

Let's  Start



Report on Alcohol Use,
Harms & Potential Actions
in Thunder Bay District

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S. Albanese / Injury and Substance Misuse Prevention

J. Bryson / Epidemiologist

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Why talk about alcohol?

Introduction

Alcohol is the most commonly used substance in our society. The World Health Organization identifies alcohol as second only to tobacco as the leading risk factor for mortality and morbidity (World Health Organization, 2011).

The last decade has seen worrying trends and repeated calls to action in relation to alcohol. There has been a gradual erosion of regulatory controls around alcohol availability in Ontario. Meanwhile, drinking has become increasingly normalized and entwined with daily life, so much so that framing alcohol as an urgent health and social issue poses a challenge.

To start a conversation about how and why we drink and what that means in our local communities, the Thunder Bay District Health Unit (TBDHU) has gathered information and evidence on local alcohol consumption, impacts, solutions and community perspectives in Thunder Bay and District.

Community participants described alcohol as a “normal” part of everyday life in Thunder Bay District, the go-to social lubricant and stress-reliever. But they also described a wide range of harms arising from alcohol use; how it affects not only drinkers but ripples out to impact families and children and the broader community. It is not that we drink alcohol that is concerning, but how we drink.

The larger story is that alcohol-related harms are significant, widespread and stand in the way of optimum health and success for residents of Thunder Bay and District. More importantly, these harms are avoidable. Our communities hold the opportunities and resources to contribute to improved health. By accessing these resources and mobilizing local-level actions, all citizens will benefit.

This report aims to answer the following questions:

- How much are we drinking?
- Why does it matter?
- Who experiences harm from alcohol use?
- What can be done?

The following pages highlight local levels and patterns of drinking and associated burden of harms, summarize evidence-informed actions, and provide local perspectives on issues and solutions for Thunder Bay and District. The report concludes with proposed areas of focus for moving forward to reduce alcohol-related harms.

Risky Drinking

“Risky drinking” is drinking that is in excess of the Low Risk Alcohol Drinking Guidelines (LRADG) special occasion limits: five or more drinks for men and four or more drinks for women on one occasion.

This has also been called “binge drinking” or “single-occasion heavy drinking” in the literature. Regular binge drinking (at least one time/month in the past year) is described as “heavy drinking.”

Purpose and scope

In Thunder Bay and District, there has been significant effort on the part of individuals and organizations to reduce the harmful effects of substance use, with encouraging results. Community members and key informants providing perspectives on alcohol for this report frequently mentioned strategies, programs and agencies that are making a difference. These efforts include educational initiatives, drinking and driving countermeasures, treatment, social supports and harm reduction.

This report is intended to

- bring forward evidence specific to alcohol;
- support the work that is already being done; and
- build capacity for collaboration between public health and other community stakeholders with an interest in reducing alcohol consumption and alcohol-related harms.

Background

The public health focus on alcohol arises from several converging trends:

- Local data showing elevated risky drinking and increased vulnerability to harms compared to the rest of the province
- Overall increases in risky drinking particularly among women and young people, and ongoing elevated drinking levels among men
- A growing body of evidence describing alcohol as the substance causing the greatest amount of individual and social harm
- Increasing support in the scientific literature for evidence-informed actions that can be taken at a local level
- Eroding provincial alcohol controls and a political landscape that favours increased access to alcohol
- Increasing alcohol industry activity, particularly targeting youth and young women
- Indications that the social acceptance of risky drinking is increasing

A growing body of evidence points to the significant burden of alcohol harms, as well as evidence-based actions that can be undertaken by public health, municipalities and other community stakeholders to reduce harms.

Provincially, there is coordination within the public health community on the issue of alcohol. Ontario's public health sector strategic plan (OMHLTC, 2013) has identified alcohol as a collective area of focus. The recent Public Health Ontario Locally Driven Collaboration Project (LDCP) report Addressing Alcohol Consumption and Alcohol-Related Harms at the Local Level (Durham, 2014) puts forward 13 evidence-based recommendations for local-level actions (see page 53).

UNDERSTANDING ALCOHOL USE IN THUNDER BAY AND DISTRICT

What does alcohol use look like in our community? Alcohol use is a global issue and has been described in the Canadian and Ontario context in the literature. To better understand our local context specific to alcohol, and to begin a conversation with community members and stakeholders, the TBDHU undertook a situational assessment to describe views and issues around alcohol in our city and district.

The following information was gathered to describe local alcohol consumption, impacts, community perspectives and potential solutions:

- a review of epidemiological data to describe population levels and patterns of alcohol use in our district and in our province
- a review of existing literature regarding risk factors, vulnerable populations and alcohol-related harms
- a review of evidence describing effective local-level, comprehensive public health approaches to decrease alcohol consumption and alcohol-related harms
- community perspectives gathered through a public community forum and six "citizen voice" drop-in events
- community stakeholder perspectives gathered through key informant interviews

Throughout this report are quotes and “what we heard” summaries from the Let’s Start “citizen voice” community consultations and key informant interviews. Understanding how we see ourselves and our drinking context is an important step to reducing alcohol-related harms in our communities. In November and December 2014, the TBDHU held a community forum and six “citizen voice” events to hear from community members. This was followed by key informant interviews held in the spring of 2015.

The full “Let’s Start” qualitative report and research methodology is available as a separate document from the Thunder Bay District Health Unit.

Acknowledgements

We would like to thank the more than 150 community participants who generously shared their time and thoughts on the topic of alcohol in our communities as part of the “Let’s Start” community consultation.

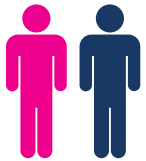


How much are we drinking?

The majority of us drink alcohol. Available data on alcohol consumption and alcohol-related harms show that levels and patterns of drinking in Thunder Bay District pose a risk to health and well-being.

Adults

Overall consumption rates and patterns of in-risk drinking – that is, drinking in excess of the Low Risk Alcohol Drinking Guidelines – continue to increase and are higher among drinkers in the Thunder Bay District compared to the rest of the province.



1 in 2

Nearly half of adults 19+ in Thunder Bay District report drinking in excess of the Low Risk Drinking Guidelines.

- Nearly half 48.2% ^(95% CI 43.3-53.1) of adults 19+ in the Thunder Bay District report drinking at levels that exceed the LRADG daily, weekly and special occasion limits, significantly higher than the provincial average. Men are more likely to exceed LRADG than women (PHO Snapshots, 2011-12).
- One in five adults 19+ in the Thunder Bay District report heavy drinking (binge drinking at least once a month in the past year). The rate for our district is higher than the rest of the province (20% vs. 16.8%) (PHO Snapshots, 2011-12).
- Weekly binge drinking among Ontario drinkers remains at an elevated level and is highest among adults aged 18-29 years old (CAMH Monitor 2011).
- Of concern are trends among women. In Ontario, daily drinking among women is increasing, as well as the average number of drinks consumed per week (Ialomiteanu, 2014).

“

I mean, one of the things that we also know about Thunder Bay is that it's live fast, die young. There's a lot of social drinking here and what I've seen over my lifetime is that – I remember drinking a lot as a young person, but I can't believe what I see now among young people in their 30s and 40s. I think that there is a lot of social drinking and I don't know if that's particular to Thunder Bay or if it happens elsewhere, but it certainly seems to be the social drug of choice.

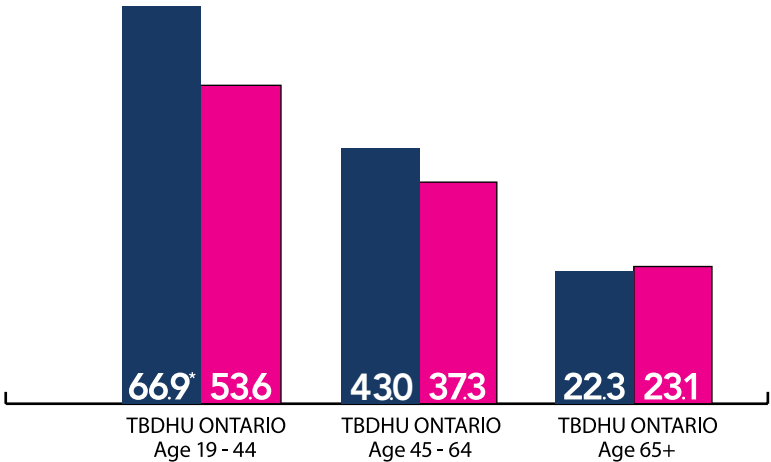
– Key Informant

”

What we heard

Citizen Voice participants described alcohol as a “social norm” in their community, used socially in many settings and situations. They also commented on how alcohol is used as a way to cope with stress and difficult life circumstances. Excessive alcohol consumption was generally seen as commonplace and often referred to as “abuse.”

FIGURE 1. PERCENTAGE OF ADULTS 19+ WHO EXCEEDED THE LRADG BY AGE: Age-Specific Crude Rate, Thunder Bay District and Ontario, 2011-2012.



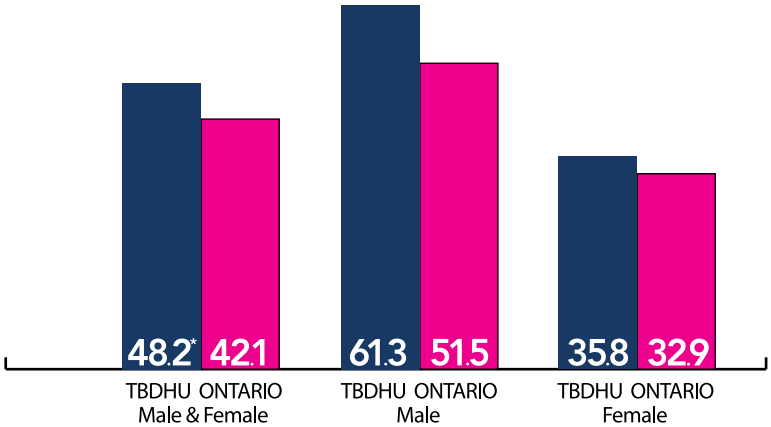
*95% CI 66.9% (59.8-74.0), 53.6% (52.1-55.1), 43.0% (35.0-50.9), 37.3% (35.5-39.1), 22.3% (17.3-27.3), 23.1% (21.7-24.4).

Source:

Public Health Ontario. Snapshots: Thunder Bay District Health Unit: Self-reported rate of exceeding the Low Risk Alcohol Drinking Guidelines (either Guideline 1 or 2*) – overall crude rate, gender specific rates and age-specific rate 2011-2012. Toronto, ON: Ontario Agency for Health Protection and Promotion; Nov 20 2013 [cited Aug 2015].

*Guideline 1: drinking within the daily and weekly limits set by the LRADG
 *Guideline 2: special occasion limits (MEN no more than 4 drinks; WOMEN no more than 3 drinks on one occasion)

FIGURE 2. PERCENTAGE OF ADULTS 19+ WHO EXCEEDED THE LRADG BY GENDER: Gender-Specific Crude Rate, Thunder Bay District and Ontario, 2011-2012.

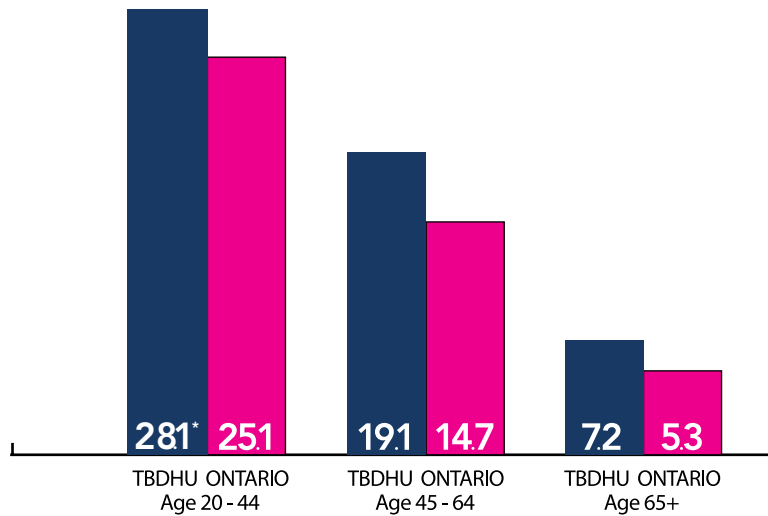


*95% CI 48.2% (43.3-53.1), 42.1% (41.1-43.1), 61.3% (55.6-67.0), 51.5% (50.1-52.9), 35.8% (28.3-43.2), 32.9% (31.7-34.1).

Source:

Public Health Ontario. Snapshots: Thunder Bay District Health Unit: Self-reported rate of exceeding the Low Risk Alcohol Drinking Guidelines (either Guidelines 1 or 2) – overall crude rate, gender specific rates and age-specific rate 2011-2012. Toronto, ON: Ontario Agency for Health Protection and Promotion; Nov 20 2013 [cited Aug 2015].

FIGURE 3. PERCENTAGE OF ADULTS WHO SELF-REPORT HEAVY DRINKING BY AGE: Age-Specific Crude Rate, Thunder Bay District and Ontario, 2011-2012.

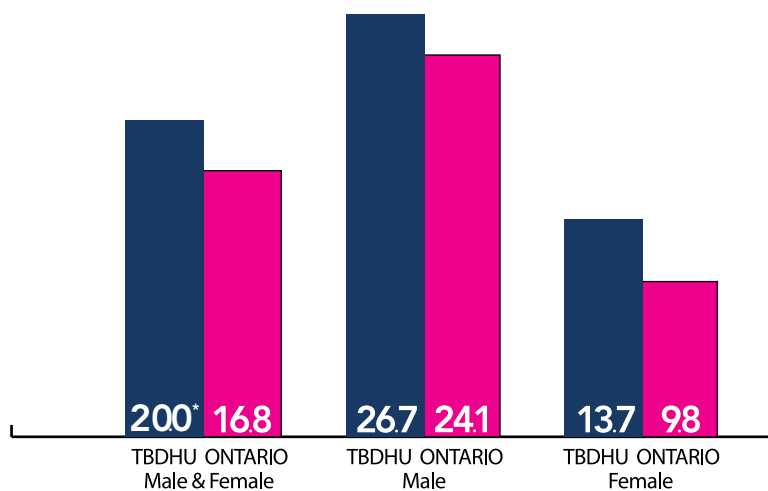


*95% CI 28.1% (21.8-34.3), 25.1% (23.9-26.3), 19.1% (13.1-25.1), 14.7% (13.5-15.8), 7.2% (3.8-10.5), 5.3 (4.7-6.0).

Source:

Public Health Ontario Snapshots: Thunder Bay District Health Unit: Self-reported Heavy Drinking Rate – overall crude rate, gender specific rates and age-specific rates. 2011-2012. Toronto, ON: Ontario Agency for Health Protection and Promotion; Nov 20 2013 [cited Aug 2015].

FIGURE 4. PERCENTAGE OF ADULTS 19+ WHO SELF-REPORT HEAVY DRINKING BY GENDER: Gender-specific crude rate, Thunder Bay District and Ontario, 2011-2012.



*95% CI 20.0% (16.9-23.1), 16.8% (16.2-17.5), 26.7% (21.6-31.7), 24.1% (23.0-25.3), 13.7% (9.4-17.9), 9.8% (9.1-10.5).

Source:

Public Health Ontario Snapshots: Thunder Bay District Health Unit: Self-reported Heavy Drinking Rate – overall crude rate, gender specific rates and age-specific rates. 2011-2012. Toronto, ON: Ontario Agency for Health Protection and Promotion; Nov 20 2013 [cited Aug 2015].

Heavy drinking

The consumption of 5 or more alcoholic drinks on at least one occasion per month in the last 12 months.

What we heard

Key informants also described alcohol as a “normal” part of the “social fabric,” tying this to its social uses. Participants also drew attention to alcohol as a coping mechanism, as linked to addiction, being easy to get, and as a “default” to alleviate boredom and for enjoyment. For young people and post-secondary students, “getting drunk” was described as the goal of drinking.

Youth

STUDENTS GRADES 7-12

The following are data on students in grades 7-12 from the Ontario Student Drug Use and Health Survey (OSDUHS) Northern region (Boak et al., 2013).



High school students in Northern Ontario report binge drinking at least once in the past month.

It is important to note that significant differences exist between Northern Ontario students and the rest of Ontario when looking at alcohol use. Northern students are more likely to report past-year alcohol use, past-month binge drinking, drunkenness, hazardous/harmful drinking and operating off-road vehicles after consuming alcohol.¹

- Alcohol is the most commonly used drug among youth: 58.9% of Northern Ontario vs. 49.5% of Ontario students in grades 7-12 reported past-year consumption of alcohol (more than just a sip). There is no discernable difference between males and females.
- Past-year alcohol use increases by grade, peaking in grade 12 with three-quarters of grade 12 students in Ontario reporting past-year alcohol use.
- 37% of secondary students (grades 9-12) in Northern Ontario reported binge drinking at least once in the past month, compared to 25.4% of secondary students province-wide. (Binge drinking in this survey is defined as having five or more drinks on one occasion at least once in the past month for both males and females).
- About one in five (19%) students in grades 7-12 in Northern Ontario report hazardous/harmful drinking (based on the AUDIT scale), and about 25% of students in grades 9-12. This puts them at risk for current or future physical and social problems.
- Almost a quarter (23.3%) of secondary students in Ontario played drinking games in the past month before the survey, and boys and girls were equally likely to participate.

¹ While the OSDUHS breaks down by region, Northern Ontario (OSDUHS-North) extends from Parry Sound to the Manitoba border, a huge geographic area. A comparative analysis concluded that OSDUHS-North data adequately describes student drug use in Thunder Bay District for most substances, with the caveat that results for alcohol consumption in particular underestimate levels of alcohol use for our region (Sieswerda, 2011).

- Northern students are more likely to report past year alcohol use, binge drinking and hazardous/harmful drinking compared to the rest of the province.
- The average age of initiating alcohol use among grade 12 drinkers in Ontario was 14.6 years, and the average age of first drunkenness was 15.3 years.
- Students in Northern Ontario are more likely to report getting drunk before 9th grade compared to the rest of the province (26% vs. 19%) (CAMH, 2010).
- Some youth are combining alcohol with other drugs or caffeinated energy drinks. These combinations can increase risky behaviours that result in injuries, and can cause dangerous effects in the body, including alcohol poisoning, drug overdose and death (CCSA, 2014a).

DRINKING AND DRIVING

- Drinking and driving among licensed students has significantly declined since 2009, which is encouraging. However, about 4% of licensed students in grades 10 through 12 still report drinking and driving at least once in the past year.
- The survey found that about 16.6% of Northern students rode in a vehicle with a driver who had been drinking.
- The likelihood of riding with a driver who had been drinking increases with each grade level to about one-quarter of Ontario students in grade 12. The characteristics of the intoxicated driver are unknown – they could be peers or adults – but the statistic is worrying given the potential for injury and death.
- Students in Northern Ontario are much more likely to operate a snowmobile, motor boat, sea-doo or ATV after drinking compared to the rest of the province (12.2% vs. 5.1%). Males are more likely than females to engage in this behaviour.

Postsecondary Students

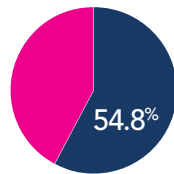
Students going on to postsecondary education often maintain or increase their alcohol use into young adulthood. The following data are from the ACHA-National College Health Assessment II (2013).



Self-reported number of times students consumed five or more drinks in a single sitting in the last two weeks.

Source:

ACHA-National College Health Assessment II (2013) Retrieved 09/10/2015 from http://www.cacuss.ca/health_data.htm



Over half (54.8%) of Ontario post-secondary students who are drinkers report negative consequences from their drinking in the past 12 months, including risky sexual activity, injury and suicidal ideation.

Source:

ACHA-National College Health Assessment II (2013) Retrieved 09/10/2015 from http://www.cacuss.ca/health_data.htm

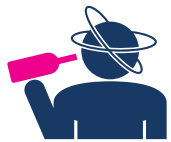
Why does it matter?

This section describes the problem of alcohol consumption and related harms, drawing on qualitative and quantitative data to understand the issues we confront in our city, district and province.

“Alcohol is no ordinary commodity”

We are inundated with marketing messages that tie alcohol to the good life. Alcohol helps us socialize, unwind and is a socially acceptable way to cope with stress: a few beers on the deck with friends, cocktails to celebrate the weekend, a bottle of wine to go with a meal. But the hard truth is that over half of us are drinking too much and it is affecting our ability to be healthy and safe.

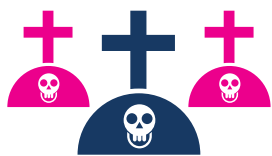
Alcohol is no ordinary commodity (Babor, 2010b). As a legal substance, no other product sold for consumption has such wide-ranging negative effects.



1 in 10

1 in 10 Ontario deaths are directly or indirectly related to alcohol misuse.

The harmful use of alcohol is a causal factor in more than 200 disease and injury conditions (WHO, 2010). It ranks first by far as the most prevalent psychoactive drug used by Ontarians, and second (behind tobacco) as a leading risk factor for disease, disability and death (WHO, 2014). In Ontario, 1 in 10 deaths are related to alcohol misuse (OMHLTC, 2012). Evidence shows a strong and consistent link between drinking and a myriad of negative consequences. Taken together, alcohol-related harms are a significant burden on society and the health of individuals, families and communities.



#2

Alcohol ranks **2nd** (behind tobacco) as a leading risk factor for disease, disability and death.



...I think there's multiple layers of consequences that are all sort of interconnected in one way or another, so a ripple effect, right?...So I think the main consequences of alcohol use in our community [are] hard to kind of pinpoint to one thing because it has individual impacts. It has family impacts. It has community impacts. It has societal impacts and consequences, so I'm not sure if there's any one specific thing I could even identify.

– Key Informant



“

I think the other consequences are – I think there’s a correlation with violence and whether it’s domestic violence or violence at parties, there’s a correlation there. I think there’s a correlation with unwanted sexual advances, sexual assaults; so whether a woman is incapacitated due to alcohol or for a man in that instance, whether the perpetrator or the violator is impacted with alcohol I think there’s risk there, so unwanted sexual activity.

– Key Informant

”

A problem of the many

Many people who enjoy alcohol would be surprised to find that they qualify as in-risk drinkers; that is, they exceed one or more of the Low Risk Alcohol Drinking Guidelines. Our society is so enamoured with drinking that there is now a substantial segment of our population that is drinking too much and — perhaps unwittingly — putting their health at risk.

A common misconception goes like this: the problems with alcohol in our society are attributable to a minority of excessive drinkers who could be considered “alcoholics” or alcohol dependent. Contrary to this, the majority of people who drink too much are not dependent and are unlikely to need treatment for their substance use. It is estimated that at least half of all Canadian drinkers are legitimate targets for risk-reduction strategies (Thomas, 2012a).

Community consultations in Thunder Bay and District revealed that citizens consistently link negative consequences of alcohol use in their community to “alcoholics” or those who “abuse” alcohol. This misconception goes to the heart of a paradox: even though a small number of high-risk drinkers consume a high volume of total alcohol sales, the much larger group of moderate-risk drinkers who appear to be in control of their drinking contribute a large share of alcohol-related problems simply because there are so many of them (Thomas, 2012a).

Alcohol-related harms

Impacts of alcohol consumption include economic costs, individual harms such as injury and chronic disease, human and social costs that affect families, workplaces and communities.

3 CATEGORIES OF HARMES

The range of harms and costs associated with alcohol use can be divided into three broad categories (Durham, 2014):

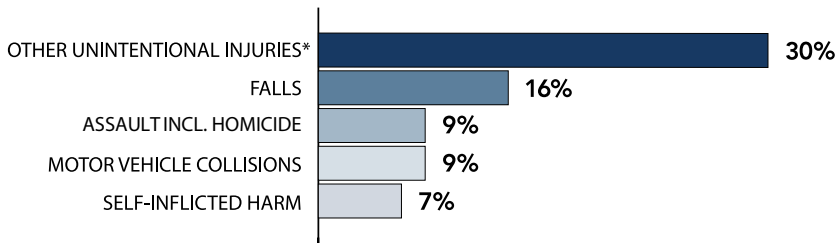
- injuries (acute or short-term effects)
- chronic health effects (long-term or chronic effects)
- second-hand effects

Injuries (SHORT-TERM EFFECTS)

The occasional heavy use of alcohol (risky drinking) has been linked to acute harms such as injuries, assaults, risky sexual behaviour, alcohol poisoning and impaired driving. The presence of alcohol increases the risk that the drinker will do harm to themselves or to others (WHO, 2011).

FIGURE 5. ESTIMATED INJURY HOSPITALIZATIONS ATTRIBUTABLE TO ALCOHOL CONSUMPTION: Top 5 causes, Thunder Bay District 2001-2013

The top five causes account for over 70% of all injury hospitalizations attributable to alcohol.

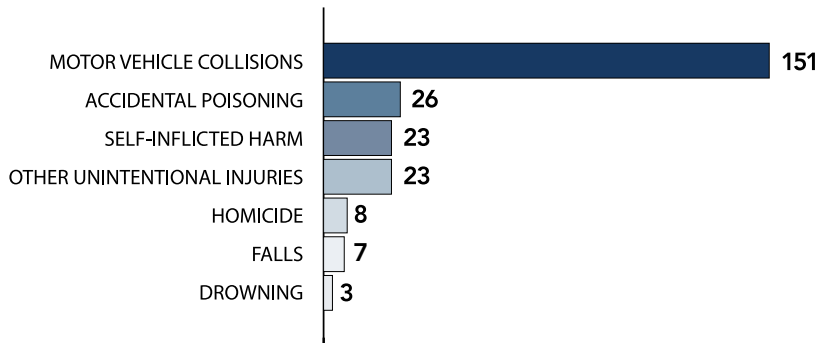


* where other unintentional injuries includes non-traffic accidents and land transport accidents; exposure to animate and inanimate mechanical forces; other accidental threats to breathing, exposure to electric current, radiation or extreme ambient air temperature or pressure; contact with heat and hot substances; contact with venomous animals or plants; exposure to forces of nature; and overexertion, travel and privation.

Source(s):

Inpatient Discharge Main Table (Discharge Abstract Database) 2003-2013, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, extracted: August 2015; Canadian Community Health Survey, 2009/2010, 2011/2012, 2013, Statistics Canada, Ontario share files, Ontario Ministry of Health and Long-Term Care.

FIGURE 6. ESTIMATED NO. OF INJURY-RELATED DEATHS ATTRIBUTABLE TO ALCOHOL CONSUMPTION: Thunder Bay District 2001-2011



* where other unintentional injuries includes non-traffic accidents and land transport accidents; exposure to animate and inanimate mechanical forces; other accidental threats to breathing, exposure to electric current, radiation or extreme ambient air temperature or pressure; contact with heat and hot substances; contact with venomous animals or plants; exposure to forces of nature; and overexertion, travel and privation.

Source(s):

Death (Vital Stats – Deaths) 2003-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, extracted August 2015; Canadian Community Health Survey, Cycle 4.1, Cycle 5.1, 2009/2010, 2011/2012, Statistics Canada, Ontario share files, Ontario Ministry of Health and Long-Term Care.

What we heard

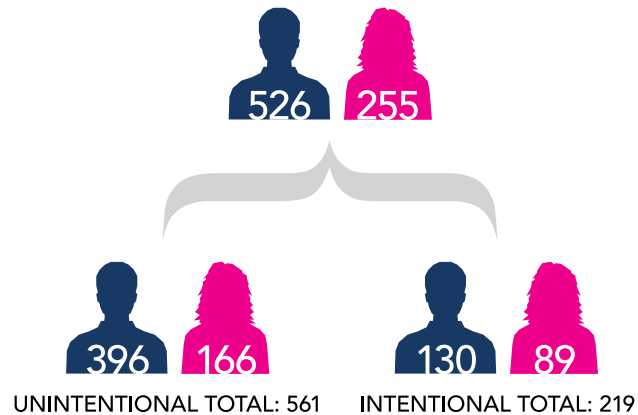
Citizen Voice participants told us that alcohol use affects children and families, leads to violence and crime, contributes to drinking and driving, changes behaviour, impacts health, causes injury and death, affects jobs and employment, puts a strain on resources and increases costs, creates a negative image of the community and leads to social issues. But alcohol also connects people and contributes to the economy.

Did you know?

NON-PALATABLE ALCOHOL

Non-palatable alcohol refers to products containing ethanol that are not meant to be consumed, such as certain cleansers, some mouthwashes, aftershave lotions and hand sanitizers, to name a few. These products can have dangerous toxic effects if consumed, but despite this some high-risk users will drink these products in part because they are more available and affordable. The chemicals present in these products multiplies the danger of toxicity and overdose. Public policies and interventions aiming to reduce alcohol-related harms should encompass both beverage and non-beverage alcohol (WHO, 2011).

FIGURE 7. TOTAL ESTIMATED ALCOHOL-ATTRIBUTABLE INJURY HOSPITALIZATIONS: By sex, 2001-2013 for Thunder Bay District (rounded numbers).



Source(s):

Inpatient Discharge Main Table (Discharge Abstract Database) 2003-2013, Ontario Ministry of Health and Longterm Care, IntelliHEALTH ONTARIO, extracted: August 2015; Canadian Community Health Survey, 2009/2010, 2011/2012, 2013, Statistics Canada, Ontario share files, Ontario Ministry of Health and Long-Term Care.

Males are more likely than females to be hospitalized for alcohol-related injuries. Unintentional injuries include causes such as on-and off-road motor vehicle collisions and falls. Intentional injuries include causes such as physical and sexual assaults and self-inflicted harm/suicide. The top three causes for men are "other unintentional injuries," "falls," and "assaults." The top three causes for women are "falls," "other unintentional injuries" and "self-inflicted harm."

DRINKING AND DRIVING

While overall alcohol consumption and risky drinking are on the rise, one positive trend is the decline of drinking and driving in the last few decades. According to the CAMH Monitor, driving after drinking declined by more than half between 1996 and 2013 among Ontario drivers (Ialomiteanu et al., 2014).



40%

of car crashes involve alcohol.

However, a recent report from the Canadian Centre on Substance Abuse using population data from the Canadian Drug Use Monitoring Survey (CADUMS 2008–2012) shows that the prevalence of driving after drinking has not changed substantially in recent years (CCSA, 2015). Drunk driving accounts for almost 25% of all fatalities on Ontario's roads (MTO, 2010) and 40% of car crashes involve alcohol (OMHLTC, 2012).

Impaired driving traffic offenses in Thunder Bay totalled 135 in 2014, a slight decline from previous years. Impaired drivers identified through the R.I.D.E. (Reduce Impaired Driving Everywhere) programme totalled 10 in 2014, with an additional 16 drivers in the 12-hour suspension/warn range suspension category (Thunder Bay Police Service, 2014).

Drinking and driving continues to pose a real risk to road safety and alcohol-involved collisions still exact a tremendous toll on people's lives.

Chronic Health Effects (LONG-TERM IMPACTS)

Many people are unaware of the cumulative effects of alcohol use. A growing body of evidence links even moderate levels of alcohol consumption to over 65 chronic diseases and conditions including cancer (Cancer Care Ontario, 2014).

The risk for developing a chronic disease starts at only one to two drinks a day and increases with consumption. The more one drinks, the greater the risk.



65+

Alcohol is related to **over 65 diseases** and conditions and is a known risk factor for cancer.

Research shows that, over time, alcohol use can lead to the development of high blood pressure, heart disease, stroke, liver disease, digestive problems, diabetes, certain cancers, mental health problems and alcohol dependence (Butt et al, 2011).

“

I have also seen many drunk drivers and hear about them talking about drinking and driving

– Community Member

”

Did you know?

THE HEALTH BENEFITS OF ALCOHOL ARE WIDELY MISUNDERSTOOD.

A common misunderstanding is that moderate, regular alcohol consumption (red wine, for example) is good for your health. There are indeed health benefits demonstrated by research but these benefits are limited. Alcohol has some protective action related to ischemic heart attack for middle-aged adults, but the benefit for this demographic has to be weighed against the risk of developing other types of conditions at the same level of consumption (CPHA, 2011). Low-risk consumption may entail some benefit for middle-aged adults, however, it is not recommended that people start drinking for their “health” as these benefits can be achieved by other means.

Did you know?

FETAL ALCOHOL SYNDROME DISORDER (FASD)

FASD is an umbrella term that describes a range of disabilities that may affect individuals exposed to alcohol in utero. It is one of the leading causes of cognitive and developmental disabilities among children in Canada and can affect every racial, cultural and socio-economic group across Ontario. A 2005 estimate of the incidence of FASD in Canada was 1% of the population (Anderson, 2015), however, due to the stigma faced by women who consume alcohol during pregnancy, the prevalence is likely under-reported.

ALCOHOL AND CANCER

Alcohol is a carcinogen. Between 1,000 and 3,000 cases of cancer diagnosed in Ontario during 2010 (2%–4% of all new cancer cases) are estimated to be attributable to alcohol consumption (Cancer Care Ontario, 2014). Cancer is one of the leading causes of death in Ontario.

Evidence shows that drinking increases the risk of cancers of the oral cavity, pharynx, esophagus and larynx, as well as cancer of the liver. Alcohol is a causal factor in two of the leading causes of cancer death in Ontario: colorectal and breast cancers (Cancer Care Ontario, 2014).

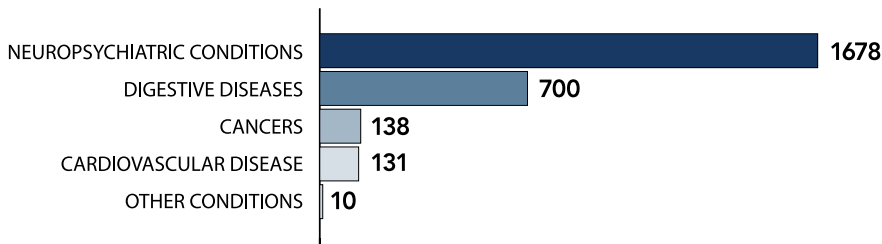
ALCOHOL USE DISORDERS

Alcohol use disorders (AUDs) such as alcohol dependence and fetal alcohol spectrum disorder (FASD) are 100% attributable to alcohol. Regular and sustained drinking above the LRADG will usually lead to some degree of alcohol dependence, though susceptibility varies with individuals (Butt, 2011). Alcohol is the number-one substance issue for new treatment admissions in the Northwest LHIN, accounting for 80% of new admissions in 2007–2013 (DATIS, 2013).

FETAL ALCOHOL SPECTRUM DISORDER

Drinking alcohol during pregnancy increases the risk of having a baby with Fetal Alcohol Spectrum Disorder (FASD). FASD is brain damage caused by exposure to alcohol in utero, and has a life-long impact on individuals affected. Over 130,000 Ontarians have FASD (Anderson, 2015).

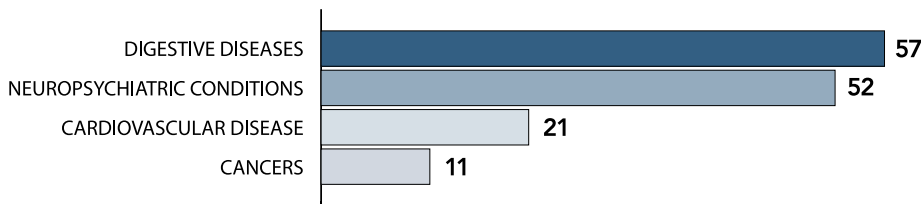
FIGURE 8. ESTIMATED NO. OF CHRONIC DISEASE HOSPITALIZATIONS ATTRIBUTABLE TO ALCOHOL CONSUMPTION: Thunder Bay District, 2003-2013



Source(s):

Inpatient Discharge Main Table (Discharge Abstract Database) 2003-2013, Ontario Ministry of Health and Longterm Care, IntelliHEALTH ONTARIO, extracted: August 2015; Inpatient Adult Mental Health Assessment, Treatment, Diagnosis (Ontario Mental Health Reporting System) 2006-2013, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, extracted: August 2015; Canadian Community Health Survey, 2009/2010, 2011/2012, 2013, Statistics Canada, Ontario share files, Ontario Ministry of Health and Long-Term Care.

FIGURE 9. ESTIMATED NO. OF CHRONIC DISEASE DEATHS ATTRIBUTABLE TO ALCOHOL CONSUMPTION: Thunder Bay District, 2003-2011



Source(s):

Death (Vital Stats – Deaths) 2003-2011, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, extracted August 2015; Canadian Community Health Survey, Cycle 4.1, Cycle 5.1, 2009/2010, 2011/2012, Statistics Canada, Ontario share files, Ontario Ministry of Health and Long-Term Care.

What we heard

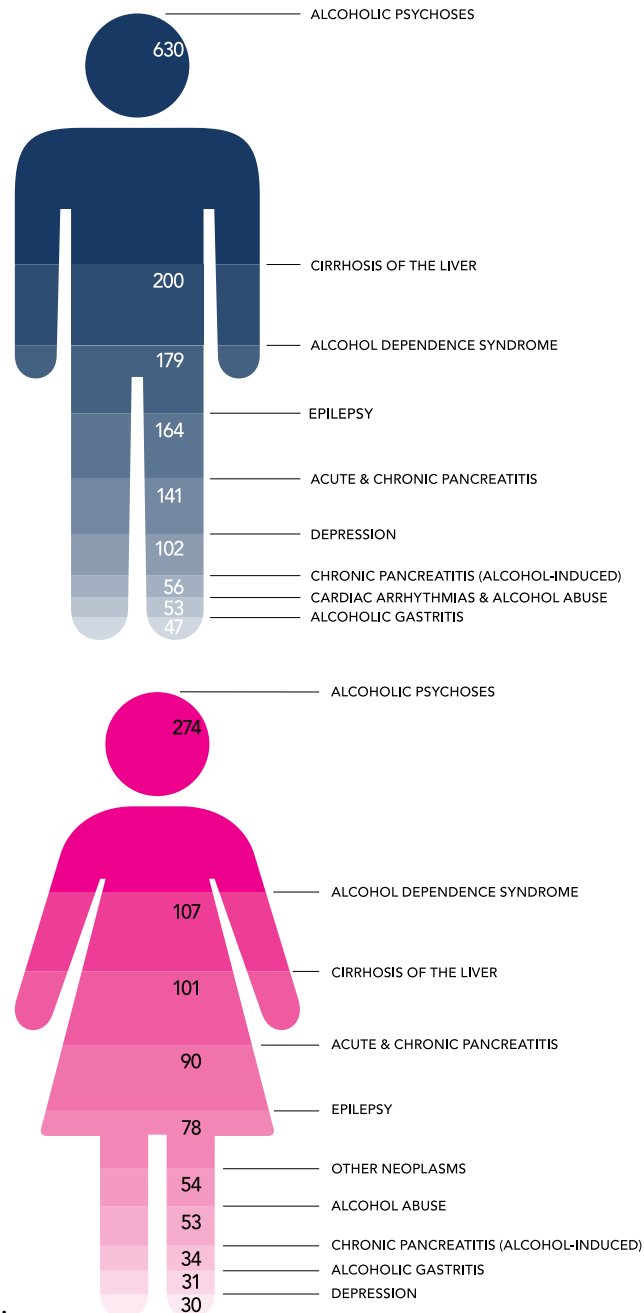
Key informants told us that drinking affects people’s health and safety, mentioning violence, crime, impaired driving, health issues, suicides and deaths. Families and children were prominent in descriptions of negative consequences. Participants also talked about how success in life can be limited by alcohol use, how drinking affects relationships, increases social service costs and demands, and can lead to legal and child welfare involvement. For some the consequences are minimal but for others, just meeting basic needs is a struggle. Alcohol use affects everyone, and its impacts are interconnected and multi-layered.

Did you know?

ONTARIO HAS A MIXED PUBLIC-PRIVATE SYSTEM OF ALCOHOL SALES.

The Liquor Control Board of Ontario (LCBO) is a Crown corporation and has a partial monopoly over off-premise alcohol sales. About 26% of off-premise retail outlets in Ontario are publicly owned (Giesbrecht et al., 2013). Alcohol is also sold off-premise through privately owned Ontario winery stores and the Beer Store, which is owned by multinational beverage corporations. Alcohol sales also operate through channels such as liquor delivery services, home-brew kits and online sales (Giesbrecht et al., 2013). The provincial government recently brought in a number of policies that expand alcohol sales in Ontario, including a new retail channel for beer sales in Ontario grocery stores.

FIGURE 10. TOP 10 CAUSES OF CHRONIC DISEASE HOSPITALIZATIONS ATTRIBUTABLE TO ALCOHOL CONSUMPTION IN MEN AND WOMEN: Thunder Bay District, 2003-2011 (no. of hospitalizations rounded)



Source(s):

Inpatient Discharge Main Table (Discharge Abstract Database) 2003-2013, Ontario Ministry of Health and Longterm Care, IntelliHEALTH ONTARIO, extracted: August 2015; Inpatient Adult Mental Health Assessment, Treatment, Diagnosis (Ontario Mental Health Reporting System) 2006-2013, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, extracted: August 2015; Canadian Community Health Survey, 2009/2010, 2011/2012, 2013, Statistics Canada, Ontario share files, Ontario Ministry of Health and Long-Term Care.

Harms to Others

Emerging evidence points to significant second-hand effects of alcohol with over one-third of Ontario adults reporting harm due to drinking by others (Giesbrecht et al., 2010).



1 in 3

adults in Ontario report experiencing harm from someone else's drinking.

Individual alcohol consumption has effects that can extend beyond health consequences to the drinker and lead to overlapping social harms such as physical and sexual violence, public disorder, family and interpersonal problems, financial problems, and work and school-related problems. There is general agreement that social harm increases with the frequency of risky drinking (Butt et al., 2011).

“

I think we have a real blasé attitude toward alcohol. It's not seen as harmful. The general public does not think about the harms associated with alcohol abuse...

– Key Informant

”

The Cost of Alcohol

Concurrent with the tremendous human cost of alcohol-related harms are economic ones. Societies are burdened by direct health care expenditures and productivity losses due to alcohol use (Sassi, 2015).



In 2011, alcohol consumption cost Ontario an estimated **\$1.7 billion** in direct health care costs and **\$3.6 billion** in indirect costs.

Despite high revenues, profits from alcohol sales in Ontario do not cover costs. In 2011, alcohol consumption cost Ontario an estimated \$1.7 billion in direct health care costs and \$3.6 billion in indirect costs (Durham, 2014). Ontario's net loss is estimated at \$456 million each year from direct health and enforcement costs (Thomas, 2012b; Rehm et al., 2007). This is merely the tip of the iceberg. The net loss would be higher if all costs were considered.

Who experiences harm from alcohol use?

Alcohol consumption affects everyone, but some members of our community are at greater risk. This section links alcohol harms to risk factors and describes groups that are more likely to experience harms related to alcohol use. Areas of vulnerability for Thunder Bay and District are also discussed.

“

In my opinion, the problem of alcohol comes from other problems, i.e., broken homes, hard lives, financial trouble. So improvements have to come through helping relationships thrive, families work through hard things, cost of living dropping.

– Community Member

”

Experts describe a complex interplay of internal and external factors that may lead to the onset and misuse of alcohol for an individual. Risk factors associated with alcohol-related harms are varied and include biological and developmental factors such as age and sex, adverse life experiences, mental health status, and social determinants such as poverty, access to education and employment, and social exclusion.

A scan of the Ontario environment identified the following groups as being at greater risk for alcohol-related injury and other harms: incarcerated individuals, people with concurrent disorders, street youth, homeless or unstably housed individuals, low socio-economic status individuals, First Nations, older adults, and any person experiencing stress, discrimination or marginalization (Sythe & Calverson, 2007; Mikkonen & Raphael, 2010). These categories are not exclusive and in fact are overlapping, but provide a starting point for considering higher-risk groups.

Alcohol and the Social Determinants of Health

Drinking has often been called a personal choice, but the choices we make are influenced by our living conditions, social context and the opportunities we have. Some members of our community have fewer opportunities to be healthy in relation to alcohol and, as a result, are more likely to experience problems.

ALCOHOL HARMS ARE UNEQUALLY DISTRIBUTED

The burden of alcohol harms is disproportionately borne by individuals who face barriers related to the social determinants of health despite lower overall consumption rates (World Health Organization, 2011). Inequities related to the social determinants of health compound over time from childhood to adulthood.

In general, those with lower incomes consume less alcohol overall and are more likely to be abstainers, but they experience higher levels of alcohol-related deaths and health problems than higher-

income groups with the same level of consumption. Put simply, marginalization increases harm (CPHA, 2011). Growing up in a socially excluded group, for example, may lead to lower school achievement in adolescence and early onset of alcohol use, lower employment and chronic stress in adulthood that increases the likelihood and impacts of alcohol-related problems (Loring, 2014)

Who is more at risk of experiencing alcohol-related harms?

The following summarizes the main groups described in the literature who experience disproportionately the negative effects of alcohol consumption.

Youth

The earlier someone begins using alcohol the more likely they are to experience problems in the future: higher rates of addiction and mental health challenges in adulthood and higher rates of addiction-related chronic disease (Leyton & Stewart, 2014).

Youth (15–24 years) are the population most likely to engage in risky drinking and are more likely to experience acute harms such as injuries and poisonings. There is research to indicate that for a given “dose” of alcohol, youth are more likely to experience harm compared to older adults (Thompson, 2012).

Other youth risk factors identified in the literature include youth perception of parental approval of alcohol use and low parental monitoring, alcohol-using peers, early and persistent problem behaviours, alcohol use in the family context, low perception of harm, easy access and availability, poor school achievement and low school connectedness (Smythe & Calverson, 2007). When youth also experience poverty, discrimination, racism and/or challenges with their mental health, this increases their risk of harm.

YOUTH WHO IDENTIFY AS LGBTQ

There is widespread discrimination against lesbian, gay, bisexual and transgender youth. Those who identify have fewer protective factors (such as school and family connectedness) and are more likely to experience more victimization, isolation, suicidal ideation and substance abuse (Wells, 2009).

Mental health, substance use and addiction are inextricably linked, and using substances may become a way to cope with the experience of discrimination and exclusion. Consequently, these risks may explain, in part, population studies showing that sexual minority youth are more likely to use alcohol and to report problems with substance use (CCSA, 2007). Heavy drinking as

What we heard

Citizen Voice participants: Youth were by far the most frequently mentioned group when participants discussed problems or solutions. For the most part, participants believed that parents were responsible for youth’s access, lack of education and subsequent behaviour surrounding alcohol. Participants also linked alcohol to Aboriginal people, low-income and homeless people. Compared to youth, participants proposed very few ways to improve the situation for these groups, and there was little evidence of the sense of collective responsibility that they felt for youth.

What we heard

Key informants: Actions to prevent and reduce alcohol-related harm should focus on children and youth, Aboriginal people, families, people with mental health challenges, and women and pregnancy. Post-secondary students would benefit from specific prevention-oriented activities, as would adults and the general public. Interventions should focus on people who are marginalized, experiencing alcohol-use problems and young families with children. At the same time, key informants emphasized the larger picture: that we need to take a purposeful and multi-tiered approach that is interconnected, rather than isolated approaches with target groups.

well as other substance use appears to be more prevalent among young LGBTQ persons compared to the general population (CAMH, 2008).

Women

Heavy drinking among women is on the rise in Canada, closing the gap with their male counterparts. Women are more vulnerable to the physiological effects of alcohol compared to men. Females absorb alcohol more quickly and take longer to break it down, due to differences in body chemistry and composition. The result is faster and greater impairment compared to men. Add women's generally smaller body size to this and the relative risk is decidedly uneven. Women who drink excessively are at much greater risk for developing certain diseases compared to men including liver disease, breast cancer and heart problems (NIAAA, 2008).

ALCOHOL AND PREGNANCY

Alcohol use during pregnancy can negatively affect maternal and child health. Experts agree there is no safe amount of alcohol to drink while pregnant. Drinking alcohol during pregnancy increases the risk of having a baby with Fetal Alcohol Spectrum Disorder (FASD) and may increase the risk of other outcomes such as miscarriage and stillbirth (Carson et al., 2010).

Most women choose to stop drinking alcohol when they learn they are pregnant, however, this decision may come after they have already consumed alcohol during the early days of their pregnancy. Most women find out they are pregnant four to six weeks after conception. Young women (aged 15–19 years) in particular have higher rates of both unintended pregnancies and binge drinking (Carson et al., 2015). Also, women who are heavy drinkers are more likely to continue drinking during their pregnancy (Soramaki et al., 2015).

From the Our Health Our Future Study conducted at Lakehead University in Thunder Bay, results showed that 77% of pregnancies in Thunder Bay are unplanned. The study also found that 32% of the women 40 years of age and younger in Thunder Bay report drinking one to two times in the past 30 days, and 33.7% report binge drinking (four or more drinks on one occasion) one to two times in the past month (Duchene et al., 2013).

A key message is that FASD is preventable if women do not consume alcohol while pregnant or planning to become pregnant. However, there are complex and varied reasons why a woman might drink during pregnancy. A recent report explored some of these explanations; they include a woman not knowing she is pregnant, lack of awareness of the risks, living

with mental health challenges, substance use and addictions, coping with violence, physical or sexual abuse, and a lack of a support network (Anderson, 2015). Another reason might be the lack of consistent messaging from health and service providers regarding the safety of alcohol use during pregnancy (Soramaki et al., 2015).

ENVIRONMENTAL FACTORS

Environmental factors play a large role in how and why women drink. For women, threats to their health and safety accumulate with every drink.

A woman who is intoxicated or around intoxicated people is more vulnerable to acute harms than a man in the same condition. This includes physical and sexual violence, unplanned pregnancy and sexually transmitted diseases. Women who have been affected by others' drinking are also more likely to report significant negative effects compared to men (Laslett, 2015).

Aboriginal people

The health of Aboriginal people is intertwined with social determinants that have unique features compared to non-Aboriginal people. Historical and contemporary contexts of racism, social exclusion and lack of self-determination continue to shape the health of Aboriginal people (Allan & Smylie, 2015). There is overwhelming evidence that Aboriginal people in Canada face significantly more challenges across the core determinants of health and experience greater harms compared to the general public (Allan & Smylie, 2015).

A recent report from the National Collaborating Centre for Aboriginal Health describes contributing factors that underlie harmful drinking and other harmful substance use: loss of cultural identity, poverty and unemployment, low education levels, availability of the intoxicant, lack of social and recreational opportunities, peer pressure and family pressure (NCCA, 2013).

The same report reviewed the limited Canadian data on levels and patterns of drinking among Aboriginal people and found that, in general, Aboriginal people are more likely to abstain from alcohol compared to non-Aboriginal people. Among those that do consume alcohol, they are more likely to drink in risky ways. Risky drinking among Aboriginal people is also more likely to lead to injury and death compared to their non-Aboriginal counterparts. This increased vulnerability is tied to and exacerbated by the social factors described above.

“

I think there is a stigma associated with alcohol, especially dysfunctional alcohol or alcohol addiction, in particular.

– Key Informant

”

“

When you think of the people you know who are drinkers, some of them live pretty controlled and productive lives. They did drink too much and it's probably to their detriment, but their lives are not out of control. And yet, if you are low income or Aboriginal and you drink, pretty likely child welfare is going to be involved in your life. So like any systemic impact, the impact of alcohol increases as you look at race and poverty, race and income.

– Key Informant

”



...we have a government at all levels that [seems] to be moving away from the notion that by providing people with a strong, healthy foundation we actually save money in the long run and produce a healthier environment. But we know this is true from evidence. When we're able to provide people with those really strong foundations like education and well-paying jobs and a safe place to live and opportunity to participate in their community, those kinds of things really help.

– Key Informant



ABORIGINAL WOMEN

Aboriginal women face severe marginalization in Canada and carry a disproportionate burden of disease. Aboriginal women are more likely to be living in poverty and experiencing unstable housing, lack of employment, violence and incarceration (Allan & Smylie, 2015).

ABORIGINAL YOUTH

Aboriginal youth have a greater lifetime prevalence and earlier age of onset for substance abuse than their non-Aboriginal counterparts (CAMH, 2008). Aboriginal youth living off-reserve are at significantly higher likelihood of risk-taking behaviour and experiencing adverse consequences of alcohol use. Programs are needed that address the unique strengths and needs of Aboriginal youth (Elton-Marshall et al., 2011).

People who have inadequate housing, income or employment

The beginning of this section outlined social determinants of health that impact a person's ability to be healthy. A repeated theme in the literature and throughout the community consultation was the concept that health is determined in large part by the social conditions people experience. From this perspective, alcohol-use problems are to some degree a symptom of social factors that inhibit people's ability to have a safe place to live, have a job that provides for the necessities, feel included in their community and have hope for their future.

Older adults

Among older adults, alcohol use is a concern because of lowered tolerance to the effects of alcohol and the increased potential for falls (Butt et al., p. 35). One in five adults 65+ in Thunder Bay and District drink in excess of the LRADG. While this is less than the "peak" ages of 19–29, it is still concerning given the lowered tolerance and changing health status associated with aging. Seniors also experience any number of stressors such as declining health or loss of a spouse, and may turn to alcohol to cope with physical or emotional pain. Drinking alcohol may worsen existing health problems and make seniors more susceptible to falls. Also, many seniors take medications that can interact with alcohol, increasing the risk of negative consequences.

Workers

Various studies point to worker rates of alcohol-use disorders in the range of 10% to 20% of employees (CAMH, 2008). It is likely, however, that workplace substance policies and Employee Assistance Programs are inadequate or underutilized, and workplaces continue to feel the effects of lower productivity due to alcohol use. Problematic alcohol use appears to be more prevalent among industrial/blue-collar workers (Mikkonen & Raphael, 2010).

People living with a mental health diagnosis

Mental health disorders and substance use are often co-occurring; in fact, 27.5% of those identified with a current alcohol problem will also have a mental illness at some point in their lifetime (CAMH, 2008). There is a two-way link between mental illness and alcohol use but the connection is unclear in terms of causality. What is clear is that people living with mental health challenges are more vulnerable to the negative effects of alcohol use. These include worsening mental health, sleep problems, adverse interactions with medication, and a lower threshold for suicide.

People who use substances

Whether it's a person experimenting with various substances or someone taking medications for a health condition, multi-substance use increases the risk of harm. Alcohol and other substances can have a synergistic effect that increases risk for the individual (Butt et al, 2011).

People who are incarcerated

Incarcerated individuals are a high-needs and high-risk population for a number of reasons (CCPHE, c2015). A large proportion of incarcerated individuals have ongoing mental health or substance-use issues at the time of intake. Incarceration exposes individuals to additional stressors and risk behaviours; yet correctional institutions lack adequate mental health, addiction and harm reduction services.

What we heard

Citizen Voice participants: When we asked what was making the situation harder in their community, participants drew attention to deficits in the type or amount of treatment services, lack of awareness and dialogue around alcohol, the availability of alcohol and constant exposure to alcohol marketing, social norms that make heavy drinking and youth drinking socially acceptable, alcohol being the centre of community events, social issues like poverty and housing, stigma and racism, and inadequate parenting.

“

So I think there could be an element of boredom in some of our communities across the district, in terms of our use. There's not a lot of extra-curricular or recreational activities that they have to access or go to and therefore they end up out of boredom finding things to do on their own; and alcohol happens to be one of those choices.

– Key Informant

”

Thunder Bay and District profile

Areas of vulnerability for residents of Thunder Bay and District reflect the unique characteristics of our region and the social determinants of health.

POPULATION PROFILE

- Living in a rural community can increase one's likelihood of experiencing alcohol-related harms. Of residents in the district, 36.5% live in rural or remote areas. Most urban residents reside in the municipality of Thunder Bay (three out of four) (Tranter, 2011).
- Thunder Bay District includes several First Nation communities, and Aboriginal populations are increasing in urban centres. The North West LHIN area has the largest proportion of Aboriginal people of all Ontario LHINs — over 20% (NWLHIN, 2014).*

HOUSING, INCOME AND EMPLOYMENT

- Approximately 15,100 individuals (12.8%) in Thunder Bay live in poverty (LSPC, 2013).
- There are significant housing pressures in Thunder Bay: vacancy rates are trending downward, increasing households are on wait lists for social housing and emergency shelters are at full capacity (LSPC, 2013).
- There is a lack of employment opportunities for youth 15–24 years, particularly for youth without certificates, diplomas or degrees (LSPC, 2013).

HEALTH STATUS

- Compared to the province (based on 2013 CCHS data for ages 12+), the Northwest LHIN has a higher proportion of people who are heavy drinkers and has a lower proportion of people who have a regular doctor, and people who report very good or excellent perceived mental health (NWLHIN, 2014).*
- Thunder Bay District has overall higher rates of injury-related hospitalizations and mortality, and residents are more likely to have a chronic illness compared to the rest of Ontario (Tranter, 2011).

*Note: data for the North West LHIN area encompasses the Thunder Bay District and the districts of Kenora, Rainy River and the Northern region.

“

I think from our perspective, housing is a huge issue. So what we have found is that the little bit of supportive housing that we're able to provide — granted, this is an extreme dysfunctional state — but I mean we have really helped to stabilize people; so it does reduce problems around alcohol and I think what we're really lacking in our community is a range of housing and housing supports that specifically deal with people that are substance users.

– Key Informant

”

ALCOHOL AVAILABILITY

- Thunder Bay District has a higher density of alcohol outlets (on- and off-premise) compared to the provincial average (Cancer Care Ontario, 2015).

YOUTH AND ADULTS IN THUNDER BAY WHO USE SUBSTANCES

In a recent needs assessment examining the housing needs of people in Thunder Bay who use substances (Centre for Community Based Research, 2013) researchers interviewed 143 individuals representing a wide age range. The research found that a significant number of interviewees reported binge drinking (62%) and risky sexual behaviour (39%), as well as being a passenger in a vehicle being driven by someone under the influence of alcohol or other drugs (80%). Researchers also concluded that people in Thunder Bay who use substances are likely to use multiple substances, with alcohol being the most frequently used.

What we heard

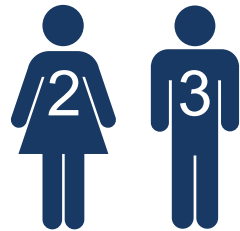
Key informants: Similar themes arose in conversations with key informants about what is making it harder to prevent and reduce alcohol-related harms: drinking as a social norm in the community, difficult social conditions, stigma and racism, ongoing stress and trauma in people's lives for which alcohol is a coping mechanism, and gaps in health care and treatment services.

What can be done to reduce harms?

How can we make things better in our community? How can we mitigate harms, improve people's health and promote a culture of moderation? There is ample evidence for actions at the local level to reduce alcohol-related harm and promote healthier communities.

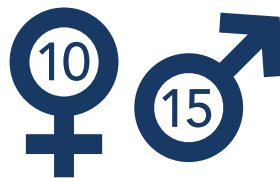
Reducing risk: Canada's Low-Risk Alcohol Drinking Guidelines

Canada's National Low-Risk Alcohol Drinking Guidelines (LRADG) were released in 2011. The guidelines provide Canadians with science-based recommendations for alcohol consumption that could lower their health and safety risks. Alcohol consumption in excess of the recommended daily, weekly or special occasion limits for men and women puts individuals at elevated risk for short- or long-term harms (CCSA, 2013).



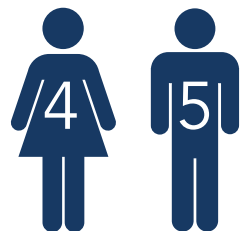
Reduce your short term risk of injury

- No more than **2 drinks a day** most days for women
- No more than **3 drinks a day** most days for men



Reduce your long term risk of disease

- No more than **10 drinks a week** for women
- No more than **15 drinks a week** for men



The LRADG "special occasion" guideline recommends:

- No more than **4 drinks** for women
- No more than **5 drinks** for men on any single occasion

Drinking in excess of this is often called "single occasion heavy drinking" or "binge drinking" in the literature.

For these guidelines, a “drink” is:



Beer
341 ml
(12 oz.)
5%
alcohol
content



Wine
142 ml
(5 oz.)
12%
alcohol
content



**Distilled
Alcohol (1.5 oz.)**
(rye, gin,
rum, etc.)
40% alcohol
content

The LRADG also identify important exceptions when interpreting the guidelines:

WHEN ZERO IS THE LIMIT

Don't drink if you are:

- Under the legal drinking age
- Driving a vehicle or using machinery/tools
- Taking medicine or other drugs that interact with alcohol
- Responsible for the safety of others
- Living with mental or physical health problems
- Making important decisions
- Doing any kind of dangerous physical activity
- Living with alcohol dependence



PREGNANT? ZERO IS SAFEST.

If you are pregnant or planning to become pregnant, the safest choice is to drink no alcohol at all.

YOUTH AND LRADG

Canada's LRADG take into account the heightened vulnerability of youth and provides specific recommendations for this age group to lower risk (CCSA, 2014a):

- Underage youth: The guidelines encourage youth to speak to their parents about drinking and delay drinking at least until the legal age, but if drinking is initiated, recommend no more than one or two drinks, no more than once or twice a week.
- From legal drinking age to 24 years: The guidelines suggest no more than two drinks per occasion for women and three drinks per occasion for men, lower than the adult “special occasion” limits.

Did you know?

Cancer Prevention Guidelines recommend limiting consumption to less than two drinks a day for men and one drink per day for women. Because even small amounts of alcohol have been shown to increase the risk of some cancers, cancer prevention organizations acknowledge there is no clear “safe limit” of alcohol intake to prevent cancer risk (Cancer Care Ontario 2014 p. 12).

What we heard

Citizen Voice participants: Things that could improve the situation are more and better treatment options, education and awareness-raising strategies, and youth-focused programs, more drinking and driving countermeasures, stricter regulation of alcohol sales, alternatives to drinking and non-drinking events, improving social conditions such as social inclusion, education, employment, housing and poverty, parent education and community involvement.

A Comprehensive Approach

A major theme running through the research is the importance of taking a comprehensive approach and this was reiterated by community members and key informants. Multi-level strategies are more effective than single-track approaches (Durham, 2014).

The Population Health Model (CPHA, 2011) describes three dimensions:

- What should we take action on? (social determinants of health)
- How should we take action? (evidence-based actions and strategies)
- With whom should we act? (levels within society)

The model can be used to identify and address multiple risk factors and conditions that impact people's health.

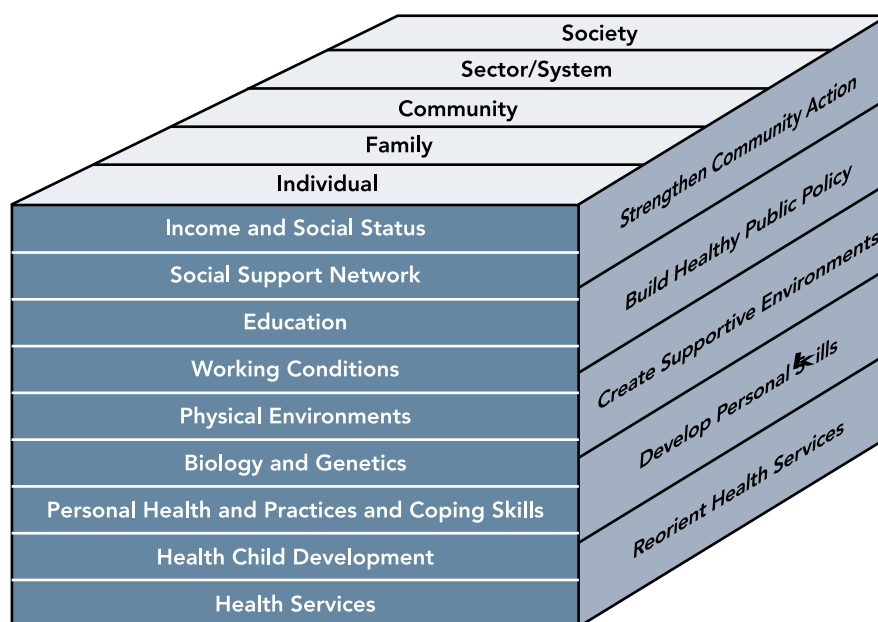


Figure 3: Population health promotion action model. Source: Public Health Agency of Canada. Retrieved 09/29/15 from <http://www.phac-aspc.gc.ca/ph-sp/php-ppsp/php3-eng.php> Reproduced with permission.

“

I've become less involved with the Poverty Strategy and more involved with the Food Strategy... And there's also the Crime Prevention Council, right? But we see that these things are starting to – the cross-fertilization is starting to happen.

– Key Informant

”

Action on the Social Determinants of Health

Drinking has often been called a personal choice, but the choices we make are influenced by our living conditions, social context, and the opportunities that we have (SDHU, c2015).

Policies that improve access to social determinants such as education, employment and housing, for example, also improve health outcomes (Babor et al., 2010).

Initiatives that work to improve living conditions for the most vulnerable, challenge stigma and racism, and increase opportunities for health and inclusion go a long way toward building healthy communities.

Community participants frequently framed individual alcohol use problems as embedded within a larger social context where alcohol use is symptomatic of other problems such as trauma, poverty and marginalization. Addressing these larger issues was therefore important to preventing and reducing alcohol-related harms.

Recommendations for local-level actions

Concurrent with actions on the social determinants described above, the literature supports specific alcohol policy directions.

Local alcohol policy has been recommended in the literature as an important and effective way to reduce harms (Babor et al., 2010, CAMH, 2013, Durham, 2014). In as far as these evidence-based actions are purposeful efforts or decisions to reduce and/or prevent alcohol-related harm, they can be considered alcohol “policies” (Babor et al., 2010).

There are a number of policies that have been shown to be effective in reducing overall consumption and harms in a population. The evidence shows that our choices are influenced by alcohol pricing, availability, marketing, legislation, drinking environments and knowledge (CAMH, 2013, Durham, 2014). Local solutions focused on these policy areas are more likely to contribute to a more moderate drinking culture and make an overall positive difference in our communities.

Drawing on a substantial evidence base and in consultation with experts, the recent Public Health Ontario Locally Driven Collaboration Project (LDCP) report Addressing Alcohol Consumption and Alcohol-Related Harms at the Local Level (Durham, 2014) makes recommendations for local-level actions related to seven policy areas. These policy areas were recommended by Thomas Babor et al. (2010) and were further organized into two tiers by Giesbrecht et al. (2011).

“

When we're able to provide people with those really strong foundations like education and well-paying jobs and a safe place to live and opportunity to participate in their community, those kinds of things really help.

– Key Informant

”

“

I think the legislation that we have in place in terms of our mainstream community — legislation around age of access, legislation around who can sell alcohol, where it can be sold, what hours it can be sold, pricing — all of those kinds of things reduce problems around alcohol so it's concerning to see the Ontario government looking at loosening some of the restrictions because they know that the more alcohol that's available, the higher the problem.

– Key Informant

”

“

...here we have the designated driver program, so we do not want people to obviously be drinking and driving. So we offer a free cab ride service home, so anyone who does not have a ride, especially with a designated driver, then we do offer the free cabs.

– Key Informant

”

Tier-one activities may appear at first glance to be beyond local control but local-level actions in these areas are possible and effective (CAMH, 2013).

TIER ONE – POPULATION-LEVEL INTERVENTIONS

1. Pricing and taxation controls

There is strong evidence to support pricing and taxation controls, though this is one of the least-advanced measures due to political and industry stances favouring increased alcohol sales.

2. Regulating physical availability

Research consistently shows a link between increased availability and increased harms.

3. Marketing and advertising restrictions

There is a positive relationship between exposure to alcohol advertising and future alcohol use in adolescents. Studies show that advertising influences the age of onset of drinking and leads to heavier drinking among those who already drink. Policies to restrict advertising, particularly to youth, are recommended in the literature.

TIER TWO – FOCUSED POLICIES AND INTERVENTIONS

4. Modifying the drinking environment

Modifying the drinking environment is an evidence-based policy that has been successful at the community level. Programs such as server training and safer bars are most effective when they are implemented as part of a comprehensive approach.

5. Drinking and driving countermeasures

Countermeasures to deter drinking and driving are well-supported in the literature.

6. Education and awareness-raising strategies

Education and awareness-raising remains a core activity of many prevention initiatives, however, research shows that on its own, education is not effective in reducing consumption and alcohol-related harms. There is evidence to support education to increase knowledge, challenge social norms, and support the other policy measures described here.

7. Screening, brief intervention and referral strategies

From a prevention perspective, there is strong evidence to support early intervention strategies, particularly screening and brief intervention, to reduce alcohol consumption and to reduce and/or prevent related harms.

“

I think if we're able to provide some real honest and practical education to youth, it would be extremely helpful in terms of trying to navigate some of the challenges that our youth face nowadays and providing some space and opportunity for them to look at what other opportunities or options they might have.

– Key Informant

”

A Public Health approach

Public health units in Ontario are mandated by the Ministry of Health and Long Term Care to address alcohol use as it relates to the prevention of injury and substance misuse, chronic disease prevention, and reproductive and child health. As mentioned earlier, Ontario's public health sector strategic plan identifies alcohol as a "collective area of focus" (OMHLTC, 2013b).

The role of public health in addressing alcohol issues can include the following:

- Increasing public awareness of the issue and monitoring trends
- Sharing evidence and best practices for the prevention of substance misuse
- Influencing the development and implementation of healthy policies
- Mobilizing and promoting access to community resources
- Training and capacity building to enhance best practices

IMPROVING OPPORTUNITIES FOR HEALTH

It is important to not only decrease risky drinking, which has become normalized in our society, but also to address the unequal distribution of alcohol harms. Comprehensiveness includes addressing the needs of those most at risk in our community including youth, women of reproductive age, and members of our community that are excluded and marginalized.

AREAS OF FOCUS

From a public health perspective, the following prevention-oriented areas of focus for the next three to five years were identified.

As starting points:

- Support community strategies that address social inequities, build healthy connected communities, and support the positive development of families and children.
- Continue awareness-raising and education on low-risk drinking, encourage a culture of moderation and build support for healthy policies related to alcohol.
- Assist local governments to implement alcohol policies and practices that limit alcohol availability beginning with municipal alcohol policies.
- Support law enforcement and municipalities to enforce existing laws and regulations around drinking and driving.

What we heard

Key informants: In sharing their thoughts on how best to move forward on community-based solutions, participants made frequent reference to existing strategies/coalitions, the need to engage people and decision-makers from the community, and the merit of collaboration in building healthy communities.

Further evidence-based actions to explore:

- Implement youth engagement strategies to empower youth to advocate against the alcohol industry and promote low-risk drinking.
- Explore opportunities and build capacity for implementation of screening and brief intervention in health practice settings.
- Work with local businesses and stakeholders to create safer drinking environments.
- Work with community stakeholders to build support against the further expansion of retail sales.
- Participate with stakeholders in active monitoring of shared community indicators around alcohol.

Taking collective action

Preventing and reducing alcohol-related harms at the local level are shared responsibilities. As partners in this enterprise public health is a key player, but cannot act alone. Collaboration among community stakeholders is vital. This report is a first step in finding common ground and shared goals for a community approach to alcohol.

In sharing their thoughts on how best to move forward on community-based solutions, community participants made frequent reference to existing strategies and coalitions, the need to engage people from the community, and the value of collaboration in building healthy communities.

One community initiative has already developed a set of shared goals for our city. Thunder Bay Counts (United Way, c2015) brought together community organizations and strategies, and developed the following goals:

- an inclusive, connected community
- a community free from the effects of poverty
- a sustainable, prosperous, vibrant community

These goals reflect agreement that taking action on the social determinants of health in Thunder Bay is essential to building a healthy community.

Also needed are evidence-based actions to reduce alcohol-related harms through local-level policies. Effective strategies are within reach but they need collaboration among various sectors to be successful. The alcohol policies recommended above as areas of focus over the next three to five years need further dialogue and engagement among community stakeholders to take root and grow.

Many organizations and strategies are acting locally and collaborating to make our city a better place. We invite stakeholders to play a role in shaping how we as a community take action to prevent and reduce alcohol-related harms. When we work together, good and lasting things happen.

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Data Sources

CANADIAN COMMUNITY HEALTH SURVEY – CCHS

The CCHS is a national cross-sectional survey conducted by Statistics Canada. The large sample size is considered representative, however, individuals who are homeless, residents of First Nations communities or other Aboriginal settlements, institutional residents, full-time members of the Canadian Armed Forces and residents of certain remote regions are excluded. CCHS data was used to report on and alcohol-related morbidity and mortality data for Thunder Bay District health region.

PUBLIC HEALTH (PHO) SNAPSHOTS

PHO Snapshots was used to provide statistical data on adult levels and patterns of alcohol use in TBHDU and Ontario. The PHO Snapshots reports referenced in this document were based on data from the Canadian Community Health Survey.

ONTARIO STUDENT DRUG USE AND HEALTH SURVEY – OSDUHS

The OSDUHS is a population survey of Ontario students in grades 7–12. The OSDUHS began in 1977 and is the longest-running school survey in Canada. The survey is conducted every two years across the province as an anonymous, self-administered survey. The OSDUHS was used to report on levels and patterns of alcohol use and risk behaviour among students in grades 7–12 in Northern Ontario.

CANADIAN STUDENT HEALTH DATA 2013

The ACHA-National College Health Assessment II (ACHA-NCHA II) is a national research survey organized by the American College Health Association (ACHA) to assist college health service providers, health educators, counsellors and administrators in collecting data about their students' habits, behaviours and perceptions on the most prevalent health topics. More than 30,000 students, from over 30 Canadian postsecondary institutions, responded to the National College Health Assessment (NCHA) 2013 survey. Results presented in this report are from the Ontario Province Reference Group Data Report.

THE CENTRE FOR ADDICTION AND MENTAL HEALTH (CAMH) MONITOR

First conducted in 1977, the CAMH Monitor is the longest ongoing addiction and mental health survey of 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 and mental health among Ontarians. The survey is conducted on behalf of CAMH by the Institute for Social Research at York University. About 3,000 Ontario adults are interviewed each year using random digit dialling. The sample is considered representative of most Ontarians aged 18 years and older (about ten million Ontarians).

DRUG AND ALCOHOL TREATMENT INFORMATION SYSTEM DATIS

The database stores client-level records on substance abuse and problem gambling services that are funded by the MoHLTC and that are provided by over 160 agencies across the province of Ontario.

INTELLIHEALTH

IntelliHealth is a knowledge repository that contains clinical and administrative data collected from various sectors of the Ontario health care system. Some of the kinds of data that can be accessed through IntelliHealth include data related to hospital services, community care, medical services, vital statistics and population data. The following data were used in this research:

- Vital statistics (deaths) from the Office of the Ontario Registrar General and Statistics Canada which includes non-Ontario residents who died in Ontario
- Inpatient Discharge Database from the Discharge Abstract Database (DAD) which contains demographic, administrative and clinical data for all acute care discharges in Ontario
- Inpatient Mental Health Database from the Ontario Mental Health Reporting System (OMHRS) which contains demographic, administrative and clinical data for all adults admitted to designated inpatient mental beds in Ontario

*Hospitalization data and vital statistics data from IntelliHEALTH databases were used in conjunction with alcohol attributable fractions (AAFs) to derive the estimates referenced in Tables 5, 6, 7, 8 and Figures 1 and 2 of this report. To calculate the AAFs for chronic diseases and injuries, sex-specific relative risks for 4 levels of alcohol consumption (abstainer, level I, level II, level III) were used as defined in the literature by Rehm et al., (2006a), Rehm et al., (2004), Rehm et al., (2006b) and Gutjahr et al., (2001). In addition, prevalence of alcohol consumption for each of the 4 levels used in the AAF calculations was established using Canadian Community Health Survey (CCHS) data for the Thunder Bay District Health Unit from the years 2009-2013 for morbidity calculations and 2007-2011 for mortality calculations. Please note that for level III alcohol consumption, the Ontario prevalence was used as the Thunder Bay District Health Unit specific estimate was not fit for Statistics Canada release guidelines (CV>33.3).

“LET’S START” COMMUNITY CONSULTATION QUALITATIVE RESEARCH PROJECT

The “Let’s Start” community consultation was launched by the Thunder Bay District Health Unit in 2014 as a way of gathering local perspectives on the topic of alcohol to inform a community report. The community consultation consisted of:

Citizen Voice Drop-Ins & Community Forum

During November and December 2015, six consultation events were held in Thunder Bay and Geraldton at public venues including shopping malls and recreation facilities, attracting 150 participants who shared their thoughts on alcohol. Much of the feedback was gathered through a short paper survey. In addition, one community forum was on November 19, 2015 in Thunder Bay.

Key Informant Interviews

In the spring of 2015 interviews were conducted with 20 key informants from various sectors and agencies on the topic of alcohol. Key informants were represented from both the City of Thunder Bay and the District. All interviews were recorded and transcribed.

Qualitative data from the Citizen Voice events, Community Forum and key informant interviews were analyzed separately by two analysts at different points in time. The analysts met to discuss similarities and differences in their codes and together identified common themes across all units of analysis. Methods and results of the qualitative research project available as a separate document from the Thunder Bay District Health Unit.

RECOMMENDATIONS FOR LOCAL-LEVEL ACTION

The following evidence-based actions to reduce alcohol-related harms are recommended by the recent Locally Driven Collaborative Project (LDCP) on alcohol.

POLICY AREA	RECOMMENDATIONS	CONSIDER THE FOLLOWING
Pricing and Taxation	1. Work with community partners to support the creation and advancement of a local stakeholder group to educate the public and policy makers.	<input type="checkbox"/> Assess how decreasing alcohol-related harms fit into stakeholders' agenda. <input type="checkbox"/> Define common goals among stakeholders <input type="checkbox"/> Utilize existing evidence and examples to support evidence-based pricing policies
	2. Work with local municipalities to identify and implement local pricing strategies. ^{*17, 27, 28, 29, 33}	<input type="checkbox"/> Risk mitigation, through municipal alcohol policies may be appealing to local leaders <input type="checkbox"/> Minimizing local pricing wars and the discounting of alcohol by addressing alcohol density
Physical Availability	3. Work with community stakeholders to continue to build support against the further expansion of alcohol sales. ^{*16a, 19, 20, 27}	<input type="checkbox"/> Assess the potential threats of increasing availability of alcohol through: <ul style="list-style-type: none"> • The potential privatization or semi-privatization of the LCBO • Increase in privately-owned channels of alcohol access (e.g. farmers markets and convenience stores) • Increase in retail outlets that offer alcohol at prices which do not meet minimum pricing (e.g., ferment-on-premise businesses)
	4. Continue to influence policy development around outlet density and hours of alcohol sale at the provincial and/or local level. ^{*16c, 18, 27, 33}	<input type="checkbox"/> Participate in active public health surveillance of outlet density and associated harms <input type="checkbox"/> Gather and present evidence on the need to set outlet density limits <input type="checkbox"/> Assist municipalities to develop, implement and evaluate municipal alcohol policies and other strategies to address alcohol availability
Marketing and Advertising	5. Implement youth engagement strategies to empower youth to advocate against alcohol marketing and advertising. ^{*5, 31}	<input type="checkbox"/> Partner with schools and/or community youth serving organizations <input type="checkbox"/> Consider using the 'healthy schools model' with schools
	6. Continue to explore effective counter-marketing approaches to alcohol advertising and marketing.	<input type="checkbox"/> Work with other Ontario public health units and community stakeholders to identify a coordinated approach to countering alcohol marketing <input type="checkbox"/> Utilize social media and other communication channels that appeal to youth
Modifying the Drinking Environment	7. Create an alcohol report about your community to show alcohol consumption, availability and alcohol-related harms at the local level. ^{*18, 33}	<input type="checkbox"/> Participate in active public health surveillance of local outlet density, alcohol consumption and alcohol-related harms <input type="checkbox"/> Collaborate with community stakeholders to frame alcohol as a community issue not just a health issue
	8. Work with local businesses and stakeholders to modify the drinking environment. ^{*6, 16b, 21, 22, 23, 25, 33, 24, 35, 36}	<input type="checkbox"/> Encourage local bars to implement a licensed establishment alcohol policy <input type="checkbox"/> Encourage local municipalities and law enforcement authorities to continue to enforce liquor laws and regulations <input type="checkbox"/> Advocate for safer drinking environments and communities
Drinking and Driving Countermeasures	9. Work with law enforcement and community stakeholders to incorporate local surveillance data on alcohol-related harms into a community report, including local drinking and driving statistics.	<input type="checkbox"/> Identify and target high-risk areas within your community
	10. Support municipalities and law enforcement to continue to enforce existing laws and regulations around drinking and driving. ^{*37}	
Education and Awareness-Raising Initiatives	11. Implement education and awareness raising strategies as a part of a balanced and comprehensive approach. ^{*5, 6, 12, 14c, 32, 35}	<input type="checkbox"/> Focus education and awareness strategies on influencing attitudes and increasing knowledge in the target population <input type="checkbox"/> Move current and future education and awareness initiatives towards a more comprehensive approach <input type="checkbox"/> Continue to use education and awareness-raising strategies as one important step in the policy road map
Treatment and Early Intervention	12. Build the capacity of health care professionals to implement early intervention and screening into their practice. ^{*7, 11, 12, 13}	<input type="checkbox"/> Share evidence and information about early intervention strategies with local health care professionals <input type="checkbox"/> Explore the development and use of practice standards or guidelines for early intervention with professional practice organizations
	13. Implement early intervention strategies as a part of an overall strategy to reduce alcohol-related harms. ^{*7, 13}	<input type="checkbox"/> Use online self-screening tools on public health unit websites to provide normative feedback <input type="checkbox"/> Include alcohol screening and brief intervention in public health direct-client service programs

*Refers to the alignment with specific recommendations within the National Alcohol Strategy Working Groups, Reducing Alcohol-Related Harm in Canada: Toward a Culture of Moderation – Recommendations for a National Alcohol Strategy (National Alcohol Strategy Working Group, 2007). Please note that this has been provided as a suggestion and other may find that the recommendations align differently.

Source:

Locally Driven Collaborative Project (draft February 2014, revised August 2014)
 Addressing Alcohol Consumption and Alcohol-Related Harms at the Local Level
 (Durham, 2014). Available at [http://www.oninjuryresources.ca/downloads/workgroups/ldcpalcohol/LDCP_report_PRINT_FINAL2_\(2\).pdf](http://www.oninjuryresources.ca/downloads/workgroups/ldcpalcohol/LDCP_report_PRINT_FINAL2_(2).pdf)

Glossary

ALCOHOL OUTLETS – physical locations where alcohol is sold either for consumption on-site (on-premise) or somewhere else (off-premise).

ALCOHOL POLICIES – purposeful efforts or decisions to reduce and/or prevent alcohol-related harm (Babor et al., 2010).

ALCOHOL USE DISORDERS IDENTIFICATION TEST (AUDIT) – a screening tool developed by the World Health Organization and used to identify problem drinking in an individual. A score of 8 out of 10 indicates problem (hazardous/harmful) drinking while a score of 13 or more indicates alcohol dependence.

BINGE DRINKING – see “risky drinking” – 5+ drinks for men and 4+ drinks for women on one occasion (one occasion is usually described as 2-3 hours).

HEAVY DRINKING – regular binge drinking (at least 1x/month in the past year).

IN-RISK DRINKING – any drinking in excess of the daily, weekly or special-occasion limits set by the Low Risk Alcohol Drinking Guidelines.

LGBTQ – referring to identities in the queer community, this acronym varies and can be inclusive of “Lesbian, Gay, Bisexual, Transgender, Transsexual, Two-Spirited, Queer and Questioning.” A related term, “trans,*” also functions as an umbrella term referring to all identities within the gender identity spectrum.

NON-PALATABLE ALCOHOL – also called “non-beverage alcohol,” refers to products containing ethanol that are not meant to be consumed such as certain cleansers and personal products.

PRIORITY POPULATIONS/VULNERABLE POPULATIONS – people who face significant barriers to health. People who have fewer opportunities to be healthy (SDHU, c2015).

R.I.D.E. – Reduce Impaired Driving Everywhere or RIDE is a sobriety testing program used by police in Ontario, Canada.

RISKY DRINKING – drinking that is in excess of the Low Risk Alcohol Drinking Guidelines (LRADG) special occasion limits: (5 or more drinks for men and 4 or more drinks for women on one occasion). This has also been called “binge drinking” or “single-occasion heavy drinking” in the literature.

SOCIAL DETERMINANTS OF HEALTH – The living conditions – income, education, jobs, housing, social supports, social inclusion – that shape our opportunities to be healthy (SDHU, c2015).

