

Substance Use Health

KEY MESSAGES:

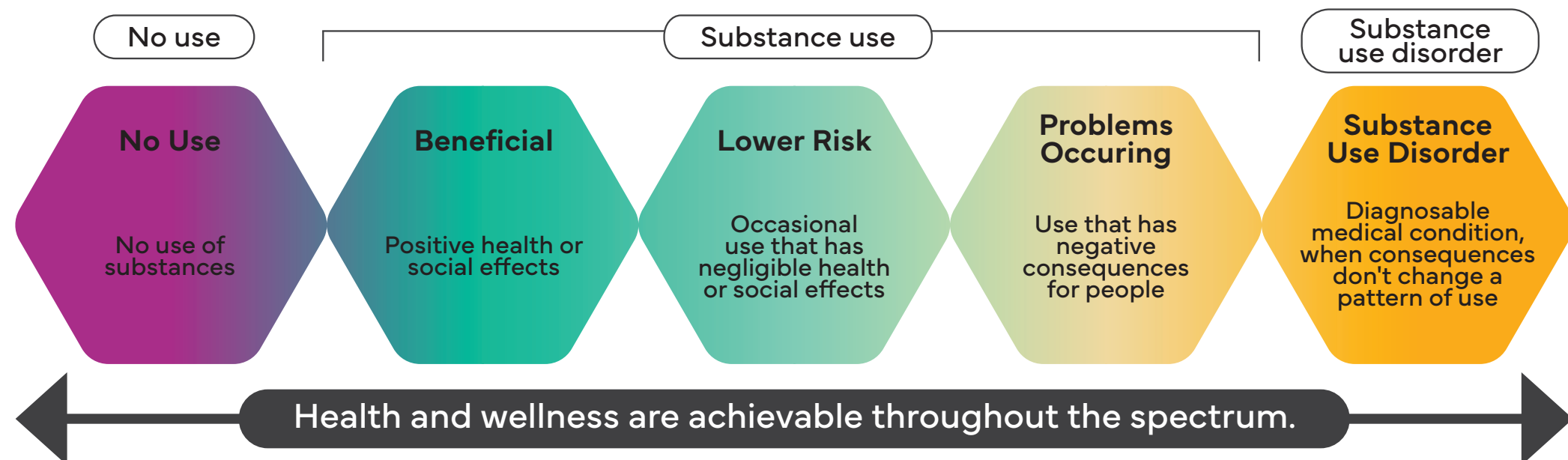
- Like other regions in Northern Ontario, Algoma has disproportionately higher rates of opioid-related hospitalizations and deaths compared to Southern Ontario. In 2022, the rates of deaths and hospitalizations due to opioid toxicity in Algoma were almost three times higher than in Ontario⁽¹⁾.
- Algoma has higher rates of smoking, heavy drinking and cannabis use compared to the provincial average⁽²⁾. For example, the rate of daily smoking in Algoma is 16.2%, compared to 10.1% for Ontario⁽³⁾.
- Vaping has become popular among youth, with 1 in 4 Ontario students in grades 7-12 reporting having vaped. The majority (84%) vape nicotine which is highly addictive⁽⁴⁾.
- Algoma Public Health works closely with a variety of partners to support the health, wellness, and safety of people who use substances.

Substance use refers to the consumption of psychoactive substances, such as opioids, alcohol, tobacco/nicotine, and cannabis. They can be used for a variety of reasons including medical, religious, or ceremonial purposes, for personal enjoyment or to deal with stress, trauma or pain⁽⁵⁾.

► Some of the most used substances in Algoma were alcohol, cannabis, and tobacco⁽²⁾.



Substance use looks different for everyone and can be viewed on a spectrum⁽⁶⁾. People move up and down the spectrum throughout their lifetime, achieving health & wellness at any stage. **A public health approach to substance use focuses on reducing harms and maximizing benefits⁽⁷⁾.**



Stigma

Many people who use substances are stigmatized or face stigma. Stigma is defined as negative attitudes, beliefs or behaviours about or towards a group of people because of their situation in life⁽⁸⁾. There are various types of stigma, including structural, social, and self-stigma.

When people who use substances experience stigma, it leads to feelings of shame, low self-esteem and fear of being judged that can cause somebody to not access support⁽⁸⁾. Substance use disorder is not a choice, it is a treatable medical condition.

Harm reduction

Harm reduction approaches reduce health and social harms associated with a behaviour without requiring a person to stop the behaviour. This approach respects human dignity and people's right to make informed decisions about their behaviours. Providing harm reduction services builds trusting relationships with clients, often leads to referrals for other support services, and can help reduce health care costs⁽⁹⁾.

Algoma Public Health partners with local health and social service providers to deliver harm reduction programs. An example of this is the **Needle Exchange Programs** which provide access to new drug equipment to reduce the risks associated with sharing or re-using drug equipment, such as transmission of Hepatitis B, C and HIV.

Opioids and toxic drugs

Opioids are a class of drugs used to treat pain and to treat opioid use disorder (e.g., oxycodone, hydromorphone, morphine, methadone). Other types of opioids, such as heroin, fentanyl, and carfentanil, are found in the unregulated or non-pharmacological markets. Unregulated drugs are unpredictable and can lead to harms such as accidental poisonings.

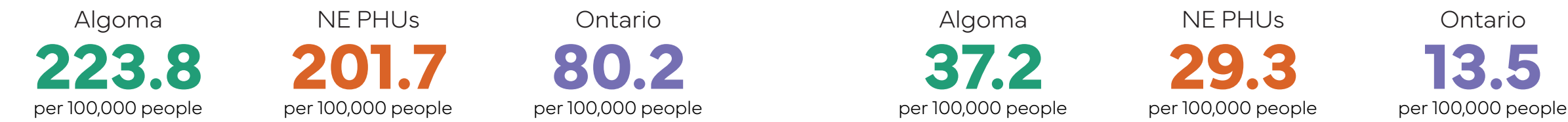
There is also increased risk of toxicity-related harms and death when opioids are used together with other substances, such as alcohol, stimulants (cocaine, methamphetamine), benzodiazepines (Valium®, Xanax®) and tranquilizers⁽¹⁰⁾. This is referred to as polysubstance use and it makes responding to drug toxicity more complicated by reducing the effectiveness of Naloxone, which only works on opioids.

The number of EMS (emergency medical services) calls, emergency department visits and deaths related to opioid toxicity in Algoma have increased significantly since the onset of the COVID-19 pandemic.

Between 2018 - 2022

- ▶ The number of opioid-related **EMS calls** increased almost three times, from **129** to **378**⁽¹¹⁾.
- ▶ The number of opioid-related **emergency department (ED) visits** doubled, from **121** to **253**⁽¹¹⁾.
- ▶ The number of opioid-related **deaths** almost doubled, from **28** to **51**⁽¹²⁾.

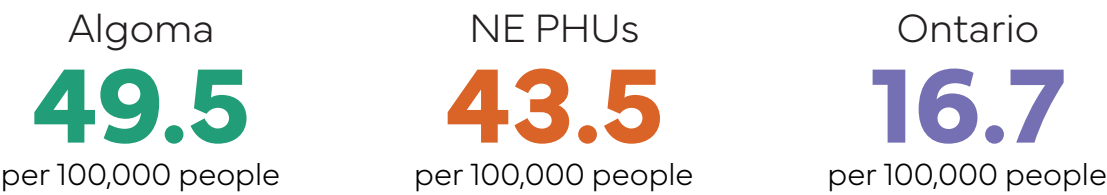
In 2022, the rate of **ED visits** for opioid toxicity in Algoma was **almost three times** that of Ontario⁽¹⁾.



In 2022, the rate of **hospitalization** for opioid toxicity in Algoma was **almost three times** that of Ontario⁽¹⁾.



In 2022, the rate of **deaths** due to opioid toxicity in Algoma was **almost three times** higher than Ontario. There were 56 deaths due to opioid toxicity in Algoma in 2022⁽¹⁾.



According to data available from the Office of the Chief Coroner, Sault Ste. Marie had the **fourth highest opioid toxicity mortality** rate in the first 9 months of 2023. Thunder Bay, North Bay, Timmins and Greater Sudbury were also listed in the top ten census subdivisions with the highest mortality rate during this period⁽¹²⁾.

What does this mean?

- ▶ There are **health inequities** that exist in the North. Surveillance data on opioid-related harms are updated quarterly:
 - Algoma Public Health – [Opioid Related Health Harms in Algoma](#)
 - Ontario Drug Policy Research Network (ODPRN) - [Suspect Drug-Related and Drug Toxicity Deaths in Ontario](#)
 - Public Health Ontario – [Interactive Opioid Tool](#)

Naloxone

Naloxone is a lifesaving medication that can temporarily reverse an overdose from opioids, including heroin, fentanyl, morphine, oxycodone and prescription opioids. It is commonly administered into the nose (intranasal) or muscle (intramuscular) and starts working within 2 to 5 minutes. Naloxone needs to be given promptly when a person is showing signs of an opioid overdose.

Calling 911 is critical because a person is at risk of overdosing again when the naloxone wears off. Algoma Public Health leads naloxone distribution and training for eligible community agencies through the Ontario Naloxone Program.

Anyone can administer naloxone and help save a life. There is no harm in giving naloxone, even when unsure what substance a person has taken. You can visit our [website to learn more about naloxone](#) and find where you can access a free kit.

Naloxone supplies distributed across Algoma in 2023:



Opioid Agonist Therapy

Opioid Agonist Therapy (OAT) is a medical treatment where long-acting opioid medications (e.g., methadone, suboxone®) are prescribed to reduce cravings for opioids and prevent severe withdrawal symptoms⁽¹⁵⁾. OAT helps improve stability and day to day functioning for people with an opioid use disorder.

- ▶ Nearly **1 in 85** people in Algoma received treatment for opioid use disorderⁱ in 2022⁽¹⁶⁾
- ▶ The amount of OAT that was dispensed in Algoma in 2022 was **significantly higher** than Ontario

The rate of people who were dispensed treatment for opioid use disorder in 2022⁽¹⁶⁾

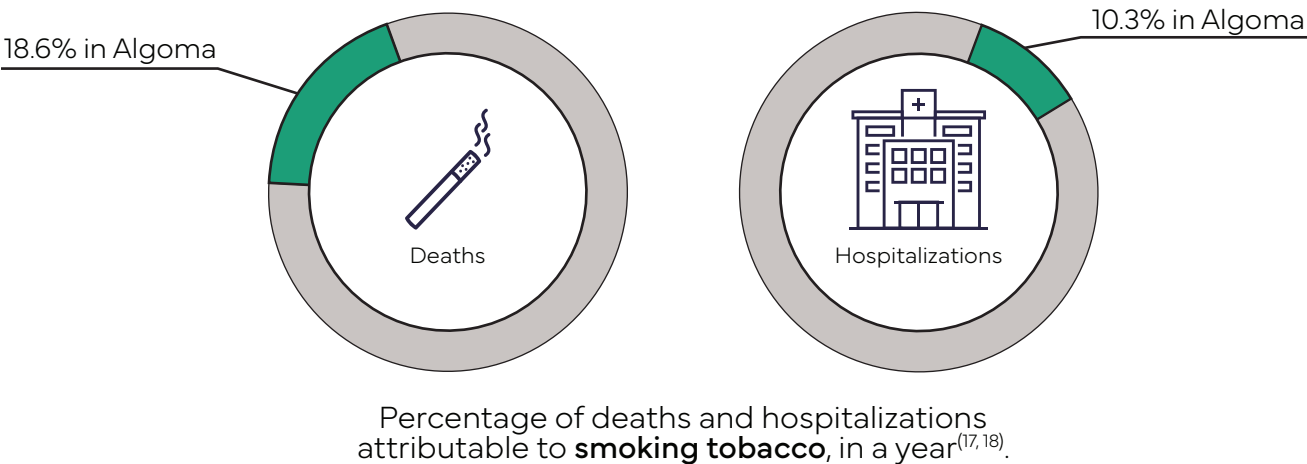
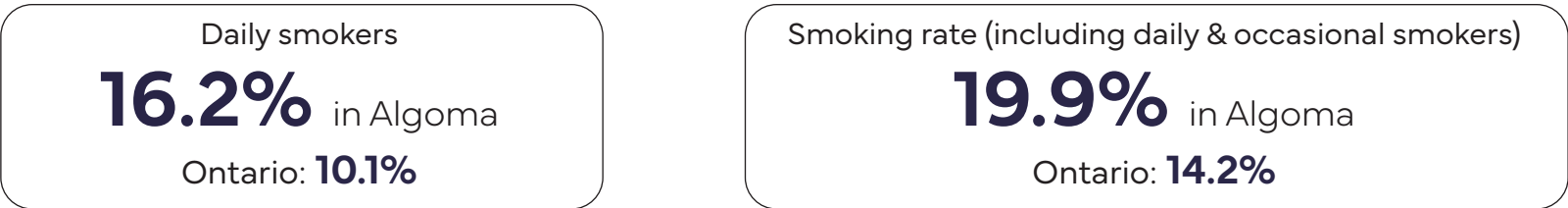


Tobacco use

Smoking tobacco is the leading cause of preventable illnesses and death in Ontario. It increases the risk for several chronic diseases, including cancer, chronic obstructive pulmonary disease (COPD), asthma, heart disease, stroke, and diabetes⁽¹⁷⁾. Smoking rates in Algoma have been consistently decreasing, however remain significantly higher than the provincial rate.

Between 2019 - 2020, the highest rate of daily smokers in Algoma was observed in people aged 45-64 at 17.9%, followed by people aged 20-44 at 17.3%⁽³⁾.

Smoking rates among people 20 years and older, 2019 - 2020



The percentage of youth aged 12-19 in Algoma **who have never smoked** a cigarette increased slightly from 86% to 87.4% between 2019 - 2020⁽³⁾. However, the rates of vaping among this age group have increased substantially.

In an average year, an estimated 18.6% of deaths in people aged 35 and older in Algoma are attributable to smoking tobacco^(17, 18).

In other words:

18.6% of deaths could be avoided in our population if smoking tobacco were reduced^(17, 18).

The Smoke Free Ontario Act (SFOA)

APH enforces this act to protect the public from second-hand smoke and vapour. The goal of enforcement activities is to educate, facilitate and achieve compliance in efforts to preserve quality of life for Algoma residents.

You can visit our [website to view](#) enforcement activity.

Vaping (e-cigarettes)

Vapes (e-cigarettes) were originally designed to help smokers quit smoking.

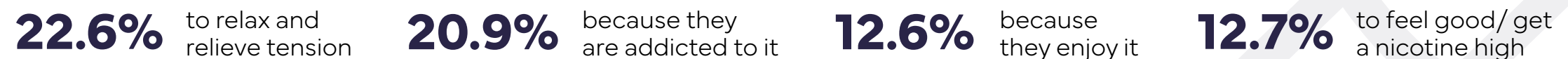
How popular are vapes among youth and young adults? Among students in Grades 7 - 12 in Ontario:



Vaping causes harms, although the long-term effects are still unknown. Vapes can contain roughly the same amount of nicotine as **20 cigarettes** in a standard cartridge. This is a highly addictive substance that poses dangers, especially for youth, pregnant adults and fetuses. Vaping can also lead to lung issues caused by toxic chemicals and heavy metals in the aerosols produced by the device. Vaping devices can also be used to consume cannabis and other drugs⁽¹⁹⁾.

► Of students from grade 7-12 who reported using vapes/e-cigarettes, the majority (**84%**) used **nicotine based** vapes/e-cigarettes⁽⁴⁾.

Why does a student vape? Among students who vaped with nicotine in the past 30 days, the most common reasons were⁽²⁰⁾:



Nicotine from vaping can cause short-term effects such as coughing, shortness of breath, chest pain, nausea and vomiting, diarrhea, depression, increased blood pressure and increased heart rate. It could also affect concentration, learning, memory, and brain development⁽²¹⁾.

Nicotine pouches are increasing in popularity with youth because they are discrete, smokeless, and have a stimulant effect. These pouches were authorized to help adults quit smoking and should not be used recreationally, by non-smokers or by people under the age of 18.

Algoma Public Health strives to protect youth from the harms of vaping by supporting government legislation to prevent vaping initiation and decrease vape use, working closely with schools to deliver evidence-based health teaching, and educating parents and caregivers about vaping. More information about recognizing the signs of youth vaping, talking to children about vaping and resources to quit smoking or vaping are available on [our website](#).

Alcohol

Canada's [Guidance on Alcohol and Health](#) states that even a small amount of alcohol can be damaging to health.

The new guidance presents evidence that less is better when it comes to drinking alcohol and that any level of alcohol consumption increases the risk of long-term harms on health such as cancer, heart disease, increased blood pressure and alcohol dependency.

Alcohol consumption per week

Drinking alcohol has negative consequences. The more alcohol you drink per week, the more the consequences add up.



- ▶ More than half of the adults in Algoma (53.5%) aged 19 and older **exceeded drinking guidelines**⁽²⁴⁾ⁱⁱ.
- ▶ The prevalence of **heavy drinkers**ⁱⁱⁱ in Algoma was 21.2% which is higher compared to the provincial prevalence of 16.0% (NE PHUs were 25.9%)⁽²⁴⁾.
- ▶ The prevalence of **heavy drinking is higher in males**; however, the rate of **heavy drinking among females is increasing** in Algoma (19.0% in 2019 - 2020 compared to 15.8% in 2017 - 2018)⁽²⁴⁾.

ⁱⁱ 2011 Low-risk Alcohol Drinking Guidelines.

ⁱⁱⁱ In the survey, heavy drinking was defined as males having 5 or more drinks and females having 4 or more drinks on one occasion at least monthly over the past year.

National data shows that alcohol continued to be the substance with the highest prevalence of use among students in grades 7-12 in 2021 - 2022. The Canadian Student Tobacco, Alcohol and Drugs Survey found that 39% of students in Canada reported consuming alcohol in the past 12 months and on **average students tried their first alcoholic beverage at 13.1 years** of age⁽²¹⁾.

According to the most recent (2017 - 2018) data available for Algoma, **1 in 5 (24.9%)* 12 to 18 year olds have reported consuming alcohol**. For the same period, the rate of underage drinking in Ontario and NE PHUs was much higher than Algoma at 31.9% and 40.1%, respectively⁽²⁴⁾.

Recent provincial (26.8%) and NE PHUs (35.1%) data from 2019 - 2020 reported reduced rates of underage drinking as compared to 2017 - 2018⁽²⁴⁾.

Several studies showed an increase in alcohol consumption after the start of the COVID-19 pandemic⁽²⁵⁻²⁷⁾. This may not be surprising since alcohol is the most commonly consumed substance in Ontario and often used to cope with emotions such as stress, anxiety, and loneliness.

In 2021, the rate of hospitalizations for conditions entirely attributable to alcohol among Algoma residents was 371.2 per 100,000. While this rate has reduced by 34.3% since 2012, it is still significantly higher compared to the provincial rate of 210.9 per 100,000⁽²²⁾.

In an average year, an estimated 4.1% of deaths in people aged 15 and older in Algoma are attributable to alcohol consumption.

In other words:

Up to **4.1%** of deaths could be avoided in our population if alcohol consumption were reduced⁽¹⁸⁾.



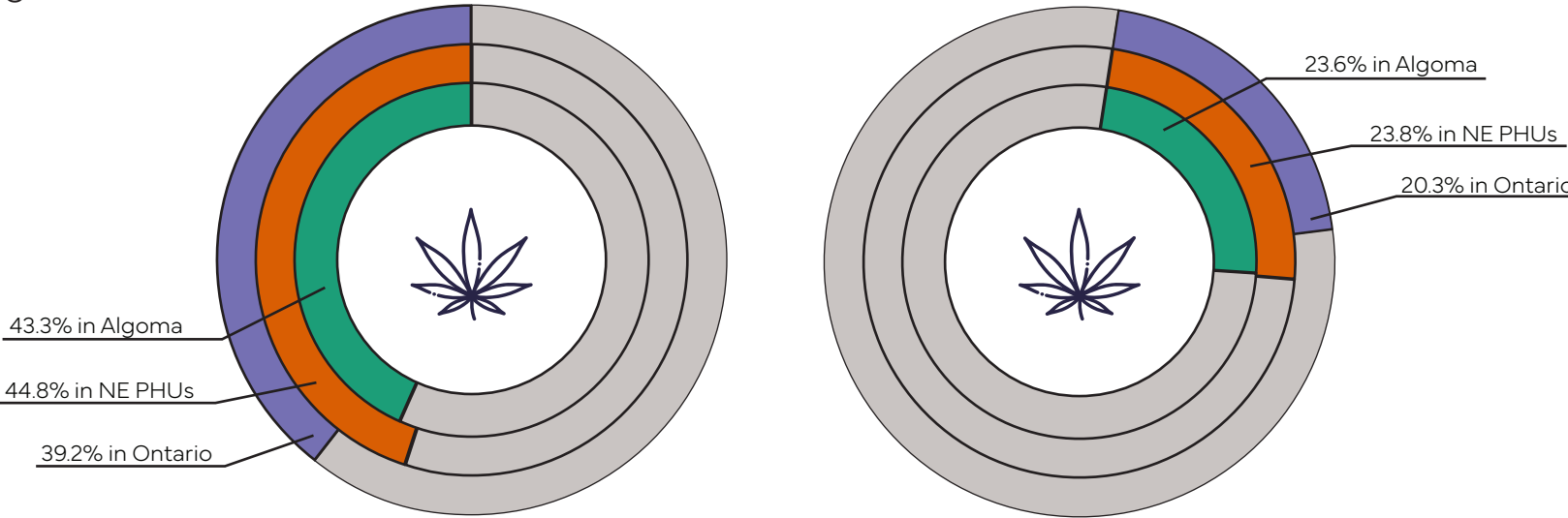
Percentage of deaths and hospitalizations attributable to **alcohol consumption**, in a year^(17,18).

Reducing the harms associated with alcohol consumption requires changing social norms around drinking through increasing awareness of the health risks, as well as policies to regulate the availability and promotion of alcohol. Algoma Public Health has a variety of **mocktail videos** promoting Canada’s Guidance on Alcohol and Health available on our social media channels and continues to be a strong advocate for evidence-based policies, such as alcohol warning labels.

Cannabis

Cannabis is the second most commonly consumed substance in Ontario after alcohol. Cannabis is often smoked or vaped, used as topicals, concentrates, in oils, edibles or extracts.

Like other substances, the rates of cannabis consumption in Algoma are higher than the province.



Percentage that used cannabis more than once **in their lifetime**⁽²⁾.

Percentage that used cannabis more than once **in the past year**⁽²⁾.

* Interpret with caution due to high sampling variability


How popular is cannabis among youth and young adults?

In 2019 - 2020, the highest rates of cannabis consumption were⁽²⁾:

36.9% among youth
aged 15-19 years
48.6% among young adults
aged 20-25 years

The most **common method** of consuming cannabis was⁽²⁾:


Smoking
57.5%


Edibles &
drinkables
16%

Smoking cannabis poses similar health risks as tobacco since cannabis smoke contains many of the same carcinogens⁽²⁹⁾. While consuming edibles reduces the harms associated with smoking, it does create other risks such as motor vehicle collisions from impaired driving and cannabis poisoning, particularly among children who may unintentionally ingest them.

In 2022, Algoma had the **highest rate** in Ontario for emergency department visits for cannabis-related poisoning⁽³⁰⁾.

52.7 per 100,000 in Algoma
Ontario: **10.2 per 100,000**

Algoma also had a **significantly higher** rate of hospitalizations for mental health conditions caused by cannabis compared to other NE PHUs⁽³⁰⁾.

125.8 per 100,000 in Algoma
NE PHUs: **119.8 per 100,000**

Cannabis consumption has been increasing for years, even before it became legalized in 2018. Studies also showed that people who used cannabis increased their use during the COVID-19 pandemic^(26, 27, 31). While cannabis remains illegal for anyone under the age of 19, it is commonly consumed by youth.

The Canadian Student Tobacco, Alcohol, and Drugs Survey⁽²¹⁾ found that among Canadians in 2021 -2022:

18.3% of students in grades
7-12 **used cannabis**

14.1 years old the average age of
first cannabis use

41% of students thought it would be "**fairly easy**" or
"**very easy**" to get cannabis if they wanted it

6% of students indicated it has been **easier to get cannabis**
for themselves since cannabis became legal for adults

Methods of consumption:

72.3% *smoking* was the
most common

54.0% *vaping liquid*
cannabis

48.9% *edibles*

34.1% *vaping dry*
cannabis

18.8% *dabbing*

Algoma Public Health encourages people who use cannabis to follow [Canada's Lower-Risk Cannabis Use Guidelines](#) to reduce the harms of cannabis use. Parents/guardians are encouraged to utilize the resources available on the Parent Support Hub at [Drug Free Kids Canada](#) to talk to children and youth about cannabis.

We recognize the need to work together as a unified community to address both the upstream and downstream drivers of substance use and related harms, as outlined in the Chief Medical Officer of Health's 2023 Annual Report [Balancing Act: An All-of-Society Approach to Substance Use and Harms](#).

We also strive to implement the [Canadian Public Health's Framework for a Public Health Approach to Substance Use](#).

The following resources are available for anyone looking for support with mental health and substance use.

- ▶ [Parents like us. | Sault Area Hospital](#)
- ▶ [Mental Health & Addiction Treatment Services | Connex Ontario](#)

The **best antidote** for addiction and other substance use harms is connection and a sense of belonging: strong, healthy, connected families and communities. - CMOH Report

References

1. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive opioid tool. Toronto, ON: Queen's Printer for Ontario; 2023. Available from: <https://www.publichealthontario.ca/en/data-and-analysis/substance-use/interactive-opioid-tool>
2. Statistics Canada. Canadian Community Health Survey (CCHS), Ontario Share File 2019 - 2020 [data files]. Ottawa, ON: Government of Canada [producer]; Toronto, ON: Ontario Ministry of Health [distributor].
3. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: smoking. Toronto, ON: King's Printer for Ontario; c2023 [modified 2023 May 12; cited 2023 July]. Available from: <https://www.publichealthontario.ca/en/Data-and-Analysis/Substance-Use/Smoking-Status>
4. Boak, A., & Hamilton, H. A. (2024). Drug use among Ontario students, 1977–2023: Findings from the Ontario Student Drug Use and Health Survey (OSDUHS). Toronto, ON: Centre for Addiction and Mental Health. Available from: <https://www.camh.ca/-/media/files/pdf---osduhs/2021-osduhs-report-pdf>
5. Health Canada. About substance use: 2024. Available from: <https://www.canada.ca/en/health-canada/services/substance-use/about-substance-use.html>
6. CAPSA [Canadian Association of Peer Support Associations]. Understanding substance use health: A matter of equity: [2023]. Available from: <https://capsa.ca/2023/wp-content/uploads/2023/11/CAPSA-Substance-Use-Health-EN-1.pdf>
7. Canadian Public Health Association. Framework for a Public Health Approach to Substance Use: 2024. Available from: <https://www.cpha.ca/framework-public-health-approach-substance-use>
8. Health Canada. Stigma around drug use: 2023. Available from: <https://www.canada.ca/en/health-canada/services/opioids/stigma.html#a1>
9. Canadian Mental Health Association. Harm reduction 2024. Available from: <https://ontario.cmha.ca/harm-reduction/>
10. Ontario Drug Policy Network and Public Health Ontario. Characteristics of Substance-Related Toxicity Deaths in Ontario: Stimulant, Opioid, Benzodiazepine, and Alcohol-Related Deaths: 2023. Available from: <https://odprn.ca/wp-content/uploads/2023/09/Substance-Toxicity-Report-Final.pdf>
11. EMS calls. District of Sault Ste. Marie Paramedic Services & Algoma District Paramedic Services [unpublished]. 2023.
12. Office of the Chief Coroner, Ontario. (2024). OCC Opioid related deaths by CSD 2018-2023Q4. [XLSX]. <https://odprn.ca/occ-opioid-and-suspect-drug-related-death-data/>
13. Dagklis T, Siargkas A, Apostolopoulou A, Tsakiridis I, Mamopoulos A, Athanasiadis A, et al. Adverse perinatal outcomes following the prenatal diagnosis of isolated single umbilical artery in singleton pregnancies: A systematic review and meta-analysis. *Journal of Perinatal Medicine*. 2022;50 (3): 244-52.
14. Naloxone kit and harm reduction supplies distribution: Ontario Harm Reduction Database (NEO), Centre for Addiction and Mental Health.
15. Health Canada. Opioid use disorder and treatment: 2023. Available from: <https://www.canada.ca/en/health-canada/services/opioids/opioids-use-disorder-treatment.html>
16. Ontario Drug Policy Research Network. Ontario Opioid Indicator Tool. Toronto, ON; April 2024. DOI: 10.31027/ODPRN.2022.01. Available from: <https://odprn.ca/ontario-opioid-indicator-tool/>
17. Ontario Health. Prevention System Quality Index 2023. Toronto: King's Printer for Ontario; 2023. Available from: https://www.ontariohealth.ca/sites/ontariohealth/files/PSQI_2023_Report_English.pdf
18. Ontario Health and Ontario Agency for Health Protection and Promotion (Public Health Ontario). Burden of Health Conditions Attributable to Smoking and Alcohol by Public Health Unit in Ontario. Toronto: King's Printer for Ontario; 2023. Available from: <https://www.publichealthontario.ca/en/Health-Topics/Health-Promotion/Tobacco/Smoking-Alcohol>
19. U.S. Department of Health and Human Services. E-Cigarette Use Among Youth and Young Adults: a report of the Surgeon General: 2016. Available from: https://www.cdc.gov/tobacco/sgr/e-cigarettes/pdfs/2016_sgr_entire_report_508.pdf

20. Health Canada. Detailed tables for the Canadian Student Tobacco, Alcohol and Drugs Survey 2021-2022: 2024. Available from: <https://www.canada.ca/en/health-canada/services/canadian-student-tobacco-alcohol-drugs-survey/2021-2022-detailed-tables.html>
21. Health Canada. Summary of results for the Canadian Student Tobacco, Alcohol and Drugs Survey 2021-22: 2024. Available from: <https://www.canada.ca/en/health-canada/services/canadian-student-tobacco-alcohol-drugs-survey/2021-2022-summary.html>
22. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: alcohol harms: hospitalizations for conditions entirely attributable to alcohol. Toronto, ON: King's Printer for Ontario; c2023 [modified 2023 Oct 30; cited 2023 Nov 22]. Available from: <https://www.publichealthontario.ca/en/Data-and-Analysis/Substance-Use/Alcohol-Harms>
23. Canadian Centre on Substance Use and Addiction. Drinking less is better: 2023. Available from: <https://www.ccsa.ca/sites/default/files/2023-05/CGAH-Drinking-Less-is-Better-en.pdf>
24. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: alcohol use. Toronto, ON: King's Printer for Ontario; c2023 [modified 2023 Jun 5; cited 2023 Jun 19]. Available from: <https://www.publichealthontario.ca/en/Data-and-Analysis/Substance-Use/Alcohol-Use>
25. Thompson K, Dutton DJ, MacNabb K, Liu T, Blades S, Asbridge M. Changes in alcohol consumption during the COVID-19 pandemic: exploring gender differences and the role of emotional distress. *Health Promot Chronic Dis Prev Can*. 2021: 254-63.
26. Health Canada. Substance use and stigma during COVID-19: 2022. Available from: <https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/healthy-living/infographic-examining-changes-alcohol-cannabis-consumption-stigma-covid-pandemic/infographic-examining-changes-alcohol-cannabis-consumption-stigma-covid-pandemic.pdf>
27. CAMH [Centre for Addiction and Mental Health]. Mental Health in Canada: Covid-19 and Beyond: 2020. Available from: <https://www.camh.ca/-/media/files/pdfs--public-policy-submissions/covid-and-mh-policy-paper-pdf.pdf>
28. Ontario. Chief Medical Officer of Health. Balancing act: An All-of-Society Approach to Substance Use and Harms: 2024. Available from: <https://www.ontario.ca/files/2024-04/moh-cmoh-annual-report-2023-en-2024-04-02.pdf>
29. Canadian Cancer Society. Cannabis and cancer: Are they connected? : 2024. Available from: <https://cancer.ca/en/cancer-information/reduce-your-risk/live-smoke-free/cannabis-and-cancer-are-they-connected>
30. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: cannabis harms. Toronto, ON: King's Printer for Ontario; c2023 [modified 2024 Apr 08; cited 2024 Apr 09]. Available from: <https://www.publichealthontario.ca/en/data-and-analysis/substanceuse/cannabis-harms>
31. Imtiaz S, Wells S, Rehm J, Hamilton HA, Nigatu YT, Wickens CM, et al. Cannabis use during the COVID-19 pandemic in Canada: A repeated cross-sectional study. *Journal of addiction medicine*. 2021; 15(6): 484-90.