

*Current
State of
Alcohol Use*
in York Region

2016

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Prepared by: Public Health Branch
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Date: November 2016

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Alcohol misuse and related harms

Alcohol is a psychoactive substance with dependence-producing properties that has been widely used in many cultures for centuries. It is the most common drug used by Canadians.¹ People drink alcohol for different reasons. Alcohol exposure through friends, families, entertainment and advertising can influence people’s motives for drinking. For many Canadians, drinking alcohol is associated with many positive situations. These can include enjoyment and relaxation, important celebrations, and forming friendships.⁶

For healthy adults, *Canada's Low-Risk Alcohol Drinking Guidelines* recommend no more than 10 drinks per week for women (with no more than two drinks a day, most days), and no more than 15 drinks a week for men (with no more than three drinks a day, most days) (Figure 1).³ The guidelines also advise lower amounts or abstinence for certain populations including pregnant women and youth.³

Figure 1 *Canada's Low-Risk Alcohol Drinking Guidelines*



Source: Canadian Centre on Substance Abuse³

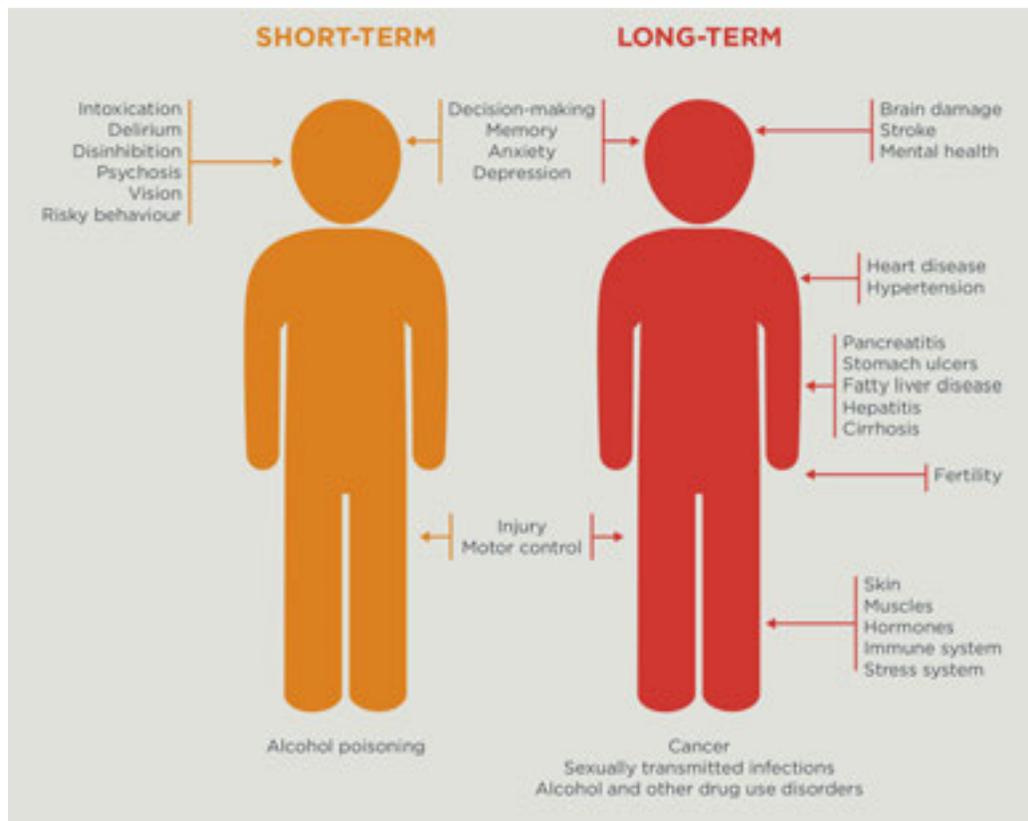
“Alcohol consumption is a complex public health issue that can have a wide range of health impacts.”⁶
(pg. 4) Canadians often hear mixed messages about alcohol’s harms and potential benefits. Alcohol, especially wine, has been marketed from the perspective of having perceived health benefits if consumed in moderation;⁴ however, emerging evidence has placed a cautionary note on previous studies that indicated low levels of alcohol consumption help protect against heart disease. There are other healthier behaviours that can be adopted to achieve any reported health benefits of low-to-moderate alcohol consumption, such as physical activity and eating a healthy diet that includes fruits and vegetables.⁶ It is now recommended that health professionals discourage any suggestions that low-level alcohol use has any medical benefits.^{5,6}

It is common for alcohol misuse to be viewed as an individual choice; however, certain individual characteristics may influence the potential for alcohol misuse either by increasing a person’s tendency to misuse alcohol (risk factors) or reducing the tendency (protective factors). These risk and protective factors are often present in childhood and can impact children and adults in a variety of ways. Some risk factors for alcohol misuse include a genetic, biological or psychological predisposition, as well as external psychosocial factors. These psychosocial factors include community attitudes, attitudes of peers, social groups or family situation, poor coping skills and lack of available supports and resources.⁷ Some reasons for alcohol misuse are impacted by other social determinants of health, including income, education, employment and early childhood development. There are many influences shaped by government, business and community actions that have an impact on individual choice.

Alcohol can have a wide range of health impacts. Many factors contribute to the effects of alcohol, including age of consumption, how much and how often alcohol is consumed, a consumer’s underlying state of health and what activity is occurring while drinking, such as driving a car.⁶

The majority of people who drink alcohol do so without causing harm to themselves or others, but alcohol consumption is responsible for several harms including potential short and long-term health impacts⁸ (Figure 2).

Figure 2 Potential short and long-term health impacts of alcohol consumption



Source: Public Health Agency of Canada, 2016⁶

Potential for harm(s) may be increased by:

- Impaired judgement and decision-making abilities⁷
- Engaging in risky behaviours such as impaired driving or unprotected sexual encounters⁷
- Using alcohol while underage or pregnant (leading to Fetal Alcohol Spectrum Disorder)⁷
- Drinking in excess of *Canada's Low-Risk Alcohol Drinking Guidelines*⁹
- Heavy consumption or binge drinking¹⁰
- Alcohol dependence¹⁰
- Stigma associated with alcohol misuse¹¹

Alcohol use is a causal factor in at least 60 types of diseases, intentional and unintentional injuries, and a contributing factor in 200 others.¹² This can result in significant short and long-term mental, emotional and physical health effects.⁷

Alcohol is considered to be carcinogenic and is strongly associated with an increased risk for certain types of cancer. These cancers include colorectal cancer, breast cancer, some cancers of the central

nervous system, and cancers of the larynx, pharynx, esophagus and liver.^{6,12,13,14} Recent research shows that one drink a day may increase the risk for breast cancer in women.^{6,15,16} Every additional drink per day may further increase the risk for breast cancer, as does the number of years a woman has consumed alcohol.^{6,15,16}

Specific harms associated with alcohol use have also been identified for pregnant women, children and youth.

Pregnant women

Given that no amount of alcohol is known to be safe during pregnancy, the best option for women who are thinking about becoming pregnant or who are pregnant is to avoid consuming alcohol.¹⁸ Alcohol misuse is a significant concern for fetal development during pregnancy. A woman who drinks alcohol during pregnancy exposes the fetus to alcohol directly through her bloodstream. Alcohol can interfere with the growth and development of all fetal body systems. The developing central nervous system is especially vulnerable to the damaging effects of alcohol.¹⁷

Alcohol consumption is also a concern in the postpartum period because any substance consumed by the mother can be transferred to the baby through breastfeeding. After childbirth there may be a potential for postpartum depression which can make women more vulnerable to substance misuse.⁷

Children and youth

Any substance use can negatively impact the developing brain in children and youth. Underage drinking is a major health concern. Adolescence is a time of rapid change and development. It is also the period during which most individuals first use alcohol and other substances. Earlier age of initiation of alcohol consumption in youth can interfere with the physical and cognitive/mental development of youth and increase the possibility of alcohol dependence.⁸ Many of the factors that influence alcohol use disorders have roots in childhood and adolescence. Studies also indicate that earlier age of onset of drinking alcohol is a strong indicator for heavy consumption in young adulthood.¹⁹

Alcohol consumption in youth can lead to a greater likelihood of harm due to risk-taking behaviour and lack of experience with drinking. Young people, consistent with their developmental capabilities, are particularly vulnerable as they may be unable to gauge the potential for negative outcomes from things that might seem exciting or likely to increase their profile with friends. Despite having plenty of information available about what is safe or unsafe, young people may still engage in high levels of risk taking. Kids Helpline identifies drug and alcohol use as one of the main risk-taking behaviours made

by youth.²⁰ Youth are more likely to engage in risky substance use and experience more harms compared to adults.²¹

In addition to individual harms, alcohol misuse may result in family and community issues through second-hand effects such as violence, crime and impaired driving,⁸ as well as significant economic burden through direct impact on health care, law enforcement and social services, and indirect impact on productivity as a result of premature death and ill health.²² Ontario experiences a net loss of more than \$456 million each year in direct costs related to health care and enforcement due to alcohol misuse.²³

York Region trends in alcohol use and related harms and outcomes

Adult population

Alcohol use and risky behaviours

In 2013-14, 74 per cent (± 4) of York Region adults ages 19 and over reported drinking alcohol in the past 12 months. Past year alcohol use has been stable in York Region since 2007 (Figure 3a).

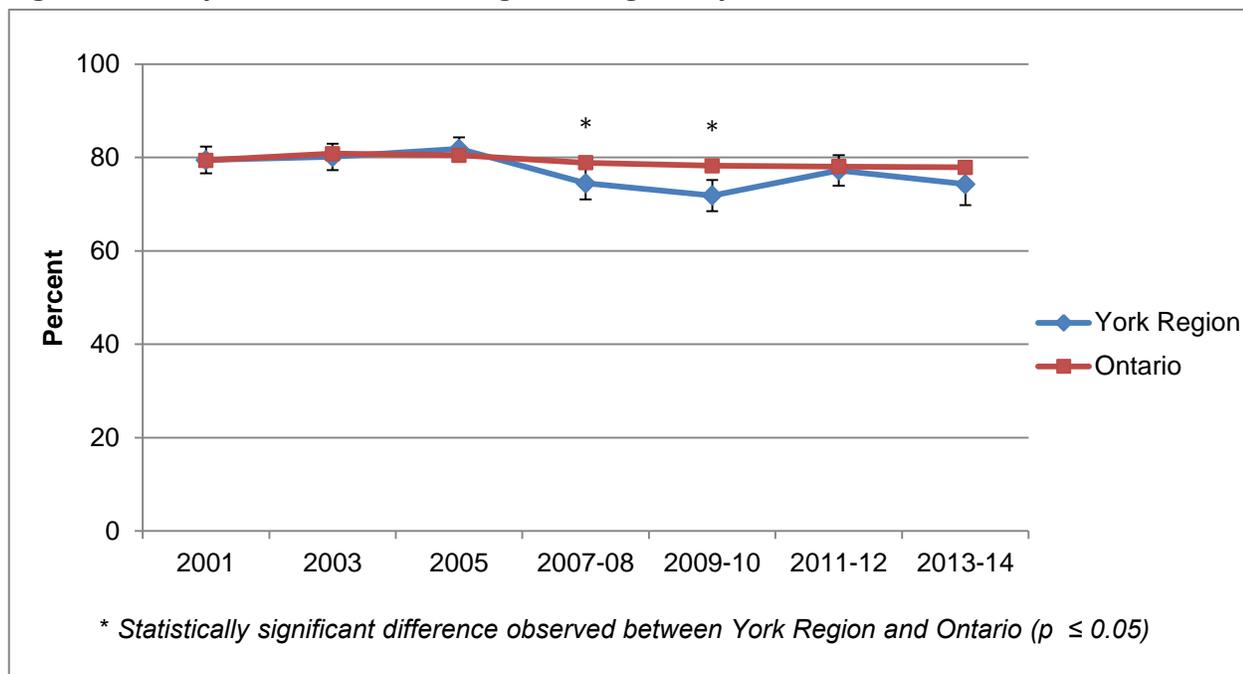
Among adults of legal drinking age in York Region:

- 57 per cent (± 5) were regular drinkers (drinking more than once per month)
- 17 per cent (± 3) were occasional drinkers (drinking less than once per month) (Figure 3b)

Alcohol consumption types were similar between York Region and Ontario.

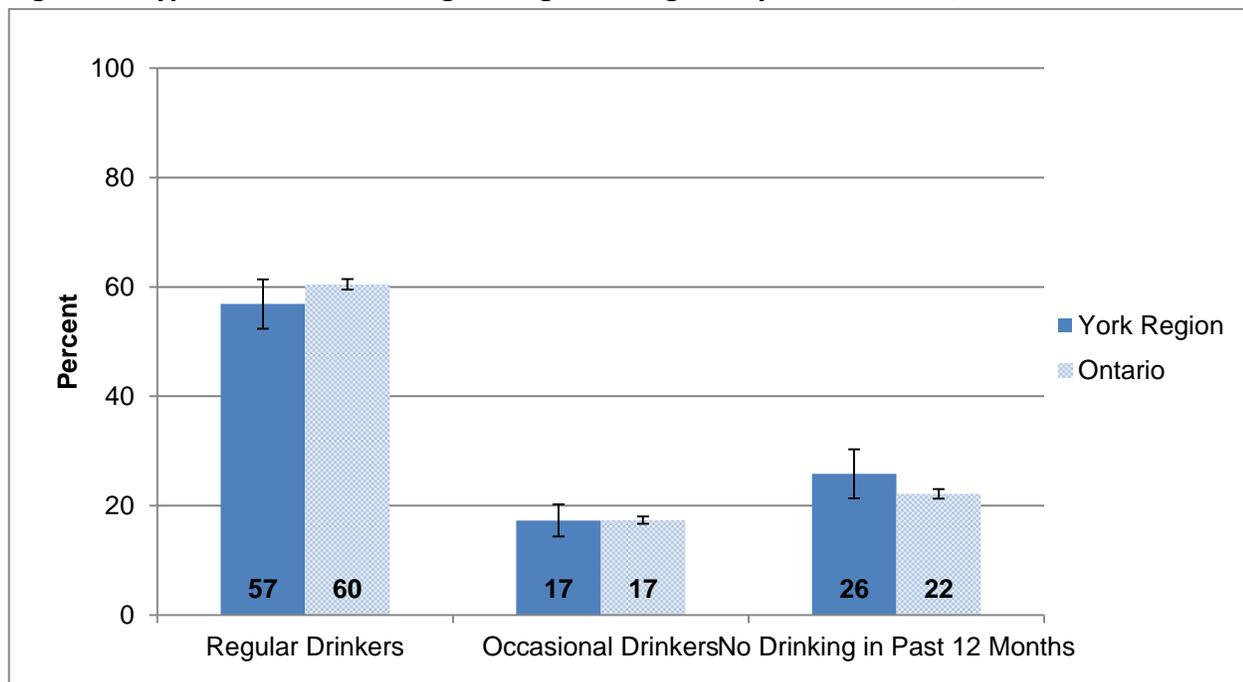
Daily drinking is a pattern which may pave the way for future problems including abuse or dependence. *Canada's Low-Risk Alcohol Drinking Guidelines* recommend individuals plan non-drinking days each week to avoid developing a habit.²⁴ Among adults of legal drinking age, six per cent (± 2) reported drinking alcohol every day.

Figure 3a Past year alcohol use among adults ages 19 years and over, 2001 to 2014



Data Source: Canadian Community Health Survey, 2001-2014, Statistics Canada, Ontario Share File, Ontario Ministry of Health and Long-Term Care.

Figure 3b Type of alcohol drinking among adults ages 19 years and over, 2013 to 2014



Data Source: Canadian Community Health Survey, 2013-2014, Statistics Canada, Ontario Share File, Ontario Ministry of Health and Long-Term Care.

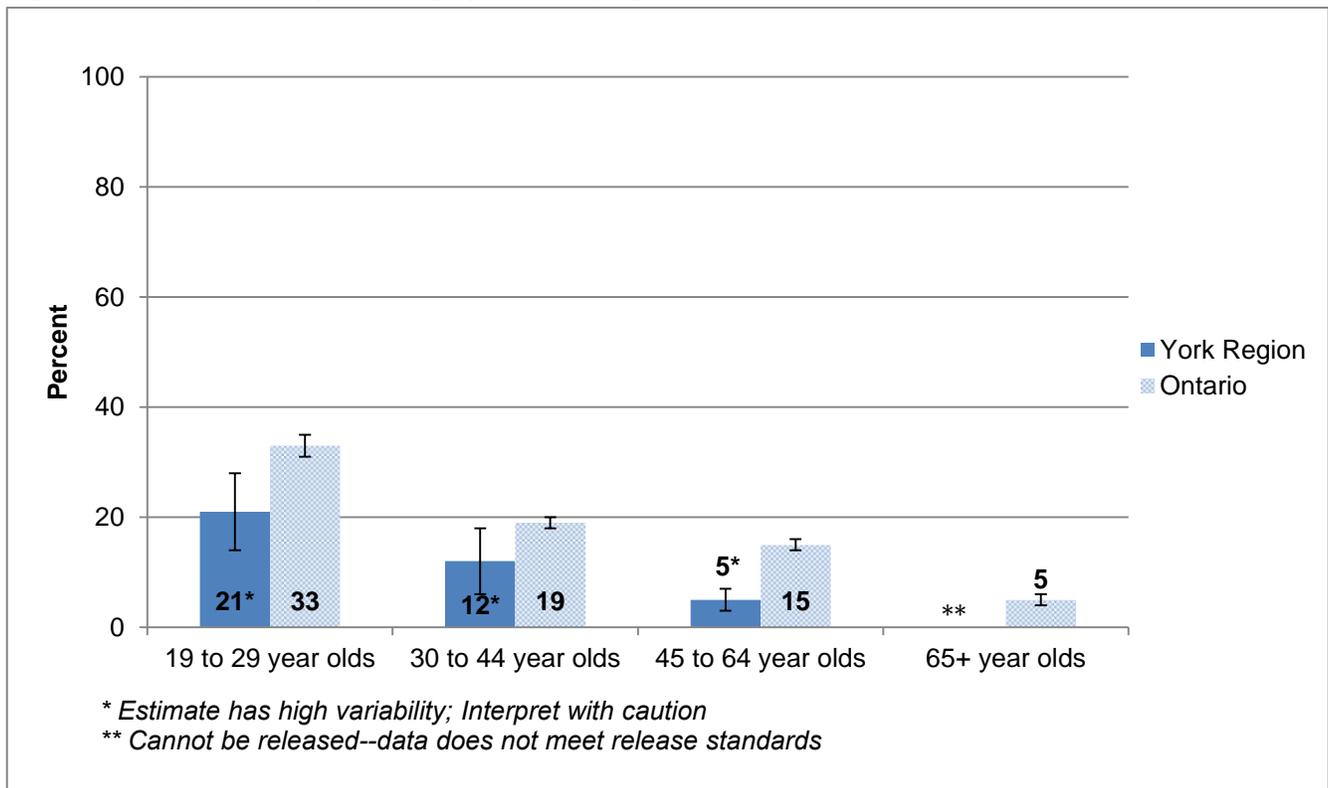
Approximately one-in-five (19 per cent, ± 3) York Region adults drank alcohol in excess of *Canada's Low-Risk Alcohol Drinking Guidelines* in 2013 to 2014. York Region adults were less likely to exceed the guidelines than their Ontario counterparts (27 per cent, ± 1).

Drinking in excess of the guidelines varied by sex but was similar by age. Men were more likely to exceed the guidelines than women (26 per cent, ± 6 vs. 13 per cent, ± 4). York Region adults were equally likely to exceed the guidelines regardless of their age group.

If all Canadian drinkers drank alcohol within the proposed guidelines, it is estimated that alcohol-related deaths would be reduced by approximately 4,600 per year.⁹

Episodes of heavy drinking increase the risk of alcohol-related harms over the short-term, such as overdose and injuries, and long-term, such as alcohol dependency and chronic diseases.²⁵ For men, a heavy drinking episode is defined as five or more drinks on one occasion, and for women it is defined as four or more drinks on one occasion. One-in-10 (10 per cent, ± 2) York Region adults in 2013 to 2014 reported that they had had at least one heavy drinking episode each month during the past year. This was significantly lower than the prevalence of heavy drinking for Ontario overall (18 per cent, ± 1). The prevalence of heavy drinking was highest among younger adults between the ages of 19 to 29 (Figure 4).

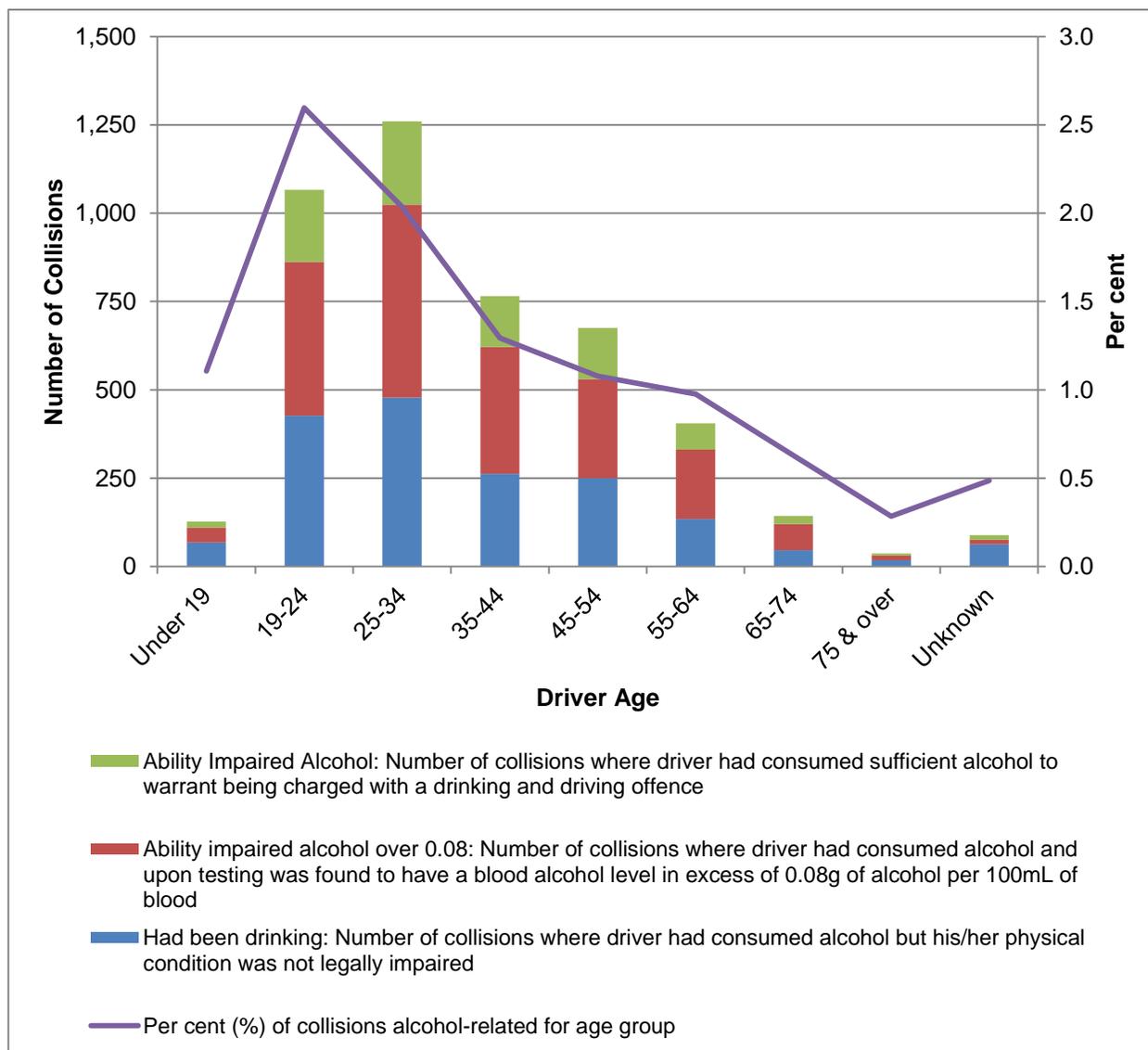
Figure 4 Past year heavy drinking episodes by age, 2013 to 2014



Data Source: Canadian Community Health Survey, 2013-2014, Statistics Canada, Ontario Share File, Ontario Ministry of Health and Long-Term Care

In 2013 to 2014, four per cent (± 1) of Ontario drivers ages 19 and over reported driving after two or more drinks in the hour before they drove during the past year.²⁶ Based on the Ontario collision data from 2013, the percentage of alcohol-related collisions in Ontario was highest among 19 to 24-year-old drivers (Figure 5). There were 110 drinking and driving fatalities in the province—a reduction of 23 per cent from 2012 when there were 143 fatalities. Ontario’s drinking and driving fatality rate was 0.11 per 10,000 licensed drivers, the lowest in North America.²⁷ While both the number of drinking and driving fatalities and the fatality rate per 10,000 licensed drivers have been declining over time, impaired driving continues to be a concern because of the burden of injury. Out of all collisions, alcohol-related collisions in York Region represented 1.8 per cent in 2012, 1.6 per cent in 2013 and 1.9 per cent in 2014²⁸. In Ontario, alcohol-related collisions represented 1.7 per cent in 2012⁴⁴ and 1.4 per cent in 2013²⁷.

Figure 5 Ontario collisions by driver age and condition, 2013



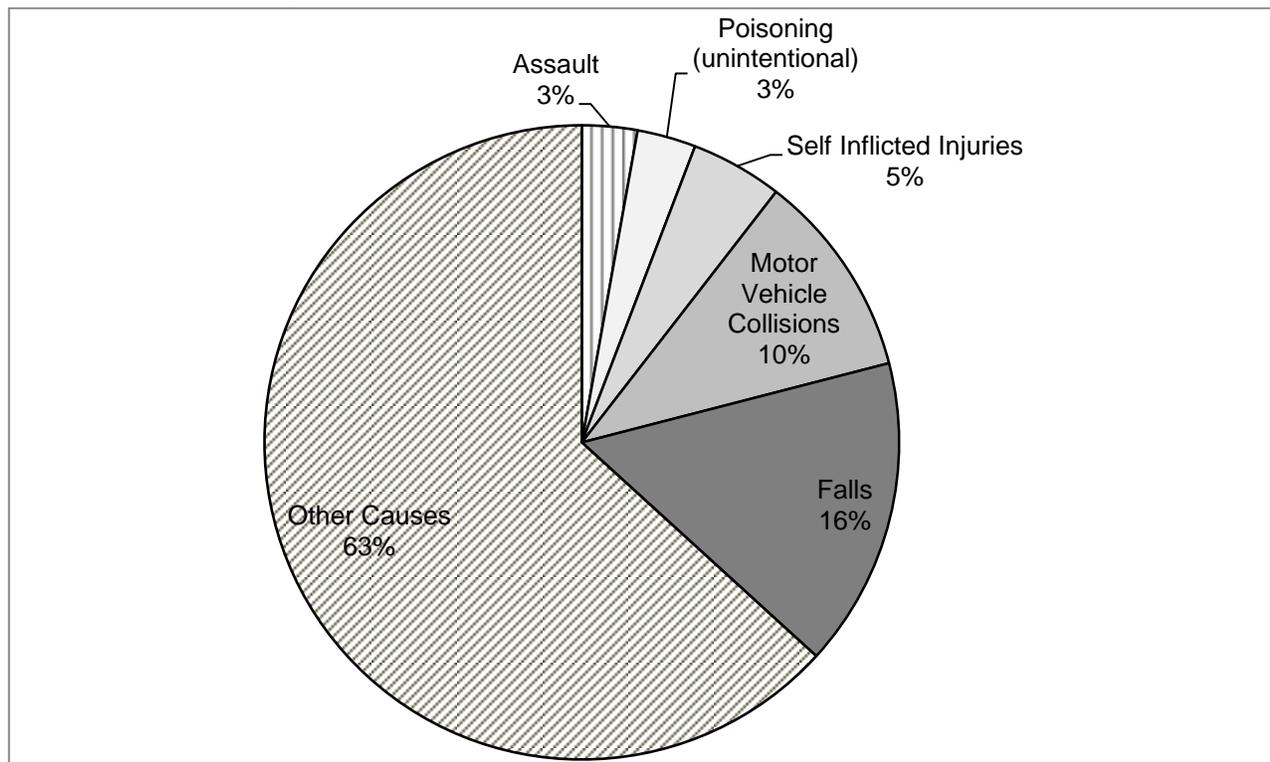
Data source: Ministry of Transportation, 2014²⁷

Alcohol-related health outcomes

A significant proportion of the disease burden attributable to alcohol consumption arises from unintentional and intentional injuries, including those due to road traffic collisions, violence and suicides. Fatal alcohol-related injuries tend to occur in relatively younger age groups. Injury-related death is also a serious alcohol-related societal burden.^{1,6}

In 2014, there were an estimated 288 injury hospitalizations attributable to alcohol consumption among York Region residents between the ages of 15 and 69. Of these hospitalizations, 16 per cent were due to falls and 10 per cent were due to motor vehicle collisions (Figure 6).

Figure 6 Estimated hospitalizations, by external injury cause, attributable to alcohol consumption, ages 15-69 in York Region, 2014

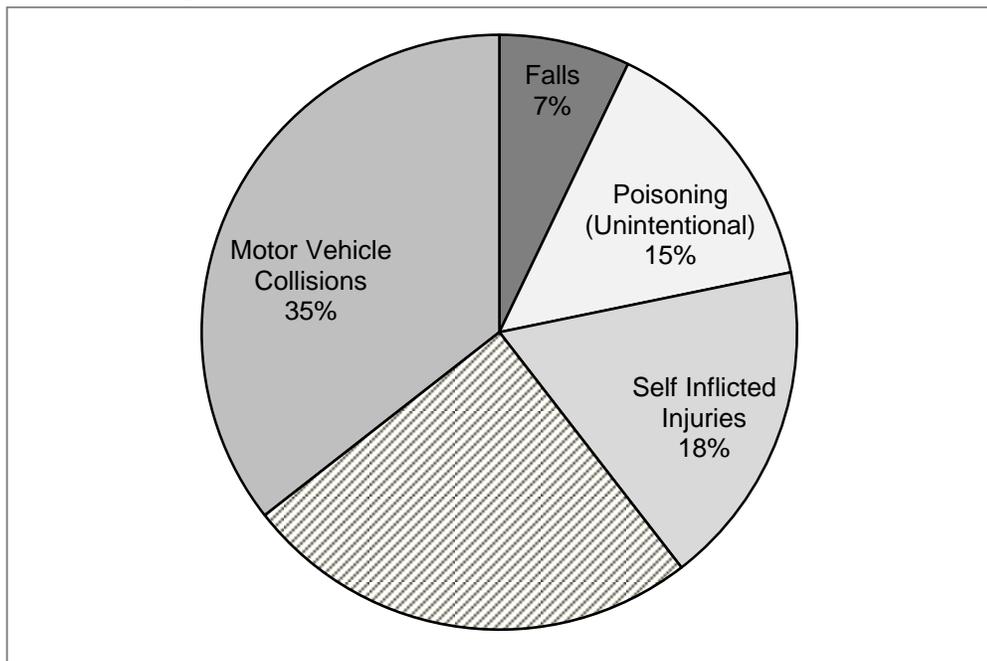


Data source: Hospitalization Data [2014], Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: March 2015

Approximately two-thirds (63 per cent) of the hospitalizations attributable to alcohol consumption were categorized as 'other causes' which include, but are not limited to fires, injuries sustained from sports, interactions with medications (such as pain killers and antibiotics) and transport collisions, including the use of all-terrain vehicles.⁴⁰

Based on the most current mortality data, an estimated 35 injury deaths attributable to alcohol consumption occurred in 2011 among 15 to 69-year-olds in York Region. Of these deaths, 35 per cent were due to motor vehicle collisions while 18 per cent were due to self-inflicted injuries (Figure 7).

Figure 7 Estimated deaths, by external injury cause, attributable to alcohol consumption, ages 15 to 69 in York Region, 2011



Data source: Mortality Data [2011], Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: March 2015

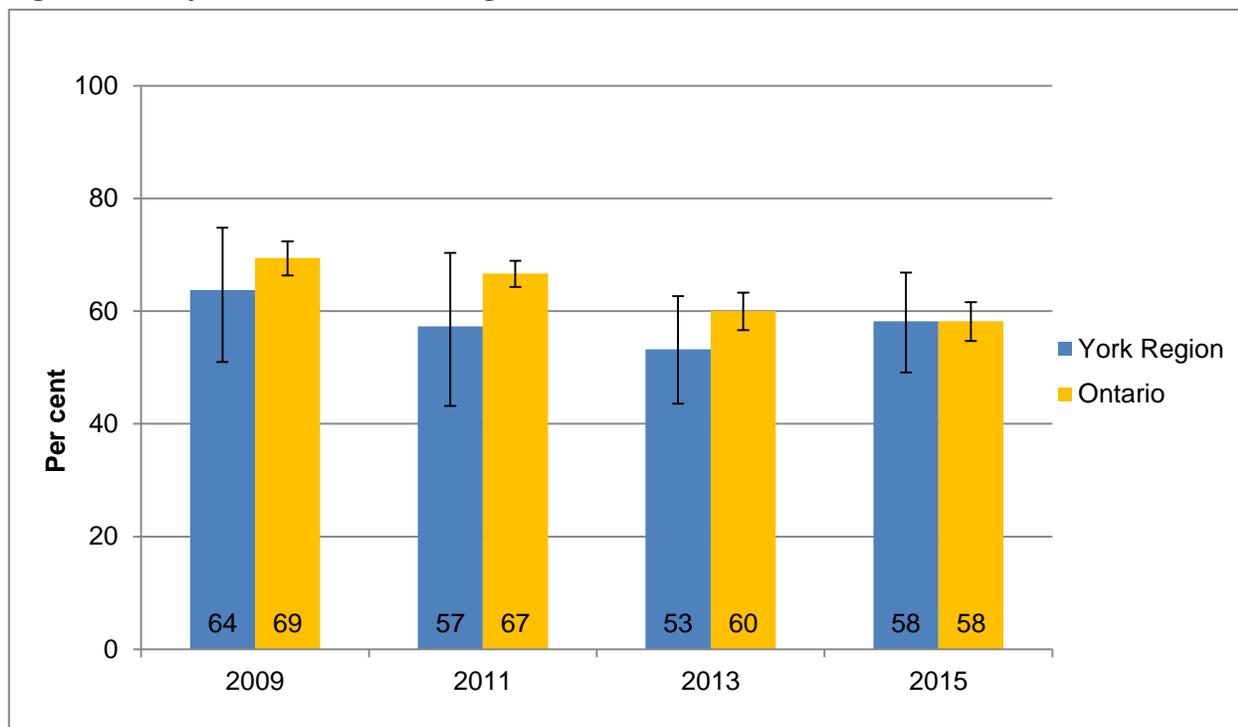
Youth population

Alcohol use and risky behaviours

In 2015, 58 per cent (± 9) of secondary students in York Region (Grades 9 to 12) reported drinking alcohol in the past 12 months (Figure 8). Past year alcohol use increased by grade, with 35 per cent (± 10) of Grade 9 students reporting past year use and 75 per cent (± 14) of Grade 12 students reporting past year use in 2015. Males and females were equally likely to drink.

One quarter (26 per cent, ± 5) of secondary students in York Region reported consuming their first alcoholic drink in Grade 8 or before.

Figure 8 Past year alcohol use among students, Grades 9 to 12, 2009 to 2015



Source: Ontario Student Drug Use and Health Survey [2009, 2011, 2013, 2015], Centre for Addiction and Mental Health

Among York Region secondary students (Grades 9 to 12), in 2015:

- 19 per cent (± 7) reported binge drinking in the past month (defined as five or more drinks on one occasion)
- 17 per cent (± 8) reported getting drunk in the past month
- 17 per cent (± 7) reported drinking hazardous or harmfully in the past year (as measured by the Alcohol Use Disorders Identification Test [AUDIT], screener)
- 18 per cent (± 7) had one or more incidents in the past year where they could not remember their activities the night before because they had been drinking²⁹

Males and females were equally likely to binge drink, get drunk and drink to hazardous or harmful levels. In 2015, approximately one-third (32 per cent, ± 11) of Grade 12 students in York Region reported binge drinking at least once in the past month.

Since 1999, there have been significant decreases in past year alcohol use and binge drinking among students in Ontario (Figure 9).²⁹ Since 2009, when data was first collected for York Region, past year alcohol use and binge drinking have been similar to provincial estimates.

Figure 9a Past year alcohol use among Ontario students, Grades 7 to 12, 1999 to 2015

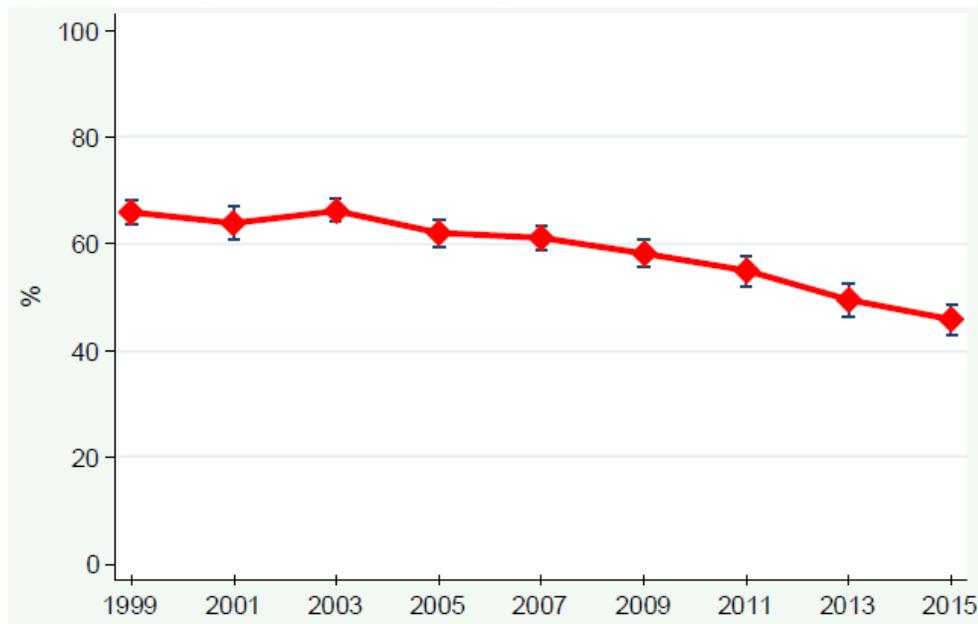
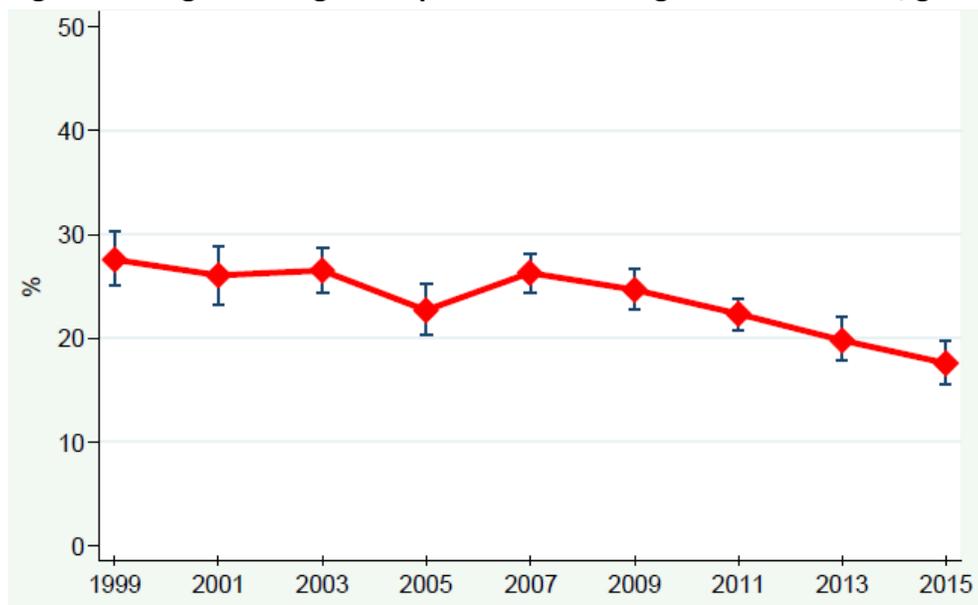


Figure 9b Binge drinking in the past month among Ontario students, grades 7 to 12, 1999 to 2015



Source: Centre for Addiction and Mental Health, 2015²⁹

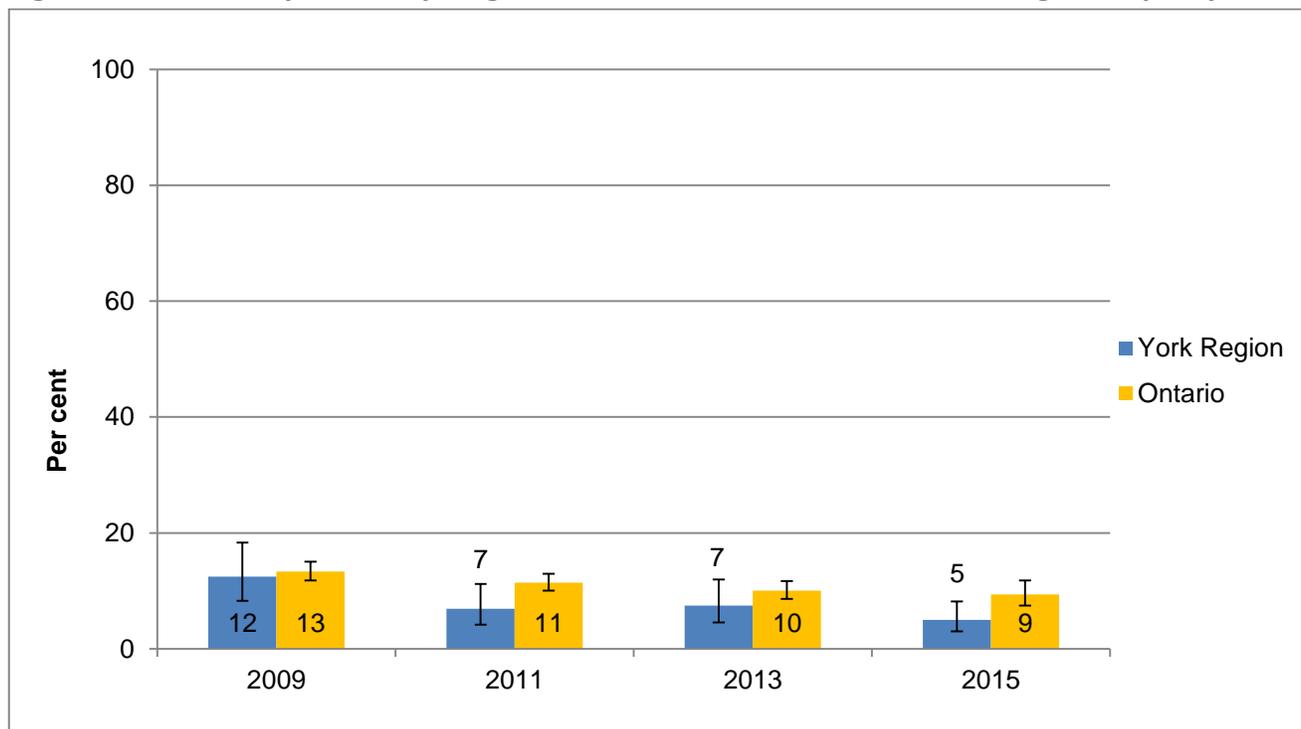
In 2015, five per cent (± 2) of Ontario Grade 10 to 12 students with a G-class driver's license reported driving a vehicle within an hour of consuming two or more drinks of alcohol at least once during the

past year.²⁹ Information on Grade 12 students in York Region who may drink and drive a vehicle cannot be released due to a very high amount of variation around the percentage; however, information on York Region secondary students as passengers in vehicles is available. Approximately one-in-six York Region secondary students (17 per cent, ± 3) reported riding in a vehicle in the past year that was driven by someone who had been drinking alcohol. This behaviour has significantly decreased from 2009 when 31 per cent (± 10) reported riding in a vehicle with someone who had been drinking alcohol in the past year. These trends regarding riding in a vehicle with someone who had been drinking are the same in both York Region and Ontario.

Alcohol-related health outcomes

In 2015, five per cent (± 3) of York Region secondary students reported being injured or injuring someone else as a result of their drinking in the past year (Figure 10).

Figure 10 Students injured or injuring someone else as a result of their drinking in the past year



Source: Ontario Student Drug Use and Health Survey [2009, 2011, 2013, 2015], Centre for Addiction and Mental Health

Best strategies to control alcohol-related harms

The prevention of substance misuse has been a focus for public health units for several years. Successful actions to reduce the harm associated with alcohol should reflect a full range of strategies, such as:

- Health promotion
- Prevention
- Treatment
- Enforcement
- Harm reduction

Reducing the harm associated with alcohol creates safer and healthier communities.³⁰

Harm reduction philosophy involves meeting people where they are along the continuum of substance use. This philosophy includes pragmatic and compassionate approaches for reducing harms associated with high-risk behaviours and improving quality of life. Some people will continue to engage in high-risk behaviours even as they experience associated harms. All people need to be respected and health care must be inclusive of all individuals.

Harm reduction refers to policies, programs and best practices that aim to reduce adverse health, social and economic consequences of the use of legal and illegal psychoactive drugs, including alcohol. A harm reduction approach benefits people who use drugs, their families and the community.³¹ Harm reduction for alcohol use involves helping individuals reduce alcohol intake and related harms. Brief intervention treatments from trained health care providers is proven to be effective in reducing alcohol consumption and harms associated with alcohol use. Brief intervention includes providing advice to help individuals reduce alcohol consumption, offering situation and goal setting feedback as well as imparting information on *Canada's Low-Risk Alcohol Drinking Guidelines*.⁴⁶

Moderation or low-risk drinking helps support healthy lifestyle choices and reduces short- and long-term risks associated with alcohol. *Canada's Low-Risk Alcohol Drinking Guidelines* were developed to inform Canadians about moderate alcohol consumption, minimize the risk for misuse and immediate and long-term alcohol-related harms. Promotion of *Canada's Low-Risk Alcohol Drinking Guidelines* helps promote a culture of moderation in alcohol consumption.³ The development of these national guidelines was influenced by key sets of evidence and based on risk reduction using a harm reduction approach. Considerations included how to minimize risks of short-term harms such as injury, and

long-term risks such as chronic illnesses and potential harms associated with alcohol use during pregnancy.^{45, 46}

Alcohol policy

Health-focused, evidence-based public policy can help mitigate alcohol-related harms. There is a strong association between the quantity of alcohol consumed in a given population and the type and number of problems experienced in the population.

Conditions and policies that can impact alcohol misuse and related harm include:³²

- Limiting alcohol availability and accessibility (such as minimum legal drinking age and where alcohol can be purchased)
- Addressing pricing and affordability (such as minimum pricing and taxation)
- Restricting marketing and promotion (such as advertising regulations and warning labels on alcohol products)
- Promoting impaired driving laws and enforcement (such as *Reduce Impaired Driving Everywhere* [R.I.D.E] programs)

Best practices for the prevention of alcohol problems have been identified and should be employed.³³ Effective population level approaches include socially responsible pricing, limits on the number of retail outlets and hours of operation and restrictions on advertising.³⁴

The demand for alcohol corresponds to its cost.⁸ In Ontario the cost of alcohol to consumers includes both pricing and taxation. Research has demonstrated that an increase in the price of alcohol can lead to a decrease in alcohol consumption. Pricing and taxation strategies are one method to decrease alcohol-related harms at a population level. Strategies should include adjusting the price of alcohol to keep pace with inflation, restricting alcohol discounts and eliminating the provision of free samples.³⁵

Alcohol sales generate substantial provincial revenue. This revenue does not cover the costs incurred for the harms associated with alcohol use. The current health care costs, enforcement and other social costs related to alcohol misuse in Ontario are estimated to reach a conservative total of \$5.3 billion yearly. This estimate includes \$1.7 billion in direct health care costs and \$3.6 billion in indirect costs. This amount is well above the approximately \$3 billion in provincial revenue accrued through alcohol sales from 2013 to 2014.²³

The alcohol industry has been successful in engaging youth and depicting alcohol in a positive manner through advertising and marketing. The negative consequences of consumption are rarely shown. Alcohol brand sponsorship of sports teams, events and concerts has a strong marketing appeal to youth. Through colourful packaging and sweet flavoured drinks, the alcohol industry has strategically targeted youth, especially young women. Exposure to alcohol marketing not only lowers the age at which youth begin consuming alcohol, but increases the amount consumed by current drinkers.⁴²

The province's *Regulatory Modernization in Ontario's Beverage Alcohol Industry* initiative (2014) has increased alcohol availability in Ontario through the sale of VQA wine in farmers' markets, the introduction of LCBO Express kiosks, increased hours of sale and the removal of special event and festival restrictions. The Ontario Government's expansion of the sale of alcoholic beverages in local supermarkets is yet another initiative that further increases access to alcohol and sets a dangerous precedent for further expansion and privatization across multiple venues throughout Ontario.⁴³ Research findings repeatedly demonstrate that alcohol consumption and related problems increase as alcohol becomes more available and vice versa.⁸

Control of underage drinking

The consumption of alcohol in youth is strongly influenced by friends and family.⁶ Preventing alcohol use in the underage population requires a comprehensive approach that is supported by the community, home and social environments, health care settings and licensed premises. Interventions need to be administered prior to the age of onset of alcohol use (first drink) and social norms, such as the perceptions of alcohol use, must be addressed.³⁶

Promoting resiliency and addressing problems early in development may prevent later substance misuse and other health problems.²¹ If avoidance of alcohol use in youth is not a viable option, delaying the age at which youth begin to use substances is a key harm reduction priority.⁷

Problem drinking has many causes, and psychological and social factors play a role. Parental attitudes and use of alcohol influence children's views of alcohol.³⁷ Positive parenting practices and family relationships are linked to reduced drinking in teens. Early onset and increased alcohol consumption can be linked to negative family relationships including family violence and divorce.⁶ The influence of peers and peer pressure also impact alcohol consumption and are often a contributor for underage and binge drinking and impaired driving.³⁸

Countermeasures for impaired driving

Impaired driving is a leading cause of criminal death in Canada.⁴⁷ Drinking and driving countermeasures can be implemented alone or can be part of a broader strategy to help modify the drinking environment. These countermeasures often are most effective when implemented as part of a comprehensive strategy that includes enforcement.⁸

An effective countermeasure is the provincial and regional year-round *Reduce Impaired Driving Everywhere* (R.I.D.E) programs. R.I.D.E is a sobriety testing program used by police. The program was first introduced in York Region in 1987. In 2014, York Regional Police laid more than 1,450 charges in relation to impaired driving offences.³⁹

Even small amounts of alcohol can impair driving ability. As levels of alcohol in a driver's bloodstream increase, so does the risk for vehicle collisions.⁴⁸ Any amount of alcohol consumption when combined with driver inexperience can increase the risk of vehicle collisions. Since 2010, Ontario has a zero blood alcohol concentration (BAC) level requirement for novice drivers of any age and all drivers who are 21 and under. Regardless of license class, under the graduated licensing program, these drivers must have a level of zero alcohol when operating a motor vehicle. Young drivers are overrepresented in impairment-related traffic deaths, reflective of their hazardous patterns of alcohol use. Evidence has consistently shown that graduated licensing programs significantly reduce crash deaths and injuries among new and young drivers.⁴⁹

The role of York Region Public Health’s Substance Misuse Prevention Program

The goal of the Substance Misuse Prevention Program is to reduce the incidence and severity of alcohol and substance-related harms by working in collaboration with community partners promoting awareness, education and harm reduction strategies to address the prevention of adverse health outcomes associated with substance use.

While research traditionally supports delaying the onset of alcohol use as a strategy to mitigate the prevalence of later-life harms, targeted programming in the Substance Misuse Prevention Program primarily focuses on the youth population. Efforts are also made to outreach and work with populations across the continuum of the lifespan.

Substance Misuse Prevention Program activities

- Collaborate with York Region school boards to:
 - Develop and implement comprehensive programming on substance misuse for parents, students, teachers and administration staff
 - Educate the student body to make informed decisions related to alcohol and other drugs through a variety of strategies, including a peer lead program
 - Provide tips on safe partying
 - Promote a delay in onset of drinking alcohol
 - Provide education on impaired driving and being a passenger in a car with an impaired driver

- Increase awareness of harms associated with alcohol use through the ongoing promotion of *Canada’s Low-Risk Alcohol Drinking Guidelines* within the community. The guidelines recommend Canadians moderate their alcohol consumption to reduce immediate and long-term alcohol-related harms. Activities in this area include:
 - Work on the provincial *Low-Risk Alcohol Drinking Guidelines* and *Youth Workgroup* to develop common key messaging for parents and other key stakeholders for underage youth target groups ages 10 to 14 and 15 to 18.

- Provide education to frontline health professionals and interested parties working in and outside of the health care sector on the *Screening, Brief Intervention and Referral* best practice

assessment tool. This tool identifies those who is at risk of excessive alcohol use. Early detection of problems through screening can lead to more immediate interventions.

- Consult with various York Region municipalities to develop and update municipal alcohol policies to manage safe drinking environments. The goal is to encourage moderate, responsible consumption by changing alcohol-related policies and social norms in the community.
- Facilitate workshops and disseminate resources to increase the public's awareness and understanding of the impact of alcohol use during and after pregnancy, and to educate the public about Fetal Alcohol Spectrum Disorder.
- Promote and be informed of road safety initiatives for the public's safety by collaborating with partners and coalitions focused on reducing the effects and harms associated with impaired driving.
- Link the use of alcohol with its impacts on mental well-being and incorporate into program activities. Work in this area is influenced by the progressive efforts of the mental health initiatives within York Region's Community and Health Services Department.
- Advocate for an approach that prioritizes health and safety and considers the costs associated with alcohol consumption by supporting a provincial alcohol strategy. Ontario has committed to ensuring a socially responsible approach to alcohol policy.
- York Region Public Health has provided feedback and comments to Ontario's proposed alcohol policy along with other partners and continues to monitor progress in the development of the policy.

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