



Cannabis Use in Minnesota

REPORT TO THE LEGISLATURE

January 1, 2025

Cannabis Use in Minnesota: Report to the Legislature

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Executive summary

This report provides an overview of the current state of surveillance data on cannabis use in Minnesota, pursuant to Minn. Stat. § 144.196. It provides baseline information from which the Minnesota Legislature and the Minnesota Department of Health (MDH) can track trends after the legalization of adult cannabis use in Minnesota in 2023, as well as an initial examination of changes after legalization of hemp-derived tetrahydrocannabinol (THC) products in 2022.

This report shares data collected between 2016 and 2024 on cannabis use prior to adult use legalization in Minnesota, collected and synthesized from the following sources:

Data on use among all age groups:

- National Survey on Drug Use and Health
- Minnesota Poison Control System
- Minnesota Office of Medical Cannabis
- Hospital discharge data
- Minnesota EHR Consortium

Data on adult use:

- Behavioral Risk Factor Surveillance System (BRFSS)
- Minnesota Adult Tobacco Survey

Data on use among youth:

- Minnesota Student Survey
- Minnesota Youth Tobacco Survey

Key trends to note include:

- The proportion of adults who report using cannabis in the prior 30 days has increased over time.
- The proportion of children who report using cannabis in the prior 30 days has decreased from 2019 to 2022.
- The proportion of adults who reported using cannabis for non-medical purposes has increased over time.
- As of 2023, smoking is the most common mode of cannabis use, followed by eating or drinking cannabis.
- The proportion of cannabis users who eat or drink cannabis products sharply increased after hemp-derived cannabinoid products were introduced into the legal market in 2022.
- Among youth, high schoolers are more likely than middle schoolers to have tried cannabis and to report regularly using cannabis.
- The number of poison control calls related to youth has increased, particularly among those under 5 years old, as have the number of cannabis-related hospital poisonings in this age group.
- The overall prevalence of hospital visits related to cannabis use, abuse, and potential dependence has remained stable over time at approximately 1.6%.

Data limitations include:

- Temporal delay between latest available years of annual surveys like BRFSS and NSDUH and reporting, which limits much data in this report to prior to 2023.
- Measures of cannabis use behavior are typically self-report, which has potential for bias.
- Hospital Discharge Data provides an incomplete sample of clinics, excluding non-hospital visits, federal facilities, and standalone psychiatric facilities.
- Data on cannabis vaping among youth began collection in 2022, so changes from prior years are unknown.

Introduction and overview

This report is intended to satisfy Minn. Stat. §144.196, which requires a biennial report on cannabis surveillance data by January 1, 2025. It contains:

- Information on the prevalence of cannabis flower use and the use of cannabis products in the state both over and under the age of 21, as well as trends in hospital-treated cannabis poisoning and adverse events.
- Information and context on available data sources for cannabis surveillance, and an overview of questions asked by those sources between 2016 and 2024.
- Summaries of trends in measures of cannabis use, including interpretation of differences between multiple data sources where available.
- Contextualization of trends between demographic groups, including age, race, ethnicity, gender identity, household income, and educational attainment.

Data and findings within this report are organized by topic so that the reader can more easily compare findings from multiple data sources, where they are available. Detailed data tables are available in Appendix B and are organized by data source. Due to the large number of tables in Appendix B, relevant point estimates are included within the body of the report, rather than directing the reader to reference specific tables. This report only includes high-level descriptive information about Minnesota's medical cannabis program. Interested readers can find more detailed information from the Office of Cannabis Management on their public dashboard, available at: [Minnesota Medical Cannabis Dashboard](https://mn.gov/ocm/dmc/data-reports/data-projects/cannabis-dashboard.jsp) (<https://mn.gov/ocm/dmc/data-reports/data-projects/cannabis-dashboard.jsp>).

National cannabis use

In 2021 and 2022, an estimated 21.43% of adults in the United States had used cannabis in the past year (95% CI: 20.90%-21.96%) and an estimated 14.91% of adults had used cannabis in the past month (95% CI: 14.47%-15.35%) (National Survey on Drug Use and Health, U.S. Substance Abuse and Mental Health Services Administration). As of 2024, 24 states and the District of Columbia have legalized adult use of cannabis, while 38 states, 4 territories, and the District of Columbia have legalized medical use of cannabis.

In 2018, a federal policy change legally defined hemp as cannabis that contains less than 0.3% Delta-9 tetrahydrocannabinol (THC) by dry weight. As a result, this allowed hemp to be sold federally, with individual states determining which specific products are legal. Initially, this was focused on cannabidiol (CBD) products in a variety of forms, including topical and edible varieties. As the hemp-derived cannabis market has grown, it has expanded its products to include other cannabinoids derived from hemp (for example, Delta-8 THC, hexahydrocannabinol or HHC, and Delta-9 THC). Because of this state-to-state variability in policy, hemp-derived THC products fall into a legal gray area in contiguous states to Minnesota. In geographies sharing land borders with Minnesota, Iowa, North Dakota, Wisconsin and South Dakota have legalized the medical use of cannabis and allow some sales of hemp-derived Delta-9 THC, while Canada legalized adult use in 2018.

Timeline: Cannabis policies in Minnesota

This section notes cannabis-related policies passed in or affecting Minnesota, with the 2018 Farm Bill being the only federal change listed.

- **2014:** Medical uses of cannabis legalized in Minnesota under Minn. Stat. § 152.22 to 152.37.
- **2018:** U.S. Agriculture Improvement Act of 2018 (commonly known as the 2018 Farm Bill) legalized sale and use of hemp products containing less than 0.3% delta-9 tetrahydrocannabinol (THC); hemp-derived products entered the legal market through this bill.
- **2019:** Sale of non-intoxicating cannabinoid products derived from hemp in Minnesota was codified via Minn. Stat. § 151.72, subd. 3.
- **2022:** Use of hemp-derived edibles containing 5 milligrams of delta-9 THC per serving legalized in Minnesota via revision of Minn. Stat. § 151.72.
- **2023:** Minnesota Adult Use Cannabis Act legalized adult use of recreational cannabis in Minnesota; hemp legislation from 2022 updated to include restrictions on sale of some specific hemp-derived cannabinoids and added requirements for sale of edible hemp-derived THC products.

Health equity and cannabis

Policy and health equity

Cannabis has a history of inequitable policies, where its prohibition has led to disproportionate surveillance and prosecution of people based on race, ethnicity, class, and other axes of equity (National Academies of Sciences, Engineering, and Medicine, 2024). Advancing health equity as it pertains to adult use cannabis includes addressing previous harms from prohibition as well as preventing the potential harms of cannabis use and abuse. To that end, the National Academies of Science, Engineering, and Medicine recommend a framework including two broad considerations about equity and cannabis. The first is social equity: certain communities, particularly communities of color, have been disproportionately involved with the criminal justice system due to possession and sale of cannabis. Involvement with the criminal justice system affects social determinants of health and can adversely impact the health and opportunities of the families and communities in which people belong. Observed in other states, participating in the incoming cannabis industry can be out of reach for low-income communities and communities of color. This can exacerbate existing economic disparities (and by extension, health disparities), as the very communities most harshly punished by the prohibition of cannabis are then excluded from economic benefit of the legalization of sale of cannabis. Recognizing the sovereignty of Tribal nations in Minnesota, a small number of adult use dispensaries have been established on Tribal land ahead of the establishment of recreational dispensaries in the rest of the state of Minnesota.

Another consideration is that cannabis use can have negative health impacts, and the potential for negative health impacts to be inequitably distributed. This includes the negative impacts of cannabis use on driving and operating heavy machinery, the hazards of cannabis use during pregnancy, and the potential negative impacts on brain development of cannabis use in adolescents and young adults. Importantly, the THC content of cannabis products has increased over time and also varies between cannabis products, with edibles having measured dosages, but vaporizers and flower having higher concentrations of THC (Freeman et al, 2021). In addition, the testing stringency and quality of cannabis

products varies extensively in an unregulated market, especially in illicit markets. There is growing evidence that adult-use markets can influence illicit markets, including reducing the price of cannabis procured outside of licensed dispensaries (Meinhofer & Rubli, 2021). This report aims to provide data that can be used to advance health equity through the adaptation and implementation of policy in coming years.

Health equity in this report

Throughout the report, the word cannabis is used rather than marijuana, as marijuana has historical connotations with anti-immigrant sentiments. Some survey instruments and data sources use the word marijuana in their language, so for clarity and consistency, those items are included using their original wording. The primary consideration related to health equity for this report is data disaggregation by demographics, particularly in data tables found in Appendix B and discussed throughout the body of this report. The Minnesota Center for Health Statistics (MCHS) is leading work in disaggregating (i.e., providing a greater number of more specific categories of a variable) demographic data, including disaggregation by race and ethnicity, sexual orientation and gender identity, and disability status. In disaggregating data, there are competing tensions between selecting categories that can be specific to subgroups while also meeting data quality standards for presentation. This means having sample sizes large enough to: 1) avoid identifying individuals or small communities, and 2) provide reliable statistical estimates.

Because this report largely draws on data from existing surveys that have their own standards, the policies specific to each survey supersede any MCHS or MDH policies. To maximize the ability of data disaggregation by demographic groups, two-year estimates are provided for some surveys, increasing sample sizes. Within estimates presented from a data source, the number of categories for a particular characteristic may vary between survey questions. For example, in BRFSS, race and ethnicity can be disaggregated to a maximum of six levels. However, sample sizes only allow this level of disaggregation for questions asked of all respondents; in analyses of questions specific to only cannabis users, this smaller group only allows two or four race and ethnicity categories to provide statistically reliable estimates. Throughout this report, data is disaggregated to the fullest extent possible. Where data is presented in a more aggregated form, especially between different questions from the same survey, this is done either to prevent identifiability or to increase statistical reliability.

Cannabis use: Behaviors

Frequency of cannabis use

Data from the National Survey on Drug Use and Health (NSDUH), 2021-2022

Cannabis use frequency varies by age.

In the overall population, 15.1% of Minnesotans reported using cannabis in the past month; 9.2% reported using cannabis 1-19 days within the past month and 5.9% reported using cannabis 20-30 days in the past month. The prevalence of cannabis use was highest in the 18-25 age group, with 16.2% of respondents reporting using cannabis 1-19 days and 15.3% reporting using cannabis 20-30 days in the past month. These similarly sized proportions among cannabis users suggest that heavy cannabis use is most common in this age group. Among respondents aged 12-17, 7.8% reported using cannabis, with a smaller proportion being heavy cannabis users (3.1%) than light or moderate cannabis users (4.7%). Prevalence of cannabis use was lowest among adults over 26 (13.4%) and a greater proportion reported using cannabis 1-19 days in the past month (8.6%) than 20-30 days in the past month (4.8%).

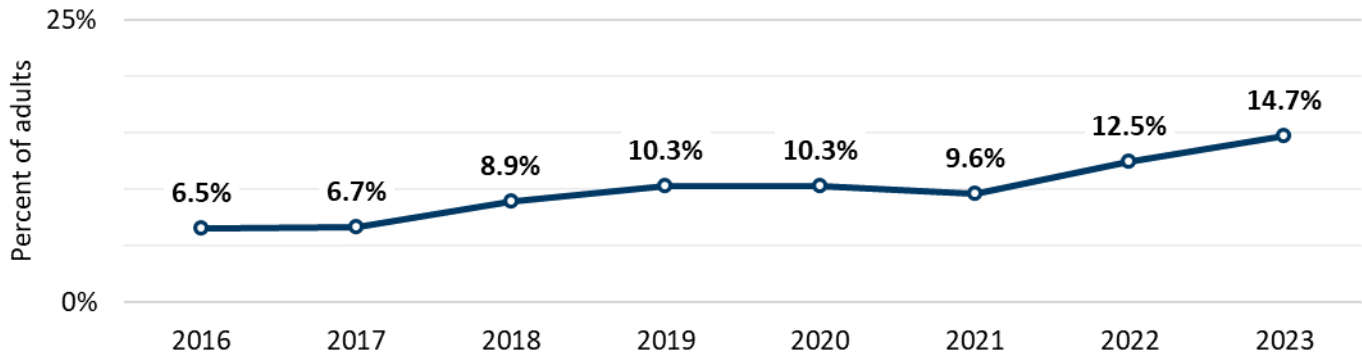
There are other demographic differences in cannabis use.

Female respondents had a slightly lower prevalence of cannabis use (14.3%) than the overall estimate (15.1%), while males had a slightly higher prevalence of use (15.8%). However, patterns of frequency differed among cannabis users, as a greater proportion of female respondents (6.4%) reported using cannabis 20-30 days in the past month than the overall estimate (5.9%) and a lower proportion of males reported used cannabis use that frequently (5.4%). Across levels of educational attainment, cannabis use was overall most common among adult respondents who had not completed high school or a GED, with 11.1% reporting using cannabis 1-19 days and 20.5% using cannabis 20-30 days. Prevalence of cannabis use was lowest among college graduates, with consistently lower frequencies of use than the overall estimates.

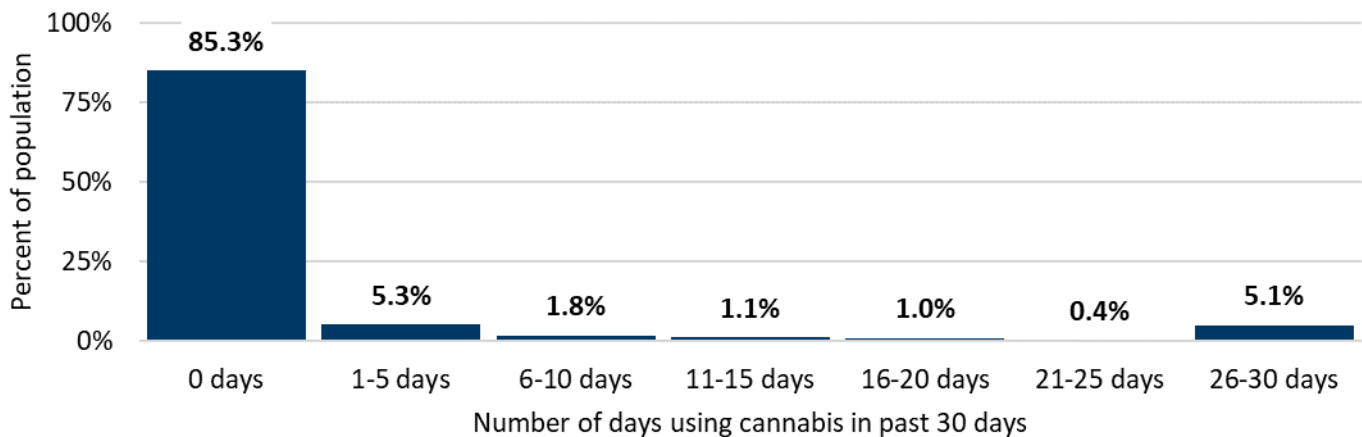
Data from the Behavioral Risk Factor Surveillance System (BRFSS)

Most adults in Minnesota do not use cannabis.

The prevalence of adult cannabis use in Minnesota has approximately doubled between 2016 and 2023 according to data from BRFSS (**Figure 1** and **Figure 2**), increasing from approximately 6.6% of adults in 2016-2017 to 13.6% of adults in 2022-2023. This estimate of prevalence is lower than the estimate from NSDUH, which suggests that approximately 15% of adults in Minnesota had used cannabis in the past 30 days in 2021 and 2022. While this indicates that cannabis use is becoming more common, they also indicate that cannabis use itself is not common. Increases in overall use coincide with changes in the legal status of cannabis, first with a 2.2% increase in prevalence of cannabis use in 2018 that coincides with the 2018 Farm Bill nationally, and then a 2.9% increase between 2021 and 2022 coinciding with the legalization of adult use of hemp-derived THC edibles in 2022 in Minnesota.

Figure 1. Prevalence of cannabis use over time among adults, Minnesota, 2016-2023

Source: Behavioral Risk Factor Surveillance System (BRFSS).

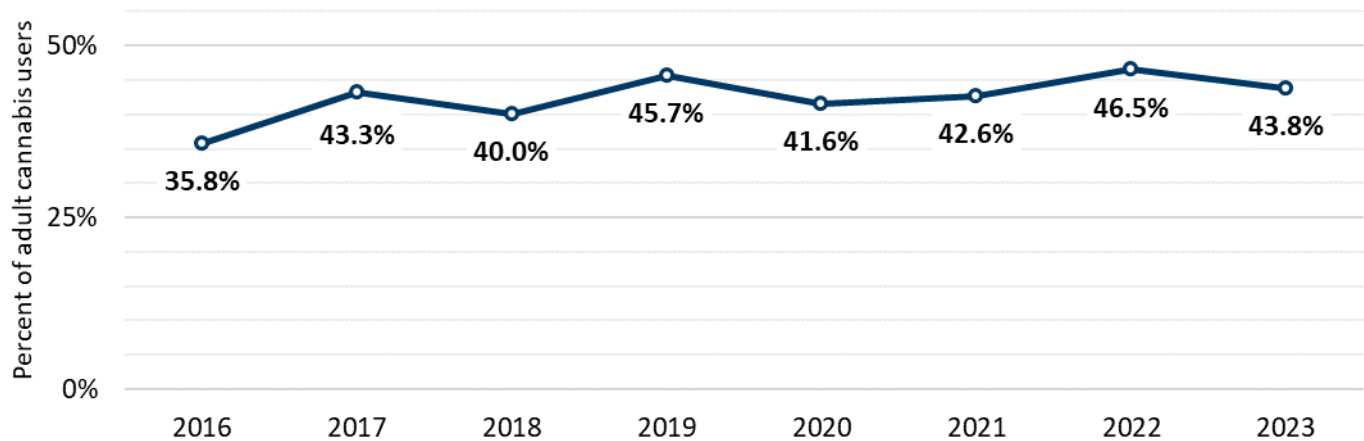
Figure 2. Frequency of cannabis use among general population, Minnesota, 2023

Source: Behavioral Risk Factor Surveillance System (BRFSS).

Among cannabis users, frequent use is common.

Among respondents who reported using cannabis, the proportion of those respondents using cannabis 20 or more of the prior 30 days increased between 2016 and 2023, though not in the same magnitude as cannabis use itself. Just over a third of cannabis users reported using 20 or more days in 2016 (35.8%), increasing to 43.8% of cannabis users in 2023, with a maximum prevalence of 46.5% of cannabis users in 2022 (**Figure 3**). Compared to the overall estimate (6.1%), heavy cannabis use was most prevalent among adults who do not have a college degree (12.5%) and among adults who live in households with a household income less than \$25,000 (11.7% for income < \$15,000, 11% for income between \$15,000 and less than \$25,000). Frequent cannabis use was most common among adults who identified as American Indian or Alaskan Native (14.7%) and lowest among adults who identified as Asian or Pacific Islander (3.3%). Frequent cannabis use is also more prevalent among adults who identify as part of the lesbian, gay, bisexual, transgender, and queer (LGBTQ+) community than adults who identify as cisgender and heterosexual.

Figure 3. Prevalence of heavy cannabis use (20+ days per month) among adult cannabis users, Minnesota, 2016-2023



Source: Behavioral Risk Factor Surveillance System (BRFSS).

Data from the Minnesota Student Survey

Cannabis use among children in Minnesota is uncommon.

In 2022, 17% of 11th-graders reported using cannabis at least once in the past year; 7% of ninth-graders, 3% of eighth-graders, and 4% of fifth-graders reported any use on the Minnesota Student Survey. These frequencies were 12%, 5%, and 3% respectively for use within the past 30 days. Only 1% of ninth-graders and 3% of 11th-graders reported using cannabis 20 days or more in the prior 30 days. These estimates are a decrease from findings in the 2016 and 2019 Minnesota Student Survey. Prevalence of cannabis use is greatest among 11th-graders; there are many potential reasons for this, including more potential opportunities to access cannabis, more time to have experimented, and perceptions that peers are using cannabis. A recent study from the University of Minnesota identified large gaps between perceptions of substance use rates among youth and actual substance use rates among youth (Planalp et al., 2024). This report is online: [Cannabis Use and Perceptions Among Minnesota High School Students](https://www.sph.umn.edu/sph/wp-content/uploads/2024/08/crc-cannabis-use-and-perceptions.pdf) (<https://www.sph.umn.edu/sph/wp-content/uploads/2024/08/crc-cannabis-use-and-perceptions.pdf>).

There are demographic differences in cannabis use behaviors among students.

In 2016, 2019, and 2022, 1-2% more female students than male students reported using cannabis in each grade. In 2022, students who identified as Two Spirit had the highest prevalence of cannabis use of any gender identity, with 18.2% reporting cannabis use in the prior 30 days across eighth, ninth, and 11th grades, and 21.5% reporting ever using it. Between groups of race and ethnicity, the prevalence of cannabis use in the prior 30 days was highest among students who identified as American Indian or Alaskan Native (13.2%), Native Hawaiian or Pacific Islander (11.1%), and multiracial (11.1%).

Data from the Minnesota Youth Tobacco Survey

Cannabis use varies among middle and high school students.

Middle school students who reported using cannabis generally exhibited infrequent usage, with the majority indicating they used cannabis fewer than 10 times per month. This suggests that cannabis use among middle schoolers may be opportunistic or situational rather than habitual. However, high school students displayed a more complex relationship with cannabis use, with similar proportions of occasional users and heavy users. Notably, 4.8% of high schoolers reported using cannabis one or two times in the past month, indicating casual or occasional experimentation. A similarly sized proportion (4.2%) reported using cannabis 40 times in the past month. This suggests a variety of usage patterns with different levels of potential risks within the high school population, from those experimenting with cannabis to those at greater risk of adverse health effects.

There are demographic disparities in cannabis use.

Students who identify as American Indian or Alaskan Native reported the highest prevalence of cannabis use, with 29.3% indicating use in the prior 30 days, substantially higher than the overall student estimate of 10.7%. This was consistent, with higher self-reported rates of vaping (18.1%), smoking (21.1%), and eating or drinking (91.5%) cannabis. While cannabis use rates between male and female students are relatively similar, the Minnesota Youth Tobacco Survey data reveals a slight difference. Among female students, 11.1% reported using cannabis in the prior 30 days, compared to 10.5% of male students.

Modes of administration: How Minnesotans use cannabis

Data from the Behavioral Risk Factor Surveillance System (BRFSS)

Smoking has decreased in popularity but remains the most common mode of cannabis use among adults.

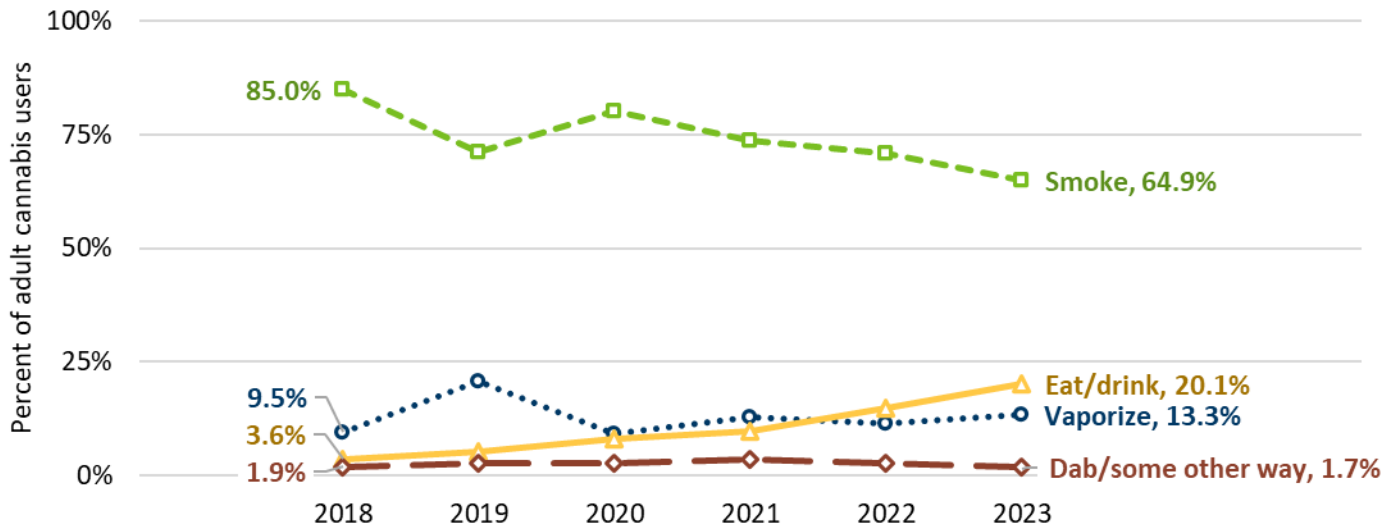
Among adult cannabis users, smoking remains the most common mode of use; in 2018, 85% of adult cannabis users reported smoking as their primary mode of use. This has decreased over time to 64.9% of adult cannabis users in 2023. By age, patterns vary greatly. Smoking is most common among cannabis users aged 18-24 (71.2%, CI 64.6%-77.1%) and least popular among cannabis users aged 65 and older (70.0%; 95% CI: 63.2%-76.3%) (**Figure 4**).

Edibles have become more popular over time.

A parallel trend to decreases in cannabis smoking is the increase in eating or drinking cannabis, rising from 3.6% of cannabis users in 2018 to 20.1% of cannabis users in 2023. The largest increase was between 2021 and 2022 (a 5.1% increase from 9.8% to 14.9%), coinciding with the legalization of adult use consumption of hemp-derived edibles. This was followed by an equivalent increase between 2021 and 2022. As of 2023, edibles are the second most common mode of consuming cannabis among adults in Minnesota. Popularity of edibles is highest among adults aged 45 to 54, with

14.1% of cannabis using adults in that age group reporting eating and drinking as their most frequent mode of consumption in 2022-2023. Adults aged 65 and over also had higher prevalence of eating and drinking cannabis, with 11.7% reporting eating and drinking as their most frequent mode of consumption in 2022-2023.

Figure 4. Trends in mode of cannabis use among adults who use cannabis, Minnesota, 2018-2023



Source: Behavioral Risk Factor Surveillance System (BRFSS).

There is no consistent trend to vaping cannabis over time.

The prevalence of vaping cannabis has had less of a steady trend. In 2019, the prevalence of cannabis vaping doubled from 9.5% to 20.7% of users (coinciding with a 13.8% decrease in cannabis smoking), followed by an even greater decrease to 9.1% of cannabis users in 2020. This coincides with the emergence of e-cigarette vaping associated lung illness (EVALI) at the end of 2019, as well as the start of the COVID-19 pandemic, factors that may have influenced behaviors (Belok et al., 2020). Since 2020, the prevalence of cannabis vaping has remained between 11 and 13%, approximately. Dabbing, along with other modes of use, remain uncommon, with less than 4% of cannabis users reporting using these methods. Among Minnesotans with higher educational attainment, there was the sharpest decrease in smoking as a mode of use.

Data from the Minnesota Student Survey

Cannabis vaping varies among students.

In 2022, 96% of eighth-graders, 94% of ninth-graders, and 86% of 11th-graders reported never having tried vaping cannabis. No eighth-graders reported being regular users, 4% of ninth-graders reported using cannabis monthly or more, and 7% of 11th-graders reported using cannabis monthly or more. Two percent of 11th-graders and 1% of ninth-graders reported using cannabis daily. Students who identified as transgender, nonbinary, and Two Spirit had higher prevalence of cannabis vaping than other gender identities. Students who identify as American Indian or Alaskan Native had higher

prevalence of vaping cannabis. Prior years of the Minnesota Student Survey did not ask about cannabis vaping specifically, so it is unclear how this has changed over time.

Data from the Minnesota Youth Tobacco Survey

Low rates of vaping among students helps create a strong foundation.

The Youth Tobacco Survey highlights encouragingly high rates of non-use of THC vaping among Minnesota students. Among middle schoolers, 97.8% reported they had never vaped cannabis, while 85.5% of high schoolers indicated the same. This strong foundation of abstinence, particularly among middle school students, reflects successful early prevention measures. However, the higher rates of use among high schoolers suggests a growing trend of experimentation and exposure as students progress through school, likely driven by factors such as peer influence, curiosity, and accessibility to vaping devices.

Data show trends in recent cannabis vaping.

Cannabis vaping in the past 30 days was reported by 2.5% of middle schoolers and 12% of high schoolers, revealing a significant increase in use as students enter adolescence. While the prevalence remains relatively low among younger students, the sharp rise among high schoolers is noteworthy and warrants attention. Adolescents are at a critical stage of development where social dynamics and risk-taking behaviors influence their decisions.

Vaping as a method of cannabis consumption varies.

The survey found that 25.6% of students who reported any vaping used vaping devices to consume cannabis. This behavior was notably more prevalent among high schoolers, with 27.6% indicating cannabis vaping, compared to only 15.3% of middle schoolers. The disparity underscores the greater accessibility to THC products and the increasing inclination toward cannabis experimentation among older students. These findings reveal how vaping devices are being used not only for nicotine but as a discreet and convenient method to consume cannabis, especially among high school students.

There are disparities in cannabis vaping among demographic groups.

Significant disparities in cannabis vaping rates were evident among demographic groups. Among American Indian and Alaskan Native students who reported vaping, more than half indicated using vaping devices to consume cannabis. This finding aligns with broader trends of health disparities and substance use within populations. It underscores the urgency of developing culturally tailored prevention and intervention programs that address the unique challenges faced by these communities.

Additionally, higher prevalence rates of cannabis vaping among marginalized gender identities, such as students identifying as transgender, nonbinary, or Two Spirit, suggest that societal pressures and stigma may contribute to their increased risk. These disparities highlight the importance of inclusive, supportive educational environments and resources to address the specific needs of these populations.

Vaping is less common compared to other methods of cannabis use, and more common than others.

When compared to other methods of cannabis consumption, vaping was less common than smoking but more frequent than consuming cannabis through edibles or beverages. This finding suggests that while smoking remains the dominant method, vaping is gaining popularity among youth due to its ease of use, perceived discreteness, and potentially lower stigma compared to smoking.

Shifting trends and methods of consumption have implications.

The findings from the Youth Tobacco Survey provide a comprehensive picture of cannabis vaping behaviors among Minnesota students. While many students maintain a foundation of non-use, the notable increases in use among high schoolers and disparities among specific demographic groups indicate areas where targeted prevention and education efforts are crucial. The rise of vaping as an alternative method of cannabis consumption reflects shifting trends that require continued monitoring and adaptive strategies to address emerging risks and protect youth from the potential consequences of early cannabis use.

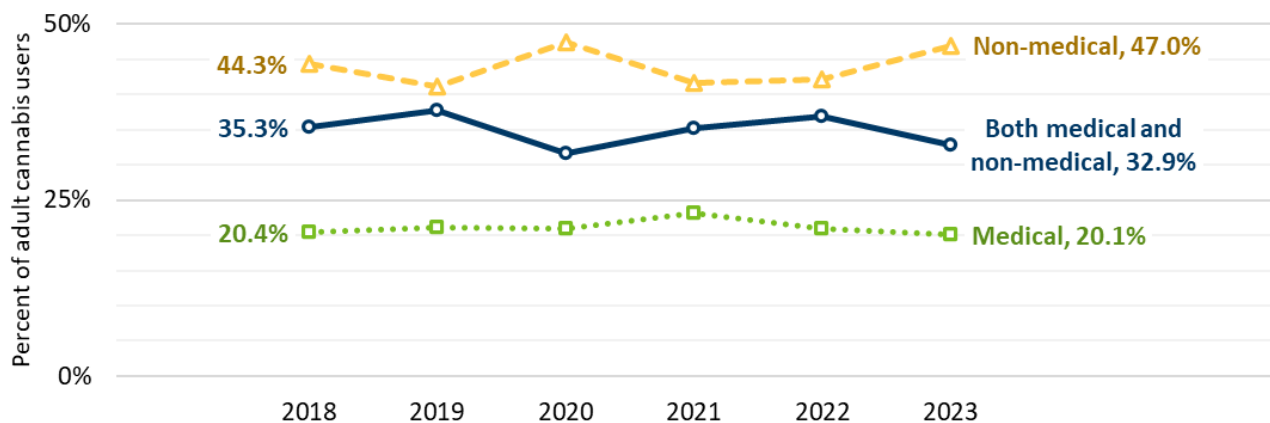
Reason for using cannabis

Data from the Behavioral Risk Factor Surveillance System (BRFSS)

Non-medical use is the most common reason for using cannabis in Minnesota.

Among cannabis users, non-medical use has consistently been the most common reason for using cannabis, staying between 41% and 48% of respondents between 2018 and 2023 (**Figure 5**). Medical use alone is the least common reason, with between 20% and 23% of respondents indicating this was their reason. Between 31% and 38% of respondents indicated that they used cannabis for both medical and non-medical purposes.

Figure 5. Trends in mode of cannabis use among adults who use cannabis, Minnesota, 2018-2023



Source: Behavioral Risk Factor Surveillance System (BRFSS).

While these percentages have fluctuated across time, there has not been a consistent pattern in them; the proportion of respondents who use cannabis solely for medical purposes has remained the most stable over time. Differences in reasons for cannabis use are within margins of error between groups by race and ethnicity, but stark patterns emerge by other demographics. Among Minnesotans with higher educational attainment and in the highest income category (i.e., \$50,000 or more), non-medical use is the most common reason for using cannabis, while using cannabis only for non-medical purposes and using cannabis for both medical and non-medical purposes were within margins of error of one another for all other income groups.

Data from Minnesota Office of Cannabis Management

Minnesotans could first purchase medical cannabis for therapeutic use in 2015 if they had qualifying conditions. Minn. Stat. § 152.27, subd. 1(a) authorized the Minnesota Medical Cannabis program, now based in the Minnesota Office of Cannabis Management (OCM), to collect data on program operations related to certified patients, registered health care practitioners, and registered caregivers and parents. This data helps evaluate benefits, risks, and outcomes for patients with a qualifying medical condition who are engaged in the therapeutic use of medical cannabis. Some important statistics include that of the 46,388 approved patients in the Minnesota medical cannabis registry, only 38.6% were new patients, suggesting continuity in the program among participants. This program largely serves adults; less than 1% of patients in the medical cannabis program were under the age of 18 in 2025. The largest share of program participants (33.9%) were between 36 and 49 years old in 2024.

Adverse effects of cannabis use

Hospitalizations and clinically observed cannabis use

Hospital discharge data from the Minnesota Hospital Association:

Hospital visits with a discharge diagnosis for cannabis use, abuse, or dependence (referred to as ‘cannabis-related hospital visits’)

There are demographic differences in cannabis-related hospital visits.

Not all people have the same likelihood of appearing in the hospital data. Racial groups have different populations sizes, and some age groups are more likely to be hospitalized than others. To account for these differences, we calculate rates based on the number of cannabis-related hospital visits per 1,000 residents. This approach helps us make fairer comparisons across groups.

Differences in visits by patient race are evident.

When examining the rate (per 1,000 residents) of cannabis-related hospital visits from 2021 through 2023 by patient race, three groups were disproportionately impacted compared to the statewide population (4.02 per 1,000 residents) and white patients (3.43 per 1,000 residents): American Indian or Alaska Native (24.80 per 1,000 residents), Black or African American (11.97 per 1,000 residents), and Native Hawaiian or Other Pacific Islander Patients (26.42 per 1,000 residents).

Notably, the rate of cannabis-related visits among white patients increased by 13% from 2021 to 2023 (3.27 to 3.69 per 1,000 residents). Over this time period, the rate of cannabis-related hospital visits decreased across all other racial groups – the rate among decreased 13% among American Indian patients (28.90 to 25.05 per 1,000 residents); 15% among Black or African American patients (13.13 to 11.13 residents); and 44% among Native Hawaiian or Other Pacific Islander residents (36.24 to 20.40 per 1,000 residents).

Young adults have the largest proportion of cannabis-related hospital visits.

When examining the rate (per 1,000 residents) of cannabis-related hospital visits from 2021 through 2023 by patient age group, three groups were disproportionately impacted: patients aged 15 to 19 (7.06 per 1,000 residents), patients aged 20 to 24 (10.70 per 1,000 residents), and patients aged 25 to 34 (8.29 per 1,000 residents).

Notably, the rate of cannabis-related visits decreased or remained stable across these three age groups and increased among all other age groups from 2021 to 2023. Over this time period, the rate decreased 13% among patients aged 15 to 19 (7.64 to 6.62 per 1,000 residents); 3% among patients aged 20 to 24 (11.01 to 10.70 per 1,000 residents); and 1% among patients aged 25 to 34 (8.55 to 8.45 per 1,000 residents). For age groups where the total annual number of cannabis-related hospital visits was 20 or greater, the highest rate increase was seen among patients aged 55 to 84. Among these age groups, the rate of cannabis-related hospital visits increased 18% among patients aged 55 to 64 (2.76

to 3.26 per 1,000 residents); increased 37% among patients aged 65 to 74 (1.35 to 1.86 per 1,000 residents); and more than doubled among patients aged 75 to 84 (0.26 to 0.60 per 1,000 residents).

Data from Minnesota Electronic Health Record Consortium

In 2020, 1% of Minnesota’s adult population had had cannabis-related indicators in their hospital visits within the prior 3 years, and that this has increased to 1.3% of the adult population in 2023. For reference, the prevalence of a comparable alcohol condition in 2023 was 2.7%. Consistently across years, prevalence is highest among those who identify as American Indian and Alaskan Native at 3%, also higher than the overall average among Black and African American people at 2%. By age, the prevalence of cannabis-related indicators in hospital visits is highest among adults aged 21-25, with the highest prevalence of over 3%. Prevalence estimates are roughly equivalent by patient sex; prevalence is slightly higher among males than females or those with a sex marked as “Unknown” or “Other” but are within rounding to 1%. Because this condition represents a variety of symptoms, it is difficult to attribute a specific amount of public health burden to this diagnosis, but this does give a general reflection of the prevalence among hospital visits.

Surveillance of cannabis use disorder symptoms

People use cannabis for a variety of reasons and the majority of cannabis users do so without disruption of their lives (Leung et al., 2020; Connor et al., 2021). However, for some cannabis users, continued usage can lead to the development of potential problems, including addiction. These fall under the spectrum of cannabis use disorders (CUD), which range in severity. NSDUH runs a screener on CUD symptoms among cannabis users; data is included in the appendices. It is important to note that this screener reflects responses that indicate the potential presence of problem cannabis use and that these do not represent counts of people with diagnosed CUD, or people who are seeking treatment for CUD. Among all adults, 49.9% reported never using cannabis, 33.8% reported having used cannabis less than 6 days in the past year, 9.9% were cannabis users with no symptoms of CUD, and 6.5% showed symptoms indicating potential CUD. Disaggregating CUD severity, 4.3% of respondents showed symptoms of mild CUD, 1.3% showed symptoms of moderate CUD, and 1% showed symptoms of severe CUD. This suggests that even among cannabis users, CUDs are rare. However, knowing this proportion is important for identifying potential services needed.

Poisonings

Data from the Minnesota Poison Control Center

The number of reports of cannabis-related poisoning is increasing, especially among young children.

In 2018, there were 281 reports about potential cannabis poisonings. Over time, this has increased substantially to 788 reports in 2023 (a 176% increase). This increase has occurred in parallel with an increased prevalence of cannabis usage over time and may reflect the greater proportion of the population who are using cannabis and may underestimate their limits or have adverse reactions. Consistently, the majority of reported poisonings have been about adults over age 20, remaining relatively stable between 44% and 51% of all reports. In contrast, the number of reports regarding children under 5 have increased substantially. In 2018, only 7% of reported poisonings involved children under 5, and in 2023,

this comprised 24% of reported poisonings. The sharpest increases in this number were between 2021 and 2022 (coinciding with the legalization of hemp-derived THC products in Minnesota) and this continued into 2023. Conversely, the proportion of reported poisonings related to youth between 6 and 19 years old decreased between 2018 (42% of calls) and 2022 (28% of calls). These findings indicate the importance of strategies, potentially through policy and design, that minimize the potential for young children to be exposed to cannabis products, particularly edible products that look like candy.

More information about how to prevent poisoning from THC, including recommendations for disposal of unused products, is available from MDH: [Preventing Unintentional Poisonings from Cannabis Products](https://www.health.state.mn.us/communities/cannabis/thcpoisonings.html) (<https://www.health.state.mn.us/communities/cannabis/thcpoisonings.html>).

Hospital discharge data from the Minnesota Hospital Association

Cannabis poisonings among young children under five are increasing.

Data from the Minnesota Poison Control Center indicates a steady increase in the number of calls due to concerns about potential poisoning of young children, increasing annually since 2021. This trend is observed in the hospital discharge data which show that the number of hospital-treated cannabis poisonings among patients under five have increased over time. From 2021 to 2023, the number of hospital-treated cannabis poisonings among patients under five more than doubled (41 to 99 visits). The rate increased during this time period from 0.12 to 0.3 poisonings per 1,000 residents. Moreover, the rate of hospital-treated cannabis poisoning was highest among patients under five (0.20 per 1,000 residents) over this time period. These incidents are relatively uncommon, with 196 visits from 2021 to 2023, but this trend merits continued surveillance and monitoring. The overall rate in 2023 was 0.1 hospital treated cannabis poisonings per 1,000 population; for reference, the incidence for alcohol-related poisonings in 2023 was 0.51 visits per 1,000 population, more than five times greater than that of cannabis-related poisonings.

Visits involving pregnancy, delivery, and cannabis

Hospital visits for newborns affected by a birthing parent's cannabis use are decreasing.

From 2021 to 2023, there were 715 hospital visits for a newborn that was affected by a birthing parent's cannabis use. Over this time period, the number of hospital visits for a newborn that was affected by a birthing parent's cannabis use decreased 27% (262 to 191 visits) and the rate decreased 24% (4.14 to 3.15 per 1,000 live births). For reference, the comparable incidence in 2023 for alcohol was 5.44 per 1,000 live births, 73% greater. Similar to the rate of newborns affected by birthing parents' cannabis use, the rate of cannabis use by birthing parents at time of delivery hospitalization decreased each year from 2021 to 2023. Overall, the rate decreased by 27.7% during those three years. The rate of cannabis use by birthing parents ages 24 years and under at time of delivery hospitalization decreased by 34.8% from 2021 to 2023. The rate of cannabis use by birthing parents ages 25 to 39 years at time of delivery hospitalization decreased by 22.9% from 2021 to 2023.

Conclusion

Data show that the prevalence of cannabis use in Minnesota has increased among adults but declined among children and adolescents. Though the prevalence of cannabis use has increased among adults, it is still uncommon, with between 14% and 20% of adults using cannabis within the prior 30 days. The prevalence of cannabis use has decreased among youth since 2019, currently between 12% and 16% of high schoolers. That the prevalence of cannabis use among youth has decreased between 2019 and 2022 is encouraging. However, there is a substantial difference in between middle schoolers and high schoolers, with roughly 2% of middle schoolers reporting cannabis use and 14% of high schoolers reporting cannabis use in the 2023 Minnesota Youth Tobacco Survey. Understanding these diverse behaviors is important for designing interventions that address both casual users and those at risk of more serious consequences. By addressing the shared and unique challenges faced by all students, schools and communities can better support youth in making choices and reducing the risks associated with cannabis use.

Data indicate that smoking cannabis became less common over time, though it remains the most common mode of using cannabis, both among adults and youth. Though data on the long-term health effects of smoking cannabis is still a developing field, studies have identified that cannabis smoke has similar profiles in particulate matter to commercial tobacco smoke, and therefore may carry similar risks (Graves et al., 2020). This decline in cannabis smoking has co-occurred with an increase in the popularity of eating and drinking cannabis, which has now become the second most common mode of cannabis use among Minnesota adults in 2023. This is encouraging, as eating and drinking cannabis mitigates respiratory risks associated with smoking, but educating the public of potential risks of this mode is equally important. Given the increase in both the number of poison control calls related to young children as well as the increased number of cannabis poisonings in children under 5, continued surveillance and study of effective interventions and strategies to mitigate risks is important. As the field is nascent, conducting studies to identify whether strategies such as improving design of packaging, storage, or other approaches may be most effective.

Cannabis vaping has not had a consistent pattern in prevalence over time, with an increased and subsequent decrease coinciding with the surge in cases of EVALI in 2019 and then remaining relatively stable since 2020.⁴ It is important to note that not all forms of cannabis vaping are not universal in risk. Cannabis vapes derived from concentrates carry specific risks, including unknown solvents and chemicals in the fluids as well as potential exposure to metals from vaporizer batteries and cartridges (McDaniel et al., 2021; MacCallum et al., 2024). Vaporizing cannabis using a dry herb vaporizer may mitigate some risks of both metals in concentrates and some of the compounds in cannabis smoke but is less studied in terms of any unique risks it may present (Morgan et al., 2022). More detailed study of how people vaporize cannabis may be important to understand the scope of potential exposure. As cannabis vaping remains popular among teens, having a prevalence only slightly lower than that of cannabis use, continued surveillance is merited, as it may inform potential strategies to mitigate harms from cannabis vaping.

Findings from this report suggest several next steps. First, data briefs that examine topics highlighted in this report with more depth and nuance will be published. Studies that can inform potential strategies to minimize public health risks of cannabis use are important. As this is a new field, building an evidence base is important, and assessing whether strategies such as improved design of packaging, strategies such as storing cannabis in locked compartments, or identification requirements upon entry for dispensaries may be effective, some of which have been implemented in other states with adult use cannabis. Importantly, finding consistent approaches for both cannabis procured from hemp-derived products as well as cannabis procured from dispensaries licensed for adult use may improve effectiveness of

recommendations. Multiple groups were identified in this report as having a higher prevalence of cannabis use. For adults, especially those over 25 (and whose brains are fully developed), this is not necessarily problematic. However, further assessment can inform whether specific and tailored strategies can help to prevent risks to groups from increased cannabis use. For minors, this becomes particularly important, especially given the potential harms to brain development and increased risk of developing CUDs later in life associated with heavy cannabis use in adolescence (National Academies of Sciences, Engineering, and Medicine, 2024).

Cannabis use prevention programs at MDH focus on teenagers and youth under age 21 as well as pregnant and breastfeeding persons. Increasing the data infrastructure to better understand the frequency and impacts of prenatal and perinatal cannabis use is necessary to inform public health strategies. This can include increasing funding to use existing surveillance tools (such as the cannabis module for the Pregnancy Risk Assessment Monitoring System) as well as conducting specific studies. In addition, the changing status of cannabis and its market merits exploring the adaptation and expansion of existing surveillance tools. Work is underway to include additional questions in BRFSS and the MSS, including field testing, cognitive testing, and refinement of additional survey questions as well as adapting wording of existing questions to better reflect current usage patterns.

Limitations of data in this report

Data presented in this report represent a pre-implementation period of adult use cannabis policy in Minnesota. It reflects, in a select couple of data sources, one year after the legalization of hemp-derived THC edibles in Minnesota and can be interpreted as baseline data from where cannabis use patterns may change in Minnesota as adult-use licenses become more common and the marketplace changes. This means, however, that it is difficult to describe from these data if and how cannabis use has changed since adult use became legal in August 2023. At the time of this report, there are only a small number of adult-use dispensaries (i.e., not including hemp-derived THC) in Minnesota licensed by Tribal Nations, and the timeline for licensing additional adult use dispensaries is still being determined. Most survey data in this report reflect a temporal lag of at least one year between survey administration and data availability for inclusion in reports. The Minnesota Student survey is administered every three years, and while they are annual surveys, both NSDUH and BRFSS have delays in time before they are released. As a result, most data coincide with the legalization of adult use cannabis in Minnesota.

In addition, data on behaviors presented in this report are based on self-report. Though the surveys used for this study have validation processes to ensure the quality of data, cannabis use has been and is still a stigmatized topic (Bharat et al., 2023; Skelton et al., 2022). This may lead to underreporting of use, particularly during periods before use was legal, something common in self-reported measures of drug use. Specifically, it is not possible to discern whether a potential competing explanation of increases in the self-reported prevalence of cannabis use reflect true trends in the population or whether they are due to respondents feeling more comfortable speaking honestly about their behaviors. It is important to note that the measures of frequency counting the number of days consuming cannabis in the past month do not count the number of times in a given day a respondent uses cannabis. Questions about the number of occasions in which people use cannabis do not also count the number of days.

Data presented from Poison Control reflects voluntary reports of potential poisonings; this non-systematic approach means that it does not accurately represent the entire breadth of cannabis poisonings. The addition of data from both Minnesota Hospital Association (hospital discharge data) and Minnesota EHR Consortium (Health Trends Across

Communities in Minnesota) help to provide additional context to this. However, hospital discharge data (MHA) does not represent care sought outside of hospital systems, nor does it represent standalone psychiatric facilities or federally funded facilities (such as the Veterans Administration and Indian Health Service). In addition, data from HTAC is limited to patients seen within participating health systems. Data from any sources using claims is dependent upon the consistent and accurate use of ICD codes for cannabis-related medical care, and cannabis use codes are typically used in conjunction with other diagnostic codes. Exploring additional data sources for future work, such as the All Payers Claims Database, may provide additional context in non-hospital settings.

Future reports to the Legislature on cannabis surveillance data

The next legislative report on cannabis use in Minnesota will be published January 1, 2027. The temporal lags mentioned earlier in this section mean that this forthcoming report will contain findings from the 2025 Minnesota Student Survey, Behavioral Risk Factor Surveillance System (BRFSS) through 2025, and National Survey on Drug Use and Health (NSDUH) potentially through 2025 or possibly 2024. The Minnesota Youth Tobacco Survey is administered every three years, the next being scheduled for 2026. It is unlikely that data from Minnesota Youth Tobacco Survey will be available for use in advance of this next legislative report. In addition to continued time in a context of “post-hemp” cannabis policy, the forthcoming report will allow a limited view into the impacts of adult use, but more expansive than that presented in this report. Data on trends in hospitalizations, poisonings, and other clinical surveillance will reflect a temporal window through 2025, and potentially through some of 2026.

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Appendix A. Overview of data sources

Minnesota data sources on cannabis use

Based on the survey fielded, data on cannabis use is collected at different points in time. The following table lists the data shared in this report and all years that data was available. Note that while the report was organized by cannabis statistic, these tables are organized by data source. In addition, not every available year of data was included in this report.

Current data sources on cannabis use in Minnesota, and frequency of collection

Data source	Age groups	2016	2017	2018	2019	2020	2021	2022	2023	2024
Minnesota Poison Control System	All			X	X	X	X	X	X	X
National Survey on Drug Use and Health (NSDUH)	All	X	X	X	X	X	X			
Behavioral Risk Factor Surveillance System (BRFSS)	Adult	X	X	X	X	X	X	X		
Minnesota Office of Cannabis Management	Adult	X	X	X	X	X	X	X	X	X
Minnesota Student Survey	Youth	X			X			X		
Minnesota Youth Tobacco Survey	Youth		X			X			X	
Hospital discharge data	All					X	X	X	X	
Minnesota Electronic Health Record Consortium	All					X	X	X	X	

Data on cannabis use in all ages

National Survey on Drug Use and Health

The National Survey on Drug Use and Health, conducted annually by the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA), provides estimates about substance use in the United States. The survey provides data estimates at the national, state, and sub-state levels. Data from this survey is used in the CDC webpage on cannabis and health effects and drives policy decisions. It has had recent improvements in its methodology and modules.

The methodology for this survey changed after 2020: previous versions were collected in-person only, and after 2020 the survey was administered both online and in person. Because of this change, SAMHSA recommends against comparing 2021 and 2022 data to prior years; therefore, this report has excluded data from years prior to 2021. A limited subset of variables are made available for analysis at a state level rather than national, these were used for this report.

More information: [National Survey on Drug Use and Health](https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health) (<https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>)

Minnesota Poison Control System

Since 2018, the Minnesota Poison Control System has tracked data on cannabis-related hospitalization and other poisonings. This data is available stratified by gender and age.

It is important to note that Minnesota Poison Control System data likely underrepresents the incidence of any poisoning or other exposure, and rates are likely higher in communities, because reporting poisoning is voluntary. As a result, Minnesota Poison Control System data may not represent all (or even potentially most) cannabis-related hospitalizations.

More information: [Minnesota Regional Poison Center](https://mnpoison.org/) (<https://mnpoison.org/>)

Minnesota Hospital Association: Hospital discharge data

This dataset is provided from the Minnesota Hospital Association (MHA) to MDH every three months. The data includes all hospital visits, including emergency department and inpatient hospitalizations, throughout Minnesota's 87 counties and 123 acute care hospitals. All hospital visits are included, regardless of payer type. This data does not include federally funded facilities such as the Veterans' Administration and Indian Health Service, tribally operated facilities, standalone psychiatric facilities, or Minnesotans treated outside of Minnesota or North Dakota. These data are de-duplicated prior to analysis and represent unique events (i.e., one presentation to the hospital). It does not represent unique patients.

For cannabis-related hospital visits and hospital-treated cannabis poisonings, the data includes Minnesota residents who were treated in Minnesota hospitals only. Hospital-treated cannabis poisonings include nonfatal cannabis poisonings of unintentional (i.e., accidental) and undetermined intent; poisonings that were intentional (i.e., determined to be related to self-harm) are not included. All poisonings are suspected overdoses. Drugs that are suspected to be involved in hospital visits are often self-reported by the patient or determined by presenting symptoms at the hospital. Toxicology tests are not typically run to determine the specific substances involved. It is important to interpret drug-specific trends with caution. Counts of these measures were used in combination with 1-year estimates of Minnesota's population from the American Community Survey of the corresponding year to estimate incidence of hospital visits per 1,000 Minnesota residents.

To identify hospital visits that involved a newborn that was affected by their birthing parent's cannabis use, the ICD-10-CM diagnosis code of P.0481 was used. These visits represent unique events (i.e., one presentation to the hospital) for infants (aged less than one years old) who reside in Minnesota and were treated in a Minnesota or North Dakota Hospital. To calculate rates, the number of hospital visits was divided by the number of live births. Live births represent birthing parents who are Minnesota residents and gave birth in Minnesota or North Dakota. Data on live births comes from the MDH Office of Vital Records and was accessed on July 31, 2024.

Minnesota Electronic Health Records Consortium: Health Trends Across Communities in Minnesota (HTAC)

The Minnesota Electronic Health Record Consortium (EHR Consortium) tracks hospitalizations that have cannabis-related symptoms indicated. This can include: cannabis use disorder, cannabis overdose, cannabis intoxication, cannabis-induced mental health disorders, and other related diagnoses. In this analysis, the sample is restricted to Minnesota residents seen at a participating health system within the prior 3 years and receiving a diagnosis of cannabis use in the preceding 5 years.

Continually updated information from the EHR Consortium is online: [Health Trends Across Communities in Minnesota \(https://mnehrconsortium.org/health-trends-across-communities-minnesota-dashboard\)](https://mnehrconsortium.org/health-trends-across-communities-minnesota-dashboard)

Data on adult cannabis use

Behavioral Risk Factor Surveillance System (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS) is a large-scale telephone survey of adults aged 18 and older. Jointly, MDH and the Centers for Disease Control and Prevention (CDC) work together to collect data monthly, throughout the year. BRFSS has an optional module for state-added questions on cannabis, which collects data on the frequency with which adults use cannabis, the modes with which cannabis users consume cannabis, and cannabis users' reason(s) for using cannabis.

More information: [Behavioral Risk Factor Surveillance System \(BRFSS\) \(https://www.health.state.mn.us/data/mchs/surveys/brfss/\)](https://www.health.state.mn.us/data/mchs/surveys/brfss/)

Minnesota Office of Cannabis Management (OCM)

Minnesotans could first purchase medical cannabis for therapeutic use in 2015 if they had qualifying conditions. Minn. Stat. § 152.27, subd. 1(a) authorized the Minnesota Office of Cannabis Management (OCM) to collect data on program operations related to certified patients, registered health care practitioners, and registered caregivers and parents. This data helps evaluate benefits, risks, and outcomes for patients with a qualifying medical condition who are engaged in the therapeutic use of medical cannabis.

Data on cannabis use among youth

Minnesota Youth Tobacco Survey

MDH conducts the Minnesota Youth Tobacco Survey every three years, with a representative sample of Minnesota middle and high schools. Due to their similar modes of use, MYTS also collects data on cannabis use among middle and high school students in Minnesota.

More information: [Minnesota Youth Tobacco Survey \(https://www.health.state.mn.us/data/mchs/surveys/tobacco/\)](https://www.health.state.mn.us/data/mchs/surveys/tobacco/)

Minnesota Student Survey

The Minnesota Departments of Education and Health conduct the Minnesota Student Survey every three years, for every student in Minnesota in fifth, eighth, ninth, and 11th grades. The MSS asks one question about cannabis use of fifth-graders, and measures cannabis use more thoroughly among students in eighth, ninth, and 11th grades. The most recent MSS was administered in 2022, estimates from the 2022 MSS are the focus of this report. The next MSS will be administered in 2025.

More information: [Minnesota Student Survey at MDH \(https://www.health.state.mn.us/data/mchs/surveys/mss/\)](https://www.health.state.mn.us/data/mchs/surveys/mss/)

Tables from prior years of the Minnesota Student Survey are online: [Tables: Minnesota Student Survey Data \(https://www.health.state.mn.us/data/mchs/surveys/mss/datatables.html\)](https://www.health.state.mn.us/data/mchs/surveys/mss/datatables.html)

Appendix B. Data tables: Cannabis use in Minnesota

1. National Survey on Drug Use and Health

Table 1.a. Cannabis use in past month by age, Minnesota, 2021-2022

Age group	% 1-19 Days	% 20-30 Days	% non-user or no past month use
12-17 years old	4.7	3.1	92.2
18-25 years old	16.2	15.3	68.5
26 or older	8.6	4.8	86.6
Overall	9.2	5.9	84.9

Source: National Survey on Drug Use and Health

Table 1.b. Cannabis use in past month by gender, Minnesota, 2021-2022

Gender	% 1-19 Days	% 20-30 Days	% non-user or no past month use
Male	10.3	5.4	84.2
Female	8.0	6.4	85.7
Overall	9.2	5.9	84.9

Source: National Survey on Drug Use and Health

Table 1.c. Cannabis use in past month by race and ethnicity, Minnesota, 2021-2022

Race and ethnicity	% 1-19 Days	% 20-30 Days	% non-user or no past month use
All other groups	10.0	5.5	84.5
White, not Hispanic	8.9	6.0	85.1
Overall	9.2	5.9	84.9

Source: National Survey on Drug Use and Health

Table 1.d. Cannabis use in past month by education, Minnesota, 2021-2022

Education level	% 1-19 Days	% 20-30 Days	% non-user or no past month use
Less than high school	11.1	20.5	68.4
High school graduate	10.6	5.1	84.4
Some college/Associates Degree	11.5	7.0	81.4
College graduate	6.9	3.6	89.5
12- to 17-year-olds	4.7	3.1	92.2
Overall	9.2	5.9	84.9

Note: The group 12- to 17-year-olds is listed by age because they generally have not been alive long enough to complete a high school education.

Source: National Survey on Drug Use and Health

Table 1.e. Cannabis use in past month by heavy alcohol use, Minnesota, 2021-2022

Level of heavy alcohol use	% 1-19 Days	% 20-30 Days	% non-user or no past month use
Never/No heavy alcohol use	7.2	4.8	88.0
Heavy alcohol use	28.6	17	54.4
Overall	9.2	5.9	84.9

Source: National Survey on Drug Use and Health

Table 1.f. Cannabis use disorder in past year, overall prevalence, Minnesota, 2021-2022

Cannabis use disorder in past year	Percent
Never used cannabis	49.9
Used cannabis < 6 days	33.8
Cannabis User, No CUD	9.9
CUD Symptoms Present	6.5

Source: National Survey on Drug Use and Health

Table 1.g. Cannabis use disorder in past year, severity, Minnesota, 2021-2022

Severity of cannabis use disorder in past year	Percent
No CUD	93.4
Mild CUD	4.3
Moderate CUD	1.3
Severe CUD	1.0

Source: National Survey on Drug Use and Health

2. BRFSS: Cannabis use frequency

Table 2.a. Frequency of cannabis use in past 30 days among the general population, Minnesota, 2016-2023

During the past 30 days, how many days did you use marijuana or hashish?

% crude estimate

Year	% 0 days	0 days CI lower	0 days CI higher	% 1-19 days	1-19 days CI lower	1-19 days CI higher	% 20-30 days	20-30 days CI lower	20-30 days CI higher
2016-17	93.4	93.0	93.8	4.0	3.7	4.3	2.6	2.4	2.9
2018-19	90.4	90.0	90.9	5.5	5.1	5.8	4.1	3.8	4.4
2020-21	90.0	89.6	90.5	5.8	5.4	6.1	4.2	3.9	4.5
2022-23	86.4	85.8	87	7.5	7.0	7.9	6.1	5.7	6.5

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% standardized estimate

Year	% 0 days	0 days CI lower	0 days CI higher	% 1-19 days	1-19 days CI lower	1-19 days CI higher	% 20-30 days	20-30 days CI lower	20-30 days CI higher
2016-17	92.7	92.2	93.1	4.4	4.1	4.8	2.9	2.6	3.2
2018-19	89.5	89.0	90.0	6.0	5.6	6.4	4.5	4.2	4.9
2020-21	89.1	88.5	89.6	6.3	5.9	6.7	4.6	4.3	5.0
2022-23	85.0	84.3	85.6	8.2	7.7	8.7	6.8	6.3	7.3

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 2.b. Frequency of cannabis use in past 30 days, by age, 2016-2023

During the past 30 days, how many days did you use marijuana or hashish?

% using 0 days in the past 30 days

Age Group	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
18-24	83.2	81.1	85.1	79.9	77.8	82.0	81.3	79.1	83.4	77.9	75.2	80.4
25-34	89.0	87.7	90.3	83.7	82.2	85.1	82.8	81.2	84.3	76.4	74.4	78.4
35-44	93.3	92.3	94.3	90.0	88.9	91.0	87.9	86.7	89.0	81.9	80.2	83.6
45-54	95.5	94.7	96.2	92.8	91.8	93.6	93.4	92.5	94.2	88.5	87.0	89.8
55-64	95.8	95.1	96.4	93.0	92.1	93.8	92.5	91.5	93.4	91.1	90.0	92.2
65 and Older	98.8	98.4	99.0	97.7	97.3	98.1	97.1	96.7	97.5	95.4	94.8	95.9

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 1-19 days in the past 30 days

Age Group	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
18-24	9.9	8.4	11.6	12.9	11.2	14.7	11.9	10.2	13.8	11.9	10.1	14.0
25-34	6.2	5.3	7.2	8.1	7.1	9.1	9.9	8.8	11.2	12.9	11.4	14.6
35-44	4.4	3.6	5.4	5.4	4.7	6.3	6.3	5.5	7.2	9.8	8.6	11.1
45-54	2.6	2.1	3.2	4.3	3.7	5.1	3.6	3.0	4.2	6.3	5.2	7.4
55-64	2.8	2.3	3.3	4.2	3.6	4.9	4.5	3.8	5.3	4.7	4.0	5.6
65 and Older	0.8	0.6	1.1	1.4	1.1	1.7	1.7	1.4	2.1	2.9	2.5	3.4

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 20-30 days in the past 30 days

Age Group	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
18-24	6.9	5.6	8.3	7.2	5.9	8.6	6.8	5.5	8.2	10.1	8.3	12.3
25-34	4.8	3.9	5.8	8.2	7.2	9.4	7.3	6.3	8.4	10.6	9.2	12.2
35-44	2.2	1.7	2.9	4.6	3.9	5.4	5.8	5	6.7	8.3	7.1	9.7
45-54	1.9	1.4	2.5	2.9	2.4	3.5	3.0	2.5	3.7	5.3	4.4	6.3
55-64	1.5	1.1	1.9	2.8	2.2	3.5	3.0	2.4	3.7	4.1	3.4	5.0
65 and Older	0.4	0.2	0.6	0.9	0.7	1.2	1.2	0.9	1.5	1.7	1.4	2.1

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 2.c. Frequency of cannabis use in past 30 days, by race and ethnicity, standardized estimates, 2016-2023

During the past 30 days, how many days did you use marijuana or hashish?

% using 0 days in the past 30 days

Race/Ethnicity	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Non-Hispanic White	92.4	91.9	92.9	89.3	88.8	89.9	88.7	88.1	89.3	84.3	83.5	85.1
Non-Hispanic Black	90.5	87.9	92.7	83.8	80.6	86.6	86.6	83.8	89.1	84.2	80.9	87.1
Asian or Pacific Islander	96.1	93.9	97.7	96.2	94.0	97.7	96.1	93.6	97.8	95.5	93.4	97.1
Am. Indian/Alaskan Native	91.6	87.3	94.8	77.9	69.8	84.8	76.8	70.1	82.5	71.9	62.8	79.8
Hispanic or Latine, All Races	94.9	93.3	96.3	93.6	92.1	95	92.2	90.6	93.6	89.7	87.3	91.8
All Other Groups	86.9	81.6	91.2	80.9	76.6	84.7	83.5	79.8	86.8	77.3	72.1	82.0

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 1-19 days in the past 30 days

Race/Ethnicity	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Non-Hispanic White	4.5	4.2	5.0	6.3	5.9	6.8	6.7	6.3	7.2	8.9	8.3	9.5
Non-Hispanic Black	5.2	3.6	7.1	8.2	6.3	10.6	6.6	4.8	8.8	6.7	4.8	9.1
Asian or Pacific Islander	2.9	1.5	5.0	2.5	1.2	4.4	1.9	1.0	3.2	3.3	2.0	5.2
Am. Indian/Alaskan Native	3.6	1.6	6.7	6.6	4.1	10.1	12.4	8.0	18.2	13.4	7.2	22.3
Hispanic or Latine, All Races	3.8	2.6	5.3	3.7	2.7	5.0	4.3	3.3	5.6	5.1	3.5	7.0
All Other Groups	7.9	4.7	12.4	6.6	4.1	9.9	8.0	5.7	10.9	10.8	7.5	15.1

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 20-30 days in the past 30 days

Race/Ethnicity	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Non-Hispanic White	3.0	2.7	3.4	4.3	4.0	4.7	4.6	4.2	5.0	6.8	6.2	7.4
Non-Hispanic Black	4.4	2.9	6.4	8.0	5.8	10.7	6.8	5.1	8.9	9.1	6.8	11.8
Asian or Pacific Islander	1.0	0.4	2.0	1.4	0.6	2.7	2.1	0.7	4.5	1.2	0.4	2.5
Am. Indian/Alaskan Native	4.8	2.4	8.5	15.5	9.0	24.0	10.8	7.0	15.7	14.7	9.6	21.1
Hispanic or Latine, All Races	1.3	0.8	2.1	2.7	1.9	3.7	3.5	2.6	4.6	5.2	3.8	7.0
All Other Groups	5.2	2.5	9.3	12.5	9.4	16.3	8.4	6.1	11.3	11.8	8.4	16.1

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 2.d. Frequency of cannabis use in past 30 days, by educational attainment, 2016-2023**During the past 30 days, how many days did you use marijuana or hashish?***% using 0 days in the past 30 days*

Educational attainment	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than high school	91.4	89.1	93.4	86.4	83.6	88.8	85.5	82.4	88.3	83.7	79.7	87.3
High school or GED	92.4	91.5	93.2	89.0	88.0	89.9	89.8	88.8	90.7	85.0	83.6	86.3
Some college	92.8	92.0	93.5	89.6	88.8	90.4	88.7	87.8	89.5	85.5	84.3	86.6
College, 4 years or more	95.5	95.0	95.9	93.3	92.8	93.9	92.6	92.0	93.1	88.7	87.9	89.4

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 1-19 days in the past 30 days

Educational attainment	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than high school	4.3	3.0	6.1	6.3	4.6	8.4	6.9	4.9	9.4	3.8	2.1	6.1
High school or GED	4.1	3.5	4.8	5.6	5.0	6.4	5.2	4.5	5.9	7.3	6.3	8.4
Some college	4.6	4.0	5.2	6.1	5.5	6.8	6.9	6.2	7.6	8.1	7.2	9.0
College, 4 years or more	3.2	2.8	3.6	4.5	4.1	4.9	4.9	4.4	5.3	7.8	7.1	8.4

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 20-30 days in the past 30 days

Educational attainment	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than high school	4.3	2.9	6.1	7.3	5.5	9.5	7.6	5.6	9.9	12.5	9.3	16.3
High school or GED	3.5	3.0	4.2	5.4	4.8	6.1	5.1	4.4	5.8	7.7	6.8	8.7
Some college	2.7	2.2	3.1	4.2	3.7	4.8	4.4	3.9	5.0	6.5	5.7	7.3
College, 4 years or more	1.4	1.1	1.6	2.2	1.9	2.5	2.6	2.2	3.0	3.6	3.1	4.0

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 2.e. Frequency of cannabis use in past 30 days, by household income, 2016-2023

During the past 30 days, how many days did you use marijuana or hashish?

% using 0 days in the past 30 days

Household income	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than \$15,000	88.3	85.9	90.4	84.9	82.3	87.2	84.7	81.9	87.2	79.4	74.8	83.5
\$15,000 to less than \$25,000	91.1	89.7	92.3	87.1	85.5	88.6	84.9	82.9	86.8	80.5	77.3	83.5
\$25,000 to less than \$35,000	93.0	91.6	94.3	86.6	84.6	88.4	88.6	86.9	90.2	84.8	82.2	87.1
\$35,000 to less than \$50,000	92.3	91.0	93.6	89.3	87.9	90.6	89.2	87.7	90.5	85.2	83.2	86.9
\$50,000 or more	94.6	94.1	95.1	92.0	91.4	92.5	91.0	90.4	91.6	86.7	85.9	87.5

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 1-19 days in the past 30 days

Household income	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than \$15,000	7.0	5.4	9.0	8.9	7.1	11	8.2	6.4	10.4	8.8	6.4	11.8
\$15,000 to less than \$25,000	5.0	4.1	6.1	6.4	5.3	7.6	8.3	6.9	10	8.5	6.6	10.7
\$25,000 to less than \$35,000	3.8	2.9	5.0	7.2	5.8	8.8	5.5	4.4	6.8	6.9	5.5	8.6
\$35,000 to less than \$50,000	4.5	3.6	5.5	5.7	4.8	6.8	5.4	4.5	6.5	7.0	5.8	8.3
\$50,000 or more	3.5	3.1	3.9	5.0	4.6	5.5	5.7	5.2	6.2	8.2	7.6	8.9

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 20-30 days in the past 30 days

Household income	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than \$15,000	4.7	3.3	6.4	6.2	4.7	8.1	7.0	5.3	9.1	11.7	8.4	15.9
\$15,000 to less than \$25,000	3.9	3.1	4.9	6.5	5.4	7.8	6.8	5.5	8.2	11.0	8.6	13.8
\$25,000 to less than \$35,000	3.1	2.2	4.2	6.2	5.0	7.6	5.8	4.7	7.2	8.3	6.4	10.6
\$35,000 to less than \$50,000	3.2	2.4	4.2	5.0	4.1	5.9	5.4	4.4	6.5	7.9	6.5	9.4
\$50,000 or more	1.9	1.6	2.3	3.0	2.6	3.4	3.3	2.9	3.7	5.1	4.6	5.7

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 2.f. Frequency of cannabis use in past 30 days, by sex, 2016-2023

During the past 30 days, how many days did you use marijuana or hashish?

% using 0 days in the past 30 days

Sex	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Male	91.2%	90.6%	91.8%	87.7%	86.9%	88.4%	88.0%	87.3%	88.7%	84.1%	83.2%	85.0%
Female	95.5%	95.0%	96.0%	93.1%	92.5%	93.6%	92.0%	91.4%	92.6%	88.6%	87.7%	89.4%

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 1-19 days in the past 30 days

Sex	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Male	5.1%	4.6%	5.6%	6.8%	6.3%	7.3%	6.9%	6.4%	7.5%	8.3%	7.7%	9.0%
Female	2.9%	2.5%	3.3%	4.2%	3.8%	4.7%	4.7%	4.2%	5.2%	6.6%	6.0%	7.3%

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 20-30 days in the past 30 days

Sex	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Male	3.7%	3.2%	4.1%	5.5%	5.0%	6.1%	5.1%	4.6%	5.6%	7.5%	6.9%	8.2%
Female	1.6%	1.3%	1.9%	2.7%	2.3%	3.1%	3.3%	3.0%	3.7%	4.8%	4.2%	5.4%

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 2.g. Frequency of cannabis use in past 30 days, by sexual orientation and gender identity, 2016-2023

During the past 30 days, how many days did you use marijuana or hashish?

% using 0 days in the past 30 days

Sexual orientation/ gender identity	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Cishet	93.9	93.5	94.3	91.2	90.7	91.6	91	90.5	91.5	88.1	87.5	88.7
LGBTQ+	80.5	77	83.7	78.3	75.6	80.9	76.8	74.2	79.3	68.8	65.8	71.6

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 1-19 days in the past 30 days

Sexual orientation/ gender identity	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Cishet	3.6	3.3	4	5.1	4.8	5.5	5.3	5	5.7	6.6	6.1	7
LGBTQ+	11.3	8.7	14.3	11.7	9.7	14	12	10.1	14	17.1	14.9	19.4

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 20-30 days in the past 30 days

Sexual orientation/ gender identity	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Cishet	2.4	2.2	2.7	3.7	3.4	4	3.7	3.4	4	5.3	4.9	5.8
LGBTQ+	8.2	6.1	10.8	9.9	8.1	12	11.2	9.4	13.2	14.1	12	16.6

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 2.h. Frequency of cannabis use in past 30 days, by gender identity, 2016-2023

During the past 30 days, how many days did you use marijuana or hashish?

% using 0 days in the past 30 days

Gender identity	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Cis male	91.3	90.7	91.9	87.8	87.1	88.5	88.1	87.4	88.8	84.3	83.3	85.2
Cis female	95.6	95	96	93.2	92.6	93.7	92	91.4	92.6	89	88.2	89.7
Trans or nonbinary	74.7	59.5	86.5	72.4	62.5	80.9	82.7	74.3	89.3	66.5	56.6	75.5

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 1-19 days in the past 30 days

Gender identity	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Cis male	5.0	4.6	5.5	6.8	6.3	7.4	6.8	6.3	7.4	8.2	7.6	8.9
Cis female	2.9	2.5	3.3	4.2	3.8	4.6	4.6	4.2	5.2	6.5	5.9	7.2
Trans or nonbinary	16.6	6.3	32.7	7.3	3.6	13.1	12.1	6.5	20.0	15.0	10.2	21.0

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 20-30 days in the past 30 days

Gender identity	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Cis male	3.7	3.2	4.1	5.4	4.9	5.9	5.1	4.6	5.6	7.5	6.9	8.2
Cis female	1.6	1.3	1.9	2.6	2.3	3.0	3.3	2.9	3.7	4.5	4.0	5.0
Trans or nonbinary	8.7	3.1	18.5	20.3	12.6	30.1	5.2	2.2	10.2	18.4	10.3	29.3

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 2.i. Frequency of cannabis use in past 30 days, by sexual orientation, 2016-2023

During the past 30 days, how many days did you use marijuana or hashish?

% using 0 days in the past 30 days

Sexual orientation	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Gay or lesbian	81.0	74.8	86.2	83.7	78.9	87.7	82.2	77.8	86.1	67.3	60.3	73.7
Straight	93.9	93.5	94.3	91.1	90.7	91.6	91.0	90.5	91.5	88.1	87.5	88.7
Bisexual	77.4	72.1	82.1	71.8	67.6	75.7	72.0	67.9	75.9	64.5	60.3	68.6
Something else	93.1	84.9	97.6	92.1	86.5	96.0	80.1	74.7	84.9	74.8	68.6	80.2

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 1-19 days in the past 30 days

Sexual orientation	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Gay or lesbian	12.4	8.0	18.2	11.2	7.9	15.4	10.3	7.3	14.1	14.1	10.5	18.2
Straight	3.7	3.4	4.0	5.1	4.8	5.5	5.3	5.0	5.7	6.6	6.1	7.0
Bisexual	11.6	8.3	15.7	14.3	11.3	17.8	15.1	12.1	18.6	21.5	18.1	25.2
Something else	3.1	0.3	11.0	4.8	1.9	9.6	7.5	4.8	11.1	12.3	8.4	17.3

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% using 20-30 days in the past 30 days

Sexual orientation	% 2016-17	2016-17 CI lower	2016-17 CI upper	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Gay or lesbian	6.6	3.8	10.6	5.1	2.9	8.3	7.4	5.0	10.6	18.7	12.7	26.0
Straight	2.4	2.2	2.7	3.7	3.4	4.0	3.7	3.4	4.0	5.3	4.9	5.8
Bisexual	11.0	7.4	15.5	13.9	11.0	17.2	12.8	10.1	15.9	14.0	11.3	17.0
Something else	3.9	1.0	9.9	3.1	0.9	7.4	12.4	8.5	17.3	12.9	8.8	18.0

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

3. BRFSS: Mode of cannabis use

Table 3.a. Mode of cannabis use in past 30 days, general population, 2018-2023

During the past 30 days, which of the following ways did you use marijuana the most often?

Mode of cannabis use	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Smoke	78.3	76.1	80.4	77.1	74.9	79.3	67.8	65.3	70.3
Eat/drink	4.4	3.5	5.5	8.8	7.5	10.3	17.6	15.8	19.5
Vaporize	15.0	13.2	16.9	10.9	9.2	12.7	12.3	10.6	14.2
Dab/other	2.3	1.5	3.5	3.2	2.4	4.2	2.3	1.4	3.5

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 3.b. Mode of cannabis use in past 30 days, by age, 2018-2023

During the past 30 days, which of the following ways did you use marijuana the most often?

% smoked cannabis

Age group	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
18-24	76.0	70.4	81.0	81.0	75.5	85.8	71.2	64.6	77.1
25-34	77.6	73.2	81.6	73.2	68.6	77.6	63.1	57.7	68.2
35-44	76.4	71.0	81.2	79.7	75.1	83.8	66.9	61.4	72.1
45-54	81.6	75.8	86.4	76.4	70.2	81.8	68.5	61.8	74.7
55-64	82.5	77.4	86.8	79.2	72.3	85.1	72.8	66.7	78.3
65 and older	81.7	72.8	88.7	70.1	62.1	77.2	70.0	63.2	76.3

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% consumed edibles (eat/drink)

Age group	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
18-24	2.3	1.1	4.4	5.3	3.0	8.8	11.4	7.8	15.9
25-34	5.2	3.3	7.8	9.0	6.3	12.2	17.9	14.3	21.9
35-44	4.8	2.6	7.9	9.0	6.3	12.3	19.3	15.2	24.0
45-54	3.9	2.0	6.9	14.1	9.6	19.7	21.3	16.0	27.4
55-64	5.4	3.1	8.7	8.4	5.2	12.6	17.8	13.3	23.1
65 and older	7.3	3.1	14.4	11.7	7.1	17.9	22.3	16.8	28.6

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% vaporized cannabis

Age group	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
18-24	17.6	13.4	22.5	10.7	7.0	15.5	14.9	10.6	20.1
25-34	15.8	12.4	19.8	14.7	11.4	18.6	16.3	12.4	21.0
35-44	16.8	12.6	21.7	9.8	6.7	13.6	12.1	8.7	16.3
45-54	13.0	8.8	18.1	7.9	5.1	11.5	8.1	5.3	11.8
55-64	9.6	6.4	13.7	8.1	3.7	15.1	7.1	4.4	10.7
65 and older	9.1	4.1	17.0	7.9	4.1	13.6	6.0	3.0	10.5

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

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% dab / some other way

Age group	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
18-24	4.0	1.6	8.3	2.9	1.2	5.8	2.5	0.5	7.5
25-34	1.3	0.5	2.8	3.1	1.6	5.3	2.8	0.9	6.2
35-44	2.0	0.7	4.3	1.5	0.6	3.3	1.6	0.7	3.3
45-54	1.6	0.3	4.8	1.6	0.4	4.4	2.0	0.6	5.1
55-64	2.6	1.1	5.1	4.2	2.1	7.5	2.3	0.8	5.3
65 and older	1.9	0.5	5.0	10.3	5.9	16.3	1.7	0.8	3.1

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 3.c. Mode of cannabis use in past 30 days, by race and ethnicity, 2018-2023

During the past 30 days, which of the following ways did you use marijuana the most often?

% smoked cannabis

Race/ethnicity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Non-Hispanic white	77.9	75.4	80.1	75.8	73.2	78.2	65.8	63.0	68.4
Black	83.9	74.7	90.8	87.6	79.0	93.6	84.5	73.6	92.2
Hispanic	75.8	70.4	80.6	76.6	72.5	80.3	79.6	75.4	83.2
All other groups	78.0	65.7	87.4	81.2	73.0	87.7	65.5	54.8	75.1

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% consumed edibles (eat/drink)

Race/ethnicity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Non-Hispanic white	4.9	3.8	6.1	9.3	7.8	11.0	19.5	17.4	21.6
Black	2.8	0.9	6.6	6.2	2.1	13.7	5.2	1.7	11.8
Hispanic	2.9	0.3	10.1	8.3	4.0	14.8	9.4	4.5	16.9
All other groups	1.8	0.4	5.4	6.5	2.7	12.8	16.6	9.9	25.5

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% vaporized cannabis

Race/ethnicity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Non-Hispanic white	15.3	13.3	17.5	11.4	9.5	13.5	12.9	11.0	15.0
Black	10.2	4.9	18.3	5.4	1.8	11.8	6.2	2.6	12.1
Hispanic	17.2	10.1	26.6	12.8	7.2	20.6	7.8	3.8	14.0
All other groups	15.8	8.6	25.7	10.1	5.4	16.9	14.7	7.8	24.2

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

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% dab / some other way

Race/ethnicity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Non-Hispanic white	2.0	1.3	2.9	3.6	2.6	4.8	1.9	1.2	2.7
Black	3.1	0.4	10.9	0.9	0.0	4.8	4.1	0.2	17.9
Hispanic	4.2	1.1	10.5	2.3	0.4	6.8	3.3	0.9	8.0
All other groups	3.8	1.1	9.2	1.7	0.7	3.4	3.5	0.9	9.1

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 3.d. Mode of cannabis use in past 30 days, by educational attainment, 2018-2023

During the past 30 days, which of the following ways did you use marijuana the most often?

% smoked cannabis

Educational attainment	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than high school	83.5	73.8	90.7	88.2	77.3	95.0	80.8	66.9	90.6
High school or GED	84.2	80.4	87.5	82.3	77.8	86.2	76.2	71.5	80.4
Some college	76.6	72.7	80.1	76.2	72.5	79.7	69.8	65.6	73.7
College, 4 years or more	70.3	65.9	74.5	68.0	63.9	71.9	51.2	47.0	55.3

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% consumed edibles (eat/drink)

Educational attainment	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than high school	2.1	0.3	6.7	2.8	0.3	9.9	4.3	0.5	15.1
High school or GED	1.9	0.9	3.4	6.0	3.9	8.9	10.0	7.3	13.3
Some college	5.1	3.5	7.2	8.4	6.2	11.1	16.4	13.4	19.8
College, 4 years or more	8.0	5.8	10.8	15.1	12.3	18.3	32.3	28.6	36.2

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% vaporized cannabis

Educational attainment	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than high school	8.3	3.7	15.6	8.3	2.5	18.9	7.6	3.0	15.5
High school or GED	11.8	8.9	15.3	7.5	4.7	11.2	12.0	8.8	16.0
Some college	17.2	14.0	20.8	11.8	9.3	14.9	12.1	9.4	15.3
College, 4 years or more	19.1	15.6	22.9	14.3	11.4	17.5	14.5	11.2	18.4

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

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% dab / some other way

Educational attainment	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than high school	6.1	1.6	15.1	0.8	0.0	4.2	7.3	1.2	21.9
High school or GED	2.2	1.0	4.0	4.1	2.4	6.7	1.8	0.8	3.3
Some college	1.1	0.5	2.2	3.5	2.2	5.3	1.7	0.8	3.0
College, 4 years or more	2.6	1.1	5.3	2.7	1.5	4.3	1.9	1.1	3.2

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 3.e. Mode of cannabis use in past 30 days, by household income, 2018-2023

During the past 30 days, which of the following ways did you use marijuana the most often?

% smoked cannabis

Household income	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than \$15,000	82.5	74.4	88.9	83.4	74.9	90.0	67.7	53.9	79.5
\$15,000 to less than \$25,000	81.9	75.7	87.1	84.3	78.6	88.9	82.8	75.8	88.5
\$25,000 to less than \$35,000	86.1	80.2	90.8	80.7	73.3	86.7	76.6	68.5	83.4
\$35,000 to less than \$50,000	83.8	77.8	88.8	80.7	74.9	85.6	72.1	65.1	78.3
\$50,000 or more	72.3	68.6	75.9	72.7	69.2	75.9	61.5	57.9	65

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% consumed edibles (eat/drink)

Household income	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than \$15,000	2.2	0.5	6.0	6.1	1.7	14.8	7.7	3.4	14.8
\$15,000 to less than \$25,000	2.4	0.9	5.3	4.9	2.3	9.2	8.7	5.2	13.5
\$25,000 to less than \$35,000	1.4	0.4	3.3	3.5	1.8	6.1	10.1	6.0	15.7
\$35,000 to less than \$50,000	2.4	0.9	5.2	6.9	4.2	10.6	15.8	11.1	21.5
\$50,000 or more	6.5	4.8	8.6	12.8	10.5	15.4	24	21.2	27

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% vaporized cannabis

Household income	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than \$15,000	12.1	6.8	19.6	8.9	4.8	14.7	17.1	8.6	29.0
\$15,000 to less than \$25,000	13.5	9.1	19.0	7.0	4.2	10.8	8.0	3.9	14.2
\$25,000 to less than \$35,000	10.5	6.4	16.0	12.1	6.9	19.1	11.1	6.1	18.1
\$35,000 to less than \$50,000	10.4	6.3	16.0	9.2	5.7	14.0	10.6	6.4	16.4
\$50,000 or more	18.8	15.8	22	11.7	9.4	14.3	12	9.8	14.5

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

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% dab / some other way

Household income	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than \$15,000	3.2	0.8	8.4	1.5	0.3	4.5	7.5	1.0	23.9
\$15,000 to less than \$25,000	2.2	0.4	6.8	3.9	1.6	7.6	0.5	0.0	2.8
\$25,000 to less than \$35,000	2.0	0.5	5.4	3.8	1.4	8.0	2.2	0.6	5.7
\$35,000 to less than \$50,000	3.3	1.4	6.6	3.1	1.4	6.1	1.5	0.5	3.4
\$50,000 or more	2.4	1	4.7	2.8	1.7	4.4	2.5	1.3	4.3

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 3.f. Mode of cannabis use in past 30 days, by sex, 2018-2023

During the past 30 days, which of the following ways did you use marijuana the most often?

% smoked cannabis

Sex	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Male	80.0	77.2	82.5	79.4	76.6	82.1	71.1	68.0	74.1
Female	75.2	71.2	78.9	73.8	70.0	77.3	63.0	58.7	67.1

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% consumed edibles (eat/drink)

Sex	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Male	3.4	2.5	4.6	8.1	6.4	10.0	15.6	13.3	18.0
Female	6.2	4.4	8.5	9.9	7.7	12.3	20.6	17.6	23.9

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% vaporized cannabis

Sex	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Male	14.3	12.1	16.7	9.8	7.8	12.0	11.8	9.7	14.2
Female	16.3	13.2	19.8	12.5	9.7	15.7	13.1	10.3	16.4

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% dab / some other way

Sex	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Male	2.4	1.3	3.9	2.7	1.8	4.0	1.5	0.9	2.4
Female	2.3	1.1	4.2	3.9	2.6	5.6	3.3	1.5	6.2

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 3.g. Mode of cannabis use in past 30 days, by sexual orientation and gender identity, 2018-2023

During the past 30 days, which of the following ways did you use marijuana the most often?

% smoked cannabis

Sexual orientation/ gender identity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Cishet	78.6	76.2	80.8	77.7	75.2	80.0	68.9	66.2	71.6
LGBTQ+	76.6	69.4	82.7	74.2	67.8	80.0	64.4	58.2	70.3

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% consumed edibles (eat/drink)

Sexual orientation/ gender identity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Cishet	4.4	3.4	5.5	9.5	8.0	11.3	18.0	15.9	20.1
LGBTQ+	4.9	2.6	8.4	5.7	3.4	9.0	16.4	12.4	21.1

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% vaporized cannabis

Sexual orientation/ gender identity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Cishet	15.1	13.1	17.2	9.8	8.1	11.7	11.4	9.5	13.5
LGBTQ+	13.8	9.4	19.4	16.8	11.7	22.9	15.4	11.5	19.9

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% dab / some other way

Sexual orientation/ gender identity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Cishet	1.9	1.2	2.9	3.0	2.2	4.1	1.7	1.1	2.6
LGBTQ+	4.7	1.3	11.7	3.3	1.5	6.2	3.8	1.1	9.4

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Because of small sample sizes, analysis of mode by gender identity was not feasible.

Because of small sample sizes, analysis of mode by sexual orientation was not feasible.

4. BRFSS: Reason for using cannabis

Table 4.a. Reason for using cannabis in past 30 days, general population, 2018-2023

When you used marijuana (or hashish) during the past 30 days, was it for medical reasons, non-medical reasons, or both medical and non-medical reasons?

Reason for using cannabis	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Medical use	20.8	18.8	22.8	22.0	19.9	24.1	20.5	18.5	22.5
Non-medical use	42.7	40.2	45.2	44.7	42.2	47.2	44.8	42.4	47.2
Both uses	36.5	34.1	39.0	33.4	31.1	35.7	34.7	32.4	37.1

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 4.b. Reason for using cannabis in past 30 days, by age, 2018-2023

When you used marijuana (or hashish) during the past 30 days, was it for medical reasons, non-medical reasons, or both medical and non-medical reasons?

% medical use

Age group	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
18-24	12.2	8.7	16.4	10.6	7.5	14.5	7.3	4.3	11.4
25-34	21.3	17.3	25.7	19.4	15.6	23.8	12.3	9.0	16.3
35-44	21.8	17.5	26.6	23.5	19.3	28.1	24.6	20.1	29.5
45-54	25.9	20.6	31.9	26.5	21.1	32.4	32.2	26.0	38.9
55-64	25.4	20.3	31.2	32.5	25.7	39.9	31.0	25.3	37.2
65 and older	32.7	25.1	41.0	37.8	30.7	45.2	35.6	29.3	42.2

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% non-medical use

Age group	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
18-24	50.1	44.3	55.9	57.7	51.4	63.8	57.1	50.4	63.5
25-34	39.0	34.4	43.8	42.1	37.3	46.9	50.6	45.7	55.5
35-44	40.4	34.8	46.2	42.8	37.6	48.1	41.7	36.7	46.8
45-54	38.9	32.6	45.6	38.8	32.2	45.7	34.3	28.5	40.5
55-64	44.1	37.5	50.8	39.8	33.6	46.1	31.4	25.8	37.3
65 and older	40.1	31.6	49.0	37.6	30.5	45.2	38.9	32.8	45.2

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% both medical and non-medical use

Age group	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
18-24	37.7	32.1	43.6	31.7	26.1	37.7	35.6	29.5	42.2
25-34	39.7	35.0	44.6	38.5	33.8	43.3	37.1	32.3	42.0
35-44	37.8	32.2	43.7	33.7	28.9	38.8	33.8	28.9	38.9
45-54	35.1	29.1	41.6	34.7	28.3	41.6	33.4	27.1	40.2
55-64	30.5	24.8	36.6	27.7	22.4	33.5	37.6	31.3	44.2
65 and older	27.2	19.6	36.1	24.6	18.8	31.2	25.5	20.1	31.7

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 4.c. Reason for using cannabis in past 30 days, by race and ethnicity, 2018-2023

When you used marijuana (or hashish) during the past 30 days, was it for medical reasons, non-medical reasons, or both medical and non-medical reasons?

% medical use

Race/ethnicity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Non-Hispanic white	21.3	19.2	23.6	22.5	20.2	24.8	19.8	17.8	22.0
Black	14.1	8.2	21.9	22.6	14.1	33.2	16.2	9.0	26.1
Hispanic	20.8	12.4	31.5	18.4	11.7	26.7	25.6	15.5	38.2
All other groups	22.4	15.1	31.1	17.9	11.9	25.4	26.5	18.7	35.6

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% non-medical use

Race/ethnicity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Non-Hispanic white	42.3	39.6	45.0	44.3	41.5	47.1	47.6	44.9	50.2
Black	42.7	32.8	53.1	53.0	42.2	63.7	32.8	23.4	43.3
Hispanic	39.3	28.6	50.9	40.1	30.3	50.6	42.5	30.3	55.3
All other groups	48.8	37.6	60.1	42.9	33.3	52.9	33.1	25.3	41.6

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% both medical and non-medical use

Race/ethnicity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Non-Hispanic white	36.4	33.7	39.1	33.2	30.7	35.9	32.6	30.1	35.2
Black	43.2	32.9	54.0	24.4	16.6	33.6	51.0	40.1	61.7
Hispanic	39.8	28.7	51.7	41.5	31.6	52.0	31.9	22.3	42.9
All other groups	28.8	20.9	37.8	39.1	30.5	48.3	40.4	31.3	49.9

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 4.d. Reason for using cannabis in past 30 days, by educational attainment, 2018-2023

When you used marijuana (or hashish) during the past 30 days, was it for medical reasons, non-medical reasons, or both medical and non-medical reasons?

% medical use

Educational attainment	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than high school	20.7	13.7	29.4	25.2	15.9	36.4	29.5	18.4	42.7
High school or GED	24.2	20.4	28.2	23.6	19.7	27.8	18.7	15.2	22.6
Some college	20.1	17.0	23.5	22.8	19.6	26.2	24.4	21.0	28.1
College, 4 years or more	17.4	14.2	20.9	17.7	14.9	20.9	14.9	12.5	17.6

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% non-medical use

Educational attainment	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than high school	32.9	22.9	44.2	40.9	29.6	52.8	29.2	18.1	42.5
High school or GED	34.7	30.3	39.3	40.0	35.1	45.0	41.1	36.3	46.1
Some college	44.0	40.0	48.2	43.2	39.2	47.3	41.0	37.0	45.1
College, 4 years or more	55.8	51.5	60.1	53.1	49.1	57.0	57.0	53.4	60.6

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% both medical and non-medical use

Educational attainment	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than high school	46.3	35.9	57.0	34.0	24.4	44.7	41.3	28.7	54.7
High school or GED	41.2	36.6	45.8	36.4	31.9	41.2	40.2	35.3	45.2
Some college	35.9	32.0	39.9	34.0	30.2	37.8	34.6	30.8	38.6
College, 4 years or more	26.8	23.1	30.7	29.2	25.6	32.9	28.1	24.7	31.6

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 4.e. Reason for using cannabis in past 30 days, by household income, 2018-2023

When you used marijuana (or hashish) during the past 30 days, was it for medical reasons, non-medical reasons, or both medical and non-medical reasons?

% medical use

Household income	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than \$15,000	31.4	23.9	39.7	27.7	20.2	36.4	34.9	24.5	46.5
\$15,000 to less than \$25,000	24.0	18.8	30.0	27.9	21.4	35.1	37.2	28.6	46.4
\$25,000 to less than \$35,000	25.3	19.1	32.3	27.1	20.3	34.8	25.5	18.4	33.7
\$35,000 to less than \$50,000	20.8	15.8	26.5	22.8	17.1	29.4	19.9	14.7	25.9
\$50,000 or more	15.9	13.3	18.7	17.6	15.1	20.4	15.4	13.2	17.9

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% non-medical use

Household income	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than \$15,000	30.7	22.8	39.5	34.7	25.9	44.4	24.5	15.7	35.2
\$15,000 to less than \$25,000	35.7	29.4	42.5	36.4	29.4	43.8	24.9	17.7	33.3
\$25,000 to less than \$35,000	30.6	23.9	38.0	32.2	25.2	39.9	30.0	22.5	38.3
\$35,000 to less than \$50,000	39.0	32.7	45.5	33.6	27.5	40.2	40.5	34.0	47.2
\$50,000 or more	51.5	47.7	55.4	56.0	52.4	59.6	53.6	50.3	56.8

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% both medical and non-medical use

Household income	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Less than \$15,000	37.9	29.4	47.0	37.6	28.8	47.0	40.6	29.3	52.7
\$15,000 to less than \$25,000	40.2	33.6	47.1	35.7	29.2	42.7	37.9	29.4	46.9
\$25,000 to less than \$35,000	44.1	36.5	52.0	40.7	33.1	48.7	44.5	35.5	53.8
\$35,000 to less than \$50,000	40.2	33.7	47.0	43.6	36.6	50.8	39.7	33.1	46.5
\$50,000 or more	32.6	29.0	36.4	26.3	23.3	29.5	31.0	27.9	34.2

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 4.f. Reason for using cannabis in past 30 days, by sex, 2018-2023

When you used marijuana (or hashish) during the past 30 days, was it for medical reasons, non-medical reasons, or both medical and non-medical reasons?

% medical use

Sex	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Male	18.3%	16.1%	20.7%	17.5%	15.2%	20.1%	15.8%	13.5%	18.2%
Female	25.1%	21.6%	28.9%	28.4%	24.9%	32.1%	26.9%	23.5%	30.4%

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% non-medical use

Sex	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Male	44.5%	41.4%	47.7%	49.6%	46.4%	52.8%	48.0%	44.8%	51.2%
Female	39.6%	35.5%	43.9%	37.6%	33.7%	41.6%	40.5%	36.7%	44.3%

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% both medical and non-medical use

Sex	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Male	37.2%	34.1%	40.3%	32.9%	29.9%	35.9%	36.3%	33.2%	39.4%
Female	35.2%	31.2%	39.4%	34.0%	30.3%	37.9%	32.7%	29.1%	36.5%

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Table 4.g. Reason for using cannabis in past 30 days, by sexual orientation and gender identity, 2018-2023

When you used marijuana (or hashish) during the past 30 days, was it for medical reasons, non-medical reasons, or both medical and non-medical reasons?

% medical use

Sexual orientation/ gender identity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Cishet	21.3	19.2	23.5	22.4	20.2	24.8	20.3	18.2	22.6
LGBTQ+	18.2	13.3	24.0	19.1	14.4	24.6	20.1	15.6	25.2

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% non-medical use

Sexual orientation/ gender identity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Cishet	43.8	41.2	46.5	46.9	44.1	49.7	46.2	43.4	48.9
LGBTQ+	36.4	29.7	43.6	36.3	30.4	42.4	40.0	34.8	45.5

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

% both medical and non-medical use

Sexual orientation/ gender identity	% 2018-19	2018-19 CI lower	2018-19 CI upper	% 2020-21	2020-21 CI lower	2020-21 CI upper	% 2022-23	2022-23 CI lower	2022-23 CI upper
Cishet	34.9	32.3	37.5	30.7	28.2	33.2	33.5	30.9	36.2
LGBTQ+	45.3	38.3	52.4	44.6	38.4	50.9	39.8	34.4	45.5

Source: Behavioral Risk Factor Surveillance System (BRFSS); CI = confidence interval

Because of small sample sizes, analysis of reason by gender identity was not feasible.

Because of small sample sizes, analysis of reason by sexual orientation was not feasible.

5. Minnesota Student Survey

Table 5.a. Cannabis use in past 30 days among Minnesota students, 2016-2022

Use of cannabis in the past 30 days	% 8 th grade, 2016	% 8 th grade, 2019	% 8 th grade, 2022	% 9 th grade, 2016	% 9 th grade, 2019	% 9 th grade, 2022	% 11 th grade, 2016	% 11 th grade, 2019	% 11 th grade, 2022
0 days	95	96	97	93	92	95	84	84	88
1 to 2 days	2	2	1	3	3	2	5	5	4
3 to 5 days	1	1	0	1	1	1	3	3	2
6 to 9 days	1	1	0	1	1	0	2	2	1
10 to 19 days	0	1	0	1	1	1	2	2	2
20 to 29 days	0	0	0	1	1	0	2	2	1
All 30 days	1	0	0	1	1	1	2	2	2

Source: Minnesota Student Survey

Table 5.b. Frequency of cannabis use among Minnesota students, 2016-2022

Frequency of cannabis use	% 8 th grade, 2016	% 8 th grade, 2019	% 8 th grade, 2022	% 9 th grade, 2016	% 9 th grade, 2019	% 9 th grade, 2022	% 11 th grade, 2016	% 11 th grade, 2019	% 11 th grade, 2022
Never	94	94	95	89	89	93	75	76	81
Tried once or twice	3	3	2	4	4	3	7	8	6
Once or twice a year	1	1	1	2	1	1	4	4	3
Once a month	1	1	1	1	1	1	3	3	3
Twice a month	1	1	0	1	1	1	3	3	2
Once a week	1	1	1	1	1	1	4	3	2
Daily	1	1	0	1	1	1	4	4	3

Source: Minnesota Student Survey

Table 5.c. Frequency of vaping with THC among Minnesota students, 2022

Frequency of vaping with THC	% 8 th grade	% 9 th grade	% 11 th grade
Never	96	94	86
Tried once or twice	2	3	5
Once or twice a year	0	1	2
Once a month	0	1	2
Twice a month	0	1	1
Once a week	0	1	2
Daily	0	1	2

Source: Minnesota Student Survey

Table 5.d. Cannabis use in the past 30 days by sex, Minnesota students, 2022

During the last 30 days, on how many days did you use marijuana? (Do NOT count medical marijuana prescribed for you by a doctor)

Sex	% 0 days	% 1 to 2 days	% 3 to 5 days	% 6 to 9 days	% 10 to 19 days	% 20 to 29 days	% all 30 days
Male	94.7	1.8	0.8	0.6	0.7	0.5	0.8
Female	93.4	2.5	1.2	0.7	0.8	0.6	0.8
No answer	90.2	3.4	2.5	0.5	1.0	0.5	2.0

Source: Minnesota Student Survey

Table 5.e. Frequency of cannabis use by sex, Minnesota students, 2022

How often do you use each of the following? Marijuana (pot, hash, hash oil)

Sex	% Never	% Tried once or twice	% Once or twice a year	% Once a month	% Twice a month	% Once a week	% Daily
Male	91.9	3.0	1.2	1.0	0.7	1.0	1.1
Female	89.5	4.1	1.6	1.3	1.0	1.2	1.3
No answer	85.3	4.9	3.3	3.3	0.5	1.1	1.6

Source: Minnesota Student Survey

Table 5.f. Vaping with THC by sex, Minnesota students, 2022

How often do you use each of the following? Vaping device or e-cigarette with marijuana, THC or hash oil, or THC wax

Sex	% Never	% Tried once or twice	% Once or twice a year	% Once a month	% Twice a month	% Once a week	% Daily
Male	93.7	2.5	0.8	0.7	0.6	0.8	0.9
Female	91.4	3.8	0.9	1.0	0.8	1.0	1.1
No answer	89.0	4.4	3.3	0.5	0.0	1.1	1.6

Source: Minnesota Student Survey

Table 5.g. Cannabis use in past 30 days by race and ethnicity, Minnesota students, 2022

During the last 30 days, on how many days did you use marijuana? (Do NOT count medical marijuana prescribed for you by a doctor)

Race and ethnicity	% 0 days	% 1 to 2 days	% 3 to 5 days	% 6 to 9 days	% 10 to 19 days	% 20 to 29 days	% All 30 days
American Indian or Alaskan Native only	86.8	4.7	2.0	0.8	1.1	1.2	3.4
Asian or Asian American only	97.8	1.0	0.4	0.3	0.3	0.1	0.2
Black, African or African American only	94.8	1.8	1.0	0.5	0.6	0.4	0.9
Hispanic or Latino/a only	94.2	2.1	1.1	0.6	0.7	0.5	0.8
Middle Eastern / North African only	95.0	3.2	0.0	0.3	0.0	0.6	0.9
Native Hawaiian or Other Pacific Islander only	88.9	1.6	3.2	1.6	4.0	0.8	0.0
White only	94.3	2.1	1.0	0.7	0.7	0.5	0.8
Multiple Races (checked more than one)	89.9	3.6	1.7	0.9	1.4	0.9	1.6
No answer	95.5	1.8	0.5	0.6	0.5	0.5	0.6

Source: Minnesota Student Survey

Table 5.h. Frequency of cannabis use by race and ethnicity, Minnesota students, 2022**How often do you use each of the following? Marijuana (pot, hash, hash oil)**

Race and ethnicity	% Never	% Tried once or twice	% Once or twice a year	% Once a month	% Twice a month	% Once a week	% Daily
American Indian or Alaskan Native only	78.9	8.6	3.7	1.5	1.2	1.8	4.3
Asian or Asian American only	96.5	1.7	0.5	0.6	0.2	0.3	0.3
Black, African or African American only	93.4	2.8	0.8	0.5	0.6	0.7	1.3
Hispanic or Latino/a only	90.3	4.2	1.4	0.8	1.1	1.1	1.0
Middle Eastern / North African only	93.9	2.9	1.0	1.0	0.3	0.6	0.3
Native Hawaiian or Other Pacific Islander only	79.5	7.7	1.7	3.4	3.4	1.7	2.6
White only	90.8	3.4	1.4	1.2	0.9	1.1	1.1
Multiple Races (checked more than one)	84.7	5.4	2.3	1.8	1.5	1.8	2.5
No answer	93.5	2.3	0.9	1.3	0.7	0.5	0.7

Source: Minnesota Student Survey

Table 5.i. Vaping with THC by race and ethnicity, Minnesota students, 2022**How often do you use each of the following? Vaping device or e-cigarette with marijuana, THC or hash oil, or THC wax**

Race and ethnicity	% Never	% Tried once or twice	% Once or twice a year	% Once a month	% Twice a month	% Once a week	% Daily
American Indian or Alaskan Native only	84.5	6.0	1.7	1.5	1.1	1.9	3.3
Asian or Asian American only	96.9	1.7	0.4	0.3	0.2	0.4	0.2
Black, African or African American only	94.3	2.3	0.6	0.6	0.6	0.6	0.9
Hispanic or Latino/a only	91.6	3.9	0.9	0.8	0.6	1.1	1.1
Middle Eastern / North African only	93.9	2.2	0.3	1.9	0.3	0.6	0.6
Native Hawaiian or Other Pacific Islander only	81.2	8.5	4.3	0.0	2.6	1.7	1.7
White only	92.7	3.1	0.9	0.9	0.7	0.9	0.9
Multiple Races (checked more than one)	88.1	4.7	1.1	1.4	1.3	1.5	1.8
No answer	95.0	1.8	0.5	0.5	0.5	0.4	1.3

Source: Minnesota Student Survey

Table 5.j. Cannabis use in past 30 days by gender identity, Minnesota students, 2022

During the last 30 days, on how many days did you use marijuana? (Do NOT count medical marijuana prescribed for you by a doctor)

Gender identity	% 0 days	% 1 to 2 days	% 3 to 5 days	% 6 to 9 days	% 10 to 19 days	% 20 to 29 days	% All 30 days
Agender	94.0	1.7	0.8	1.3	1.0	0.3	0.8
Cis Male	94.9	1.7	0.8	0.5	0.7	0.5	0.8
Trans Male	90.0	3.8	2.6	0.7	0.8	0.8	1.2
Genderfluid	89.5	4.2	3.0	1.0	0.8	0.7	1.0
Cis Female	93.9	2.4	1.0	0.7	0.7	0.5	0.8
Trans Female	90.7	3.5	1.3	0.0	1.8	0.9	1.8
Nonbinary	89.9	3.5	2.3	1.1	1.6	0.4	1.3
Two Spirit	81.8	5.7	2.3	3.4	2.3	2.3	2.3
Questioning	92.5	2.9	1.8	0.5	1.0	1.0	0.4
Not Listed	93.0	1.8	0.6	1.0	0.9	0.3	2.4
Multiple Gender Ids	90.2	3.3	1.8	1.0	1.5	1.1	1.1

Source: Minnesota Student Survey

Table 5.k. Frequency of cannabis use by gender identity, Minnesota students, 2022

How often do you use each of the following? Marijuana (pot, hash, hash oil)

Gender identity	% Never	% Tried once or twice	% Once or twice a year	% Once a month	% Twice a month	% Once a week	% Daily
Agender	91.1	4.0	2.0	0.9	0.5	1.3	0.2
Cis Male	92.1	2.9	1.2	0.9	0.7	1.0	1.1
Trans Male	82.5	7.1	2.5	3.4	1.2	1.7	1.6
Genderfluid	83.3	6.5	2.6	2.2	2.1	1.6	1.6
Cis Female	90.2	3.8	1.5	1.2	1.0	1.1	1.2
Trans Female	86.6	4.6	2.3	0.5	1.9	1.4	2.8
Nonbinary	82.5	7.4	1.9	2.3	1.9	2.4	1.7
Two Spirit	79.5	5.1	1.3	6.4	2.6	1.3	3.8
Questioning	88.8	3.8	1.7	1.3	1.2	1.5	1.8
Not Listed	89.7	3.2	1.5	1.5	0.8	0.7	2.7
Multiple Gender Ids	84.6	5.5	2.5	1.9	1.4	2.1	1.9

Source: Minnesota Student Survey

Table 5.l. Vaping with THC by gender identity, Minnesota students, 2022

How often do you use each of the following? Vaping device or e-cigarette with marijuana, THC or hash oil, or THC wax

Gender identity	% Never	% Tried once or twice	% Once or twice a year	% Once a month	% Twice a month	% Once a week	% Daily
Agender	92.3	3.9	1.6	0.5	0.5	0.5	0.5
Cis Male	93.9	2.5	0.7	0.7	0.5	0.8	0.9
Trans Male	87.4	6.1	1.5	0.9	1.9	1.2	1.0
Genderfluid	87.0	6.0	1.6	1.4	1.1	1.3	1.5
Cis Female	91.9	3.6	0.9	1.0	0.8	0.9	1.0
Trans Female	90.3	3.7	0.5	0.5	1.9	1.9	1.4
Nonbinary	86.7	4.4	2.0	1.1	2.0	1.9	2.0
Two Spirit	80.8	5.1	3.8	2.6	1.3	2.6	3.8
Questioning	91.7	3.4	0.7	0.7	0.9	1.2	1.4
Not Listed	91.5	3.5	0.8	1.2	0.5	0.3	2.2
Multiple Gender Ids	87.6	4.8	1.3	1.8	1.2	1.7	1.6

Source: Minnesota Student Survey

Table 5.m. Cannabis use in past 30 days by sexual orientation, Minnesota students, 2022

During the last 30 days, on how many days did you use marijuana? (Do NOT count medical marijuana prescribed for you by a doctor)

Sexual orientation	% 0 days	% 1 to 2 days	% 3 to 5 days	% 6 to 9 days	% 10 to 19 days	% 20 to 29 days	% All 30 days
Straight (heterosexual)	95.2	1.8	0.8	0.5	0.6	0.4	0.7
Asexual	98.1	0.6	0.4	0.2	0.3	0.3	0.2
Bisexual	87.5	3.9	2.4	1.5	1.4	1.3	1.8
Gay or Lesbian	89.9	3.9	1.5	1.1	1.6	0.7	1.4
Questioning/Not sure	93.8	2.4	1.1	0.6	0.8	0.6	0.8
Pansexual	87.8	4.3	2.2	1.0	2.0	1.1	1.6
Queer	87.6	4.9	2.2	1.6	1.9	1.0	0.7
I don't describe myself in any of these ways	93.5	2.3	1.0	0.5	0.9	0.6	1.2
I am not sure what this question means	97.8	0.9	0.4	0.4	0.0	0.1	0.4

Source: Minnesota Student Survey

Table 5.n. Frequency of cannabis use by sexual orientation, Minnesota students, 2022

How often do you use each of the following? Marijuana (pot, hash, hash oil)

Sexual orientation	% Never	% Tried once or twice	% Once or twice a year	% Once a month	% Twice a month	% Once a week	% Daily
Straight (heterosexual)	92.4	3.0	1.1	1.0	0.7	0.9	0.9
Asexual	96.5	1.9	0.4	0.2	0.2	0.6	0.4
Bisexual	80.8	6.6	2.9	2.4	1.9	2.5	2.9
Gay or Lesbian	85.3	5.8	2.0	1.7	1.4	1.8	2.1
Questioning/Not sure	89.5	4.4	1.7	1.2	0.7	1.3	1.2
Pansexual	80.3	7.1	3.2	2.3	2.1	2.8	2.2
Queer	81.1	6.9	2.6	2.7	2.1	2.6	1.8
I don't describe myself in any of these ways	89.3	3.8	2.0	1.2	0.5	0.9	2.4
I am not sure what this question means	97.0	1.1	0.3	0.2	0.8	0.3	0.3

Source: Minnesota Student Survey

Table 5.o. Vaping with THC by sexual orientation, Minnesota students, 2022

How often do you use each of the following? Vaping device or e-cigarette with marijuana, THC or hash oil, or THC wax

Sexual orientation	% Never	% Tried once or twice	% Once or twice a year	% Once a month	% Twice a month	% Once a week	% Daily
Straight (heterosexual)	93.8	2.7	0.7	0.7	0.6	0.7	0.8
Asexual	97.5	1.1	0.3	0.3	0.2	0.4	0.3
Bisexual	84.7	6.0	1.5	1.7	1.7	2.1	2.3
Gay or Lesbian	88.2	4.8	1.7	1.3	1.0	1.5	1.5
Questioning/Not sure	91.9	3.8	0.9	1.0	0.8	0.9	0.8
Pansexual	84.8	6.1	1.9	1.5	1.2	2.0	2.5
Queer	86.1	5.8	1.4	2.0	1.7	1.7	1.3
I don't describe myself in any of these ways	92.0	3.1	0.9	1.1	0.6	0.9	1.3
I am not sure what this question means	97.3	1.2	0.4	0.5	0.1	0.3	0.2

Source: Minnesota Student Survey

6. Minnesota Youth Tobacco Survey

Table 6.a. Cannabis use among Minnesota youth, 2023

Any cannabis use in the past 30 days (percent of sample)	% all grades
0 times	89.3
1 to 2 times	4.2
3 to 9 times	1.8
10 to 19 times	1.3
20 to 39 times	0.9
40 or more times	2.6

Source: Minnesota Youth Tobacco Survey

Table 6.b. Cannabis use among Minnesota youth, by grade, 2023

During the past 30 days, how many times did you use marijuana/THC?

Grade level	% 0 times	% 1 or 2 times	% 3 to 9 times	% 10 to 19 times	% 20 to 39 times	% 40 or more times
Middle	96.1	1.6	0.6	0.3	0.7	0.6
High	84.3	4.8	2.7	2.1	2.0	4.2
Total	89.2	3.5	1.8	1.3	1.5	2.7

Source: Minnesota Youth Tobacco Survey

Table. 6.c. Cannabis use among Minnesota youth, by gender, 2023

During the past 30 days, how many times did you use marijuana/THC?

Gender	% 0 times	% 1 or 2 times	% 3 to 9 times	% 10 to 19 times	% 20 to 39 times	% 40 or more times
Female	88.9	3.9	1.9	1.5	1.3	2.5
Male	89.5	3.1	1.7	1.2	1.6	2.9
Total	89.2	3.5	1.8	1.3	1.4	2.7

Source: Minnesota Youth Tobacco Survey

Table 6.d. Cannabis use among Minnesota youth, by race and ethnicity, 2023**During the past 30 days, how many times did you use marijuana/THC?**

Race and ethnicity	% 0 times	% 1 or 2 times	% 3 to 9 times	% 10 to 19 times	% 20 to 39 times	% 40 or more times
American Indian Non-Hispanic	70.7	8.0	8.9	0.0	5.6	6.8
Asian non-Hispanic	98.6	1.0	0.0	0.3	0.0	0.0
Black non-Hispanic	91.5	1.6	2.6	1.2	1.0	2.1
Pacific Islander non-Hispanic	91.7	0.0	0.0	0.0	8.3	0.0
White non-Hispanic	89.9	3.5	1.5	1.4	1.1	2.6
Multiple races Non-Hispanic	82.2	5.8	2.0	1.0	3.7	5.3
Hispanic	83.7	4.8	2.8	2.0	3.1	3.6
Total	89.3	3.5	1.8	1.3	1.4	2.7

Source: Minnesota Youth Tobacco Survey

Table 6.e. Smoking cannabis among Minnesota youth, 2023

Smoked cannabis in the past 30 days (percent of sample)	% all grades
0 times	91.1
1 to 2 times	2.8
3 to 9 times	1.6
10 to 19 times	1.1
20 to 39 times	1.0
40 or more times	2.5

Source: Minnesota Youth Tobacco Survey

Table 6.f. Smoking cannabis among Minnesota youth, by grade, 2023**During the past 30 days, how many times did you smoke marijuana/THC?**

Grade level	% 0 times	% 1 or 2 times	% 3 to 9 times	% 10 to 19 times	% 20 to 39 times	% 40 or more times
Middle	97.2	0.9	0.6	0.3	0.4	0.5
High	86.6	4.1	2.3	1.7	1.4	3.9
Total	91.1	2.8	1.6	1.1	1.0	2.5

Source: Minnesota Youth Tobacco Survey

Table 6.g. Smoking cannabis among Minnesota youth, by gender, 2023

During the past 30 days, how many times did you smoke marijuana/THC?

Gender	% 0 times	% 1 or 2 times	% 3 to 9 times	% 10 to 19 times	% 20 to 39 times	% 40 or more times
Female	90.4	3.4	1.4	1.2	1.1	2.6
Male	91.7	2.2	1.7	1.1	0.9	2.3
Total	91.1	2.8	1.6	1.1	1.0	2.5

Source: Minnesota Youth Tobacco Survey

Table 6.h. Smoking cannabis among Minnesota youth, by race and ethnicity, 2023

During the past 30 days, how many times did you smoke marijuana/THC?

Race and ethnicity	% 0 times	% 1 or 2 times	% 3 to 9 times	% 10 to 19 times	% 20 to 39 times	% 40 or more times
American Indian Non-Hispanic	79.9	3.8	6.1	0.0	2.7	7.6
Asian non-Hispanic	99.1	0.5	0.3	0.0	0.0	0.0
Black non-Hispanic	94.1	1.1	1.6	1.4	0.3	1.4
Pacific Islander non-Hispanic	90.8	0.0	0.0	0.0	0.0	9.2
White non-Hispanic	91.5	2.9	1.4	1.2	0.8	2.3
Multiple races Non-Hispanic	85.2	4.3	2.1	1.1	1.9	5.4
Hispanic	85.6	4.4	2.4	1.4	2.4	3.8
Total	91.1	2.8	1.5	1.1	1.0	2.5

Source: Minnesota Youth Tobacco Survey

Table 6.i. Vaping cannabis among Minnesota youth, 2023

Vaped cannabis in the past 30 days (percent of sample)	% all grades
0 times	92.6
1 to 2 times	2.8
3 to 9 times	1.1
10 to 19 times	0.9
20 to 39 times	0.9
40 or more times	1.7

Source: Minnesota Youth Tobacco Survey

Table 6.j. Vaping cannabis among Minnesota youth, by grade, 2023

During the past 30 days, how many times did you vape marijuana/THC?

Grade level	% 0 times	% 1 or 2 times	% 3 to 9 times	% 10 to 19 times	% 20 to 39 times	% 40 or more times
Middle	97.5	0.6	0.5	0.4	0.2	0.7
High	88.0	3.5	1.8	1.8	1.9	3.1
Total	92.0	2.3	1.3	1.2	1.2	2.1

Source: Minnesota Youth Tobacco Survey

Table 6.k. Vaping cannabis among Minnesota youth, by gender, 2023

During the past 30 days, how many times did you vape marijuana/THC?

Gender	% 0 times	% 1 or 2 times	% 3 to 9 times	% 10 to 19 times	% 20 to 39 times	% 40 or more times
Female	91.6	2.4	1.6	1.4	1.4	1.6
Male	92.4	2.2	1.0	1.0	1.0	2.5
Total	92.0	2.3	1.3	1.2	1.2	2.1

Source: Minnesota Youth Tobacco Survey

Table 6.l. Vaping cannabis among Minnesota youth by race and ethnicity, 2023

During the past 30 days, how many times did you vape marijuana/THC?

Race and ethnicity	% 0 times	% 1 or 2 times	% 3 to 9 times	% 10 to 19 times	% 20 to 39 times	% 40 or more times
American Indian Non-Hispanic	81.9	2.5	5.8	0.0	5.1	4.7
Asian non-Hispanic	99.1	0.6	0.0	0.3	0.0	0.0
Black non-Hispanic	95.7	0.2	1.1	0.8	0.8	1.4
Pacific Islander non-Hispanic	90.8	0.0	0.0	0.0	0.0	9.2
White non-Hispanic	92.3	2.4	1.0	1.2	1.2	2.0
Multiple races Non-Hispanic	86.2	4.7	2.7	0.9	1.5	3.9
Hispanic	86.9	3.4	2.5	2.1	1.6	3.6
Total	92.0	2.3	1.3	1.2	1.1	2.1

Source: Minnesota Youth Tobacco Survey

Table 6.m. Eating or drinking cannabis products among Minnesota youth, 2023

Ate or drank cannabis products in the past 30 days (percent of sample)	% all grades
0 times	95.6
1 to 2 times	2.2
3 to 9 times	0.7
10 to 19 times	0.2
20 to 39 times	0.3
40 or more times	1.0

Source: Minnesota Youth Tobacco Survey

Table 6.n. Eating or drinking cannabis products among Minnesota youth, by grade, 2023

During the past 30 days, how many times did you eat or drink something with marijuana/THC in it? Do not count foods or drinks that contain CBD only.

Grade level	% 0 times	% 1 or 2 times	% 3 to 9 times	% 10 to 19 times	% 20 to 39 times	% 40 or more times
Middle	98.5	0.6	0.1	0.0	0.2	0.6
High	93.5	3.3	1.1	0.3	0.4	1.3
Total	95.6	2.2	0.7	0.2	0.3	1.0

Source: Minnesota Youth Tobacco Survey

Table 6.o. Eating or drinking cannabis products among Minnesota youth, by gender, 2023

During the past 30 days, how many times did you eat or drink something with marijuana/THC in it? Do not count foods or drinks that contain CBD only.

Gender	% 0 times	% 1 or 2 times	% 3 to 9 times	% 10 to 19 times	% 20 to 39 times	% 40 or more times
Female	95.6	2.6	0.8	0.1	0.3	0.6
Male	95.6	1.8	0.7	0.3	0.2	1.3
Total	95.6	2.2	0.7	0.2	0.3	1.0

Source: Minnesota Youth Tobacco Survey

Table. 6.p. Eating or drinking cannabis products among Minnesota youth, by race and ethnicity, 2023

During the past 30 days, how many times did you eat or drink something with marijuana/THC in it? Do not count foods or drinks that contain CBD only.

Race and ethnicity	% 0 times	% 1 or 2 times	% 3 to 9 times	% 10 to 19 times	% 20 to 39 times	% 40 or more times
American Indian Non-Hispanic	91.5	6.0	2.6	0.0	0.0	0.0
Asian non-Hispanic	99.4	0.6	0.0	0.0	0.0	0.0
Black non-Hispanic	96.9	0.6	1.1	0.0	0.5	0.9
Pacific Islander non-Hispanic	90.8	0.0	0.0	0.0	0.0	9.2
White non-Hispanic	95.8	2.4	0.6	0.2	0.2	0.8
Multiple races Non-Hispanic	92.9	1.9	1.2	1.2	0.0	2.9
Hispanic	92.5	3.0	1.3	0.2	1.1	1.9
Total	95.6	2.2	0.7	0.2	0.3	1.0

Source: Minnesota Youth Tobacco Survey

7. Minnesota EHR Consortium: Health Trends Across Communities in Minnesota

Table 7.a. Prevalence of cannabis use, general population, 2020-2023

Year	Count	% of Minnesota population
2020	51,780	1.0%
2021	56,430	1.1%
2022	61,350	1.1%
2023	65,000	1.2%

Source: Minnesota EHR Consortium

Table 7.b. Prevalence of cannabis use by sex, 2023

Sex	% of Minnesota population
Male	1%
Female	1%
Other/unknown	1%

Source: Minnesota EHR Consortium

Table 7.c. Prevalence of cannabis use by race and ethnicity, 2023

Race and ethnicity	% of race/ethnicity
American Indian or Alaskan Native	3%
Asian or Pacific Islander	Less than 1%
Black or African American	2%
Hispanic or Latino	1%
White	1%
Other/unknown/missing	Less than 1%

Source: Minnesota EHR Consortium

8. Minnesota Poison Control

Table 8.a. Reports to Minnesota Poison Control related to cannabis poisoning, by age, 2018-2023

Age group	2018 (count)	2018 (%)	2019 (count)	2019 (%)	2020 (count)	2020 (%)	2021 (count)	2021 (%)	2022 (count)	2022 (%)	2023 (count)	2023 (%)
0 to 5 years old	21	7%	47	13%	55	0.15%	117	21%	157	22%	188	24%
6 to 19 years old	120	42%	152	42%	135	0.37%	148	27%	196	28%	247	31%
20+ years old	143	50%	161	44%	169	0.47%	276	51%	344	49%	325	41%
Total (incl. age unknown)	285	100%	362	100%	361	1%	545	100%	701	100%	788	100%

Source: Minnesota Poison Control

9. Minnesota Hospital Association: Hospital discharge data

Table 9.a. Hospital visits with a discharge diagnosis of cannabis use, abuse, or dependence, 2021-2023

Year	Count	Rate per 1,000 MN residents
2021	22,783	3.99
2022	22,381	3.91
2023	23,864	4.16
2021-2023	69,028	4.02

Source: Minnesota Hospital Association hospital discharge data.

Table 9.b. Hospital visits with a discharge diagnosis for cannabis poisoning, 2021-2023

Year	Count	Rate per 1,000 MN residents
2021	433	0.08
2022	450	0.08
2023	595	0.10
2021-2023	1,478	0.09

Source: Minnesota Hospital Association hospital discharge data.

Table 9.c. Hospital visits with a discharge diagnosis for cannabis poisoning, by age group, 2021-2023

Cells with an asterisk (*) denote values with counts ranging from 1 to 4, and are suppressed to protect patient privacy along with all associated measures.

Age group	2021 (count)	2021 (%)	2021 (rate per 1,000 MN residents)	2022 (count)	2022 (%)	2022 (rate per 1,000 MN residents)	2023 (count)	2023 (%)	2023 (rate per 1,000 MN residents)	2021-2023 (count)	2021-2023 (%)	2021-2023 (rate per 1,000 MN residents)
Under 5	41	9%	0.12	56	12%	0.17	99	17%	0.30	196	13%	0.20
5 to 9	30	7%	0.08	25	6%	0.07	33	6%	0.09	88	6%	0.08
10 to 14	19	4%	0.05	22	5%	0.06	47	8%	0.12	88	6%	0.08
15 to 19	67	15%	0.18	69	15%	0.18	65	11%	0.17	201	14%	0.18
20 to 24	56	13%	0.16	43	10%	0.12	42	7%	0.12	141	10%	0.13
25 to 34	71	16%	0.10	78	17%	0.10	83	14%	0.11	232	16%	0.10
35 to 44	57	13%	0.07	44	10%	0.06	66	11%	0.08	167	11%	0.07
45 to 54	43	10%	0.06	45	10%	0.07	53	9%	0.08	141	10%	0.07
55 to 64	30	7%	0.04	36	8%	0.05	60	10%	0.08	126	9%	0.06
65 to 74	14	3%	0.02	27	6%	0.05	30	5%	0.05	71	5%	0.04
75 to 84	*	*	*	*	*	*	*	*	*	21	1%	0.02
85 and older	*	*	*	*	*	*	*	*	*	6	0%	0.02
All ages	433	100%	0.08	450	100%	0.08	595	100%	0.10	1,478	100%	0.09

Number, proportion, and rate (per 1,000 Minnesota residents) of hospital-treated cannabis poisonings. Source: Minnesota Hospital Association hospital discharge data.

Table 9.d. Hospital visits involving newborns affected by birthing parent's cannabis use, 2021-2023

Year	Count	Rate (per 1,000 live births)
2021	262	4.14
2022	262	4.16
2023	191	3.15
2021-2023	715	3.82

Source: Minnesota Hospital Association hospital discharge data.

Table 9.e. Cannabis use by birthing parents at time of delivery, 2021-2023

Year	Count w/ cannabis use	Count of delivery hospitalizations (MN residents in MN hospitals)	Rate per 10,000 delivery hospitalizations
2021	1,232	58,986	208.9
2022	1,024	58,322	175.6
2023	848	56,135	151.1
2021-2023	3,104	173,443	179.0

Source: Minnesota Hospital Association hospital discharge data.

Table 9.f. Cannabis use at delivery, parental age 25 and under, 2021-2023

Year	Count w/ cannabis use, ages 24 years and under	Count of delivery hospitalizations (MN residents in MN hospitals), ages 24 years and under	Rate (per 10,000 delivery hospitalizations)
2021	529	8,750	604.6
2022	442	8,631	512.1
2023	331	8,397	394.2
2021-2023	1,302	25,778	505.1

Source: Minnesota Hospital Association hospital discharge data.

Table 9.g. Cannabis use at delivery, parental age 25-39, 2021-2023

Year	Count w/ cannabis use, ages 25-39 years	Count of delivery hospitalizations (MN residents in MN hospitals), ages 25-39 years	Rate (per 10,000 delivery hospitalizations)
2021	692	48,208	143.5
2022	567	47,450	119.5
2023	504	45,530	110.7
2021-2023	1,763	141,188	124.9

Source: Minnesota Hospital Association hospital discharge data.

10. Minnesota Office of Cannabis Management: Medical Cannabis Registry

Table 10.a. Overview of patients enrolled in Minnesota Medical Cannabis Registry, 2024

Approved patients	2024
Number of approved patients in registry	46,388
Number of new patients	18,069
Percent of patients that are new	39.0%
Number of returning patients	28,319
Percent of patients that are returning	61.0%

Contains data through the third quarter (Q3) of 2024. Source: Minnesota Office of Medical Cannabis.

Table 10.b. Patients in Minnesota Medical Cannabis Registry, by age, 2024

Approved patients by age group, 2024	Count	%
4 years old and under	9	0.02%
5 to 17 years old	401	0.86%
18 to 24 years old	2,229	4.81%
25 to 35 years old	9,405	20.27%
36 to 49 years old	15,719	33.89%
50 to 64 years old	11,393	24.56%
65+ years old	7,232	15.59%
Total	46,388	100.00%

Contains data through the third quarter (Q3) of 2024. Source: Minnesota Office of Medical Cannabis.