

DATA AND TREND ANALYSIS

# Tobacco, Alcohol and Substance Use



*Tobacco use is the single most preventable cause of disease, disability, and death in the United States, yet more deaths are caused each year by tobacco use than by all deaths from human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders combined. Substance abuse—involving drugs, alcohol, or both—is associated with a range of destructive social conditions, including family disruptions, financial problems, lost productivity, failure in school, domestic violence, child abuse and crime.*

# Alcohol Binge Drinking - Adults

## DESCRIPTION

The Centers for Disease Control and Prevention define binge drinking as a pattern of drinking that brings a person's blood alcohol concentration to 0.08 grams percent or above. This typically happens when men consume 5 or more drinks or women consume 4 or more drinks in about two hours. Binge drinking is the most common, expensive and fatal pattern of excessive alcohol use in the U.S., which costs about \$249 billion annually. Those costs come in the form of losses in productivity and missed work, health care expenses, alcohol-related crime and car crashes, as well as early mortality. Binge drinking can lead to many negative consequences that impact a person's mental, physical and emotional health. All these factors contribute to an adverse impact on the individual drinking and society in general.<sup>1</sup>

## HOW WE ARE DOING

In 2016 in Minnesota, 26.5 of males and 16.2 percent of females report binge drinking in the last 30 days.<sup>2</sup> Among Minnesota college students, 37.2 of males and 21.9 percent of females report binge drinking. Students who engaged in binge drinking reported an average of 19 negative consequences within the past 12 months as a result of drinking, compared to an average of 4.4 negative consequences for students who reported they did not engage in high risk drinking.<sup>3</sup> Among Ramsey County adults 25 years or older, about 72 percent of survey respondents reported drinking at least one alcoholic beverage in the 30 days prior to the survey. About 24.2 percent of men and 21.5 percent women reported binge drinking one or more times during the past 30 days.<sup>4</sup>

## BENCHMARK INDICATOR

Health People 2020: Reduce the proportion of persons engaging in binge drinking during the past 30 days—adults aged 18 years and older.

U.S. Target: 24.4 percent.<sup>5</sup>

## DISPARITIES

Disparities can be seen in relation to gender, age, education, income and race. National research shows that men generally binge drink at twice the frequency as women. Binge drinking prevalence and intensity are highest among 18-24 and 25-34 age groups. Respondents who did not graduate from high school had the lowest prevalence of binge drinking, but those who did binge drink had a higher frequency and intensity of drinking compared to respondents with higher educational levels. Respondents with household incomes >\$75,000 had the highest binge drinking prevalence, but binge drinkers with household incomes <\$25,000 reported a higher frequency and intensity of binge drinking. The prevalence of binge drinking among non-Hispanic whites was similar to the prevalence among Hispanics, but significantly higher than the prevalence for non-Hispanics from other racial and ethnic groups.<sup>6</sup>

## Information to note

- Among Minnesota college students, 37.2% of males and 21.9% of females report binge drinking.
- Among Ramsey County adults 25 or older, 24.2% of men and 21.5% women reported binge drinking one or more times during the past 30 days.

## Community voice

*"Bad choices, alcohol and drugs around unhealthy people."*  
- White Female, age 45-54

From the 146 alcohol mentions, 78% (114) stated that it kept them from being healthy.

<sup>1</sup> Alcohol and Public Health. Centers for Disease Control and Prevention. <https://www.cdc.gov/alcohol/data-stats.htm>. Accessed May 2018.

<sup>2</sup> BRFSS Prevalence & Trends Data. Centers for Disease Control and Prevention. <https://www.cdc.gov/brfss/brfssprevalence>. Accessed May 2018.

<sup>3</sup> College Student Health Survey Report 2015. [https://boynton.umn.edu/sites/boynton.umn.edu/files/2018-02/MNPPostsecondaryStudents\\_CSHSReport\\_2015.pdf](https://boynton.umn.edu/sites/boynton.umn.edu/files/2018-02/MNPPostsecondaryStudents_CSHSReport_2015.pdf). Published October 2015. Accessed May 2018.

<sup>4</sup> Metro SHAPE Adult Health Data Book: Ramsey County 2014. Ramsey County. [https://www.ramseycounty.us/sites/default/files/Open%20Government/Public%20Health%20Data/ramsey\\_county\\_metro\\_SHAPE\\_2014\\_survey.pdf](https://www.ramseycounty.us/sites/default/files/Open%20Government/Public%20Health%20Data/ramsey_county_metro_SHAPE_2014_survey.pdf). Accessed April 20, 2018.

<sup>5</sup> Healthy People 2020. <https://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse/objectives>. Accessed May 2018.

<sup>6</sup> Vital Signs: Binge Drinking Prevalence, Frequency, and Intensity Among Adults – United States 2010. Centers for Disease Control and Prevention. 2012. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6101a4.htm>. Published January 13, 2012. Accessed May 2018.

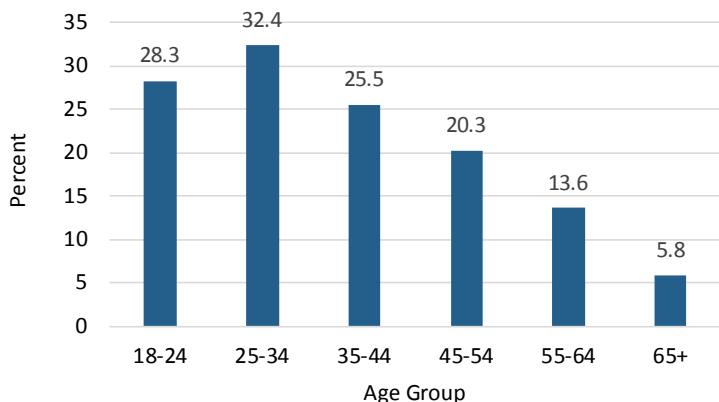
## RISK FACTORS

People binge drink for different reasons, but some factors include: coping with mental health issues, struggling to forget underlying problems; expressing resistance to social norms/rules; and trying to loosen inhibitions. Binge drinking can put a person at higher risk for a long list of health problems including injuries, violence, suicide, sexually transmitted diseases, alcohol poisoning, drowning, unintended pregnancy, fetal alcohol spectrum disorders, sudden infant death syndrome, cancer and other chronic diseases.<sup>7</sup>

## WHAT RAMSEY COUNTY GOVERNMENT IS DOING

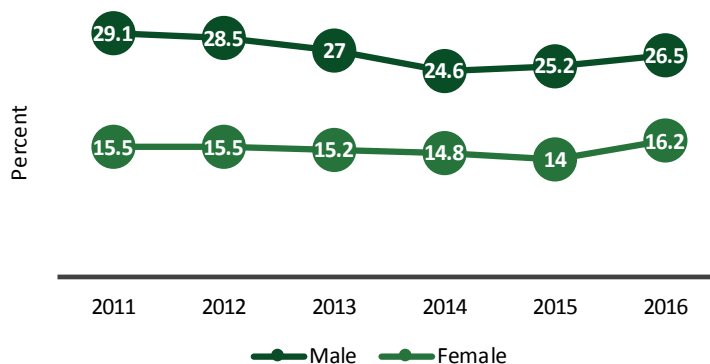
text Saint Paul – Ramsey County Public Health maintains a disease surveillance role, monitoring the rate of adult binge drinking in Ramsey County.

Binge Drinking among Adults within Last 30 Days, Minneapolis - St. Paul Metropolitan Statistical Area, 2017



Source: Centers for Disease Control and Prevention.<sup>7</sup>

Binge Drinking among Adults within Last 30 Days, Minneapolis - St. Paul Metropolitan Statistical Area



Source: Centers for Disease Control and Prevention.<sup>7</sup>

<sup>7</sup> BRFSS Prevalence & Trends Data. Centers for Disease Control and Prevention. <https://nccd.cdc.gov/brfss/brfssprevalence>. Accessed April 2019.

## DESCRIPTION

This indicator describes alcohol use among Ramsey County adolescents, including students who report any use and those who report binge drinking. People between the ages of 12 and 20 drink 11 percent of all alcohol consumed in the U.S.<sup>1</sup> Binge drinking for females is defined as drinking 4 or more alcoholic beverages at the same time or within a couple of hours of each other; 5 or more drinks for males.<sup>2</sup> Youth who drink are more likely to experience a host of problems including difficulties in school, legal issues, illness, unwanted, unplanned and unprotected sexual activity, suicide and homicide, car crashes, burns, falls and drowning, and changes in brain development that could be life-long.<sup>3,4,5,6</sup> Almost half of all teen suicides and more than half of adolescent deaths in Minnesota each year involve alcohol.<sup>7</sup>

## HOW WE ARE DOING

The use of alcohol, including binge drinking, among ninth-grade students in Ramsey County has been steadily declining. The Minnesota Student Survey defines binge drinking as 5 or more drinks within a couple of hours regardless of gender. In 2013, 7 percent of both male and female ninth-graders in Ramsey County reported binge drinking. In 2016, 3 percent of males and 4 percent of females said they binged on alcohol (5 or more drinks in a row) in the past 30 days. Overall, 8.7 percent of Ramsey County 9th graders responding in 2016 reported using alcohol one or more days in the 30 days prior to the survey.<sup>8</sup>

## BENCHMARK INDICATOR

Healthy People: Reduce the proportion of adolescents aged 12 to 17 years engaging in binge drinking during the past month.  
U.S. Target: 8.6 percent.

## DISPARITIES

In Ramsey County, a higher percentage of females report drinking in the past 30 days than male ninth-graders. Ramsey County students who identify as “white only” reported higher rates of alcohol use in the past 12 months than students of color.<sup>8</sup> Students who were bisexual, gay, lesbian or questioning their sexual orientation are more likely to drink than their heterosexual classmates.<sup>9</sup>

## RISK FACTORS

There are both individual and community risk factors that contribute to adolescent alcohol use. Evidence shows that traumatic brain injuries in youth can lead to alcohol abuse in later life.<sup>10</sup> Community influences such as laws, cultural norms, extreme economic deprivation

## Information to note

- Alcohol use among 9th-graders in Ramsey County has been steadily declining.
- When they drink, underage youth consume more per occasion on average than adults do.
- Alcohol is the most commonly used and abused substance among youth in the U.S.

<sup>1</sup> Drinking in America: Myths, Realities and Prevention Policy. U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention. 2005. <https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=232714>. Accessed August 2018.

<sup>2</sup> Substance Abuse. HealthyPeople.2020. [https://www.healthypeople.gov/node/5206/data\\_details](https://www.healthypeople.gov/node/5206/data_details). Accessed December 5, 2017.

<sup>3</sup> Miller JW, et al. Binge drinking and associated health risk behaviors among high school students. *Pediatrics*. 2007;119:76–85. doi:10.1542/peds.2006-1517.

<sup>4</sup> Bonnie RJ, O’Connell ME, eds. *Reducing Underage Drinking: A Collective Responsibility*. Committee on Developing a Strategy to Reduce and Prevent Underage Drinking. Washington, DC: The National Academies Press; 2004.

<sup>5</sup> U.S. Department of Health and Human Services, Office of the Surgeon General. *The Surgeon General’s Call to Action to Prevent and Reduce Underage Drinking: A Guide to Action for Communities*. Rockville, MD. NCBI. 2007.

<sup>6</sup> Fact Sheets – Underage Drinking. Centers for Disease Control and Prevention. <https://www.cdc.gov/alcohol/fact-sheets/underage-drinking.htm>. Accessed June 14, 2017.

<sup>7</sup> What’s the Big Deal? Underage Drinking in Minnesota. Minnesota Department of Public Safety. <https://dps.mn.gov/divisions/ots/educational-materials/Documents/Whats-Big-Deal-Brochure.pdf>. Accessed December 5, 2017.

<sup>8</sup> Minnesota Student Survey. Minnesota Department of Education Website. <http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=2>. Accessed May 15, 2018.

<sup>9</sup> 2017 Substance Abuse in Minnesota: A State Epidemiological Profile. Substance Use in Minnesota. [http://www.sumn.org/~media/510/2017\\_Minnesota\\_Epi\\_Profile.pdf](http://www.sumn.org/~media/510/2017_Minnesota_Epi_Profile.pdf). Accessed November 2, 2017.

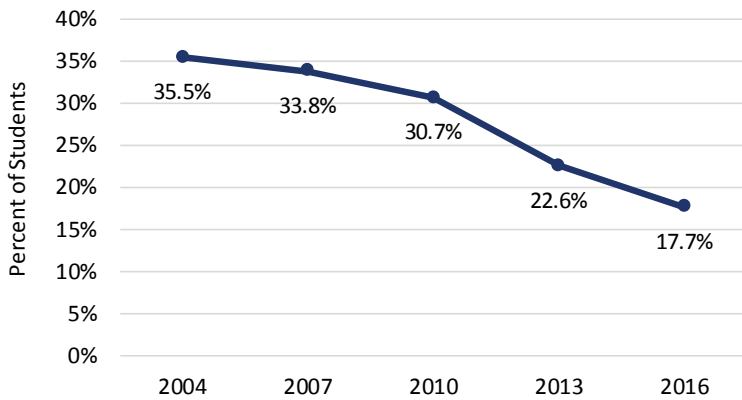
<sup>10</sup> Frontiers. Brain injury in kids might lead to alcohol abuse: Traumatic brain injuries in children and adolescents could lead to alcohol abuse in later life. *Science Daily*. 2017. <https://www.sciencedaily.com/releases/2017/08/170814121052.htm>. Published August 14, 2017. Accessed August 16, 2017.

and neighborhood disorganization can also contribute to use. Interventions in alcohol use are most successful when they focus on the community in general rather than solely on individuals.<sup>11</sup>

## WHAT RAMSEY COUNTY GOVERNMENT IS DOING

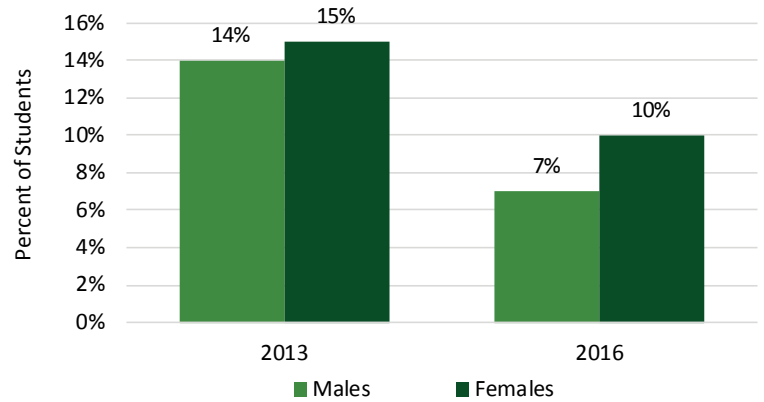
Juvenile Probation offers an on-line curriculum addressing alcohol use and marijuana to those youth on probation with substance use/abuse issues.

Alcohol Use in the Past 12 Months Among 9th-Graders, Ramsey County



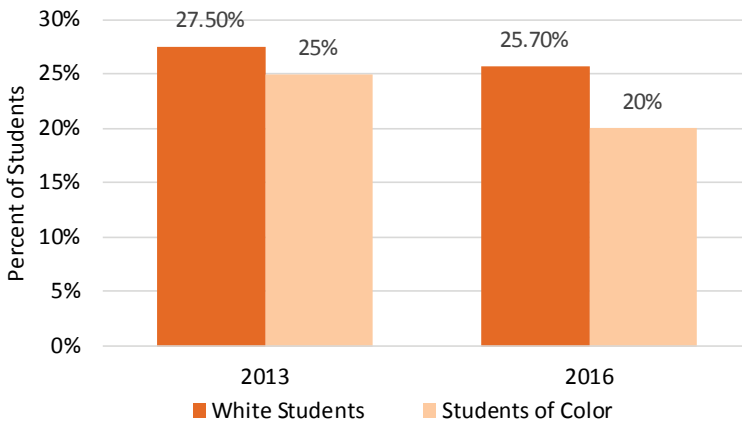
Source: Minnesota Student Survey.

Alcohol Use in the Past 30 Days Among 9th-Graders, Ramsey County



Source: Minnesota Student Survey.

Alcohol Use in the Past 12 Months, Ramsey County Students



Source: Minnesota Student Survey

<sup>11</sup> Hawkins JD, Catalano RF, Miller JY. Risk and Protective Factors for Alcohol and Other Drug Problems in Adolescence and Early Childhood: Implications for Substance Abuse Prevention. Psychol Bull. 1992;112 (1):64-105. <https://www.ncbi.nlm.nih.gov/pubmed/1529040>. Accessed August 2018.

# Drug Overdose Deaths

## DESCRIPTION

More than 72,000 Americans died from drug overdoses in 2017, including illicit drugs and prescription opioids—a twofold increase in a decade.<sup>1</sup> Deaths due to drug overdose can be accidental, intentional, or due to overdose of a specific drug/ multiple drugs. Despite the circumstances, deaths due to drug overdose are preventable and lead to personal, family and community suffering. The leading drug categories associated with deaths are opiate pain relievers, heroin, psychostimulants (e.g., methamphetamine), cocaine and benzodiazepines.<sup>2</sup> Preventing deaths from drug overdose requires efforts among individuals, professional providers, families, neighbors, friends and community to recognize overdose, manage addiction, contain the drugs and other interventions.<sup>1</sup>

## HOW WE ARE DOING

The number of drug overdose deaths are on the rise nationwide, with the sharpest increases related to fentanyl and fentanyl analogs (synthetic opioids).<sup>1</sup> In Minnesota, the number of deaths due to overdose have risen from 129 deaths in 2000 to 675 in 2016. During that same period, Ramsey County overdose deaths went from 14 in 2000 up to 89 in 2016. The age-adjusted overdose death rate for Ramsey County in 2016 was 17.8 per 100,000 which is higher than other metro counties' rates and Minnesota's rate of 12.3, none of which meet the Healthy People 2020 target of 11.3. Looking back over the past five years, the Ramsey County rate is not rising as quickly as some other metro counties. In 2016, most overdose deaths in Ramsey County were opioid-involved (34), followed by heroin-involved and psychostimulant-involved (each 13 deaths).<sup>2</sup>

## BENCHMARK INDICATOR

Healthy People 2020<sup>3</sup>: Reduce the number of drug-related deaths.  
U.S. Target: 11.3 per 100,000 population.

## DISPARITIES

Previously, adults ages 45 to 54, were the group experiencing the most drug overdose deaths in Minnesota, but since 2016, this has shifted to those 25 to 34 years.<sup>2</sup> The age-adjusted rate of death due to drug poisoning is more than four times greater among American Indian/Alaska Native residents than white residents, and two times greater among African-Americans relative to whites. These rate disparities are some of the highest in the nation.<sup>4</sup> Men have more deaths and higher mortality rates of drug overdose death compared to women. In 2016, men accounted for 67 percent of drug overdose deaths in Minnesota.<sup>2</sup>

## RISK FACTORS

Risk factors associated with drug overdose mortality include but are not limited to: history of drug abuse/ addiction; injection drug use, street drug use, drug mixing, prescription drug misuse, multiple medication use, and history of mental disorders.<sup>5,6</sup>

## WHAT RAMSEY COUNTY GOVERNMENT IS DOING

text

## Information to note

- The age-adjusted overdose death rate for Ramsey County in 2016 was higher than other metro counties' rates and Minnesota's rate.
- See Opioid Misuse and Death section of this document for additional information.

<sup>1</sup> Drug Overdose Death Rates. National Institute on Drug Abuse. <https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates>. Updated August 2018. Accessed August 2018.

<sup>2</sup> Drug Overdose Deaths among Minnesota Residents 2000-2016. Minnesota Department of Health. [http://www.health.state.mn.us/divs/healthimprovement/content/documents-opioid/2016DrugOverdoseDeathReport\\_Final.pdf](http://www.health.state.mn.us/divs/healthimprovement/content/documents-opioid/2016DrugOverdoseDeathReport_Final.pdf). Accessed August 2018.

<sup>3</sup> Substance Abuse. Healthy People 2020. <https://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse/objectives>. Accessed August 2018.

<sup>4</sup> Rudd RA, Aleshire N, Zibbell JE, Gladden RM. Increases in drug and opioid overdose deaths – United States, 2000-2014. MMWR. 2016;64(50):1378-82. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6450a3.htm>. Published January 1, 2016. Accessed August 2018.

<sup>5</sup> Drug Overdose. Healthline. <https://www.healthline.com/health/drug-overdose>. Accessed August 2018.

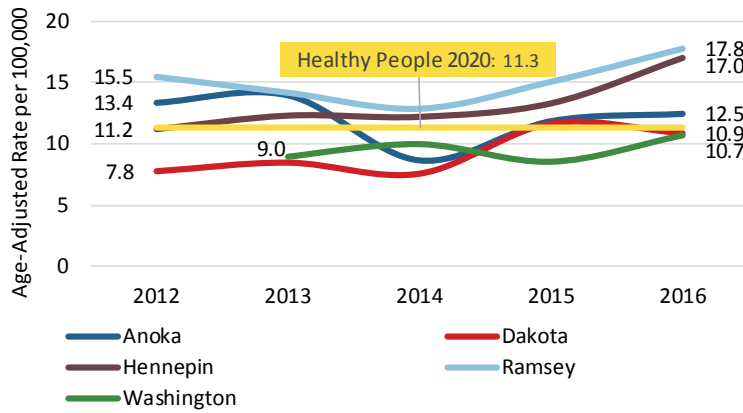
<sup>6</sup> Heroin Overdose Data. Center for Disease Control and Prevention. <https://www.cdc.gov/drugoverdose/data/heroin.html>. Accessed August 2018.



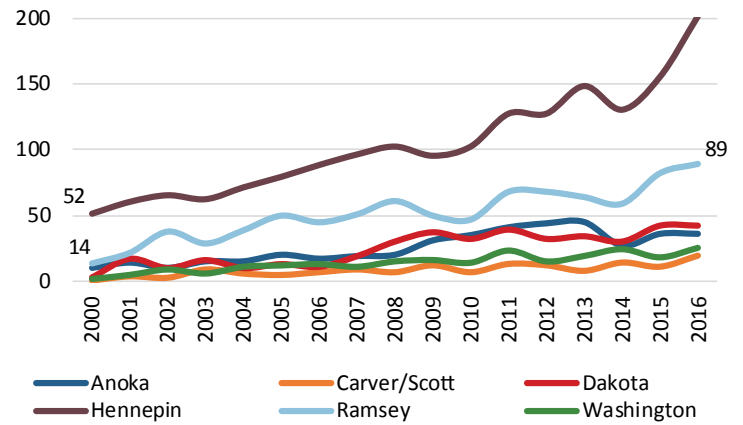
## WHAT RAMSEY COUNTY GOVERNMENT IS DOING

Saint Paul - Ramsey County Public Health provides data monitoring and reporting for this topic in order to better understand the overall health and current conditions in the community. The information may help inform community partners, policy makers or county program leadership.

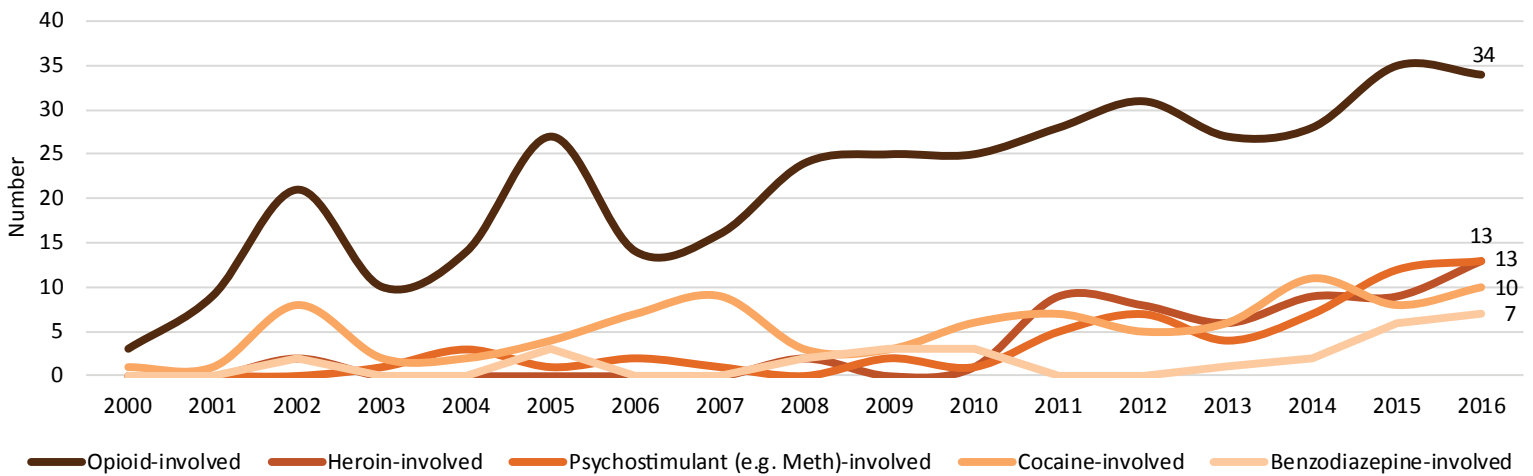
Drug Induced Death Rate Over Time, Metro Counties\*



Number of Drug Overdose Deaths, Metro Counties Over Time



Overdose Deaths Related to Select Drug Type (non-exclusive), Ramsey County



<sup>7</sup> CDC Wonder. Centers for Disease Control and Prevention. <https://wonder.cdc.gov/>. Accessed August 2018.

<sup>8</sup> Drug Overdose Deaths Among Minnesota Residents 2000-2016. Minnesota Department of Health Website. [http://www.health.state.mn.us/divs/healthimprovement/content/documents-opioid/2016DrugOverdoseDeathReport\\_Final.pdf](http://www.health.state.mn.us/divs/healthimprovement/content/documents-opioid/2016DrugOverdoseDeathReport_Final.pdf). Accessed August 2018.

## DESCRIPTION

Marijuana is the most commonly used illicit drug among adolescents. Youth also misuse a variety of prescription medications which is the fastest-growing substance use disorder in the U.S.<sup>1</sup> Adolescents take drugs because young brains often have difficulty with impulse control, drugs are readily available and many teens believe that drugs aren't dangerous.<sup>2</sup> Adolescents most often seek substance use treatment for marijuana while adults most often seek treatment for alcohol.<sup>3</sup> Currently, the only access point for youth to substance use treatment is by being assessed and labeled chemically dependent. But youth would rather access treatment if substance use/misuse was viewed as a mental health issue.<sup>4</sup>

## HOW ARE WE DOING

In Ramsey County, alcohol and marijuana are the most commonly used drugs among teens, followed by prescription stimulants and painkillers.<sup>5</sup> There has been significant progress in efforts to reduce adolescent use of marijuana. After several years of little change, marijuana use in the past month among ninth-graders fell dramatically from 9.4 percent in 2013 to 6.8 percent in 2016. But it is concerning that 12.3 percent of students reported driving a vehicle after alcohol or drug use.<sup>5</sup> Five percent of Ramsey County youth (8th, 9th, 11th grade) report using prescription drugs one or more days to get high in the past month, about evenly split between students of color (2.9 percent) and white students (2.1 percent)<sup>5</sup>; the rate is higher for students who identified as LGBTQ (9 percent). More students in 11th grade report misuse of prescription medications, followed by students in eighth grade.<sup>5</sup> Ramsey County teens had 315 admissions for substance use/misuse calendar year 2016 through June 2017.<sup>6</sup> Overall in 2016, 2.1 percent of responding 9th grade students reported using marijuana or another illicit substance at least once in the 12 months prior to the survey.<sup>7</sup>

## BENCHMARK INDICATOR

Healthy People 2020:

1) Reduce the proportion of adolescents aged 12 to 17 years who misuse substances.

U.S.Target: 6.7 percent

2) Reduce the proportion of adolescents reporting use of marijuana during the past 30 days.

U.S. Target: 6.0 percent

## DISPARITIES

In Ramsey County, students of color (5.5 percent) and females (5.2 percent) reported prescription misuse in the past 30 days more often than white students (4.4 percent) or males (4.7 percent) in 2016.<sup>5</sup> There is a disparity between access to substance use treatment between Saint Paul and suburban areas in the county.<sup>4</sup>

## RISK FACTORS

Bullying is a risk factor in substance use: adolescents who bully and those who are bullied are more likely to use substances than their peers.<sup>5</sup>

## Information to note

- Marijuana use in the past month among Ramsey County 9th graders fell dramatically from 9.4% in 2013 to 6.8% in 2016.
- 5% of Ramsey County youth report using prescription drugs one or more days to get high in the past month, about evenly split between students of color and white students. 9% of students who identified as LGBTQ used drugs on one or more occasions in the past month.
- Youth would rather access treatment if substance use/misuse was viewed as a mental health issue.

<sup>1</sup> Rise in Prescription Drug Misuse and Abuse Impacting Teens. Substance Abuse and Mental Health Administration Web site. <https://www.samhsa.gov/homelessness-programs-resources/hpr-resources/teen-prescription-drug-misuse-abuse>. Accessed July 20, 2017.

<sup>2</sup> Andersen SL, Teicher MH. Desperately driven and no brakes: Developmental stress exposure and subsequent risk for substance abuse. *Neuroscience & Biobehavioral Reviews* 33(4):516–524, 2009

<sup>3</sup> Principles of Adolescent Substance Use Disorder Treatment: A research-based guide. National Institute on Drug Abuse Web site. <https://www.drugabuse.gov/publications/principles-adolescent-substance-use-disorder-treatment-research-based-guide/introduction>. Accessed July 17, 2017.

<sup>4</sup> How Do We Implement SUD Treatment and Support? Minnesota Department of Human Services, Alcohol and Drug Abuse Division. Accessed November 3, 2016.

<sup>5</sup> Minnesota Student Survey. Saint Paul – Ramsey County Public Health database

<sup>6</sup> Minnesota Department of Human Services, ADAD, DAANES. Accessed January 29, 2018.

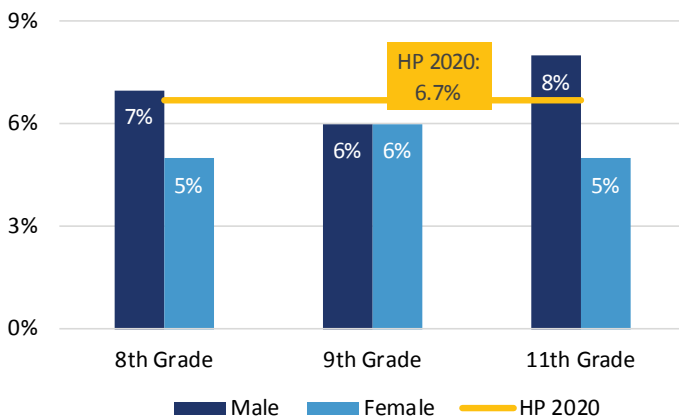
<sup>7</sup> Minnesota Student Survey. Minnesota Department of Education Website. <http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=2>. Accessed May 15, 2018.



## WHAT RAMSEY COUNTY GOVERNMENT IS DOING

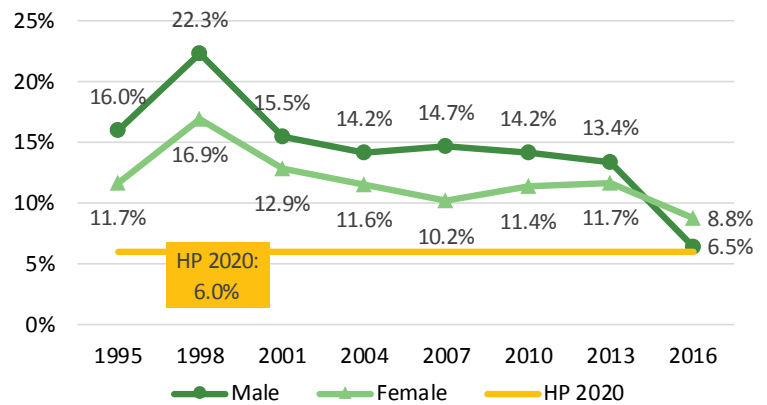
Workforce Solutions provides programming to youth and employment services to parents on public assistance. A primary focus of Workforce Solutions programming is to improve the education of participants so that they are prepared for employment opportunities. Reducing stress on families through increased earnings is at the core of Workforce Solutions programming. In recent years, Workforce Solutions has begun working with the children of parents receiving some form of public assistance. These efforts have included mentoring in the schools and working directly as a liaison with the schools to ensure that children and adolescents receive the most appropriate services while they are in school. County funded cultural consultants have met directly with school administrators and counseling staff to advocate for families from high-risk demographics on public assistance. The county intends to enhance these services over the next five years.

Students Reporting Marijuana or Other Drug Use in the Past Year, Ramsey County, 2016



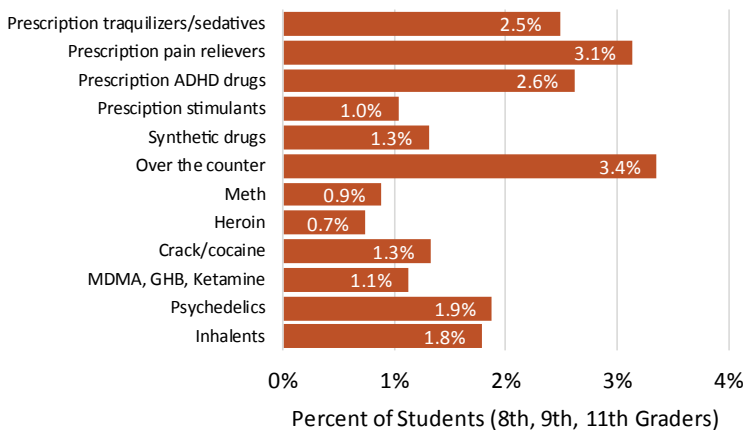
Source: Minnesota Student Survey.<sup>8</sup>

9th Graders Reporting Marijuana Use in Past Month, Ramsey County



Source: Minnesota Student Survey, Saint Paul - Ramsey County Public Health.

Substance Use/Prescription Misuse, Ramsey County 2016



Source: Minnesota Student Survey, Saint Paul - Ramsey County Public Health.

Student Substance Use/Misuse, Ramsey County, 2016

	Percent of students (8th, 9th, 11th Graders) reporting alcohol/drug use
Drove a motor vehicle after using alcohol/drugs on more than one occasion.	12.3 %
Needed to use a lot more alcohol/drugs to get same effect.	12 %
Attempted to cut down on use of alcohol/drugs.	7.2 %

Source: Minnesota Student Survey, Saint Paul - Ramsey County Public Health.

<sup>8</sup> Minnesota Student Survey. <http://www.health.state.mn.us/divs/chs/mss/countytables/ramsey16.pdf>. Accessed March 1, 2018.

# Opioid Misuse and Death

## DESCRIPTION

Opioid misuse includes the misuse of prescription opioid pain relievers or the use of heroin. Prescription drug misuse is second only to marijuana use as the most commonly used illicit drug. Even if the reason for misuse was to relieve physical pain (the most common reason), use without a prescription of one's own or use at a higher dosage or more often than prescribed constitutes misuse. Although prescription drug misuse is common in the U.S., most people (87.2 percent) who take prescription pain relievers do not misuse them.<sup>1</sup> The current opioid epidemic in the U.S. is so far-reaching that it is an important factor contributing to the declining life expectancy of the nation.<sup>2</sup> Fatal and non-fatal overdoses are key indicators of the scope and lethality of the opioid epidemic.

## HOW WE ARE DOING

Between 2008 – 2016, deaths in Minnesota related to opioid increased from 226 to 395, while in Ramsey County these deaths increased from 24 to 34. During that same time, heroin-related deaths in Minnesota increased from 8 to 150, in Ramsey County, these deaths increased from 2 to 13.<sup>3</sup> For every drug overdose that results in death, there are many more nonfatal overdoses. In 2016, the rate of nonfatal opioid-related emergency department visits among Ramsey County residents was at its lowest level in the past five years, 70.2 per 100,000 residents,<sup>4</sup> and opioid prescribing rates in Ramsey County are at their lowest in the past 10 years (499 per 1000 residents).<sup>5</sup> About 5 percent of Ramsey County 11th graders reported using prescription pain relievers not prescribed for them in 2016.<sup>4</sup> Data from 2017 crime reports show that Ramsey County has the lowest rate of drug abuse crimes than the other Twin Cities metro counties (225 per 100,000 population). The number of arrests in Ramsey County for opioid and synthetic narcotics have decreased from 681 in 2013 to 537 in 2017 (which was 41.1 percent of all the total drug arrests).<sup>6</sup>

## DISPARITIES

The number of white Minnesotans who die from opioid overdoses is higher than others, but Native American and African-American communities die from opioid overdoses at higher rates. In 2015, Minnesota ranked first among all states when measuring the disparity-rate ratio of deaths due to drug overdose among African-Americans and American Indians relative to whites. Data from 2016 show the disparity has continued and worsened. The realities of poverty, racism, classism, social isolation, sexual exploitation and other social inequities affect people's vulnerability to and capacity for effectively dealing with drug-related harms.<sup>7,8</sup>

## RISK FACTORS

Individuals in physical pain with access to prescription pain relievers are most at risk for opioid misuse. Challenges in safe storage and disposal of prescriptions also contribute to the opioid crisis. Most patients fail to store opioid in locked locations, including those with children and adolescents who are particularly vulnerable to risks of opioid misuse and

## Information to note

- Between 2008 – 2016 in Ramsey County, the number of opioid-related deaths increased from 24 to 34, while the number of heroin-related deaths increased from 2 to 13.
- In 2016, the rate of nonfatal opioid-related emergency department visits among Ramsey County residents was at its lowest level in the past five years, 70.2 per 100,000 residents.

<sup>1</sup> Hughes A, Williams MR, Lipari RN, Bose J, Copello EA, Kroutil LA. Prescription drug use and misuse in the United States: Results from the 2015 National Survey on Drug Use and Health. SAMHSA. 2016. <https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR2-2015/NSDUH-FFR2-2015.htm>. Published September 2016. Accessed September 2018.

<sup>2</sup> John Hopkins Bloomberg School of Public Health and the Clinton Foundation. The Opioid Epidemic: From Evidence to Impact. Paper presented at America's Opioid Epidemic Meeting. October 30, 2017; Baltimore, MD.

<sup>3</sup> Opioid Dashboard. Minnesota Department of Health. <http://www.health.state.mn.us/divs/healthimprovement/opioid-dashboard/>. Accessed September 2018.

<sup>4</sup> Saint Paul – Ramsey County Public Health data set.

<sup>5</sup> Reports and Statistics. Minnesota Prescription Monitoring Program. <http://www.pmp.pharmacy.state.mn.us/reports-and-statistics.html>. Accessed September 2018.

<sup>6</sup> Criminal Justice Data Reporting. Uniform Crime Reports. Bureau of Criminal Apprehension. <https://dps.mn.gov/divisions/bca/bca-divisions/mnjis/Pages/uniform-crime-reports.aspx>. Accessed September 2018.

<sup>7</sup> Opioid Dashboard. Minnesota Department of Health. <http://www.health.state.mn.us/divs/healthimprovement/opioid-dashboard/>. Accessed September 2018.

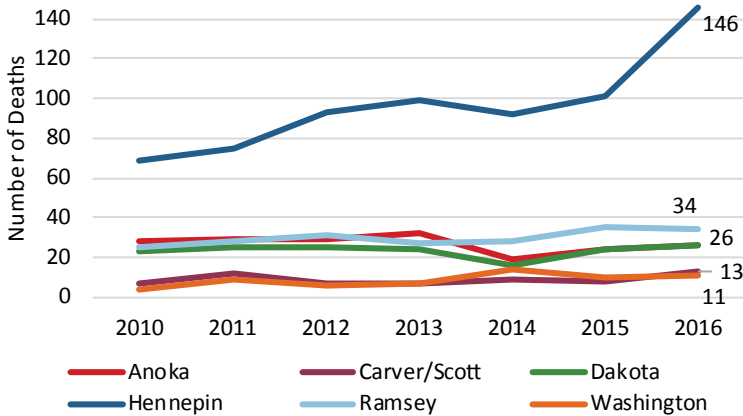
<sup>8</sup> Wright N, Roesler J. Drug overdose deaths among Minnesota residents, 2000-2016. Minnesota Department of Health. 2017. <http://www.health.state.mn.us/divs/healthimprovement/data/reports/drugoverdose.html>. Published August 2017. Accessed September 2018.

overdose. Over half of people who report non-medical use of prescription opioids state their most recently used drug came from a friend or family member.<sup>9</sup>

## WHAT RAMSEY COUNTY GOVERNMENT IS DOING

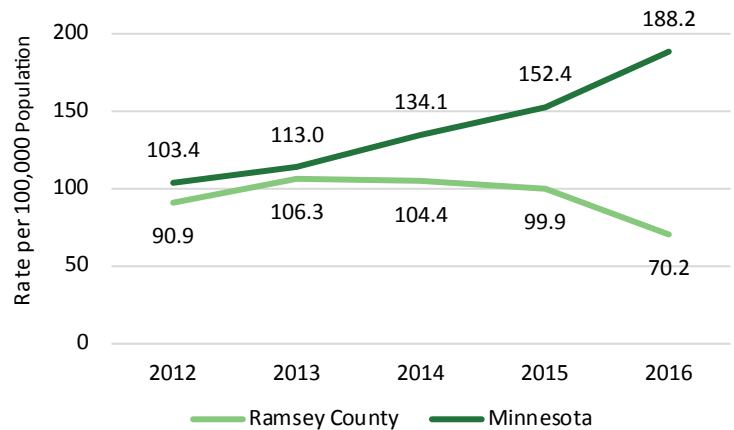
The Minnesota Department of Human Services is the designated authority for alcohol and drug abuse prevention and treatment. There are many activities in Minnesota's Opioid Action Plan<sup>10</sup> that aim to address opioid misuse and death (e.g., patient and provider education, monitoring prescribing practices, and increasing access to medications used to reverse the toxic effects of an overdose). Minnesota is one of 39 states that allows individuals to administer Naloxone to a person without being subject to liability or prosecution. Increasing access to treatment for individuals with opioid use disorder is imperative, together with a substantial program of research to develop new non-addictive treatments for pain.<sup>11</sup>

### Opioid-Involved Overdose Deaths, Metro Counties



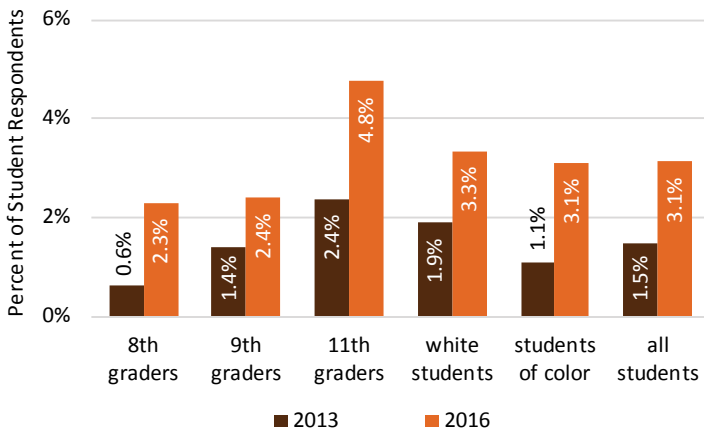
Source: Minnesota Department of Health. SPRCPH analysis.

### Rate of Nonfatal Opioid-Related Emergency Department Visits



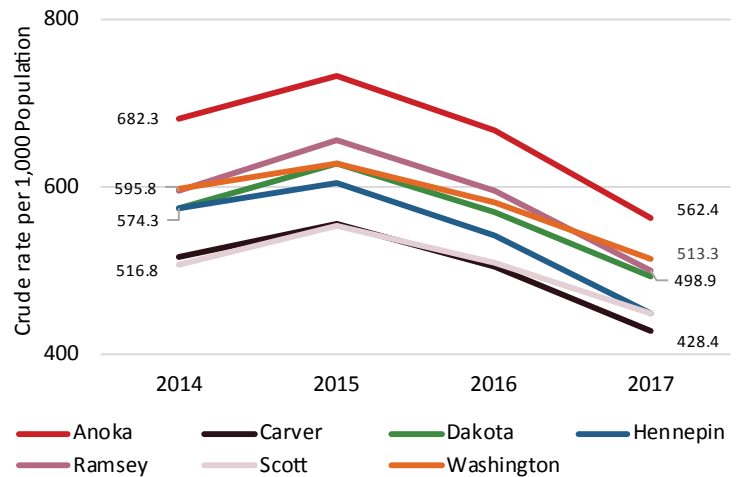
Source: Saint Paul - Ramsey County Public Health data set.

### Youth Who Used Prescription Pain Relievers Not Prescribed to Them to Get High On At Least 1 Occasion in Past 12 Months, Ramsey County



Source: Saint Paul - Ramsey County Public Health data set.

### Opioids Dispensed to Residents, 7-County Metro



Source: Minnesota Prescription Monitoring Program, Reports and Statistics<sup>12</sup>

<sup>9</sup> Reports and Detailed Tables from the 2017 National Survey on Drug Use and Health (NSDUH). SAMHSA. <https://www.samhsa.gov/data/nsduh/reports-detailed-tables-2017-NSDUH>. Accessed September 2018.

<sup>10</sup> Minnesota's Opioid Action Plan. [http://www.mn.gov/gov-stat/pdf/2018\\_02\\_14\\_Minnesota\\_Opioid\\_Action\\_Plan.pdf](http://www.mn.gov/gov-stat/pdf/2018_02_14_Minnesota_Opioid_Action_Plan.pdf). Published February 14, 2018. Accessed September 2018.

<sup>11</sup> Drug overdose deaths among Minnesota residents, 2000 – 2015. Minnesota Department of Health. <http://www.health.state.mn.us/divs/healthimprovement/content/documents/2015OpioidDeathReport.pdf>. Accessed 11/28/2017.

<sup>12</sup> Minnesota Prescription Monitoring Program, Reports and Statistics. <http://pmp.pharmacy.state.mn.us/reports-and-statistics.html>. Accessed August 2018.

# Substance Use Disorders and Treatment - Adults

## DESCRIPTION

Substance use disorders (SUDs) have life-long effects that include high costs to individuals, families, health care systems and communities.<sup>1</sup> Research documents the connection between trauma and substance use disorders. While the effects of trauma and exposure to violence are found in all service sectors, it is particularly prominent among people with SUDs involved in the criminal justice system and disproportionately affects communities of color who experience historical and intergenerational trauma.<sup>1</sup> SUD is a common medical condition that is treatable. An estimated 450,000 to 500,000 Minnesotans are directly impacted by addictions with 50,000 treatment admissions- two-thirds publicly funded in Minnesota annually.<sup>2</sup> But every year, nearly 400,000 Minnesotans with SUD will not receive treatment. Many factors contribute to this “treatment gap,” including not being able to afford care, fear of shame and discrimination, and lack of screening for SUDs.<sup>2</sup> Legal penalties for illicit drugs range from probation sentences to prison time. Ninety percent of Minnesota inmates have been diagnosed with a SUD.<sup>3</sup> Recovery from SUDs is a process of change through which individuals improve their health and wellness, live a self-directed life and strive to reach their full potential. People need a stable and safe place to live; meaningful, productive, worthwhile activities; and relationships and social networks that provide support, friendship, love and hope.<sup>1</sup>

## HOW WE ARE DOING

Illicit drug use in Minnesota, most common among adults 18-25, has remained stable in recent years and is below national rates.<sup>2</sup> About 2 percent of Ramsey County students reported having been in treatment for an alcohol or drug use in 2016.<sup>4</sup> It's estimated that over 32,700 Ramsey County residents needed SUD treatment in 2016, and among that group, only 4,186 actually received treatment. In other words, 12.8 percent of those needing treatment received it, which does not meet the Healthy People target of 10.9 percent.<sup>5</sup> Since 2012, opioid misuse was top reason for illicit drug treatment for county residents. But for the first time since 2007, methamphetamine addiction became the primary reason for treatment admissions in 2016, accounting for 19.8 percent of admissions. Opioids were close behind at 18.6 percent of admissions.<sup>6</sup> Arrests in Ramsey County for narcotics decreased 31 percent between 2012-2016.<sup>5</sup> The number of Ramsey County adults in prison or on probation for drug offenses decreased 16 percent during the same time.<sup>5</sup>

## BENCHMARK INDICATOR

Healthy People 2020: Increase the proportion of persons who need alcohol and/or illicit drug treatment and received specialty treatment for abuse or dependence in the past year.

U.S. Target: 10.9 percent<sup>7</sup>

## DISPARITIES

Significant SUD disparities persist in diverse communities, including racial and ethnic groups, LGBTQ individuals, people with disabilities, girls and young adults.<sup>1</sup> Various SUD subpopulations face elevated levels of mental health disorders and experience higher rates of suicide. People with mental health disorders have a higher risk of abusing prescription

## Information to note

- In 2016, there were 28,534 Ramsey County residents who needed substance use disorder treatment but did not receive it.
- For the first time since 2007, methamphetamine addiction among county residents became the primary reason for substance use disorder treatment admissions in 2016; bypassing opioid admissions.
- The number of Ramsey County adults in prison or on probation for drug offenses decreased 16%, while the number of narcotics arrests in the county decreased 31% between 2012-2016.

<sup>1</sup> Leading Change 2.0: Advancing the Behavioral Health of the Nation 2015-2018. SAMHSA. <https://www.nasmhpd.org/sites/default/files/PEP14-LEADCHANGE2.pdf>. Accessed April, 2018.

<sup>2</sup> 2018 Substance Abuse in Minnesota: A State Epidemiological Profile. Minnesota Department of Human Services. <http://sumn.org/~media/542/MNEpiProfile2018.pdf>. Accessed April, 2018.

<sup>3</sup> Chemical Dependency Treatment Services in Prison Fact Sheet. Minnesota Department of Corrections. 2017. [https://mn.gov/doc/assets/CD%20Treatment\\_tcm1089-309012.pdf](https://mn.gov/doc/assets/CD%20Treatment_tcm1089-309012.pdf). Published August 2017. Accessed February 2018.

<sup>4</sup> Minnesota Student Survey. Saint Paul – Ramsey County Public Health data set.

<sup>5</sup> Minnesota Department of Human Services. Personal communication February 2018.

<sup>6</sup> Ramsey County. SUMN.org Fact Sheet. SUMN.org Web Site. <http://www.sumn.org/data/location/show.aspx?tf=32%2c32&loc=62&cat=136&ds=a>. Accessed April, 2018.

<sup>7</sup> Substance Abuse. Healthy People.gov. <https://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse/objectives>. Accessed March 20, 2018.

# Substance Use Disorders and Treatment - Adults

medication than those that do not. In Minnesota, the disparity is large: 22.8 percent of adults with depression use illicit drugs compared to 9.1 percent of adults without depression.<sup>8</sup> Historically, diverse populations tend to have less access to health care, lower or disrupted health care service use and poorer behavioral health outcomes.<sup>9</sup> Twin Cities Metro SUD programs indicate that whites account for the highest percentage of admissions for all substances except cocaine, for which African-Americans account for the highest percentage of admissions.<sup>10</sup>

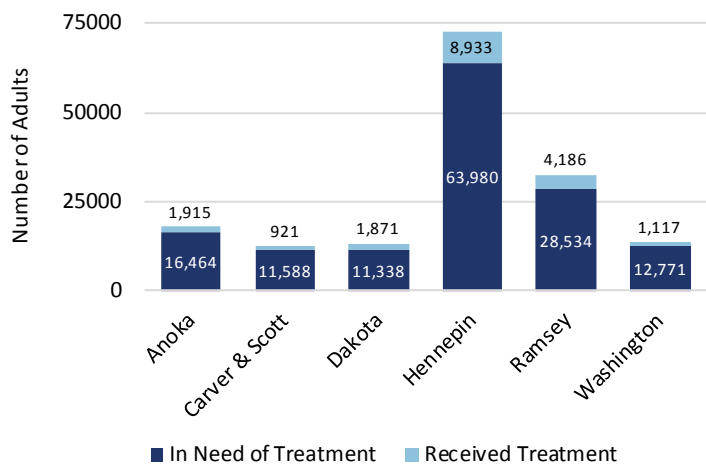
## RISK FACTORS

Risk factors for SUDs include living in poverty, domestic violence, childhood and historical trauma including involvement in the foster care system, and involvement in the criminal justice system.<sup>9</sup> Individuals who live with someone who has a SUD are also at risk.<sup>11</sup>

## WHAT RAMSEY COUNTY IS DOING

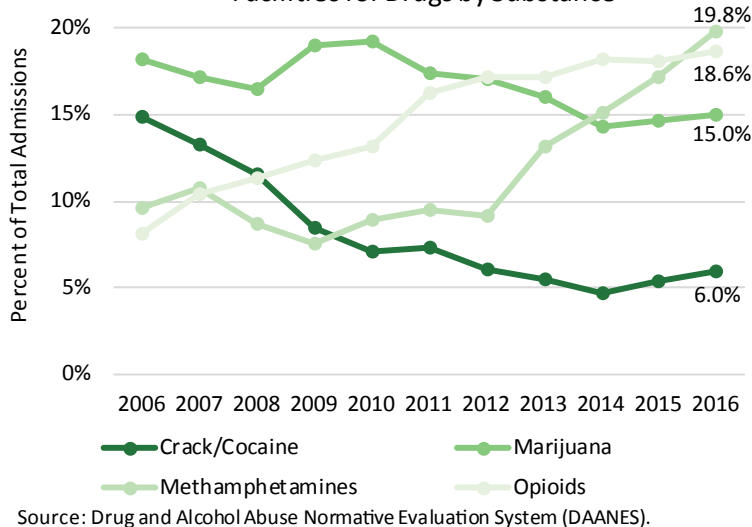
Ramsey County's criminal justice system recognizes that many offenders have significant underlying issues that attributed to their criminal actions and, therefore, may require additional resources to ensure they do not end up back in court in the future. For this reason, specialized programs such as drug courts, DUI courts and veterans' courts are in place to assist eligible offenders. The Ramsey County Mental Health Court is one of only three programs in the state that is directed toward offenders who suffer from mental illness or coinciding mental illness and substance use disorders.

Adults in Need of Substance Use Disorder Treatment, 2016



Source: Minnesota Department of Human Services.<sup>12</sup>

Ramsey County Admissions to MN Treatment Facilities for Drugs by Substance



Source: Drug and Alcohol Abuse Normative Evaluation System (DAANES).

<sup>8</sup> Substance Abuse. Healthy People.gov. <https://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse/objectives>. Accessed March 20, 2018.

<sup>9</sup> Leading Change 2.0: Advancing the Behavioral Health of the Nation 2015-2018. SAMHSA. <https://www.nasmhpd.org/sites/default/files/PEP14-LEADCHANGE2.pdf>. Accessed April, 2018.

<sup>10</sup> Park E. Depression and co-occurring substance use disorders: Results from the 2010 Minnesota survey on adults substance use. MN Department of Human Services. 2013. <https://edocs.dhs.state.mn.us/lfserver/Public/DHS-6720-ENG>. Published May 2013. Accessed July 27, 2017.

<sup>11</sup> Falkowski C. Drug abuse trends in the Minneapolis/St. Paul Metropolitan area. Drug abuse dialogues. 2017. [http://drugabusedialogues.com/drug\\_abuse\\_trends\\_reports/2017\\_April.pdf](http://drugabusedialogues.com/drug_abuse_trends_reports/2017_April.pdf). Published April 2017. Accessed July 20, 2017.

<sup>12</sup> Minnesota Department of Human Services personal communication, January 2018.

<sup>13</sup> Drug and Alcohol Abuse Normative Evaluation System (DAANES). SUMN Web Site: <http://sumn.org>. Accessed December, 2017.

## DESCRIPTION

Tobacco use is the leading preventable cause of death in the U.S. Nearly one in five deaths is related to tobacco use. Smoking harms nearly every organ in the body and contributes to many diseases and conditions, including heart disease, stroke, cancer, emphysema, bronchitis, type 2 diabetes, rheumatoid arthritis, bone health, and pregnancy risks such as preterm delivery, low birth weight and SIDS.<sup>1</sup> Each year, tobacco causes more Minnesotan deaths than alcohol, homicides, car accidents, AIDS, illegal drugs and suicide combined. Tobacco contributes to over 25,000 Minnesotan deaths every year, and causes over \$3.2 billion in annual medical costs. For Ramsey County that means about 2,108 tobacco related deaths per year, and medical costs of \$262,697,100.<sup>2</sup>

## HOW WE ARE DOING

Research from 2014 shows that the adult smoking rate among Minnesotans has significantly decreased since 2010 to an all-time low of 14.4 percent. In 2014 in Ramsey County, 9.2 percent of adults reported smoking, which meets the Healthy People goal.<sup>3</sup> Among Ramsey County 9th graders, smoking fell from 7.5 percent in 2013 to 2.8 percent in 2016. Echoing a national trend, e-cigarettes are on the rise with 7.6 percent of Ramsey County 9th graders reporting use of e-cigarettes. Considering all forms of tobacco, 9.5 percent of 9th graders report using tobacco in the last 30 days, which meets the Healthy People goal.<sup>4</sup>

## BENCHMARK INDICATOR

Healthy People 2020:

1) Reduce cigarette smoking by adults

U.S. Target: 12 percent

2) Reduce tobacco use by adolescents

U.S. Target: 21 percent<sup>5</sup>

## DISPARITIES

There are disparities related to race, education, income and other factors. Among Minnesota adults in 2015, American Indian residents had the highest rate at 37.2 percent, followed by multiracial, black, Hispanic, white, and Asian residents with the lowest rate at 7.8 percent. The rate of smoking among Minnesotans who did not graduate from high school was 34.6 percent compared to a much lower rate among college graduates of 7.1 percent.<sup>6</sup> In Ramsey County, those with higher income (>200% poverty) had a smoking rate of 5.8 percent, compared to a much higher rate of 17.9 percent among those less income (<200% poverty).<sup>7</sup>

## RISK FACTORS

Many factors influence tobacco use, and its related diseases and death. Risk factors include race/ethnicity, age, education and socioeconomic status. Tobacco use is also influenced by cultural norms, smoke-free policies, tobacco prices, funding for tobacco prevention and health insurance coverage for cessation.<sup>8</sup>

## Information to note

- Each year, tobacco causes more Minnesotan deaths than alcohol, homicides, car accidents, AIDS, illegal drugs and suicide combined.
- 9.2% of Ramsey County adults report smoking.
- Among Ramsey County 9th graders, cigarette smoking decreased from 7.5% to 2.8% between 2013 and 2016; 8% report E-cigarette use.
- There are large disparities for smoking related to race, education and income.

## Community voice

*"Bad habits, smoking, drinking, bad eating habits and lack of exercise."*  
- White Male, age 65-74

1881 (87.7%) respondents mentioned individual habits that influence their health.

143 respondents referenced smoking as negatively affecting their health.

<sup>1</sup> Health Effects of Cigarette Smoking. Centers for Disease Control and Prevention. [https://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/health\\_effects/effects\\_cig\\_smoking/index.htm](https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/index.htm). Accessed June 2018.

<sup>2</sup> Data Tables for State and County Tobacco Profiles. Minnesota Department of Health. [http://www.health.state.mn.us/divs/hpcd/tpc/docs/counties/county\\_data\\_tables.pdf](http://www.health.state.mn.us/divs/hpcd/tpc/docs/counties/county_data_tables.pdf). Accessed June 2018.

<sup>3</sup> Tobacco Data Reports. Minnesota Department of Health. <http://www.health.state.mn.us/divs/hpcd/tpc/data.html>. Accessed June 2018.

<sup>4</sup> Minnesota Student Survey. Minnesota Department of Health. <http://www.health.state.mn.us/divs/chs/mss/> Accessed June 2018.

<sup>5</sup> Centers for Disease Control and Prevention. Healthy People 2020. <https://www.healthypeople.gov/2020/topics-objectives/topic/tobacco-use/objectives>. Accessed June 2018.

<sup>6</sup> Smoking Facts and Figures. Minnesota Department of Health. [https://data.web.health.state.mn.us/web/mndata/smoking\\_basic](https://data.web.health.state.mn.us/web/mndata/smoking_basic). Accessed June 2018.

<sup>7</sup> Saint Paul – Ramsey County Public Health. Metro SHAPE Ramsey County Data Book 2014. <https://www.ramseycounty.us/your-government/open-government/research-data/public-health-data>. Accessed June 2018.

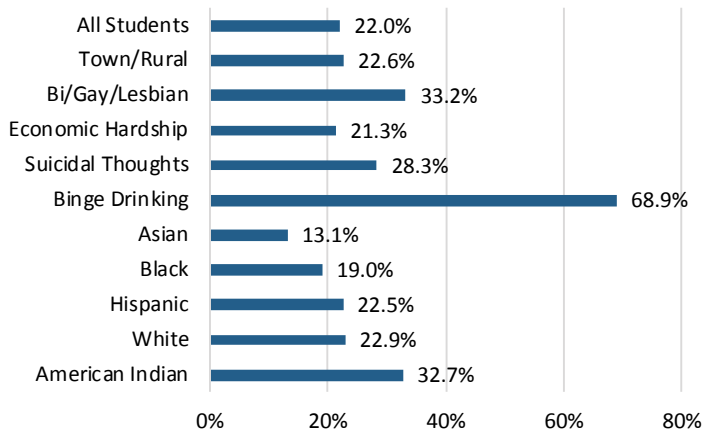
<sup>8</sup> Smoking Prevalence – Lifestyle Risk Factors. Centers for Disease Control and Prevention. <https://ephracking.cdc.gov/showHBSmokingPrevalence>. Accessed June 2018.



## WHAT RAMSEY COUNTY GOVERNMENT IS DOING

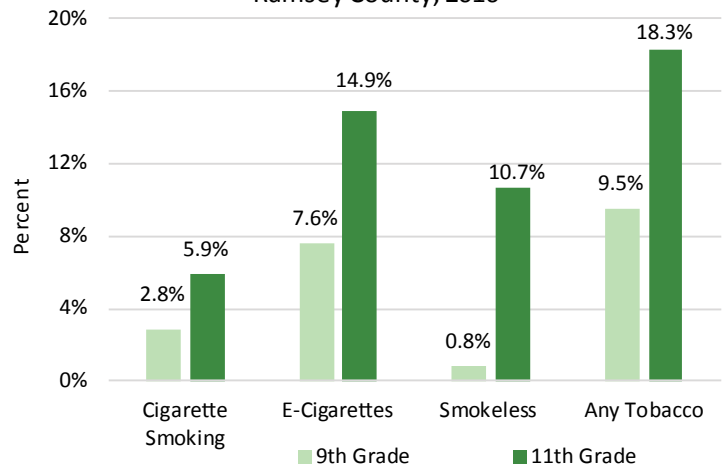
One of Saint Paul – Ramsey County Public Health's areas of focus within the Statewide Health Improvement Program (SHIP), is to reduce the use of, and exposure to tobacco. Partnership successes to create a tobacco-free environment in Ramsey County, include working with the American Lung Association (ALA) to support smoke-free policies at multi-unit housing properties and to support public housing through the transition of the federal HUD smoking ban happening in July of 2018. Partnering with the African American Leadership Forum (AALF) to create changes agents to create community support for Menthol Tobacco policy changes; and working with Association for Nonsmokers MN (ANSR) to pass city council ordinances for restricting the sales of menthol products to adult-only stores. The Environmental Health division of Saint Paul- Ramsey County Public Health regulates the Ramsey County Clean Indoor Air Act countywide.

Cigarette Use in the Past 30 Days, 11th Grade Disparities, Minnesota, 2016



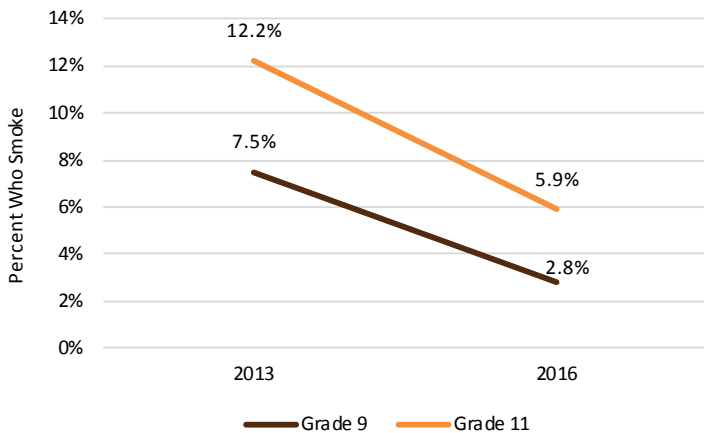
Source Minnesota Department of Health.<sup>9</sup>

Tobacco Use in Last 30 Days Among Students, Ramsey County, 2016



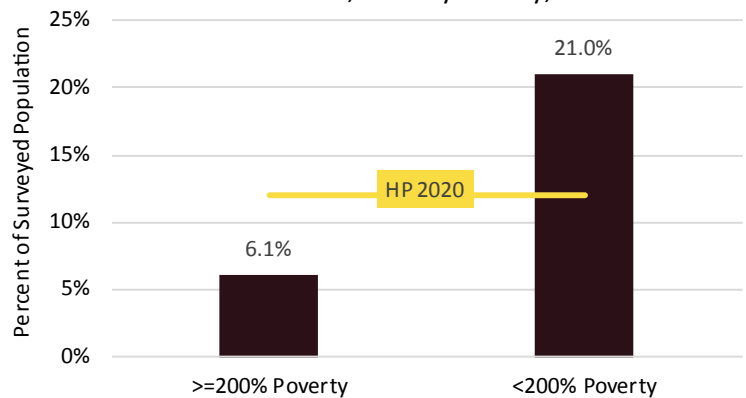
Source: Minnesota Student Survey, 2016.<sup>10</sup>

Cigarette Smoking in the Past 30 Days, Students, Ramsey County, 2013-2016



Source: Minnesota Student Survey, Ramsey County data.<sup>10</sup>

Current Smokers by Household Income, Adults 25+ Years, Ramsey County, 2014



Source: Saint Paul – Ramsey County Public Health. Metro SHAPE Ramsey County Data Book 2014

<sup>9</sup> Source Tobacco Profiles. Minnesota Department of Health. [http://www.health.state.mn.us/divs/hpcd/tpc/docs/counties/county\\_data\\_tables.pdf](http://www.health.state.mn.us/divs/hpcd/tpc/docs/counties/county_data_tables.pdf). Accessed June 2018.

<sup>10</sup> Source: Minnesota Student Survey. Minnesota Department of Health. [http://www.health.state.mn.us/divs/hpcd/tpc/docs/counties/county\\_data\\_tables.pdf](http://www.health.state.mn.us/divs/hpcd/tpc/docs/counties/county_data_tables.pdf). Accessed June 2018.

<sup>11</sup> Source: Saint Paul – Ramsey County Public Health. Metro SHAPE Ramsey County Data Book 2014. <https://www.ramseycounty.us/your-government/open-government/research-data/public-health-data>. Accessed June 2018.