CANNABIS AND MISSOULA YOUTH

A REPORT FROM THE HEALTHY MISSOULA YOUTH ENVIRONMENTAL SCAN
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Introduction

Healthy Missoula Youth is a coalition facilitated by Missoula Public Health and made up of multiple community partners working to prevent harm related to youth substance use. Our focus is to reduce rates of drinking, marijuana, and tobacco use, as well as other substances among youth.

In fall of 2022, the Policy and Law Committee of Healthy Missoula Youth decided to undertake an “environmental scan” or deep dive into the cannabis landscape in Missoula and its impacts on youth. Neighboring states have experienced shifts in patterns of youth use, social norms, hospitalizations, and more after legalizing cannabis for adult use, and we wanted to understand what was happening in our own community.

We gathered data from a variety of sources, as well as collecting our own data locally. Information on patterns and trends was sourced from the Montana Prevention Needs Assessment, the Montana Youth Risk Behavior Survey, the National College Health Assessment, the University of Montana’s Center for Population Health Research, and the Montana Department of Justice’s Forensic Science Division. Additional primary data collection began with a review of Missoula dispensary websites in the winter of 2022-23 and eventual visits to their physical locations in spring of 2023.

Our findings indicate there are improvements to the cannabis regulatory system that could be made locally and on a state level to reduce negative impacts of cannabis on youth. The following report will present the results of our environmental scan and highlight public health recommendations to protect youth while managing this new industry.

HEALTHY MISSOULA YOUTH POLICY & LAW COMMITTEE MEMBERS:

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According to youth responses to the 2022 Montana Prevention Needs Assessment and national Monitoring the Future data, Missoula youth are more likely to use marijuana than their peers in the state and across the nation.

In addition, Missoula high school youth marijuana use is on an upward trend. According to the Montana Youth Risk Behavior Survey, Missoula high school students reported a 22% increase in marijuana use between 2019 and 2021.

(Montana Youth Risk Behavior Survey, 2021)
In addition, Missoula youth perceive marijuana use as less risky than other Montana students. We know from research that youth’s perception of harm influences their decision to use or abstain from a substance.

In general, Missoula youth who use marijuana are initiating use at a younger age than their peers across the state. Early initiation puts youth at increased risk of developing a future substance use disorder and other related physical and mental health harms.
While most Missoula youth report that their parents believe youth marijuana use is very wrong, they are somewhat less likely to report this than their peers across the state. At the same time, more Missoula youth reported having talked with one of their parents about the dangers of substance use in the past year.

Research indicates that parents are highly influential in their children’s decisions around substance use. Parental monitoring, communication, etc are all factors that protect youth from substance use.

Conversations About Drug Use

During the past 12 months, have you talked with at least one of your parents about the dangers of tobacco, alcohol, or drug use? By parents, we mean your biological parents, adoptive parents, step-parents, or adult guardians - whether or not they live with you. (Choose all that apply.)

- Missoula County MPNA 2022
- Montana MPNA 2022
University of Montana students comprise a substantial portion of the Missoula community, and many of them are younger than 21 - the legal age for marijuana consumption. In addition, the human brain is not fully developed until age 25, and any substance use can be especially harmful to a developing brain. According to the two most recent National College Health Assessments, marijuana use is on the rise amongst UM students, especially males.
The number of cannabis-related DUI’s in Missoula County has seen a steep increase since 2019, and has more than doubled in the past 7 years according to Montana Department of Justice data. Research studies have shown negative effects of marijuana on drivers, including an increase in lane weaving, slower reaction time, impaired depth perception, decreased coordination, and altered attention to the road. An analysis of multiple studies found that the presence of THC metabolite in blood, saliva, or urine, was associated with 20 to 30 percent higher odds of a motor vehicle crash (Rogebers & Elvis, 2016). While the county-level DUI data was not disaggregated by age, UM students are reporting less impaired driving in 2023.

UM college students who reported driving within 6 hours of using cannabis/marijuana in the last 30 days.

(“Only students who reported driving in the past 30 days and using cannabis in the last 30 days were asked this question.” - NCHA)
Hospital and ER Visits

Cannabis-related hospitalization and emergency department visits for youth and young adults have gone down for our youngest youth (ages 0-14), but risen for older teens (15-19) and young adults (ages 20-24) since 2016. In 2021, Missoula hospitals treated 70 youth and young adults (ages 0-24) for cannabis-related issues. These numbers were provided by the Montana Hospital Association in partnership with the UM’s Center for Population Health Research.

Marijuana related hospitalizations can range from poisonings of children who mistakenly eat an edible product, to over-consumption, or even cannabis-induced psychosis. With today’s high-potency products, more individuals are seeking treatment for cannabis overdose. Symptoms of over-consumption include: agitation, panic attacks, a fast heart rate, chest pain, uncontrollable shaking or seizures, sudden high blood pressure with a headache, cannabinoid hyperemesis syndrome, or unresponsiveness.

Additionally, in Montana marijuana is the most commonly used drug among ages 12-17 who visit treatment centers for drug misuse or abuse. 52% of youth are being seen primarily for cannabis-related issues (2019 Montana DPHHS Medicaid Claim Treatment Data).

**Hospital & ER Visits**

Cannabis-related Hospitalizations & Emergency Department visits for youth and young adults in Missoula

- Youth aged 0-14
- Youth aged 15-19
- Youth aged 20-24

![Graph showing hospital and ER visits from 2016 to 2021](chart.png)
Missoula mother Linda Wolfe joined the Healthy Missoula Youth coalition after her son experienced multiple bouts of cannabis-induced psychosis. According to the American Addiction Center, “Approximately 1 in every 100 people who uses highly potent marijuana will manifest psychotic symptoms.” Linda is sharing her story to educate other families about this risk of cannabis use.

A Missoula Parent’s Experience Navigating their Son’s Cannabis-Induced Psychosis

When you realize your son or daughter has cannabis-induced psychosis and addiction to cannabis it is like a nightmare you can not wake up from. Regular people in our life don’t understand. They say, “Really? Weed? Are you sure?” We struggled to understand it back then. Now, after the shame, depression, and sleepless nights are over we strive to help other parents, or anyone going through this struggle.

During our son’s third cannabis-induced psychosis (within 2 years) we had to trust the professionals, and that they knew what they were doing. We finally got help and understood that weed is addictive. We all had a plan in place with a life coach/counselor and set our boundaries.

The fear of our son being so vulnerable out there walking around out of his mind was awful. We now know that, unfortunately calling the police 19 times within a week to try to get him involuntarily committed to the hospital with medication (for a while) is what had to happen.

This was the most traumatic experience my husband and I had ever gone through. Talking to other parents who have gone down this path helped us almost more than anything.

Our son does not have bipolar or schizophrenia. His psychosis was from weed and weed alone. If you know anyone going through this please let them know about what weed can and is doing to people.
Cannabis Density

ACCORDING TO A 2020 REPORT BY VERILIFE, A CANNABIS DISPENSARY COMPANY:

Missoula has more dispensaries per capita than any other city in the U.S.

This report states that Missoula had **18.1** dispensaries per 50,000 residents (Jan. 2020). As of 2023, a local environmental scan indicates the current number to be **30.7** dispensaries per 50,000.

In addition, Montana was reported to have the **third highest number of dispensaries per capita per 100,000** in the U.S.

Valuewalk, July 18, 2021: https://www.valuewalk.com/cities-states-most-marijuana-dispensaries/
Dispensaries should be inspected at least 4 times a year, preferably at least once quarterly.

The Cannabis Control Division is the agency tasked with the inspection and enforcement of cannabis laws in dispensaries. These inspections are done prior to the initial licensure of a dispensary, and then at least once annually before the renewal of the license. “CCD conducts a variety of inspection types including announced, unannounced, complaint driven, compliance verification, renewal, follow-up, and pre-licensing inspections. Inspectors will contact a licensee via phone or email to schedule inspections unless an unannounced inspection is being conducted.”

As of December 2023, Region 2 contains Sanders County with 5 licensed dispensaries, Mineral County with 1 licensed dispensary, Missoula County with 59 licensed dispensaries, and Ravalli County with 15 licensed dispensaries.

PUBLIC HEALTH RECOMMENDATION
Dispensaries should be inspected at least 4 times a year, preferably at least once quarterly.

REGION 2 HAS ONLY 3 INSPECTORS AVAILABLE TO COVER OVER 80 DISPENSARIES EACH YEAR.

HEALTHY MISSOULA YOUTH CANNABIS AND MISSOULA YOUTH REPORT 2023
Committee members reviewed the websites of Missoula dispensaries from September-December 2022. During this timeframe, there were 52 dispensaries in Missoula, 42 of which had functioning websites. Websites were examined in comparison to Montana law around their content, especially in relationship to impact on youth use or access. Specifically, we looked at how sites were verifying the age of visitors, if they offered online shopping, any health claims or warnings present, site features that may be considered appealing to youth, and any false or misleading content.

The majority of Missoula dispensary websites required visitors to check a box indicating if they were of legal age. This is similar to approaches used by dispensaries across the U.S. We know from research that exposure to advertising increases use likelihood to use substances, so preventing exposure to dispensary websites is one preventative measure.

76% offered online shopping, but required customers to pick up in-person at the store where presumably they would need to present identification. One dispensary advertised delivery to those who are over age 65 or immunocompromised. Delivery is not allowed by Montana law.

83% of Missoula dispensaries used a checkbox to indicate visitors were 21.

7% also asked for a birthdate

10% did not screen for age

A marijuana business that maintains a webpage must utilize appropriate measures to verify that individuals visiting the webpage are 21 years of age or older.

- Administrative Rules of Montana 42.29.123
Montana law prohibits dispensary websites from advertising health claims, however we found 26% had statements on their website that seemed to cross this line. Statements ranged from products being a “possible cure for cancer” to being good for mental health issues such as anxiety. Only 3 sites (7%) mentioned marijuana as being not FDA approved as a medical treatment. Research has connected marijuana with increased risk of anxiety, depression, and suicidal ideation (Kedzior & Laeber, 2014; Blanco, et al., 2016; Shalit, et al., 2016).

Only one site mentioned that marijuana was addictive and had health risks.
Montana law permits up to 100 milligrams of THC per package for edible marijuana products. Each individual serving is allowed only up to 10 milligrams of THC. When we looked at edible products on dispensary websites we saw many items that in a food product we would consider a single serving containing multiple servings. For example, each cookie in the picture above contained eight servings of THC, and the bottled drink, which would be considered one package, contained 10 servings. While this is not illegal (with the exception of the chocolate bars advertised as having 140 mgs of THC), it is easy to see how a child or inexperienced marijuana consumer may accidentally consume a large quantity of THC.

PUBLIC HEALTH RECOMMENDATION
Prohibit products that do not have completely physically separated individual servings, and disallow the sale of Cannabis-infused beverages, as flavored beverages are a typical route of initiation for youth use.
Montana law prohibits dispensaries from selling edible products that are “attractive to children” or “easily confused with commercially sold candy.” What we found were many products available online that were virtually indistinguishable from commercially sold candy once removed from packaging clearly labeled marijuana. Missoula dispensaries were selling many THC products that were fruity and/or sugar coated, such as brownies, lollipops, chocolate bars, popsicles, caramels, cookies, candies, and even ice cream and peanut butter and jelly.

The public health recommendation is to prohibit such products, but also to have a clear definition of what is “attractive to children.” Enforcement regarding what is classified as “candy” is strongly recommended.

PUBLIC HEALTH RECOMMENDATION
Prohibit products that resemble a non-Cannabis consumer product, including, but without limitation, candy or baked goods that are typically consumed by, or marketed to, children or youth;
In April of 2023, coalition members visited the physical locations of the (then) 53 dispensaries within Missoula County. One dispensary was closed for renovations, so was not included in all elements of our scan. We observed the outside advertising, signage, and their location with respect to how close they were to facilities that serve youth or vulnerable populations, and/or other dispensaries.

In 2020, Missoula had the distinction of being named the city with the most dispensaries per capita in the United States (Verilife.com, 2020). Montana has not set a limit on the number of marijuana licenses available, however localities can and have done so. The city of Bozeman had capped the number of marijuana retail outlets within their city limits at 20. In 2021, they lifted their cap and the numbers of dispensaries in Bozeman have now eclipsed Missoula.

As of November 2023, there are now 59 dispensaries within Missoula County. The most current list of dispensaries can be found on the Cannabis Control Division website mtrevenue.gov/cannabis.

**PUBLIC HEALTH RECOMMENDATION**
Limit the number of storefront retail outlets to fewer than 1 per 15,000 people. This would mean 8 dispensaries for a county our size. Missoula County currently has 59 dispensaries.
Dispensary Visits

The state of Montana has not put any restrictions on proximity of dispensaries to one another. However in November of 2021, after the Healthy Missoula Youth coalition presented to the City Council on cannabis density, the City of Missoula passed an ordinance requiring a minimum distance of 500' from other cannabis dispensaries. Existing dispensaries were grandfathered in.

In several locations within Missoula, for example downtown pictured below, there are multiple dispensaries even on the same block. However, with this new ordinance, if one were to go out of business, another dispensary could not open in that same location.

18 out of 53 Missoula dispensaries were within 500' of another dispensary. The downtown area is an example of high density of dispensaries.

PUBLIC HEALTH RECOMMENDATION
Do not issue permits for a Cannabis Retailer located within 1,000 feet of an existing lawful Cannabis Retailer.
The state of Montana does not allow dispensaries to be within 500' of places of schools or places of worship, however this is only applicable if they are on the same street. In Seeley Lake, the elementary school is less than 300' from a dispensary, however their addresses are on different streets. We found 5 places of worship in Missoula County that were in this same situation.

The public health recommendation is for dispensaries to be 1000' from youth-serving facilities and places that serve vulnerable populations such as treatment facilities. Localities may be more strict under state law. Our neighbors to the north, Ronan and Polson do not allow dispensaries within 1000' of schools, daycares, or city property, including parks.

Penalties for all dangerous drug possession crimes are enhanced when they occur within 1,000 feet of a school (MCA 45-9-109). Officially, according to MCA 50-32-222, cannabis is still considered a Schedule I "dangerous drug," and therefore is part of this restriction.
The state of Montana requires, and provides, printable signage for dispensaries stating that customers must be 21 or have a medical card to enter their business. We found in Missoula that 46% of dispensaries did not have this required signage posted in a visible location. Signage is a minimal effort to reduce underage access.

28 out of 52 (54%) dispensaries visited had a visible sign restricting entry by age

24 out of 52 (46%) did not post this required signage
The state of Montana prohibits dispensaries from using objects that may be “appealing to youth” to advertise their business with “an intent to cause youth to become interested” in marijuana. However, the definition of what is appealing to youth is left largely gray, and it is difficult to determine intent. We saw multiple businesses that used cartoons, animals, and verbiage within their logos and advertising that could be perceived as appealing to youth.

Researchers recommend defining what is “appealing to youth” more specifically to include advertising that (1) mimics advertising of a non-cannabis product typically consumed by, or marketed to youth; (2) depicts a cartoon, or any non-human animate creature including, without limitation, an insect, toy, fruit, vehicle or robot, and (3) depicts or describes candy, baked goods, or other food typically marketed to youth.

**PUBLIC HEALTH RECOMMENDATION**
Do not allow cartoons, or any non-human animate creature including, without limitation, an insect, toy, fruit, vehicle or robot. Do not allow tradenames that are attractive to youth.
We followed marijuana-related marketing in local outlets for two weeks in April of 2023 and found:
- 0 advertisements in the Missoulian or Missoula Current
- 2 listings for the 4/20 Block Party in the weekly Kaimin

We contacted the Missoula Broadcasting Company, who own 103.3 The Trail, 104.5 The U, 105.9 Jack FM, and 102.9 ESPN and they let us know on their stations for the month of April 2023 there were:
- 321 advertisements marketing marijuana businesses
- 70 advertisements for marijuana-related promotional events, presumably the 4/20 Block Party

The state of Montana prohibits dispensaries from “advertising” on television, radio, or in print. However “advertising” as defined is distinguished from “marketing” their brand:

“A licensee may promote its business and market its brand but may not advertise marijuana or marijuana products except in electronic advertising.”

PUBLIC HEALTH RECOMMENDATION
Advertising AND marketing materials for cannabis and cannabis products, brands, licensees, or commercial cannabis-related services may not be attractive to youth (strongly define attractive to youth).

Note - local governments generally do not regulate TV/Radio.
Coalition members visited Missoula’s 4/20 Block Party held at Caras Park on April 20, 2023. The 4/20 Block Party is billed as a community event to celebrate and advocate for cannabis. It includes live music, food booths, and vendors including dispensaries and arts and crafts. No on-site sales of marijuana are allowed by law.

There were many children in attendance, and products and activities to cater to children including clowns, coloring, puppets, and free “un-medicated” cookies and gummies. While marijuana sales were not allowed, this does not mean it wasn’t being publicly used and/or consumed. It was, which is also not allowed by law.

PUBLIC HEALTH RECOMMENDATION
Prohibit temporary cannabis events to protect smoke-free air, prevent drugged driving, and avoid social normalization.
Recommendations

There are actions we can take locally and at a state level to discourage underage use of marijuana.

Impact Reports

Other states who have legalized marijuana mandate reports on the impacts of legalization, including health, crime, and economics. We need comprehensive reporting on what is happening in other Montana communities and at the state level.

Address Enforcement Gaps

Our committee observed many marijuana laws not being adhered to, which begs the question of how well they are being enforced.

- The fees for a retail marijuana license (both state and local) should cover the costs to administer and enforce the regulations.

Learn from Others

There are public health recommendations we can use to guide Montana's marijuana regulations, from other states and public health researchers. Many found in this report come from:

- GettingItRightfromtheStart.org
- Smart Approaches to Marijuana
  - learnaboutsam.org

Cap on Dispensaries

Studies indicate that youth who live near more dispensaries are more likely to use cannabis.

- A cap on the number of dispensaries and stronger buffer zones for Missoula, like those in Polson & Ronan, may help protect future generations.

Join the conversation around underage marijuana use in Missoula, and help design policies for our community that safeguard our youth!

Visit healthymissoulayouth.org to get involved.
Acknowledgements

Thank you to all those who worked tirelessly collecting data for our environmental scan, reading the research, identifying public health recommendations, and summarizing for public consumption:


And thank you to SAMHSA’s Communities Talk to Prevent Alcohol and Other Drug Misuse funding for their support.

We thank the Missoula community for your continued support in our efforts to prevent underage substance use.

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