Alcohol Uncovered: 2015
Key Findings about the Use, Health Outcomes and Harm of Alcohol in Peel
Region of Peel
Working for you
ALCOHOL UNCOVERED: A PEEL PROFILE OF USE, HEALTH OUTCOMES AND HARM OVERVIEW

This report is intended to highlight the key findings reported by Peel Public Health in Alcohol Uncovered: A Peel Profile of Use, Health Outcomes and Harm, 2015. Readers interested in a more detailed examination of the issues and data methods can access the full report in electronic format at: peelregion.ca/health/reports.

The region of Peel, located directly west of Toronto and York Region, includes the cities of Mississauga and Brampton and the town of Caledon. Peel is one of the largest municipalities in Canada and the second largest in Ontario. Peel has experienced rapid growth with the population increasing by 12% between 2006 and 2011. In 2011, Peel’s population was 1.3 million people; by 2031, Peel’s population is expected to exceed 1.6 million.

Alcohol use can result in both positive and negative physical and mental health outcomes; however, in Peel, the negative outcomes outweigh the positive. For example, approximately 196 hospitalizations are averted each year in Peel due to consumption of low levels of alcohol. Higher consumption of alcohol however, increases the risk of disease and injury. Approximately 1,083 hospitalizations are attributed to alcohol annually in Peel for issues such as respiratory infections, cardiovascular disease, cancer, falls, attempted suicide and motor vehicle accidents.

In addition to negatively affecting physical and psychological health at the individual level, excessive alcohol consumption can negatively affect the lives of those who live and work with the drinker, and result in broader societal costs. In Peel, examples of some of these costs include 1,493 ambulance and 4,015 police calls related to alcohol each year. Additionally, the cost of treating hospitalized Peel residents for alcohol-related diseases and injuries is estimated at just over $11.5 million per year.

The full report entitled Alcohol Uncovered: A Peel Profile of Use, Health Outcomes and Harm, 2015 provides an overview of alcohol-related health issues for Peel and describes those within Peel’s population that consume alcohol in a risky or health-harming manner.

The summary report entitled Key Findings about the Use, Health Outcomes and Harm of Alcohol in Peel provides an overview of the main findings of the full report and identifies future areas of focus for Peel Public Health programming.

SUMMARY OF KEY FINDINGS

Alcohol use has some health benefits but these are outweighed by the health burden in Peel

The health burden of alcohol-related diseases and injuries is high, and outweighs the benefits (Table 1). Annually, within Peel, alcohol is attributed to:

• 3,476 emergency room visits;
• 1,493 ambulance calls;
• 1,279 hospitalizations;
• 28 new cases of cancer; and
• 127 deaths.
The diseases and injuries attributed to alcohol use in Peel are diverse

A variety of diseases and injuries are attributed to alcohol use. This is reflected through emergency department visits, hospitalizations, and deaths (Table 2).

### Table 1

**Total Number of Incident Cases of Cancer, Emergency Department Visits, Hospitalizations and Deaths due to Disease and Injury Averted and Attributed to Alcohol Use, Peel**

<table>
<thead>
<tr>
<th>Chronic diseases or injuries averted</th>
<th>Cancer incidence</th>
<th>Emergency department visits</th>
<th>Hospitalization</th>
<th>Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic diseases and injuries attributable to alcohol</td>
<td>0</td>
<td>Data not available</td>
<td>196</td>
<td>37</td>
</tr>
<tr>
<td>Total*</td>
<td>28</td>
<td>3,476</td>
<td>1,279</td>
<td>127</td>
</tr>
</tbody>
</table>

*Total calculated as total number of attributable minus total number of averted.

Sources:
- Hospital In-Patient Discharges Data 2007-2011, IntelliHEALTH Ontario, Ministry of Health and Long-Term Care.

### Table 2

**Examples of Alcohol-Related Diseases or Injuries, Peel**

<table>
<thead>
<tr>
<th>Alcohol-related disease or injury</th>
<th>Emergency department visits</th>
<th>Hospitalization</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol induced mental disorders</td>
<td>2,591</td>
<td>216</td>
<td>4</td>
</tr>
<tr>
<td>Alcohol dependence syndrome</td>
<td>409</td>
<td>88</td>
<td>3</td>
</tr>
<tr>
<td>Alcohol liver disease</td>
<td>237</td>
<td>145</td>
<td>31</td>
</tr>
<tr>
<td>Respiratory infections</td>
<td>---</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>Motor vehicle traffic accident</td>
<td>---</td>
<td>52</td>
<td>10</td>
</tr>
<tr>
<td>Accidental fall</td>
<td>---</td>
<td>247</td>
<td>8</td>
</tr>
<tr>
<td>Attempted or completed suicide</td>
<td>---</td>
<td>104</td>
<td>22</td>
</tr>
</tbody>
</table>

--- Data not available

Sources:
- Hospital In-Patient Discharges Data 2007-2011, IntelliHEALTH Ontario, Ministry of Health and Long-Term Care.
The cost of hospital treatment for alcohol-attributable diseases and injuries in Peel is just over $11.5 million annually

It is estimated that the hospitalization costs of treating alcohol-attributable diseases and injuries is just over $11.5 million per year in Peel. This is a conservative estimate as there are some diseases and injuries attributable to alcohol for which we were unable to calculate hospitalization costs.

Rates of risky alcohol consumption behaviours are not improving in Peel

In Peel, binge drinking; drinking and driving; alcohol-related assault; and liquor offences resulting in police response have either remained stable or, in some cases, increased over time. Binge drinking trends are shown in Figure 1.

**Figure 1**
Binge Drinking by Year, Peel and Ontario, 2000/2001 – 2011/2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Peel % (95% CI)</th>
<th>Ontario % (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000/2001</td>
<td>12.7 (10.9 – 14.6)</td>
<td>16.3 (15.7 – 16.8)</td>
</tr>
<tr>
<td>2003</td>
<td>14.7 (12.9 – 16.8)</td>
<td>14.6 (14.1 – 15.1)</td>
</tr>
<tr>
<td>2005</td>
<td>13.6 (11.8 – 15.6)</td>
<td>16.9 (16.3 – 17.4)</td>
</tr>
<tr>
<td>2007/2008</td>
<td>10.9 (9.3 – 12.8)</td>
<td>16.0 (15.4 – 16.6)</td>
</tr>
<tr>
<td>2009/2010</td>
<td>13.6 (11.6 – 15.8)</td>
<td>16.1 (15.5 – 16.8)</td>
</tr>
<tr>
<td>2011/2012</td>
<td>12.4 (10.5 – 14.7)</td>
<td>16.8 (16.1 – 17.5)</td>
</tr>
</tbody>
</table>

Note: 95% CI reflects the 95% confidence interval of the estimate.
Males engage in risky drinking behaviours

Males are more likely to engage in risky drinking behaviours (e.g., binge drink daily). They also utilize more community resources (e.g., police calls and ambulance calls) as a result of their alcohol use than females (Table 3).

### Table 3
Health or Societal Outcome by Sex, Peel

<table>
<thead>
<tr>
<th>Health or societal outcome</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adherence to low-risk drinking guidelines†</td>
<td>79%</td>
<td>91%</td>
</tr>
<tr>
<td>Binge drinking†</td>
<td>19%</td>
<td>6%</td>
</tr>
<tr>
<td>Intoxication ambulance calls‡</td>
<td>160.4 per 100,000</td>
<td>55.8 per 100,000</td>
</tr>
<tr>
<td>Domestic dispute disturbance involving alcohol§</td>
<td>3.6 per 100,000</td>
<td>0.9 per 100,000</td>
</tr>
<tr>
<td>Alcohol-related assault§</td>
<td>60.2 per 100,000</td>
<td>10.0 per 100,000</td>
</tr>
<tr>
<td>Liquor offences§</td>
<td>190.4 per 100,000</td>
<td>29.9 per 100,000</td>
</tr>
<tr>
<td>Impaired driving§</td>
<td>620.4 per 100,000</td>
<td>121.6 per 100,000</td>
</tr>
<tr>
<td>Blood alcohol content suspensions§</td>
<td>57.8 per 100,000</td>
<td>10.9 per 100,000</td>
</tr>
<tr>
<td>Motor vehicle collision involving alcohol§</td>
<td>90.8 per 100,000</td>
<td>19.6 per 100,000</td>
</tr>
</tbody>
</table>

Sources:
†Canadian Community Health Survey 2001/2012, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.
‡ Peel Regional Paramedic Services, 2006-2012, Peel Ambulance Call Report data.
§ RMS-NICHE 2009-2012, Peel Regional Police

### Table 4
Alcohol-related Behaviours and Outcomes among Youth by Sex, Peel

<table>
<thead>
<tr>
<th>Alcohol-related behaviour or outcome</th>
<th>Male %</th>
<th>Female %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being drunk in the past month†</td>
<td>27.4</td>
<td>21.1</td>
</tr>
<tr>
<td>Binge drinking in the past month†</td>
<td>33.6</td>
<td>25.3</td>
</tr>
<tr>
<td>Alcohol dependence†</td>
<td>6.6*</td>
<td>8.9</td>
</tr>
<tr>
<td>Use of alcohol and energy drinks together†</td>
<td>14.2</td>
<td>10.4</td>
</tr>
<tr>
<td>Use of alcohol and cannabis†</td>
<td>12.3</td>
<td>8.7*</td>
</tr>
<tr>
<td>Play drinking games†</td>
<td>14.5*</td>
<td>9.0*</td>
</tr>
<tr>
<td>Had sexual intercourse while high or drunk (once or more)†</td>
<td>52.0</td>
<td>48.0</td>
</tr>
<tr>
<td>Drinking and driving†</td>
<td>3.7*</td>
<td>NR</td>
</tr>
<tr>
<td>Passenger with someone who had been drinking†</td>
<td>16.3</td>
<td>20.2</td>
</tr>
</tbody>
</table>

*Use estimate with caution
NR=Not releasable due to small numbers
Note: There are no significant differences between the proportion of males and females reporting the behaviour or outcome.
Sources:
‡ Student Health Survey 2011, Peel Public Health
Peel’s youth engage in a variety of risky behaviours involving alcohol and have easy access to alcohol

Peel students in Grades 7 to 12 are engaging in a variety of risky alcohol behaviours. Females are engaging in these risky behaviours at a rate similar to males (Table 4).

Fifty-eight per cent (58%) of Peel students feel that it would be very or fairly easy to get alcohol if they wanted some. Among students who did consume alcohol in the past year, half (50%) reported that they had someone give them alcohol (Figure 2).

Municipalities can regulate alcohol consumption on municipally-owned properties

There are many acts and regulations related to the sale and distribution of alcoholic beverages in Canada and Ontario. Both the Alcohol and Gaming Commission of Ontario (AGCO) and the Liquor Control Board of Ontario (LCBO) have a significant role in the regulation of alcohol. At the municipal level, Municipal Alcohol Policy (MAP) provide a means for municipalities to regulate alcohol consumption on municipally-owned properties in compliance with current liquor laws.

Public opinion data about alcohol can be used to change existing or introduce new alcohol policies

While data are not available for Peel, there is public support in Ontario for:

- keeping alcohol taxes the same (67%);¹
- preventing the privatization of Liquor Control Board of Ontario (LCBO) stores (61%);¹
- preventing the sale of alcohol in corner stores (63%);¹
- maintaining the current number of places to buy alcohol (78%);¹
- maintaining current beer and liquor store hours (78%);²

Figure 2
Methods of Obtaining Alcohol, Peel, 2013

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Someone gave it to me</td>
<td>49.7</td>
</tr>
<tr>
<td>I gave someone else money to buy it</td>
<td>17.0</td>
</tr>
<tr>
<td>I took it from home</td>
<td>13.1</td>
</tr>
<tr>
<td>I got it some other way</td>
<td>5.3</td>
</tr>
<tr>
<td>I don’t remember</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Source: Ontario Student Drug Use and Health Survey 2013, Centre for Addiction and Mental Health, Peel Public Health.
• increasing prohibitions on wine and liquor in TV advertising (53%);³
• preventing drunken customers from being served (76%);¹ and
• having random police checks such as the RIDE (Reduce Impaired Driving Everywhere) program (97%).³

Peel-specific data about alcohol is lacking
Data on alcohol consumption behaviours and the social impacts of excessive alcohol use is lacking in some key areas:

• The amount of alcohol use during pregnancy
• The personal impacts of alcohol use (e.g., symptoms of alcohol dependence); the impact of alcohol on family (e.g., violence), friends and at work (e.g., experienced harms from someone else’s drinking); and the impact of alcohol in the community.
• Impaired driving collisions and fatalities
• Alcohol sales, taxes and revenues
• Public opinion about alcohol (e.g., alcohol pricing, taxation, physical availability, hours of sale, marketing and advertising restrictions, modifications to the drinking environment)

CHALLENGES FOR PEEL

The public do not see alcohol as a potential health-harming substance
• Polarizing evidence regarding the harms and benefits associated with alcohol use makes it difficult for the public to appreciate personal risk versus protective effects associated with their consumption.
• Recommendations within the 2011 Canadian Low Risk Drinking Guidelines can unintentionally promote alcohol as a social behaviour. The increased drinking limits in the 2011 Canadian Low Risk Drinking Guidelines may impart a false sense of protection for drinkers who view their consumption as moderate. It can also support a misperception that harms related to drinking are associated only with heavy drinking.
• Extensive and sophisticated marketing by the alcohol industry successfully promotes and normalizes the consumption of alcohol.

Provincial regulations are becoming more permissive which increases alcohol consumption
• Recent changes to Ontario liquor laws are modifying the drinking environment by increasing the physical availability of alcohol (i.e., access and convenience).
• Research evidence to date suggests that increasing the availability of alcohol is related to an increase in consumption and alcohol-related harms.

There is limited local-level data on alcohol-related harms at the family and community level in Peel
• While national and provincial data are available about alcohol-related harms at the family and community level, specific local data is needed to understand the impact of alcohol consumption on Peel’s families, communities and support agencies.
• There is an absence of key indicators and proxy measures to assess the local impact of changes to provincial liquor laws (e.g., sales, revenue data).
FUTURE CONSIDERATIONS

Currently, Ontario is one of the most highly regulated jurisdictions with respect to alcohol, resulting in lower levels of alcohol-related harms. Changing provincial regulations and extensive marketing of alcohol by industry may diminish the protective effects experienced to date. Balancing alcohol as a commodity, while reducing related harms, requires a collaborative, multi-faceted and long-term approach.

The findings in this report provide insight into the current state of alcohol use in Peel and provide some key areas of focus for Peel Public Health:

Sustain prevention efforts

Peel Public Health will continue to work with the community to increase awareness and decrease the risk of harms associated with substance misuse through the following approaches:

• Reduce risks for youth by collaboration with schools and community partners.
  - Strengthen parent-child relationships to better engage children and youth around the topic of alcohol.
  - Influence behaviour and attitudes of children and youth through school curriculums.

• Create safer drinking environments.
  - Support municipalities in the development and evaluation of Municipal Alcohol Policy.
  - Work in collaboration with licensed establishments and post-secondary institutions to address alcohol-related harms.

• Collaborate with stakeholders and health professionals to support evidence-based early detection and intervention strategies, with a particular focus on men.

Influence provincial agencies to comprehensively assess the public health impacts of Provincial liquor laws

• Identify and monitor key indicators, proxy measures and health and social impacts of changing alcohol availability in Peel.
• Influence provincial agencies to include a health and social impact assessment for recent and proposed policy changes that increase the availability of alcohol within Ontario.
• Continue to support existing laws and regulations that reduce health-harming alcohol consumption and mitigate alcohol-related harms; for instance, the enforcement of over service, minimum age restrictions and drinking and driving countermeasures.

Gain a better understanding of Peel’s health-harming drinking patterns and behaviours

• Strengthen local monitoring and surveillance to better understand trends reflective of Peel’s community.
• Explore opportunities to partner and establish a coordinated approach to gather and share data with agencies that have a vested interest in reducing alcohol-related harms.
REFERENCES


DATA REFERENCES

A  2011 Census, Statistics Canada
B  Hemson Consulting, Population Forecast, Region of Peel
C  Ontario Student Health and Drug Use Survey, 2013, Centre for Addiction and Mental Health, Peel Public Health
D  RMS-RICHE 2009-2012, Peel Regional Police