



Monitoring drug use patterns and health impacts

*Talk for the
COLORADO SUBSTANCE ABUSE TREND AND RESPONSE TASK FORCE
August 5, 2016*

Surveys in Colorado

BRFSS - Behavior Risk Factor Surveillance System

- National adult survey - no marijuana questions
- Colorado added marijuana questions starting in 2014
- We just received 2015 data
- About 11,000 surveys completed in Colorado in 2015

HKCS - Health Kids Colorado Survey

- State high school and middle school survey
- Asks all questions from the national YRBSS survey
- Adds questions on many youth behaviors, risk factors and protective factors, including marijuana questions
- About 15,000 surveys completed in Colorado in 2015

Other Surveys in Colorado

Not used in today's presentation

NSDUH - National Survey on Drug Use and Health

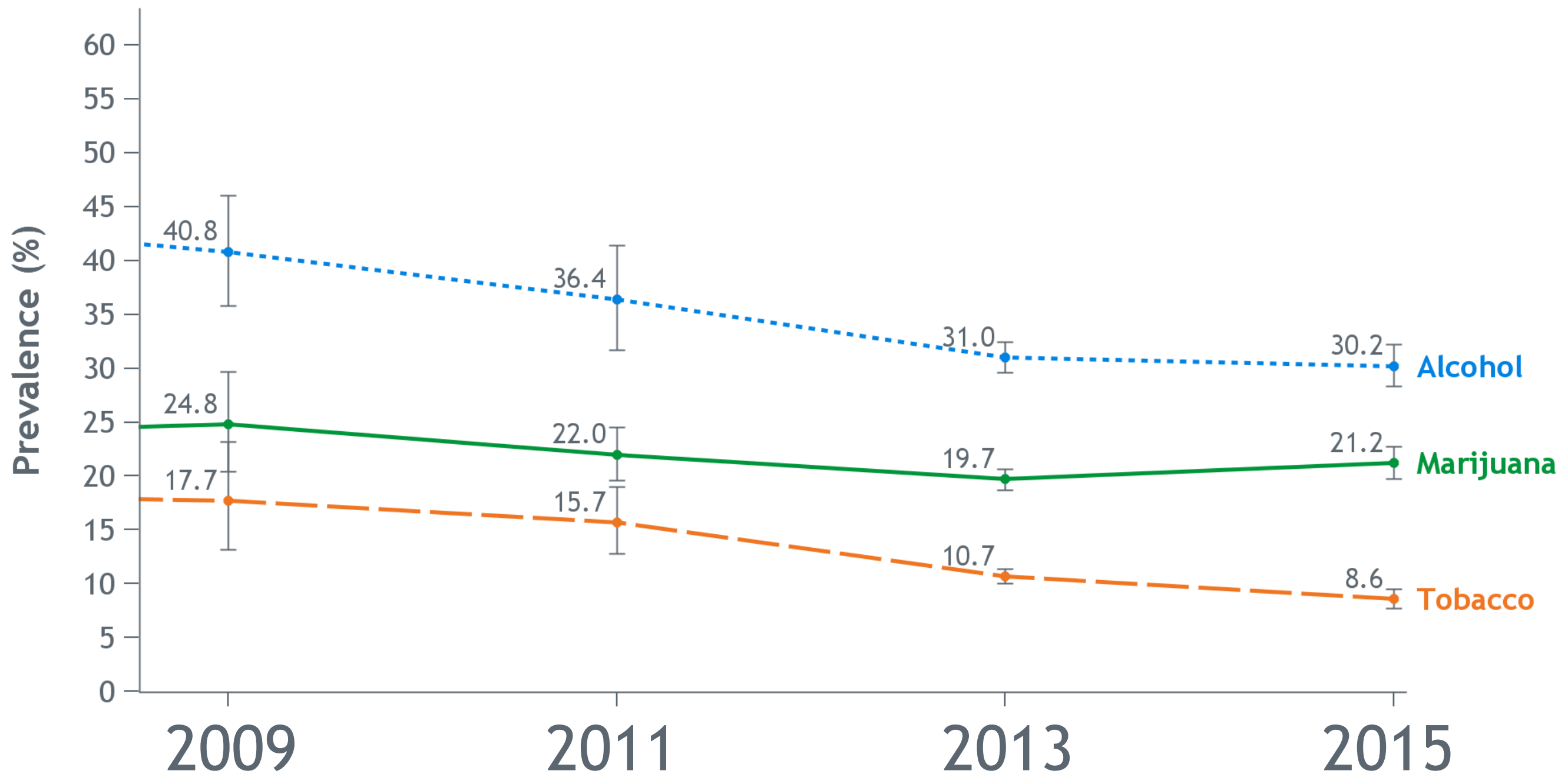
TABS - Tobacco Attitudes and Behaviors Survey

IFHL - Influential Factors in Healthy Living

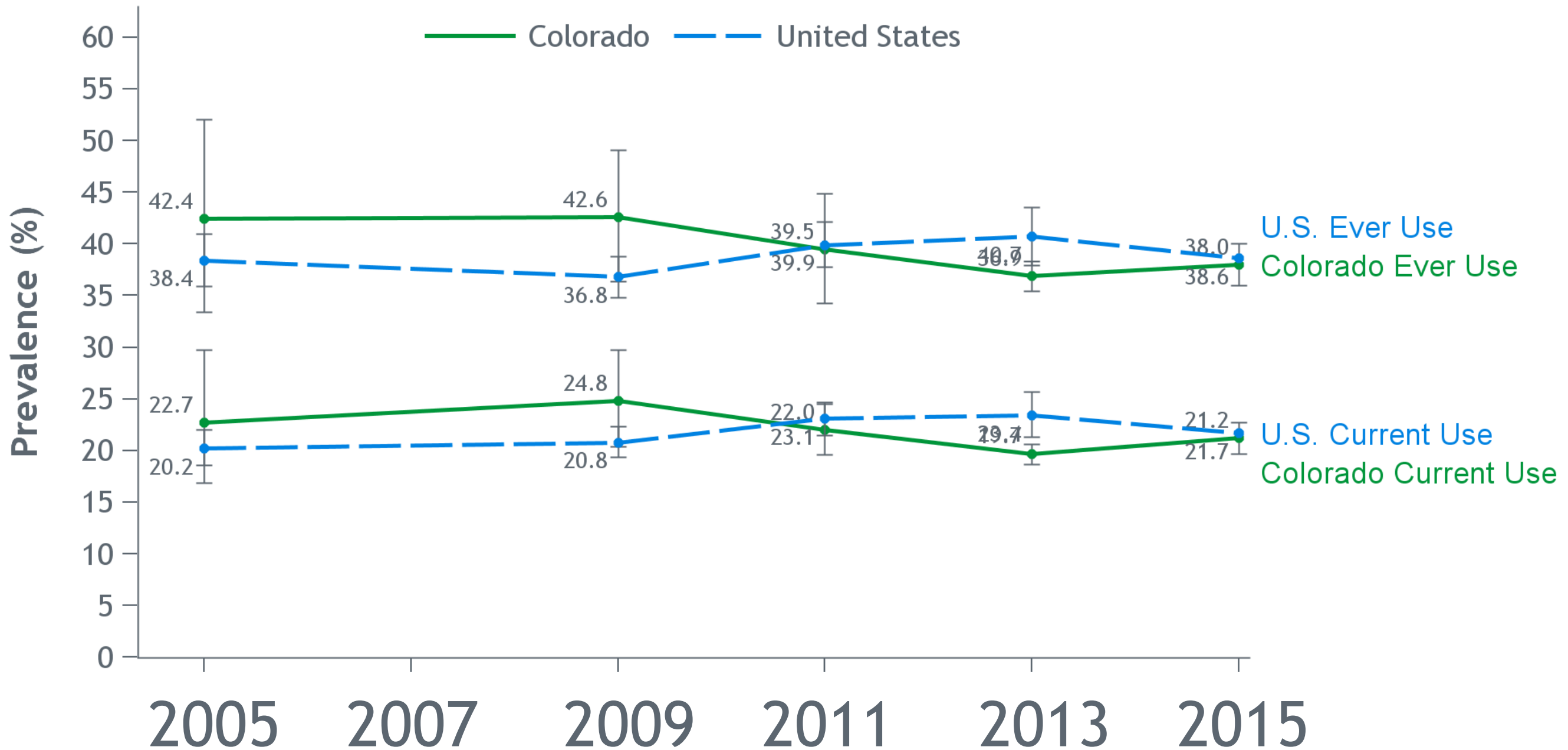
CHS - Child Health Survey

PRAMS - Pregnancy Risk Assessment Monitoring System

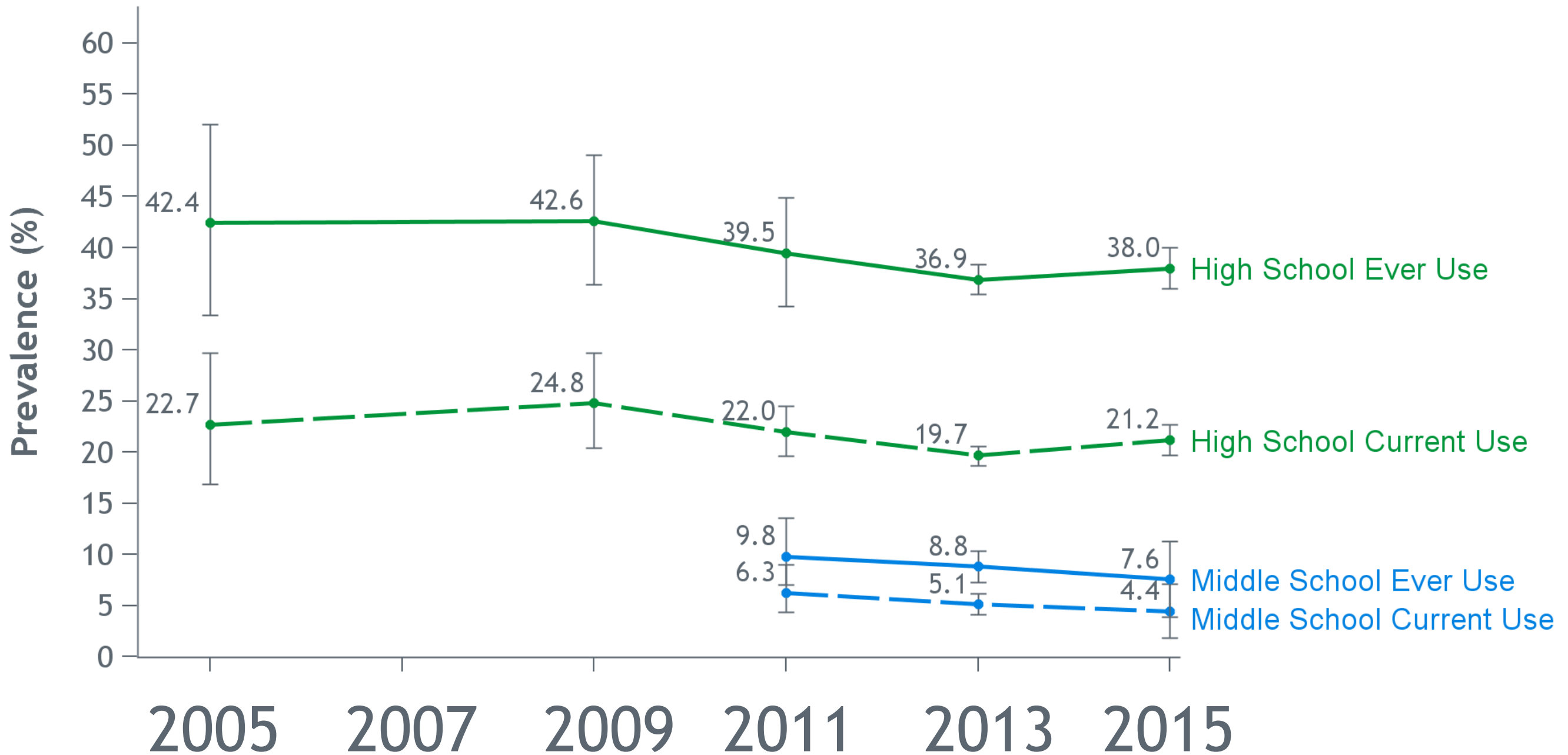
High School Alcohol, Marijuana and Tobacco Use in CO (HKCS)



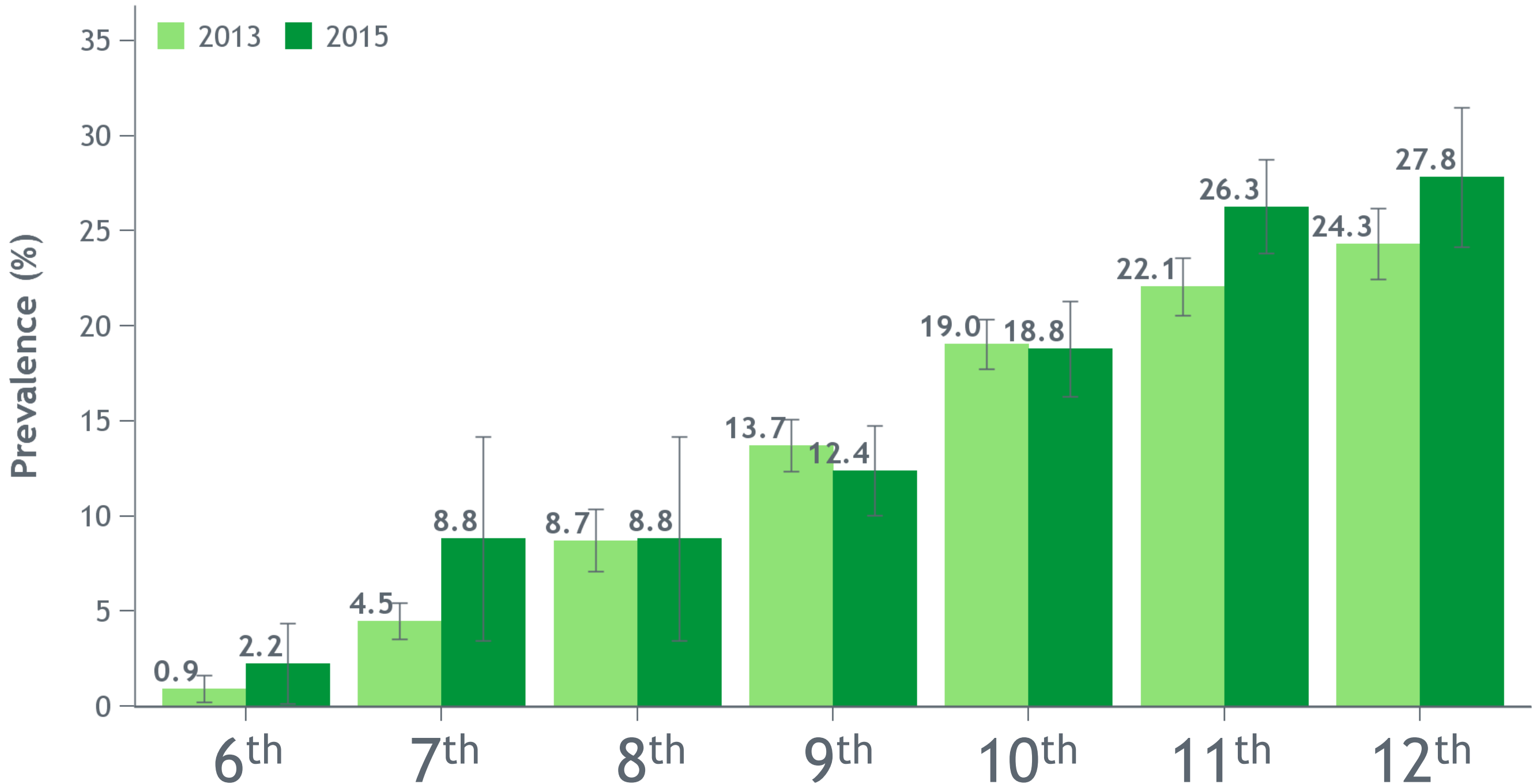
High School Marijuana Use in Colorado and Nationally (HKCS)



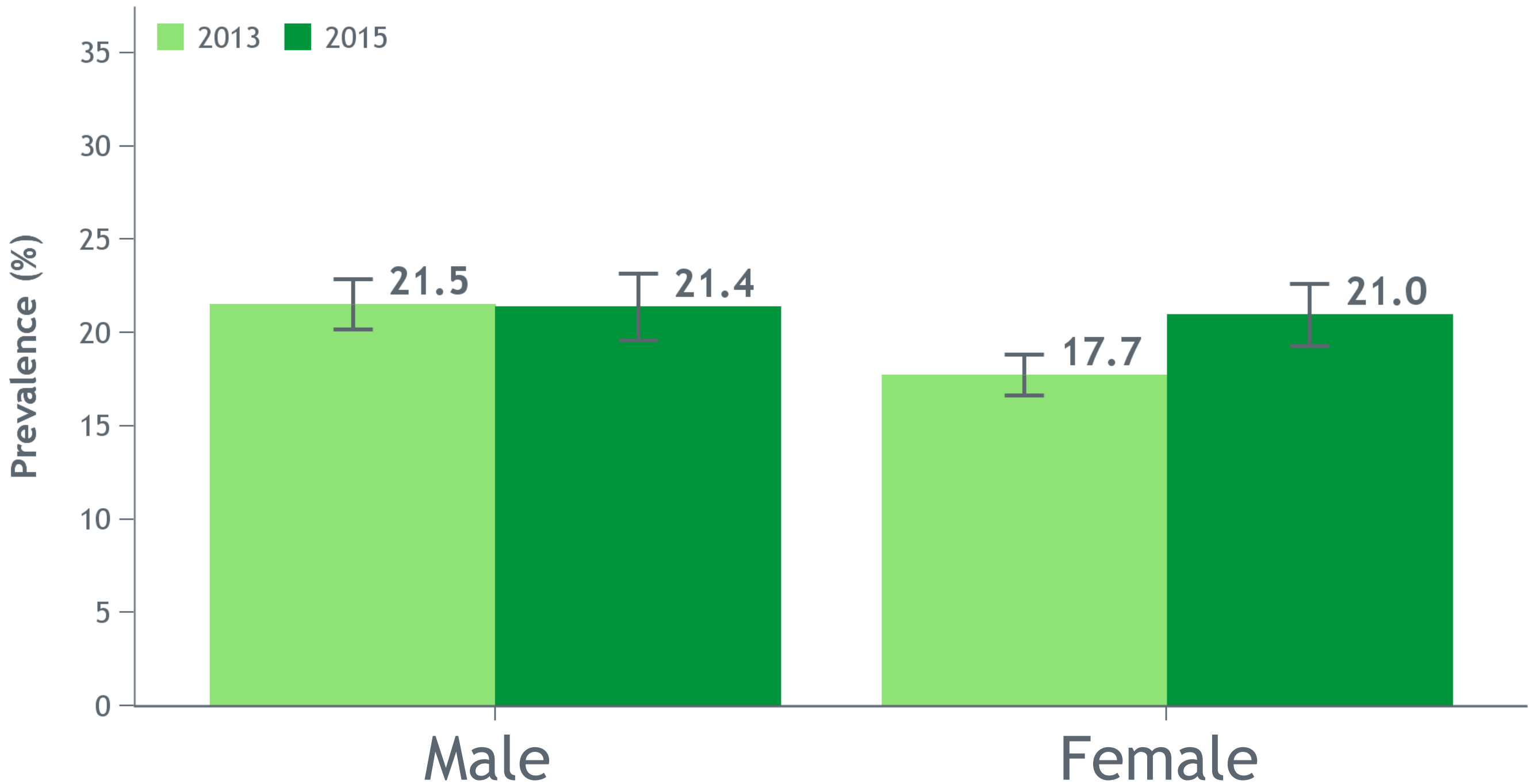
High School and Middle School Marijuana Use in Colorado (HKCS)



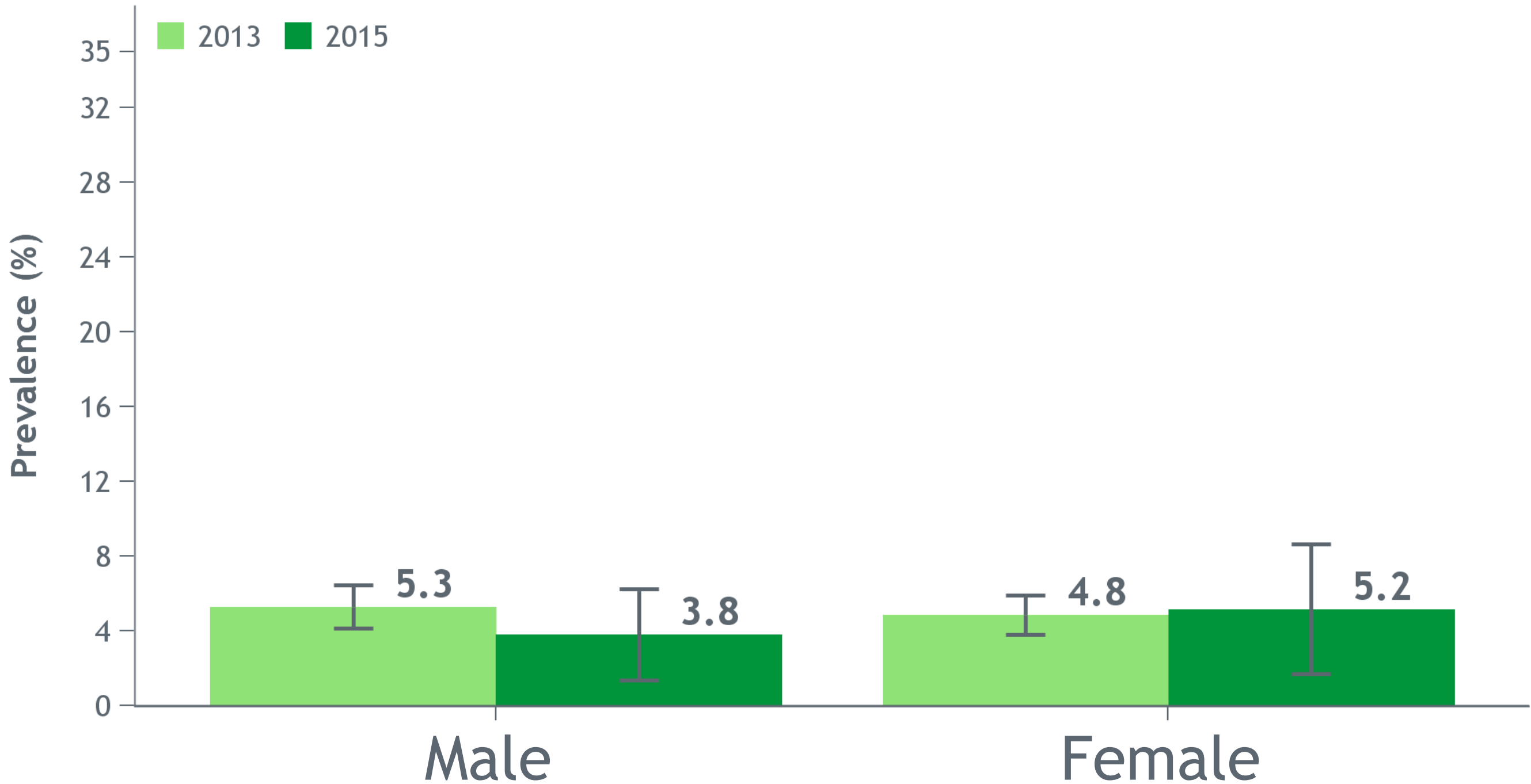
H.S. and M.S. Marijuana Use in Colorado by Grade Level (HKCS)



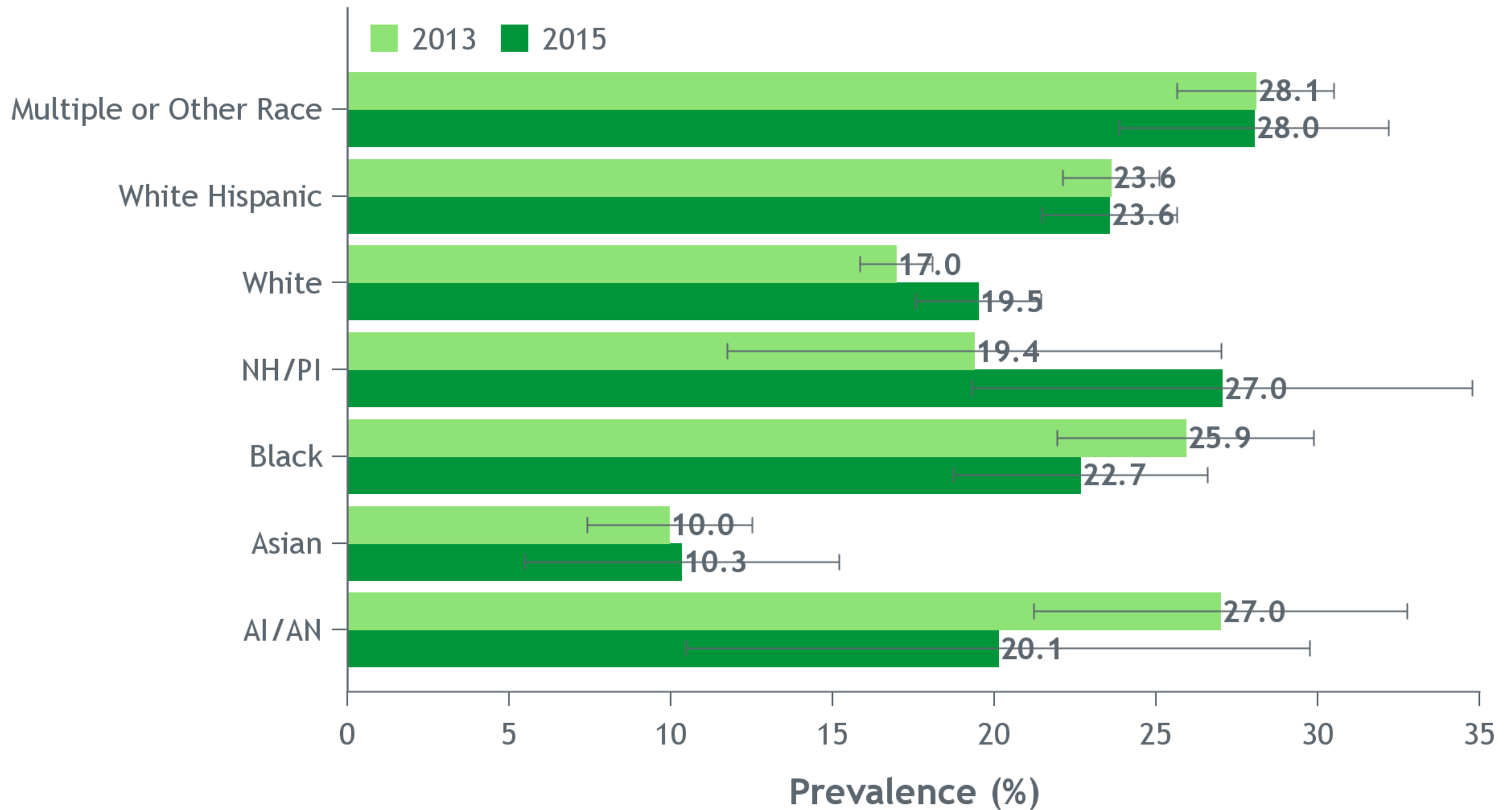
High School Marijuana Use in Colorado by Sex (HKCS)



Middle School Marijuana Use in Colorado by Sex (HKCS)



Marijuana Use by Race/Ethnicity in Colorado High Schools



Marijuana Use in Colorado

Summary

- Alcohol use in high school is still higher than marijuana use. Both alcohol use and tobacco smoking are trending down
- Highest rates of marijuana use (1 or more times within the past 30 days) are among the 18-25 age group and high school juniors and seniors, at about 26%
- About 13% of all adults use (18 years and older)

Marijuana Use in Colorado

Summary

- Adult use is higher among males than females, but in high school they're nearly the same
- There is a big difference between high school use rates and adult use rates for Hispanics
- Gay, lesbian, bisexual use is over 30% in both adults and high school
- Kids first trying marijuana rises around age 13

2 Overarching Indicators

*tracked for
the Colorado Consortium for
Prescription Drug Abuse Prevention*



Use:

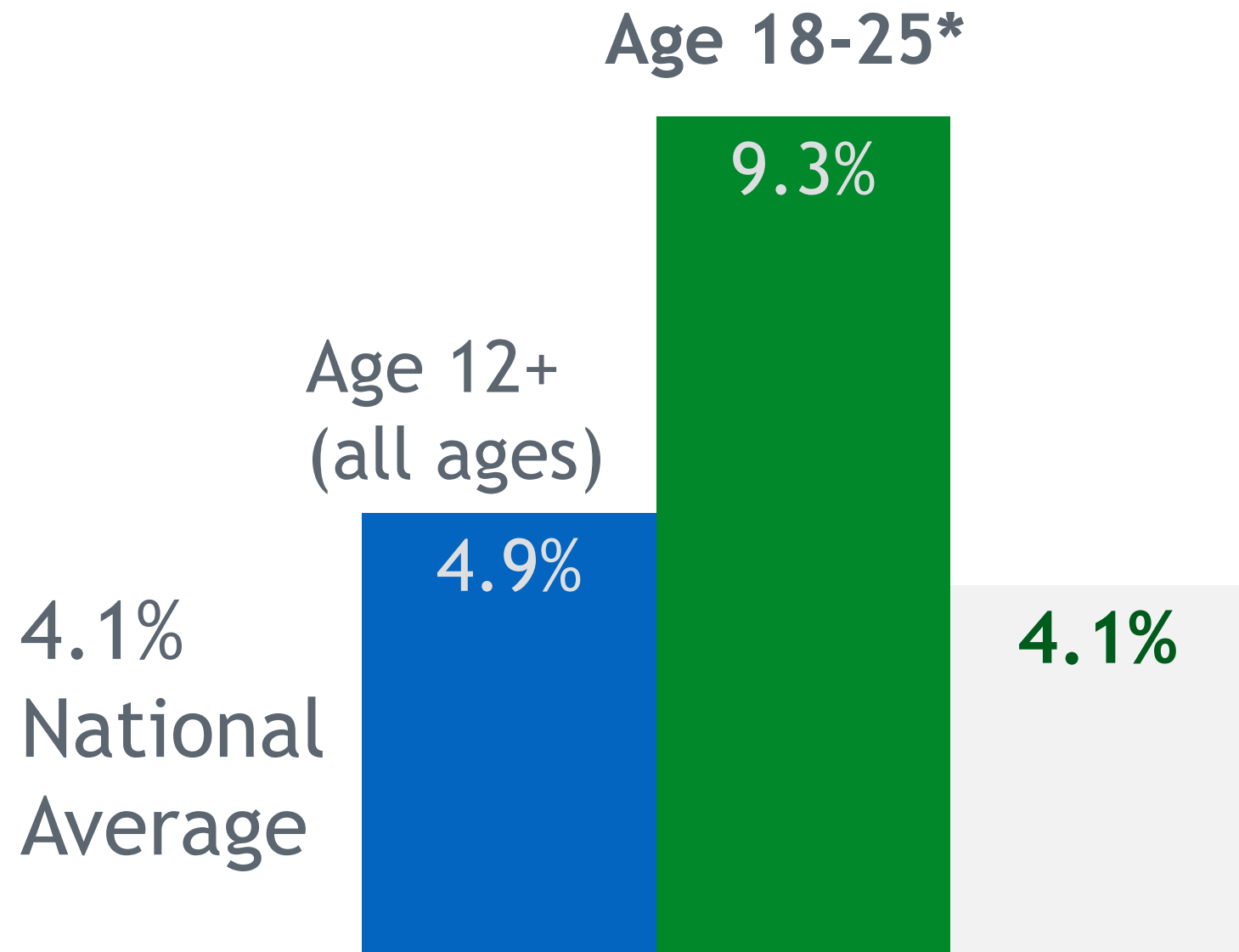
1. Non-medical use of prescription pain relievers

Impact:

2. Drug overdose deaths involving prescription opioids

Rx Opioid Misuse in 2013-2014

Percent of Coloradans who **misused prescription pain relievers** in the past year

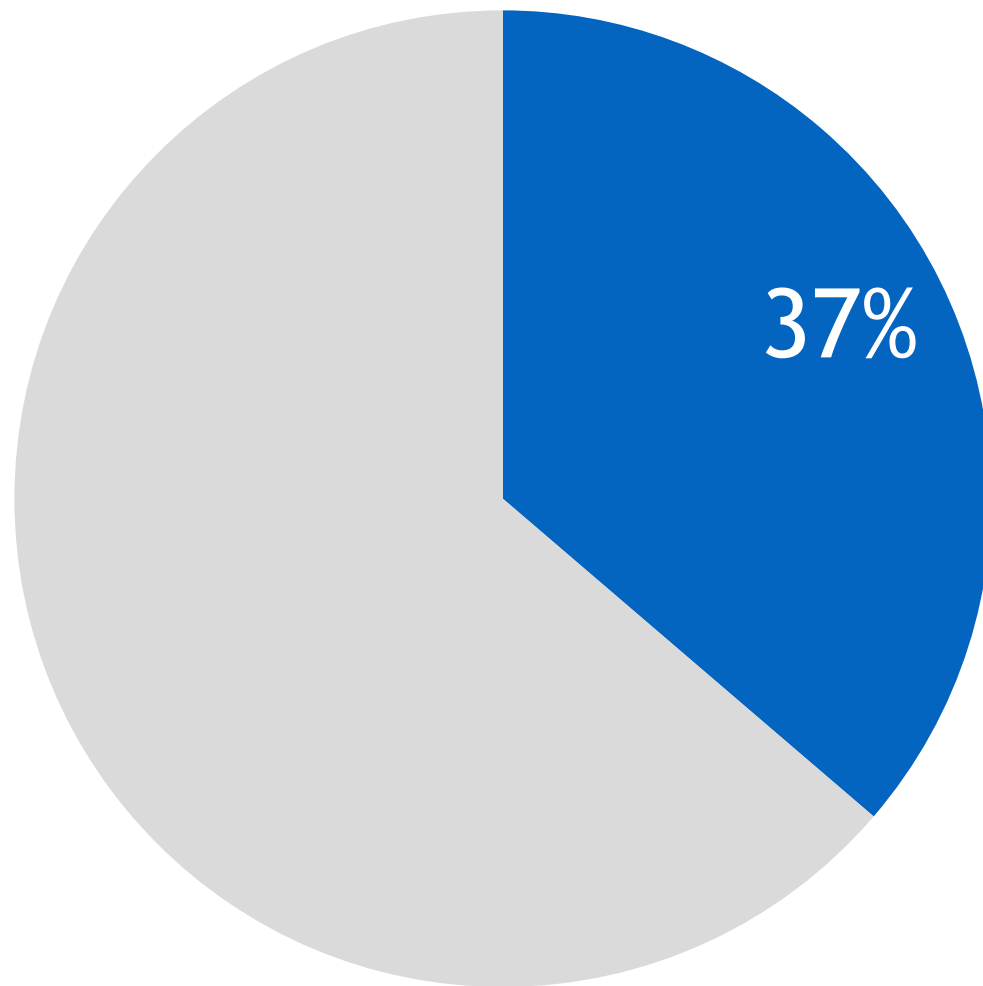


*Difference between the 2012-2013 and 2013-2014 population percentages is statistically significant at the 0.05 level. From the National Survey on Drug Use and Health for 2013-2014:

<http://www.samhsa.gov/data/sites/default/files/NSDUHsaeShortTermCHG2014/NSDUHsaeShortTermCHG2014.htm>

Health Impact:

Prescription opioid overdoses



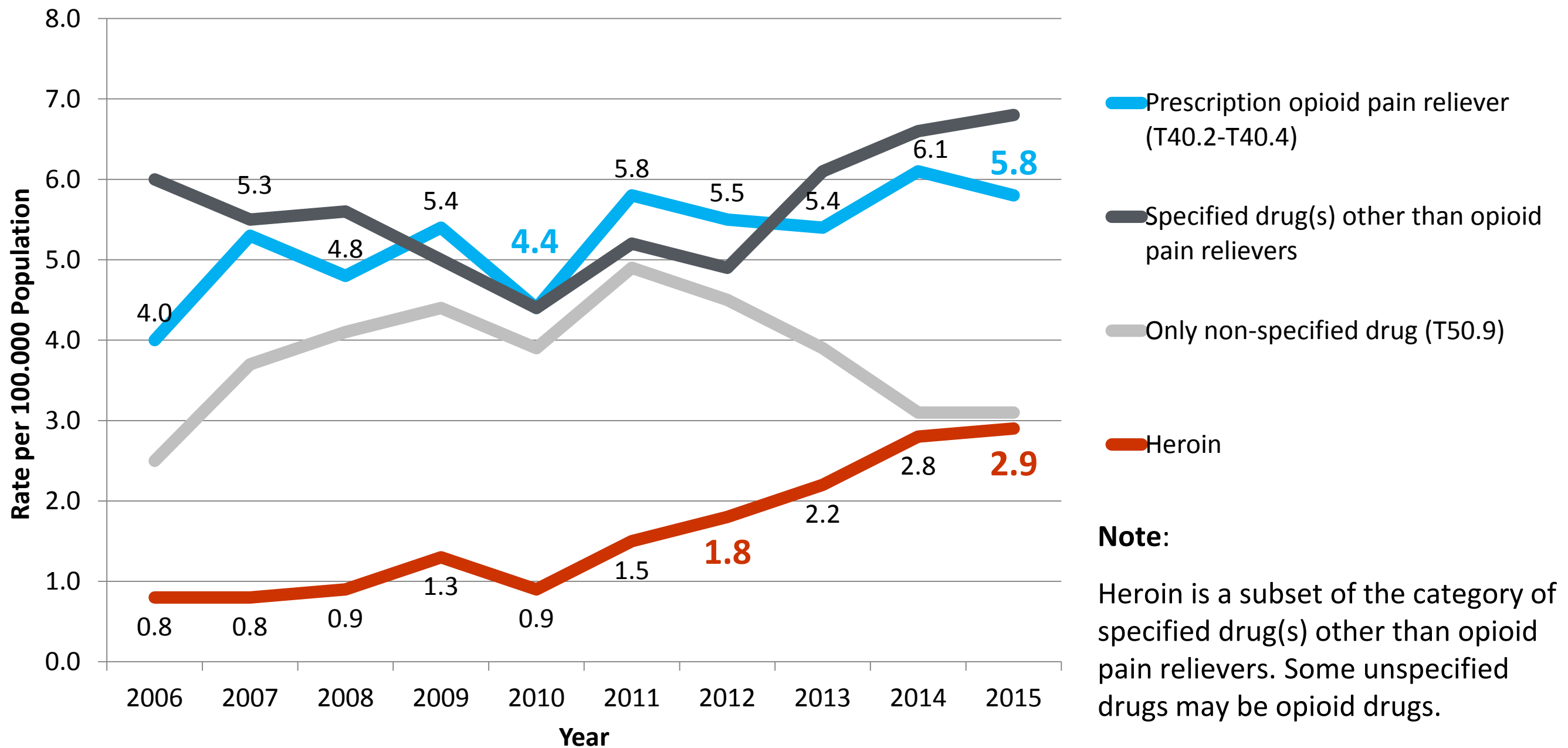
329 of the 880 drug poisoning deaths in Colorado involved rx opioid pain relievers in 2015.



Source: Colorado death certificate data 2015, Vital Statistics Unit

Health Impact: Opioid overdose deaths

Age-adjusted rates, Colorado residents, 2006-2015

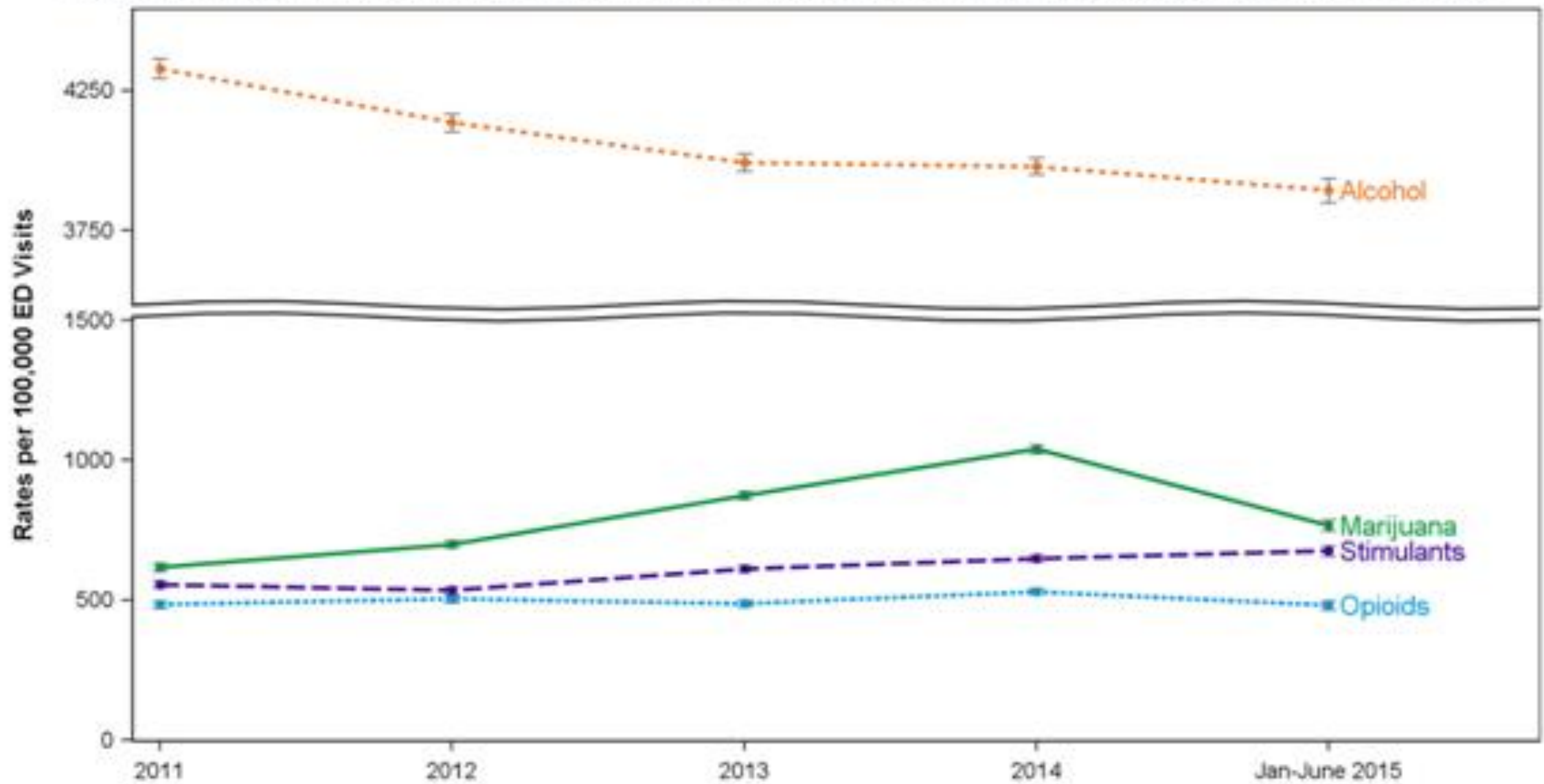


Source: Colorado death certificate data 2015, Vital Statistics Unit

*Opioids are only part of the
drug picture ...*

in terms of health impact.

Substance Related ED Visits in Colorado, 2011-June 2015: Exposures, Diagnoses, Billing Codes, or Poisonings.

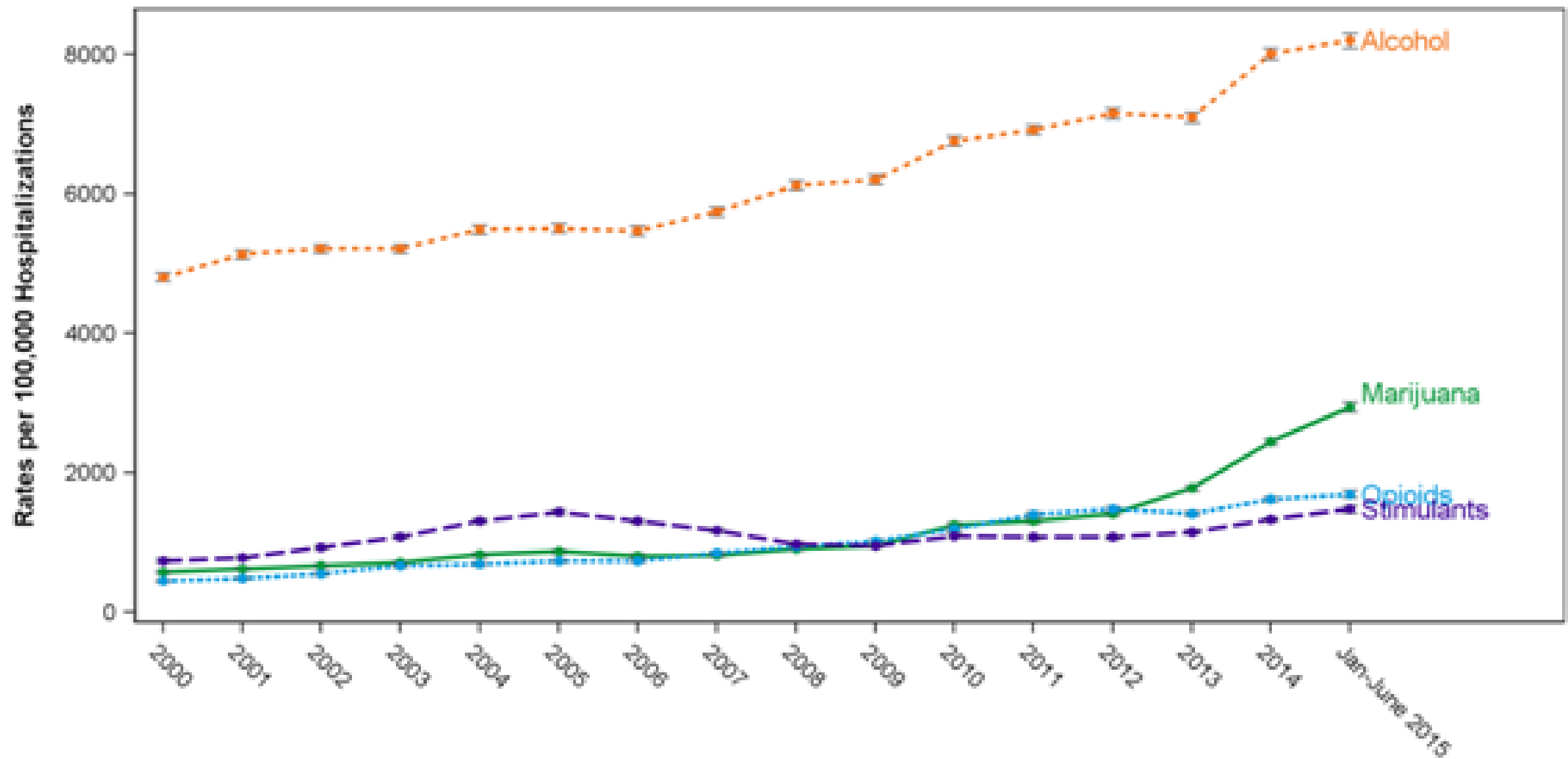


*EEOHT, CDPHE 2016

†ICD-9-CM codes 305.2, 304.3, 969.6 and E854.1 were used to determine ED visits with possible marijuana exposures, diagnoses, billing codes or poisonings.

‡ED visits involving other substances were identified using ICD-9-CM codes: Alcohol (291[0-5, 8, 9], 303[0, 9], 305.0, 425.5, 571[0-6, 8, 9], 790.3, 980[0-3, 8, 9], E860[0-4, 8]); Prescription Opioid Dependence and Poisoning (304[0, 7], 305.5, 965[00, 02, 09], E850[1, 2]); Heroin Poisoning (E850.0, 965.01); Cocaine Dependence and Poisoning (304.2, 305.6, 970.81, E855.2); Stimulant Dependence and Poisoning (304.4, 305.7, 970.89, 969.72, E854.2, E855.5).

Substance Related Hospitalizations in Colorado, 2000-June 2015: Exposures, Diagnoses, Billing Codes, or Poisonings.



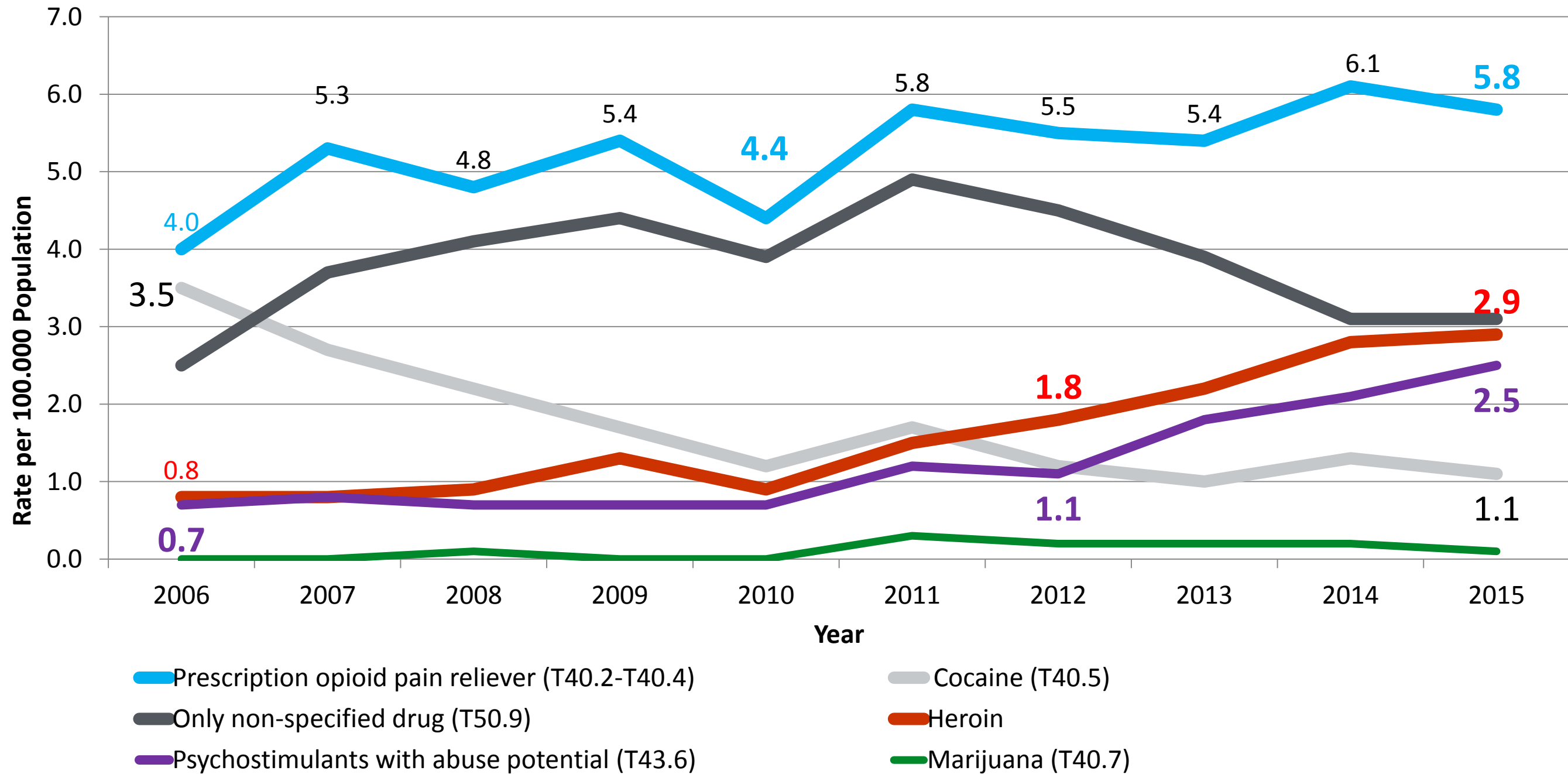
*EEOHT, CDPHE 2016

†ICD-9-CM codes 305.2, 304.3, 989.6 and E854.1 were used to determine hospitalizations with possible marijuana exposures, diagnoses, billing codes or poisonings.

‡Hospitalizations involving other substances were identified using ICD-9-CM codes: Alcohol (291[.0-.5, .8, .9], 303[.0, .9], 305.0, 425.5, 571[.0-.6, .8, .9], 790.3, 980[.0-.3, .8, .9], E860[.0-.4, .8]); Prescription Opioid Dependence and Poisoning (304[.0, .7], 305.5, 965[.00, .02, .09], E850[.1, .2]); Heroin Poisoning (E850.0, 965.01); Cocaine Dependence and Poisoning (304.2, 305.6, 970.81, E855.2); Stimulant Dependence and Poisoning (304.4, 305.7, 970.89, 989.72, E854.2, E855.5).

Health Impact: Drug overdose deaths

Age-adjusted rates, Colorado residents, 2006-2015



Source: Colorado death certificate data 2015, Vital Statistics Unit

Summary

Opioids

- Lower % of 18-25 misusing prescription opioids
- Prescription opioid overdose leveling?
- Heroin overdose rate in 2015 same as 2014 but higher than 2012

Alcohol and other drugs

- Shift in care from ED to inpatient for rates of alcohol dependence and alcohol poisoning?
- Alcohol rates 4 to 30 times greater than other drugs, depending upon the indicator (not all shown)
- Psychostimulant overdose rate same as 2014 but higher than 2012.

Response using new funding

Bureau of Justice Assistance

- Hired an epidemiologist to analyze the PDMP
- Support to Consortium
- Goal: Increase data-driven decision making at the state and local level

Centers for Disease Control

- Hire 2 staff
- Test PDMP integration with the 2 Colorado Health Information Exchanges
- \$ for heroin rapid response project

Upcoming efforts

Data

- Health Watch report detailing drug overdose trends this fall
- Updated Consortium dashboard on the web
- More local and regional results

Future Opportunities?

- Applied for CDC funding for an alcohol epidemiologist
- With more staff at CDPHE, increased collaboration with CDHS/State Epi Outcome Work Group, Consortium, across CDPHE

Delayed data! Drug-related hospitalizations and ED visits due to a major change in coding claims data as of 10/1/2015

Q & A

Questions later?

Contact:

Daniel Vigil, MD, MPH

daniel.vigil@state.co.us

Barbara Gabella, MSPH

barbara.gabella@state.co.us