Maternal and Child Health Data Brief

JANUARY 2019

SUBSTANCE USE AMONG WOMEN OF REPRODUCTIVE AGE IN COLORADO

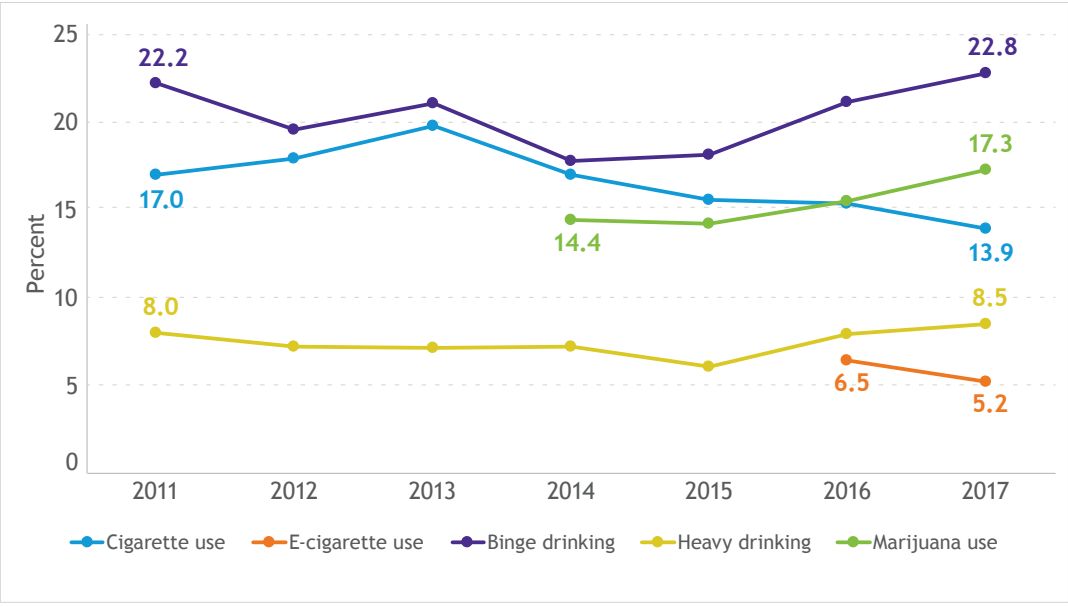
Why substance use is an issue among women of reproductive age

Substance use poses significant health risks to women of reproductive age (15-44 years) who use tobacco, alcohol, and/or other drugs. The use and misuse of substances is associated with health risks like addiction, mental health disorders, organ damage, overdose, and death.[1] For women who become pregnant, substance use is associated with preterm birth, low birth weight, stillbirth, maternal death, fetal development problems including brain abnormalities, sudden unexpected infant death (SUID), and childhood developmental problems that can be long-lasting.[1,2,3]

The risk factors for tobacco, alcohol, marijuana, and other drug use are multi-level and complex. Widespread availability,[4,5] perceived norms of substance use,[6] predisposition among adolescents to take risks,[6] and misperceptions of safety[7,8] may increase the likelihood of substance use.

Women who use or misuse substances are also more likely to experience a range of social problems including domestic violence, motor vehicle crashes, and involvement in crime.[10,11] Many substances, both illegal and legal, can cause harm; examples include cocaine, heroin, methamphetamine, marijuana, tobacco, alcohol, and prescription drugs.

Figure 1. Past month substance use, Colorado women ages 18-44 years, 2011-2017.[12]



In 2017, 22.8 percent of women ages 18 to 44 years reported binge drinking in the past month (defined as 4+ drinks on one occasion) and 8.5 percent of women reported heavy drinking (defined as >1 drink per day).[1]

Prevalence of past month prescription opioid/heroin use among Colorado women ages 18 to 44 years is not included here because it is not assessed using the same data source.

COLORADO
Department of Public Health & Environment

Prevalence of substance use among women of reproductive age

In 2017, 22.8 percent of women ages 18 to 44 years reported binge drinking in the past month (defined as 4+ drinks on one occasion) and 8.5 percent of women reported heavy drinking (defined as >1 drink per day).[12] About 13.9 percent of women currently smoked cigarettes and 5.2 percent were current e-cigarette users. The prevalence of current marijuana use was 17.3 percent.

Although statistical tests did not reveal significant changes in prevalence of use over time for any substance, current cigarette smoking decreased from 17.0 percent in 2011 to 13.9 percent in 2017 and marijuana use increased from 14.4 percent in 2014 to 17.3 percent in 2017.

Prescription drugs and opioids

Results from the National Survey on Drug Use and Health (2017) show that 3.7 percent of women 18 years or older misused opioids (either prescription drugs or heroin) nationwide in the past year.[13] The prevalence of opioid misuse was higher among women ages 18 to 25 years at 7.2 percent. The prevalence of any use of prescription pain relievers in the past year was also higher among women ages 18 to 25 years (33.4%) than among men of the same age group (26.5%). Colorado-specific data on women of reproductive age is not available.

Data from the 2017 Colorado Prescription Drug Monitoring Program shows that a majority of the prescriptions received by women ages 18 to 44 years were opioids (49%), followed by benzodiazepines (24%) and stimulants (20%).[14] About 5.4 percent of women received high dose opioid prescriptions (>90 morphine milligram equivalents).[14] The threshold for recommended opioid dosages is set by the Centers for Disease Control and Prevention. Prevalence of high dose opioid prescriptions is important to monitor because higher dosages are associated with an increased risk of opioid use disorder and overdose.

Co-use of multiple substances

Among women ages 18 to 44 years who used any substance (cigarette, e-cigarette, marijuana, binge drinking), 64.1 percent used one substance only, while 26.4 percent used two, 8.3 percent used three, and 1.2 percent used four substances.[11] Data from the Colorado Maternal Mortality Review Committee show that among drug-related maternal deaths in 2008-2013, nearly one-half had both recreational and prescription drugs present.[3] Maternal death is defined as the death of a woman while pregnant or within one year of the end of pregnancy.

Women ages 18 to 44 years who currently used cigarettes or marijuana had significantly higher prevalence of all other substance use than women who did not use cigarettes or marijuana[12] (data not shown). As shown in table 1, among women who currently used marijuana, over one-third (34.1%) currently smoked cigarettes, compared to only 14.6 percent of all Colorado women. Although prevalence of heavy drinking was about 8.2 percent among all Colorado women, among women who smoked cigarettes or who used marijuana, the prevalence was much higher (18.6% and 20.2%, respectively).

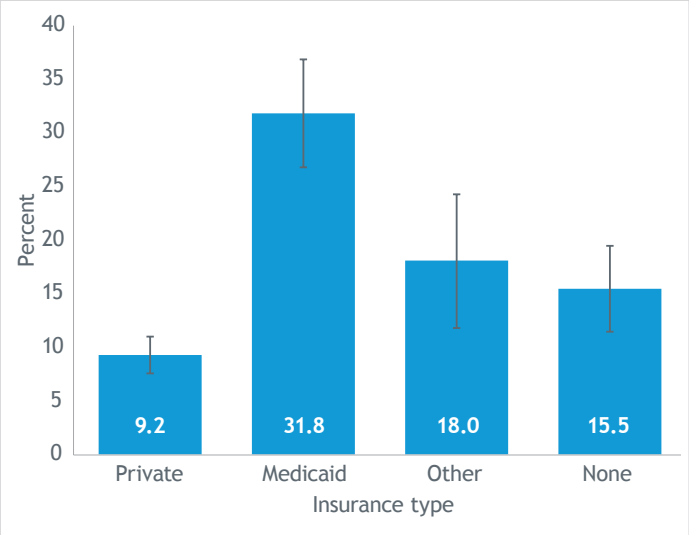
Table 1. Substance use among Colorado women ages 18-44 years overall and by current smoking and marijuana use status, 2016-2017.[11]

	All Colorado women		Colorado women who currently use cigarettes		Colorado women who currently use marijuana	
Substance	Percent	CI*	Percent	CI	Percent	CI
Cigarette use	14.6	13.1-16.1	N/A		34.1	28.4-39.8
E-cigarette use	5.8	4.8-6.9	19.0	14.5-23.4	17.2	12.5-21.9
Marijuana use	16.4	14.6-18.1	38.1	32.1-44.2	N/A	
Binge drinking	22.0	20.2-23.7	33.8	28.4-39.3	43.8	37.9-49.7
Heavy drinking	8.2	7.0-9.3	18.6	14.2-23.1	20.2	15.4-25.1

*Confidence interval.

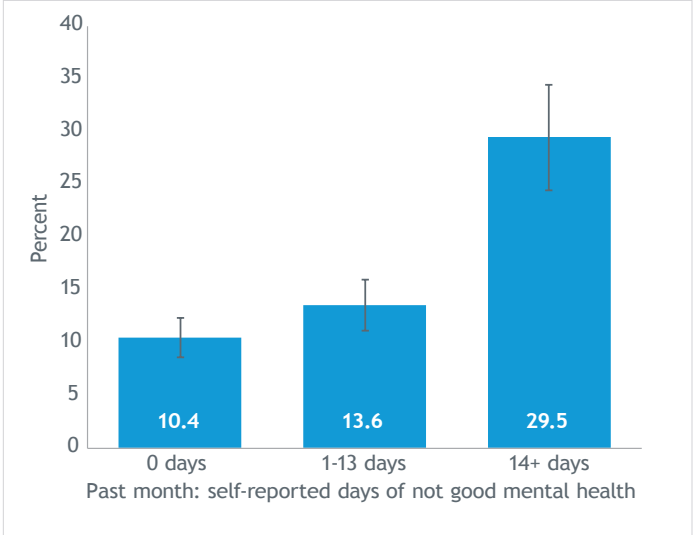
Social and economic disparities in substance use

Figure 2. Current smoking by insurance type, Colorado women ages 18-44 years, 2016-2017.[12]



A significantly higher percentage of women with Medicaid insurance and a significantly lower percentage of women with private insurance were current smokers than women with all other insurance types. About 1 in 11 women with private health insurance were smokers (9.2%) compared with nearly 1 in 3 women with Medicaid insurance (31.8%).

Figure 3. Current smoking by mental health status, Colorado women ages 18-44 years, 2016-2017.[12]

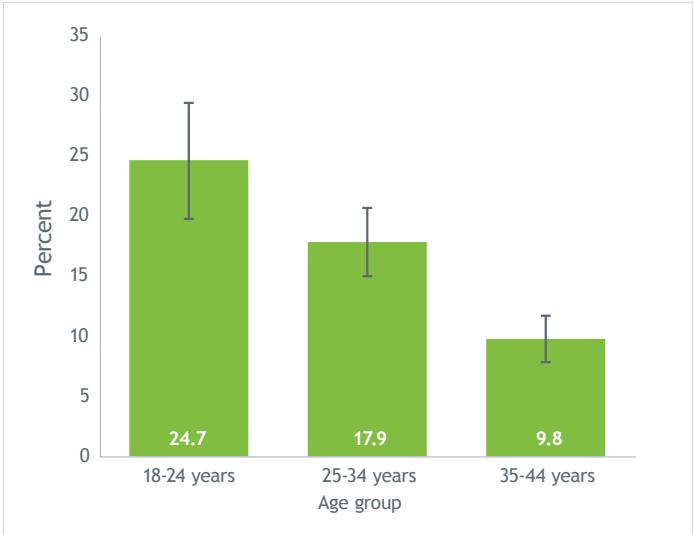


A significantly higher percentage of women who reported 14+ days of not good mental health in the past month were current smokers (29.5%) than women who reported 0 days (10.4%) or 1 to 13 days (13.6%) of not good mental health in the past month. Compared with women who reported 0 days of not good mental health in the past month, a significantly higher percentage of women who reported 1 to 13 days were current smokers as well.

Figure 4. Current e-cigarette use by urban/rural setting, Colorado women ages 18-44 years, 2016-2017.[12]

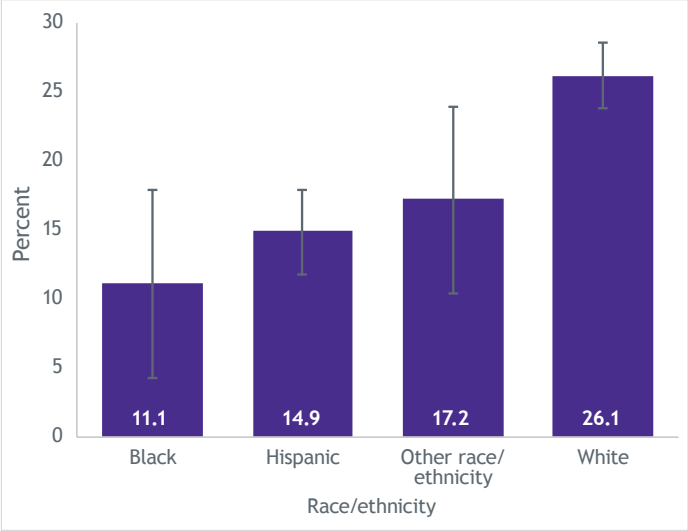
A significantly higher percentage of women residing in an urban county were current e-cigarette users (6.0%) compared with women residing in a rural county (2.6%).

Figure 5. Current marijuana use by age group, Colorado women ages 18-44 years, 2016-2017.[12]



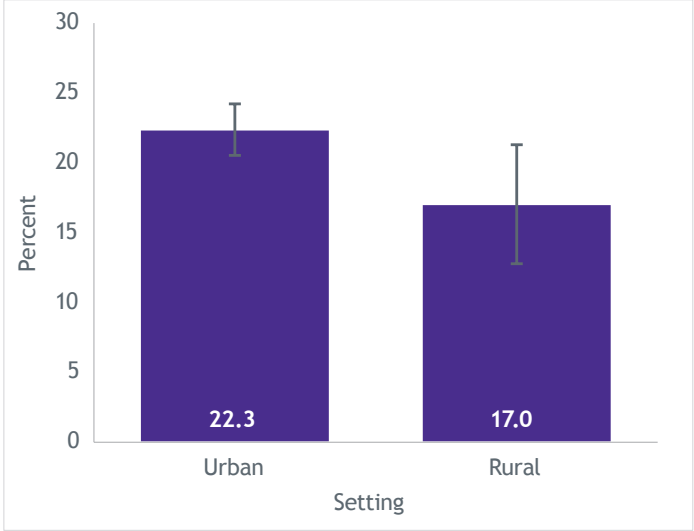
A significantly higher percentage of women ages 18 to 24 years were current marijuana users than women ages 25 to 34 and 35 to 44 years. Almost 1 in 4 women (24.7%) ages 18 to 24 were current marijuana users, compared to about 1 in 10 women (9.8%) ages 35 to 44 years. Prevalence of current marijuana use is significantly lower in older age groups.

Figure 6. Current binge drinking by race/ethnicity, Colorado women ages 18-44 years, 2016-2017.[12]



White women had significantly higher prevalence of binge drinking than all other race/ethnicity groups. Black and Hispanic women, and women of other races/ethnicities did not significantly differ from each other in past month binge drinking. Over 1 in 4 white women (26.1%) reported past month binge drinking, compared to 1 in 9 black women (11.1%), 1 in 7 Hispanic women (14.9%), and about 1 in 6 women of other races/ethnicities (17.2%).

Figure 7. Current binge drinking by urban/rural setting, Colorado women ages 18-44 years, 2016-2017.[12]



A significantly higher percentage of women residing in an urban county reported past month binge drinking (22.3%) compared with women residing in a rural county (17.0%).

Prevalence of substance use among pregnant women

In 2016, 6.4 percent of women who had a live birth reported smoking cigarettes, while only 1.1 percent reported e-cigarette use, during the 3rd trimester of pregnancy.[14] Cigarette use has declined since 2012 when 9.1 percent of women reported 3rd trimester smoking.

About 2.2 percent of women reported using marijuana during the 3rd trimester in 2016, which was not a significant change from the 2.4 percent who reported this in 2014.[15]

Concerningly, 17.3 percent of women reported alcohol use in the 3rd trimester, a significant increase since 2012 when 10.4 percent of women reported this.[15]

In 2017, 232 infants in Colorado were born with neonatal abstinence syndrome, which primarily occurs from maternal use of opioids such as heroin, methadone, and prescription pain medications.[16]

Risk factors for substance use

The risk factors for tobacco, alcohol, marijuana, and other drug use are multi-factorial and complex. Widespread availability,[4,5] perceived norms of substance use,[6] predisposition among adolescents to take risks[6] and misperceptions of safety[8,9] may increase the likelihood of substance use. Advertising by tobacco and liquor

The disparities shown in the graphs here are not exhaustive. Disparities exist in tobacco, alcohol, and marijuana use among women of reproductive age by other social and demographic groupings.

industries has been shown to encourage the initiation and continuation of cigarette and alcohol use.[17,18] The tobacco industry spends an estimated $140 million on marketing in Colorado each year, and has historically targeted women experiencing low socioeconomic status through discount coupons and specific brand development and marketing.[19,20] Research shows that young women hear more radio wine advertising and cable TV advertising for alcohol than young men of the same age group.[21] It has also been shown that underage women ages 18 to 20 years see more advertising than women of legal drinking age for the majority of the top alcohol brands they consume.[22]

The Colorado substance use landscape

Alcohol

In the last decade, alcohol in Colorado has become more physically available and affordable. In Colorado, the current alcohol excise tax is only $0.01 for a beer or a glass of wine and $0.03 for a cocktail with spirits, which ranks as one of the lowest state alcohol excise taxes in the country.[23,24] Alcohol is currently available for sale seven days a week and up to nineteen hours per day and is not able to be taxed further by counties and municipalities in Colorado.[25]

Beginning in January 2019, many grocery and convenience stores will be able to sell full-strength beer, and now individuals ages 18 to 20 years can sell alcohol if a supervisor over the age of 21 is present.[25,26] Additionally, many types of alcohol outlets will now be able to increase the number of liquor licenses they can obtain over time, which could increase alcohol outlet density in some communities.[25]

Tobacco

In January 2005, a tax increase on tobacco and tobacco products increased the price of a pack of cigarettes by 64 cents. However, Colorado has not raised the tax on tobacco products since then and is currently ranked 39th in the nation for its cigarette tax at $0.84 per pack compared with a national average of $1.78.[27] All other tobacco products are taxed at 40 percent of the manufacturer's list price.

In July 2006, Colorado implemented the Colorado Clean Indoor Air Act (CCIAA) to reduce the risk of tobacco smoke-related health problems in Colorado. The CCIAA prohibits smoking in most indoor areas throughout the state along with entryways to most buildings and facilities.[28] E-cigarettes are not currently included in the CCIAA, but there is a statewide regulation establishing smoke-free locations where e-cigarettes cannot be used, including schools, child care facilities, and school buses.[28] Twenty-five Colorado communities further prohibit the use of e-cigarettes in locations such as restaurants and workplaces.

Currently in Colorado, tobacco is available for sale to those ages 18 years or older, however, there is no statewide requirement of a license to sell tobacco. Several communities, including Aspen, Basalt, and Avon, have recently passed laws that require retailers to have a license to sell tobacco and raise the age of sale for tobacco products to 21 years and over.

Marijuana

In 2012, Colorado became one of the first states to legalize retail marijuana for adults ages 21 years and over, with the first retail dispensaries opening in January 2014. Colorado's retail marijuana has the highest taxes among all legal retail states at 30 percent (15 percent excise and 15 percent sales tax). Hours of sale are limited and can be further limited by counties and municipalities.

Retailers are strictly regulated with requirements for security, ID checks, packaging requirements to prevent injury, and warnings specific to both youth and pregnant or breastfeeding women. Marijuana advertising is not allowed to target audiences with less than 30 percent of adults over the age of 21. No billboards or additional advertising are allowed at point of sale.

In 2013, marijuana was added to the Colorado Clean Indoor Air Act; use is banned in public places, in cars, at dispensaries, and use is up to the discretion of additional property owners (including rental properties and hotels).[28]

Opioids

In 2012, Colorado state agencies partnered with the Governor's Office to generate a strategic plan to address the growing number of opioid deaths in Colorado and created the Colorado Consortium for Prescription Drug Abuse Prevention to implement effective programs, strategies, and policies to reduce opioid misuse and overdose. During the 2014 legislative session, Colorado legislators passed a bill that aligned Colorado's Prescription Drug Monitoring System (PDMP) with best practice strategies including allowing delegated access, unsolicited reports, mandated enrollment, access by out-of-state pharmacists, and Colorado Department of Public Health and Environment (CDPHE) access to PDMP data as a public health surveillance tool. Additionally, the Board of Pharmacy increased PDMP data collection intervals on dispensed opioids to daily uploads and partnered with the Colorado Dental Board, Colorado Medical Board, and State Board of Nursing to adopt a policy for prescribing and dispensing opioids.

In 2017, the legislature created the bipartisan Opioid and Other Substance Use Disorders Interim Study Committee to study issues relating to opioid and substance use disorders in Colorado and to develop legislative options to address the gaps and hurdles to accessing prevention, intervention, harm reduction, treatment and recovery resources. During the 2018 legislative session legislators passed five bills to address Colorado's opioid epidemic, including enacting guidelines for prescribers to follow when issuing refills for opioid prescriptions, creating a loan repayment program for behavioral health providers, changing insurance policies for Medicaid to increase access to medication assisted treatments for opioid use disorders, and increasing funding to school-based health centers to address substance misuse. For more information on these and other strategies to prevent and reduce substance misuse, please refer to the Opioid and Other Substance Use Disorders Interim Study Committee website.

The Colorado Department of Public Health and Environment acknowledges that generations-long social, economic and environmental inequities result in adverse health outcomes. They affect communities differently and have a greater influence on health outcomes than either individual choices or one's ability to access health care. Reducing health disparities through policy, practice, and organizational systems change can help improve opportunities for all Coloradans.

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