



DATA REPORT:

EXPLORING PATTERNS OF SUBSTANCE USE AND RELATED HARMS IN BRUCE AND GREY COUNTIES

Prepared by:

Alison Govier
Coordinator
Community Drug & Alcohol Strategy

Contributions from:

Alanna Leffley
Senior Epidemiologist
Grey Bruce Public Health

Lina Sherazy
Health Promoter
Grey Bruce Public Health

Shelby Huffman
Health Data Analyst
Grey Bruce Public Health

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GLOSSARY

Grey Bruce – The Canadian Community Health Survey measures a series of health indicators and provides annual estimates for each Health Unit catchment area. In this report the term Grey Bruce refers to Grey Bruce Health Unit (GBHU) catchment population aged 12 and older who live in private households. Residents of Indian reserves, health care institutions, some remote areas, and full-time members of the Canadian Forces are excluded from the sampling frame [Statistics Canada].

Mainly Rural Areas/Peer Groups – A group of health regions with social and economic characteristics similar to Grey Bruce [Statistics Canada].

Emergency Department Visit Rates – Emergency department visits that are mental and/or behavioural disorders related to substance use, as well as poisoning resulting from substance ingestion/exposure. Substances that are considered in the calculation of overall substance misuse for the purposes of this report: alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, stimulants including caffeine, hallucinogens, tobacco, solvents, and psychedelics [Grey Bruce Public Health].

Hazardous/Harmful Alcohol Use – An established pattern of drinking that increases the likelihood of future physical and mental health problems (e.g., liver disease) - as well as harmful consequences of that use - a pattern of drinking that is already causing damage to health (e.g., alcohol-related injuries, depression) and indications of dependence [Centre for Addiction and Mental Health].

Hospitalizations Entirely Caused by Alcohol – Hospital stays for the treatment of conditions considered to be wholly (100%) caused by the harmful consumption of alcohol. Examples include mental and behavioural disorders, such as alcohol dependence and intoxication [Canadian Institute for Health Information].

Regular Heavy Drinking – Drinking in excess of the special occasion Low-Risk Drinking Guidelines at least once in the past month. That is, more than 3 drinks for women and more than 4 drinks for men on any single special occasion [Statistics Canada].

INTRODUCTION

Most residents in Bruce and Grey counties use one or more psychoactive substance. Though not all use is problematic, drug and alcohol use can cause harm to individuals, families and communities. Problematic substance use is linked to negative health outcomes such as injury, overdose, chronic health conditions, mental health disorders and transmission of infections. At the community level, substance use impacts employment rates, community safety and contributes to the overburdening of health, justice and social services.

In 2009, over three hundred concerned citizens, service providers, municipal leaders and families assembled at a town hall in Hanover to bring attention to the impact of crystal meth use on young people in the community. Following the town hall, a group of service providers commissioned the report *Crystal Methamphetamine: A Profile of its Use in Grey and Bruce Counties* (Clarke, 2009). The report noted that the number of people presenting to the local courts or service agencies with crystal meth problems was increasing, and a lack of rehabilitation services and ongoing support for people released from jail put them at risk of continued and escalated drug use. The report also highlighted concerns about the lack of parent and community awareness, the impact of crystal meth use on long-term health, parenting and maternal health, and the safety hazards to first responders and others in the community.

With the mandate of addressing issues presented in the report, the Task Force on Crystal Meth (Task Force) was established - a cross-sector collaborative with representation from the local school boards, municipal and county councils, mental health and addiction services, police services and social services. HopeGreyBruce Mental Health and Addiction Services was the backbone organization for the effort. Funding support was provided on an annual basis from Grey County and Bruce County.

The Task Force adopted a 'four Pillar' approach (Treatment, Education/ Prevention,

Enforcement, and Harm Reduction) to carry out projects aimed at addressing the use, sale and production of crystal meth in Bruce and Grey counties. These projects included:

- School-based awareness campaigns,
- A new addiction court support program,
- Safety training for first responders,
- 'My Part' awareness and education series for social service staff,
- New drug endangered child guidelines for service providers, and
- Community awareness events such as 'Rock the Beach'.

In 2016, the Task Force hired a full-time coordinator to assess the continued relevance of its mandate and facilitate a strategic refresh of regional priorities. This Data Report serves as foundational documents to guide this work.

Collaborative sense-making sessions scheduled for the spring of 2018 will provide community partners opportunities to engage with local data, offer their interpretations and build shared understanding around local priorities. Findings from the sense-making sessions will inform community action planning for 2018-2020.

Questions addressed in this report include:

1. **What are the rates of substance use and related harms in Bruce and Grey counties?**
2. **How do subpopulations vary in substance use rates and related harms?**
3. **What factors contribute to substance related harms?**
4. **What is happening in Bruce and Grey counties to address substance related harms?**

Key research questions were developed with input from members of the Community Drug & Alcohol Strategy (formerly the Grey Bruce Task Force on Crystal Meth & Other Drugs) and research working group made up of partner organizations and people with lived experience.

Limitations

This report draws on the best available local data to answer four key research questions. Due to the low population density in Bruce and Grey counties, data is often masked or combined with neighboring regions in national and provincial survey findings. Where local data is not available, provincial or national trends are used.

National and regional health surveys were consulted for this report. It should be noted that survey findings rely on self-report data which can result in under-reporting of problematic (i.e., socially undesirable) behaviors.

The report provides a snapshot of existing data and literature rather than a comprehensive picture of the local context. Engaging multiple perspectives in interpreting the data will help to identify information gaps for further exploration.



As part of its strategic refresh in 2017, the Task Force on Crystal Meth and Other Drugs changed its name to the Community Drug & Alcohol Strategy. A broader mandate allows the group to more effectively address long-standing and emerging community needs, such as polysubstance use (i.e., dependence on more than one substance at a time), opioid addiction and overdose, cannabis legalization and problematic alcohol use.

The name change will also allow the group to align its efforts with the 30+ municipal drug strategy groups across Ontario. These strategies take a multi-sectoral approach (treatment, harm reduction, enforcement, education/prevention) to address substance related harms, while responding to unique regional needs and opportunities.

Reducing Harm in Bruce & Grey was chosen as the group's tagline to emphasize commitment to evidence based harm reduction approaches in addressing substance use. Looking at substance misuse through a health lens was identified as a foundational principle for carrying out the group's new mandate. More information on the Community Drug & Alcohol Strategy is presented in Appendix A.


1. What are the patterns of substance use and related harms in Bruce and Grey counties?

ALCOHOL

Local rates of regular heavy drinking are comparable to other rural areas in Ontario, but higher than the provincial average.

According to data from the 2013/14 Canadian Community Health Survey, Grey Bruce residents are more likely than Ontarians to report regular heavy drinking (22.7% vs. 16.7%, respectively).

However, compared to other mainly rural areas, Grey Bruce residents are no more or less likely to engage in regular heavy drinking (Leffley & McFarland, 2016).



23%
**OF GREY BRUCE RESIDENTS REPORT
REGULAR HEAVY DRINKING**

It is estimated that drinking drivers are involved in one-third of roadway fatalities in Canada.

Although there has been a general decline in roadway deaths involving drinking drivers in Canada, recent statistics show that over one-third (37.4%) of fatally injured drivers had been drinking. Most of these drivers had illegal blood alcohol concentrations (BAC) – 83.1% of fatally injured drinking drivers had BACs >80 mg% (Traffic Injury Research Foundation of Canada, 2013).

Comparable statistics are not available at a local level. According to a serve report survey conducted in 2006, 4% of Grey Bruce residents aged 18 and over said drank alcohol before operating a motor vehicle, and 8% before driving a recreational vehicle at least once in the previous 12 months (Barclay & Wonnacott, 2012).

Alcohol accounts for over half of all substance related emergency department visits in Grey Bruce.

Emergency department visits for reasons related to substance use have doubled provincially and increased by about two thirds locally (65%) since 2002. In Grey Bruce, over half (57%) were linked to alcohol (McFarland & Leffley, 2017).

In Canada, there are more hospitalizations caused by alcohol than heart attacks.

Across Canada, there were about 77,000 hospitalizations entirely caused by alcohol in 2015/2016, compared with about 75,000 for heart attacks. Canadians living in rural and remote areas have higher rates for Hospitalizations Entirely Caused by Alcohol than their urban counterparts (Canadian Institute for Health Information, 2017).

In addition to acute injuries, alcohol use is a significant risk factor for numerous chronic health conditions, such as cirrhosis of the liver and several types of cancers. It is estimated that 7.7% of deaths of Canadians between 0 and 64 are alcohol attributable (Shield, Taylor, Kehoe, Patra, & Rehm, 2012).

CANNABIS

Available data suggests that rates of cannabis use among the general population in Grey Bruce are comparable to provincial rates.

Fifteen percent (14.8%) of Grey Bruce residents aged 12 or older report using cannabis in the past year. Grey Bruce residents are no more or less likely to report cannabis use Ontario or other mainly rural areas counterparts (Public Health Ontario, 2016).

It is estimated that about 7.5% of adults in Ontario experience cannabis use problems.

Cannabis can be used safely in moderation and for medical purposes (if prescribed by a medical practitioner), but there are risks and harms associate with its use.

Short-term effects include deficits in attention span, memory, body tremors and impaired motor functioning (Beirness & Porath-Waller, 2015; Canadian Centre on Substance Abuse, 2015). Chronic use can increase the risk of psychosis, depression and anxiety, breathing problems and respiratory conditions (McInnis & Plecas, 2016; Porath-Waller, 2009).

Cannabis misuse (or risky use) is not well documented in Grey Bruce, though provincially, it is estimated that about 7.5% of adults (and 45% of past year cannabis users) meet the

criteria for moderate or high risk of cannabis use problems (Lalomiteanu, Hamilton, Aldaf & Mann, 2016).

Risk factors for cannabis use problems (as defined by the Centre for Addiction and Mental Health) include:

- frequency of use;
- strong desire to use;
- legal or financial problems from use;
- lack of control over one's own use;
- failure to meet expectations; and
- having someone express concern about using.

Cannabis is second only to alcohol as the most commonly detected substance among drivers who die in traffic crashes in Canada.

Impaired driving is the leading criminal cause of death and injury in Canada. Cannabis is second only to alcohol as the most commonly detected substance among drivers who die in traffic crashes in Canada (Traffic Injury Research Foundation, 2017).

According to the Canada Cannabis Survey, 50% of cannabis users don't think that cannabis use affects their driving (Health Canada, 2017b).

CANNABIS LEGALIZATION

Cannabis is currently a Schedule II drug under the Canadian Controlled Drugs and Substances Act, meaning that growing, possessing, distributing and selling cannabis is illegal. However, the Government of Canada plans to legalize, regulate and restrict access to cannabis beginning July 2018. Some American states have legalized recreational cannabis in recent years, but it is too early to draw conclusions about the effects of legalization on usage and related harms.

OPIOIDS

Compared to other regions in Ontario, Grey Bruce ranks in the mid-range for the percent of the population receiving opioids for pain.

Opioids are a group of drugs commonly prescribed to treat pain. Some drugs in the class can also be used as cough suppressants or as treatments for opioid addiction. One in 7 Ontarians were dispensed an opioid in 2016, with the majority receiving an opioid for the treatment of pain (Gomes, Pasricha, Martins, & Greaves, 2017).

When compared to other health units, Grey Bruce rates (at 13.8%) ranked in the middle of the range for the percent of the population receiving opioids for pain (Figure 1) (Gomes et al., 2017).

FIGURE 1: PERCENT OF ONTARIANS DISPENSED AN OPIOID FOR PAIN, BY PUBLIC HEALTH UNIT.

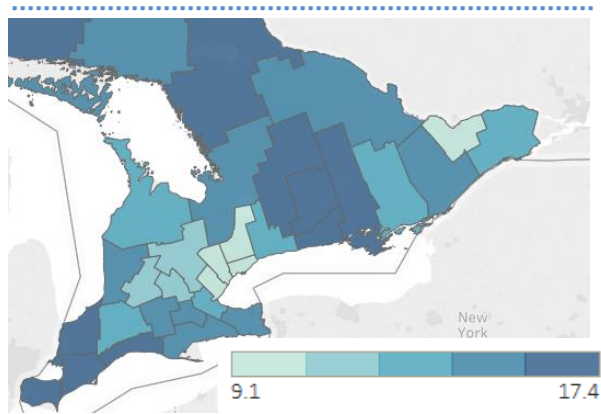


Figure adapted from Gomes et al., 2017

In Ontario, the number of people dispensed opioids remained stable between 2012 and 2017, and the volume of drug being dispensed declined (Gomes et al., 2017).

Opioid-related emergency department visit rates in Grey Bruce tripled between 2002 and 2015.

Prescription opioids (such as Percocet, Percodan, Tylenol #3, Demerol, OxyContin, OxyNEO, codeine) suppress pain and may cause a relaxed or euphoric feeling. They can also be dangerous when not used as prescribed or are not used under a doctor's supervision. If taken with depressants (e.g., alcohol) or in large quantities they can impede breathing and lead to respiratory failure.

The local and provincial opioid-related Emergency Department visit rates have remained comparable since 2002 (Figure 2). Overall, opioid-related ED visit rates have increased by two and a half to three times both locally and provincially, reaching 80.3 per 100,000 population in Grey Bruce in 2015 (McFarland and Leffley, 2017).

FIGURE 2: OPIOID-RELATED EMERGENCY DEPARTMENT VISIT RATES, GREY BRUCE AND ONTARIO (RATE PER 100,000 POPULATION).

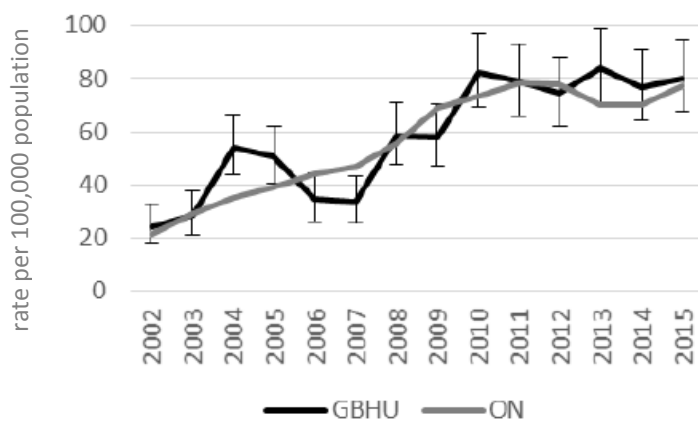


Figure adapted from McFarland and Leffley, 2017

OPIOIDS (Continued)

Compared to other regions in Ontario, Grey Bruce ranks in the low-to-mid range for opioid-related deaths.

Over the past decade there has been a significant increase in opioid related harms in Ontario and across Canada, recently escalating to become a public health emergency in some areas of the country.

In Ontario, the number of opioid-related deaths has increased 136% since 2003. More than 850 Ontarians died from opioid-related causes in 2016 (Public Health Ontario, 2018).

In Grey Bruce, the annualized rate of opioid-related deaths (per 100,000 population) for the region is 5.1. Compared with other health units, Grey Bruce rates rank in the low-to-mid range of opioid related deaths (Figure 3) (Ontario Drug Policy Research Network, 2017).

FIGURE 3: OPIOID-RELATED DEATHS IN 2016, BY PUBLIC HEALTH UNIT (ANNUALIZED RATE PER 100,000 POPULATION).

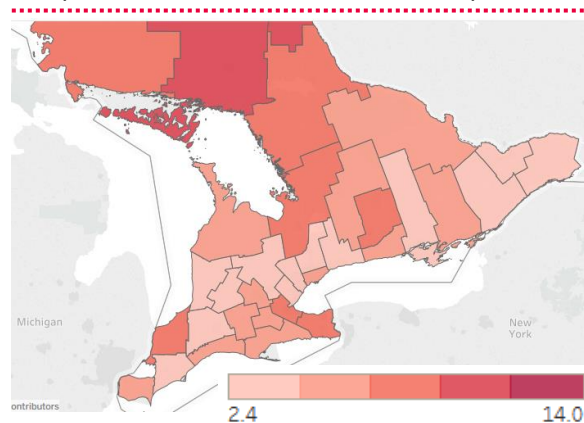


Figure adapted from Ontario Drug Policy Research Network, 2017

Illegally produced fentanyl remains a growing driver of the opioid crisis in Canada.

From January to September 2017, 72% of accidental apparent opioid-related deaths involved fentanyl or fentanyl analogues, compared to 55% in 2016 (Health Canada, 2017a).

ILLICIT DRUGS

Available data suggests that Grey Bruce residents use illicit drugs at similar rates to other rural and provincial counterparts.

According to data collected from the Canadian Tobacco, Alcohol and Drugs Survey, about 2% of Ontarians used at least one illicit drug (excluding cannabis) in the past year (Health Canada, 2015).

Data on past year illicit drug use is not available locally. Figure 4 shows *life-time* self-reported rates of illicit substance use among residents aged 12 and over. These rates are comparable to Ontario rates and other mainly rural health regions, except for ecstasy use which is lower than the provincial rate (Public Health Ontario, 2013).

FIGURE 4: SELF-REPORTED % OF GREY BRUCE POPULATION WHO HAVE EVER USED AN ILLICIT DRUG (2009-2012)

| | |
|---------------------------|------|
| Hallucinogens, PCP or LSD | 7.5% |
| Cocaine or crack | 5.5% |
| Amphetamines | 2.3% |
| Ecstasy | 2.0% |

People who use illicit drugs are at risk of harms related to their physical, mental and social wellbeing as well as their personal security.

Harms associated with illicit and/or injection drug use can include blood-borne pathogen transmission (shared injection), increased risk of dependence from quick action methods, intoxication in unsafe environments, and social isolation related to stigma (Centre for Addictions Research BC, 2006).

2. How do subpopulations vary with respect to substance use and related harms?

GENDER

Among adults, men are more likely than women to report regular heavy drinking, cannabis use problems and illicit drug use.

Men in Grey Bruce are twice as likely as women to report regular heavy drinking (31% of men vs. 15% of women) (Leffley & McFarland, 2016).

Rates of regular heavy drinking among men in Grey Bruce have not changed significantly since 2003, but rates among women increased slightly from 2003 to 2013/14 (Leffley & McFarland, 2016).



Rates in Grey Bruce have risen in some years to be significantly higher than provincial rates among men, but not higher than the rates in other mainly rural areas. Rates among women are comparable to provincial and rural rates (Leffley & McFarland, 2016).

Available provincial data suggests that the odds of experiencing cannabis problems are about three times higher among Ontario men than among women (11.4% vs. 3.8%) (Ialomiteanu, Hamilton, Adlaf, & Mann, 2016).

In Ontario, prevalence of illicit drugs use is higher among men (3%) than women (1%) (Health Canada, 2015).

Men are more likely to be hospitalized for reasons entirely cause by alcohol.

From age 20 onward, Canadian men have higher rates for Hospitalizations Entirely Caused by Alcohol than women (Canadian Institute for Health Information, 2017).

More women than men received an opioid to treat pain or cough in 2016, while the reverse was true for opioids to treat addiction.

Opioid dispensing also varies by sex, with fewer men than women dispensed an opioid to treat pain (11.0% of men vs. 12.8% of women) and cough (1.9% of men vs. 2.6% of women) (Ontario Drug Policy Research Network, 2017).

The proportion of people being treated for opioid addiction was higher among men (0.5%) compared to women (0.3%) (Ontario Drug Policy Research Network, 2017).

Rates of opioid-related morbidity and mortality are higher among men than among women.

In 2016, the emergency department visit rate among men in Ontario was higher than among women (35.9% per 100,000 for men vs. 27.7% for women) (Public Health Ontario, 2018).

In 2016, more than twice as many men in Ontario died from opioid related causes than women (595 males vs. 272 females) (Public Health Ontario, 2018).

AGE

Rates of self-reported heavy drinking are highest among 20 to 34-year olds compared to other age groups. However, hospitalizations caused by alcohol are most prevalent among middle aged adults.

National level data from the Canadian Community Health Survey suggests that heavy drinking occurs more frequently among men than women and among individuals age 20 to 34 than other age groups (Leffley & McFarland, 2016). While rates of Hospitalizations Entirely Caused by Alcohol peak in mid-life (45 to 64) for both sexes (Canadian Institute for Health Information, 2017).

Individuals aged 29 and under are more likely to report cannabis problems than those over 30.

Available data suggests that younger Grey Bruce residents are more likely to report **cannabis use**. This is in line with provincial and national trends (Public Health Ontario, 2016).

FIGURE 4: SELF-REPORTED CANNABIS USE BY AGE, GREY BRUCE (2009-2012)

| | |
|-----------------|-----|
| 12-19 year olds | 17% |
| 20-44 year olds | 22% |
| 45-64 year olds | 7% |

The odds of experiencing cannabis problems are 4 times higher among Ontarians aged 18 to 29 (18.2%) than among those aged 30 and older (4.6%) (Ialomiteanu et al., 2016).

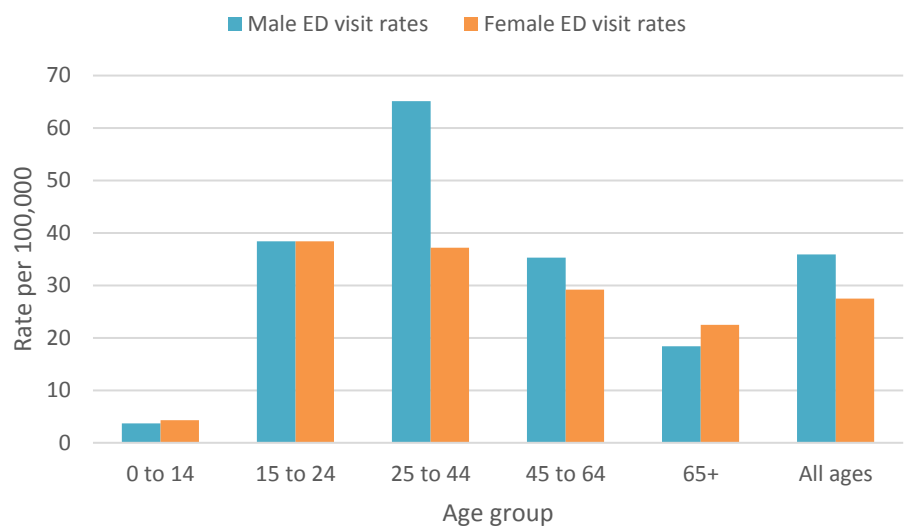
Older adults are more likely to be dispensed an opioid, while opioid related harms such as emergency department visits and death are more likely to occur among younger adults.

Among individuals who received an opioid for pain in 2016, the median age is 55 years. The proportion of people who received an opioid increased with age, with the highest percent among those aged 65 and older (22.0%).

According to Health Canada, most accidental apparent opioid-related deaths in 2016 occurred among males (76%), with the highest percentage among individuals between the ages of 30 and 39 (28%) (Health Canada, 2017a).

FIGURE 5: RATE OF OPIOID-RELATED ED VISITS BY SEX AND AGE GROUP, ONTARIO 2016.

In Ontario, the highest rate of opioid-related ED visits in 2016 was among men aged 25 to 44 (65.1 per 100,000) (Public Health Ontario, 2018).



INCOME

Low income is associated with lower rates of heavy drinking, daily drinking and hazardous/harmful drinking, but higher rates of Hospitalizations Entirely Caused by Alcohol.

Available data suggested that *past year daily drinking* increases with income. Relative to those with a household income of less than \$30,000 (4.3%), the odds of daily drinking are two times higher for each of the other income categories (6.8% to 9.5%). Household income also shows a significant association to *hazardous/harmful drinking*, with a higher rate among those with incomes of \$80,000 or higher (17.1%) than among those with incomes of less than \$30,000 (13.0%) (Ialomiteanu et al., 2016).

Heavy drinking follows an income gradient, with the highest rates of heavy drinking observed among higher-income men. A similar pattern is observed for women; however, the differences are not significant (Figure 9) (Canadian Institute for Health Information, 2017).

Those living in the lowest-income neighbourhoods have higher rates of *hospitalizations entirely cause by alcohol* than those living in the highest-income

neighbourhoods. Specifically, rates of hospitalizations for the lowest-income neighbourhoods were 2.5 times higher than for the highest-income neighbourhoods in Canada overall (Canadian Institute for Health Information, 2017).

While opioid dispensing for pain and cough occurs similarly across income groups, individuals with lower income are more likely to be receiving opioids to treat opioid use disorder.

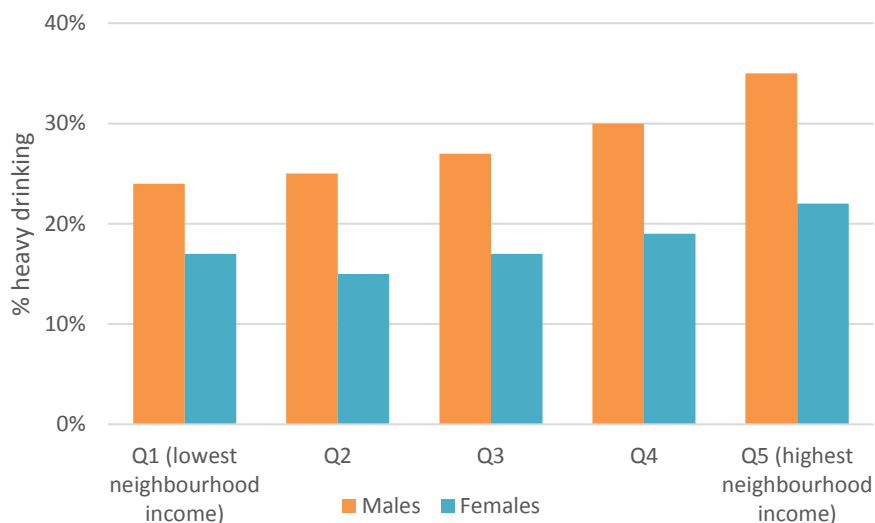
FIGURE 6: PERCENTAGES OF PEOPLE DISPENSED AN OPIOID FOR ADDICTION TREATMENT BY INCOME QUINTILE

| | |
|-------------|-----|
| Lowest | 36% |
| 2nd Lowest | 23% |
| Middle | 17% |
| 2nd Highest | 14% |
| Highest | 10% |

According to a 2017 study by the ODPNR, individuals receiving an opioid to treat pain and cough were relatively evenly distributed among income quintiles, while the use of opioids to treat addiction was concentrated in the lower income groups - with 58% of individuals dispensed an opioid for addiction treatment being in the lowest two income quintiles (Ontario Drug Policy Research Network, 2017)

FIGURE 7: PERCENTAGE OF HEAVY DRINKING, BY INCOME QUINTILE AND SEX, 2014

Adapted from (Canadian Institute for Health Information, 2017)



YOUTH

Alcohol and cannabis are the most commonly used substances among youth, both nationally and regionally. Looking at trends over time, rates of use have significantly declined over the last two decades.

According to the 2017 Ontario Student Drug Use and Health Survey (OSDUHS):

- 43% of students between grades 7 and 12 report drinking alcohol during the 12 months before the survey,
- 19% report using cannabis, and
- 11% report using an opioid nonmedically.

Sex differences: The prevalence of use does not differ between males and females for all three drugs.

Grade differences: Rates of use of alcohol and cannabis significantly increase as grade levels increase. For example, cannabis use increases from about 2% of 7th and 8th graders up to 37% of 12th graders. Despite some variation, rates of opioid use do not significantly differ across grades.

Trends over time: A significant downward trend in past year use was observed for alcohol and cannabis between 1999 and 2017. There has also been a significant linear downward trend since 2007 – when monitoring began – from 20.6% down to 10.6% in 2017.

There has been a significant increase in abstinence from all drugs since 1999.

Four-in-ten (43%) students in grades 7 through 12 report using no drug at all during the past year – this includes alcohol, cigarettes, and other smoking devices. There has been a significant upward trend in abstinence since 1999, with a sharp increase in recent years.

FIGURE 8: PAST YEAR DRUG USE (%), OSDUHS 2017 (N=11,435)

| Grades 7-12 | |
|--|-----------|
| Alcohol | 43 |
| High-Caffeine Energy Drinks | 34 |
| Cannabis | 19 |
| Binge Drinking (5+ Drinks/Past Month) | 17 |
| Electronic Cigarettes (Vape Pens) | 11 |
| Opioid Pain Relievers | 11 |
| OTC Cough/Cold Medication | 9 |
| Tobacco Cigarettes | 7 |
| Waterpipes (Hookahs) | 6 |
| Smokeless (Chewing) Tobacco | 5 |
| Inhalants (Glue or Solvents) | 3 |
| ADHD Drugs (non-medical) | 2 |
| Synthetic Cannabis (Spice, K2) | 1 |
| Salvia Divinorum | 0.6 |
| Grades 9-12 | |
| Mushrooms or Mescaline | 4 |
| Ecstasy (MDMA) | 3 |
| Cocaine | 3 |
| Tranquilizers/Sedatives | 3 |
| LSD | 2 |
| Fentanyl | 0.9 |
| Jimson Weed | 0.8 |
| Methamphetamine | 0.6 |
| Crack | 0.6 |
| Any Use of a Prescription Drug | 14 |
| Any Drug Use Including Cannabis | 38 |
| Any Drug Use Excluding Cannabis | 24 |

Figure adapted from Boak et al. 2017

FIGURE 9: PERCENTAGE REPORTING NO DRUG USE IN PAST YEAR, 1999-2017 OSDUHS (GRADES 7-12).

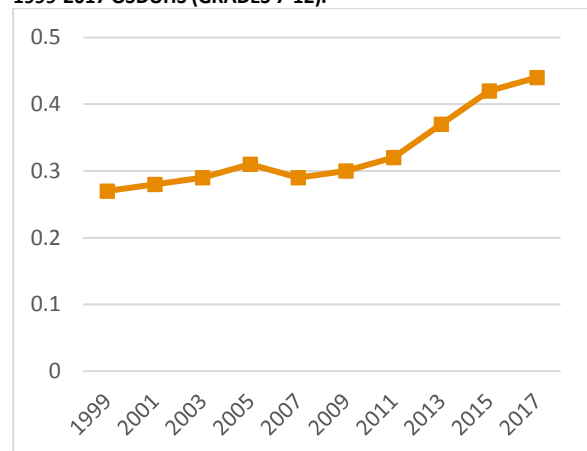
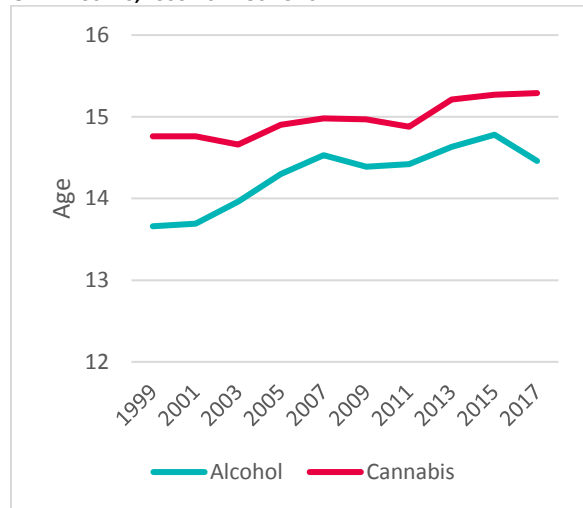


Figure adapted from Boak et al. 2017

The age of initiation for drinking and cannabis use is currently older than in 1999.

Early initiation of substance use is a risk factor for substance use disorders and other problems later in life. According to the OSDUHS (2017), the average age at first alcoholic drink among 12th grade drinkers was 14.5, and the average age at first drunkenness was 15.2. The average age at first cannabis use was 15.3. These rates have remained relatively stable in recent years, but are currently older than in 1999.

FIGURE 10: AVERAGE AGE AT FIRST ALCOHOLIC DRINK AMONG 12TH-GRADE DRINKERS, AND FIRST CANNABIS USE AMONG 12TH-GRADE USERS, 1999-2017 OSDUHS



The percentage of drivers reporting driving after cannabis use is higher than driving after drinking.

In 2017, 4.2% of drivers (with G-Class license) in grades 10 through 12 drove within an hour of consuming two or more alcoholic drinks at least once during the past 12 months, while 8.8% of students report driving after using cannabis.

Male and females are equally likely to drink and drive, while male drivers are significantly more likely than female drivers to use cannabis and drive (11.3% vs. 5.6%, respectively).

One-in-six students report binge drinking at least once in the past month.

The OSDUHS defines binge drinking as five or more drinks on a single occasion. Sixteen percent (16%) of students in grades 7 to 12 report binge drinking in the four weeks before the survey. Binge drinking does not significantly differ between males and females, but does increase with grade level – climbing to 32% among 12th graders.

It is estimated that 14% of secondary students engage in hazardous/harmful drinking.

The OSDUHS (2017) defines hazardous drinking as “an established pattern of drinking that increases the likelihood of future physical, social, or mental health problems (e.g., dependence), and harmful drinking as a pattern of drinking that is already causing harm (e.g., injuries)”.

About one-in-seven (14%) of secondary students report **hazardous/harmful drinking** in the past 12 months. Males and females are equally likely to drink hazarously.

About one-in-six (16%) **could not remember** what had happened when they were drinking on at least one occasion during the past 12 months, and one-in-twelve (8%), report that they were **injured or someone else was injured** because of their drinking during the last 12 months.

One-in-five cannabis users in grades 9 through 12 are worried about their use.

Starting in 2007, the OSDUHS included a screen for cannabis dependence. Two percent (2%) of students in grades 9 through 12 report symptoms of cannabis dependence. Males and females are equally likely to report symptoms. Looking at results among past year users only, about 7.2% cannabis users report dependence symptoms.

3. What factors contribute to substance related harms?

SOCIAL DETERMINANTS OF HEALTH

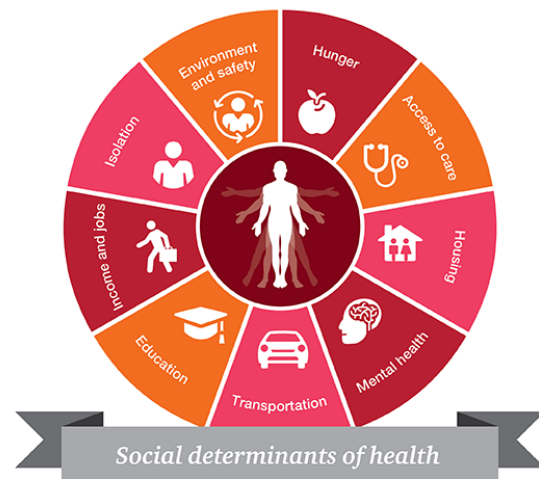
Social determinants of health are the conditions in the environment in which people are born, live, learn, work, play and age that affect a wide range of health, functioning and quality of life outcomes. The social determinants of health interact to create one's circumstances and can accumulate. Social, cultural, economic and political factors make up the social determinants of health.

Social Determinants of Health include:

- Gender
- Housing
- Income and Income Distribution
- Race
- Social Exclusion
- Social Safety Net
- Unemployment and Job Security
- Aboriginal status
- Disability
- Education
- Employment and Working Conditions
- Food Insecurity
- Health Services

Socioeconomic status describes an individual's position in society given their income, level of education and employment. It is well documented that socioeconomic status and health outcomes have a direct relationship; as one's income level rises so does their health.

Housing is another determinant that impacts health outcomes and has an important relation to substance use. Lack of secure and sustainable housing can lead to poor mental health due to



homelessness, lack of control and inadequate sleep. Also, housing contributes to employment opportunities and seeking services. For example, one with no housing is unable to provide a permanent address for employment or social services.

Vulnerable populations that face an accumulation of the social determinants of health through multiple generations are disproportionately affected by substance misuse. The health and socioeconomic status of Indigenous peoples are significantly poorer compared with other Canadians. The impacts of colonization led to intergenerational trauma, as well as loss of culture that have unjustly influenced the health of Indigenous populations on and off reserve. Government policies such as residential schools and assimilation have caused loss of culture, language and spiritual practices. Moreover, the loss of parental-child connection and learning amongst the children that were removed from their homes impacted generations to come.

DEVELOPMENTAL FACTORS

Risk factors are influencers associated with potential for substance misuse. Each individual has their own level of risk from biological, environmental and social experience. Risk factors interact and accumulate beginning at the prenatal period and continue during child development affecting the risk of substance use (SAMSHA, 2015).

Risk factors include:

- Age of first use
- Genetics
- Epigenetics (Environmental influences on the way genes are expressed)
- Self esteem
- Attitudes and beliefs about drugs
- Family history of addiction
- Prenatal substance use
- Adverse childhood experiences
- Diagnosed and undiagnosed mental health disorders
- Stress
- Loneliness
- Pain from injuries or chronic disease requiring treatment
- Influence of society media and social media
- Associating with people who use substances
- The type of drug used

Protective Factors

Protective factors are characteristics of individuals and their environments that aid in coping and adapting to life situations and changes (SAHMSA, 2015). Examples of protective factors include: highly responsive parenting; behaviour control; social interaction with peers and; and age appropriate expectations.

Protective factors are not the absence of risk factors; they reduce or lessen the negative impact of risk factors (Hawkins et al., 1992). Table 2 demonstrates protective factors for possible risk factors and what domain they are influenced by. It is important to understand that risk factors begin to develop early and can predict later substance use, therefore intervening early can alter the life course trajectory in a positive direction when implementing protective factors (National Institute on Drug Abuse, 2003).

Domains of influence

| Risk Factors | Domain | Protective Factors |
|------------------------------|-------------------|---------------------------------|
| Early aggressive behavior | Individual | Impulse control |
| Lack of parental supervision | Family | Parental monitoring |
| Substance abuse | Peer | Academic competence |
| Drug availability | School | Antidrug use policies |
| Poverty | Community | Strong neighbourhood attachment |

MENTAL HEALTH

The link between mental health and substance use disorders is complex. Substance use disorders and mental health problems have common risk and protective factors. They might develop independently as a result of common risk factors or one might cause the other. People with mental health issues may turn to substances as self-medication to cope with their mental health symptoms. Also, substance use can trigger mental health problems from changes in an individual's life through financial and relationship distresses caused by substance dependence.

When mental health problems and substance use disorders occur together, they are called concurrent disorders. More than 50% of those seeking help for addiction also have a mental health problem (Canadian Centre on Substance Abuse, 2010). Approximately 25-30% of young people who misuse drugs have been diagnosed with conduct disorder or oppositional defiant disorder (Canadian Centre on Substance Abuse, 2013). Conduct disorder is a disorder diagnosed in young people when they are aggressive in a way that causes problem for themselves or their families; they may lie, threaten or harm others (Canadian Centre on Substance Abuse, 2013). Oppositional defiant disorder is when youth are openly hostile, uncooperative and irritable to a degree that impairs functioning (Canadian Centre on Substance Abuse, 2013).

Risk factors mentioned above such as early childhood experiences of abuse, neglect and exposure to domestic violence are associated with substance abuse in later years. These adversities are also associated with mental health problems in adult years and can put individuals at risk for concurrent disorders (Canadian Centre on Substance Abuse, 2010).

**More than 50% of those seeking help for addiction
also have a mental health problem**

- Canadian Centre on Substance Abuse

5. What is happening in Bruce and Grey counties to address substance related harms?

SYSTEM ALIGNMENT

Three mental health and addiction organizations in Grey Bruce are currently working towards amalgamating services to create a new organization by September 2018.

Successful drug prevention and treatment is not just about what initiatives or programs are delivered, but also how systems are organized and implemented. In 2015, the South West LHIN initiated a series of meetings among four providers of adult mental health and addiction services in Grey Bruce to explore opportunities for closer alignment and collaboration among all organizations to better care for the people they serve.

This process has resulted in an Amalgamation Agreement, which was signed on January 31, 2018. The new organization (comprised of Canadian Mental Health Association Grey Bruce, G & B House and HopeGreyBruce Mental Health and Addictions Service) will be called Canadian Mental Health Association Grey Bruce: Mental Health and Addiction Services and will be operational by September 1, 2018.

It is anticipated that the amalgamation of services will:

- reduce fragmentation between programs,
- reduce duplication of programming,
- improve consistency and timely access to care,
- simplify the navigation of services for clients,
- respond to the needs of patients with dual diagnosis,
- better serve newcomers, and
- improve health equity.

INTERAGENCY COOPERATION

Formal and informal partnerships exist across sectors and disciplines to provide wrap around client care and to support service coordination.

Case conferencing, interdisciplinary programming, case management are examples of approaches used by agencies in Bruce and Grey counties to better meet the needs of clients. Interagency planning and coordination is also carried out by committees and interdisciplinary teams who meet regularly to resolve service gaps, share evidence-based approaches and plan collaborative initiatives.

Examples include:

- Fetal Alcohol Spectrum Disorder (FASD) Leadership Table
- Substance Involved Moms Support (SIMS) Committee
- H.E.L.P (Health, Education, Linkages, Prevention)
- Addictions and Mental Health Network Table
- Community Drug & Alcohol Strategy
 - Opioid Response Working Group
 - Cannabis Legalization Working Group

PROGRAMS AND SERVICES

Local mental health and addictions services operate in an environment of funding scarcity and increasing client demand. Agencies continue to stretch existing resources to meet the needs of individuals and families living in rural communities.

Like other rural areas in Ontario, the addictions and mental health sector in Bruce and Grey counties operates in an environment of funding

scarcity. Meeting the needs of individuals in rural communities is further challenged by the province’s centralized service delivery model and the lack of inter-community public transportation options. A 2016 report from Ontario’s Mental Health and Addictions Leadership Advisory Council, notes that many Ontarians struggle to find services due to geographic location, waitlists, lack of awareness, and difficulty navigating the system. The report also identifies supportive housing as a well-known gap - affecting the use of health and emergency services, and essential to meeting the province’s goals for ending chronic homelessness(Ontario Mental Health & Addictions Leadership Advisory Council, 2016).

Among the recommendations presented in the report is a push for the province to adopt a set of core mental health and addictions services that have dedicated funding support, are available to

all Ontarians, and are accessible in all regions of the province. Also included in the recommendations is the development of an evidence and needs-based funding model for community mental health and addictions services. The complete list of recommendations is presented in Appendix B.

A comprehensive assessment of local service gaps and assets has yet to be completed in Bruce and Grey counties, though consultations and discussions are underway as part of the amalgamation process as well as the Community Drug & Alcohol Strategy strategic planning process. Figure 11 presents a preliminary list of specialized substance use programs and services offered in Bruce and Grey counties. The list is not meant to be comprehensive, but rather to use as a starting point for further explorations with community partners.

FIGURE 11: PRELIMINARY LIST OF SPECIALIZED SUBSTANCE USE PROGRAMS AND SERVICES IN BRUCE AND GREY COUNTIES

| Core Service | Service |
|---|--|
| Prevention, Promotion and Early Intervention Services: | Re-Think Your Drinking Campaign |
| | R.I.D.E. Checks Support Opioid Awareness |
| | School based drug awareness programs* |
| | RNAO Youth Mental Health and Addiction Champions Program* |
| | Mental Health ASSIST mental* |
| | Grey Bruce Needle Exchange Program |
| | Overdose Response and Naloxone Training |
| Information, Assessment and Referral Services | New Directions for Alcohol, Drug and Gambling problems |
| Counselling and Therapy Services <i>(Specialized services to address substance use problems)</i> | National Native Drug and Alcohol Programs |
| | Saugeen Native Drug & Alcohol Counselling Centre |
| | New Directions for Alcohol, Drug and Gambling problems |
| | Methadone Maintenance Support Program |
| | Ontario Addiction Treatment Centre (OATC) |
| | Addictions Treatment for Pregnant and/or Parenting Mothers |
| | Addiction Court Support |
| | CHOICES Drug and Alcohol Counselling for Youth* |
| Specialized Consultation and Assessment | Concurrent Disorders Treatment Services |
| | Rapid Access Addiction Medicine (RAAM) Clinic |
| Crisis Support Services | Withdrawal Management Services |

| | |
|---|--|
| | Urgent Response Team |
| Housing and Social Supports | G&B House: Residential Support and Recovery Home |
| | Community Connections: Apartment Program & Outreach Services |
| | Addiction Supportive Housing |
| | Community Connections: Group Services |
| Peer and Family Capacity Building Support | Wellness Recovery Action Plan (WRAP) program |
| | Recovery and Me Group Program |
| | Community Addiction Treatment Services (C.A.T.S.) |
| | Narcotics Anonymous |
| | Alcoholics Anonymous |
| | Al-Anon Family Groups |

NEXT STEPS

This report is one of several tools intended to help community leaders understand and monitor substance use problems in Bruce and Grey counties. In addition to this data report, the following research activities were carried out by the Community Drug and Alcohol Strategy coordinator:

- Key informant Interviews with service providers (2016)
- Survey of Community Drug & Alcohol Strategic members (2017)
- Consultations with participants of HopeGreyBruce mental health and addiction services (2017)
- Review of relevant community/agency reports (2017)

In the spring and summer of 2018, community stakeholders will be invited to engage with the research findings through a series of community engagement intended to:

1. Build a common understanding of substance related harm in Bruce and Grey counties;
2. Identify local trends, root causes and other factors that contribute to substance related harms;
3. Identify and map existing initiatives, networks and promising practices; and
4. Develop key priorities areas and strategies for cross-sectoral initiative aimed at reducing substance related harms.

Themes from the community engagement activities will inform a regional Action Plan to reduce substance related harms in Bruce and Grey counties. Implementation of the Action Plan will be carried out by existing cross-sectoral committees as well as project specific working groups mobilized Community Drug & Alcohol Strategy. The Leadership Table of the Community Drug & Alcohol Strategy will continue to provide strategic guidance on behalf of community partners.

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