SUBSTANCE USE PATTERNS & HEALTH IMPACTS

Colorado Substance Abuse Trend and Response Task Force August 2, 2019

Barbara Gabella, Kacy Crawford, Katelyn Hall Colorado Department of Public Health and Environment



- Healthy Kids Colorado Survey (HKCS)
 - > Every 2 years, self-reported, school-based survey (HS & MS)
 - > Largest survey asking about youth substance use in Colorado
- Behavioral Risk Factor Surveillance System (BRFSS)
 - > Annual self-reported, telephone-based survey (Adults 18+)
 - Largest survey asking about adult substance use in Colorado



- Pregnancy Risk Assessment Monitoring System (PRAMS)
 - > Annual survey of women who recently gave birth
 - Mail survey with telephone follow-up asks about many risk factors including substance use
- National Survey on Drug Use and Health (NSDUH)
 - > Annual survey of participants 12 years and older
 - > State estimates are based on two years of survey data

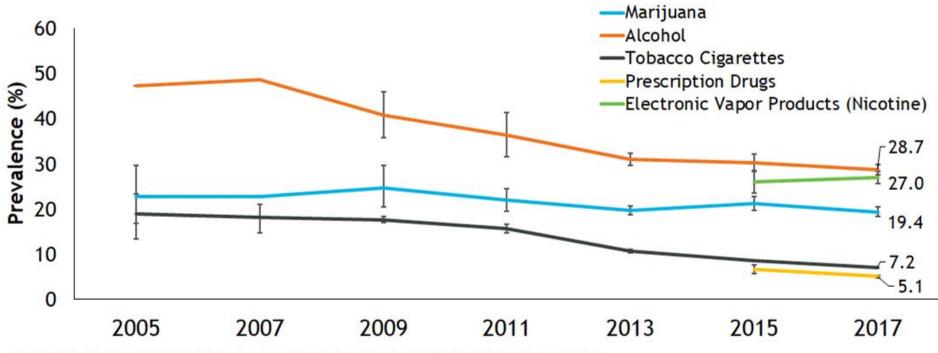




HEALTHY KIDS COLORADO SURVEY



Prevalence of past 30 day substance use among high school students in Colorado, 2005-2017



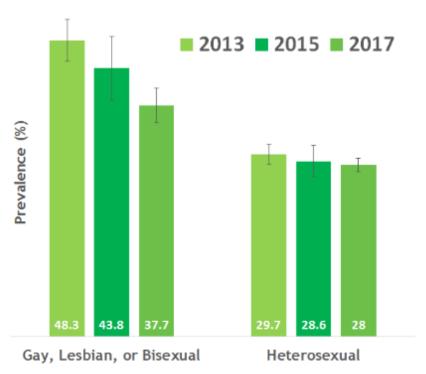
Produced by: Marijuana Health Monitoring Program, Colorado Department of Public Health & Environment 2018. Data Sources: Healthy Kids Colorado (HKCS).

*Black bars indicate margins of error (95% Confidence Intervals).



High School Alcohol Use (2017)

2 in 3 high school students did **NOT** drink in the past 30 days



1 in 6 high school students binge drink

LGBT students are more likely to have drank alcohol in the past 30 days compared to heterosexual students



High School Marijuana Use (2017)

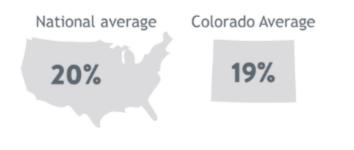
MARIJUANA USE

4 out of 5 (81%) Colorado youth have **NOT** used marijuana in the last month.



CURRENT USE

Colorado youth current marijuana use compared to the national average



HOW YOUTH USUALLY USE MARIJUANA

Among youth who currently use, usual method of use



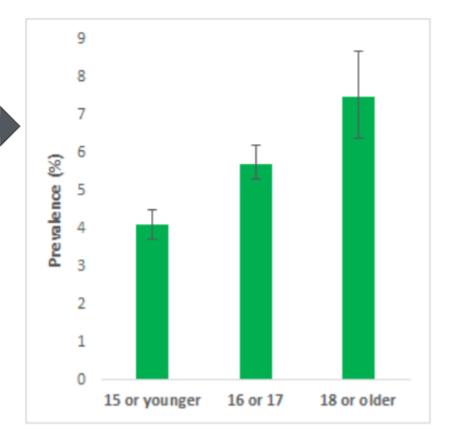
*Statistically significant Increase since 2015.



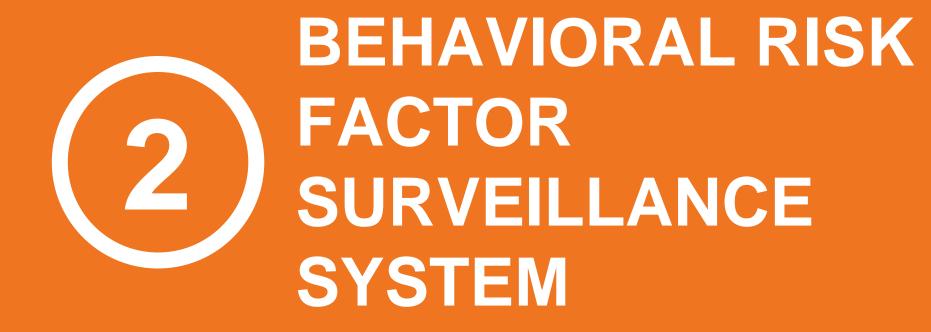
High School Prescription Drug Use (2017)

- Only 5% of youth report using prescription drugs without a doctor's prescription in the last 30 days
 - This prevalence increases significantly over time as youth grow older

Gay, Lesbian, or Bisexual youth (8.6%) report using prescription drugs without a prescription at a significantly higher prevalence than heterosexual youth (4.5%)

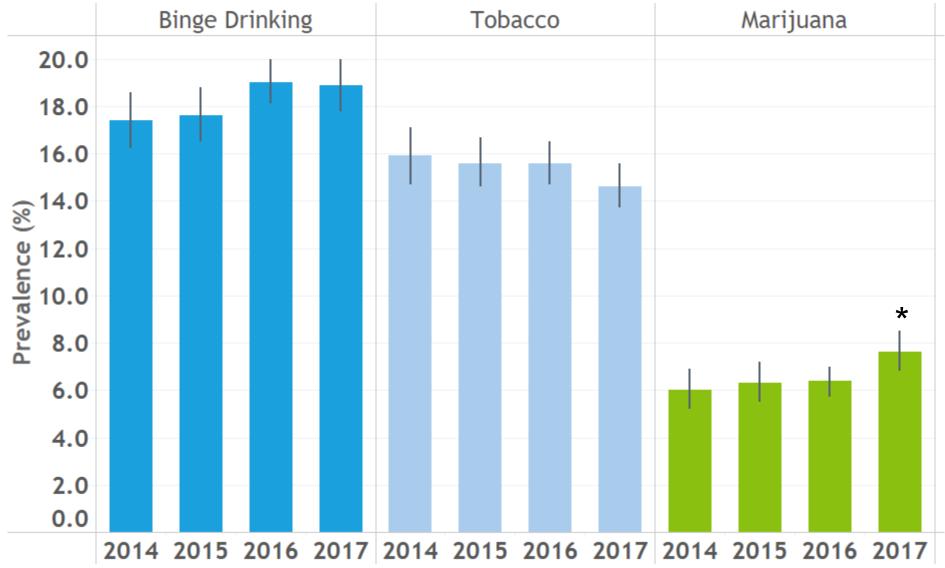








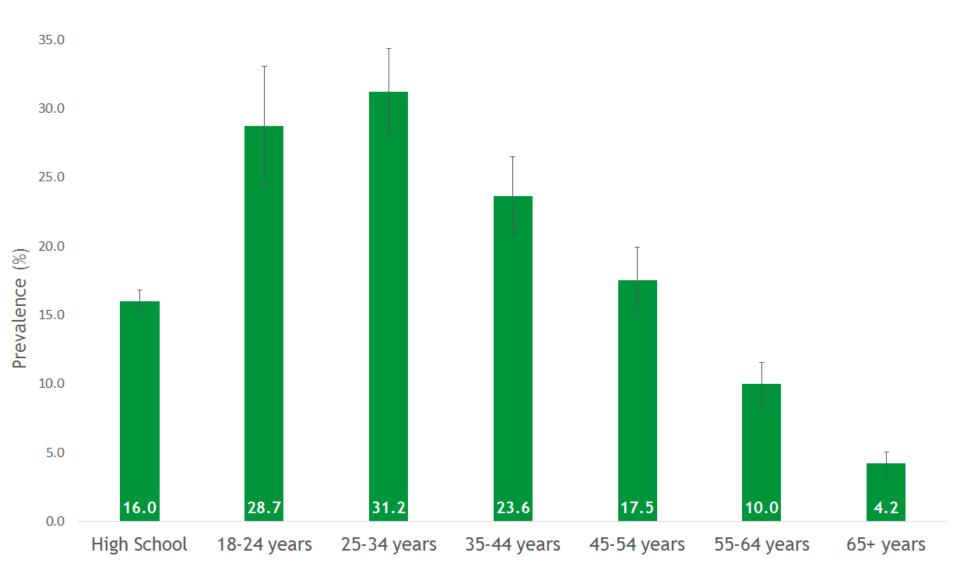
Daily/near daily marijuana use, tobacco use, and binge drinking among adults in Colorado, 2014-2017



COLORADO Department of Public Health & Environment

Created by CDPHE, EEOHT Source: Colorado BRFSS, 2014-2017

Colorado Binge Drinking Across the Lifespan

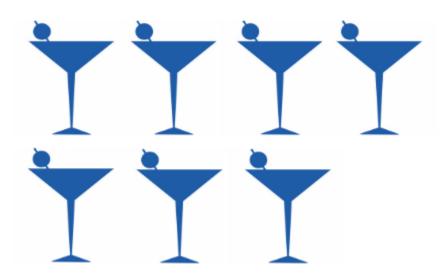


Created by CDPHE, Alcohol Epidemiology Source: Colorado HKCS and BRFSS, 2017



Colorado Adult Binge Drinking Frequency & Intensity

Binge drinkers average:



7 drinks per binge

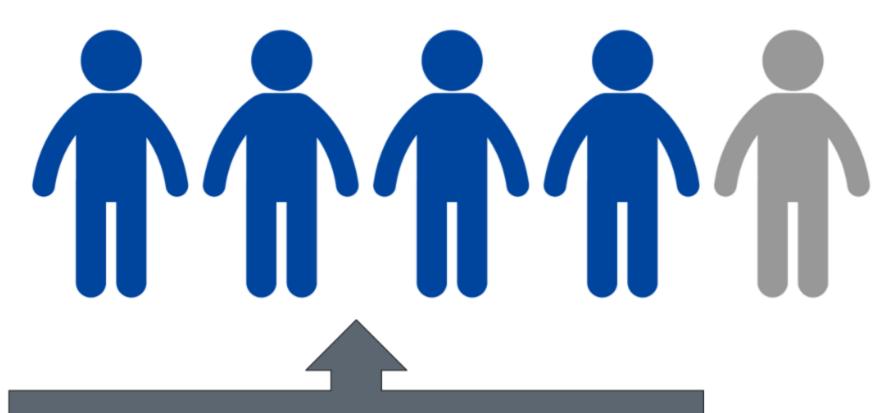


4 episodes per month



Created by CDPHE, Alcohol Epidemiology Source: Colorado HKCS and BRFSS, 2017

Colorado Adult Drinking and Driving



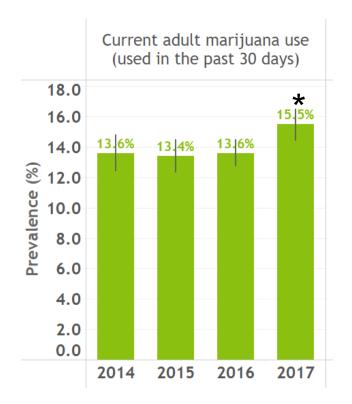
4 in 5 adults who drove after drinking also report binge drinking





Created by CDPHE, Alcohol Epidemiology Source: Colorado HKCS and BRFSS, 2016

Adult Marijuana Use in Colorado

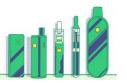


- Increase in past month marijuana use
 - Driven by adults 18-34 years

Among 15.5% using marijuana...



40.4% reporting eating/drinking marijuana products



29.1% reporting vaporizing marijuana



• **21.1%** reporting dabbing marijuana concentrates



3.0% of adults reported driving after recent marijuana use (no change from 2014-2017)

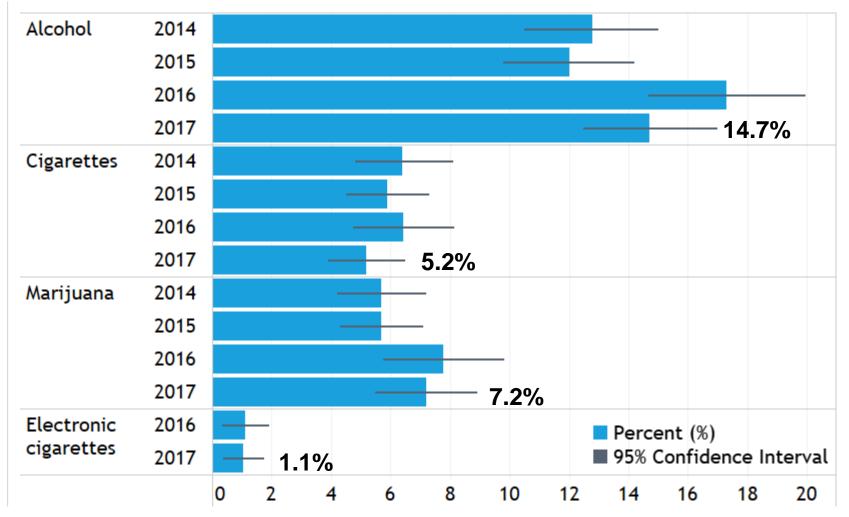




PREGNANCY RISK ASSESSMENT MONITORING SYSTEM



Alcohol, tobacco, marijuana, and e-cig use during pregnancy, 2014-2017



NOTE: For alcohol, cigarettes, and e-cigarettes, data are reported in the last trimester of pregnancy. For marijuana, data are reported as any use during the pregnancy.

Created by CDPHE, EEOHT

Source: Colorado PRAMS, 2014-17

https://www.colorado.gov/pacific/marijuanahealthinfo/PRAMS-data



OLORADO

Department of Public

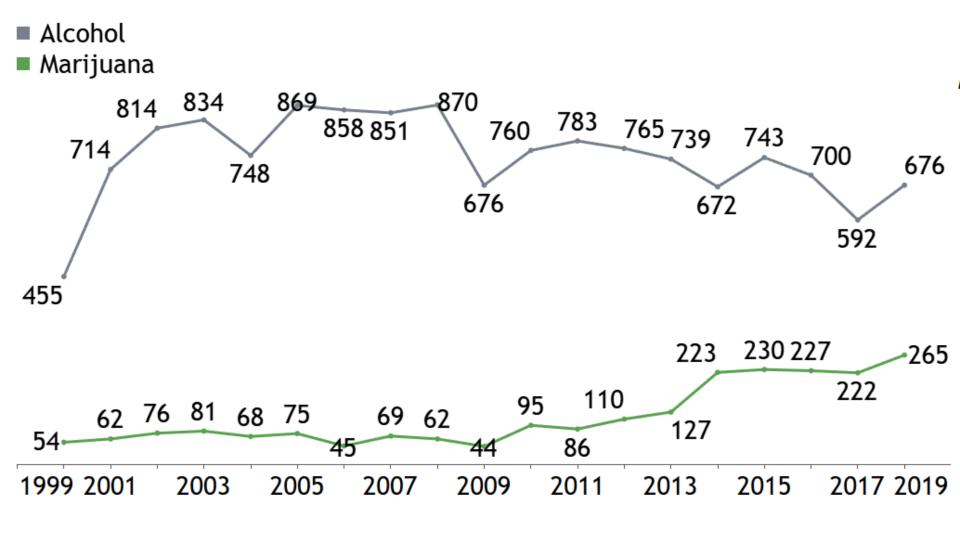
Health & Environment





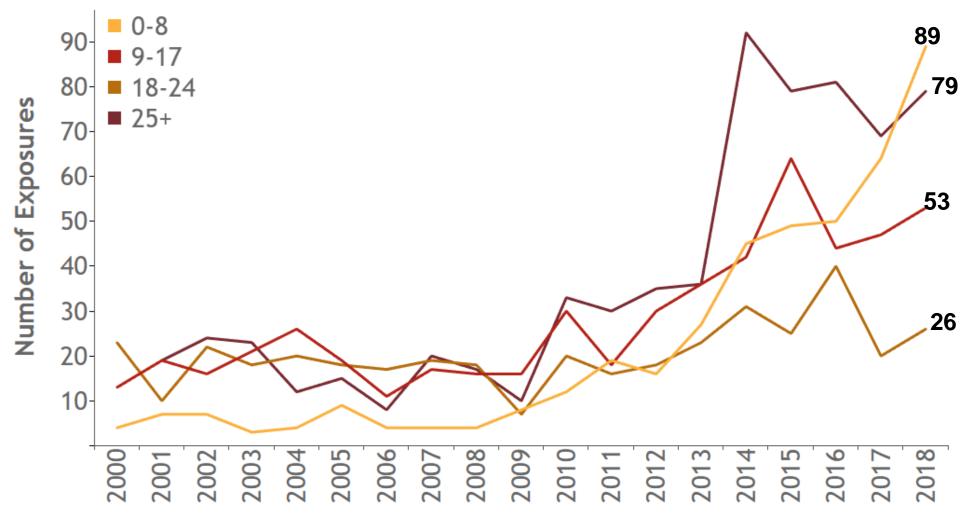


Number of marijuana and alcohol exposures reported to the poison center from Colorado, 2000-2017





Marijuana exposures reported to the poison center with by age: 0-8, 9-17, 18-24, and 25+ years.

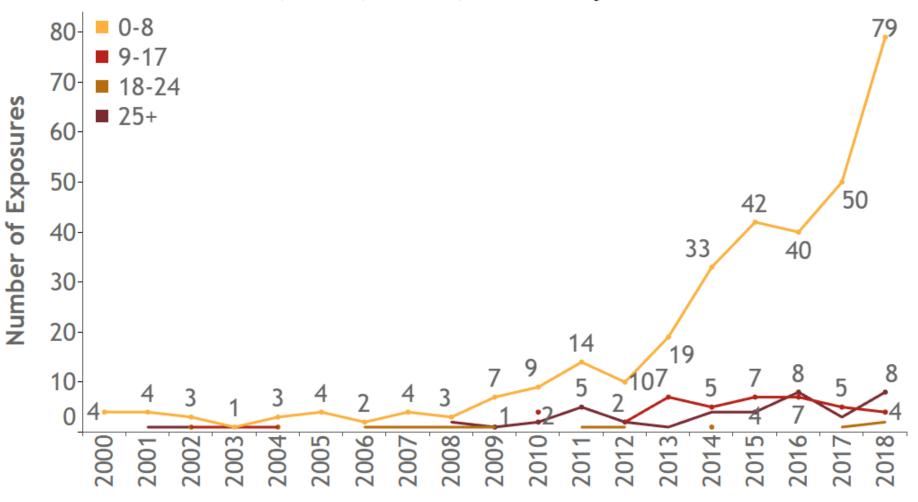






Number of unintentional marijuana only exposures by age

Marijuana exposures reported to the poison center with by age: 0-8, 9-17, 18-24, and 25+ years.







PRESCRIPTION DRUG PREVENTION INDICATORS





Overarching indicators tracked for the Colorado Consortium for Prescription Drug Abuse Prevention



Use:

1. Misuse (2015 forward)

Non-medical use of prescription pain relievers (2014 and prior)

Impact:

2. Drug overdose deaths involving prescription opioids



227,000 Coloradans age 12 or older misused prescription pain relievers in the past year ...

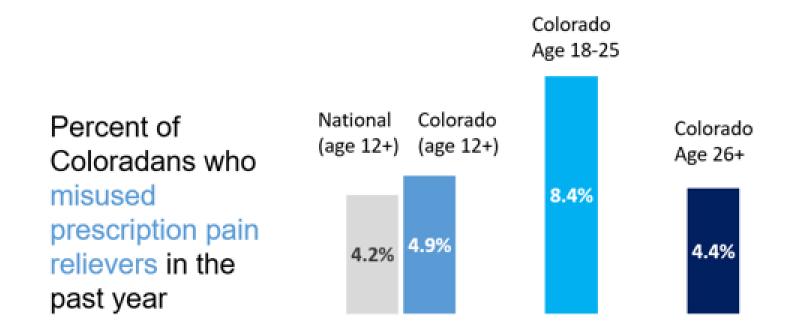
without a prescription of one's own;

in greater amounts, more often, or longer than told; or

in any other way not directed by a doctor.



Misuse* of Rx Pain Relievers in 2016-2017



*Misuse is use in any way not directed by a doctor.

www.samhsa.gov/data/report/2016-2017-nsduh-state-specific-tables



Source: National Survey on Drug Use and Health

4.9% of Coloradans age 12 or older misused prescription pain relievers in the past year.

Colorado's result is still in the top tier of states.

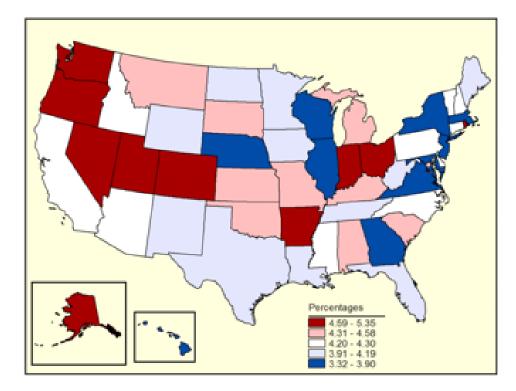


Figure 12a from the National Survey on Drug Use and Health, 2016-2017 accessed on 7/30/19 at: https://www.samhsa.gov/data/report/2016-2017-nsduh-national-maps-prevalence-estimates-state



Health Impact: Prescription opioid overdoses

Non-opioid drugs & unspecified Rx 0pioid 32% 44% 20% Both Heroin

349 (36%) of the 974 drug poisoning deaths in Colorado involved **Rx opioid pain relievers** in 2018.

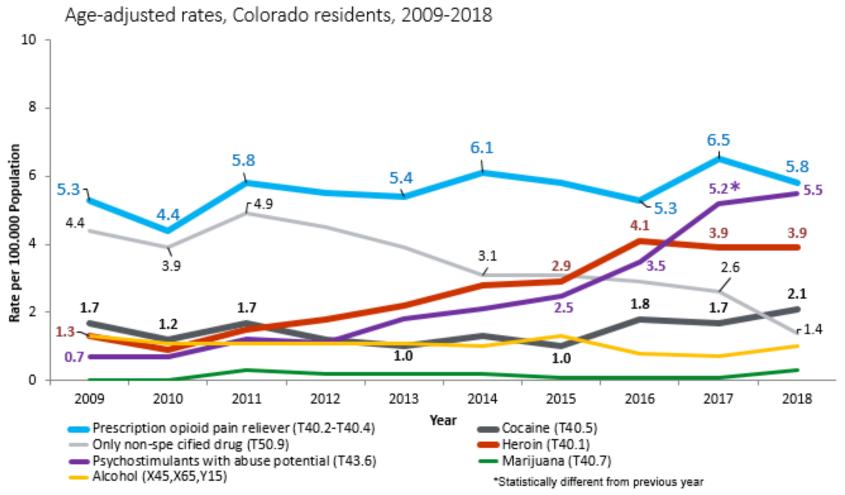


35 person (4%) died from an overdose involving both heroin and prescription opioids. Source: Colorado death certificate data 2018, Vital Statistics Unit





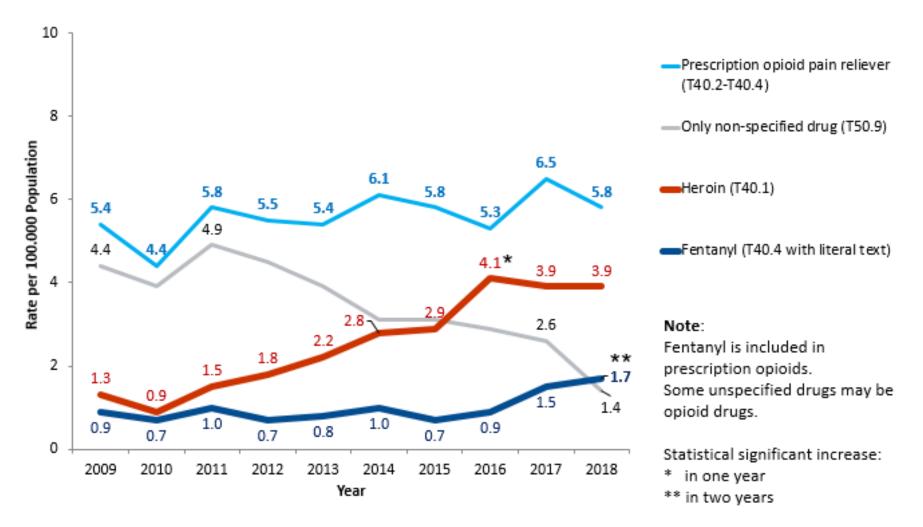
Health Impact: Drug overdose deaths





Health Impact: Opioid overdose deaths

Age-adjusted rates, Colorado residents, 2009-2018





SUMMARY: ALCOHOL

 Alcohol is still the most prevalently used substance.

 Binge drinking is not just a youth or young adult issue.

 Most adults who report drunk driving also report binge drinking.



SUMMARY: MARIJUANA

• Use is highest in young adults (18-25) at 29.2%

 3.0% of all adults drove after recently using marijuana

 Poison center calls in ages 0-8 increased after legalization and continue to increase



2018 SUMMARY: OPIOIDS

5.8 overdose deaths per 100,00 persons involved prescription opioids, including fentanyl.

3.9 heroin deaths per 100,000 persons is still twice the 2012 rate.

The low yet increasing rate of fentanyl overdoses might reflect changes in testing and reporting.

- Coroners and medical examiners continue to improve the reporting of specific drugs on the death certificates for drug overdoses.
- Identifying fentanyl and fentanyl analogs contributing to overdose deaths is difficult.



2018 SUMMARY: OTHER DRUGS

5.5 overdose deaths per 100,000 persons involved psychostimulant drugs with abuse potential.

- approaches the 5.8 rate for prescription opioid overdose deaths.
- a statistically significant increase from 3.5 deaths in 2016.

2.1 overdose deaths per 100,000 population involved cocaine.

The cocaine rate might be leveling after a single-year doubling from 2015 to 2016.



LINKS TO RESOURCES

- CDPHE VISION Data Dashboard
- Healthy Kids Colorado Survey Reports and Infographics
- Excessive alcohol use prevention and data
- Marijuana Use Trends and Health Effects
- Opioid Data Dashboard of the Colorado Consortium for Prescription Drug Abuse Prevention



THANKS!

Barbara Gabella, MSPH Senior Scientist in Injury Epidemiology barbara.gabella@state.co.us

Kacy Crawford, MPH Alcohol Epidemiologist kacy.crawford@state.co.us

Katelyn Hall, MPH, PhD Candidate Marijuana Statistical Analyst and Epidemiologist katelyn.hall@state.co.us

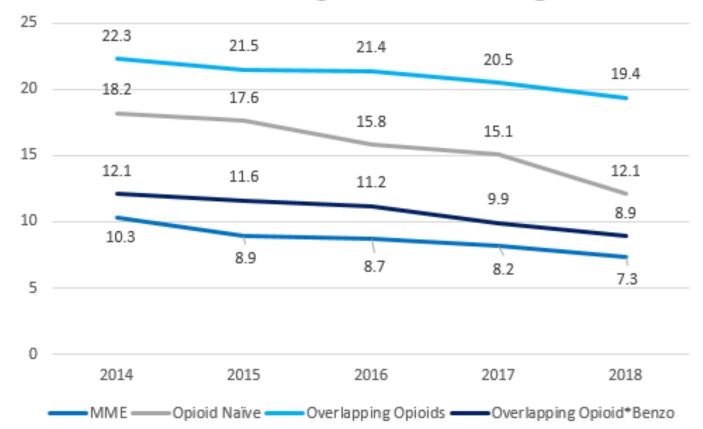








Potential High Risk Prescribing



MME = % of patients receiving more than 90 morphine milligram equivalents per day

Opioid Naive= % of patients prescribed long-acting/extended release opioids who did not fill an opioid prescription in the previous 45 days

Benzo = Benzodiazepines: a class of controlled substances commonly prescribed for anxiety, such as diazepam (Valium), alprazolam (Xanax)

