

**COLORADO & WASHINGTON STATE SINCE LEGALIZATION**

In the wake of multimillion-dollar political campaigns funded with out-of-state money, Colorado and Washington voted to legalize marijuana in November 2012. Though it would take more than a year to set up retail stores, personal use (in Colorado and Washington), and home cultivation/giving away of up to six plants (in Colorado) were almost immediately legalized after the vote.

Public marijuana use, though illegal, remains a common way to celebrate the law. Also, a brand-new marijuana industry selling candies, waxes, sodas,

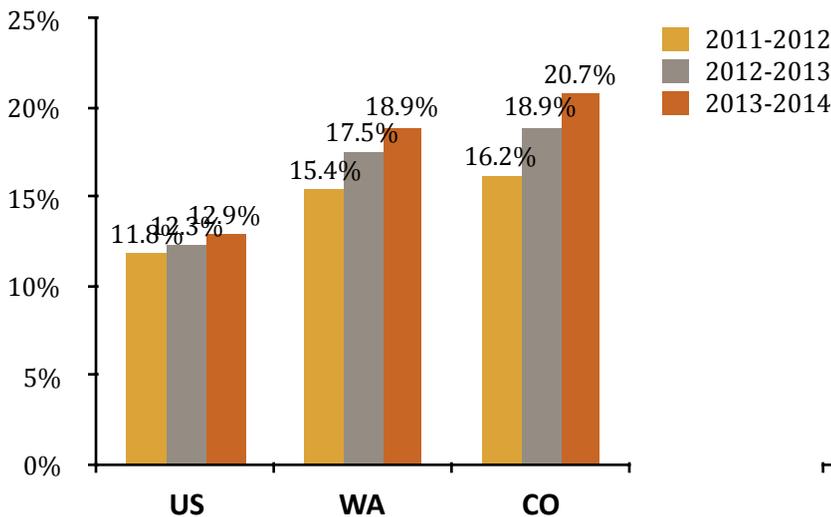
and other marijuana items has exploded, and with it a lobby to fight regulation.

These “experiments” in legalization and commercialization, have not succeeded. **Perhaps unsurprisingly, Colorado now leads the country in past-month marijuana use by youth, with Washington in 6th place. Other states that have since legalized marijuana occupy 4th place (District of Columbia) and 5th place (Oregon).** States with “medical marijuana” laws occupy 2nd and 3rd place (Vermont and Rhode Island, respectively). Additionally, as explained in greater detail below, the laws have had

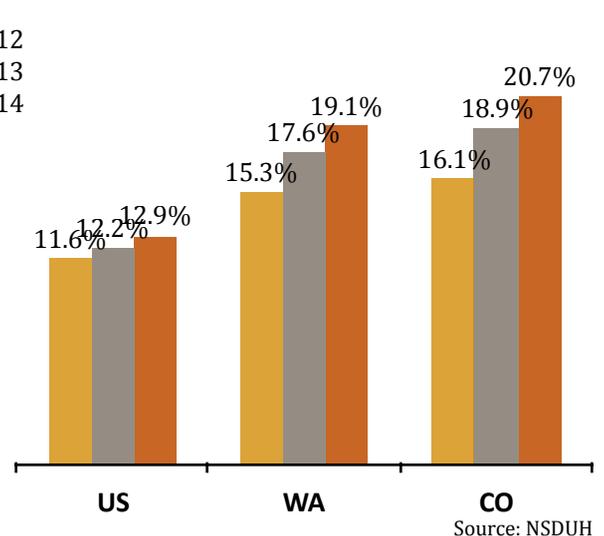
serious, negative impacts on public health and safety.

The federal government, through the Department of Justice (DOJ), announced it would initially take a hands-off approach, promising to track the consequences of legalization, from youth marijuana use to use on public lands, and determine action later. So far, however, neither the federal nor state authorities have implemented a robust public tracking system. **This failure led the U.S. Government Accountability Office (GAO) to criticize DOJ in 2016 for not appropriately monitoring and documenting outcomes.**

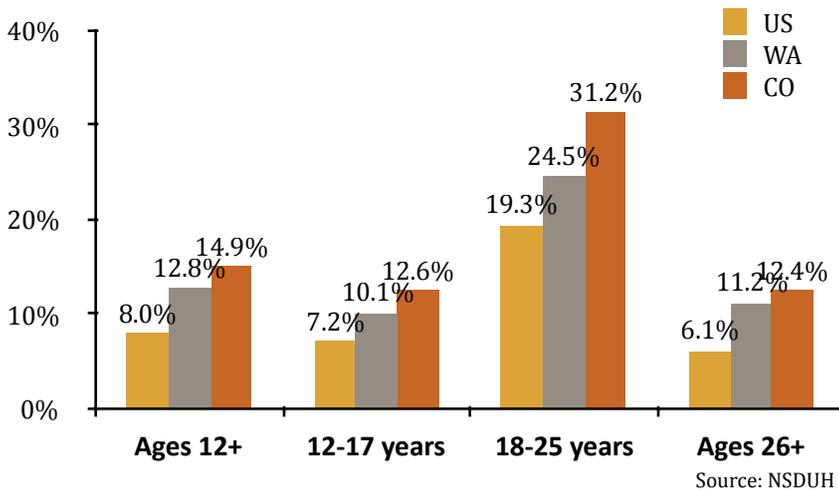
**PAST-YEAR MARIJUANA USE BY STATE (AGES 12+)**



**PAST-YEAR MARIJUANA USE BY STATE (AGES 18+)**



**PAST-MONTH MARIJUANA USE BY AGE GROUP (2013-2014)**



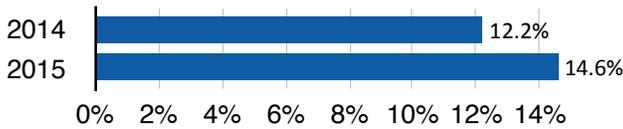
Past-year and past-month marijuana use by all age groups exceeds the national average in both Washington State and Colorado. Marijuana use in both states has risen significantly\* in many categories.

\*Significant at the 0.05 level.

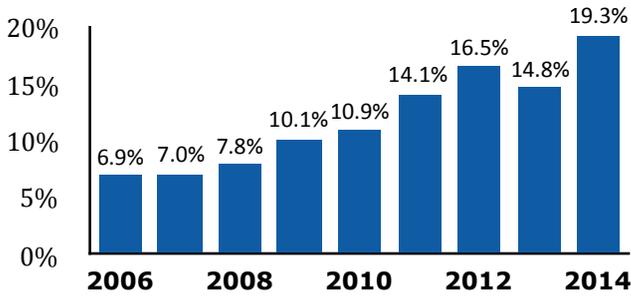
# MARIJUANA-RELATED DUI CASES HAVE SPIKED IN BOTH COLORADO & WASHINGTON AFTER LEGALIZATION

## COLORADO

Percentage of total DUI/DUID citations related to marijuana in CO



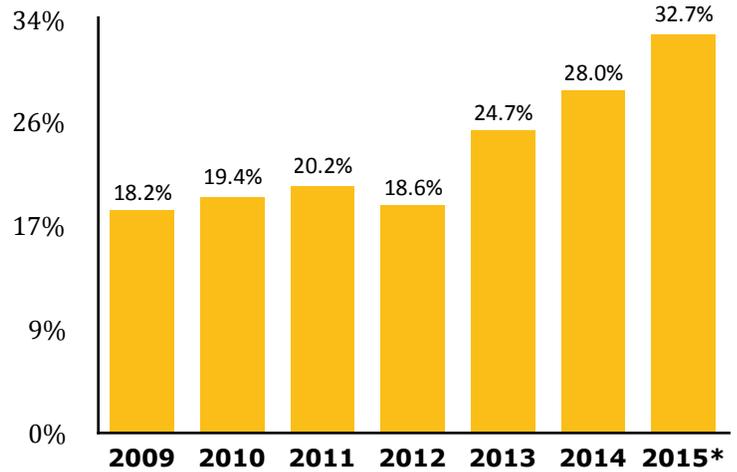
Percentage of total traffic fatalities where the driver tested positive for THC in CO



Source: Colorado State Patrol; Rocky Mountain HIDTA (Sep. 2015)  
 Note: Only 47% of operators involved in traffic deaths were tested for drug impairment in 2014, consistent with past practices

## WASHINGTON

Percentage of total DUI/DRE cases tested positive for THC\* in WA



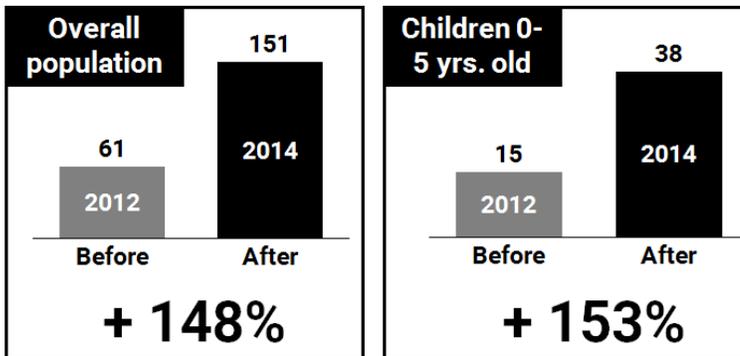
\*2015 data through June 2015

Source: NPR & Washington Traffic Safety Commission (w/ updated 2012-15 statistics)  
 Note: This study used toxicology data that had been normalized by the State of Washington to allow for a multi-year comparison, despite the fact that a "marijuana positive" is now triggered at the 2 ng/ml level versus a 1 ng/ml level prior to 2013.

# MARIJUANA-RELATED POISONINGS HAVE RISEN SHARPLY IN BOTH STATES

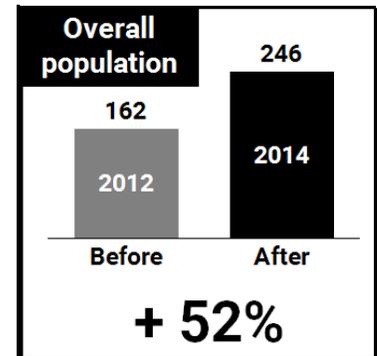
Poisonings related to marijuana have surged in both Colorado and Washington since both states legalized marijuana in 2012.

## COLORADO



Source: Rocky Mountain HIDTA (Sep. 2015)

## WASHINGTON



Source: Washington Poison Center

## TEEN ARRESTS

+6%

Arrests for marijuana use in Denver public schools increased by 6% between the 2013 and 2014 school years.

Source: Denver Police Department

## TEEN ADMISSIONS TO TREATMENT

+66%

Teen admissions to treatment for marijuana use at the Arapahoe House treatment network in CO increased by 66% between 2011 and 2014.

Source: Arapahoe House

## COLORADO MARIJUANA IS REGULARLY DIVERTED TO OTHER STATES

521%

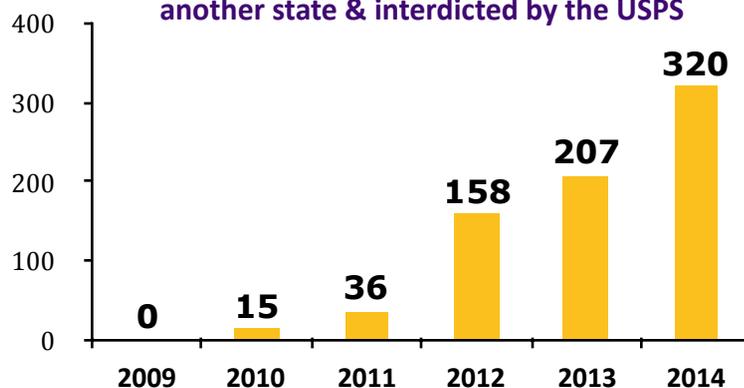


In 2014, there were 360 highway interdictions resulting in seizures of Colorado marijuana destined to over 40 states.

**This represents a 31% increase from 2012, and a 521% increase from 2008.**

Source: Rocky Mountain HIDTA (Sep. 2015)

# of parcels of marijuana mailed from CO to another state & interdicted by the USPS



Source: Rocky Mountain HIDTA (Sep. 2015)

## IS THE MARIJUANA INDUSTRY TARGETING LOW-INCOME, MINORITY COMMUNITIES?

A 2016 investigation by the Denver Post revealed that a **“disproportionate share” of marijuana businesses are now located in lower-income and minority communities in Denver**, communities that often suffer disparate impacts of drug use.

This is similar to a Johns Hopkins study that showed that predominantly black, low-income neighborhoods in Baltimore were eight times more likely to have carry-out liquor stores than white or racially integrated neighborhoods.

One of Denver’s lower-income neighborhoods has one marijuana business for every 47 residents.

47

## A THRIVING BLACK MARKET IN COLORADO

In February 2015, Colorado Attorney General Cynthia Coffman told reporters:

**“The criminals are still selling on the black market. ...We have plenty of cartel activity in Colorado (and) plenty of illegal activity that has not decreased at all.”**

Lt. Mark Comte of the Colorado Springs Police Vice and Narcotics Unit similarly commented that “[legalization] has done nothing more than enhance the opportunity for the black market.” Indeed, a federal law enforcement official characterized Colorado as “the black market for the rest of the country.”

Source: Colorado Springs Gazette & USA Today

## DENVER CITY AND COUNTY CRIME IS UP

In the city and county of Denver, overall crime was up 4.1% in 2015, compared to the prior year. Most saliently, drug and narcotics crime rose 12.5%, belying rampant media reports of “legalization linked with a drop in crime.”

+12.5%

Drug/narcotics crime

+26.3%

Motor vehicle theft

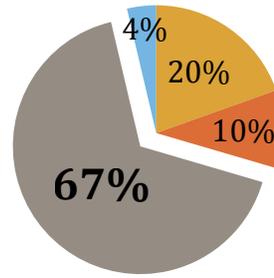
+74.2%

Homicide

Source: Denver Police Department (NIBRS, accessed February 17, 2016)

## ABOUT TWO-THIRDS OF COLORADO MUNICIPALITIES HAVE BANNED MARIJUANA

**A full 181 of Colorado's 271 municipalities — 67% — had banned marijuana in their jurisdictions, or had passed a moratorium on its cultivation/sale, as of April 2015.**



Source: Colorado Municipalities League



## MARIJUANA EDIBLES POSE A PUBLIC HEALTH RISK

Edibles often contain 3-20 times the THC concentration recommended for intoxication.

There have been at least three deaths related to marijuana edibles through 2015.

While Colorado is looking at how to control this industry, the marijuana industry marches on - defending gummy bears, cupcakes, sugary cereals and sodas - **similar to how Big Tobacco defended their practices for a century.**



Source: Food Safety News; Maine Alliance to Prevent Substance Abuse

## TARGETING CHILDREN?

Tobacco industry mascots: Joe Camel



Marijuana industry mascots: "Buddie"



## PRIVATE EQUITY AND INSTITUTIONAL CAPITAL ARE FLOWING INTO MARIJUANA

The marijuana-focused private equity firm, Privateer Holdings, in partnership with the descendants of Bob Marley, have created a multinational cannabis brand called Marley Natural.

**Investors have already raised \$50 million to launch Marley Natural and other branded marijuana businesses.**

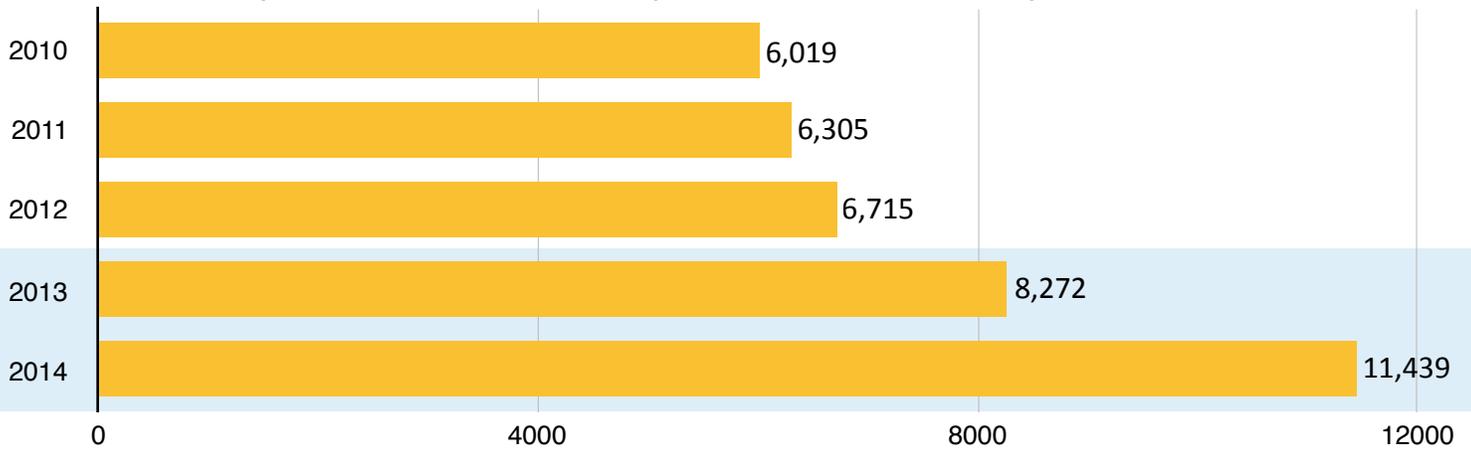
The political campaigns to legalize marijuana do not mention these branded marijuana products, candies, or advertising practices.



Source: Fortune

MARIJUANA-RELATED HOSPITALIZATIONS HAVE RISEN AN AVERAGE OF 30% PER YEAR SINCE LEGALIZATION

Hospitalizations related to marijuana in Colorado (CO Hospital Association)



Source: Rocky Mountain HIDTA (Sep. 2015)

MORE MARIJUANA CITATIONS IN DENVER

A FINANCIAL BOON? NOT FOR GOVERNMENTS, BASED ON THE TOBACCO AND ALCOHOL INDUSTRIES

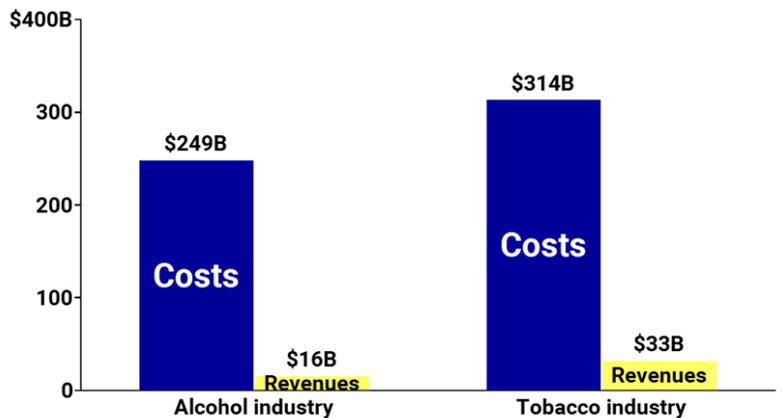
184

In 2013, Denver police issued 184 citations for public display and/or consumption of marijuana.

761

In 2015, 761 citations were issued for public consumption, a 314% increase.

Billions of U.S. dollars (indexed to 2012 values)

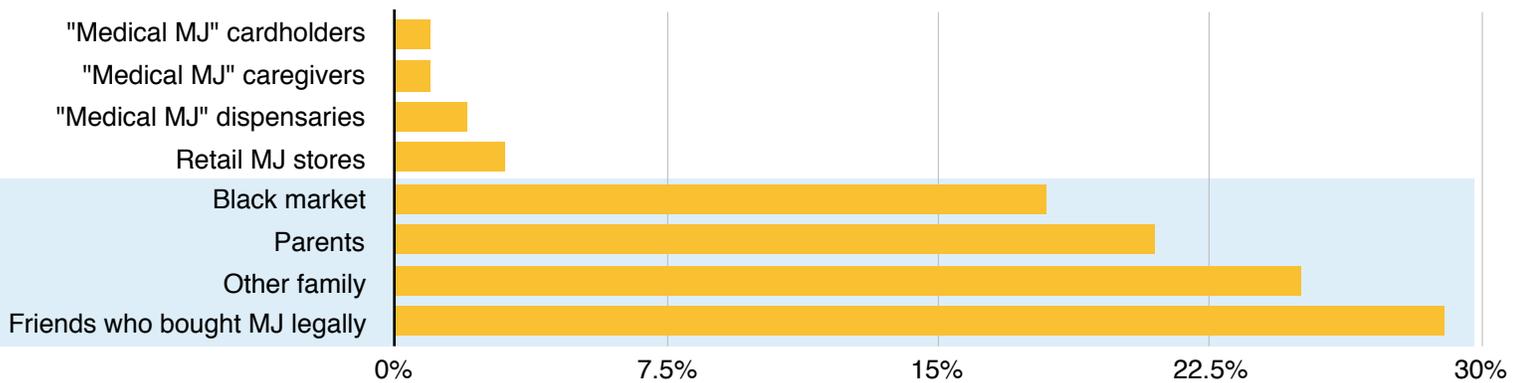


Source: Denver Post; Colorado Public Radio

Source: CDC, American Lung Association; Tax Policy Center

COLORADO KIDS ARE STILL ABLE TO OBTAIN MARIJUANA, THROUGH THE BLACK MARKET OR FRIENDS/FAMILY

Source of marijuana for Colorado high school students (school counselor survey)



Source: Rocky Mountain HIDTA (Sep. 2015)

## NO DATA, NO COST ACCOUNTING, NO PROBLEM?

**More sophisticated data are sorely lacking with respect to marijuana in Colorado and Washington. Real-time data are needed on both the consequences of legalization and the economic costs of such a policy, such as:**

- Emergency room and hospital admissions related to marijuana
- Marijuana potency and price trends in the legal and illegal markets
- School incidents related to marijuana, including representative data sets
- Extent of marijuana advertising toward youth and its impact
- Marijuana-related car crashes, including THC levels even when BAC is over 0.08
- Mental health effects of marijuana
- Marijuana brief intervention and treatment admissions
- Cost of implementing legalization from law enforcement to regulators
- Cost of mental health and addiction treatment related to increased marijuana use
- Cost of needing but not receiving treatment
- Effect on the market for alcohol and other drugs
- Cost to workplace and employers
- Impact on employee productivity

## ABOUT SMART APPROACHES TO MARIJUANA (SAM)

**Comprising the top scientists and thinkers in the marijuana research and practice space, SAM works to bridge the gap between the public's understanding of marijuana and science's understanding of marijuana.** At the local, state, tribal, and federal levels, SAM seeks to align marijuana policy and attitudes about the drug with 21st-century science, which continues to show how marijuana use harms the mind and body. SAM argues against extremes in marijuana policy, and opposes both incarceration for low-level use and blanket legalization, favoring instead a health-based marijuana policy. Learn more at [www.learnaboutsam.org](http://www.learnaboutsam.org).

### SAM SCIENCE ADVISORS:

- Hoover Adger, MD, Professor of Pediatrics and Director of Adolescent Medicine, Johns Hopkins University
- Eden Evins, MD, MPH, Associate Professor of Psychiatry, Harvard Medical School
- Stuart Gitlow, MD, MPH, MBA, President, American Society of Addiction Medicine
- Sion Harris, PhD, Center for Adolescent Substance Abuse Research, Children's Hospital Boston
- Sharon Levy, MD, MPH, Assistant Professor of Pediatrics, Harvard Medical School
- Kimber Richter, MD, PhD, Professor of Preventive Medicine and Public Health, University of Kansas.
- Paula Riggs, MD, Associate Professor of Psychiatry, University of Colorado at Denver
- Christian Thurstone, MD, Associate Professor of Psychiatry, University of Colorado
- Kathryn Wells, MD, Associate Professor of Pediatrics, University of Colorado at Denver
- Krishna Upadhy, MD, MPH, Assistant Professor of Pediatrics, Johns Hopkins School of Medicine

