problem substance use. For more information, visit www.ccsa. ca/2007CCSADocuments/ccsa-011522-2007-e.pdf

iv) Situational Assessment

- Alcohol is the most commonly used drug among Canada's youth. (52)
- Alcohol-related trauma is a significant and preventable cause of death among young Canadians. (17)
- Youth who begin using substances prior to their 15th birthday face a higher risk of poor health. (44)
- According to the Canadian Campus Survey (CCS, 2005), 31% of Ontario undergraduates were considered
 a heavy drinker in the past year compared to 34% in the past month. (53)
- According to the Canadian Community Health Survey, 8% of youth aged 12–18 were heavy drinkers, compared to 37% for those aged 19–24 years. (53)
- The Canadian Campus Survey (CCS, 2005) is the best available source of information on drinking practice and its negative impact in the post-secondary context, within our country. According to the CCS, 21.5% of BC undergraduates were heavy drinkers. (54)
- Early use of psychoactive substances often predicts later problematic use, general health and mental health problems and developmental delays in cognitive and emotional functions in young adulthood. Alcohol-related motor vehicle crash deaths frequently remain a leading cause of death among persons aged 15–24 years. (55)
- According to the results of the 2009 Ontario Student Drug Use Survey (OSDUS) released by the Centre for Addiction and Mental Health (CAMH), the use of illicit drugs has declined. In 2003, 68% of students reported that they had not used any illicit drug during the past year; in 2005, it was 71% and in 2007 it was 72%. The use of cannabis decreased steadily from 30% in 2003 to 27% in 2005, and 26% in 2007 and 2009. Similarly, the use of many drugs, such as hallucinogens, methamphetamine and heroin, decreased. The overall percentage consuming alcohol decreased as well, from 66% in 2003 to 62% in 2005 and 58% in 2009. But drinking habits remain an issue. In 2009, 25% of students reported binge drinking at least once during the month before the survey and 21% of students reported drinking at a hazardous level. (27)
- In 2009, 12% of students who are licensed drivers continued to drink and drive. A higher percentage (17%) reported driving within one hour of smoking cannabis. Moreover, 23% of all students reported being a passenger with a driver who had been drinking, and 18% with a driver who had been using drugs. (27)
- The National Framework for Action to Reduce the Harms Associated with Alcohol and Other Drugs and Substances in Canada identifies children and youth as a key population. (56) Research has continued to demonstrate that substance misuse and addiction issues should be handled within the context of a young person's family and community. Without parental and family involvement, the impact of an intervention is diminished. Additional efforts are required to promote and facilitate the use of both prevention and treatment that includes parents and family environments.

v) Partnerships

Partnerships are the same as Requirement 2 with the following additions:

Local

- Schools
- Post-secondary institutions
- Parents
- Youth
- Youth-servicing agencies
- Sexual assault services
- Police
- MADD

Provincial

- Ministry of Education
- Ministry of Child and Youth Services

vi) Building Assets /Resiliency

Building assets (U.S. terminology) and resiliency (Canadian terminology) in youth, as well as providing youth opportunities to be engaged, are protective factors that promote positive youth development and prevent youth from engaging in risk taking behaviours. (57)

The Search Institute in the United States has developed a framework of 40 Developmental Assets – positive experiences, relationships, opportunities and personal qualities that help young people grow up healthy, caring and responsible. Created in the 1990s, the framework is grounded in research on child and adolescent development, risk prevention and resiliency. The Search Institute's research shows that the more assets young people have, the less likely they are to engage in risky behaviours. Three common themes have emerged from numerous findings, which indicate assets:

- Promote academic success:
- Divert youth from risky behaviours and increase civic engagement; and
- Give young people the strengths they need to make positive choices in life.

Because of its basis in research and its proven effectiveness, the Developmental Assets framework has become the single most widely used approach to positive youth development in the United States. Studies of more than 2.2 million young people consistently show that the more assets young people have, the less likely they are to engage in a wide range of high-risk behaviours and the more likely they are to thrive. (57) Assets have power for all young people, regardless of their gender, economic status, family, or race/ethnicity. Furthermore, levels of assets are better predictors of high-risk involvement and thriving than poverty or being from a single-parent family.

Youth who experience more assets are less likely to get into trouble, use drugs and engage in sexual activity, violence, gambling and other high-risk behaviours. They are also more likely to be successful, do well in school and help others. By building assets, youth can be prepared to make good decisions when faced with difficult situations.

vii) Resiliency Initiatives

In alignment with the U.S., Resiliency Initiatives has developed a resiliency assessment and evaluation protocol that provides a statistically sound and research-based approach to understanding the strengths related to long-term resiliency. Working from this strength-based model of understanding child, youth and adult development, Resiliency Initiatives emphasizes the positive aspects of individual differences in understanding what extrinsic and intrinsic strengths contribute to optimal human development. For more information, visit http://www.resiliencycanada.ca

A resiliency focus allows individuals to be seen as being "at promise" instead of "at risk." The focus is on facilitating rather than fixing, pointing to health rather than dysfunction and turning away from limiting labels to wholeness and well-being. (58)

viii) Youth Engagement

Building assets (resiliency) through youth engagement enhances protective factors and is associated with a reduction in risky youth behaviour, including the use of alcohol and other drugs. Youth engagement is defined as the meaningful and sustained involvement of a young person in an activity focusing outside the self. Full engagement consists of a cognitive component, an affective component and a behavioural component – head, heart and feet. For more information, visit http://www.engagementcentre.ca

Key Messages According to the Centre of Excellence (http://engagementcentre.ca for youth engagement)

- Meaningful youth engagement produces benefits to youth and the community in which they live.
- Through engagement, youth gain a sense of empowerment as individuals and make healthy connections with others that are associated with reduction of risk behaviours and increased participation in positive activities that contribute to community.
- Youth engagement is a crosscutting, comprehensive, strength-based practice for effective protection, prevention and intervention on multiple issues.
- The community gains from the contributions that youth bring to organizations, activities and their relationships.

Public health role:

Assess regional and local needs to establish priorities for planning initiatives for both universal and targeted initiatives.

b) Policy

In many countries, significant investments have been made into prevention programs and their evaluation. Recent reviews of interventions for prevention of substance use and its harms (2,11,38) have documented what can be learned from the global experience. These reviews have identified key elements that influence substance use patterns and contribute to or mitigate harms:

- The structure of the adult world that influences children and shapes their future patterns of substance use.
- Recent contributions from research on brain development that isolate critical factors during pregnancy, birth, infancy and childhood that might be modified to reduce the risk of later behavioural problems, including those associated with substances.
- A number of more general lessons and principles that underpin effective prevention that can be extracted from international experience of what works in certain settings or cultures.

Of the policies related to substance misuse, the following are most effective for youth in Ontario (38):

- Increases in minimum drinking age
- Zero tolerance laws that apply a lower legal blood alcohol content to drivers under the legal drinking age
- Graduated licensing

Restricting access to alcohol by minors include (59):

- Enforcement to improve retailer compliance with age identification for alcohol sales.
- Media messages to increase public awareness of harms related to use of alcohol, cannabis by minors.
- Media and parent education strategies to increase supervised access to alcohol in home and social contexts.
- There is evidence that increasing in the price of alcoholic beverages is an effective policy for reducing alcohol consumption and its consequences. (104)

These recommendations are also supported by findings in the *Community Preventative Services Guide*; for more information, visit http://www.thecommunityguide.org/adolescenthealth/index.html

Public health role:

- Advocating to maintain the current minimum drinking age or promote a higher minimum drinking age
 if substantiated with evidence.
- Advocating/collaborating with partners to develop Municipal Alcohol Policies (MAP).
- Ensuring policies consider a youth lens.
- Collaborating with AGCO, law enforcement, concerned partners, youth, post-secondary institutions.
- Promoting development and promotion of campus alcohol policies.
- Advocating for continued controls on access to alcohol by youth.

c) Program and Social Marketing

This section focuses on youth, schools and post-secondary institutions. The *School Health Guidance Document* provides information on how to effectively implement a comprehensive health promotion approach in a school setting, including opportunities for alignment with the education sector.

A combination of population-based interventions that engage all members of society and targeted strategies are required to reduce the harm associated with youth use of alcohol and other drugs. Comprehensive approaches to reduce the rate of alcohol use include policy that restricts access to alcohol, as previously described in this document, in conjunction with social marketing strategies. In addition to these initiatives, school, post-secondary and community-based interventions are also essential components to achieve a comprehensive approach. (38)

i) School Settings

School drug education programs with a behavioural orientation have shown short- to medium-term success. Educational strategies should also increase knowledge, explore attitudes, develop decision-making, increase self esteem and raise awareness of how media, peers and parents influence alcohol consumption and drug use. Strategies should also introduce a "whole school" approach and help parents to develop their parenting skills. Where appropriate, it is useful to offer brief one-on-one advice and referrals to external resources. (49)

The Canadian Centre on Substance Abuse (CCSA) and the Public Health Agency of Canada (PHAC) have identified important ingredients that should be included in alcohol-related programs. Examples of detailed programs can be found in New standards for school-based youth substance abuse prevention: Building on Our Strengths Canadian Standards for School-based Youth Substance Abuse Prevention CCSA's Drug Prevention Strategy for Canada's Youth 2009, available at http://www.ccsa.ca/2009%20CCSA%20Documents/ccsa-newrel-20090519e.pdf

Essential ingredients for programs:

- Adopt adequate research design
- Use a formative phase of development that involves talking to young people and testing the intervention with them and their teachers
- Provide programs at relevant times during young people's development; ensure programs are interactive and based on skill development
- Set goals for changing behaviour
- Include booster sessions
- Include information that is practical
- Include appropriate teacher training
- Use interactive delivery
- Make programs widely available
- Adopt marketing strategies (38)

ii) Post-Secondary Settings

Assessment of alcohol and drug use in post-secondary students in Canada has been sporadic. The Centre for Addiction and Mental Health (CAMH) has conducted two campus surveys over a decade, releasing the last survey in 2004. Post-secondary students have their own patterns of harmful drinking that can be significantly curtailed by interventions on campus. Campus interventions, however, should be supported by community initiatives that deal with licensed establishments who cater to this target group. For more information, visit http://www.camh.net/Research/Areas_of_research/Population_Life_Course_Studies/CCS_2004_report.pdf

Similar studies outside of Canada can shed light on substance misuse among post-secondary students. For example, the Harvard School of Public Health College Alcohol Study surveyed students from a nationally representative sample of US colleges four times between in 1993 and 2001. More than 50,000 students at 120 colleges took part in the study. The study reviewed college drinking and the implications for prevention, including the need to focus on lower drink thresholds, the harm produced at this level of drinking, the secondhand effects experienced by other students and neighborhood residents, the continuing extent of the problem and the role of the college alcohol environment in promoting heavy drinking. The survey also highlighted the roles of campus culture, alcohol control policies, enforcement of policies, access, availability and pricing, marketing and special promotions of alcohol.

A Matter of Degree is an evaluation report on environmental prevention strategies from the Harvard School of Public Health study for post-secondary setting. The document can be viewed at http://www.hsph.harvard.edu/cas/What-We-Learned-08.pdf

The Centre for Addictions Research of BC provided the Canadian context by releasing, in 2008, *Alcohol on Campus: Programs and Policies: Review and Recommendations*. This document presents a situational assessment of the consumption patterns of post-secondary students and includes a call to action for specific interventions that would reduce alcohol-related harms. The document can be viewed at http://carbc.ca/portals/0/resources/AlcoholOnCampus.pdf

Educational strategies in the post-secondary setting are recommended. Although these measures demonstrate modest impact in isolation, when woven together in a concerted initiative – especially one that involves both committed internal staff, faculty and student representatives and external off-campus resource personnel – they have the potential to affect meaningful and important changes such as:

- Raising the awareness of risky and safer drinking patterns, as well as support services on campus.
- Providing personalized normative feedback to encourage more modest consumption.
- Supplying diversely accessible screening and brief intervention opportunities.
- Regulating alcohol consumption, sales, pricing, advertising and promotion on campus.
- Forming a community coalition to address student consumption issues off campus.

Further evidence, summaries and detailed interventions are provided in *Alcohol on Campus: Programs and Policies Review and Recommendations* from the Centre for Addictions Research of BC, revised July 2008. Available at http://www.carbc.ca/portals/0/resources/AlcoholOnCampus.pdf

Research stresses the importance of efforts by post-secondary institutions to develop programs and policies that respond to problems of excessive substance use on campus. Campus policies and programs should be holistic and address the unique needs of their population. In their review of drug prevention strategies for college students, Larimer et al. (60) strongly recommend that campuses collaborate with surrounding communities to implement efficient and effective individual and environmental preventive and intervention strategies. The Alberta Alcohol and Drug Abuse Commission (AADAC) report (61) underlines that the binge drinking environment also includes the communities surrounding the campus and stresses that it is important for campus administrators to collaborate and work with the community in order to target, prevent and intervene in case of excessive use of alcohol among college students. (54)

Public awareness campaigns in the mass media on their own have been shown to have limited effect; however, media strategies appear to be effective when complemented by on-the-ground regulations and other interventions. (38)

iii) Policies for Post-Secondary Settings

Colleges and universities should develop and implement effective policies that will prevent the misuse of alcohol by students. (62,63) Policy components must be accessible to students and provide clear information about laws and regulations regarding alcohol use. These policies should include (63,64):

- The minimum legal drinking age
- Standards of conduct
- The consequences for breaking campus rules and laws
- The risk associated with the misuse of alcohol
- Counselling or treatment programs, negative effects of alcohol advertising
- An evaluation component that monitors and assesses the policy on a regular basis

Further details are provided at http://www.apolnet.ca/thelaw/policies/ReviewOfAlcoholPolicies.pdf

iv) Brief Intervention Counselling

Brief interventions are a recommended best practice for post-secondary settings (65) and are recommended by CAMH in many of their documents. According to one study, brief alcohol interventions are among the top five most cost-effective preventatives and are as at least as effective as Pap smears or bowel cancer screening. (54) A brief intervention can range from a brief conversation to up to five counselling sessions. Even brief interventions lasting three to five minutes have been shown to be effective.

Brief interventions can take place in settings such as primary health care and can be implemented by a variety of trained behavioural and primary health care providers. Brief interventions consist of feedback about personal risk, explicit advice to change behaviour, patient's responsibility for change and ways to affect change. (66)

v) Resources

One recent document that examines the brief intervention technique from a public health perspective is *Screening* and *Brief Intervention: Making a Public Health Difference*, 2008, available at http://www.jointogether.org/aboutus/ourpublications/pdf/sbi-report.pdf

BASICS is an intervention designed for college students 18 to 24 years old who drink heavily and have experienced negative consequences as a result. Sixty-seven percent of students receiving the BASICS significantly improved their behaviour from baseline to follow-up four years later, compared to 55% of a control group (a statistically significant 12% difference). Positive results were documented in controlled studies at three different universities. (67)

Summary of BASICS as a model program is available at http://www.modelprograms.samhsa.gov/pdfs/model/BASICS.pdf

vi) Community-Based Interventions

School-based strategies should be augmented by community-based interventions. (38) This Guidance Document includes examples of community trials in Requirement 2.

An example of a community-based program is SHAHRP (School Health and Alcohol Harm Reduction Project), Preparing for the Drug Free Years and Preventing substance abuse among Aboriginal youth: http://www.cancer.ca/manitoba/prevention/mb-knowledge%20exchange%20network/~/media/CCS/Manitoba/Files%20List/English%20files%20heading/pdf%20not%20in%20publications%20section/KEN% 20-%20Youth%20alcohol_1509131495.ashx

vii) Targeted Interventions for Vulnerable Families

Strengthening Families for the Future (CAMH)

Strengthening Families for the Future is a prevention program for families with children between the ages of 7 and 11 who may be at risk for substance use problems, depression, violence and school failure. The program's goals are to:

- Reduce intention to use alcohol and/or other drugs
- Reduce problem behaviour
- Increase resiliency and life skills
- Increase positive and effective parenting
- Increase family communication

Further information is available at http://www.camh.net/Publications/CAMH_Publications/strengthen_families.html

viii) Parenting Adolescents: A Creative Experience

This Australian parenting program focuses on parents of adolescent children. Eighteen sites were involved in an extensive evaluation. The program used a broad-based strategy that promoted mental health, well-being and connectedness in families and local communities. Local service providers were trained to run the program. Parents and adolescents were recruited from Grades 7/8 in targeted schools and through a broad range of community strategies. A program description and ordering information is provided at http://www.mhws.agca.com.au/mmppi_detail.php?id=27

The Australian program has been evaluated (68) and short videos are available that document the challenge of recruiting parents and encouraging them to attend, as well as the labour intensive nature of interventions that work. The abstract with the evaluation is available at http://www.ncbi.nlm.nih.gov/pubmed/12225740

d) Evaluation and Monitoring

Monitoring alcohol use can be facilitated by:

- The Ontario Student Drug Use and Health Survey: CAMH
- Ministry of Education School Climate Survey
- Canadian Community Health Survey
- CIHI data
- RRFSS
- LHIN Catchments Area Reports (regional level data)

Programs should be evaluated, and systems to monitor youth alcohol and substance use should be developed.

Tool kits and services are available.

Examples of how this has been done in Ontario:

- Some public health units have used a *Comprehensive School Health* (CSH) approach. For more information, refer to the *School Health Guidance Document*. (69)
- Hamilton Public Health has developed a skill-based program for Grade 7/8 students.
- Party in the Right Spirit (Evaluation/Logic Model from Middlesex-London Public Health Unit) is a promising
 practice. The focus has changed from inviting schools to sending representatives to a central location; now the
 enhanced program event is in the school. (70)
- What's with Weed: A peer-led student program to help youth recognize and reduce problematic marijuana use. The program was created by treatment and health promotion professionals, is youth-driven, youth-delivered and tested and evaluated in seven high schools in urban and rural settings. Implemented in Niagara Public Health Unit. (71)

Opportunities for Partnership

- Schools and other community partners
- The Ministry of Child and Youth Services
- The Ontario Physical and Health Education Association (OPHEA)

Identification of Key Linkages to Other OPHS and Government Strategies and Programs

- Foundations for Healthy Schools Framework (Ministry of Education). This framework identifies four components to address health-related topics using a comprehensive approach and identifies health-related topics that are aligned with curriculum expectations for elementary and secondary school students and relevant to student well-being.
- Ensure connections with the Alcohol and Gaming Commission of Ontario and LCBO re alcohol-related policy.
- Influence the development of the Mental Health and Addictions Strategy (MOHLTC).
- Injury prevention graduated licensing including zero tolerance for Blood Alcohol Concentration (BAC).

e) Resources

Joint Consortium on School Health

For substance misuse prevention tool kits in schools, including policy, community partners, higher risk youth and classroom education; for more information visit http://www.jcsh-cces.ca

Canadian Institute for Health Information

Improving the Health of Canadians

http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=PG_39_E&cw_topic=39&cw_rel=AR_322_E

The Public Health Agency of Canada (PHAC) summarizes components of effective youth alcohol and drug prevention programs in *Preventing Substance Use Problems among Young People: A Compendium of Best Practices.* (72)

Canadian Centre on Substance Abuse

http://www.ccsa.ca/Eng/Pages/Home.aspx

A Drug Prevention Strategy for Canada's Youth

http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011522-2007-e.pdf

Addressing Youth Substance Abuse: Is there a better way?

http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-actnew17n3-2007-e.pdf

Reducing Alcohol-Related Harm in Canada: Toward a Culture of Moderation – Recommendations for a National Alcohol Strategy

http://www.nationalframework-cadrenational.ca/uploads/files/FINAL_NAS_EN_April3_07.pdf

Substance Abuse in Canada: Youth in Focus

http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011521-2007-e.pdf

The Costs of Substance Abuse in Canada 2002 Highlights

http://www.ccsa.ca/2006%20CCSA%20Documents/ccsa-011332-2006.pdf

Alcohol Policy Network

Best Practices

http://www.apolnet.ca/resources/BestPracticesHome.html

Alcohol and Youth: Recommendations for Research; an Analysis of Canadian Data on Alcohol Youth Trends http://www.apolnet.ca/resources/pubs/respapers/rsch_youth.html

Alcohol and Youth Trends: Implications for Public Health

 $http://www.apolnet.ca/resources/pubs/rpt_AlcoholYouth-5Nov07.pdf$

Priorities 2006: Developments in Alcohol Policy Since 1996 http://www.apolnet.ca/resources/pubs/rpt_Priorities.html

Alcohol and Drug Prevention Publications
http://www.hc-sc.gc.ca/hc-ps/pubs/adp-apd/index-eng.php

Preventing Substance Use Problems Among Young People – A Compendium of Best Practices http://www.hc-sc.gc.ca/hc-ps/pubs/adp-apd/prevent/index-eng.php

Health Council of Canada

Their Future is Now: Healthy Choices for Canada's Children and Youth http://www.healthcouncilcanada.ca/docs/rpts/2006/HCC_ChildHealth_EN.pdf

Centre for Addiction and Mental Health
School lesson plans on substance use and misuse
http://www.camh.net/education/resources_teachers_schools/drug_Curriculum/

Alcohol and Drug Prevention Programs for Youth: What works? http://www.camh.net/About_Addiction_Mental_Health/Child_Youth_Family_Resources/youthprevention.html

Ontario Student Drug Use Survey (OSDUS) Highlights: Drug Use Among Ontario Students 1977-2005 http://www.camh.net/Research/osdus.html

Ontario Physical and Health Education Association http://www.ophea.net/

Mothers Against Drunk Driving
Alcohol, Trauma and Impaired Driving, 3rd edition
http://madd.ca/english/research/real_facts.pdf

Youth and Impaired Driving in Canada: Opportunities for Progress http://madd.ca/english/research/youth_and_impaired_driving_2006.pdf

World Health Organization
Alcohol, No Ordinary Commodity
http://www.racp.edu.au/download.cfm?DownloadFile=58652CD1-9BE2-4D4E-55490E849F199F90

Youth substance use and abuse: challenges and strategies for identification and intervention http://www.cmaj.ca/cgi/content/full/178/2/145

City of Vancouver Four Pillars Drug Strategy Program

http://vancouver.ca/fourpillars/

Samples of Websites/Projects Dealing with Alcohol and Youth

http://www.keepcontrol.ca

http://www.drinkingfacts.ca

http://www.madd.ca/youth

http://www.virtual-party.org

Requirement 4: Public Awareness

The board of health shall increase public awareness of the prevention of injury and substance misuse in the following areas:

- Alcohol and other substances;
- Falls across the lifespan;
- Road and off-road safety; and
- Other areas of public health importance for the prevention of injuries, as identified by local surveillance in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current).

These efforts shall include:

- a. Adapting and/or supplementing national and provincial health communications strategies; and/or
- b. Developing and implementing regional/local communications strategies.

A systematic review conducted by the Alcohol Policy Network found that advertising has an impact on youth substance use. In addition, observational studies have shown an association for adolescents. Communication should be part of a comprehensive approach and support local initiatives. For more information visit http://www.apolnet.ca/resources/pubs/rpt_Effectiveness-Dec05.pdf

Numerous studies have shown that alcohol advertising and promotion increases the likelihood that adolescents will start to use alcohol, and to drink more if they are already using alcohol. For more information, visit http://www.safetylit.org/citations/index.php?fuseaction=citations.viewdetails&citationIds%5b%5d=citjournalarticle_94003_1

(a) Situational Assessment

The prevention of substance misuse requires a comprehensive health promotion approach. Comprehensive approaches include education and awareness, skill-building, policy, environmental support and community action. To be effective, communication and social marketing strategies should be sustained over time.

Social marketing alone is rarely enough to bring about change. A variety of strategies should be applied if change is to occur. Social marketing works best when policies are modified and communities are mobilized. The combined approach can change conditions, as well as socio-economic and environmental systems. Ultimately, this will have an impact on both individual behaviour and health determinants. (73)

It has been shown that media-based campaigns that are pursued in conjunction with complementary and reciprocal community actions are more effective than media campaigns alone in changing both attitudes towards substances and use itself. (74,75)

According to the World Health Organization:

- Mass media campaigns do not change attitudes and behaviour on their own.
- Media campaigns are more effective combined with direct community action.
- Media campaigns raise awareness and lend support to policy initiatives.
- Media campaigns need accurate information and reduction of misinformation.
- Scare tactics only work with low-awareness audiences.

Ingredients of a successful communication campaign include (WHO):

- A well-defined target group
- Research to understand the target
- Research to pre-test materials
- Messages that build on knowledge
- Messages that satisfy motives
- Addressing barriers
- A media plan that ensures exposure
- Long-term commitment

Public service announcements (PSAs) are messages prepared by non-governmental organizations, health agencies and media organizations that promote responsible drinking, and share the hazards of drinking and driving and related topics. Despite their good intentions, PSAs are an ineffective antidote to the much more frequent high-quality paid advertisements that promote alcohol consumption.

Counter-advertising decreases the appeal and use of harmful products such as tobacco and alcohol by disseminating information about these products, their effects and the industry that promotes them. Tactics include health-warning labels on product packaging, as well as prevention messages in magazines and on television.

In 2005, Miller and Associates (76) reported evidence and best practices for a communication campaign on alcohol that specifically targeted youth. Even for findings related to youth:

- There was no real evidence of any campaign lowering alcohol use among target.
- The anti-drug campaign in the U.S. is massive, but questionable in terms of results.
- Public service announcements do not work on their own.
- There are very few comprehensive campaigns or programs (necessary for behaviour change).
- There is a trend towards stupid/embarrassing themes.
- Campaigns do not highlight safety, just risks.

(b) Policy

Communication strategies should target policy and decision-makers. Media messages addressing health and safety issues are rare. Currently, health messages to youth and the general population about the risks associated with alcohol relate mostly to impaired driving – and are delivered at the local level. While some regions of the province have identified messaging and campaigns that address other risks and safety strategies, there has been no coordinated provincial campaign. For more information, visit http://www.apolnet.ca/Index.html.

Social marketing should be used as part of a comprehensive approach to advocate for or influence policy development. This fits into Step 5 – "Build Support for a Policy" of The Health Communication Unit's (THCU) Policy Development at a glance – Eight Steps to Developing a Health Promotion Policy. For more information, see http://www.mdfilestorage.com/thcu/pubs/489887946.pdf

Ontario Examples

Building Networks to Support Municipal Alcohol Policy Development: The Simcoe County Experience
An example of Step 5 – "Building Support for a Policy" is Building Networks to Support Municipal Alcohol Policy
Development: The Simcoe County Experience. In this program, health unit staff partnered with the local FOCUS
community project and CAMH to mount a campaign aimed at encouraging municipalities in Simcoe County to
adopt municipal alcohol policies. (77) The objectives of the campaign were to:

- Increase awareness of host, server and occupier liability
- Increase awareness of the purpose of and need for municipal alcohol policies (MAPs)
- Encourage communities without MAPs to develop and implement such policies

A range of strategies were employed by the campaign to convey the importance of implementing MAPs, including presentations to municipal councils, displays in the community, radio and TV appeals and special events. Public health nurses taking part in the campaign carried out a proactive outreach strategy with local municipalities, connecting with interested municipalities to offer support for MAP development and recognizing municipalities that had MAPs in place through the presentation of awards at community events. Smart Serve, a responsible alcohol beverage service training program, was offered to community groups and businesses throughout Simcoe County. The campaign appeared to be successful in encouraging municipal governments to adopt MAPs. By November 2001, four new MAPs had been adopted in Simcoe County and an additional four were in progress. (75) The Simcoe County experience illustrates how a comprehensive awareness and advocacy campaign can bring about healthy policy change. (78)

Social marketing can be used to influence behaviour by raising awareness about new or changed policy and legislation. Before being enforced, campus policies must be well disseminated. (38)

For more information, see http://www.carbc.ca/portals/0/resources/AlcoholOnCampus.pdf

(c) Resources

Eight Steps to Developing a *Health Promotion Policy* stresses the importance of raising awareness and effectively communicating information about a new policy. For more information, see http://www.mdfilestorage.com/thcu/pubs/497736921.pdf

The following organizations develop communication campaigns on alcohol use:

- MADD (national)
- Ontario Parents Against Drunk Driving
- CAMH (provincial)
- LCBO

(d) Program and Social Marketing

Rethinking Drinking

Rethinking Drinking is an example of a campaign designed to change the culture of alcohol use and to provide tools and resources in print and online. This website and booklet from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) is designed to help people reduce their risk for alcohol problems. The materials present evidence-based information about risky drinking patterns, the alcohol content of drinks and the signs of an alcohol problem, along with information about medications and other resources to help people who choose to cut back or quit drinking.

Alcohol Reality Check

A similar site and campaign in BC called Alcohol Reality Check can be found at http://www.alcoholreality.ca

Where are your Choices Taking You?

The Australian Government's National Alcohol Campaign called *Where Are Your Choices Taking You?* and *It's Your Choice* took place from 1998–99 to 2002–03. This program included two PSA TV spots (one aimed at males; one at females), a print pocket card, brochure for parents, magazine ads, print ads for parents of non-English speaking backgrounds and inserts in major Sunday papers. The three phases of the campaign were focused on youth ages 15–17, parents of children aged 12–17 and young people aged 18–24. All phases were effective and campaign awareness levels were very high. There was an increase in the proportion of respondents who reported that the central campaign message was related to choices about whether to drink alcohol. Respondents continued to rate commercials as thought provoking, believable and relevant. The campaign also made the target group think about the negative effects of drinking too much, the benefits of not drinking too much and the choices they made about drinking. Alcohol consumption decreased in the three months prior to the evaluation.

Drinking Nightmare campaign, Australian Government

This comprehensive National Youth Alcohol Campaign aims to contribute, along with a range of initiatives, to a reduction in harms associated with drinking to intoxication by young Australians. For more information, visit http://www.drinkingnightmare.gov.au.

What's With Weed

http://www.parentactionondrugs.org/pdf/WhatsWithWeedBestPractices.pdf http://www.ohpe.ca/node/10262 Be Safe: Have an Alcohol Free Pregnancy, Ontario's Provincial Alcohol and Pregnancy campaign, 2004 http://www.beststart.org/apcampaign/results.htm (campaign site, including evaluation) http://www.alcoholfreepregnancy.ca/eng/index.html (public site)

Canadian Examples

National Anti-Drug Strategy: Youth Drug Prevention Campaign Parent component 2007-2009 http://www.hc-sc.gc.ca/ahc-asc/activit/marketsoc/camp/nads-sna-eng.php

National Anti Drug Strategy: Media Youth Consortium

The objective is to mobilize youth-marketing and youth-service organizations around a drug prevention campaign by creating task-specific alliances that result in the ongoing delivery of consistent, evidence-informed messages designed to increase awareness and understanding among youth aged 10–24 of illicit drugs and their related harms. A recent initiative was launched at http://www.xperiment.ca that addresses cannabis, ecstasy and cocaine.

Public health role:

- Integrate alcohol as a risk factor for injury and chronic disease, as well as promote the Low-Risk Drinking Guidelines.
- Advocate for a comprehensive social marketing campaign that promotes provincial and local efforts (e.g., in 2008), in conjunction with complementary alcohol policy initiatives. Note: alPHa advocated for the Ontario government to create an enhanced public education and promotion campaign on the negative health impacts of alcohol misuse. For more information, visit http://www.alphaweb.org/substanceuse.asp.
- Identify existing international, national and provincial partners who have developed or are developing programs to reduce substance use.
- Identify existing local networks to collaborate about substance misuse to maximize resources.
- Collaborate with the LCBO to enhance the communication campaign Social Responsibility to enhance comprehensiveness.
- Promote the Low-Risk Drinking Guidelines designed to minimize the health risks of alcohol use.
- Promote responsible driving, including not driving under the influence of alcohol.
- Advise women who know they are pregnant or are planning on becoming pregnant of the harmful effects of alcohol on their unborn child.
- Promote the adoption of municipal alcohol policies.
- Provide Server Intervention Training and promoting Safe Bar Policy.
- Promote responsible hosting.

(e) Evaluation and Monitoring

Resources to Support Implementation

- A tutorial on social marketing and communication planning can be found at http://www.hc-sc.gc.ca/ahc-asc/activit/marketsoc/tutorial-guide/index-eng.php.
- National Social Marketing Centre (NSMC), a strategic partnership between the Department of Health in England and Consumer Focus (formerly the National Consumer Council) with information on news and events, as well as case studies, reports, tools, presentations, resources and training materials about social marketing. For more information, visit http://www.nsmcentre.org.uk/.
- The Health Communication Unit (THCU) webinar on the use of Social Media in health promotion, visit http://www.thcu.ca/videos/new_media_webinar.htm.

- The Health Communication Unit's (THCU) Health Communication Resources, visit http://www.thcu.ca/infoandresources/health_comm_map.cfm.
- The Pink Book-Making Health Communications Work-National Cancer Institute (http://www.cancer.gov/pinkbook) describes a practical approach for planning and implementing health communication efforts.
 The planning steps in this book can help make any communication program work, regardless of size, topic, geographic span, intended audience or budget.
- From the World Health Organization (79), visit http://www.who.int/substance_abuse/publications/en/prevention_substance_use.pdf

Requirement 5: Legislation Awareness/Enforcement

The board of health shall use a comprehensive health promotion approach in collaboration with community partners, including enforcement agencies, to increase public awareness of and adoption of behaviours that are in accordance with current legislation related to the prevention of injury and substance misuse in the following areas:

- Alcohol and other substances;
- Falls across the lifespan;
- Road and off-road safety; and
- Other areas of public health importance for the prevention of injuries as identified by local surveillance in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current).

Active enforcement of regulations is related to serving intoxicated or underage clients and related health and safety issues.

(a) Situational Assessment

Potential Partnerships:

- AGCO
- Police
- Fire Department/Fire Prevention
- Smart Serve
- CAMH
- MADD
- Hospitality industry: licensed establishment owners, managers, staff
- Business and residents associations
- City departments, licensing, by-law
- Local politicians/city council
- Drug awareness committees
- Post-secondary institutions
- Hospitals
- Treatment/addictions
- Insurance companies

A detailed overview of legislative and regulatory bodies was produced by the Alcohol Policy Network in 2006. In addition, an updated overview of regulatory bodies was provided by the Alcohol Policy Network in 2008. These overviews are of importance to public health units because regulatory changes should be monitored and assessed against best practices for their impact on the health of Ontarians.

Legislative changes in Ontario have both enabled and challenged the work of public health units in achieving substance misuse prevention.

Overviews of legislative changes and regulatory bodies are described in:

http://www.apolnet.ca/resources/pubs/rpt_Priorities2006.pdf

http://www.apolnet.ca/thelaw/WhoResponsible.html

Legislation

Provincially elected officials develop liquor legislation governing the sale and distribution of alcohol in Ontario.

• Liquor Licence Act (LLA): covers most aspects of Ontario's beverage alcohol laws. These laws provide practical rules for responsible sale and service of beverage alcohol in Ontario.

Links to the LLA:

Statute: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90119_e.htm

Regulations: http://www.e-laws.gov.on.ca/Browse?queryText=dDocName+%3Cmatches%3E+%60ELAWS_

STATUTES_*_e%60+%3CAND%3E+(xRegUnderAct+%3Cstarts%3E+%60L%60)&resultCount=200&sortField=

 $d Doc Title \& sort Order = ASC \& start Index = 1 \& type = regs \& letter = L \& expand = yes \& lang = en \& act = elaws_statutes_s$

90119_e#18

Pieces of the *Liquor License Act* and other relevant legislation will be discussed in more detail in the Policy and Program sections below.

Enforcement

Enforcement of the Act is primarily conducted by police forces (federal, provincial and municipal) and by Alcohol and Gaming Commission of Ontario (AGCO) inspectors.

Regulatory Bodies

Alcohol and Gaming Commission of Ontario (AGCO)

The Alcohol and Gaming Commission of Ontario is responsible for administering the *Liquor License Act* and ensuring compliance with the Act and its regulations.

The AGCO is a quasi-judicial regulatory agency that reports to the Minister of Consumer and Business Services. The AGCO is responsible for regulating alcohol use by administering the *Liquor Licence Act*, the *Liquor Control Act* and the *Wine Content and Labelling Act*, 2000. (80) The AGCO regulates the sale, service and consumption of alcohol in licensed establishments, and is also responsible for overseeing the administration of Special Occasion Permits (SOPs). These are required for occasional events, such as weddings and receptions, where beverage alcohol will be served and/or sold.

The Registrar of Alcohol and Gaming has the authority under the *Liquor Licence Act* for regulating and licensing the following: liquor sales licenses and endorsements, brew-on-premise facility licenses, liquor delivery service licenses, manufacturers' licences and manufacturers' representatives licences.

More details and resources (listed in resource section) are available from the AGCO at http://www.agco.on.ca/en/b.alcohol/b.alcohol.html

• The Federal Ministry of Finance is responsible for excise taxes.

- The Provincial Ministry of Finance is responsible for the liquor sales tax.
- The Ministry of Attorney General and the Ministry of Community Safety and Correctional Services is responsible for justice, police services, public safety and security.
- The Liquor Control Board of Ontario (LCBO) is responsible for the retail sale of beverage alcohol at Ontario government stores and Agency stores.

(b) Policy

This requirement recommends that health units work with enforcement agencies to raise awareness and the adoption of behaviours that are in accordance with current legislation. Health units should develop the capacity to transfer knowledge to the general public about the origins of specific legislation, benefits, pros and cons and effectiveness in preventing mortality or disability.

Legislation:

- Examples of issues that are covered by current pieces of legislation and control measures that fit under this
 requirement are: Legal drinking age (part of the Liquor Licence Act)
- Beverage service/drinking to intoxication (part of the LLA)
- Disorderly conduct
- Control of sales of alcohol
- Blood Alcohol Concentration (BAC) and impaired driving
- Graduated licensing
- Mandatory Smart Serve training

Cross-over flag:

See Prevention of Injury Guidance Document for further details on drinking and driving.

The Smart Serve Training Program has been developed by Smart Serve Ontario, a division of the Hospitality Industry Training Organization of Ontario (HITOO), and is endorsed by the AGCO.

Smart Serve training is mandatory for the following individuals (81):

- New liquor sales licence holders, including new license applicants, license transfer applicants and temporary transfer applicants intending to operate an establishment. In addition to license holders, all managers, servers of beverage alcohol and security staff must hold Smart Serve certificates.
- Stadium licensees, their managers, servers and security staff.
- Course marshals and employees dispensing liquor from vending carts on golf courses that hold a Golf Course Endorsement.
- Holders of Caterer's Endorsements and servers and security staff working at catered events.
- Where ordered by the AGCO (e.g., disciplinary cases).

Government policies regarding alcohol services have the greatest impact if they are combined with active enforcement. (13) As mentioned above, this is also important in post-secondary environments. Schools that permit the operation of a licensed establishment on campus can and should monitor operations, to ensure operations honour contractual terms, including obligations for responsible beverage service (e.g., hours of business and other agreements). (38) For more information visit http://www.carbc.ca/portals/0/resources/AlcoholOnCampus.pdf.

Public health role:

- Advocate for policy that requires those who are not currently mandated to have Smart Serve training, such as event workers at Special Occasion Permit events, to be trained. Public health also needs to advocate for effective enforcement of such a policy. This can be done through a Municipal Alcohol Policy.
- Raise awareness about the legislation mentioned above.
- Mobilize the community to work together for more effective and comprehensive approaches towards prevention that include policy and sustained enforcement in accordance with alcohol legislation.
- Advocate for effective and sustained enforcement of policies.
- Facilitate community mobilization. Partnerships within public health units between health promoters and health inspectors are a useful approach to engaging other community organizations in advocating or raising awareness about enhanced policing or enforcement.

Examples from Ontario Public Health Units:

 Alcohol Liability and/or Policy workshops for golf courses and/or bars and other licensed establishments have been organized by many health units across Ontario.

These workshops have included experts on alcohol liability (e.g., Prof. Robert Solomon, Shelley Timms and Larry Grand) who share information about the *Liquor Licence Act* and provide case law examples. The workshops stress the importance of effective policy development with enforcement to help reduce the risk of liability. Some health units have followed up and provided further resources to participating establishments to assist them in raising awareness of their policies and consequences. Policy writing workshops guide licensed establishments through the process of developing effective policy.

■ Liquor Licence Act Reforms

The Ontario Public Health Association (OPHA) has written letters to the AGCO providing input on proposed reforms to the *Liquor Licence Act*. Amongst other important recommendations, the OPHA recommends doubling the amount of liquor inspectors in the province and instituting minimum liquor prices. More details are available at http://www.apolnet.ca/news/ITW/ITW-Oct08.html.

The letters to the AGCO are available at http://www.opha.on.ca/our_voice/letters_a-d.shtml#alcohol.

Alcohol Delivery Services:

Kingston's post-secondary working group decided to act on Alcohol Delivery Services after discussions with staff at Queen's University residences, who were concerned about some of the delivery practices, etc. The public health role was mainly one of connecting the partners (Queen's, AGCO, Kingston Police), and Queen's contacted the delivery companies, with assurances from the Kingston Police that they would follow up as required. The end result was that delivery services were officially banned from the Queen's campus. Letters from the university were sent to the delivery service companies informing them that deliveries to student residents were prohibited and any violations would be reported to police.

(c) Program and Social Marketing

Legislation:

- Legal drinking age (Liquor Licence Act)
 - **Best Practice Recommendation:** There is sufficient evidence for enhanced enforcement of laws prohibiting sale of alcohol to minors in order to limit underage alcohol purchases. Further research will be required to assess the degree to which these changes in retailer behaviour affect underage drinking. Effective actions include:
 - Retailer compliance checks conducted by, or coordinated with local law enforcement or alcohol beverage control agencies, and violators receive legal or administrative sanctions.
 - Enhanced enforcement programs conducted as part of multi-component, community-based efforts to reduce underage drinking.
 - Strategies to increase perceived risk of detection by publicizing the increased enforcement activities and
 cautioning proprietors against selling alcohol to minors. These messages can be delivered using either mass
 media or by sending letters to all local alcohol retailers. (6)
- Risk-Based Licensing http://www.agco.on.ca/en/b.alcohol/b11.riskbasedlicensing.html
- Monetary Penalties http://www.agco.on.ca/en/b.alcohol/b12.monetarypenalties.html

Public health role:

- Facilitate community mobilization.
- Raise awareness of increased enforcement activities to increase perceived risk of detection.

Public health can partner with the AGCO and other enforcement agencies and community partners to raise awareness amongst licensed establishment owners and staff of local enforcement activities, in an effort to increase compliance with local by-laws and the *Liquor Licence Act*. Information about local enforcement activities could also be shared with the public (targeting those who frequent licensed establishments), so that they are aware that inappropriate behaviour, such as intoxication, will not be tolerated. This can help to shift social norms.

Evidence and Promising Practice

- Introduce a publicly reported monitoring system that tracks serious alcohol-related harms associated with drinking at particular licensed premises. This system should include violent incidents and data on "last place of drinking" for all drinking and driving offenders. Note: This is a promising practice. (82) For more information, visit http://www.health.gov.bc.ca/prevent/pdf/followingtheevidence.pdf.
- Encouraging strong local collaboration between licensees, police and local government authorities to meaningfully implement these and other policies to reduce alcohol-related violence (e.g., creating local accords or community action plans for alcohol-related violence). (83)

The most promising approaches to reduce aggression and violence in licensed premises include community-focused interventions such as interventions to improve the effectiveness of bar staff and approaches that include increased policing. (38)

Many interventions, especially broad-based community interventions, have shown significant reductions in violence in licensed premises. Rigorous evaluations, however, have been rare and a wide range of strategies showing promising results are worthy of further study. These include targeted policing strategies, training programs for staff (especially security staff) and multi-component strategies targeting a range of known risk factors for violence. (38) Community approaches tend to produce the largest and most significant effects, but are more expensive than other approaches and have shown difficulties with sustainability.

Holding servers legally liable for the consequences of providing more alcohol to persons who are already intoxicated, or to those underage, has shown consistent benefit as a policy measure in the U.S. Wagenaar and Holder (84) found that when one state deliberately distributed publicity about the legal liability of servers, there was a 12% decrease in single-vehicle night time injury-producing traffic crashes. (13)

Public health role:

Public health is encouraged to facilitate the adoption and implementation of these promising practices and to ensure programs are evaluated.

Examples:

■ The **Alcohol Linking Program** represents a cross-sectoral approach to improving both the safety and the health of community members. (85) This program is an innovative collaboration between Hunter New England (HNE) Population Health and New South Wales (NSW) police to reduce alcohol-related crime in Australia. Implementation of the program has resulted in sustained improvements in the quality of police intelligence systems and police capacity to better target their resources to harm reduction initiatives. Through such enhanced capacity, a systematic approach and the implementation of a low-cost, educative police response, the program has been shown to contribute to a reduction of alcohol-related harm and has been adopted into routine practice by NSW police state-wide. (86,87)

Queensland Safety Action Projects (1990s)

There are four central strategies for this project:

- Creation of a community forum leading to the development of community-based task groups and implementation of a safety audit.
- The development and implementation of risk assessments in licensed premises by project personnel,
 followed by the development and implementation of a code of practice by nightclub managers.
- Various training programs for the community-based project steering committee, the project officer, managers, bar and security staff and police.
- Improvements in the external regulation of licensed premises by police and liquor licensing inspectors, with
 a particular emphasis on preventive rather than reactive strategies and a focus on the prevention of assaults
 by security staff, as well as compliance with provisions of the Queensland Liquor Act prohibiting the serving
 of intoxicated persons.

The evaluation included systematic observations by trained researchers, incident recording by security staff and police data. Environmental data (e.g., social and physical environment, serving and drinking practices) were collected. The evaluation indicated the interventions were associated with a reduction in violence and there was evidence of improvement in environmental risk factors. Analysis of system changes (some years later) revealed significant increases in the capacity of the formal regulatory system. (65)

STAD Project (Stockholm Prevents Alcohol and Drug Problems) (1997-2006)

Primary Strategies:

- A two-day training course in responsible beverage service for servers, security staff and owners. The course covered alcohol law and the effects of alcohol, but also methods for managing conflict.
- New forms of enforcement, including notification letters to premises identified by police or other authorities as exhibiting problems, such as overserving and mutual controls of licensed premises conducted by the licensing board and the police. These mutual controls, based on analyses by both agencies of the nature of problems in specific venues, were suggested by the head of the licensing board as a way of improving communication between the two authorities. Both forms of enforcement were introduced gradually.
- The evaluation included police data, rates of refusal of service to actors simulating intoxication and was compared to a control community. The evaluation found reduction in violent crimes and improvements in rates of refusal of service. Partnerships were key to the success of the program, particularly the role of the head of the licensing board as chair of the Steering Group. (65)

Details about these community approaches are well documented in the literature. (40, 87-92)

Comprehensive community-based approaches can also apply to post-secondary environments. In addition to acting as a watchdog, groups representing healthy alcohol programs and policy action on campus can seek to build a rapport and basis for cooperation with a campus pub. (38)

A community coalition within an educational institution can address concerns about licensed retail outlets in the area, and also address the impact of student consumption in off-campus residential settings. Students attending or hosting local parties could be advised in advance about liability issues in relation to service to minors and those who leave intoxicated, about what neighbourhood standards are in regard to annoyance and grounds for complaint and about procedures followed and possible sanctions issued in the event of behaviour that provokes complaint. A campus may see fit to make clear to its students and the surrounding community the extent that it is committed to support area residents and exercise disciplinary jurisdiction over off-campus disturbances caused by students, under the influence or not. (93)

Examples in Ontario

Education Sessions on LLA and Liability:

In partnership with Kingston Police, the Kingston Public Health Unit will arrange for an education session for student leaders prior to orientation about alcohol law and liability.

- Similar sessions to students living in the off-campus housing area have been offered, but were not as well attended.
- A mandatory session has been organized for the last few years for all students charged with selling alcohol without a license at street parties. Most students are unaware that it is illegal to charge a flat rate for an "all you can drink" party, even if breakfast, or another item, is provided along with the fee. Information on alcohol laws, licensing and liability is welcomed by most students and many have stated that they wished they had this knowledge prior to being charged.

Public health role:

- Work to ensure that alcohol policies are communicated and disseminated effectively within the community.
- Ensure policies support legislation.
- When working on policy initiatives, (e.g., MAPs, bar policy, campus policy, workplace policy), health units should advocate for effective and sustained enforcement of the policies.
- Increase awareness of alcohol liability and its enforcement.
- Mobilize the community to work together for more effective and comprehensive approaches towards prevention that include policy and sustained enforcement in accordance with alcohol legislation.
- Share best practice information with post-secondary schools and raise awareness of current legislation and implement prevention strategies. Public health can encourage student organizations to partner closely with licensed establishments, as much of the drinking occurs either in private rooms or off campus.

(d) Evaluation and Monitoring

See details from the examples used in the section Program and Social Marketing, which included evaluation as part of their interventions.

Integration with Other Requirements Under OPHS and Other Strategies and Programs

- Prevention of Injury and Substance Misuse
- Chronic Disease Prevention
- Reproductive Health (FASD)

(e) Resources to Support Implementation

Information from the AGCO

The AGCO Licence Line

http://www.agco.on.ca/en/d.publications/d2.licence.html

Responsible Service Tip Sheets

http://www.agco.on.ca/en/d.publications/d1.responsible.html

Information Bulletins

www.agco.on.ca/en/d.publications/d3.1.alcohol.html

Alcohol Frequently Asked Questions (FAQs)

http://www.agco.on.ca/en/t.tools/t3.alcohol.fags.html

Sandy's Law

http://www.agco.on.ca/en/b.alcohol/warningsign.html

The Community Guide

Preventing Excessive Alcohol Use: Regulation of Alcohol Outlet Density

http://www.thecommunityguide.org/alcohol/outletdensity.html

City of Vancouver

Four Pillars Drug Strategy Program

http://www.vancouver.ca/fourpillars

Section 4. Alcohol and Chronic Disease Prevention Requirements

NOTE: Only Requirements 4 (*Workplace Health*) and 7 (*Community Partners*) related to alcohol use are included in this section under *Chronic Disease Prevention* (CDP), as the focus of this Guidance Document is on the Substance Misuse requirements. See the *Healthy Eating, Physical Activity and Healthy Weights; Comprehensive Tobacco Control;* and *School Health* Guidance Documents for detailed information on other components of the *Chronic Disease Prevention* program standard.

i) Alcohol and Chronic Disease Prevention - Community

Requirement 6

The board of health shall use a comprehensive health promotion approach to increase the capacity of workplaces to develop and implement healthy policies and programs and to create or enhance supportive environments to address the following topics:

- Healthy eating;
- Healthy weights;
- Comprehensive tobacco control;
- Physical activity;
- Alcohol use;
- Work stress; and
- Exposure to ultraviolet radiation.

These efforts shall include:

- a. Conducting a situational assessment in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current); and
- b. Reviewing, adapting and/or providing behaviour change support resources and programs.

(a) Background

Alcohol use is a contributing factor in some workplace injuries, absenteeism, attrition, disciplinary problems, theft, poor morale and lower productivity. (102) Bennett and Lehman (94) identified that alcohol misuse in the workplace causes approximately 40% of co-workers to experience at least one negative consequence in association with a person's substance misuse.

(b) Situational Assessment

The Alcohol Policy Network provides a comprehensive situational assessment in their resource entitled *Let's Take Action on Alcohol Policies in the Workplace*, 2004. For more information see http://www.apolnet.ca/resources/pubs/LTA-Workplace.pdf

(c) Policy

Presently, some health units offer technical support to workplaces in policy development, frequently through educational sessions targeting employees, or "train the trainer" events for occupational health nurses. The most useful Ontario resource is provided by the Alcohol Policy Network, and is titled *Let's Take Action on Alcohol Policies in the Workplace*, 2004. This resource can be printed and provided to workplaces that have an interest in developing a policy. For more information, see http://www.apolnet.ca/resources/pubs/LTA-Workplace.pdf

The Centre for Addiction and Mental Health (CAMH) has also developed materials to support the development of workplace policies on substance use. These can be accessed at http://www.apolnet.ca/thelaw/policies/wkpl_policy_worksheet-CAMH.pdf. The provided worksheet contains a checklist that a workplace can use to develop an overall substance use policy.

In addition to the proper handling of employees with substance misuse problems and exploring how the workplace can contribute to the prevention of problems, workplaces have also been interested in avoiding civil litigation as the result of social events where alcohol is served. *Keeping Good Company: An Employer's Guide to Understanding and Avoiding Alcohol Liability*, produced by MADD Canada in 2006, is a good resource for health units interested in supporting workplaces in providing responsible social events. For more information, see http://www.madd.ca/english/research/liability_employer.pdf

There are best practices in promoting and developing workplace policies consistent with other settings. Simply developing and implementing a written policy on how the workplace views and will respond to alcohol and other drug problems is an effective strategy in itself and provides a good foundation for further interventions. An effective policy should address the following development and content issues:

- Consultation with the workforce during development
- Universal application
- Tailored to suit the organization
- Comprehensive coverage of and specific procedures for responding to drug use (95)

(d) Program and Social Marketing

The Effectiveness of Workplace Interventions to Reduce Substance Misuse, Effective Public Health Practice Project, McMaster University School of Nursing, May 2008 http://www.old.hamilton.ca/phcs/ephpp/Research/Full-Reviews/2008/WISM.pdf

Information and Education Programs:

Evidence about the effectiveness of information and education programs is inconsistent. Some programs have achieved short-term change, but this change was not sustained. Education can help employees understand why alcohol and drug use can be a problem in the workplace, and this understanding can provide a foundation and rationale for more targeted programs.

Health Promotion Programs:

- There is no substantial body of research to indicate whether these programs are effective in the workplace; however, they are useful at the community level.
- The following key elements should be incorporated into the design of any workplace health promotion program to optimise its effectiveness:
 - Provide participants with a greater sense of control over their own health, in general or in relation to a
 particular health practice, such as reducing alcohol consumption.
 - Attend to the interdependent nature of health practices, such that alcohol consumption is linked to weight loss, sleeping and stress management.
 - Provide personal follow-up and support to maintain changed behaviour.

Regulation of Use and Compliance Drug Testing

While health units are not usually invited to assist a workplace in developing drug testing policies, health units can provide the evidence available on the ineffectiveness of drug testing in response to employer queries.

In Canada, drug testing may be unreasonable and discriminatory and thus conflicts with the Canadian Charter of Rights and Freedoms. Some studies have indicated that testing programs reduced drug use and increased productivity, but their methodology was weak and the findings should be interpreted with caution. Many of the claims cited to justify pre-employment drug screening have been exaggerated.

Examples in Ontario

- Hastings and Prince Edward Counties Health Unit
- Middlesex-London Health Unit
- Region of Peel Public Health http://www.peelregion.ca/health/workplace/news/2008/may08.htm

(e) Evaluation and Monitoring

Please see previous Evaluation and Monitoring sections of this Guidance Document for further information.

Integration with Other Requirements Under OPHS and Other Strategies and Programs

- Prevention of Injury and Substance Misuse
- Workplace Health and Safety,
- WSIB

(f) Resources to Support Implementation

The Health Communication Unit (THCU) Virtual Community home page on Workplace http://www.thcu.ca/Workplace/vc/index.cfm

THCU Workplace Health Promotion Project

http://www.thcu.ca/Workplace/Workplace.html

Alberta Health Services (now merged with former Alberta Alcohol and Drug Abuse Commission-AADAC) It's Our Business – Workplace Information Series:

http://www.aadac.com/542_1609.asp

http://www.aadac.com/documents/its_our_business_policy_development_employee_drug_testing.pdf

http://www.aadac.com/documents/its_our_business_dealing_with_troubled_employee.pdf

http://www.aadac.com/documents/its_our_business_the_basics.pdf

CCSA - Workplace

http://www.ccsa.ca/Eng/Topics/Populations/Workplace/Pages/default.aspx

SAMHSA's Drug Free Workplace Kit – resources and tools that workplaces can use to develop drug-free workplace policies and programs

http://www.workplace.samhsa.gov/WPWorkit/index.html

Dr. Graham Lowe

http://www.grahamlowe.ca/

Health Canada

http://www.phac-aspc.gc.ca/pau-uap/fitness/work/why4_e.html

National Quality Institute (NQI)

http://www.ngi.ca

Dr. Martin Shain

http://www.neighbouratwork.com/view.cfm?Prod_Key=2534&PROD_DETAIL_KEY=3764&TEMP=Content%20Single

ii) Alcohol and Chronic Disease Prevention - Workplaces

Requirement 7

The board of health shall increase the capacity of community partners to coordinate and develop regional/local programs and services related to:

- Healthy eating, including community-based food activities;
- Healthy weights;
- Comprehensive tobacco control;
- Physical activity;
- Alcohol use; and
- Exposure to ultraviolet radiation.

These efforts shall include:

- a. Mobilizing and promoting access to community resources;
- b. Providing skill-building opportunities; and
- c. Sharing best practices and evidence for the prevention of chronic diseases.

(a) Background

Alcohol has been identified as a risk factor for chronic disease, including stroke, diabetes and some cancers. (96,97) Exceeding the Ontario Low-Risk Drinking Guidelines (more than 1-2 drinks per day, with weekly maximums of 14 for men and 9 for women) and heavy drinking can double the risk of ischemic stroke and increase the risk of hemorrhagic stroke two-to-three–fold. (100) Excessive alcohol consumption increases the risk of stroke by raising the blood pressure and contributing to obesity. (98) About 7% of Ontarians aged 45 and over drink at unhealthy levels. Excessive alcohol consumption is a significant, modifiable risk factor for stroke and other chronic diseases. One of the recommendations of the Ontario Stroke Strategy is that a population health approach to reducing excessive alcohol consumption and associated health risks be developed and implemented as part of existing health promotion programs.

Alcohol consumption is significantly associated with cancer risk. Individuals who consume more than one drink of alcohol per day are at 1.4 times greater risk for breast or colorectal cancer than non-drinkers. (99) If more than two drinks per day are consumed (versus none), the relative risk is greater than one for breast, colorectal, esophagus, liver, pharynx, prostate and stomach cancer. According to Cancer 2020, approximately 25% of men and 10% of women in Ontario drink in a manner that increases their risk of cancer either acutely or over the long run. If the proportion of people consuming alcohol in Ontario were to be reduced by half, an estimated 3.5% of alcohol-related cancers could be eliminated each year, translating into approximately 3,000 less cases over a five-year period.

Alcohol has gradually been added to the agenda for chronic disease prevention in Ontario.

- In 2003, Cancer Care Ontario's Cancer 2020 action plan included alcohol consumption as a risk factor to target.
- In 2004, the Prescribing Prevention document by the Ontario Stroke Initiative highlighted alcohol as a risk factor.
- In 2003/2004, the Ministry realigned provincial objectives to start addressing alcohol as a risk factor for chronic disease, in addition to alcohol-related injury.
- In 2006, a provincial campaign on alcohol and chronic disease was launched with funding from the Ontario Stroke Strategy.

Consumption Trends in Ontario – Public Health Flags (100)

■ Men and Women: (104)

Almost one in three drinkers (32%) consumes alcohol at levels exceeding the low risk drinking guidelines.

■ 18-29 year olds:

Weekly heavy drinking increased from 11% in 1995 to 26% in 2007.

Hazardous or harmful drinking increased from 22% in 2002 to 39% in 2007.

Women:

Past-year drinking increased from 72% in 1998 to 78% in 2007.

Daily drinking increased from 2.6% in 2001 to 5.3% in 2007.

Hazardous or harmful drinking increased from 5% in 1998 to 8% in 2007.

For chronic disease, the appropriate level of alcohol consumption may be lower than current drinking guidelines. Based solely on the evidence related to cancer, even small amounts of alcoholic drinks should be avoided. Other than abstinence, there is no recommended level of alcohol consumption to reduce the risk of cancer. (101)

Higher costs for alcoholic drinks and more stringent marketing and sale policies contribute to lower levels of consumption and a corresponding lighter burden of public health problems including the incidence of various cancers. (105)

(b) Situational Assessment

A recent situational assessment was documented in Alcohol and Chronic Disease: an Ontario Perspective. (102) The role of alcohol in chronic disease is particularly important in light of the alcohol consumption habits of the Canadian population. Recorded alcohol consumption increased in Canada from 7.3 litres of absolute alcohol per person aged 15 and over in 1997 to 7.9 litres in 2004. (103)

(c) Policy

- Alcohol policies that reduce overall consumption are important contributors to reducing alcohol-related chronic disease.
- Comprehensive interventions that affect the overall level of drinking include increasing alcohol taxation,
 maintaining government control of liquor sales and brief interventions.
- The best practices recommended by Babor et al., 2003 in *Alcohol No Ordinary Commodity* that are relevant to chronic disease prevention include (104):
 - Alcohol taxes
 - Government monopoly of retail sales
 - Restrictions of hours and days of sale
 - Restrictions on outlet density
 - Enforcement of on-premise regulations
 - Brief interventions for high risk drinkers

(d) Program and Social Marketing

As discussed previously, alcohol screening and brief intervention can lead to behaviour change. According to a study published in *Addiction*, the majority of people are comfortable with physician inquiries into their drinking habits, and with advice to cut down where warranted. Very few respondents, however, indicated that their own physician had ever asked about their drinking, provided them with advice on cutting down or provided assistance with alcohol drinking problems. This suggests that public health efforts to engage physicians in recognizing the importance of alcohol consumption on overall health and engaging in brief intervention are valuable. (105)

The National Alcohol Strategy suggests that it is important to encourage health professionals such as doctors, nurses, social workers and allied health professionals to screen and treat those at risk of developing alcohol-related problems. It states that early intervention with problem drinkers would yield enough future savings to health and social services, and to law enforcement and justice, to offset the initial costs. In addition, primary care providers are often the first resource that people turn to for help with their alcohol issues. Providing primary care providers with information and resources on alcohol risks can support their uptake and use of health promotion information and tools to help to combat chronic diseases such as stroke and cancer.

(e) Resources

Screening and Brief Intervention: Making a Public Health Difference, 2008 http://www.jointogether.org/aboutus/ourpublications/pdf/sbi-report.pdf

Alcohol Screening and Brief Intervention: A Guide for Public Health Practitioners, APHA, 2008 http://www.apha.org/programs/additional/progaddNHTSI.htm

Evidence-based information package from Canadian Cancer Society on effective primary care alcohol interventions for adults: Effective primary care alcohol interventions for adults

http://www.cancer.ca/Manitoba/Prevention/MB-Knowledge%20Exchange%20Network/~/media/CCS/Manitoba/Files%20List/English%20files%20heading/pdf%20not%20in%20publications%20section/KEN%20-%20Adults%20alcohol_1509131489.ashx

Examples in Ontario

Screening and Brief Intervention

• Kingston, Frontenac, Lennox and Addington Public Health Unit created and promoted CAGE + 2 + Y as an instrument to educate health professionals about the *Low-Risk Drinking Guidelines*, as well as to provide a tool for brief intervention in addressing alcohol as a risk factor for chronic disease and injury. See the final report of the pilot study at http://www.kflapublichealth.ca/Files/Reports/A_Pilot_Study_to_Evaluate_Physicians_ Response_to_the_Health_Professionals_Screening_Tool_for_Alcohol_use.pdf.

CAGE + 2 + Y

- CAGE is one of the oldest short screening instruments. It has good validity, sensitivity and specificity and can be modified to include other drug use. The purpose of this tool is to identify patients at risk of health problems, including chronic disease or injury, as a result of alcohol use and to enable health care professionals to initiate a discussion of the *Low-Risk Drinking Guidelines* with their patients. The tool was developed by the Greater Kingston Area Safe and Sober Community Alliance and pilot tested with area physicians and health professionals.
- CAGE + 2 + Y has been replicated at Peterborough County District Health Unit, Perth District Health Unit, Waterloo Region Health Unit, Windsor Essex Health Unit, Halton Region Health Unit, Sudbury and District Health Unit and Grey-Bruce Health Unit.

Low Risk Drinking Guidelines

See http://www.lrdg.net

(f) Evaluation and Monitoring

Opportunities for Partnership

- Liquor Control Board of Ontario Social Responsibility Program http://www.alphaweb.org/docs/lib_011235555.pdf http://www.alphaweb.org/docs/lib_011211125.pdf
- Family Health Teams (all LHIN regions in Ontario)
- Primary health care health professionals
- Ontario Stroke Strategy/Regional Stroke Prevention Networks
- Cancer Care Ontario/Regional Cancer Prevention Networks
- Healthy Communities Partnerships

Integration with Other Requirements Under OPHS and Other Strategies and Programs

- Injury Prevention
- Child Health
- Reproductive Health

(g) Resources to Support Implementation

http://www.lrdg.net

http://www.alcoholhelpcentre.net

http://www.checkyourdrinking.net

Section 5. Conclusion

This Guidance Document is one of a series that have been prepared by the Ontario Ministry of Health Promotion to provide guidance to boards of health as they implement health promotion programs and services that fall under the 2008 Ontario Public Health Standards (OPHS). This Guidance Document has provided background information specific to prevention of substance misuse, including its significance and burden.

In addition, this Guidance Document has provided information about situational assessments for each OPHS Requirement relevant to prevention of substance misuse, and includes related information about policies, program/ social marketing, evaluation and monitoring issues and the social determinants of health. It also suggests policy direction and strategies for consideration, and examines evidence and rationale.

Achieving overall health goals and societal outcomes will depend on the efforts of boards of health working together with many other community partners, such as non governmental organizations, local and municipal governments, government-funded agencies and the private sector. By working in partnership towards a common set of requirements, Ontario can better accomplish its health goals by reaching for higher standards and adequately measuring the processes involved.

The health of individuals and communities in Ontario is significantly influenced by complex interactions between social and economic factors, the physical environment and individual behaviours and conditions. Addressing the determinants of health and reducing health inequities will also ensure that boards of health are successful in their efforts.

Appendix A: Linkages between Prevention of Substance Misuse Requirements and Others

List of Acronyms

CH = Child Health CTC = Comprehensive Tobacco Control FS = Food Safety HEHWPA = Healthy Eating, Healthy Weights and Physical Activity HHPM = Health Hazard Prevention and Management IDPC = Infectious Diseases Prevention and Control PHEP = Public Health Emergency and Preparedness PI = Prevention of Injury PSM = Prevention of Substance Misuse (including alcohol) R = Requirement RH = Reproductive Health RPC = Rabies Prevention and Control SH = School Health SHSTIBI = Sexual Health, Sexually Transmitted Infections, and Blood-borne Infections (including HIV) SW = Safe Water TPC = Tuberculosis Prevention and Control VPD = Vaccine Preventable Diseases The key subjects for the linkages are: 1) Surveillance; 2) Community Partners; 3) Priority Populations; and 4) Public Education and Social Marketing.

Assessment 1. The board of health shall conduct epidemiological analysis of surveillance data, including monitoring of trends over time, emerging trends, and priority populations, in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current) in the areas of: • Alcohol and other substances; • Falls across the lifespan; and Policy Other areas of public health importance for the prevention of injuries. 2. The board of health shall work with community partners, using a comprehensive health promotion approach, to influence the development and implementation of healthy policies and programs, and the creation or enhancement of safe and supportive environments that address the following: • Road and off-road safety; and may include • Other areas of public health importance for the prevention of injuries as identified by local surveillance in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current). 3. The board of health shall use a comprehensive health promotion approach to increase the capacity of priority populations to prevent injury and substance misuse by: • Collaborating with and engaging community partner. • Mobilizing and promoting access to community resources;	1. The board of health shall conduct epidemiological analysis		7	l											
ti tin tin tin sage as a second to the secon		R1	_	R1	R1	R1	R1	R3	R L	R2	R1	R 1	R2	R1	
S contained by the state of the	data, including monitoring of trends over		R3				R2	R4	R2	R3	R2	R2	R3	R2	
Su ac 2. Th to of o of displaying the substitution of the substi	trends, and priority populations, in						R3		R3				R4		
Sun 2. Th to of or or the three properties of properties the properties of the properties of the three properties of three propert	h the Population Health Assessment and												RS		
2. The contract of the contrac	otocol, 2008 (or as current) in the areas of:														
2. The too of the three	Alcohol and other substances;														
2. The using the state of the s	Falls across the lifespan;														
2. The control of the	Road and off-road safety; and														
2. To to of a substitution of the substitution	 Other areas of public health importance for the 														
2. The to of of or or the the properties of properties the properties of the propert	of injuries.														
to or or that the state of the	2. The board of health shall work with community partners,	R3	R4	R2		R3	R4	_	R5a		R3	R4		R4	R3
of of this state of the state o	using a comprehensive health promotion approach,	37			R3a	R7	R5		R6						
or or the state of	to influence the development and implementation						R6								
or enhancement that address the:	of healthy policies and programs, and the creation														
that address the Alcohol and Ealls across i Road and of Other areas the preventi surveillance Health Asse. (or as curren promotion approxippoulations to propulations to promotion approxippoulations to promotions are collaborations.	or enhancement of safe and supportive environments														
Alcohol and Falls across the season of the rareas the preventive surveillance the surveillance to a surveillanc	e following:														
Road and off Road and off Other areas the preventia surveillance. Health Asse: (or as curren 3. The board of heal promotion approximations to promotion approximations to present the sources; resources;	Alcohol and other substances;														
Road and off Other areas the preventic surveillance. Health Asse. (or as curren 3. The board of heal promotion approxipopulations to preventical promotions.) Mobilizing a resources;	• Falls across the lifespan;														
Other areas the preventius surveillance. Health Assei (or as curren 3. The board of heal promotion approxipopulations to presources; resources;	Road and off-road safety; and may include														
the preventic surveillance. Health Asse: (or as curren) 3. The board of heal promotion approxipopulations to promotion. Collaboratin. Mobilizing as resources;	 Other areas of public health importance for 														
surveillance Health Asser (or as curren 3. The board of heal promotion approc populations to pro Collaboratin Mobilizing as resources;	the prevention of injuries as identified by local														
Health Asses (or as curren 3. The board of heal promotion appros populations to pro Collaboratin Mobilizing as resources;	surveillance in accordance with the Population														
(or as curren 3. The board of heal promotion approc populations to pre Collaboratin Mobilizing as resources;	Health Assessment and Surveillance Protocol, 2008														
3. The board of heal promotion approapproapproapproapproapproapproappr	ent).														
promotion approapopulations to preserve to	3. The board of health shall use a comprehensive health	R8	R8	R6	R3	R9		R6	R59	R4					
populations to pre Collaborating Mobilizing are resources;	promotion approach to increase the capacity of priority								R7						
 Collaboratin, Mobilizing an resources; 	populations to prevent injury and substance misuse by:								R11						
 Mobilizing ar resources; 	 Collaborating with and engaging community partners; 														
resources;	 Mobilizing and promoting access to community 														
 Providing ski 	 Providing skill-building opportunities; and 														
Sharing best	Sharing best practices and evidence for the prevention														
of injury and	of injury and substance misuse.														

PHEP	R5																												
HHPM	R3																												
SW	R7	Z																											
FS	R5																												
VPD																													
TPC																													
SHSTIBI	R4																												
RPC	R5																												
IDPC	R4	R5	R6														R14												
SH																													
СТС	R11																												
PSM	R4	R5																											
귭	R3																												
H H	R5																												
НЕНМРА																													
포	R11																	.S.	SS								a v		
OPHS REQUIREMENT	4. The board of health shall increase public awareness	of the prevention of injury and substance misuse	in the following areas:	Alcohol and other substances;	Falls across the lifespan;	Road and off-road safety; and may include	 Other areas of public health importance for the 	prevention of injuries, as identified by local surveil-	lance in accordance with the Population Health	Assessment and Surveillance Protocol, 2008	(or as current).	These efforts shall include:	a. Adapting and/or supplementing national and	provincial health communications strategies; and/or	b. Developing and implementing regional/local	communications strategies.	5. The board of health shall use a comprehensive health	promotion approach in collaboration with community partners	including enforcement agencies, to increase public awareness	of, and adoption of, behaviours that are in accordance with	current legislation related to the prevention of injury and	substance misuse in the following areas:	Alcohol and other substances;	Falls across the lifespan;	Road and off-road safety; and	 Other areas of public health importance for the 	prevention of injuries as identified by local surveillance	in accordance with the Population Health Assessment	and Surveillance Protocol, 2008 (or as current).
CATEGORY																	Health	Protection											

References

- 1. Rehm J, Baliunas D, Brochu S, Fischer B, Gnam W, Patra J et al. The costs of substance abuse in Canada 2002. Ottawa (ON): Canadian Centre on Substance Abuse; 2006.
- 2. BC Ministry of Healthy Living and Sport. Model core program paper: prevention of harms associated with substances. BC Health Authorities, BC Ministry of Healthy Living and Sport; 2009. Available from: http://www.phabc.org/pdfcore/Prevention_of_Harms_Associated_with_Substances-Model_Core_ Program_Paper.pdf?NSNST_Flood=bdefcc09257f683a37bfdb47f6e356fa
- 3. British Columbia Ministry of Health Services. Every door is the right door. A British Columbia planning framework to address problematic substance use and addiction. British Columbia Ministry of Health Services; 2004. Available from: http://www.health.gov.bc.ca/library/publications/year/2004/framework_for_substance_use_and_ addiction.pdf
- 4. Statistics Canada. Health indicator profile, annual estimates, by age group and sex, Canada, provinces, territories, health regions (2007 boundaries) and peer groups, occasional.
 Available from: http://www.cansim2.statcan.ca/cgi-win/CNSMCGI.PGM
- 5. Bondy S, Rehm J, Ashley M, Walsh G, Single E, Room R. Low-risk Drinking Guidelines: The Scientific Evidence. Canadian Journal of Public Health 1999 July-August;90(4):264–270.
- 6. Centres for Disease Control and Prevention. The community guide. What works to promote health. Preventing excessive alcohol use: enhanced enforcement of laws prohibiting sales to minors.
 Available from: http://www.thecommunityguide.org/alcohol/lawsprohibitingsales.html
- 7. BC Partners for Mental Health and Addictions Information. Here to help.

 Available from: http://www.heretohelp.bc.ca/publications/factsheets/addiction
- 8. Thomas G, Davis CG. Comparing the perceived seriousness and actual costs of substance abuse in Canada. Available from: http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011350-2007.pdf
- Glicksman, L. Alcohol trends in Ontario. Alcohol: no ordinary commodity forum; 2009 Mar 5; Toronto, Canada. Available from: http://www.apolnet.ca/resources/education/presentations/ANOC6_Shows/Gliksman-ANOC6. pps#28
- 10. Giesbrecht N, Roerecke M, Rehm J. Alcohol and chronic disease: implications for policies and prevention strategies in Canada. Background paper prepared for Health Canada and the National Alcohol Strategy Working Group. Available from: http://www.nationalframeworkcadrenational.ca/uploads/files/Priorities%20Alcohol/HC_chronic_disease_revised%20July%2006.pdf

- 11. Roerecke R, Haydon E, Giesbrecht N. Alcohol and chronic disease: an Ontario perspective. Toronto (ON): Alcohol Policy Network, Ontario Public Health Association; 2007.
- 12. Gutjahr E, Gmel G, Rehm J. Relation between average alcohol consumption and disease: an overview. Eur Addict ResAddict Res 2001 Aug;7(3):117–27.
- 13. Babor T, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K et al. Alcohol: no ordinary commodity: research and public policy. Oxford and London: Oxford University Press; 2003.
- 14. Brewer RD, Swahn MH. Binge drinking and violence. JAMA 2005;294(5):616-8.
- 15. Kuo M, Adalf EM, Lee H, Linksman L, Demers A, Wechsler H. More Canadian students drink but American students drink more: comparing college alcohol use in two countries. Addiction 2002 Dec;97(12):1583–92.
- 16. Centers for Disease Control and Prevention. What every woman should know about alcohol and pregnancy. Available from: http://www.cdc.gov/Features/AlcoholFreePregnancy
- 17. Ontario Ministry of Health and Long-Term Care. Initial report on public health. Toronto (ON): Queen's Printer for Ontario; 2009.
- 18. SMARTRISK. The economic burden of injury in Ontario. Toronto (ON): Queen's Printer for Ontario; 2006.
- 19. Loxley W, Toumbourou JW, Stockwell T, Haines B, Scott K, Godfrey C et al. The prevention of substance use, risk and harm in Australia: a review of the evidence. Canberra, (Australia): National Drug Research Centre and the Centre for Adolescent Health; 2004.
- 20. Statistics Canada. CANSIM Table 105-0501 Health indicator profile, annual estimates, by age group and sex, Canada, provinces, territories, health regions (2007 boundaries) and peer groups, occasional.
 Available from: http://www.cansim2.statcan.ca/cgi-win/CNSMCGI.PGM
- 21. Statistics Canada. Health indicators catalogue 82-221-XWE.

 Available from: http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=82-221-X&lang=eng
- 22. Ontario Ministry of Health and Long-Term Care. Ontario programs for health promotion and disease prevention. Available from: http://www.health.gov.on.ca/english/public/pub/hpromo/hpromo.html#1
- 23. Mercer GW. Estimating the presence of alcohol and drug impairment in traffic crashes and their costs to Canadians: 1999 to 2006. Oakville (ON): Mothers Against Drunk Driving Canada; 2009.
- 24. Core Health Indicators Work Group. Heavy drinking episodes. In: Core indicators for public health in Ontario. Toronto (ON): Association of Public Health Epidemiologists in Ontario; 2009.
- 25. Canadian Institute for Health Information. Ontario trauma registry report: major trauma registry report: major injury in Ontario, 2007-2008. Ottawa (ON): Canadian Institute for Health Information; 2009.

- 26. Paglia-Boak, A., Mann, R.E. Adlaf, E.M., Rehm, J. (2009). Drug use among Ontario students, 1977-2009: OSDUHS highlights. (CAMH Research Document Series No. 28). Toronto, (ON): Centre for Addiction and Mental Health; 2009. Available from: http://www.camh.net/Research/Areas_of_research/Population_life_course_studies/OSDUS/ Hightlights_DrugReport_2009OSDUHS_Final_Web.pdf
- 27. Centre for Addiction and Mental Health. Ontario student drug use and health survey. 2006-2007 Research Report. Available from: http://www.camh.net/Research/osdus.html
- 28. The University of British Columbia Department of Pharmacology & Therapeutics. Therapeutics initiative. Evidence based drug therapy. Use of benzodiazepines in BC Is it consistent with recommendations? Therapeutics Letter 2004 Nov/Dec. Available from: http://www.ti.ubc.ca/PDF/54.pdf
- 29. Ontario Ministry of Health and Long-Term Care. Every door is the right door: towards a 10 year mental health and addictions strategy. A discussion paper.
 Available from: http://www.health.gov.on.ca/english/public/program/mentalhealth/minister_advisgroup/pdf/discussion_paper.pdf
- 30. Institute of Alcohol Studies. Alcohol and Mental Health. IAS factsheet. Cambs (UK): Institute of Alcohol Studies; 2004.
- 31. Department of Health. Health of the nation. Mental illness: key area handbook. London (UK): HMSO; 1993.
- 32. Crawford V. Co-existing problems of mental health and substance misuse (Dual Diagnosis):

 A review of relevant literature. Final report to the Department of Health. London (UK): Royal College of Psychiatrists' Research and Training Unit; 2001.
- 33. Sawka E, Liepold H, Lockhart N, Song S, Thomas G. Synopsis of a proposed national alcohol strategy.

 Submitted to the International Conference of Reducing alcohol problems in the Baltic Sea region: effective approaches to tackle alcohol-related problems in local communities; 2007 Mar 12-13; Riga, Latvia.
- 34. National framework for action to reduce the harms associated with alcohol, other drugs and substances in Canada. Reducing alcohol-related harm in Canada: toward a culture of moderation. Ottawa (ON): Canadian Centre on Substance Abuse; 2007.
- 35. Ontario Ministry of Health and Long-Term Care. Chronic disease prevention and management. Available from: http://www.health.gov.on.ca/english/providers/program/cdpm/index.html
- 36. World Health Organization. Sundsvall statement on supportive environments for health. Paper from 3rd Third International Conference on Health Promotion; 1991 Jun 9-15;. Sundsvall, Sweden; 1991.

 Available from: http://www.who.int/hpr/NPH/docs/sundsvall_statement.pdf.

- 37. Ontario Recreation Facilities Association. Municipal alcohol policy guide. Ottawa (ON): Recreation Facilities Association; 2007.
- 38. Stockwell T, Gruenewald P, Toumbourou J, Loxley W, editors. Preventing harmful substance use: the evidence base for policy and practice. Hoboken (NJ): John Wiley & Sons Limited; 2005.
- 39. National Registry of Evidence-based Programs and Practices. Community trials intervention to reduce high-risk drinking. Available from: http://www.nrepp.samhsa.gov/programfulldetails.asp?PROGRAM_ID=161
- 40. Center for the Study and Prevention of Violence. Midwestern prevention project.

 Available from: http://www.colorado.edu/cspv/blueprints/modelprograms/MPP.html
- 41. City of Toronto. The Toronto drug strategy.

 Available from: http://www.toronto.ca/health/drugstrategy/
- 42. Thiessen, EG. Evaluation framework for municipal drug strategies.

 Available from: http://www.fcm.ca/CMFiles/evaluation1MUQ-3282008-9382.pdf
- 43. City of Toronto. Safer bars program as mandatory municipal licensing requirement.

 Available from: http://www.toronto.ca/legdocs/mmis/2009/ls/bgrd/backgroundfile-17944.pdf
- 44. Odgers, CL, Caspi A, Nagin D, Piquero AR, Slutske WS, Milne B et al. Is it important to prevent early exposure to drugs and alcohol among teens? Psychol SciSci 2008 Oct;19(10):1037–44.
- 45. Hibell B, Andersson B, Bjarnasson T, Ahlström S, Balakireva O, Kokkevi A et al. The 2003 ESPAD report: alcohol and other drug use among students in 30 European countries. Stockholm: Swedish Council for Information on Alcohol and other Drugs; 2004.
- 46. Plant MA, Miller P, Plant ML. Trends in drinking, smoking and illicit drug use among 15 and 16 year olds in the United Kingdom (1995-2003). J SubstJ Subst Use 2005 Dec; 10(6):331-9.
- 47. Chikritzhs T, Pascal R, Jones P. Under-aged drinking among 14-17 year olds and related harms in Australia.

 National Alcohol Indicators Bulletin No. 7. Australia: National Drug Research Institute, Curtin University; 2004.
- 48. Adlaf EM, Begin P, Sawka E, editors. Canadian Addiction Survey (CAS). A national survey of Canadians' use of alcohol and other drugs: prevalence of use and related harms: detailed report. Ottawa (ON): Canadian Centre on Substance Abuse; 2005.
- 49. National Institute for Health and Clinical Excellence. Community-based interventions to reduce substance misuse among vulnerable and disadvantaged children and young people.
 Available from: http://www.nice.org.uk/nicemedia/pdf/PHI004guidance.pdf
- Canadian Centre on Substance Abuse. Substance abuse in Canada: youth in focus.
 Available from: http://www.ccsa.ca/2007%20CCSA%20Documents/ccsa-011521-2007-e.pdf

- 51. Saewyc EM, Stewart D. Evidence for healthy youth development interventions for core public health functions. McCreary Centre Society; 2007.
- 52. Leslie K. Alcohol and drug use among teenagers. CMAJ 2008 Jan 15;178(2):149.
- 53. Centre for Addiction and Mental Health. Population Studies.

 Available from: http://www.camh.net/research/areas_of_research/Population_life_course_studies/population_lifecourse.html
- 54. Centre for Addicitions Research of BC. Alcohol on campus: programs and policies. Review and recommendations. Available from: http://www.carbc.ca/portals/0/resources/AlcoholOnCampus.pdfhttp://www.carbc.ca/portals/0/resources/AlcoholOnCampus.pdf
- 55. Younie S, Scollo M, Hill D, Borland R. Preventing tobacco use and harm: what is evidence based policy? In: Stockwell T, Gruenewald P, Toumbourou J, Loxley W, editors. Preventing harmful substance use: the evidence base for policy and practice. Hoboken (NJ): John Wiley & Sons Limited; 2005.
- 56. Health Canada, Canadian Centre on Substance Abuse. National framework for action to reduce the harms associated with alcohol and other drugs and substances in Canada. 1st ed, 2005: 21.
- 57. Search Institute. Building assets, strengthening faith.

 Available from: http://www.search-institute.org/survey-services/surveys/building-assets-strengthening-faith
- 58. Search Institute. Insights & evidence: boosting student achievement new research on the power of developmental assets.
 - Available from: http://www.search-institute.org/system/files/IE-10-03-Achievement.pdf
- 59. McBride N. The evidence base for school-based interventions. In: Stockwell T, Gruenewald P, Toumbourou J, Loxley W, editors. Preventing harmful substance use: the evidence base for policy and practice. Hoboken (NJ): John Wiley & Sons Limited; 2005.
- 60. Larimer ME, Kilmer JR, Lee CM. College student drug prevention: a review of individually oriented prevention strategies. J Drug Issues 2005;5(2):431–456.
- 61. Alberta Alcohol and Drug Abuse Commission. Preventing heavy episodic drinking among youth and young adults: a literature review.
 - Available from: http://www.corp.aadac.com/content/corporate/research/preventing_heavy_drinking_lit_review.pdf
- 62. Mitic W. Alcohol and university student drinking-not a class act. Can J Public Health 2003; 94 Jan-Feb(1):13-6,35.
- 63. Toomey TL, Wagenaar AC. Environmental policies to reduce college drinking: options and research findings. J Stud Alcohol Suppl. 2002 Mar;(14):193–205.

- 64. Nova Scotia Department of Health. When drugs come to school: a resource manual for student substance use and school-based policy development. Halifax (NS): Nova Scotia Department of Health; 2002.
- 65. Dimeff LA, Baer JS, Kivlahan DR, Marlatt GA. Brief alcohol screening and intervention for college students (BASICS): a harm reduction approach. New York: The Guilford Press: 1999.
- 66. Soberg LI, Maciosek MV, Edwards NM. Primary care intervention to reduce alcohol misuse: ranking its health impact and cost effectiveness. Am J Prev Med 2008 Feb;34(2):143–52.e3.
- 67. Dimeff LA, Baer JS, Kivlahan DR, Marlatt GA. Brief alcohol screening and intervention for college students (BASICS): a harm reduction approach. New York: The Guilford Press; 1999.
- 68. Toumbourou JW, Gregg ME. Impact of an empowerment-based parent education program on the reduction of youth suicide risk factors. J Adolesc Health 2002 Sep;31(3):277–85.
- 69. Public Health Agency of Canada. Comprehensive school health.

 Available from: http://www.phac-aspc.gc.ca/dca-dea/7-18yrs-ans/comphealth-eng.php
- 70. Miller S. SafeGrad celebration program evaluation 2008. London (ON): Middlesex-London Health Unit; 2008.
- 71. Tutt, A. What's with weed: a program to reduce problematic marijuana use in secondary schools Niagara region pilot project. Niagara Region (ON): Niagara Drug Awareness Committee; 2008.
- 72. Health Canada. Preventing substance use problems among young people: a compendium of best practices. Ottawa (ON): Minister of Public Works and Government Services Canada; 2001.
- 73. Health Canada. Best practices and prospects for social marketing in public health.

 Available from: http://www.hc-sc.gc.ca/ahc-asc/activit/marketsoc/tutorial-guide/appendix-annexe_a-eng.php
- 74. Casswell S, Ransom R, Gilmore L. Evaluation of a mass-media campaign for the primary prevention of alcohol-related problems. Health Promot Int 1990;5(1):9–17.
- 75. Boots K, Midford R. Mass media marketing and advocacy to reduce alcohol-related harm. In: International handbook of alcohol dependence and problems. Heather N, Peters TJ, Stockwell T, editors. West Sussex (UK): John Wiley and Sons; 2001.
- 76. Miller Neighbor & Associates. Final report on a literature review to support a province-wide communication/media campaign on dangerous drinking by youth ages 15 to 18.
 Available from: http://www.apolnet.ca/resources/pubs/YAMMLitSearchReport.pdf
- 77. Allen K, Shewfelt V. Alcohol Policy: the Simcoe County Experience. 2000.
- 78. The Health Communication Unit. Developing health promotion policies.

 Available from: http://www.mdfilestorage.com/thcu/pubs/539372877.pdf

- 79. Hawks D, Scott K, McBride N. Prevention of psychoactive substance use: a selected review of what works in the area of prevention. Geneva: World Health Organization; 2002.
- 80. Alcohol Policy Network. Priorities 2006: developments in alcohol policy since 1996. Toronto (ON): Ontario Public Health Association; 2006.
- 81. Alcohol and Gaming Commision of Ontario. Smart Serve.

 Available from: http://www.agco.on.ca/en/b.alcohol/b5.training.html
- 82. Centre for Addictions Research of BC. Following the evidence: preventing harms from substance use in BC. British Columbia: British Columbia Ministry of Health; 2006.
- 83. Kendall PRW. Public health approach to alcohol policy: an updated report from the provincial health officer. Office of the Provincial Health Officer, British Columbia; 2008.
- 84. Wagenaar AC, Holder HD. Effects of alcoholic beverages server liability on traffic crash injuries. Alcohol Clin Exp Res 1991 Dec;15(6): 942–7.
- 85. Australian Resource Centre for Healthcare Innovations. Alcohol linking project.

 Available from: http://www.archi.net.au/elibrary/service/community/community_resources/alcohol_linking_project
- 86. Wiggers J, Jauncey M, Considine R, Daly J, Kingsland M, Purss K et al. Strategies and outcomes in translating alcohol harm reduction research into practice: the alcohol linking program. Drug Alcohol Rev 2004 Sep;23(3);355–64.
- 87. Graham, K, Homel R. 2008. Raising the Bar: preventing aggression in and around bars, pubs and clubs. Portland (OR): Willan Publishing; 2008.
- 88. Homel R, Hauritz M, Wortley R, McIlwain G, Carvolth R. Preventing alcohol-related crime through community action: the surfers paradise safety action project. In: Homel R, editor. Policing for prevention: reducing crime, public intoxication and injury. Crime Prevention Studies. Volume 7. Monsey (NY): Criminal Justice Press; 1997.
- 89. Hauritz M, Homel R, McIlwain J, Burrows T, Townsley M. Reducing violence in licensed venues through community safety action projects: the Queensland experience. Contemp Drug Probl 1998;25:511–51.
- 90. Wallin E, Gripenberg J, Andreasson S. Overserving at licensed premises in Stockholm: Effects of a community action program. J Stud Alcohol 2005 Nov;66(6):806–14.
- 91. Wallin E, Norström T, Andreasson S. Alcohol prevention targeting licensed premises: a study of effects on violence. J Stud Alcohol 2003 Mar. 64(2):270-7.
- 92. Treno, AJ, Gruenewald PJ, Lee JP, Remer LG. The Sacramento neighborhood alcohol prevention project: outcomes from a community prevention trial. J Stud Alcohol Drugs 2007 Mar;68(2):197-207.

- 93. DeJong W, Vehige T. The off-campus environment: approaches for reducing alcohol and other drug problems.

 Available from: http://www.higheredcenter.org
- 94. Bennett JB, Lehman WE. Workplace drinking climate, stress, and problem indicators: assessing the influence of teamwork (group cohesion). J Studies Alcohol 1998 Sep;59(5):608–18.
- 95. Stockwell T, Gruenewald P, Toumbourou J, Loxley W, editors. Preventing harmful substance use: the evidence base for policy and practice. Hoboken (NJ): John Wiley & Sons Limited; 2005.
- 96. Mitchell D, Schwenger S. Prescribing prevention: health promotion and stroke prevention. Available from: http://www.preventstroke.ca/documents/prescribing_prevention_eng.pdf
- 97. Reynolds K, Lewis B, Nolen JD, Kinney GL, Sathya B, He J. Alcohol consumption and risk of stroke: a meta-analysis. JAMA Feb 2003;289(5):579–88.
- 98. Reynolds K, Lewis B, Nolen JD, Kinney GL, Sathya B, He J. Alcohol consumption and risk of stroke: a meta-analysis. JAMA Feb 2003;289(5):579–88.
- Cancer Care Ontario. Ontario cancer facts.
 Available from: http://www.cancercare.on.ca/cms/one.aspx?pageId=8651
- 100. Gliksman, L. Alcohol trends in Ontario. Alcohol No Ordinary Commodity Forum; 2009 Mar 5; Toronto, Canada; 2009 Available from: http://www.apolnet.ca/resources/education/presentations/ANOC6 Shows/Gliksman-ANOC6.pps
- 101. World Cancer Research Fund, American Institute for Cancer Research. Policy and action for cancer prevention.
 Food, nutrition, physical activity and the prevention of cancer: a global perspective. Washington:
 World Cancer Research Fund, American Institute for Cancer Research; 2009.
- 102. Roerecke R, Haydon E, Giesbrecht N. Alcohol and chronic disease: an Ontario perspective. Toronto (ON): Alcohol Policy Network, Ontario Public Health Association; 2007.
- 103. Rehm J, Giesbrecht N, Patra J, Roerecke M. Estimating chronic deaths and hospitalizations due to alcohol use in Canada in 2002: implications for policy and prevention strategies. Prev Chronic Dis 2006 Oct;3(4):A121.
- 104. Babor T, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K et al. Alcohol: no ordinary commodity research and public policy. New York: Oxford University Press; 2003.
- 105. Rush B, Urbanoski K, Allen B. Physicians' enquiries into their patients' alcohol use: public views and recalled experiences. Addiction 2003 Jul;98(7):895–900.