COMMUNITY HEALTH IMPROVEMENT PLAN

Drug Use Data Profile

Effective Date: 2024 - 2026



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Overview

Introduction:

Community Health Assessment and Planning Process

The Community Health Assessment and Planning (CHAP) process is about improving the health and well-being of residents in Olmsted County. Every three years, the community conducts a joint health needs assessment to determine Olmsted County's health priorities; formulate a plan to address the needs; and publish an annual progress report. Olmsted County Public Health Services, Mayo Clinic, and Olmsted Medical Center engage with diverse partners across our community to lead this process.

About the Data Profile

The purpose of this Data Profile is to provide a deeper dive into the Community Health Improvement Plan (CHIP) priority, drug use. By providing quantitative data from a variety of data sources, as well as factors that contribute to the health priority, this document will help assist Olmsted County partners with strategy selection for the 2024 – 2026 CHIP. Specifically, the report will help identify a population indicator for the drug use priority, along with showcasing specific data-driven needs that community partners can impact.

A link to the 2022 Community Health Needs Assessment (CHNA) is here.

Summary:

This data profile presents a deeper dive into the most updated data around drug use in Olmsted County. A variety of data sources are used to capture drug fatalities, non-fatal overdoses, self-reported drug use, treatment admissions, prescriptions dispensed, and drug related arrests. When available, data was analyzed against demographic information and social determinants of health to get a better picture of disparities in the population. The profile will walk through key findings to help narrow strategy identification.

Methods of Analysis

Population:

The majority of this profile includes data on drug use for Olmsted County residents. However, there are additional data pieces for fatalities and arrests that are based off occurrences in Olmsted County, not residential status. These pieces are noted within their sections.

Data source(s):

It is important to note the differences in fatality data, non-fatal data, and self-reported survey data. Death certificate data is likely one of the stronger data sources, as there are more standardized criteria. When using hospital discharge data for non-fatal overdoses, any overdoses that did not require hospitalization are missing from this non-fatal overdose data. In addition, different health care providers can code drug overdoses differently in electronic medical records, meaning hospital discharge data is likely an underrepresentation of true overdose visits. Self-reported drug use survey data may also be an underrepresentation of the true population due to the fear around reporting drug use as well as not reaching the population using drugs.

U.S. Census: For calculating rates for both Olmsted County and Minnesota, the Decennial Census was used for 2020, ACS 1-year estimates were used for 2021, and census vintage year estimates were used for 2022 denominators.

Death certificate data: Provided by the Minnesota Department of Health (MDH) and includes fatalities that occurred within Minnesota.

Minnesota Hospital Association Discharge Data: Provided by MDH (who state they receive about 95% of hospital discharge data). This data includes all emergency department visits and inpatient visits at hospitals in

Minnesota or North Dakota. Olmsted County residents were identified using the zip code in the patient's hospital account. Any visits at a federal facility or tribally operated facility are not included in this data.

Drug and Alcohol Abuse Normative Evaluation System (DAANES): Provided by Substance Use Minnesota and includes data on all private and public pay treatment facility admissions and discharges.

Minnesota Board of Pharmacy Prescription Monitoring Program (PMP): Data system for Minnesota prescribers and pharmacists to enter prescription data.

Minnesota Bureau of Criminal Apprehension Data: Provided by the Minnesota Department of Public Safety and includes arrests occurring in Olmsted County.

Minnesota Student Survey (MSS): An anonymous statewide school-based survey conducted every three years among 5th, 8th, 9th, and 11th graders.

Community Health Needs Assessment Survey (CHNA): An anonymous mailed survey to adult residents of Olmsted County conducted every three years.

Youth Risk Behavior Surveillance System (YRBSS): A state-based system of health surveys that is provided by the Centers for Disease Control and Prevention (CDC).

National Survey on Drug Use and Health (NSDUH): An annual survey conducted by Substance Abuse and Menth Health Services Administration (SAMHSA) on the civilian, noninstitutionalized population aged 12 or older in the United States.

Methods:

Overall, this profile focuses on the use of drugs that are not prescribed. However, each data source includes slightly different drugs; the specific drugs assessed by the data are listed within those sections. In addition, some data sources use the term marijuana while others use the term cannabis, but for this profile, these should be interpreted as the same drug – a substance coming from the plant Cannabis sativa. MDH pulled case lists from the death certificate data and hospital discharge data using appropriate ICD-10 codes for illicit drugs. Upon receiving case data, further analysis was completed by Olmsted County using SPSS.

When analyzing the two surveys conducted among Olmsted County residents (CHNA and MSS), independent Z-Tests for percentages (using unpooled proportions) were computed in WinCross to pinpoint significant differences found within the data, using a 95% confidence interval. Throughout the report, a notation symbol signals a significant difference in the data. When analyzing across demographics and social determinants of health questions, data suppression occurred anytime the number of responses for any group was less than 20 and no conclusion was drawn based off those small groups, thus a significant relationship between some demographics and social determinants of health may not have been able to be evaluated. In addition, only statistically significant findings were included in the report.

Of the demographics and indicators with significant relationships to drug use, odds ratios were calculated to determine the strength of the relationship. Odds ratios represent the odds that an outcome will occur in one situation more than another. For this report's purposes, odds ratios were used to determine within demographics and indicators which group mental health issues were more likely to be present in.

The remaining data sources were analyzed and reported by external organizations and pulled from their websites.

Demographics

The following are demographics of Olmsted County, pulled from the <u>2022 Olmsted County Community Indicators</u> that uses 2021 data from the U.S. Census Bureau.

- In 2021, 163,436 people lived in Olmsted County; this is a 12% increase over the past 10 years.
- The majority of Olmsted County residents identify as white alone (77.8%).
 - 6.8% identify as Black or African American alone.
 - 6.3% identify as Asian alone.
 - 6.1% two or more races.
 - o 2.5% some other race alone.
 - American Indian and Alaska Native alone and Native Hawaiian and other Pacific Islander alone make up less than 1% of Olmsted County's population.
- 20.6% of the population is under 14 years old, 39.6% of the population is 19 to 44 years old, 29.3% of the population is 45 to 69, and 10.5% is 70 and over.
- 11% of the population is foreign born.
- 14.3% of residents speak a language other than English at their home.
- Olmsted County has a higher educational rate than Minnesota and the United States, and at least 75% of people have attained a high school diploma.
 - o 47.1% of Olmsted County adults have at least a bachelor's degree.
- The median household income in Olmsted County is \$84,656.
- The homeownership rate in Olmsted County is 70.9%.
- The unemployment rate in Olmsted County is 3.2%.

Definitions

CHNA Indicator Definitions:

Access to Care: Access to health care is defined as "the timely use of personal health services to achieve the best health outcomes." For this assessment, residents answered if they had ever experienced delays in medical, dental, or mental health care.

Body Mass Index (BMI): BMI is a calculation using a person's sex, height, weight, and age in years to determine underweight, normal weight, overweight, and obese.

Community Mobility: Community mobility enables safe, convenient, and comfortable travel and access for users of all ages and abilities, regardless of their mode of transportation. For this assessment, residents answered if lack of transportation ever limited their ability to complete errands or work, attend appointments or social events, or limited their child's ability to attend care.

Community Inclusiveness: An inclusive community does everything it can to respect all its citizens. It assures that all citizens have equitable outcomes and promotes equal treatment and opportunity. For this assessment, residents answered if they had ever been in a situation where they felt unwelcome or unaccepted at least once in a year.

Community Resiliency: Community resiliency is a measure of the sustained ability of a community to utilize available resources to respond to, withstand, and recover from adverse situations. This assessment uses a composite measure that combines residents' ratings of their ability to respond to an adverse situation and their perception of the community's ability to respond to and recover from an adverse situation.

Independence: Is the index of measured factors impacting the quality of independent living such as activities of daily life (eating, bathing, dressing/undressing, and moving around the house), preparing meals, shopping for personal items, managing medications, managing money, and doing housework. Residents who answered that they had no difficulty completing these activities are considered independent.

Health Insurance/Insurance Coverage: Insurance coverage refers to health insurance, prescription, mental health, and dental care insurance, which may include insurance from both private and public payers. The health insurance indicator examines whether or not a resident has a health insurance policy that covers prescription or dental health insurance coverage.

Health Status: Residents indicated if their health status was "Excellent", "Very Good", "Good", "Fair", or "Poor".

Socially Connected: Social connectedness measures how people come together to support each other as individuals, neighbors, and communities. For this assessment, residents who indicated that they agreed people in their neighborhood know each other, can be trusted, and will help each other were socially connected.

World Health Organization Well-being Index: The World Health Organization (WHO) Five Well-being Index, also known as WHO-5, is a scale helps capture the mental health and well-being of those who may or may not self-report mental health issues, such as depression or anxiety. The scale ranges from zero to 100; an index score is calculated based on individual responses to five questions. A score closer to zero indicates poorer quality of life/mental health. A score closer to 100 represents higher quality of life/mental health. More information on the index is found in the link below. For the WHO Well-being variable, we compared those who scored 50 and below to those who scored 51 and above. https://www.corc.uk.net/outcome-experience-measures/the-world-health-organisation-five-well-being-index-who-5/

MSS Definitions

Adverse Childhood Experiences (ACEs): An Adverse Childhood Experience (ACE) describes a traumatic experience in a person's life occurring before the age of 18. As the number of ACEs increases, the risk for health problems increases in a strong and graded fashion in areas such as alcohol use, substance abuse, depression, anxiety, and smoking. The ACE score is a measure of cumulative exposure to adverse childhood conditions. Exposure to any single ACE condition is counted as one point. If a person experienced none of the conditions in childhood, the ACE score is zero. Points are then totaled for a final ACE score. It is important to note that the ACE score does not capture the frequency or severity of any given ACE in a person's life, focusing instead on the number of ACE conditions experienced. In addition, the ACE conditions used in the ACE survey reflect only a select list of experiences.

The nine ACEs used in this profile are:

- Problematic drinking or alcoholism of a household member.
- Illegal street or prescription drug use by a household member.
- Mental illness of a household member.
- Household member emotional abuse towards child.
- Household member physical abuse towards child.
- Domestic violence between adult household members.
- Sexual abuse towards child from non-family member.
- Sexual abuse towards child from family member.
- Incarcerated guardian.

Any Emotional Distress: Students who indicated ever being bothered by any of the following over the two weeks prior to the survey (several days, more than half the days, nearly every day):

- Little interest or pleasure in doing things.
- Feeling down, depressed, or hopeless.
- Feeling nervous, anxious, or on edge.
- Not being able to stop or control worrying.

Cisgender: For this assessment, gender identify is broken out into two categories: cisgender only and not cisgender only. Cisgender only includes those who reported that they only identify as the gender that matches their sex assigned at birth. Not cisgender only includes those who reported any of the following: agender, transgender, genderfluid, nonbinary, two spirit, questioning/unsure, and/or identity not listed.

Health Status: Students indicated if their health status was "Excellent", "Very Good", "Good", "Fair", or "Poor".

Negative Behaviors: Students who indicated doing any of the following in the 12 months prior to the survey:

- Ran away from home.
- Damaged or destroyed property.
- Hit or beat up another person.
- Took something from a store without paying for it.

Positive School Environment: Students who agreed or strongly agreed to all of the following:

- If something interests me, I try to learn more about it.
- I think things I learn at school are useful.
- Being a student is one of the most important parts of who I am.
- Overall, adults at my school treat students fairly.
- Adults at my school listen to the students.
- The school rules are fair.
- At my school, teachers care about students.
- Most teachers at my school are interested in me as a person.

Findings

Fatalities

Olmsted County Residents

The 2017 - 2022 fatality data in this section is from death certificate data; 2017-2021 can be considered final, while 2022 is still preliminary. Fatalities that were determined to be suicide were not included in this report. All cases included in the fatality data had an underlying cause of death ICD-10 code of drug overdose. Each drug type listed throughout the data was found within the contributing cause of death ICD-10 code. Specifics for the drug types are below:

- All Opioid (T40.0, T40.1, T40.2, T40.3, T40.4 and T40.6): which includes the two opioid categories below:
 - Synthetic opioids (T40.4): does not include methadone.
 - o Heroin (T40.1).
- Cocaine (T40.5).
- Psychostimulants (T43.6): methamphetamine, amphetamine, etc.
- Benzodiazepines (T42.4): sedative medication including Xanax, Valium, etc.

From 2017 - 2022, 136 Olmsted County residents died of drug overdose (excluding suicides). Of these 136 fatalities, 129 fatalities (94.9%) occurred in Olmsted County. Figure 1 shows the number of fatal overdoses each year as well as the breakdown of drugs that were listed as contributing cause(s) of fatality. Categories are not mutually exclusive; thus a single fatality may have multiple drugs of cause. In Figure 1, "None of these listed" includes those who died of an overdose, but the drug of cause did not fall into any of these categories listed. Number of fatal overdoses remained steady each year between 2017-2019, but then began to increase each year from 2020-2022.

In 2021, there were 17.1 fatal overdoses per 100,000 population in Olmsted County, this was lower than the 2021 Minnesota rate of 21.1/100,000 population. However, the Olmsted County rate increased to 26.2/100,000 population in 2022. Of the 43 preliminary fatalities in 2022, 65.1% involved opioids and 40% involved psychostimulants. Between 2017 - 2022, of the 136 fatalities, 56 fatalities (39.5%) had multiple of the drug categories listed in Figure 1. Of the 56 with multiple of the drug categories listed, 53 were a combination of any opioid with any of the other three drug categories.

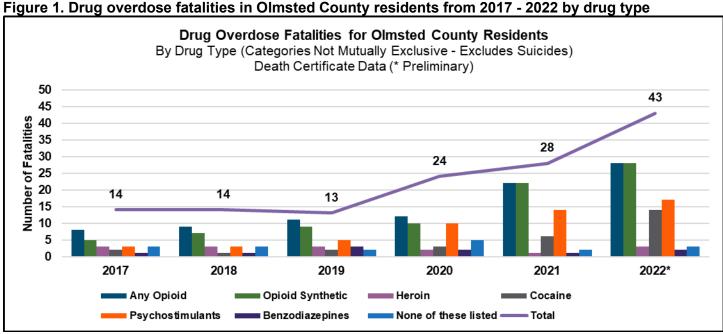


Figure 2 includes a demographic breakdown of any drug fatalities from 2017 - 2022. Overall, there are disparities in those who are Black and those who are male. Black residents made up 24.0% of drug fatalities in the six-year span when only 7.5% of Olmsted County's overall population is Black. In addition, 68.0% of overdose fatalities were male, when 49.0% of the Olmsted County overall population is male. In 2022 specifically, 32.6% of overdose fatalities were Black and 72.1% were male, higher than previous years. In addition, in 2022, there was a slight decrease in 25-34 age range (16.3% of 2022 fatalities) and an increase in

the 65-74 age group (14.0% of 2022 fatalities) compared to the overall 2017 - 2022 seen below in Figure 2.

Drug Overdose Fatalities for Olmsted County Residents 2017-2022 Combined by Demographics (Excludes Suicides) Death Certificate Data (2022 Preliminary) 99.0% 100% 73.0% % of Fatalities 80% 68.0% 60% 32.0% 40% 24.0% 22.0% 23.3% 18.0% 15.0% 20% 10.0% 7.0% 4.0% 2.3% 2.3% 1.0% 0% Male 25-34 65-74 75-84 Black Non-Hispanic 35-44 45-54 55-64 White Hispanic 15-24 Other/Unknown Female 85+ Ethnicity Age Race Sex

Figure 2. Drug overdose fatalities 2017 - 2022 by demographics

When looking at the 2017 - 2022 demographics in Figure 3 for both any opioid and psychostimulant fatalities (the two highest fatal drug categories), both had a similar age breakdown as overall fatalities. The majority of fatalities for any opioids and for psychostimulants were still both in white and male populations. However, when comparing the two drugs, among the Black population and female population, opioid related deaths saw higher rates compared to psychostimulants, whereas psychostimulants saw higher rates in the white population and the male population compared to opioid related deaths.

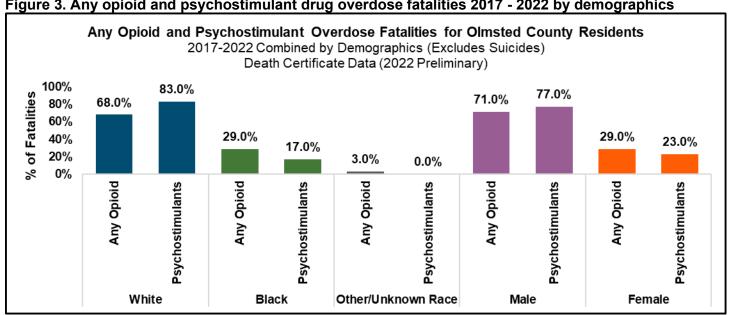


Figure 3. Any opioid and psychostimulant drug overdose fatalities 2017 - 2022 by demographics

Olmsted County Location

In addition to the previous data showing drug overdose fatalities for residents of Olmsted County, the following data shows any drug overdose fatalities that occurred in Olmsted County through 2022, regardless of residential status. Analyzing fatalities this way shows more about the drug activity found within the county. From 2017 - 2022, there were 192 drug overdose fatalities that occurred in Olmsted County. As seen in Figure 4, there was an increase in psychostimulant fatalities in 2022. While opioid fatalities saw an increase in 2021, they remained stable in 2022, but were still the highest source of drug overdose.

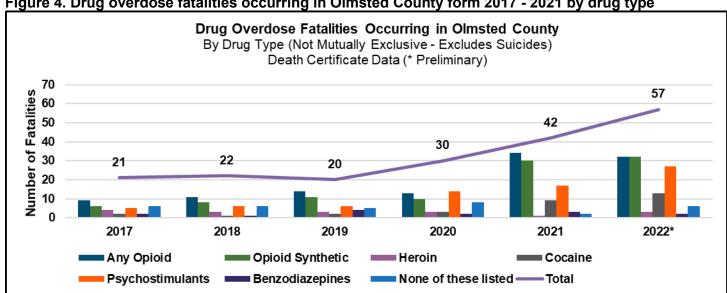


Figure 4. Drug overdose fatalities occurring in Olmsted County form 2017 - 2021 by drug type

Of the 192 fatalities occurring in Olmsted County, 63 (33%) were not Olmsted County residents, and of these, 20 lived out of state while 43 were Minnesota residents. Figure 5 shows the annual breakdown of fatalities that occurred in Olmsted County by residential location. In 2021, there was an increase in those who died in Olmsted County who were not residents, which remained stable in 2022.

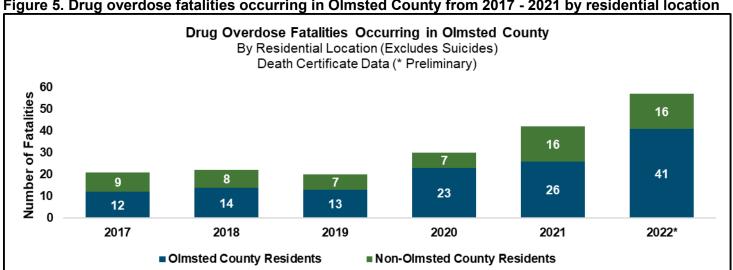


Figure 5. Drug overdose fatalities occurring in Olmsted County from 2017 - 2021 by residential location

As seen in Figure 6, the drug with the greatest increase in 2021 for non-Olmsted County residents was any opioid. However, in 2022, opioid fatalities among non-Olmsted County residents decreased and psychostimulant fatalities greatly increased.

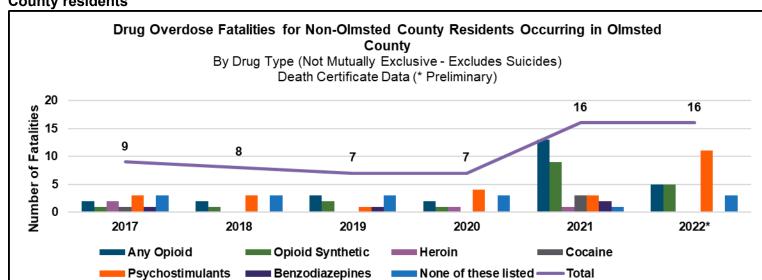


Figure 6. Drug overdose fatalities occurring in Olmsted County from 2017 - 2021 for non-Olmsted County residents

Between 2017-2021, 87% of fatal overdoses in Olmsted County for non-Olmsted County residents were white, 13% were Black, 55% were male and 45% were female. These are higher percentages for white and female compared to the demographic breakdown of fatal overdoses for Olmsted County residents where 74% were white and 32% were female. The most common age range for non-Olmsted County resident overdose fatalities was 25-34 year-olds (26%), followed by 55-64 year-olds (19%), 35-45 year-olds (17%), and 45-54 year-olds (15%), fairly similar to Olmsted County resident overdose fatalities.

Non-Fatal Overdoses

The data in this section includes non-fatal overdose emergency department visits and inpatient visits for Olmsted County residents at any hospital in Minnesota or North Dakota. If a patient went to the emergency department and then was later hospitalized, this visit would represent one non-fatal hospital visit for drug overdose. The drug type is often self-reported by the patient, not necessarily confirmed with a toxicology test, so the drug category-specific findings should be interpreted with caution. Intentional non-fatal overdoses (self-harm) were excluded from this data. Those who overdosed and did not visit the hospital are not included in this data. The Q4 (October-December) data found within 2022 is considered preliminary data and could be subject to slight variation.

Figure 7 shows the breakdown of drug overdose related hospital visits each year and the substances that were suspected to be involved. The "Any Opioid" category includes heroin, synthetic opioid, and other opioid, and narcotics. The "Any Stimulant" category includes cocaine, amphetamines, methylphenidate, ecstasy, other psychostimulants, and unspecified stimulants. Please note, the majority of hospital visits for non-fatal drug overdoses did not specify the specific drug(s) used.

In 2022, there were 240 drug overdose hospital visits in the provisional data for Olmsted County residents (a rate of 1.5 per 1,000 residents) which was a decrease from 2021 where there were 285 non-fatal drug overdose hospital visits in Olmsted County residents (a rate of 1.7 per 1,000 residents). This 2021 Olmsted County rate was slightly lower than the rate for Minnesota non-fatal drug overdose hospital visits in 2021, which was 2.0 per 1,000 population.

In 2022, use of any opioids made up 37% of drug overdose hospital visits followed by use of any stimulants, which made up 11% of visits. From 2021 to 2022, visits with reported use of heroin decreased (from 39 in 2021 to 19 in 2022), but use of opioid excluding heroin slightly increased (from 68 in 2021 to 70 in 2022).

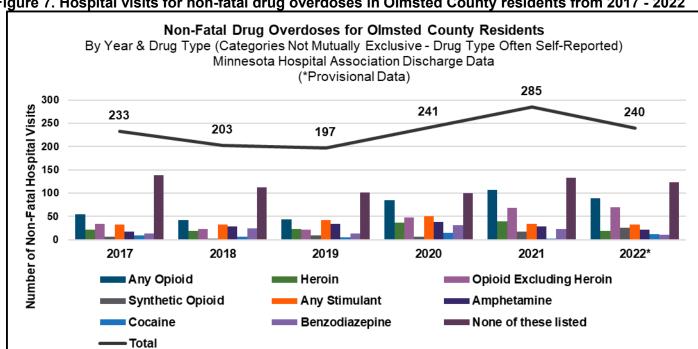


Figure 7. Hospital visits for non-fatal drug overdoses in Olmsted County residents from 2017 - 2022

Figure 8 includes a demographic breakdown of all non-fatal drug overdose hospital visits from 2017 - 2022. Similar to fatal overdoses, there are disparities in those who are Black and those who are male. Black residents made up 18.2% of non-fatal drug overdose visits in the six-year span and males made up 59.6% of non-fatal drug overdoses, each percentage higher than the percentage of that demographic group in the overall population. In 2022 specifically, 18.5% of non-fatal drug overdose hospital visits were Black, a slight drop from 20.1% in 2021, and 9.1% were Hispanic, higher than any of the five previous years. In addition, 57.9% of 2022 non-fatal drug overdose hospital visits were male, a slight drop from 60.7% in 2021. In 2022, there was a slight increase in the percentage of visits among those 25-34 years old (27.5% of visits). It is important to note that of the 9.6% of visits for 0-14 year-olds, 92% did not have a drug type listed. Of those that did, it was a mixture of any stimulants, any opioid, and benzodiazepine.

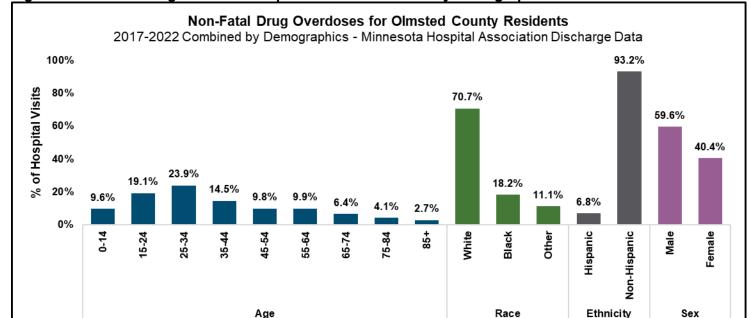


Figure 8. Non-fatal drug overdose hospital visits 2017 - 2022 by demographics

Drug Use

Use, Abuse, and Dependence

The data in this section includes emergency department visits and inpatient visits that had a diagnosis code related to drug use, drug abuse, and/or drug dependence for Olmsted County residents at any hospital in Minnesota or North Dakota. The presence of these codes does not necessarily indicate that the visit was exclusively related to drug use. This data is per visit, meaning one patient could show up multiple times in the dataset. The Q4 (October-December) data found within 2022 is considered provisional data and could be subject to slight variation.

Figure 9 shows the rate of diagnosis codes for drug use in Olmsted County residents and the rate of diagnosis codes for drug misuse in Olmsted County residents. Drug use includes any disorder diagnosis codes for use, abuse, and dependence for the following drug categories:

- Opioid.
- Cannabis.
- Sedatives.
- Cocaine.
- Other stimulants.
- Hallucinogens.
- Inhalants.
- Other psychoactive substances.

Drug misuse shows the severity of the use by only including diagnosis codes for drug abuse and dependence.

There was a drop in both drug use and misuse in 2019 and 2020, possibly related to a decrease in visits during the COVID-19 pandemic. Drug use rebounded to 14.4 per 1,000 population in 2022 (similar to the 14.3 per 1,000 rate in 2017), but drug misuse remained low in 2022 at 7.7 per 1,000 population.

Hospital Visits With Any Drug Use or Any Drug Misuse Diagnosis Codes For Olmsted County Residents By Year Minnesota Hospital Association Discharge Data (*Provisional Data) 16 14.3 14.4 Rate Per 1,000 Population 14 10.9 10.8 12 9.1 8.6 10 11.7 8 8.6 7.6 7.7 7.2 6.7 2 0 2017 2018 2019 2020 2021 2022* -Any Drug Use -Any Drug Misuse (Abuse or Dependence)

Figure 9. Rate of drug use and misuse diagnosis codes in Olmsted County residents

Figure 10 shows the breakdown for drug use by drug type. It appears the drop in the overall drug use in 2019 and 2020, and the increase in 2022 (shown above in Figure 9) was likely due to the change in the rate of cannabis use diagnoses, as the other five drug types have remained relatively stable since 2017. In 2022, the most common drug use diagnosis was cannabis followed by stimulants, and then opioids, most of which dropped slightly in 2019 and 2020 and are now similar to the pre-pandemic rates in 2017. Hallucinogens and inhalants were not included in Figure 10 or 11 due to having use rates lower than 0.2 per 1,000 population each year.

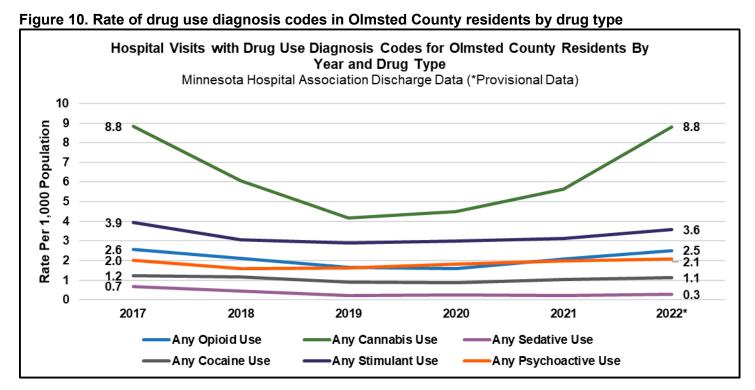


Figure 11 on the other hand, shows the breakdown of drug misuse by drug type. Rates of cannabis misuse decreased in 2018 and 2019 and have remained lower since then, unlike cannabis use, as seen above in Figure 10. Similar to drug use, all other drugs for drug misuse rates besides cannabis decreased slightly in 2019 and 2020 and then crept back up in 2022 to be similar to the 2017 rates.

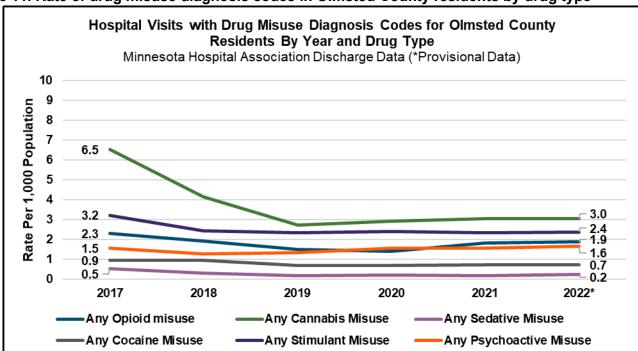


Figure 11. Rate of drug misuse diagnosis codes in Olmsted County residents by drug type

The demographic comparisons among residents with any drug misuse shows disparities in both the Black and male populations, matching the trends seen in other drug data. Additionally, the largest proportion of incidents occurred among 25-34-year-olds, also similar to trends in other data. Other races besides Black and white made up a small proportion of visits and thus were not included in Figure 12. Black residents made up 17.0% of drug misuse diagnoses in the six-year span, and males made up 59.2% of drug misuse diagnoses, both higher than the percentages of those groups in the overall population. In 2022 specifically, 16.9% of drug misuse diagnoses were Black, 54.4% were male, and 6.0% were Hispanic. The most common age group continued to be 25-34-year-olds (24.2% in 2022).

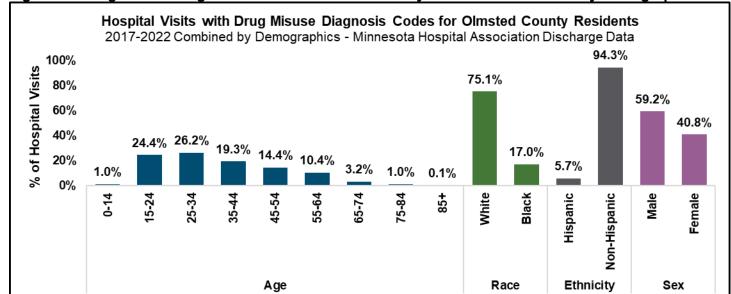


Figure 12. Drug misuse diagnosis codes in Olmsted County residents 2017 - 2022 by demographics

Self-Reported Adolescent Drug Use

The Minnesota Student Survey asks students in grades 8, 9, and 11 about use of the following drugs:

- Marijuana.
- Stimulants such as amphetamines (bennies, speed, uppers).
- Inhalants (sniffing glue, huffed, inhaled aerosol spray cans, or other gases to get high).
- Psychedelics (LSD, PCP, mushrooms).
- MDMA (ecstasy, Molly), GHP (G, Liquid E, Liquid X, roofies), Ketamine (Special K).
- Cocaine.
- Heroin.
- Methamphetamine.
- Over-the-counter drugs such as cough syrup, cold medicine or diet pills used to get high.
- Synthetic marijuana.
- Other synthetic drugs such as bath salts.
- Prescription drug abuse (stimulants, ADHD or ADD drugs, pain relievers, tranquilizers).

From 2016 to 2019, Olmsted County saw a significant increase in students (grades 8, 9, and 11 combined) who reported using any of these drugs in the past 12 months (12.5% in 2016 to 16.6% in 2019). However, the percentage dropped significantly in 2022 to 13.2% of students. Olmsted County was also significantly lower than Minnesota in 2022 and 2016, as shown in Figure 13. Fifth graders were asked a slightly modified question about drug use. In 2022, 3.0% of fifth grade students reported using marijuana, inhalants, or prescription drugs in the past 12 months, which was similar to previous years (3.8% in 2019 and 2.9% in 2016). National comparisons are found in the next section on specific drugs.

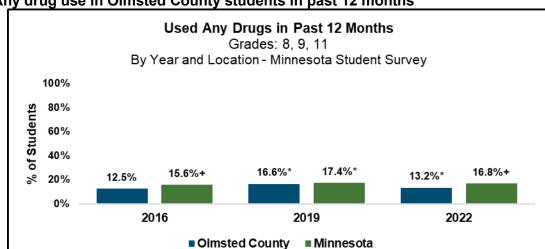
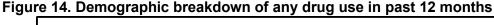
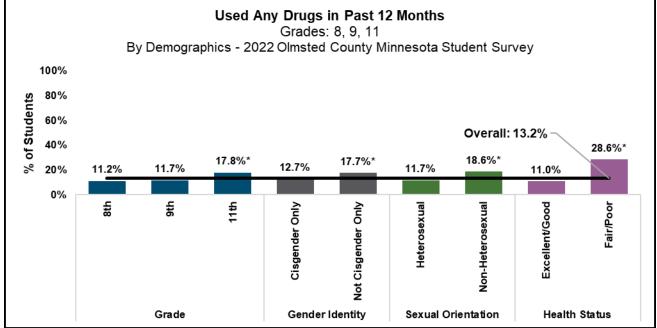


Figure 13. Any drug use in Olmsted County students in past 12 months

When analyzing any drug use against demographics, there were four statistically significant disparities, as seen in Figure 14. In 2022, 28.6% of those who considered themselves to be in fair or poor health reported using any drugs in the past 12 months, which was significantly greater than 11.0% for those in good or excellent health. Other significant disparities included grade, gender identify, and sexual orientation.





^{*} Statistically significant difference from other groups in demographic category

^{*} Statistically significant difference from previous year for same location

⁺ Statistically significant difference from other location for same year

Table 1 shows additional analysis between any drug use and other social determinants of health. Each social determinant of health listed below is a significant difference and can be interpreted as: "of those who reported ever using a phone while driving, 22.2% reported having used any drugs in the past 12 months compared to of those who did not report using a phone while driving, 13.1% reported having used any drugs in the past 12 months". Of this list, the social determinants of health with the highest odds ratios, signaling a strong relationship to drug use, were:

- Tobacco use.
- Binge drinking.
- Negative behaviors.
- Relationship violence.
- Skipped meal in past 30 days because family did not have enough money to buy food.
- Incarcerated guardian.

Another important finding to note is the significant increase in drug use for each additional number of ACEs.

Table 1. Percentage of students who used any drugs in the past 12 months (all differences in the table are statistically significant)

c statistically significantly					
	No	Yes			
Ever used phone while driving	13.1%	22.2%			
Always wear a seatbelt when in vehicle	21.5%	11.3%			
Missed any school in past 30 days	7.5%	14.9%			
Positive school environment	16.1%	6.3%			
Feels safe at school	23.6%	11.7%			
Feels safe at home	32.1%	12.3%			
Bullied in the last 30 days	8.1%	19.5%			
Dentist visit within past year	16.9%	12.4%			
Have a physical disability	11.9%	20.3%			
Treated for mental health problems	9.3%	24.5%			
Skipped meal in past 30 days	12.6%	37.1%			
Adequate hours of sleep on school night	16.4%	7.8%			
Have an adult they can talk to	19.9%	12.2%			
Experienced emotional distress in past two weeks	6.5%	15.1%			
Experienced relationship violence	9.7%	32.7%			
Ever had an incarcerated guardian	10.2%	31.0%			
Gambled in past 12 months	10.3%	20.0%			
Used any tobacco products in past 30 days	8.4%	69.4%			
Have binge drank in past 12 months	11.1%	72.9%			
Negative behaviors in past 12 months	7.5%	30.5%			
	None	1	2	3	4 or >
Number of Adverse Child Experiences (ACEs)	6.5%	12.4%	19.0%	31.7%	50.6%

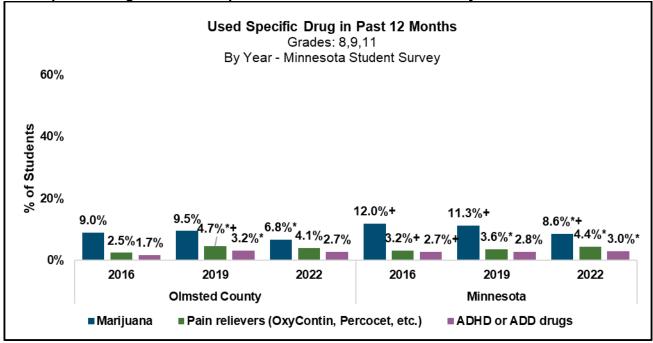
Most Common Drug Types

The most commonly reported drugs used by students in the last 12 months in 2022 were marijuana (6.8% of students), followed by abusing pain relievers (4.1%) and abusing ADHD or ADD drugs (2.7%). As seen in Figure 15, reported marijuana use significantly decreased from 2019 (9.5%) to 2022 while abusing pain relievers and ADHD or ADD drugs remained similar to 2019 (4.7% pain relievers and 3.2% ADHD/ADD drugs). The top three drugs used in the last 12 months for Minnesota students in 2022 were the same as Olmsted County: marijuana (8.6%), pain relievers (4.4%), and ADHD or ADD drugs (3.0%).

For a 2021 national comparison, 15.8% of high school students in the United States reported using marijuana in the 30 days prior to the Youth Risk Behavior Surveillance System (YRBSS) survey, much higher than

Minnesota and Olmsted County. In addition, 6.0% of high school students in the United States reported using prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it in the 30 days prior to the YRBSS survey.

Figure 15. Specific drugs used in the past 12 months for Olmsted County and Minnesota students



^{*} Statistically significant difference from previous year for same location

Table 2 shows additional drugs used by Olmsted County students from most frequently used to least frequently use. Heroin, methamphetamine, and other synthetic drugs, such as bath salts, were all used by less than 1.0% of students, and therefore were not included in the table. Pain relievers, ADHD or ADD medication, tranquilizers, and stimulants are all prescription drugs, thus they are noted in the table as "abusing" since the survey question asked if the student has used any of the following prescription drugs without a doctor's prescription or differently than how a doctor told them to use it.

Table 2.Percentage of Olmsted County students who reported using each drug during the past 12 months

	2022
Marijuana	6.8%
Abusing prescription pain relievers (OxyContin, Percocet, etc.)	4.1%
Abusing prescription ADHD or ADD	2.7%
Over-the-counter drugs (cough syrup, cold medicine, etc. to get high)	2.0%
LSD, PCP, or other psychedelics	1.7%
Abusing prescription tranquilizers (Valium, Xanax, sedatives, etc.)	1.7%
Sniffed glue or huffed or inhaled contents of aerosol spray cans	1.3%
MDMA (ecstasy, Molly), GHB (Liquid E, Liquid X, roofies) or Ketamine	1.2%
Synthetic marijuana (K2, Gold)	1.2%
Abusing prescription stimulants such as amphetamines	1.1%
Crack, coke, or cocaine	1.0%

⁺ Statistically significant difference from other location for same year

When further analyzing the top three drugs used by Olmsted County students, disparities were present in all three. Figure 16 shows the statistically significant disparities among drug users of different demographic groups. Those in fair or poor health was a significant disparity across all three top drugs. Marijuana saw a significant increase in usage with each increase in grade; the highest usage amongst 11th graders (12.9%). However, abusing prescription pain relievers was the highest amongst 8th graders (5.1%).

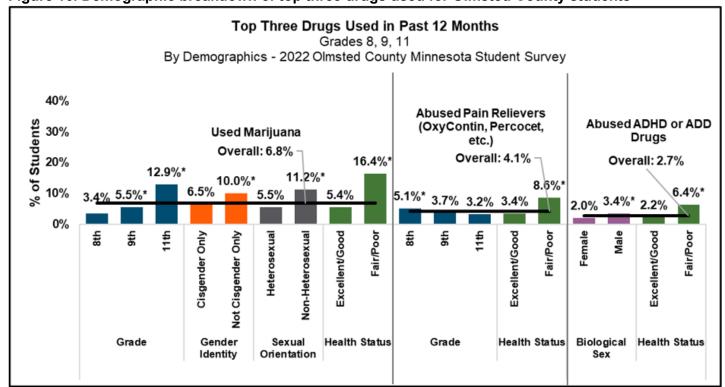


Figure 16. Demographic breakdown of top three drugs used for Olmsted County students

Table 3 shows additional analysis between the top three drugs used and other social determinants of health. Each social determinant of health listed below is a significant difference and can be interpreted as: "of those who reported ever using a phone while driving, 17.0% reported using marijuana in the past 12 months compared to of those who didn't report using a phone while driving, 7.6% reported using marijuana in the past 12 months". For all three drugs, the social determinants of health with the highest odds ratios, signaling a strong relationship, use of other substances: using tobacco in the past 30 days and binge drinking.

Besides other substance use, the social determinants of health with the highest odds ratio in relation to marijuana use were similar to any drug use:

- Negative behaviors.
- Relationship violence.
- Incarcerated guardian.
- Mental health treatment.

In addition, of the 6.8% of students who reported using marijuana in the past 12 months, 68.8% reported they have used a vaping device or e-cigarette with marijuana, THC or hash oil, or THC wax.

^{*}Statistically significant difference from other groups in demographic category

Besides other substance use, the social determinants of health with the highest odds ratios in relation to pain reliever abuse were:

- Relationship violence.
- Negative behaviors.
- Bullied in past 30 days.
- Don't feel safe at school.

The highest odds ratios in relation to ADHD and ADD abuse were similar to marijuana:

- Negative behaviors.
- Incarcerated guardian.
- Relationship violence.

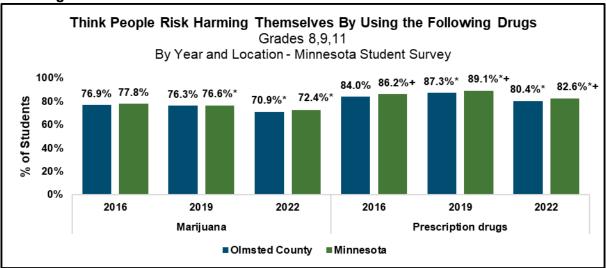
Table 3. Percentage of students who reported using marijuana, abusing pain relievers, or abusing ADHD or ADD drugs (all differences in the table are statistically significant)

ABITE OF ABE drags (all amoronoco in the table to			Abused		Abused ADHD	
	Used		Pain		or ADD	
	Marijuana		Relievers		Drugs	
	No	Yes	No	Yes	No	Yes
Ever used phone while driving	7.6%	17.0%				
Always wear a seatbelt when in vehicle	12.9%	5.4%			6.5%	1.7%
Missed school in past 30 days	3.0%	8.0%				
Positive school environment	8.6%	2.7%				
Feel safe at school	12.3%	6.0%	9.4%	3.3%	6.0%	2.2%
Feel safe at home	19.6%	6.2%				
Bullied in past 30 days	3.6%	10.7%	2.2%	6.5%	1.8%	3.7%
Involved in after school activities	10.6%	5.9%				
Dentist visit within past year	9.6%	6.2%	6.2%	3.6%		
Have a physical disability	6.1%	10.7%	3.6%	6.5%		
Ever treated for mental health problem	4.0%	14.8%	3.2%	6.5%	1.8%	5.4%
Physical activity meets recommendations (7 days/week)	7.3%	4.5%				
Skipped a meal in past 30 days	6.4%	21.9%				
Adequate hours of sleep on school nights	9.1%	2.9%				
Have an adult they can talk to	13.4%	5.9%	7.0%	3.6%		
Experienced relationship violence	4.1%	22.5%	3.0%	9.7%	1.9%	7.7%
Ever had an incarcerated guardian	4.7%	19.3%	3.3%	8.6%	1.8%	8.6%
Gambled in past 12 months	5.4%	10.3%	2.7%	7.3%	1.7%	5.3%
Used any tobacco products in past 30 days	2.6%	56.9%	3.1%	16.4%	1.7%	15.0%
Have binge drank in past 12 months	4.8%	69.4%	3.3%	29.6%	2.0%	25.9%
Negative behaviors in past 12 months	2.8%	19.2%	2.7%	8.4%	1.2%	7.5%
Number of Adverse Child Experiences (ACEs)	None	1	2	3	4 or >	
Used Marijuana	2.0%	6.6%	12.0%	18.9%	33.5%	

Perceived Severity

In 2022, 70.9% of Olmsted County students felt people risk harming themselves if they use marijuana, which was similar to Minnesota students, but was a significant decrease from 76.3% in 2019. The percentage of Olmsted County students who felt people risk harming themselves if they abuse prescription drugs also significantly decreased, going from 87.3% in 2019 to 80.4% in 2022. A significantly lower portion of Olmsted County students felt people risk harming themselves if they abuse prescription drugs than Minnesota students in 2022.

Figure 17. Percentage of students who think people risk harming themselves when using marijuana or prescription drugs



^{*} Statistically significant difference from previous year for same location

When further analyzing the perceived risk of harm when using drugs among Olmsted County students, disparities were present in both marijuana and prescription drugs. Figure 18 shows the statistically significant demographic disparities found within each drug. Males and students who are a race other than white showed significant differences across both drugs. In 2022, 65.6% of male students felt people risk harming themselves if they use marijuana, which was lower than the 76.1% of female students. In addition, 74.7% of students who are a race other than white felt people risk harming themselves if they abuse prescription drugs, which was lower than the 83.2% of white students.

⁺ Statistically significant difference from other location for same year

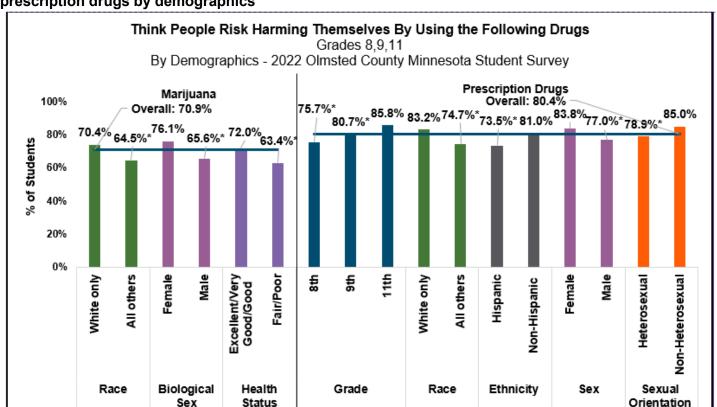


Figure 18. Percentage of students who think people risk harming themselves when using marijuana or prescription drugs by demographics

In 2022, 87.4% of students reported that they think their friends feel using marijuana would be at least a little bit wrong and 94.8% reported that they think their friends feel using prescription drugs not prescribed to them would be at least a little bit wrong, both significant increases from 2019 (83.8% marijuana and 92.8% prescription drugs).

Similar to 2016 and 2019, 93.3% of students in 2022 reported that they think their parents would feel it was at least a little bit wrong if they used marijuana and 95.0% of students reported that they think their parents would feel it was at least a little bit wrong if they used prescription drugs not prescribed to them.

In 2022, 53.1% of students reported that they think most students in their school have used marijuana. This was similar to Minnesota (54.8% of students) but was a significant decrease from 2019 (62.4% of students) and is greatly different than the percentage of students who actually reported using marijuana in the past 12 months (6.8% of students).

^{*} Statistically significant difference from other groups in demographic category

Self-Reported Adults

The Community Health Needs Assessment (CHNA) asks questions about use of the following drugs for adults:

- Marijuana.
- Pain relievers (Oxycodone, Vicodin).
- Tranquilizers (Xanax, Ativan, Valium, benzos).
- Stimulants (methamphetamine, Adderall, Ritalin, and speed).
- Cocaine or crack.
- Heroin.
- Fentanyl.
- Hallucinogens (Ecstasy, MDMA, PCP).
- Inhalants (Whip-its, glue, spray paint).
- Synthetics (K2, spice, bath salts).
- Other.

According to the 2021 CHNA, 16.9% of adults reported any drug use in the past 30 days. This was not a statistically significant difference from 2018. In 2021, the National Survey on Drug Use and Health (NSDUH) from Substance Abuse and Mental Health Services Administration (SAMHSA) reported that 14.6% of people 18 years and older in Minnesota and 15.0% of people 18 years and older in the United States reported using illicit drugs (marijuana, cocaine, heroin, hallucinogens, inhalants, methamphetamine, misuse of prescriptions, and opioids) in the past month.

When analyzing any drug use against demographics, there were seven statistically significant disparities, as seen in Figure 19. In 2021, 43.7% of those who are non-heterosexual reported using any drugs in the past 30 days, which was significantly greater than those who are heterosexual where only 14.9% reported using any drugs in the past 30 days. Sexual orientation had the highest odds ratio, followed by marital status and home ownership.

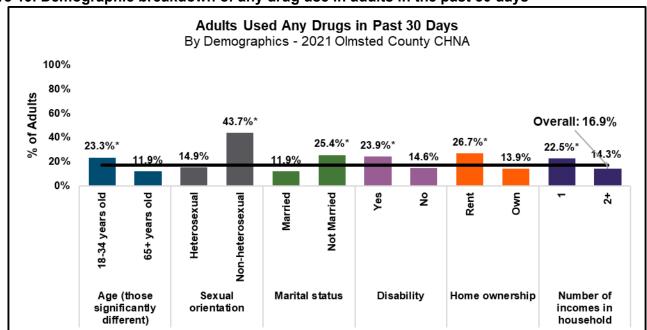


Figure 19. Demographic breakdown of any drug use in adults in the past 30 days

^{*} Statistically significant difference from other groups in demographic category

Table 4 shows additional analysis between any drug use and other social determinants of health. Each social determinant of health listed below has a significant difference and can be interpreted as: "of those who reported being financially stressed, 28.5% reported having used any drugs in the past 30 days compared of those who didn't report being financially stressed, 11.1% reported having used any drugs in the past 30 days". Of this list, the social determinants of health with the highest odds ratios, signaling a strong relationship, were:

- Tobacco use.
- Financial stress.

Table 4. Percentage of adults who used any drugs in the past 30 days (all differences in the table are statistically significant)

	No	Yes
Financially stressed	11.1%	28.5%
Have a mental health diagnosis	12.4%	25.7%
WHO-5 index 51 or above (positive well-being)	28.4%	13.9%
Used tobacco in past 30 days	14.2%	37.7%
Have timely personal health services (access to care)	23.6%	13.5%
Feel included in the community (community inclusiveness)	23.8%	13.6%
Feel the community is resilient (community resiliency)	27.4%	15.2%
Can independently perform daily activities (independence)	34.6%	15.8%

Most Common Drug Types

The most commonly used drugs reported by adults in 2021 were pain relievers (8.9%), marijuana (8.5%), and tranquilizers or sedatives (0.6%); none of which were a significant difference from 2018. Marijuana and pain relievers were also in the top two drugs reported by adolescents in 2022 (marijuana: 6.8% and pain relievers: 4.1%). Table 5 shows additional drugs used by Olmsted County adults in order from most frequently used to least frequently used.

For a 2021 state and national comparison, the most common illicit drug used in the past month by adults 18 years or older reported by the National Survey on Drug Use and Health was marijuana (13.6% for Minnesota and 13.7% for the United States). A further breakdown is given for the United States data. When looking at just 18-24-year-olds in the United States, 24.1% reported using marijuana in the past month, compared to 12.2% of those 26 years or older. The next most common reported drugs used in the past month by adults 18 years or older in the United States was misuse of prescription psychotherapeutics (1.6%) and central nervous system stimulants (1.6%).

Table 5. Percentage of Olmsted County adults who reported using each drug during the past 30 days

	2021
Pain relievers (Oxycodone, Vicodin, Acetaminophen with Codeine, etc.)	8.9%
Marijuana (including using via e-cigarette cartridge, smoking, hashish, wax, edibles, etc.)	8.5%
Other	1.1%
Tranquilizers or sedatives (Xanax, Ativan, Valium, benzos, etc.)	0.6%
Stimulants (methamphetamine or other amphetamines, Adderall, Ritalin, and speed)	0.3%

When further analyzing the top two reported drugs used by Olmsted County adults, disparities were present in marijuana use. Figure 20 shows the four statistically significant demographic disparities found. In 2021, 39.1% of those who identified as non-heterosexual reported using marijuana in the past 30 days, compared to only 6.6% of those who identify as heterosexual reported using marijuana in the past 30 days.

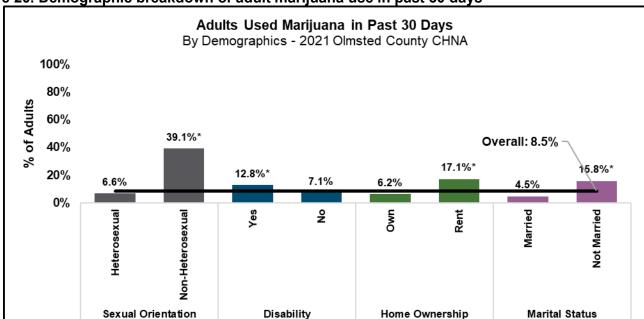


Figure 20. Demographic breakdown of adult marijuana use in past 30 days

Table 6 shows additional analysis between marijuana use and other social determinants of health. Each social determinant of health listed below is a significant difference and can be interpreted as: "of those who reported being financially stressed, 16.2% reported having used marijuana in the past 30 days compared to of those who did not report being financially stressed, 4.6% reported using marijuana in the past 30 days". Of this list, the social determinants of health with the highest odds ratios, signaling a strong relationship, were:

- Tobacco use.
- Financial stress.

Table 6. Percentage of adults who used marijuana in the past 30 days (all differences in the table are statistically significant)

	No	Yes
Financially stressed	4.6%	16.2%
Have a mental health diagnosis	5.5%	14.6%
WHO-5 index 51 or above (positive well-being)	15.2%	6.8%
Used tobacco in past 30 days	6.0%	26.6%
Has timely personal health services (access to care)	15.9%	5.2%
Feel included in the community (community inclusiveness)	14.7%	5.7%
Feel the community is resilient (community resiliency)	17.2%	7.3%
Feel socially connected (social connectedness)	12.5%	6.5%

When analyzing pain relievers against the demographics and social determinants of health, the only statistically significant relationship was with those overweight or obese. Of those overweight or obese, 11.4% used pain relievers compared to 5.6% of those who were not overweight or obese.

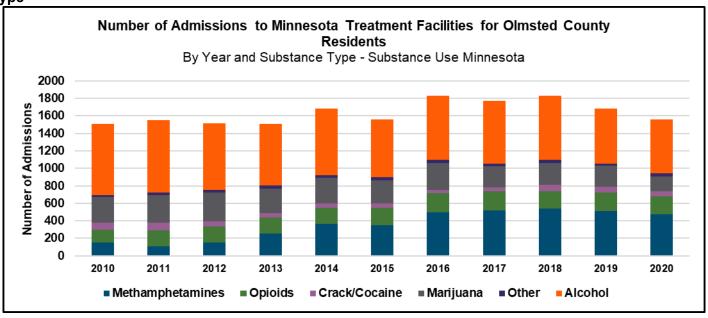
Treatment

In 2022, 1.8% of Olmsted County students in the Minnesota Student Survey reported ever being treated for an alcohol or drug problem, similar to the number of students who reported ever being treated for an alcohol or drug problem in 2019 and 2016.

^{*} Statistically significant difference from other groups in demographic category

Figure 21 shows the number of admissions to treatment facilities by substance type between 2010-2020 for all ages of Olmsted County residents. Alcohol remains the highest number of treatment admissions followed by methamphetamines. In 2020, there were 616 admissions for alcohol, 471 admissions for methamphetamines, and 209 admissions for opioids. The number of treatment admissions for methamphetamines in Olmsted County residents has stayed relatively stable since 2016 and the number of treatment admissions for opioids in Olmsted County residents has stayed relatively stable since 2011, even with the increases in drug overdose fatalities and non-fatal opioid overdose related hospital visits.

Figure 21. Admissions to Minnesota treatment facilities for Olmsted County residents by substance type



Opioid Prescriptions Dispensed

According to the Minnesota Board of Pharmacy Prescription Monitoring Program, there were 284.1 opioid prescriptions prescribed by providers in 2021 per 1,000 Olmsted County residents. As seen in Figure 22, after seeing a steady decrease in opioid prescriptions prescribed each year from 2016 (421.2 per 1,000 population) to 2020 (279.7 per 1,000 population), there was a slight increase in the rate from 2020 to 2021 (284.1 per 1,000 population).

This is a similar pattern seen in the 11-county southeast Minnesota region:

- 542.7/1,000 in 2016.
- 339.0/1.000 in 2020.
- 338.8/1,000 in 2021.

It is also a similar pattern seen in the state of Minnesota:

- 615.6/1,000 in 2016.
- 397.7/1,000 in 2020.
- 386.9/1,000 in 2021.

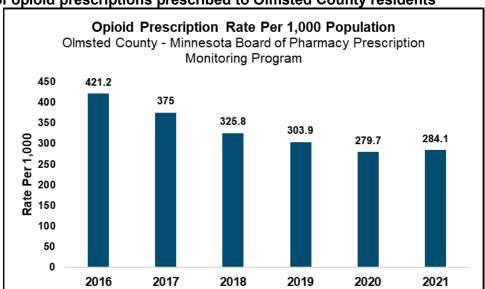


Figure 22. Rate of opioid prescriptions prescribed to Olmsted County residents

Law Enforcement Data

According to the Minnesota Bureau of Criminal Apprehension data, the number of drug related arrests in Olmsted County increased from 369 in 2021 to 423 in 2022. The most commonly involved drugs during these two years were cannabinoids (marijuana) and psychostimulants (methamphetamines), both of which saw an increase from 2021 to 2022. In 2022, 44.4% of drug related arrests involved cannabinoids and 44% involved psychostimulants while only 13% involved narcotics (arrests may involve more than one drug).

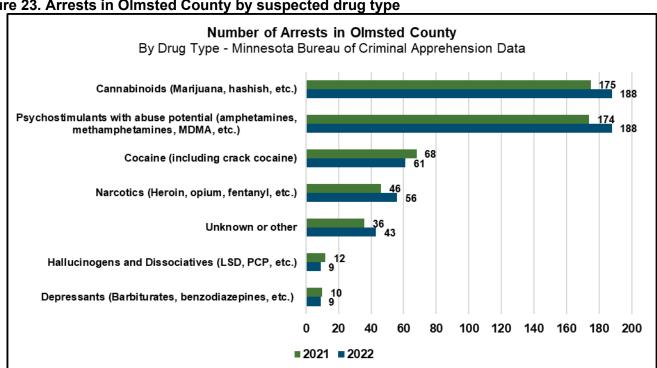


Figure 23. Arrests in Olmsted County by suspected drug type

As shown in Figure 24, the majority of drug related arrests that occur in Olmsted County are for possessing or concealing. This increased from 262 arrests in 2021 to 325 arrests in 2022.

Number of Arrests in Olmsted County By Criminal Activity - Minnesota Bureau of Criminal Apprehension Data 262 Possessing/Concealing 325 103 Using/Consuming Distributing/Selling Transporting/Transmitting/Importing Buying/Receiving Operating/Promoting/Assisting Cultivating/Manufacturing/Publishing 0 50 100 250 300 350 150 200 Number of Arrests ■ 2021 ■ 2022

Figure 24. Drug related arrests in Olmsted County by arrest type

When looking into the demographics of 2022 drug related arrests in Figure 25, there appears to be a similar breakdown in patterns to those seen previously in this report for drug fatalities and non-fatal overdoses with disparities in the Black and male populations. The demographic breakdown in 2022 arrests was similar to the 2021 arrests, except 2022 saw a slight decrease in ages 25-34 (39% in 2021 to 30% in 2022) and an increase in ages 55+ (7% in 2021 and 12% in 2022). The number of arrests involving Black residents increased from 20% in 2021 to 24% in 2022 while the number of arrests involving white residents decreased by 4% from 2021.

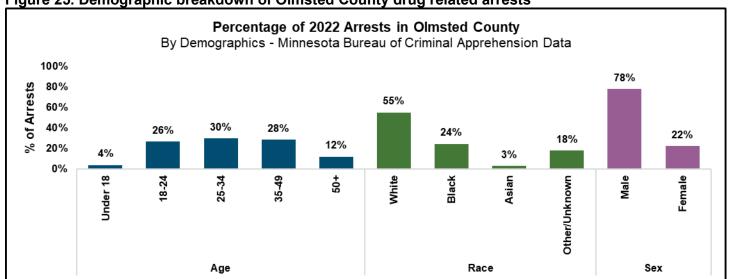


Figure 25. Demographic breakdown of Olmsted County drug related arrests

Connections With Other CHIP Priorities

The three Olmsted County Community Health Improvement Plan priorities for 2024-2026 are Mental Health, Access to Care, and Drug Use. This specific report outlines drug use which is inextricably linked with mental health and access to care as evidenced in the statistically significant indicator tables where frequently mental health and access to care were found to be negatively associated with drug use. For more detailed information on how drug use is linked with the other two priorities, please refer to the respective data profiles.

Conclusion

After reviewing drug data for Olmsted County, there are some key themes important to consider for strategy identification:

- Drug overdose fatalities have rapidly increased over the past three years from 13 in 2019 to 43 in 2022 (preliminary).
- Fatal and non-fatal drug overdoses in Olmsted County are being driven by opioids and psychostimulants, although the drug that appears to be most commonly used or abused in Olmsted County is cannabis.
- Two consistent disparities in drug fatal overdoses, non-fatal overdoses, and drug misuse discharge data in Olmsted County were the Black population and the male population.
 - Black and male were both disparities for MSS data around adolescents thinking people don't risk harming themselves by using marijuana or prescription drugs.

The following bullets recap key takeaways from each section of the profile:

Fatalities:

- Recent increases in both opioid and psychostimulant fatalities for Olmsted County <u>residents</u>.
- From 2017 2022 combined, 23.5% of Olmsted County resident fatalities were Black, however, when looking at 2022 alone, 32.6% of fatalities were Black (much higher than the 7.1% Black fatalities in 2021, but similar to the 33.3% Black fatalities in 2020).
- Recent increase in opioid fatalities for <u>non-residents</u> dying in Olmsted County. In 2021, there
 was an increase in opioid fatalities, but in 2022 the majority were psychostimulant fatalities.
- Non-fatal hospital visits:
 - Decrease in overall drug overdose visits from 2021 to 2022, however, this is provisional data and is subject to change slightly. 2022 was still similar or greater than 2017-2020.
- Drug use and misuse:
 - o From 2017 2022, cannabis has been the top drug for use and misuse diagnoses codes.
 - Next most commonly used drugs were stimulants and opioids, both of which have relatively stable use rates over the six-year span except for a slight dip during the pandemic years (2019 & 2020).

• Adolescent use:

- Any drug use significantly increased with age, specifically driven by marijuana use. The other disparities in any drug use among adolescents were: non-heterosexual, not cisgender only, and fair/poor health status.
- A significant decrease from 2019 to 2022 in the percentage of adolescents who feel people risk harming themselves when using marijuana (76.3% compared to 70.9% respectively) or prescription drugs (87.3% compared to 80.4% respectively).
- 53.1% reported that they think most students in their school have used marijuana, however only
 6.8% reported using it.

• Adult use:

- Three disparities with the highest odds ratios for any drug use were: non-heterosexual, not married, and home renters.
- Pain relievers were the most commonly abused drug reported for Olmsted County adults (8.9%) followed by marijuana (8.5%).
- A higher percentage of Olmsted County adults reported abusing pain relievers in the past 30 days (8.9%) compared to the United States (1.6%), however, this could be due to the different language used in the surveys (Olmsted County's data sources asked about pain relievers for non-medical purpose and the U.S data sources asked about prescription psychotherapeutics).

Treatment:

 Neither methamphetamine nor opioid treatment admissions increased in 2020, the year we started to see an increase in overdose fatalities.

Arrests:

- In 2021, there was an increase in arrests related to cannabinoids and psychostimulants. Of 2021 arrests, 44% involved cannabinoids and 44% involved psychostimulants while only 13% involved narcotics.
- The demographic breakdown of arrests appears to closely match the demographic breakdown of fatalities and non-fatal overdoses.

The tables below summarize the statistically significant disparities and social determinants of health described earlier in the report for survey data from the MSS and CHNA. Please note: Although Black and male disparities do not appear in these tables, it is important to remember that the surveys have self-reported drug use data and must be considered alongside the other data in this report.

2022 Minnesota Student Survey – Statistically Significant Drug Use Crosstabs

Olmsted County Public Health Services

Note: Numbers in parentheses note which groups had statistically significant difference with the group identified in the row.

For example, looking at the 4th row under "Grade": (8,9) indicates that there were statistically significant differences between those in 11th grade and both those in 8th grade (8) and those in 9th grade (9) for the factors in question.

		iii questioni	1	ı	1	1
- Fifth grade not asked ^ - Fifth and eighth grade not asked	Any Drug Use Past 12 Months	Marijuana Use in Past 12 Months*	Abused Pain Relievers in Past 12 Months*	Abused ADHD or ADD Drugs in Past 12 Months*	Don't Feel People Risk Harming Themselves with Marijuana Use*	Don't Feel People Risk Harming Themselves with Prescription Drug Use*
Grade						
5 th						
8 th			X (11)			X (9,11)
9 th		X (8)				X (11)
11 th	X (8,9)	X (8,9)				
Race						
White Only						
Non-white					X	X
Ethnicity						
Hispanic						X
Non-Hispanic						
Biological Sex						
Female						
Male				Х	X	X
Gender Identity*						
Cisgender Only						
Non-Cisgender	X	Х				
Sexual Orientation*						
Heterosexual						X
Non-Heterosexual	X	Х				
Health Status						
Excellent/Very Good/Good Health						
Fair/Poor Health	X	Х	Х	Х	X	
Ever used phone while driving						
No						
Yes	X	Х			Х	
Always wear a seatbelt when in			,			
vehicle						
No	X	Х		Х	Х	X
Yes						
Missed any school in past 30 days						
No						
Yes	X	Х			X	
L	•					

- Fifth grade not asked ^ - Fifth and eighth grade not asked	Any Drug Use Past 12 Months	Marijuana Use in Past 12 Months*	Abused Pain Relievers in Past 12 Months*	Abused ADHD or ADD Drugs in Past 12 Months*	Don't Feel People Risk Harming Themselves with Marijuana Use*	Don't Feel People Risk Harming Themselves with Prescription Drug Use*
Positive school environment						
No	X	X			X	
Yes						
Feel safe at school						
Disagree	X	X	X	X		
Agree						
Feel safe at home						
Disagree	X	X				
Agree						
Bullied in past 30 days						
No						
Yes	X	X	X	Χ		
Involved in after school activities						
No		X			X	
Yes						
Dentist visit within past year						
No	X	X	X		X	X
Yes						
Have a physical disability						
No						
Yes	X	X	X			
Treated for mental health problem						
No						X
Yes	X	X	X	X		
Meeting physical activity						
recommendation						•
No		X				
Yes						X
Skipped meal in past 30 days						
No						
Yes	X	X			X	
Meeting fruit and vegetable						
recommendation*		1	1		T	
No						
Yes Meeting sleep recommendation						
No	X				l v	
Yes		X			Х	X
Can talk to adult about problems						
No	X	X	X		X	
Yes		^	_ ^		^	
Experienced emotional distress in						
past two weeks*						
No			1			X
Yes	X					
Experienced relationship violence*			<u></u>		L	
No						
Yes	Х	Χ	Х	Х	X	
						<u> </u>

- Fifth grade not asked ^ - Fifth and eighth grade not asked	Any Drug Use Past 12 Months	Marijuana Use in Past 12 Months*	Abused Pain Relievers in Past 12 Months*	Abused ADHD or ADD Drugs in Past 12 Months	Don't Feel People Risk Harming Themselves with Marijuana Use*	Don't Feel People Risk Harming Themselves with Prescription Drug Use*
Ever had incarcerated guardian*					T	1
No						
Yes	X	X	Х	X	X	
Gambled in past 12 months*					T	I
No						
Yes	Х		X	Х	X	X
Used any tobacco products in past 30 days*						
No						
Yes	Х	X	Х	Χ	Х	
Binge drank in past 12 months*						
No						
Yes	Х	Х	Х	Χ	Х	
Negative behaviors in past 12 months*						
No						
Yes	Х	Х	Х	Χ	X	X
Used any drugs in past 12 months*						
No						
Yes					X	
Positive sexual health [^]						
No					Х	
Yes						
Body Mass Index (BMI)*						
Normal or underweight (1)						
Overweight (2)					X (1)	
Obese (3)					X (1)	
Adverse Childhood Experiences (ACEs)*						
0						X (1,2)
1	X (0)	X (0)				, , ,
2	X (0,1)	X (0,1)				
3	X (0,1,2)	X (0,1)				
4+	X (0,1,2,3)	X				
	7 (0, 1,2,0)	(0,1,2,3)				

2021 Community Health Needs Assessment – Statistically Significant Drug Use Crosstabs

Olmsted County Public Health Services

Note: Numbers in parentheses note which groups had statistically significant difference with the group identified in the row.

For example, looking at the first row under "Age": (4) indicates that there were statistically significant differences between those age 18-34 and those age 65+ (4) for the factors in question.

Adults Used Any Drugs Past 30 Days Adults Used Marijuana in Past 30 Days Pain Relivers in Past 30 Days				
18-34 (1)		Drugs Past 30	Marijuana in Past	Pain Relivers in
18-34 (1)	Age			
35-49 (2) 50-64 (3) 65+ (4) Race/Ethnicity White, Non-Hispanic All others Gender Male Female Children in household Yes No Birthplace U.S. Non-U.S. Marital status Married Not Married X X X Disability Yes X X X No Education No college Residence (Based on zip code) Rochester Non-Rochester Household income \$\$35K+\$ Health status Excellent/Very good/Good Fair/Poor Home ownership Own		X (4)		
S0-64 (3)		,		
Race/Ethnicity White, Non-Hispanic All others Gender				
Race/Ethnicity White, Non-Hispanic All others Gender				
White, Non-Hispanic All others Gender ————————————————————————————————————				
All others Gender Male Female Children in household Yes No Sirthplace U.S. Non-U.S. Non-U.S. Marital status Married Not Married X X X Disability Yes X X Shoolege Some college Some college Residence (Based on zip code) Rochester Household income <\$35K \$35K Health status Excellent/Very good/Good Fair/Poor Home ownership Own	White, Non-Hispanic			
Male Female Children in household Yes No Birthplace U.S. Non-U.S. Marital status Married Not Married No Solling Reducation No college Residence (Based on zip code)				
Female Children in household Yes No Birthplace U.S. Non-U.S. Marital status Married Not Married Not Married Not Married Not Married Not Married Not Married No South Married No South Married No College Some college Residence (Based on zip code) Rochester Non-Rochester Household income \$35K \$35K+	Gender			
Children in household Yes	Male			
Yes	Female			
No	Children in household			
Birthplace U.S. Non-U.S. Marital status Married Not Married Not Married Not Married X X X Disability Yes X X X No Education No college Some college Residence (Based on zip code) Rochester Non-Rochester Household income <\$35K	Yes			
U.S. Non-U.S. No	No			
Non-U.S. Marital status Married X X Not Married X X Pes X X No X X No college X X Some college X X Residence (Based on zip code) X X Residence (Based on zip code) X X Rochester X X Non-Rochester X X Household income X X <\$35K	Birthplace			
Married X X Not Married X X Disability X X Yes X X No Beducation Beducation No college College Some college College Residence (Based on zip code) College Rochester College Non-Rochester College Household income College \$35K College \$35K+ College Health status College Excellent/Very good/Good College Fair/Poor College Home ownership Cown	U.S.			
Married X X Disability X X Yes X X No Beducation Beducation No college College Some college College Residence (Based on zip code) College Rochester College Non-Rochester College Household income College \$35K College \$35K+ College Beach on zip code College Residence (Based on zip code) College Residence	Non-U.S.			
Not Married X X Disability X X Yes X X No Image: Control of the control	Marital status			
Disability X X No Beducation Beducation No college Some college Some college Residence (Based on zip code) Beducation Some college Rochester Rochester Some college Some college Rochester Some college Some college Some college Some college Rochester Some college Some college Some college Some college Some college Rochester Some college Some c	Married			
Yes X X No Education No college Some college Some college Residence (Based on zip code) Rochester Non-Rochester Household income	Not Married	X	X	
No Education No college Some college Residence (Based on zip code) Residence (Based on zip code) Rochester Image: Control of the control	Disability			
No college	Yes	X	X	
No college Some college Residence (Based on zip code) Some college Rochester Image: Comparison of the college of th	No			
Some college Residence (Based on zip code) Rochester Non-Rochester Household income	Education			
Residence (Based on zip code) Rochester Non-Rochester Household income <\$35K \$35K+ Health status Excellent/Very good/Good Fair/Poor Home ownership Own	No college			
Rochester Non-Rochester Household income <\$35K \$35K+ Health status Excellent/Very good/Good Fair/Poor Home ownership Own	Some college			
Non-Rochester Household income <\$35K	Residence (Based on zip code)			
Household income <\$35K \$35K+ Health status Excellent/Very good/Good Fair/Poor Home ownership Own	Rochester			
<\$35K				
\$35K+ Health status Excellent/Very good/Good Fair/Poor Home ownership Own	Household income			
Health status Excellent/Very good/Good Fair/Poor Home ownership Own				
Excellent/Very good/Good Fair/Poor Home ownership Own	\$35K+			
Fair/Poor				
Fair/Poor	Excellent/Very good/Good			
Own Own	Fair/Poor			
	Home ownership			
	Own			
Rent X X	Rent	X	Х	

	Adults Used Any Drugs Past 30 Days	Adults Used Marijuana in Past 30 Days	Adults Abused Pain Relivers in Past 30 Days
Work status			
Retired			
Not retired			
# of household income earners			
1	X		
2+			
Sexual orientation			
Heterosexual			
Non-heterosexual	X	X	
Financial stress		T	
Yes	X	X	
No			
Mental health	V		
Yes	X	X	
No			
WHO- 5 index 50 or below (low well-being)	V	V	
Yes No	X	X	
Tobacco use			
Yes	X	V	
No	^	X	
Binge drinking			
Yes			
No			
Drug use			
Yes			
No			
Access to Care			
Yes			
No	X	X	
Community inclusiveness	7.	,	
Yes			
No	Х	X	
Community mobility			
Yes			
No			
Community resiliency			
Yes			
No	X	X	
Diabetes			
Yes			
No			
Distracted driving			
Yes			
No			
Food secure			
Yes			
No			

	Adults Abused Pain Relivers in Past 30 Days	Adults Used Marijuana in Past 30 Days	Adults Abused Pain Relivers in Past 30 Days
Fruit and vegetable consumption			
Yes			
No			
Healthy homes			
Yes			
No			
Healthy homes – no radon			
Yes			
No			
Hypertension			
Yes			
No			
Insurance coverage			
Yes			
No			
Multiple chronic conditions			
Yes			
No			
Overweight/obesity			
Yes			X
No			
Physical activity			
Yes			
No			
Safe from fear and violence			
Yes			
No			
Seat belt use			
Yes			
No			
Senior independence			
Yes			
No			
Independence			
Yes			
No	X		
Social connectedness			
Yes			
No		X	