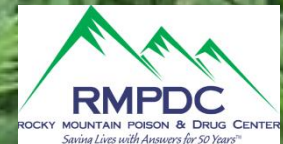


Denver City Council Marijuana Committee

July 10, 2017

Richard C. Dart, MD, PhD
Director, Rocky Mountain Poison and Drug
Center, Denver Health

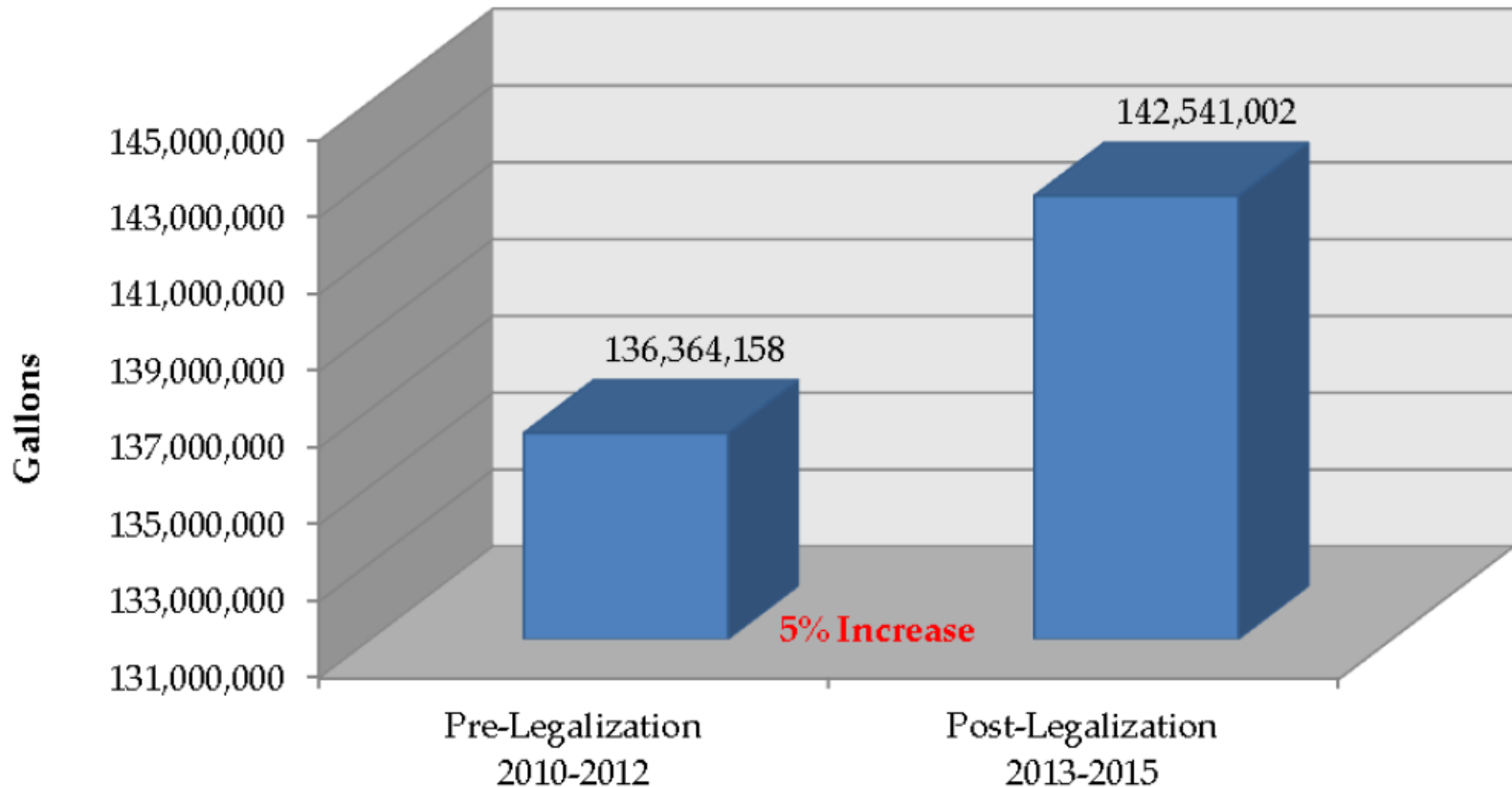


Marijuana vs. Alcohol

- Marijuana decreases use of alcohol and opioid painkillers?
- Effects on Children
- Emergency departments
- Hospitalizations
- Effect on motor vehicle drivers

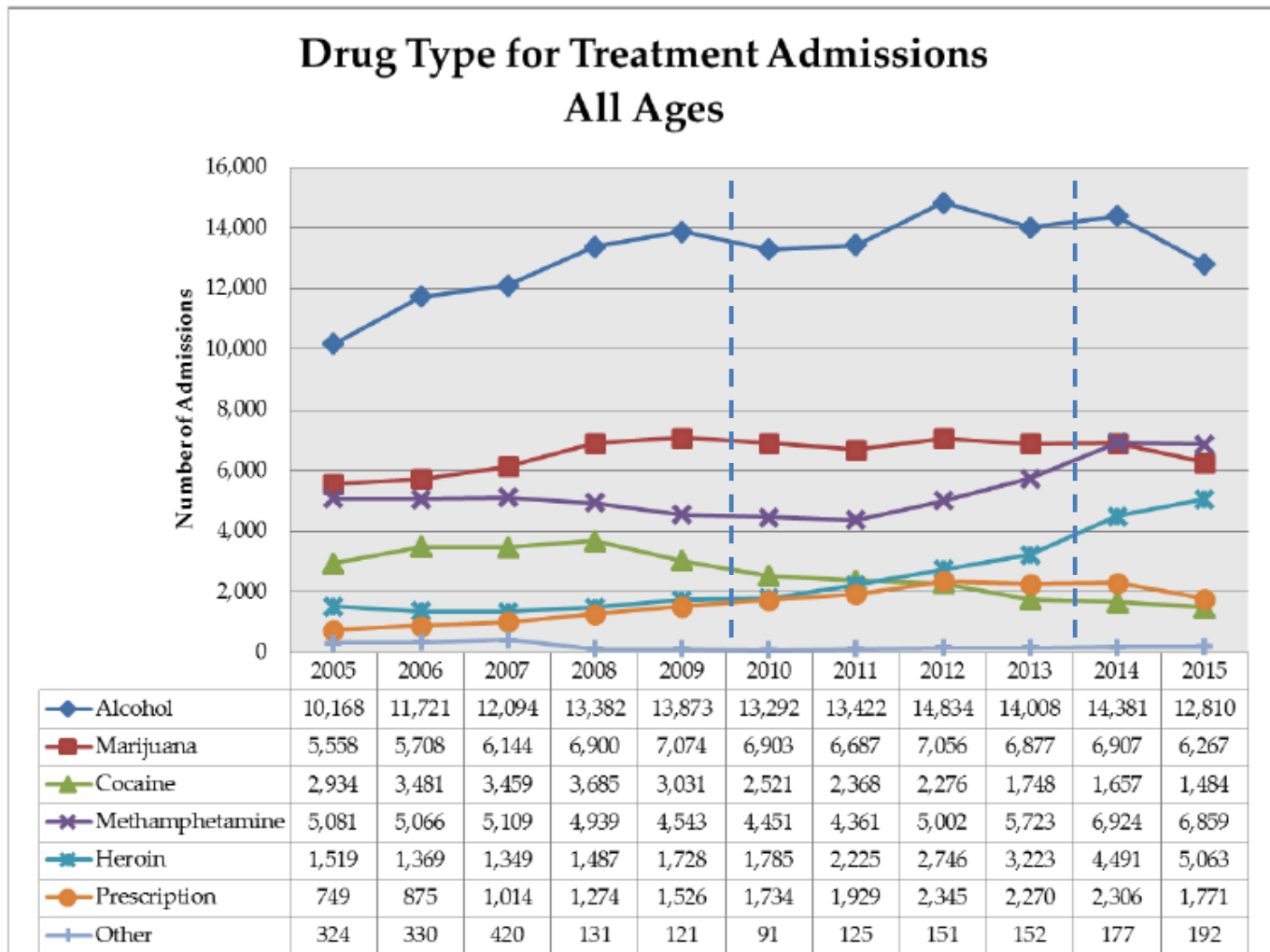
Cannabis Legalization Has Not Decreased Alcohol Consumption

Colorado Average Consumption of Alcohol



SOURCE: Colorado Department of Revenue, Colorado Liquor Excise Tax

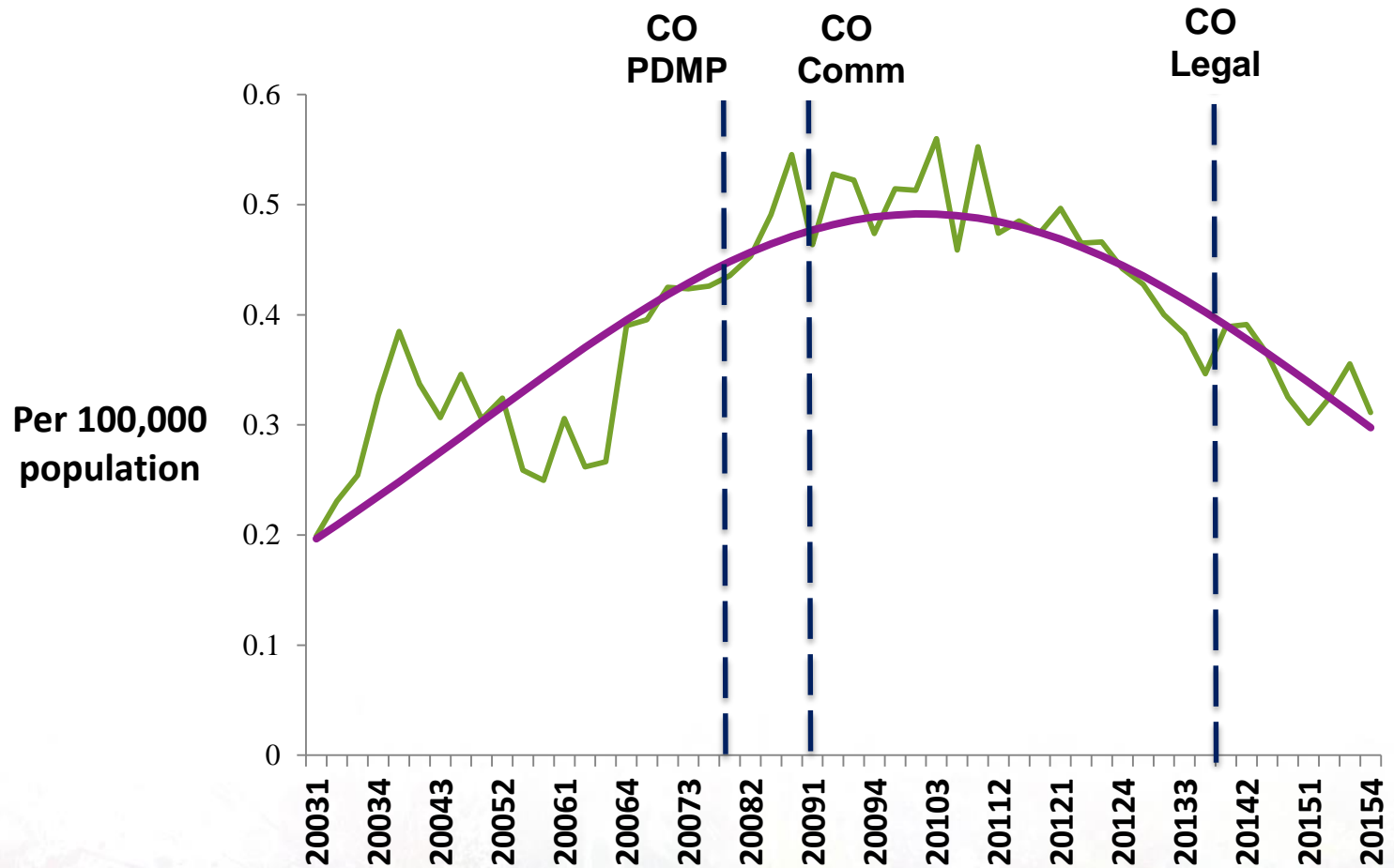
No Apparent Effect on Treatment of Addiction



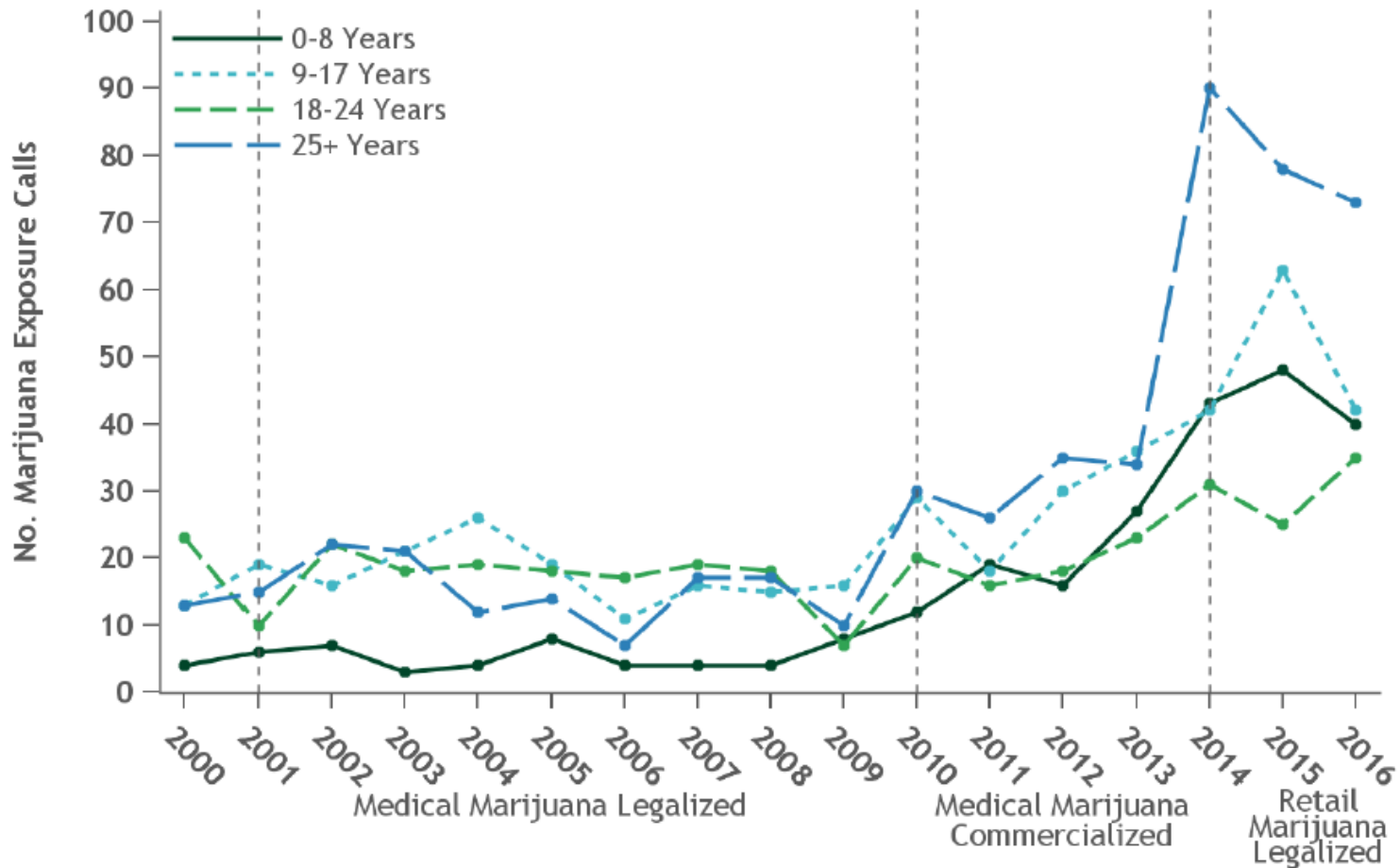
SOURCE:

Colorado Department of Health Services, Office of Behavioral Health, 2005-2015

RADARS Poison Center Program All Opioid Painkillers, Intentional Abuse

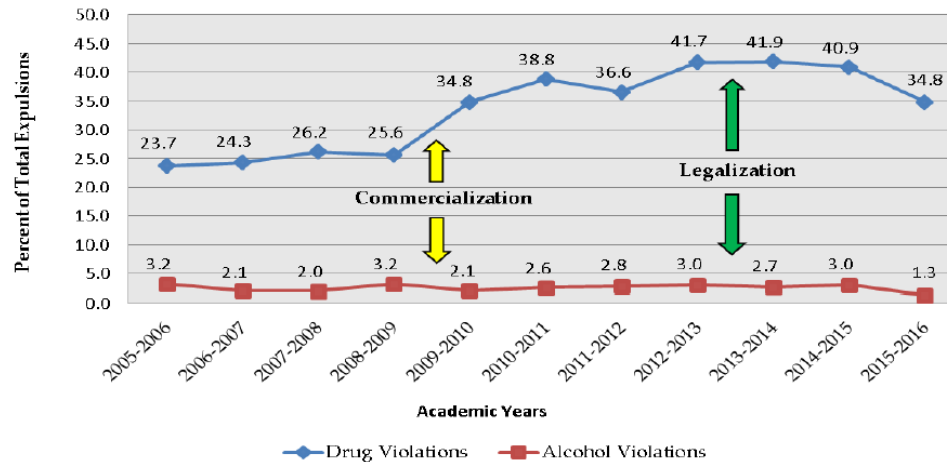


Number of Marijuana Exposure Calls to Poison Center, Colorado, 2000-2016



The Teenage Brain

Percent of *Total Expulsions* in Colorado

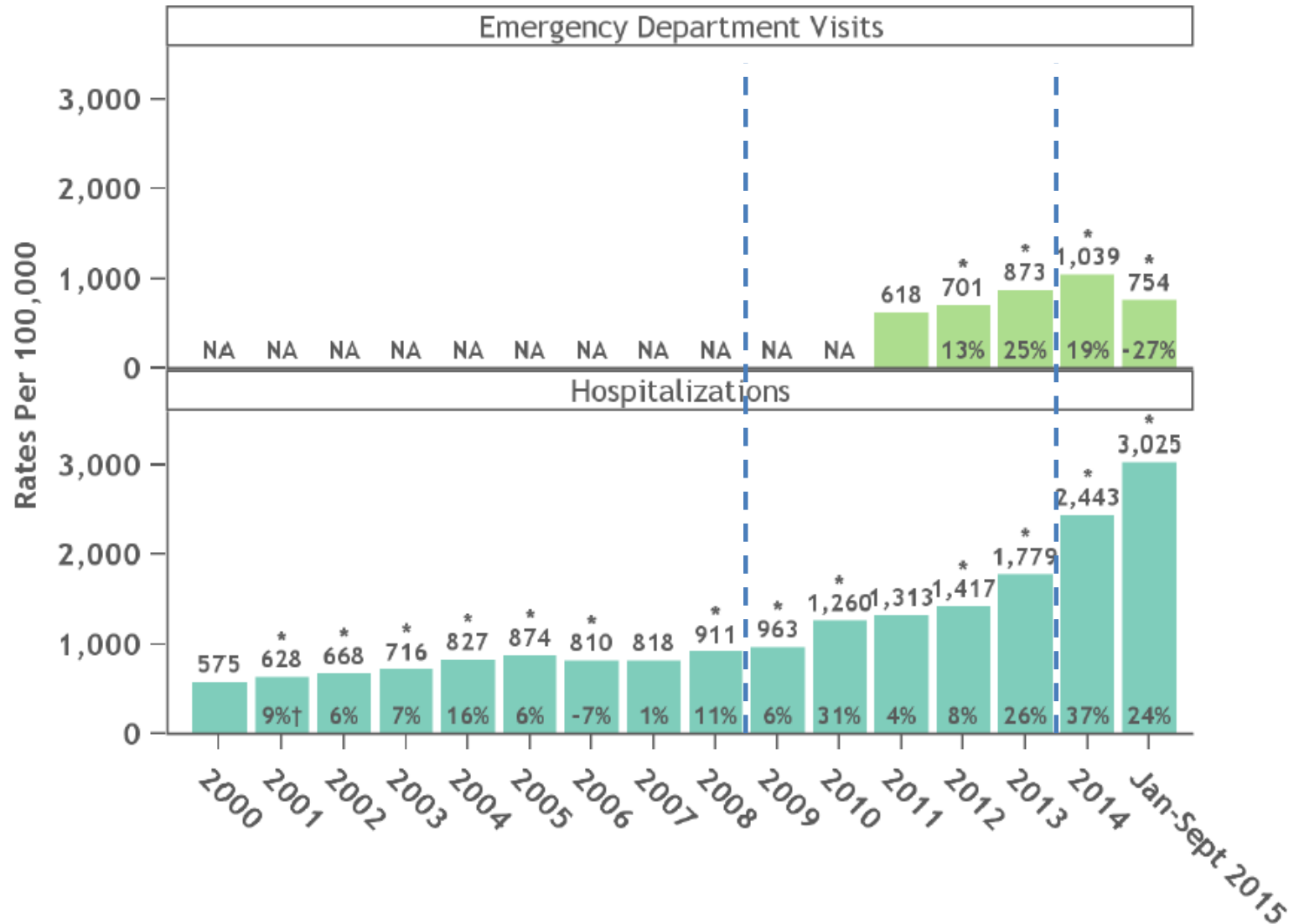


SOURCE: Colorado Department of Education, 10-Year Trend Data : State Suspension and Expulsion Incident Rates and Reasons

❖ In school year 2015/2016, 58 percent of total expulsions were for marijuana violations.

- Marijuana affects development of the adolescent brain, probably until age 25
- National Drug Abuse and Health Survey indicate that use may be increasing among Colorado youth.

Hospitalization and ED Visits with MJ-related Billing Codes



Emergency Department Visits

- In general, MJ patients are less violent than alcohol patients.
- But, when they use a lot –
 - We found SUBSTANTIAL evidence that THC intoxication can cause acute psychotic symptoms, which are worse with higher doses.26-31

Denver coroner: Man fell to death after eating marijuana cookies

By John Ingold

The Denver Post

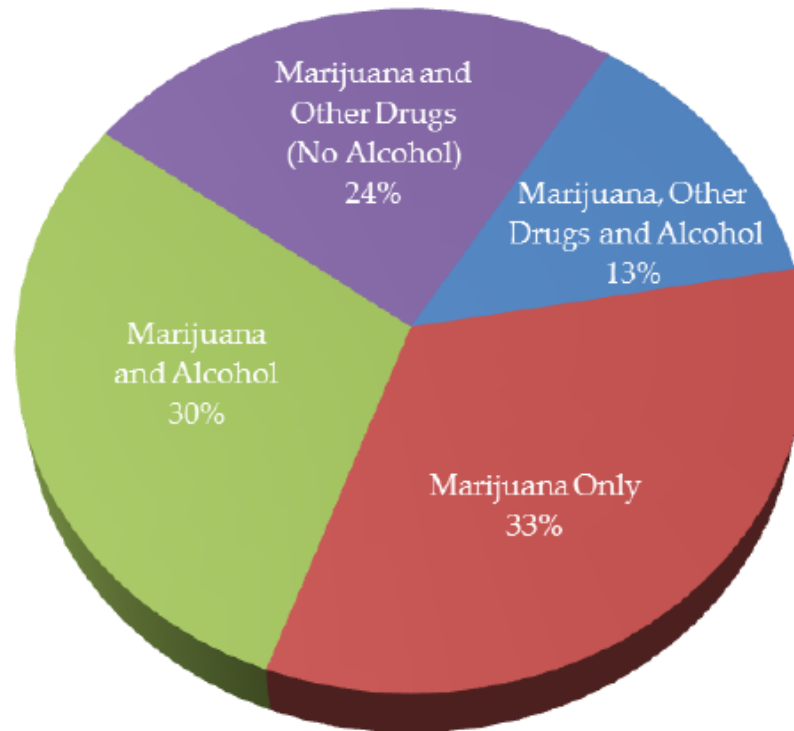
A college student jumped to his death from a hotel balcony after eating marijuana-infused cookies... first time authorities have publically linked a death to marijuana...

257 COMMENTS



- Naïve user
- Cookie = multiple “doses” of marijuana
- Content of tetrahydrocannabinol (THC) in product varies several fold.

Drugs involved in Fatal Motor Vehicle Accidents



*Toxicology results for all substances present in individuals who tested positive for marijuana

SOURCE: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS), 2006-2011 and Colorado Department of Transportation 2012-2015

Effect of Marijuana and Alcohol on Driving

- We found SUBSTANTIAL evidence that recent marijuana use by a driver increases their risk of motor vehicle crash.7-11(Revised*)
- We found SUBSTANTIAL evidence that the combined use of marijuana and alcohol increases impairment and motor vehicle crash risk more than use of either substance alone.12,14,15,38-42

Long Term Health Impacts

- Cancer
 - We found SUBSTANTIAL evidence that daily or near-daily marijuana smoking is associated with pre-malignant lesions in the airway.14-16
 - We found MIXED evidence for whether or not cumulative levels of marijuana smoking greater than the equivalent of one joint per day for 10 years are associated with lung cancer.17-21 (Revised*)



Small Bongs
\$ 27.88

Buds
\$ 20.99 - \$ 18.99

Buds
\$ 20.99 - \$ 18.99

COOKIES

TOPICALS

TINCTURES

MINTS

GUMMIES

CHOCOLATES

SWEET GRASS
\$5.00

COOKIES

SWEET GRASS
\$5.00

Summary

- Marijuana is different than alcohol. Whether better or worse is in the eye of the beholder.
- The damage to developing brains is real and substantial resources are needed to combat underage use.
- Maintain existing limits. Evidence shows clearly that increased immediate availability leads to increased injury.