Acknowledgments

We gratefully acknowledge the input of people who use drugs and alcohol and their loved ones who have fought to be heard and understood. We also gratefully acknowledge the input and work of service providers and those working to improve the way we provide care for all people.

This report has been developed by Lambton Public Health - Crystal Palleschi, Epidemiologist and Ellie Fraser, Mental Health and Addictions Program Coordinator.

Ipsos Public Affairs and Lambton Public Health developed and administered the jurisdictional scan, key informant interviews, interviews with people with lived experience, and the survey of service providers.
Executive Summary

Context
Canada is in the midst of a public health crisis with more than 11,500 people dead in opioid-related overdoses from 2016 to 2018. As the health and economic impacts of drug and alcohol use continue to increase, the need to meaningfully address substance use in Canada is growing.

In Ontario, the provincial government allocated annual funding to public health units to enhance harm reduction programming and increase knowledge, availability, and collaborative efforts to mitigate opioid-related harms. This situational assessment is a deliverable of that funding and provides a comprehensive understanding of the impact, influencing factors, and recommended actions to best address the harms of substance use in Lambton County. The information gathered in this report will help inform the development of a community drug and alcohol strategy, another deliverable of the provincial funding to public health.

Patterns of Use and Harms
Lambton County residents experience higher rates of use and harms from drugs and alcohol than the Ontario average across a variety of the indicators that were examined. On average, Lambton residents are more likely than Ontario residents to exceed Canada’s Low-Risk Alcohol Drinking Guidelines and drink heavily. Lambton residents are also more likely to visit the emergency department for substance-related issues and to be prescribed opioids.

Substance use in Lambton has impacts across the lifespan. Males and young adults are significantly more likely to use substances, attend the emergency room for drug-related reasons, and enter into treatment than females and older adults. Older adults have higher rates of opioid prescriptions, particularly older males who are more likely to attend the emergency room for alcohol-related reasons.

In addition to emergency department visits, harms from substance use include mental health problems, infections such as hepatitis C, and neonatal abstinence syndrome, with significantly higher rates of the latter two in Lambton County. Lambton rates for those admitted into publicly-funded substance use treatment programs and opioid agonist therapy are significantly higher than the provincial average.

Local Needs
There are many factors locally that contribute to or protect from problematic substance use. In one-on-one interviews, people with lived experience identified the main issues they faced were:

- Lack of early intervention supports (to prevent escalating use)
- Limited access to the necessary services for themselves and their caregivers when needed
- Insufficient scope and continuity of care from existing services

Service providers also identified similar limitations and called for improved prevention efforts such as:

- Increasing support for youth
- Addressing root causes of problematic substance use
• Increasing safe and affordable housing

They also indicated a need to improve how services are delivered by improving links between services, expanding harm reduction efforts, increasing support throughout the criminal justice system, and building the capacity of professionals to care for people experiencing problems due to substance use.

**Recommendations**

Based on this report, we recommend the use of a public health approach across Lambton to reduce the harms associated with drug and alcohol use. This approach includes the development of a community drug and alcohol strategy to identify specific, locally relevant priorities that involve, and are accountable to, the residents of Lambton County. In particular, we recommend these priorities include:

• A focus on the harms of both drugs and alcohol
• Collaborative action through broad stakeholder involvement
• Upstream approaches that reduce the inequitable outcomes produced by the social determinants of health
• A strengths-based approach with evidence-informed interventions
• Comprehensive consideration of the factors influencing use such as the demand, supply, and harm of drugs and alcohol
• A universal approach that takes into account those at greater risk of harms and includes them in the development of specific, supportive interventions
• A community-wide effort to reduce stigma against problematic substance use
• A system of care that is accessible, available when needed, quality, and comprehensive
• A multi-level approach that incorporates individual, systemic, and population level interventions
• A system informed by and supportive of people with lived experience and their loved ones

In addition to the recommendations of this report, we support the recommendations developed by a research report carried out by Ipsos Public Affairs (commissioned by Lambton Public Health) with input from other jurisdictions, people with lived experience, their loved ones, and services providers. The suggested actions include having an upstream and disruptive approach, stigma reduction, and treatment of root causes and underlying conditions that lead to or develop from problematic substance use. The report also recommends specific philosophies and actions regarding care and treatment for people with substance use problems and their families including individualized, holistic care, a consistent pathway to, through and from care with the support of a system navigator, a centralized system of caregiver support, increasing access to local treatment, and greater support for higher risk populations.
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Why Now?

Across Canada, thousands of people are dying from opioid overdose at rates that have increased significantly in recent years. This crisis is prompting governments, health-care providers, public health officials, and law enforcement agencies to quickly implement strategies to reduce opioid-related deaths. In Ontario, public health has been tasked with harm reduction activities including:

- Facilitate the development of a drug or opioid response plan
- Increase access to naloxone and other harm reduction resources
- Improve surveillance and develop an early warning system

This report outlines the impacts of substance use in Lambton County. Its purpose is to inform others about the impact of substance use locally and initiate steps toward collective community action.

Despite efforts by the government, many do not believe enough has been done to address the risk due to the stigma associated with illicit substance use, prompting calls for decriminalization of all drugs. As this report found, in Lambton County, the problem is much more nuanced.

In Lambton, alcohol is by far the most prevalent substance used and is the direct cause of many physical and mental harms. Over the past two decades, opioid-related emergency department visits have increased in Lambton and are higher than the provincial average. 1 in 5 residents use cannabis for recreational or medicinal purpose and some data show that crystal methamphetamine is resulting in significant personal and societal harms locally. Lambton County physicians continue to prescribe opioids at higher rates than the rest of the province.

Although this community has a history of responsive advocacy to increase services, people who use drugs and their families tell us the system is difficult to navigate, discriminatory and inaccessible. They express concern that the system doesn’t consider the recurring nature of problematic substance use or the importance of addressing its determinants. We need a two-pronged approach that includes limiting the harms of current use and curbing the reasons people use in the first place. We need to move upstream and address the root causes of problematic substance use that requires getting people out of poverty, housing them, supporting families to raise healthy children, making mental health care accessible, regulating the supply of substances, and working to restore our community from the legacies of colonization and discrimination.
Understanding the situation

Lambton County is located along the southern tip of Lake Huron and is bordered by the St. Clair River, the Municipality of Chatham-Kent and Middlesex County. Lambton is home to 126,000 residents, a population base that has remained stable for more than 20 years. Sarnia is the county’s largest population and urban centre, surrounded by rural towns and farmland, with a rich agricultural heritage. The area is a major petrochemical and refining centre with an emerging bio-industrial sector. Our region has beautiful beaches, parks, and trails making it a very attractive place to live, work and play. Looking to the future, our civic leaders are working to position the area for sustainable growth and development.

Later in the report, we explore the impact that Lambton's demographics and unique characteristics may have on patterns of substance use and harms.

This report combines information from stakeholders who know the system well with relevant local data to create a comprehensive picture of substance use in Lambton County (Figure 1: Sources of Information).

Figure 1: Sources of Information

Sources of information

**Stakeholder engagement**

Starting in December 2017, Lambton Public Health worked with Ipsos Public Affairs to conduct interviews with key informants in other regions, local community partners and people with lived experience. This was supplemented with an online survey of community service providers. While we have included highlights and recommendations from these interviews throughout this report, details are available in the [Drug and Alcohol Strategy Research Report](#).
Surveys
Substance use data is collected through various local, provincial and national surveys. In 2018, Ipsos Public Affairs conducted a telephone survey of 800 Lambton residents, 18 years of age and older, on behalf of Lambton Public Health. While this survey does not have direct provincial comparators, it provides the most current data for our community. Data are also provided from the 2015/16 Canadian Community Health Survey (CCHS), a national survey conducted by Statistics Canada that includes residents 12 years and older.

The CCHS sample size is generally too small to isolate youth from the sample, so there are limited data regarding the use of substances among Lambton youth. Regional results for Southwestern Ontario are available from the 2017 Ontario Student Drug Use and Health Survey (OSDUHS) and can be used as a proxy for local substance use data.

All surveys have limitations, and this is particularly true for self-reported behaviours related to illegal activity. Those who are misusing substances may be difficult to reach via a telephone survey and those participating may not share this information, so surveys likely underestimate the true prevalence of substance use.

Health services use and treatment
Emergency Medical Services (EMS) data were obtained from the County of Lambton EMS division. As part of the new opioid surveillance system, Lambton EMS has agreed to provide Lambton Public Health with data related to calls for alcohol intoxication, opioid and non-opioid overdose. This is based on assessment at the time of the call and diagnosis may change once in the hospital.

Emergency department visit and hospitalization data were obtained via the Ontario Ministry of Health IntelliHEALTH ONTARIO program, available to all public health units. This system provides data from the National Ambulatory Care Reporting System (NACRS) and the Discharge Abstract Database (DAD), which are maintained by the Canadian Institute for Health Information.

Treatment data were obtained from the Drug and Alcohol Treatment Information System (DATIS). This system includes data for all clients with open admissions in at least one Ministry of Health funded substance abuse treatment service. It does not include information about clients seeking treatment in private facilities.

All health services and treatment data are reported by place of residence of the patient or client (i.e. include all Lambton residents regardless of where they seek treatment).

Harm reduction
Lambton Public Health began collecting harm reduction clinic data with a new system (NEO360) in February 2018. This includes data about needle exchange, other harm reduction supplies and naloxone distribution.

Mortality
Mortality data were obtained through special request to the Office of the Chief Coroner in Ontario. There is usually a significant lag time to release mortality data, with 2016 being the most recent year...
available for alcohol and all drug toxicity-related deaths. However, the coroner’s office has been providing preliminary data for opioid-related deaths to Public Health Ontario in response to the opioid crisis. Public Health Ontario has also provided public health units with detailed characteristics of opioid overdose-related deaths at the local and provincial level for planning purposes. These data can only be shared in aggregate form due to the small number of deaths and corresponding privacy considerations.

**Opioid-specific data**
Opioid-specific emergency department visits, hospitalization and mortality data are analyzed centrally by Public Health Ontario and shared via the online [Interactive Opioid Tool](#).

Opioid prescription and opioid agonist therapy data are analyzed and reported by the Ontario Drug Policy and Research Network via the [Ontario Prescription Opioid Tool](#).

**Infectious diseases**
Infectious disease data were obtained from the integrated Public Health Information System (iPHIS), which is used by all public health units in Ontario to track the incidence of reportable infectious diseases.

**Evidence review**
In some instances, we have insufficient data on substance use in Lambton. This includes the use of illicit substances and populations who may be most vulnerable to the harms of use. We reviewed the literature concerning risk and protective factors associated with problematic substance use and populations most affected. Where possible we connected the literature with our local situation.

**Language**
This report uses People First Language in an attempt to remove the stigmatizing labels that can perpetuate the harm associated with substance use.
Drug and Alcohol Use

- Alcohol is the most widely used substance (80%) by Lambton adults followed by cannabis (19%). Illicit substance use (not including cannabis) was reported by 3%, approximately 4300 residents. Prescription opioids were used by 16% of Lambton residents.
- Many residents report risky drinking behaviours with nearly 60% of adults and 27% of youth reporting binge drinking. About 20% of young adults (under 35 years) reported at least weekly use of cannabis.
- Young males (under 35 years) are more likely to report risky alcohol use and substance use than females in Lambton. Older adults are more likely to report an opioid prescription.
- Rates of risky alcohol use and opioid prescribing were higher in Lambton compared to the Ontario average. Cannabis use is similar in Lambton and Ontario.

In order to understand the impact of substance use in Lambton, we need to have some understanding of why people use substances, why people can't stop using them, and how it affects their lives and the lives of those around them. Substance use falls along a continuum. Most substance use is not problematic and may be beneficial (substance use for medicinal purposes or cultural significance) and socially accepted (alcohol, and now cannabis, are legal in Canada) (Figure 2). However, many individuals, families and loved ones, and communities are significantly and negatively impacted by use of legal and illegal substances. While addiction is explored later in this report, harm from substance use doesn't only impact those who experience a severe addiction, in fact any level of use along the continuum carries some risk.

Figure 2: Substance use spectrum

Adapted from Substance Use Prevention and Harm Reduction Guideline, 2018

What substances are Lambton residents using?
Alcohol is the most commonly used substance among Lambton adults, with 8 in 10 reporting use in the past year (Figure 3). This is similar to 2017 national and provincial estimates of alcohol consumption, with about 78% of Canadians and 76% of Ontarians reporting drinking alcohol at least once in the past year.\(^5\)

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\(^5\) The local survey included adults 18 years and older, while the Canadian Tobacco, Alcohol and Drugs Survey included youth and adults, 15 years and older.
Cannabis use is also prevalent, with nearly 1 in 5 reporting either medical or recreational use.\(^2\) This is similar to the percentage of Ontario residents reporting cannabis use (18%) based on the National Cannabis Survey conducted at approximately the same time as our local survey (2nd Quarter 2018).\(^6,\)\(^7\)

Use of prescription opioids in the past year for medical purposes was reported by 17% of residents. This self-reported estimate is similar to data from the Narcotics Monitoring System, which captures all opioid prescriptions dispensed in pharmacies across Ontario. Based on this source, 19,057 individuals, or 15% of Lambton residents, were prescribed opioids for pain in 2018. This is higher than the provincial average of approximately 10%.\(^7\)

Illegal drug use (excluding cannabis) was reported by 3% of adults in Lambton. This is similar to the proportion of Canadians (15 years and older) reporting the use of illegal drugs in 2017 (3.3%, excluding cannabis).\(^5\) Recreational use of prescription drugs and opioids was reported by 1% of Lambton residents. This is similar to the proportion of Canadians who reported problematic use of any pharmaceutical, including use for the purpose of getting high (1.2%).\(^5\) Overall, this represents more than 4,300 Lambton residents, 18 years and older, using illegal drugs or misusing prescription drugs in the past year.

Figure 3: Use of alcohol and drugs in the past year, Lambton residents 18 years and older, 2018

Source: 2018 Lambton Public Health Program Survey

It is difficult to obtain a complete picture of illicit drug use through telephone surveys, so it is also helpful to look at data collected from Lambton Public Health’s harm reduction clinic clients. Between

\(^{\text{ii}}\) The local survey included adults 18 years and older, while the National Cannabis Survey included youth and adults, 15 years and older. The national survey also had a different timeframe, asking about use in the past 3 months vs. the past year.
February and December 2018, 515 unique individuals were registered at the clinic with 121 providing a primary substance used. Methamphetamines were the most common primary substance reported followed by opioids (Figure 4). Hydromorphone was the most common opioid reported (17%).

**Figure 4: Percentage of Lambton Public Health harm reduction clinic clients reporting primary substance used, 2018**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methamphetamine</td>
<td>52%</td>
</tr>
<tr>
<td>Opioids</td>
<td>26%</td>
</tr>
<tr>
<td>Steroids</td>
<td>8%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
<tr>
<td>Cannabis (recreational use)</td>
<td>3%</td>
</tr>
<tr>
<td>Heroin</td>
<td>2%</td>
</tr>
<tr>
<td>Crack</td>
<td>2%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

Source: Lambton Public Health, Neo360 Database, extracted January 7, 2019 (n=121 clients reporting a primary substance)

**Youth**

Similar to adults, youth in grades 9 to 12 throughout Southwestern Ontario most commonly report using alcohol, cannabis and opioids in the past year (Figure 5).

**Figure 5: Percentage of grades 9 to 12 students reporting drug use in the past year, Southwestern Ontario, 2017**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>60%</td>
</tr>
<tr>
<td>Cannabis</td>
<td>30%</td>
</tr>
<tr>
<td>Opioids (non-medical)</td>
<td>11%</td>
</tr>
<tr>
<td>Cough/cold (non-medical)</td>
<td>7%</td>
</tr>
<tr>
<td>Mushrooms/Mescaline</td>
<td>5%</td>
</tr>
<tr>
<td>Ecstacy</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: 2017 Ontario Student Drug Use and Health Survey (OSDUHS). Includes Erie St. Clair and South West LHINs; Student n=678; School n=12
How much and how often are substances used?

Alcohol

About 58% of Lambton adults, 18 years and older, drink to the point of risking immediate harm (i.e. binge drinking\(^\text{iii}\) at least once in the past year).\(^2\) Furthermore, about 30% are considered heavy drinkers - binge drinking at least once per month in the past year.\(^2\)

Nearly 1 in 3 residents are heavy drinkers - binge drinking at least once per month in the past year.

Source: 2018 Lambton Public Health Program Survey

While males were only slightly more likely than females to report drinking any alcohol in the past year, they were significantly more likely to report heavy drinking (Figure 6). A similar percentage of adults aged 18 to 64 years reported drinking any alcohol but those under 25 years were significantly more likely to report heavy drinking (Figure 6).\(^2\)

**Figure 6: a) Percentage of residents reporting any alcohol consumption and heavy drinking, by gender and b) Heavy drinking by age, Lambton, 2018**

![Figure 6](image)

Source: 2018 Lambton Public Health Program Survey

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\(^{iii}\) Binge drinking is defined as having 4 or more drinks for women and 5 or more drinks for men on one occasion.
While the local survey conducted in 2018 does not have provincial comparator data, similar data is collected regularly through the Canadian Community Health Study (CCHS). The most recent CCHS (2015/16) suggests that harmful drinking rates have been increasing in Lambton and local residents are more likely than Ontario residents to exceed the low-risk alcohol drinking guidelines\textsuperscript{v} and to report heavy drinking.

**Youth**

About 27% of grades 9 to 12 students in Southwestern Ontario reported binge drinking\textsuperscript{v} in the past month. Furthermore, 18% of secondary school students in the region display hazardous or harmful drinking patterns based on the World Health Organization's Alcohol Use Disorders Identification Test (AUDIT).\textsuperscript{4} Regional estimates were higher than provincial estimates (23% binge drinking; 14% harmful use), but the differences were not statistically significant. In Ontario, there has been a steady decrease in hazardous/harmful drinking among both males and females between 2009 and 2017.\textsuperscript{4}

**Cannabis**

Of the 15% of Lambton adults who used cannabis for non-medical purposes in the past year, 55% used it at least weekly, including 35% who use it daily or almost daily (Figure 7). This equates to 8% of Lambton adults, 18 years and older, using cannabis at least weekly in the past year.

Figure 7: Frequency of cannabis use in the past 3 months among Lambton adults who used cannabis for non-medical purposes, 2018

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not in the past three months</td>
<td>16%</td>
</tr>
<tr>
<td>Once or twice</td>
<td>23%</td>
</tr>
<tr>
<td>Monthly</td>
<td>5%</td>
</tr>
<tr>
<td>Weekly</td>
<td>20%</td>
</tr>
<tr>
<td>Daily or almost daily</td>
<td>35%</td>
</tr>
</tbody>
</table>

Source: 2018 Lambton Public Health Program Survey

Non-medical use of cannabis was higher among males and decreased with age (Figure 8). Among those 18-34 years, 42% of males and 27% of females reported using cannabis for non-medical purposes in the past year. Young adults were most likely to report frequent use of cannabis, with 20% of those 18-34 years reporting weekly or daily use.

\textsuperscript{v} Canada’s Low-Risk Alcohol Drinking Guidelines recommend no more than two drinks a day or 10 drinks a week for women, no more than three drinks a day or 15 drinks a week for men, and at least two non-drinking days per week.

\textsuperscript{v} The 2017 Ontario Student Drug Use and Health Survey (OSDUHS) defines binge drinking as five or more drinks on one occasion.
Prescribed Opioids

While the total volume of opioids dispensed for pain has decreased in Lambton between 2013 and 2018, local rates of dispensing remain about 1.7 times higher than provincial rates. Of those prescribed opioids for pain in Lambton in 2018, about 6% (1,197 individuals) were prescribed doses exceeding the suggested dose threshold of 50 MME (based on North American clinical guidelines). The number of individuals receiving high daily doses has decreased steadily in Lambton and Ontario between 2013 and 2018.\

While it is known that opioid prescription rates increase as age increases (Figure 9), harmful use is noted in younger age groups (described further below).
Youth
In Southwestern Ontario, 13% of secondary school students met the criterion for a drug use problem that may require intervention based on the CRAFFT adolescent substance use screener. Based on the Ontario Student Drug Use and Health Survey (2017), male students in Ontario in grades 9 to 12 are more likely than female students to meet the criterion for a drug use problem (16% vs. 11%). The likelihood of indicating a drug use problem increases with grade - from 5% of 9th graders to 22% of 12th graders. There has been a significant decline in the percentage reporting a drug use problem between 2003 and 2017.

Limitations regarding illicit drug use
We do not have data about how much or how often illicit opioids or other drugs are used in Lambton County. Due to the small proportion of survey respondents who report non-medical use of opioids or other illicit drugs, it is not possible to examine patterns of use among different sub-populations. While surveys include questions about ethnicity, Indigenous status, income, and education, small sample size prevents us from making comparisons that are statistically meaningful. Sub-populations with high rates of problematic substance use can be understood by looking at provincial statistics and other relevant research. This is further described below in the section on priority populations.

What are Lambton residents' attitudes towards drug and alcohol use?
Drinking alcohol is generally acceptable: most respondents (88%) say that drinking is OK within limits, but attitudes vary with age. Older adults are more likely to say that drinking is OK, but a person should not get drunk. Younger adults are more likely to say that occasionally getting drunk is OK, as long as it doesn't interfere with responsibilities.
Cannabis use is less socially acceptable, particularly among older adults. Overall, one-third of residents think cannabis is never a good thing to use, including about 50% of those 65 years and older. Others (58%) think infrequent/occasional use is fine as long as it doesn’t interfere with responsibilities.

3 in 5 residents think occasional cannabis use is OK if it doesn’t interfere with responsibilities.

Source: 2018 Lambton Public Health Program Survey

Non-medical opioid use is viewed as a high-risk activity by nearly 90% of Lambton residents and over 70% believe that opioid use is a very serious problem in Lambton County.

Use of other illegal drugs such as heroin, cocaine, ecstasy, etc. was viewed as a very serious issue in Lambton County by about two-thirds of respondents. One quarter think that alcohol and cannabis use are serious issues in the community.
Drug and Alcohol Harms - Health Impacts

- Alcohol accounted for nearly half of the substance-related emergency department visits in 2018 followed by opioids that accounted for about 20%.
- Alcohol-related visits have increased steadily over time. Opioid-related visits have varied over time, with the number of visits in 2018 exceeding all previous years of study. Other substances remain relatively stable.
- About 60% of deaths due to alcohol and drug toxicity since 2012 are opioid-related. Mortality rates due to opioids are currently lower than the provincial average but were regularly higher prior to 2016.
- Hepatitis C rates have been increasing and are significantly higher than the provincial average.
- Other harms are more difficult to quantify locally but include physical and mental illnesses, economic costs, and social harms.

How many emergency department visits are due to drug and alcohol use?

In 2018, there were nearly 1,500 emergency department (ED) visits for substance-related diagnoses among Lambton residents (average 4 visits per day; range 0 to 12 visits per day). This represents 1.7% of all visits.

About 45% of substance-related ED visits were related to alcohol use and 19% were due to use of opioids (Figure 10). Note: There is a separate category for "multiple and other" substances, so these figures likely underestimate the number of visits related to each individual substance.

Alcohol-related visits have been increasing steadily over time between 2002 and 2018 (Figure 11). Alcohol-related visits are lower among Lambton residents compared to the provincial average. Opioid-related visits peaked between 2009 and 2011, declined until 2014 and then increased, particularly in 2018. The number of opioid-related ED visits was higher in 2018 compared to all previous years of study and the local rate (212 per 100,000) was significantly higher than the provincial rate (131 per 100,000). While stimulant-related visits have been relatively low and stable, the number of ED visits increased nearly three-fold between 2016 and 2018 (from 60 to 170 visits per year). Finally, while cannabis is not a common cause of emergency department visits, visits more than doubled from 2016 to 2018 (from 28 to 74 visits per year).
Who is visiting the emergency department due to drug and alcohol use?
Overall, males are more likely than females to visit the ED or be hospitalized for alcohol and drug-related diagnoses. Age-specific patterns vary between genders and there are different patterns for alcohol vs. drug-related ED visits (Figure 12). While alcohol-related ED visits are highest among females 20-39 years of age, they peak among older males 50-59 years old. Drug-related ED visits peak among 20-29-year-olds for both males and females.

Source: Ambulatory Visits [CY 2002-2018], Ontario Ministry of Health, IntelliHEALTH ONTARIO, Date Extracted: July 5, 2019
How many deaths have occurred due to drug and alcohol use?

The Office of the Chief Coroner in Ontario reports 67 deaths due to drug and/or alcohol toxicity among Lambton residents between 2012 and 2016. About 60% of these deaths have been related to opioids (Table 1).

Table 1: Number of deaths among Lambton residents due to alcohol and/or drug toxicity, 2012-2016

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug and/or Alcohol Toxicity</td>
<td>10</td>
<td>16</td>
<td>12</td>
<td>20</td>
<td>9</td>
<td>67</td>
</tr>
<tr>
<td>Opioid Toxicity</td>
<td>7</td>
<td>9</td>
<td>8</td>
<td>11</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>% related to opioids</td>
<td>70%</td>
<td>56%</td>
<td>67%</td>
<td>55%</td>
<td>56%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Source: Office of the Chief Coroner in Ontario.

While mortality data usually has a significant lag time before release, opioid-related deaths are now updated regularly and available through the Public Health Ontario Opioid Tool. The number of deaths in Lambton has ranged from 5 to 11 per year between 2008 and 2018. The data shows an increasing trend in Ontario but there is more variability in Lambton (Figure 13). Rates were increasing and slightly higher than Ontario rates between 2012 and 2015, decreased below provincial rates in 2016 and 2017 and were similar to the provincial rate in 2018.
In Lambton, between May 2017 and March 2019, there were 24 opioid-related deaths. Of these deaths:

- 92% were unintentional
- 50% were among 25-44 year olds and 46% were among 45-64 year olds
- 54% had a form of fentanyl present
- Hydromorphone, methadone, oxycodone, oxymorphone, morphine, hydrocodone, heroin, carfentanil and codeine were present in at least one death
- 96% were white individuals
- 73% occurred indoors at a private residence
- 41% had evidence of injection drug use
- 9% reported that naloxone was used

Note: These are confirmed opioid-related deaths. A death investigation by the Office of the Chief Coroner for Ontario has indicated an opioid directly contributed to the cause of death.

**What are other health impacts of drug and alcohol use in our community?**

The health impacts of substance use differ between people, over time, and depending on the amount of substance consumed. This section outlines some of the more common health challenges faced by people who use drugs.

Alcohol contributes to many health and social problems listed in Table 2.
Mental health problems
Mental health problems are a common issue associated with substance use. People with substance use problems are more likely to have a mental health problem than people without a substance use problem and vice versa, but the exact reasons for this correlation are not clear and vary between people. The connection to mental health is explored further in the section on risk and protective factors.

Much like physical problems associated with alcohol use, mental health problems also produce dose-dependent effects. Chronic and acute alcohol use increases the risk of suicides and suicide attempts, and in both cases, the more alcohol that is consumed, the greater the risk for suicide and self-harm.\textsuperscript{11,12} This appears true for entire cultures with higher rates of harmful drinking.\textsuperscript{12}

Infections due to injection drug use
People who inject drugs are at risk of several infectious diseases. Blood-borne infections, such as hepatitis C and HIV, can be transmitted when syringes are reused and shared. Invasive group A streptococcal disease (iGAS) can result when injection sites are not properly sterilized allowing bacteria to enter the bloodstream.\textsuperscript{13} Because people who inject drugs are at increased risk of bacteremia (bacteria in the bloodstream), they are also at increased risk of infective endocarditis, an inflammation of the lining of the heart.\textsuperscript{14} The risk of infective endocarditis has been linked to the increase in injection hydromorphone over the past 10 years.\textsuperscript{15} This switch to injecting hydromorphone is said to lead to riskier injection practices and therefore increase the chance for serious bacterial infection.\textsuperscript{15}

In Lambton, there has been an increase in infections associated with drug use in recent years. In particular, hepatitis C rates increased sharply in Lambton between 2009 and 2010 and have been significantly higher than provincial rates since this time (Figure 14).\textsuperscript{16} In 2018, there were 137 cases diagnosed and more than three-quarters of cases reported past or present injection drug use. Historically, hepatitis C was most commonly diagnosed among older adults, but there has been a shift in the age distribution with the majority of cases now reported among those less than 40 years of age.

---

Table 2: Health and social problems of alcohol use

<table>
<thead>
<tr>
<th>Direct Effects (can cause):</th>
<th>Disease &amp; Conditions (linked to):</th>
<th>Functions &amp; Systems (affects):</th>
<th>Behaviours (can lead to):</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Addictions</td>
<td>• Other substance use disorders</td>
<td>• Immune</td>
<td>• Risk-taking</td>
</tr>
<tr>
<td>• Memory loss</td>
<td>• Mental health problems</td>
<td>• Stress</td>
<td>• Impulsivity</td>
</tr>
<tr>
<td>• Delirium</td>
<td>• Organ damage</td>
<td>• Cognition</td>
<td>• Violence</td>
</tr>
<tr>
<td>• FASD</td>
<td>• Cancers</td>
<td>• Digestion</td>
<td>• Injury</td>
</tr>
<tr>
<td></td>
<td>• Cardiovascular disease</td>
<td>• Brain</td>
<td>• Impaired decision-making</td>
</tr>
<tr>
<td></td>
<td>• Diabetes</td>
<td>• Hormones</td>
<td>• Impaired social, academic and occupational functioning</td>
</tr>
<tr>
<td></td>
<td>• STIs</td>
<td>• Fertility</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Heart, blood, lungs</td>
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</tbody>
</table>

Adapted from Public Health Agency of Canada\textsuperscript{10}
Hepatitis C can be fatal but treatments are continually improving and treatment is available to those who need it locally.\textsuperscript{17}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure14.png}
\caption{Incidence of hepatitis C infections by year \textit{Lambton and Ontario, 2004-2018}}
\end{figure}

Source: Public Health Ontario, Infectious Diseases Query.\textsuperscript{16}

Local rates of iGAS increased sharply between 2011 and 2012. While local rates were lower than provincial rates prior to 2012, they have been similar to or slightly higher since that time.\textsuperscript{16} Lambton’s HIV infection rates are lower than the provincial average, but there has been an increase in cases in Lambton in the past six years.\textsuperscript{16}

These illnesses and others such as abscesses and wounds are a common issue seen in people who inject drugs and could impact as many as 1 in 3 people who have injected drugs in the past month.\textsuperscript{18} Harm reduction programs such as sterile syringe distribution and exchange have been shown to reduce these harms and provide a connection to health care, education, other supports, and a non-judgmental environment. However, it should be noted that prohibition and the subsequent stigma of these substances and the people who use them lead to people using unregulated substances in unsafe locations without sterile supplies, increasing the risk of harms from substance use.

\textit{Impacts of maternal substance use on infants}

In connection with the increase in the use of prescription opioids, neonatal abstinence syndrome (NAS) has been increasing in Canada and other countries.\textsuperscript{19} NAS can occur due to opioids crossing the placenta due to chronic illicit or prescribed use. NAS rates rose rapidly in Lambton starting in 2008 and peaked in 2015. While rates decreased in 2016 and 2017, they increased again in 2018 and remain significantly elevated compared to provincial rates (Figure 15).
Pregnant mothers who use drugs and their infants are both at risk of blood-borne infections, violence, withdrawal, and overdose. Maternal substance use can also increase the risk for physical problems associated with the pregnancy and in some instances, death. Alcohol use during pregnancy is widely known to cause fetal alcohol spectrum disorders (FASD) and maybe underdiagnosed because of the stigma and the lack of a single diagnostic test. Opioid agonist therapy can help to reduce these risks by providing a safe supply of opioids so a mother can access standard prenatal care.
Drug and Alcohol Harms - Economic and Social Impacts

Drug use not only has negative individual consequences, but it also impacts the health and well-being of the population, whether someone actively uses substances or not.

Economic Harms

In Ontario, substance use (including tobacco) cost $14.7 billion, 70% of which is attributable to legally obtained substances (alcohol and tobacco) (Figure 16). This amounts to $1,074 for each resident ($136 million for Lambton County), an increase from 2007.

![Figure 16: Overall Costs by Substance in 2014, in Millions](image)

Lost productivity costs make up almost 40% of the overall costs followed by health care (28%) and justice (26%) (Figure 17). This is largely due to deaths among those still of working age, a population significantly impacted by substance use, in addition to short and long-term disability costs. Despite the known cost-benefit of prevention efforts, prevention is included in other direct costs, accounting for only 7% of the total costs. Of course, economic costs do not quantify the total impact of substance use on a community since they don't take into account the emotional costs of caring for a loved one with problematic substance use.

Source: Adapted from Canadian Substance Use Costs and Harms Scientific Working Group, 2018
Social Harms
In order to understand the full impact of substance use, we must look beyond the financial costs. We've heard from people who use drugs, their loved ones, services providers, and the community about how problematic substance use can impact the justice system, public safety, public perception, and housing instability.

"...one day I woke up and I decided, I can't live like this, not eating and breathing; can't sleep right; I can't work, I can't hardly do anything cause I'm so malnourished and my throat and my sinus cavities are so infected..." – Person with lived experience of substance use

Justice System
It is difficult to quantify the impact of substance use on the justice system. Although illegal substance use and distribution are in direct violation of the law, substance use can also lead to other crimes such as those carried out while under the influence of substances (violent crime, nuisance crimes) and those carried out in order to obtain substances (theft, robbery, illegal activities for money/drugs). There are also costs associated with legal substances, mostly to regulate their sale but also to mitigate certain harms, such as drunk driving prevention programs. In Canada, alcohol accounted for the greatest percentage of costs to the justice system and was more likely to be associated with violent crimes than non-violent crimes.20

Unfortunately, the transition into, through, and out of the justice system can impact the harms of substance use in other ways. For some, the justice system is a way to initiate treatment. Often, loved ones describe engaging the justice system as their last chance for accessing services. Due to its
involuntary nature, being incarcerated can initiate withdrawal and place parameters on a person that can motivate some to engage in treatment. However, the opposite can also be true. Access to treatment services in jails is limited, there can be greater access to substances themselves within jails, and there may be greater pressure to use as a means of mental escape or pressure to align with powerful groups. Leaving jail presents yet another challenging time for those who do not have a safe place to return to and can't find meaningful work due to their criminal record. If they have been abstaining from substances, they are at an even greater risk for overdose if they use at levels they previously tolerated. There are a number of opportunities for evidence-based interventions that could help to reduce the harms of substance use for those in the criminal justice system such as drug courts, behavioural counselling, and opioid agonist treatment; however, they are not currently implemented systematically.

Many residents believe that problematic substance use is a top criminal justice concern. Sarnia residents are increasingly identifying drug-related crime as a priority issue for police to tackle and businesses are calling on police to be more active in communities. As discussed above, this can be both a helpful and harmful stance and is only one aspect of a comprehensive response.

"So then we finally had to call the police, and lay charges. And our hope was that maybe finally with charges laid against him, something will happen where they will confine him, he will get clean, being in jail, cleaned up, they will send him for treatment, for mental health, and in fact, that has happened, he’s at the [mental health hospital] right now. So that was in our desperation. No parent wants to lay charges against their child, and we love our son, and we want to get help, but it’s out of desperation because we’re feeling really abandoned by the system, by the hospital and the justice system..." – Parent

"I tried to avoid [the police] as much as I could, for obvious reasons. When I did [interact], they were more just preaching than anything else." – Person with lived experience of substance use

### Public Safety

Driving while under the influence of drugs or alcohol is also a criminal offence and a threat to public safety. In 2016, drinking and driving collisions was the second leading cause of death on Ontario roadways resulting in almost 20% of the total reported fatalities on roadways. In Lambton, driving under the influence of drugs or alcohol presents a serious concern to public safety (Table 3). Youth are especially vulnerable to risky behaviour and substance use as their brains continue to develop. In Southwestern Ontario, 17% of secondary

<table>
<thead>
<tr>
<th>Table 3: Number of impaired driving offences, Sarnia and Lambton</th>
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<tr>
<td>Sarnia Police Services</td>
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<tr>
<td>Lambton OPP</td>
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</tbody>
</table>
school students have been a passenger in a vehicle with a driver who has been drinking alcohol and 12% have been a passenger with a driver who has been using drugs. About 9% of drivers (grades 10-12) report using cannabis before driving a vehicle.⁴

The illicit nature of injection drugs forces people to inject in the privacy of a residence, or when homeless, an accessible building or in public. This has resulted in unsafe disposal of syringes both in the community and in public buildings (such as the hospital and library) and concern raised by the community. Although more sterile needles are being distributed, there are fewer needles being returned.²⁵ This is a similar concern in other communities that are beginning to put more resources into secure, safe disposal locations. Recent funding to address the increasing hepatitis C rates in Lambton County has expanded a needle syringe program into the county. Secure, standalone disposal sites with after-hours drop-off are being installed in various locations throughout the county.

Public Perception and Stigma
Despite the widespread acceptance of alcohol use and the less accepted, but now legal cannabis, illicit substance use is still highly stigmatized and seen by some as an anti-social behaviour or a moral failing. Policies associated with substance use can increase feelings of isolation and may perpetuate the structural risk factors that put people at risk for harmful substance use in the first place.²⁶

Stigma and discrimination against people who use drugs have been implicated in delaying or avoiding treatment, not only for substance use but for other physical and mental health conditions associated with it. Research suggests that health-care providers generally have more negative views and expectations of patients who use drugs, have shorter visits and worse rapport, and are more dissatisfied and unmotivated working with them.²⁷ This is possibly due to a lack of adequate specific education, interaction, and support giving care to people who use drugs.²⁷ We also heard from loved ones of people who use drugs that when seeking treatment, their loved ones were not treated like other patients which left them feeling disrespected and dismissed. Unfortunately, the stigma can also lead to social isolation and being ostracized from family and community.

“A lot of people judge them, ..when they were on drugs and looked different, maybe they got sores, maybe they’re not clean bathed, maybe they look all dopey, and they try to talk to people, people don’t take them seriously.” – Parent

“When you’re in a family that doesn’t believe in addiction [as a disease] and you’re the only one, you feel like, ‘What’s wrong with you? What happened to you for you to get off track?’” – Person with lived experience of substance use

Housing Instability
Homelessness is also an issue among people who use drugs. Locally, substance use and addictions issues were reported as the top cause for homelessness and are estimated to be a risk factor in as many as half of those who are homeless.²⁸ Internationally, research has shown higher rates of mental health and substance use problems in the homeless population with the most common issues being alcohol
dependence, drug dependence, personality, and mood disorders. Numerous other factors impacting the housing market locally have resulted in a collaborative of community services prioritizing homelessness and housing instability. For any meaningful impact to be made, it is necessary that problematic substance use and homelessness initiatives acknowledge and understand the influence they have on each other.

“I see a lot of people and you know they're doing drugs. There's needles everywhere sometimes. They put a big fence around the house because the needles were all out... But I think if they have somewhere they can go even, yes.” – Person with lived experience of substance use
Drug and Alcohol Treatment Seeking

- Although there is a large variety of treatment options for substance use problems, they are not always easy to access.
- Rates of admission to government-funded substance abuse treatment services and opioid agonist therapy are significantly higher than the provincial average.
- Males aged 25-34 make up the highest number of admissions to treatment and also represent the highest increase in admissions over time.
- Opioids have recently surpassed alcohol as the most frequently reported primary substance of abuse in government-funded treatment programs. Methamphetamines have also been increasing.
- Addiction is complex and is influenced by societal, community, interpersonal, and individual-level factors that impact Lambton residents. By taking a multi-level approach, we are more likely to reduce the harms from substance use and increase the quality of life for all residents.
- People who use drugs, their loved ones, and the service providers that work with them provided suggestions for many opportunities to improve the system that offers treatment of support such as intervening early, increasing access and understanding of the system, and providing wrap-around services along a continuum of care.

"... I decided to ask my worker about methadone program. And called the right people and that afternoon was on methadone. Within about a week I stopped doing 50 pills a day, down to a couple of weeks at that time, or a few a week. And then gradually none. It only took the first month. But I still used methadone as a crutch, but I’m glad I did find it".
– Person with lived experience of substance use

What services are available to reduce harms and treat problematic substance use?

There are a wide variety of services that exist to help support people to reduce problematic substance use, many of which are publicly funded. Services exist along a continuum from least intrusive to most intensive and are often based on the stage of recovery a person is in. Harm reduction services acknowledge that while someone may not want to decrease their use, they can use more safely and receive connections to other services to improve their quality of life which may enable them to decrease their use. If a person is interested in stopping use, they may access detoxification or withdrawal management services that can help support the process either in hospital or community. Some detox services are medically supported to assist and avoid medical emergencies but others are abstinence based and no medication is provided. First line treatment for problematic opioid use is available by prescription through physicians and specialized clinics that offer opioid-agonist treatment (OAT). Individuals may then attend a longer term residential treatment facility or return to community-based "aftercare" support including peer led and other 12 Step programs.
"So [my psychiatrist] says, I promise I will not let you down, I will not drop the ball on you. And I said, we'll see, right? ... So he has been consistent, I've had him since, he has never failed me, he has never dropped the ball. He's continued to show incredible support and faith. He's always direct, he never underestimates my ability to understand, or learn. So he doesn't infantilize me at all, you know, he treats me with dignity and respect, which I appreciate, and doesn't dumb things down, or thinks I can't handle something." – Person with lived experience of substance use

Unfortunately, navigating all of these services can be challenging. Space in publicly-funded treatment facilities is limited and can result in long waitlists, shorter treatment times, and a disjointed path of recovery. In private facilities, the cost can be prohibitive and there is limited data compared to publicly-funded beds. Currently, there are no residential treatment facilities in Lambton County so transportation can be a barrier to service. A lack of affordable transitional and stable housing and support for family and loved ones also puts individuals' recovery at risk.

"Transitional housing would benefit many people in preventing relapse during that critical time post treatment." – Stakeholder

Suggestions for improving care from people with lived experiences

<table>
<thead>
<tr>
<th>Intervene Early</th>
<th>Increase Access</th>
<th>Improve Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Offer support before their use becomes more frequent, more intense, and more diverse or dangerous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Make it easier to understand where and how to get help for problematic use and caregiver support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Treat problematic substance use like other chronic illnesses: holistic approach, plan for relapse, stigma-free</td>
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</tbody>
</table>

How many people are accessing harm reduction services?

In 2018, there were 1,667 visits to the Lambton Public Health Harm Reduction clinic to obtain injection and inhalation equipment. This included 1,121 visits by 505 registered clients and 546 visits by anonymous clients. Among registered clients, 64% were male and 35% were 25 to 34 years old (Figure 18). Lambton Public Health also accepts used needles for proper disposal. In 2018, there were 160 visits to return more than 72,000 used needles.

vi Between February and December 2018 after implementation of neo360 Harm Reduction Database.
In 2016, Lambton Public Health began distributing free naloxone kits to temporarily reverse opioid overdose. In 2018, Lambton Public Health distributed 763 kits and Lambton area pharmacies distributed 1,288 kits. In general, naloxone kit distribution by Lambton Public Health and satellite sites has increased over time (Figure 19).

Source: Lambton Public Health, Internal Tracking and neo360 Database (February 2018 to July 2019).
How many people are seeking treatment for problematic substance use?

Government-funded drug and alcohol treatment
In 2018/19, 1254 individuals from Lambton County were admitted to a Ministry of Health (MOH) funded substance abuse treatment service. Rates of admission to these services were lower than the provincial average until 2012/13, but then increased rapidly and have been significantly higher than the Ontario average in recent years (Figure 20).

![Figure 20: Rate of unique admissions to government-funded substance abuse treatment services per 100,000 population, Lambton and Ontario, 2007/08 to 2018/19.](image)

Source: Centre for Addiction and Mental Health, Drug and Alcohol Treatment Information System (DATIS)

Admissions to government-funded treatment services are more common among Lambton males than females (59% vs. 41%). Admissions are highest among those 25 to 29 years of age (Figure 21). This age group has also seen the largest increase over time (Figure 22). About 73% of admissions were among Sarnia residents, 8% among Lambton Shores residents, and 7% among St. Clair residents.
Opioid-agonist therapy (OAT)

In 2018, 1289 Lambton residents were dispensed an opioid for OAT. There has been a higher rate of opioids dispensed for OAT in Lambton compared to Ontario between 2013 and 2018 (Figure 23). While methadone is the main treatment used for OAT, buprenorphine is becoming a more common treatment increasing from 19% to 47% of individuals receiving this type of OAT between 2013 and 2018.7
In 2018, Lambton males were more likely than females to be dispensed opioids for OAT (59% vs. 41%).

While local data for OAT by age is not available due to small numbers, 25 to 44 year olds are most likely to be dispensed OAT in Ontario.

**Which substances are people most often seeking treatment for?**

In 2018/19, prescription opioids were the top presenting problem among those admitted to MOH-funded substance abuse treatment services, followed by alcohol, cannabis and methamphetamines (Figure 24). Admissions due to these top substances have been increasing over time (Figure 25).

**Figure 23: Rate of opioid agonist therapy per 1,000 population, Lambton and Ontario, 2013 to 2018**

![Graph showing rate of opioid agonist therapy per 1,000 population, Lambton and Ontario, 2013 to 2018](image-url)


Source: Centre for Addiction and Mental Health, Drug and Alcohol Treatment Information System (DATIS)³²

*Note: Up to five presenting problem substances may be reported in an admission.*
What can lead to or protect from problematic drug and alcohol use?

"Mental health and addiction piece; access to primary care, timely access to mental health and social support services. You know, there's a good chunk of these folks that are homeless. There's a good chunk of these folks that are unemployed. There's a good chunk of these folks that have got, you know, concurrent mental health issues that aren’t being addressed." – Stakeholder

Problematic substance use is complex and there are many factors that could contribute to or reduce the risk of someone's use. Researchers are learning more about the role of different influences in a person's life but we have enough information to know where some opportunities for intervention exist.

Addiction is a complex illness that can be described using 4 Cs:

- Craving
- Loss of Control of amount or frequency of use
- Compulsion to use
- Use despite Consequences

Addiction is often believed to be a choice that someone can easily decide to continue or stop. However, most human behaviour is much more complex than that and substance dependence is no different. When we only consider what someone plans to do (for example, stop using drugs or alcohol), we discount all of the other factors that ultimately impact one's behaviour such as the belief that use will help one to feel better, the desire to fit in or engage socially, the biological urges to use in order to avoid withdrawal, and use itself which is positively reinforcing.
Certain people are at greater risk of harm due to drug and alcohol use because of social and economic factors, also known as the social determinants of health. While this report has highlighted some groups that experience greater harms, research at the provincial and national levels can help us to further understand differences in risk. Priority populations should be explicitly considered and interventions should be tailored to their unique needs and strengths.

Table 4 includes an adapted list of some of the known risk and protective factors for problematic substance use grouped by level of influence. The following section describes how these risk and protective factors may influence substance use in Lambton County.

Table 4: Risk and protective factors for problematic substance use by level of influence

<table>
<thead>
<tr>
<th>Level of Influence</th>
<th>Examples of Risk and Protective Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Societal/Structural</td>
<td>Marketing practices and social norms</td>
</tr>
<tr>
<td></td>
<td>Colonization and intergenerational trauma</td>
</tr>
<tr>
<td></td>
<td>Stigma and discrimination</td>
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<tr>
<td></td>
<td>Income and housing policies</td>
</tr>
<tr>
<td>Community</td>
<td>School connectedness and environment</td>
</tr>
<tr>
<td></td>
<td>Social and community connectedness</td>
</tr>
<tr>
<td></td>
<td>Availability of and access to health and social services</td>
</tr>
<tr>
<td></td>
<td>Availability of and access to substances</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Early childhood development</td>
</tr>
<tr>
<td></td>
<td>Physical and sexual abuse and other types of violence</td>
</tr>
<tr>
<td></td>
<td>Family member with problematic substance use</td>
</tr>
<tr>
<td>Individual</td>
<td>Resilience</td>
</tr>
<tr>
<td></td>
<td>Mental health status</td>
</tr>
<tr>
<td></td>
<td>Genetics</td>
</tr>
</tbody>
</table>

Source: Adapted from Public Health Agency of Canada

**Societal and Structural Factors**

**Social norms**
Lambton County has a number of societal risk factors that could account for the increased use. Alcohol (and to a lesser degree cannabis) are widely accepted in Lambton as part of the social fabric (88% of residents reported it's "OK" to drink within limits). When drinking behaviour is normalized, it can result in use that starts earlier (such as underage drinking) and more harmful use. It can also be normalized by existing alcohol policies at the provincial and federal levels including availability and marketing of alcohol, discussed later in this section, and can be particularly persuasive in youth and young adults.

**Colonization and intergenerational trauma**
In Canada, the traumatic impacts of colonization and the residential school system have been transmitted to subsequent generations of Indigenous Peoples through psychological, physiological and social processes.
More people in Lambton County identify as Indigenous than the Ontario average. About 40% of those who identify as Indigenous live in one of three First Nations communities located in Lambton County, about 40% live in Sarnia; the remaining 20% live in other Lambton municipalities.

Indigenous Peoples are significantly and negatively impacted by racial and cultural stigma and discrimination, culturally unsafe services, financial and geographical barriers, and the structural inequities that exist in current policies. Importantly, cultural connection can be a protective factor against harmful use so promoting culturally-based services and cultural safety in non-Indigenous services is necessary for health and well-being that is inclusive of everyone.

**Stigma and discrimination**

Stigma and discrimination against a person for any reason may also increase their use of substances and influence their desire or ability to seek supports. Stigma and discrimination refer not only to the interpersonal acts of physical and psychological harm, but also the impact of institutional oppression and structural violence that is experienced by certain groups. Substance use itself is highly stigmatized and yet is often a way that people who have experienced stigma cope with those experiences.

Although Lambton has much less ethnocultural diversity than the rest of Ontario there are reports of stigma and discrimination felt by a variety of different groups including LGBTQ2IA+, ethnocultural minorities, and those with problematic substance use.

**Income and housing policies**

Income and housing policies may be risk or protective factors for problematic use. Lambton has a slightly lower proportion of residents living in low income households than the Ontario average, the highest percentage of whom are in Sarnia. People with low income are more likely to experience negative impacts of alcohol and substance misuse and this may even be a contributing factor to initiating use. They may also experience housing instability that can be a result of problematic substance use and a risk factor for substance use.

Manufacturing and construction are among the top four industries in Lambton, with almost 1 in 5 people in the labour force employed in the trades. Research has shown that manufacturing and construction are careers with some of the highest rates of heavy alcohol use, illicit substance use, and substance use disorders. Lambton's education level reflects the prevalent industries; compared to Ontario, twice as many residents have apprenticeship or trades qualifications and half as many have a bachelor's degree or higher. In addition to these higher risk industries, there has been a decrease in employment in the top industries locally, creating income-related risks for substance use.

**Community**

**Social and community connectedness**

Among Lambton adults, 63% reported feeling connected to their community. Often, workplaces foster meaningful social connections and can have a dramatic impact on whether people feel supported when experiencing challenges. While two-thirds of employees in Lambton County agree that their employer promotes mental health, 22% report that it is not the case at their place of employment. Similarly, just
over half say they feel comfortable speaking with their employer about mental health concerns; however, just over a third says they do not. This indicates a pressing need for employers to emphasize and promote mental health, including explicit knowledge of substance use issues so that the appropriate support can be given to their staff.

School connectedness and environment
Some examples of factors that can impact a feeling of connectedness at school include engagement in learning (which could be impacted by learning problems and teacher relationships), connection to peers who do not use drugs or alcohol, and access to mental health literacy education in school.

Availability and access to health and social services

“We have services, but people aren’t accessing them. Need organizational shift from helping people get into treatment to harm reduction and providing service on a continuum.”—Service Provider

“It was just such a disjointed system… It was like we were just flailing in the wind with no one sailing the ship.”—Parent

Mental health and substance use services exist throughout Lambton but are much less widely available in the more rural areas. Service providers also feel that the existing services could be improved. When we asked service providers about local substance use services and to rate the capacity, availability, and appropriateness of a variety of services (treatment, harm reduction, prevention, and justice involvement) they most often reported each service as being “fair” (of the options “very good, good, fair, poor, and very poor”). When asked what improvements were needed, suggestions were provided and a summary is included in Figure 26.

Figure 26: Improvement Suggestions to Local Substance use Services

<table>
<thead>
<tr>
<th>Prevention</th>
<th>Harm Reduction</th>
<th>Recovery</th>
<th>Enforcement/Justice</th>
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</thead>
<tbody>
<tr>
<td>• Target youth</td>
<td>• Safe injection and more needle exchange</td>
<td>• Streamlined process for access points</td>
<td>• Greater education and mental health support at enforcement level</td>
</tr>
<tr>
<td>• Target pharmacists</td>
<td>• HR education for health-care providers</td>
<td>• Lack of detox, recovery, and rehab</td>
<td>• Recovery, rehab, and psychoeducation during incarceration</td>
</tr>
<tr>
<td>• Opioid specific education</td>
<td>• HR outreach workers</td>
<td>• More awareness of existing services</td>
<td>• Diversion programs</td>
</tr>
<tr>
<td>• Better access to services</td>
<td>• Stable housing, safe house shelters</td>
<td>• Aftercare/wrap around services</td>
<td>• Youth outreach to build long-term trust</td>
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<tr>
<td>• Better linkages between partners</td>
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<td>• Affordable housing</td>
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<tr>
<td>• Addressing root causes</td>
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<td>• Grassroots, flexible programming</td>
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Availability of and access to substances

“...I had hurt my arm and couldn’t do [my job] anymore... I got a pinched nerve. The doctor had given me Percocet... So, after years I’ve been on it, and of course I realize now it’s not working for me because I’ve gotten used to them and the pain was starting to sneak back... After the years I find out, I really need these pills and if I didn’t have them it was awful, I couldn’t function.” – Person with Lived Experience

People can access substances in a variety of different ways, from retail stores, to medicine cabinets, to peers. For legal substances access is highly regulated by the government, whereas illegal substances are less widely available but have a greater potential of being contaminated with substances that could cause a fatal overdose. Research suggests that greater access to and availability of alcohol in particular directly contributes to increased use.45

Based on higher prescription rates, opioid availability is significantly higher in Lambton than the rest of Ontario, although it is decreasing.7 While the rate of opioid prescription does not always directly correlate with opioid morbidity and mortality, it does increase the potential risk for harms due to opioids.46

For youth, nearly 1 in 5 secondary school students in Southwestern Ontario have seen drugs being sold in their neighbourhood, with 60% reporting it is easy or very easy to get cannabis and 24% reporting it is easy or very easy to get prescription opioids.4 Among Ontario students reporting non-medical use of opioids in the past year, the most common source was a parent or sibling (55%).4 While programs such as the fentanyl Patch for Patch program can help to reduce the incidence of prescription opioids being made available in the illicit drug market, it doesn't include all opioids.

Interpersonal

Early development and adverse childhood experiences

Early childhood contains periods critical to healthy development. In Lambton, 17% of children in live in poverty putting their development at risk.37 Children who are exposed early on to Adverse Childhood Experiences (ACEs) such as neglect, abuse, and other household challenges (parental substance use or violence) are at greater risk of many physical and mental health problems throughout life, including early death. Lambton’s Healthy Babies, Healthy Children program reported higher rates of children who experienced four or more ACEs than the provincial average.47 This was corroborated in our consultations with individuals with lived experience as many shared that they were a witness to substance use and that it was normalized in their homes.1

Trauma and Other Adverse Experiences

Certain groups of people are more likely to experience traumatic or adverse life experiences that put them at greater risk for substance use. These people are less likely to have access to supportive resources and include youth involved with child welfare, people with housing instability or involved in the criminal justice system,21 people with mental health problems, and Indigenous Peoples who have experienced generations of harmful colonization.39,48 The alcohol paradox also suggests that while
people living in low income are less likely to misuse alcohol, they are more likely to experience harms from it than those with higher incomes.10

**Individual**

...as soon as I had feelings that I couldn’t cope with, I would ‘drug them out’. Or I would distract myself in one way or another, so even when that relationship ended, I would use sex or drugs or both, or all of it, to numb the feelings and distract from my feelings of not enough, feeling like a failure, overwhelmed, I didn’t even know what the feelings, the correct feelings were to certain needs. – Person with Lived Experience of substance use

**Gender**

In Lambton, men are more likely to engage in heavy drinking than women. Men are also more likely than women to use drugs, such as cannabis, as well as attend the emergency room for alcohol or drug-related harms. Young men (under 35) in particular are more likely to attend the emergency department for drug-related issues however alcohol-related emergency department visits peak at age 50-59 years.

Research suggests that while men consume more drugs and alcohol, women are at greater risk for health problems from use because of the differences in metabolizing drugs and alcohol and other social factors such as increased risk of sexual assault.12 A recent study found that Ontario women experienced a greater rise in emergency department visits compared to men between 2003 and 2016 (86% vs. 53% increase).49 It has also been found that people who identify as LGBTQ2IA+ are more likely to use drugs and alcohol harmfully than their non-LGBTQ2IA+ counterparts.50

**Age**

Youth are more vulnerable to the harms of drug and alcohol use, whether it’s only one episode of use or multiple. About 16% of secondary school students in Southwestern Ontario report being drunk or high at school in the past year.4 Despite their reasons for using, early and regular use can have negative and long-term impacts on their physical and psychosocial development.

Similarly, older adults are also at risk for drug and alcohol use, a trend that seems to be increasing in the past two decades.51 This pattern is being identified because of the aging population but they also face a number of unique challenges such as chronic physical illnesses, forced retirements, social isolation, and loss.39

**Mental health status & resilience**

Positive mental health and a sense of personal resiliency can be protective factors against substance misuse. A recent survey in Lambton indicated that 70% of adults are in very good or excellent mental health and over 80% report positive relationships and can manage their daily responsibilities.44 In addition, 3 in 4 residents were classified as flourishing, 96% of which reported a high level of resiliency.44 However, mental health problems are common as 1 in 5 adults report being diagnosed with a mental illness in their lifetime.44 Overall, younger people, people with low income, those with a chronic illness, and caregivers are more likely to report lower mental health.44
Another measure to assess the health of children in Lambton is the Early Development Instrument (EDI), an assessment completed by kindergarten teachers of their students. In the most recent EDI from the 2014/15 school year, many students were identified as being vulnerable in the areas of social competence, emotional maturity, and communication skills. In each domain there was at least one subdomain where approximately half of the kindergarten students demonstrated none or only some of the developmentally appropriate behaviours. This also points to a heightened need for healthy and knowledgeable adult figures in the lives of Lambton’s children.

“[My child] has mental health issues... Whether one has started or caused or made the other worse is I think one of the challenges. The more he has anxiety, the more challenges, the more drugs he uses to self-medicate, which has made his mental health deteriorate...”
– Parent

“No matter what program you go... there almost needs to be somebody there who takes their case, navigates them through the whole process and says, you know, ‘This is what you have to do’. “ – Parent
Recommendations

Given the impact that problematic substance use is having on residents of Lambton County, we recommend urgent and collaborative action to reduce the harms of drug and alcohol use. Based on this report, we recommend the use of a public health approach across Lambton to reduce the harms associated with drug and alcohol use. This approach includes the development of a community drug and alcohol strategy to identify specific, locally relevant priorities that involve, and are accountable to the residents of Lambton County. In particular, we recommend these priorities include:

- A focus on the harms of both drugs and alcohol
- Collaborative action through broad stakeholder involvement
- Upstream approaches that reduce the inequitable outcomes produced by the social determinants of health
- A strengths-based approach with evidence-informed interventions
- Comprehensive consideration of the factors influencing use such as the demand, supply, and harm of drugs and alcohol
- A universal approach that takes into account those at greater risk of harms and includes them in the development of specific, supportive interventions
- A community-wide effort to reduce stigma against problematic substance use
- A system of care that is accessible, available when needed, quality, and comprehensive
- A multi-level approach that incorporates individual, systemic, and population level interventions
- A system informed by and supportive of people with lived experience and their loved ones

In addition to the above recommendations, we are supportive of the 10 recommendations to achieve success from the Drug and Alcohol Strategy Research Report that incorporates input from service providers, people who use drugs and their loved ones, and other drug strategies. We have adapted these recommendations below (Figure 27).
Figure 27: Ten recommendations based on the Drug and Alcohol Strategy Research Report

<table>
<thead>
<tr>
<th>An upstream and disruptive approach</th>
<th>Stigma reduction</th>
<th>Treating root causes/underlying conditions</th>
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<tr>
<td>An individualized approach to treatment and support</td>
<td>System navigation support/pairing individuals with a champion</td>
<td>Centralized system of caregiver support</td>
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<tr>
<td>A holistic approach that acknowledges the ongoing nature of addictions issues</td>
<td>A consistent pathway to, through, and from care</td>
<td>Increasing access to local treatment</td>
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<td>Support for targeted populations</td>
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Substances have an enormous potential to help and harm. This report demonstrates that we need to consider the impact of drugs and alcohol in Lambton, reduce the stigma against people who use them, and improve how we care for people impacted by them. The report offers meaningful insights into our current relationship with drugs and alcohol and recommends key actions that would help to improve the lives of all residents of Lambton County. We also need to work together to create systemic, sustainable change that not only reduces the harms from substances but prevents problematic use in the first place and create a community that enables people to thrive in all they do.

“[M]y brain was always tuned to “take a pill now. Take a pill”...

I look at my future, and I see happiness. It took a long way to get here, really.

..So, I would countdown the hours and stuff and I don’t have to do that anymore.”

– Person with Lived Experience
References


