



# **The Impact of Marijuana Legalization**

**Substance Abuse Prevention Coalition of  
Alexandria (SAPCA)**

**March 27, 2014**

# What is Marijuana?

- It is a dry, shredded green, brown or gray mix of flowers, stems, seeds and leaves from the hemp plant, *Cannabis sativa*.
- The main active chemical in marijuana is delta-9-tetrahydrocannabinol, or THC for short.

# What it looks like



# Alexandria Data

## Past 30 day marijuana use

- **1 out of 11** 8<sup>th</sup> graders
- **1 out of 5** 10<sup>th</sup> graders
- **1 out of 4** 12<sup>th</sup> graders



# Short-term Effects

- Marijuana intoxication can cause:
  - Reduced inhibition
  - Distorted perceptions
  - Impaired coordination
  - Difficulty with thinking and problem solving
  - Interferes with learning and memory
  - Can make driving dangerous
  - Causes increased heart rate



# Marijuana Effects – After the Euphoria

- Sleepy
- Depressed
- Occasionally marijuana use may produce
  - Anxiety
  - Fear
  - Distrust
  - Panic



# Long Term Effects and Addiction

- Effects on body/health after long-term use:
  - Ability to do complex tasks could be compromised
  - Negative impact on pursuit of life goals
  - Can contribute to lung damage



# Why Should We Care? Our Children and Their Future!

“Marijuana use not only places teens at risk of addiction but also impairs their memory, judgment, and ability to learn.”

NIDA Director Dr. Nora D. Volkow, National Institutes of Health  
*March 11, 2011*



NIDA research: Regular marijuana use is harmful to the adolescent brain

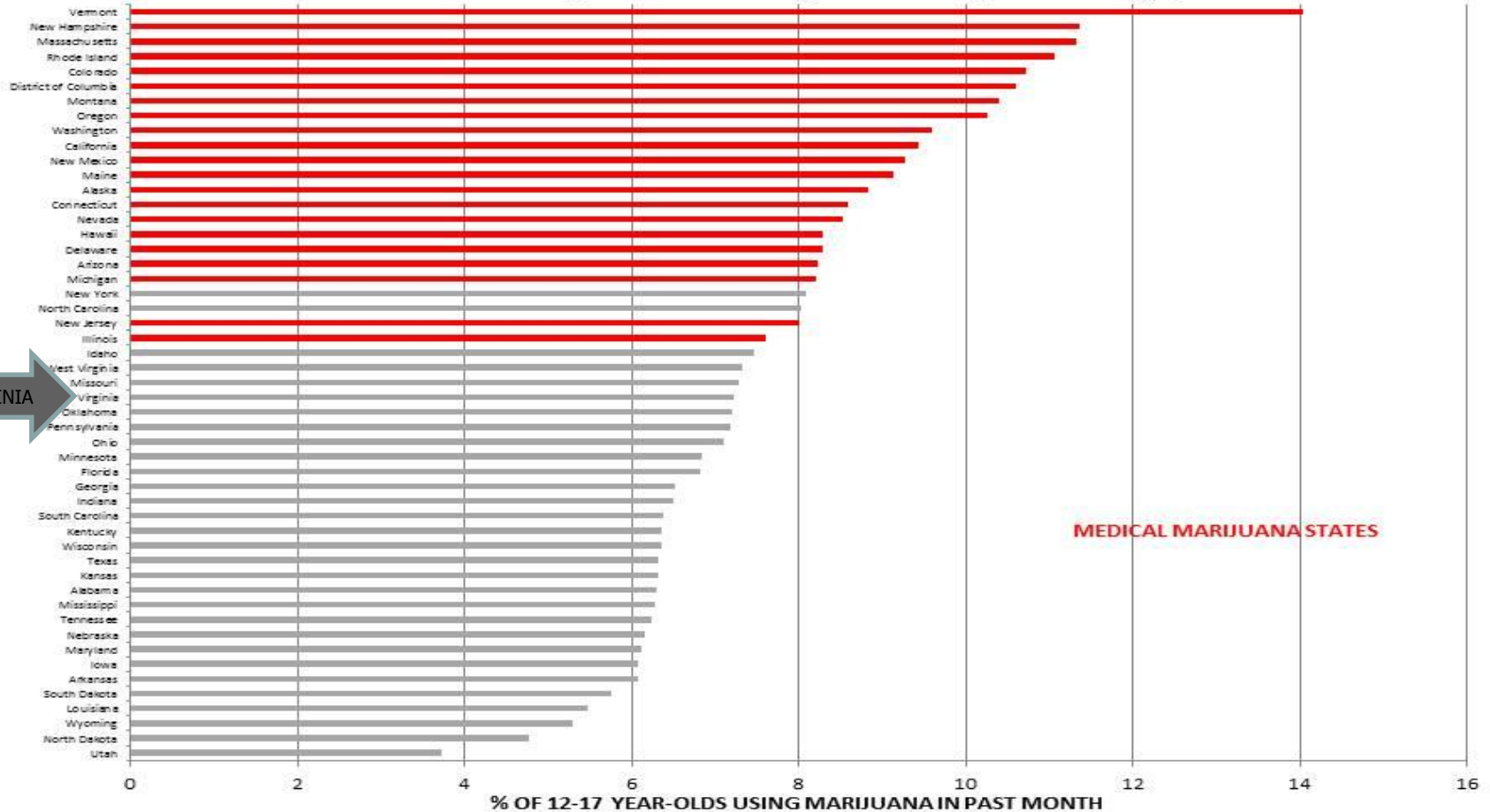
- Heavy use by teens can lower IQ 7 to 8 points (New Zealand study)
- Marijuana's negative effects on attention, memory and learning can last for days or weeks (even after intoxication is gone)
- Daily marijuana smokers function at a reduced intellectual level *most if not all of the time*
- High school and college drop-out and failure rates increase with marijuana use
- Regular marijuana users by age 15 three times more likely to develop mental illness such as schizophrenia





# Teen Illicit Use Of Marijuana is Higher In Medical Marijuana States

Past Month Marijuana Users Aged 12-17 (Percentage)



MEDICAL MARIJUANA STATES

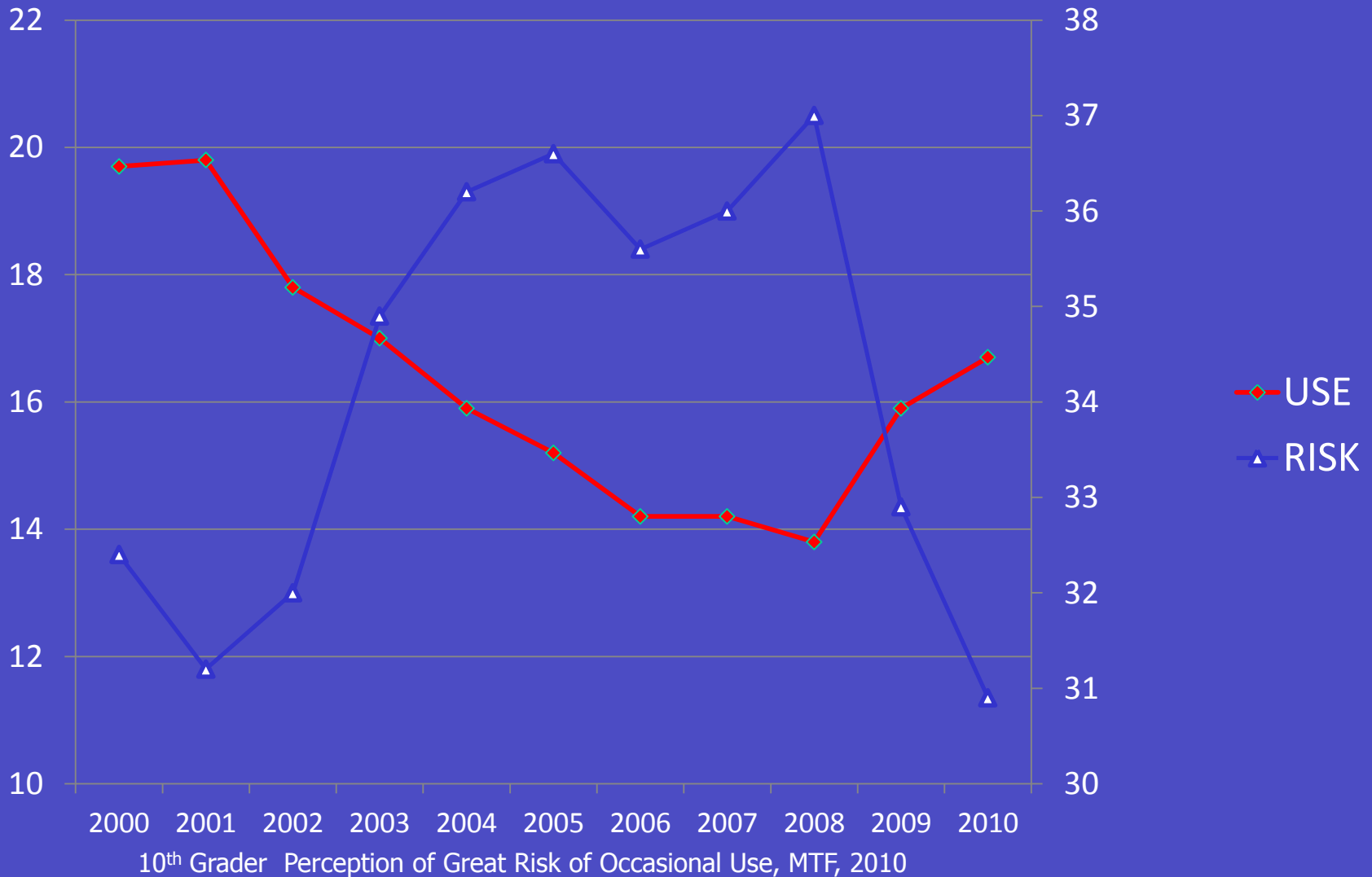
Source: National Survey on Drug Use and Health (NSDUH), HHS/SAMHSA (2010-11) and National Conference of State Legislatures (NCSL)

# Marijuana Is Addictive

## Marijuana Addiction Rates

- ✓ 9% of users (1 in 11)
- ✓ 17% for those who start young (1 in 6)
- ✓ 25-50% for daily users

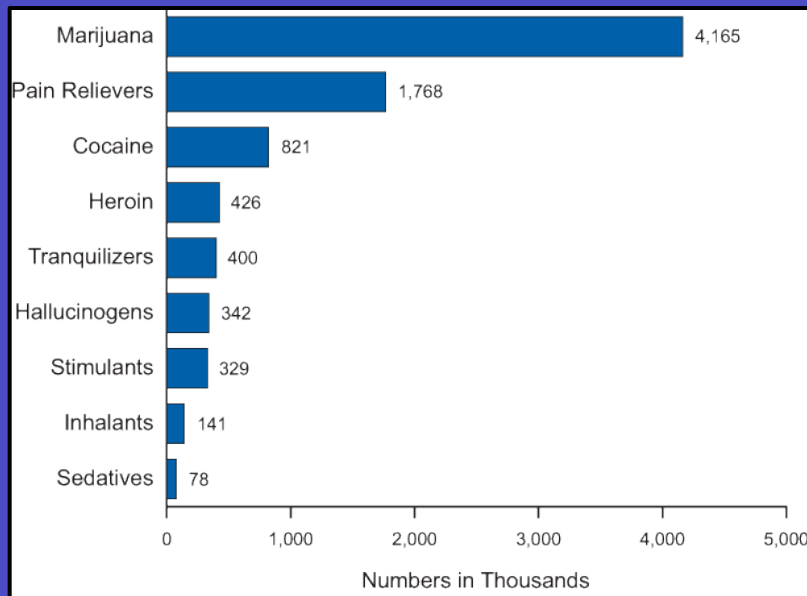
# Use vs. Perceived Risk





# 2011 SAMHSA National Survey on Drug Use and Health Abuse and Treatment Rates Ages 12 & Older

**Figure 7.2 Specific Illicit Drug Dependence or Abuse in the Past Year among Persons Aged 12 or Older: 2011**



- 21% increase in treatment admission rate for marijuana (2000-2010)
- In 2010, 74% male, average age 25
- In 2011, treatment for marijuana abuse 2<sup>nd</sup> only to alcohol
- 52% increase in marijuana-related emergency room visits between 2004-2011

*Substance Abuse and Mental Health Services Administration*

## Impact of Legalization in Colorado

2000: Medical marijuana enacted  
2010: Legislature legalized dispensaries

By 2012:

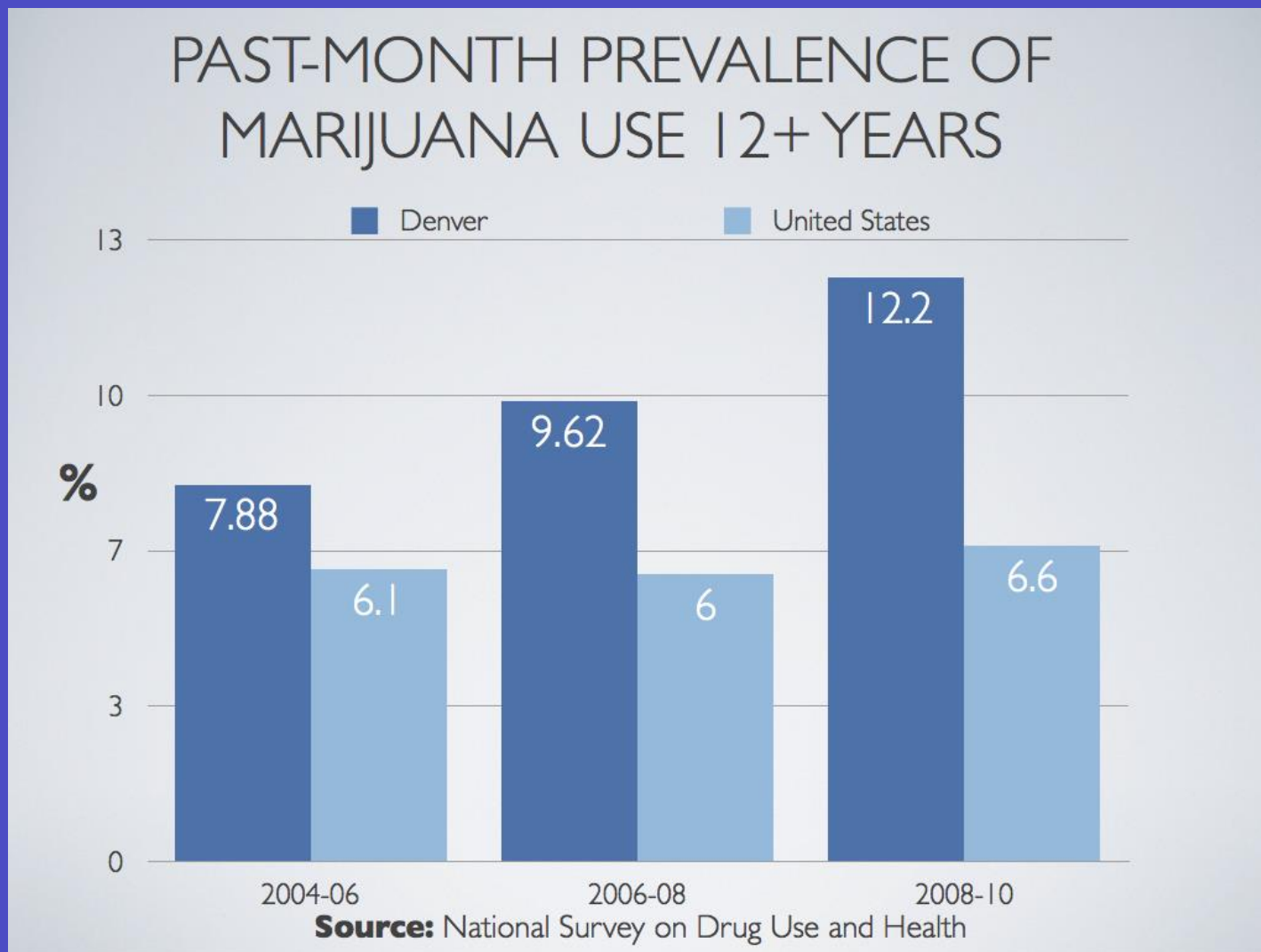
- ✓ 532 licensed dispensaries
- ✓ Over 108,000 registered patients
- ✓ 94% qualified due to “severe pain”

November 2012:

- ✓ Recreational marijuana legalized
- ✓ Age 21 and over can grow up to 6 plants & possess up to 1 ounce



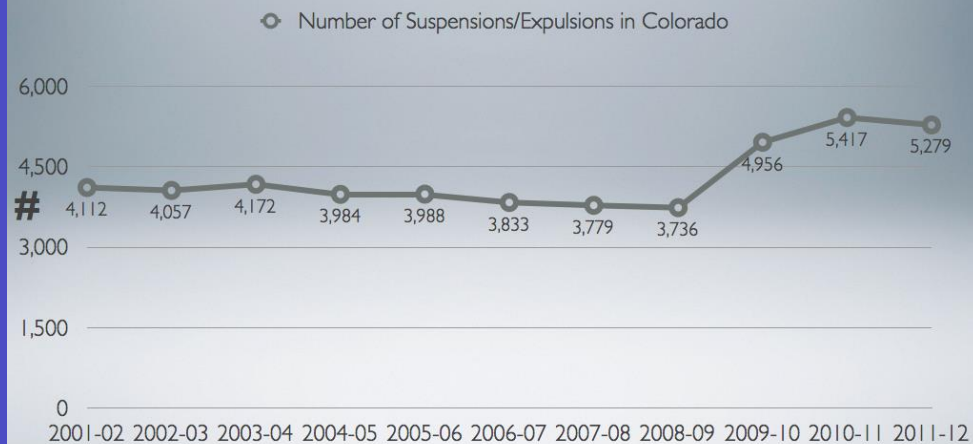
# Marijuana Use By Adolescents in Denver





# School Expulsions in Colorado

## DRUG-RELATED SUSPENSIONS/EXPULSIONS



**Source:** Colorado Department of Education

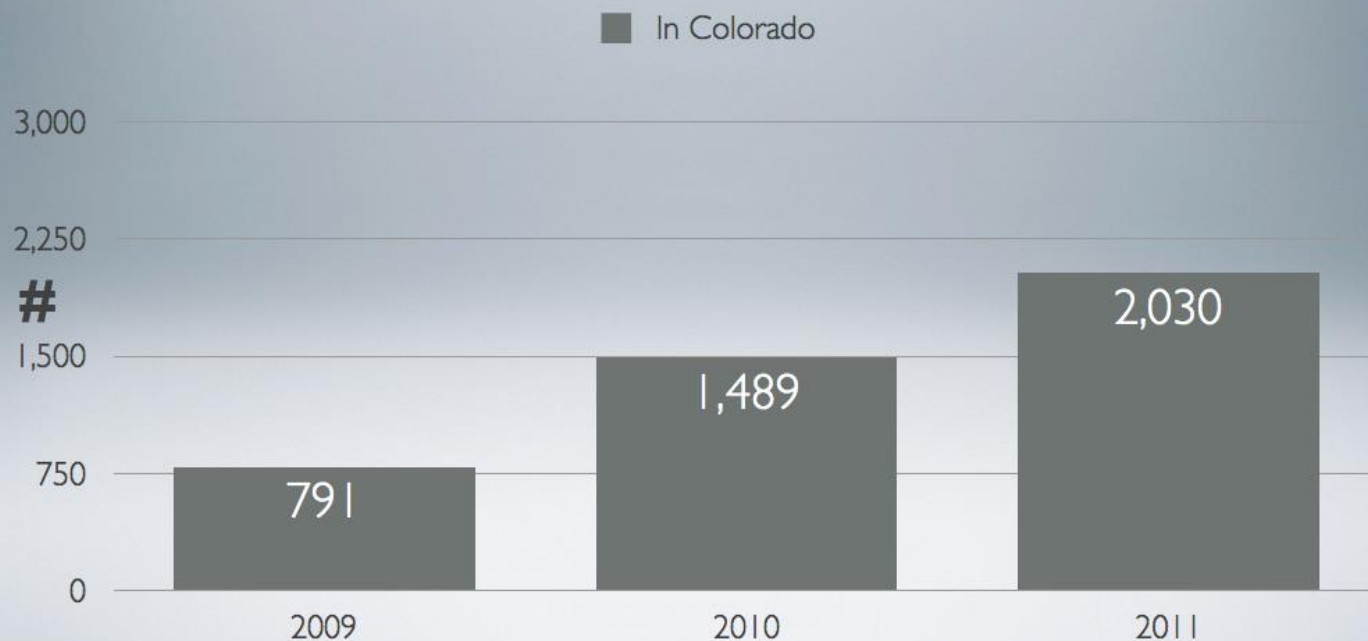
The Colorado Department of Education included all drugs in this data set. However, department officials reported that most drug-related expulsions reported since the 2008-09 academic year have been related to marijuana. The department commissioned a series of educational materials for teachers, parents and legislators to explain the harms of marijuana after drug-related expulsions spiked 45 percent. It is also worth noting that a 10-year low in drug-related suspensions and expulsions was replaced by a 10-year high in only one academic year.

School expulsions



# Testing Positive for THC in Colorado

## BLOOD TESTS FOR DUID: POSITIVE FOR THC

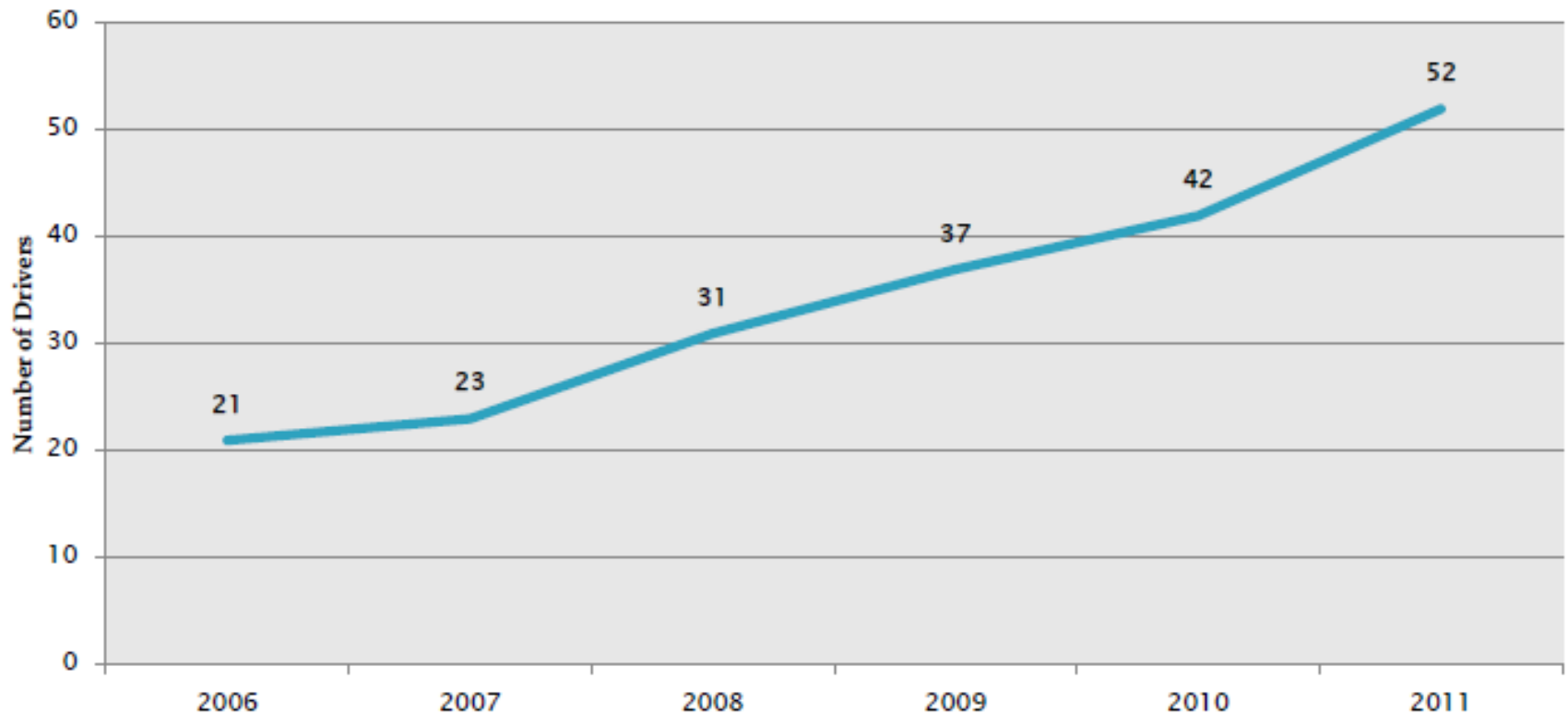


**Source:** Colorado Department of Public Health and the Environment



# Fatal Crashes Involving Marijuana

**Number of Drivers Testing Positive for Marijuana Only  
Involved in Fatal Crashes in Colorado**





## % of Arizona's Teens More Likely to Use Marijuana if it is Legalized

	<b>Number More Likely To Use if Legal</b>	<b>% of Arizona's High School Students</b>
<b>Students Who Have Never Used</b>	~32,000	10%
<b>Students Who Have Used in Lifetime</b>	~76,000	24%

- *The Partnership Attitude Tracking Study (PATs): Teens and Parents, 2012*
- ACJC Arizona Youth Survey, 2012

# The Netherlands Experience

- 1976 – Sale of marijuana authorized in specialty shops (“coffee shops”) licensed by the government
- Between 1980s to mid-90s, the number of “coffee shops” selling marijuana quintupled
- Rates of youth use of marijuana doubled from mid 80s to mid 90s.
- Rate of use of ages 18-20 year olds went from 15% in 1984 to 44% in 1996 (300% increase)
- Potency skyrocketed (8.6% to 20%)
- Black market sale of marijuana increased, focusing on kids, exceeding legal limits, and after-hours’ sales.
- Dutch citizens more likely to be admitted for treatment for marijuana than any other European country.
  
- 1996 - Local communities given the authority to decide whether coffee shops allowed in their jurisdictions
- $\frac{3}{4}$  of communities have since banned them
- Amsterdam is now home to  $\frac{1}{3}$  of all coffee shops despite having only 5% of country’s population.
  
- Late 2011 - Country scaled back its marijuana laws
- Reclassified high THC content marijuana as a hard drug alongside cocaine
- Banned sale of marijuana to tourists

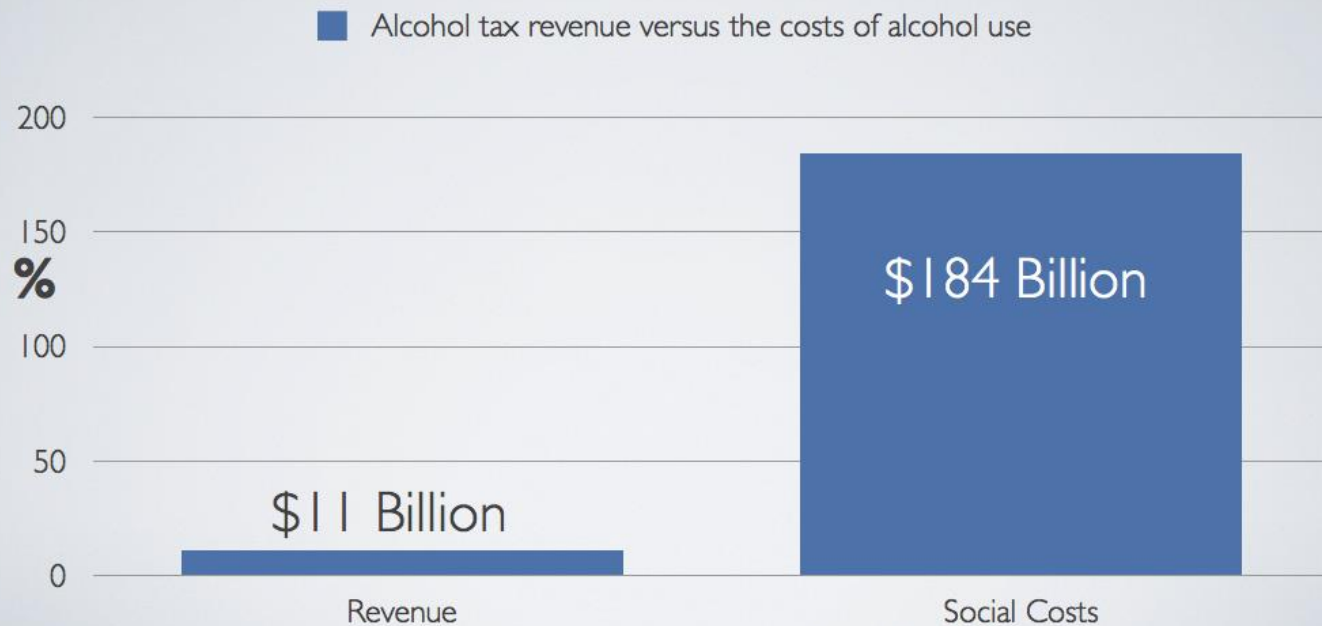
# Medical Marijuana

- Since 1970, marijuana has been a federal Schedule I controlled substance (not approved for any purpose)
- Marinol, Cesamet
  - FDA-approved medications containing synthetic THC are available to treat nausea in cancer patients undergoing chemotherapy and to stimulate appetite
- Savitex
  - Ongoing research into therapeutic values of THC and other cannabinoids to treat spasticity, obesity, pain, and other disorders



# Alcohol : Money Maker or Dollar Drainer?

## ALCOHOL TAXES VS. SOCIAL COSTS



**Sources:** U.S. Census; Harwood (2001); National Institute on Alcohol Abuse and Alcoholism

# Prevention before Legalization

“Teens deserve to grow up in an environment where they are prepared to meet the challenges of the 21st century, and drug use never factors into that equation.”

-ONDCP Director  
Gil Kerlikowske

#MTF2013



National Institute  
on Drug Abuse  
DrugAbuse.gov

- We owe it to our kids to try prevention before legalization
- Public awareness & education
- Alternatives? Yes. Legalization? No!

Legalization means commercialization, normalization and wider access leading to *more use and addiction*

- 80% of the profits from addictive industries comes from the 20% of users who consume most of the volume
- Phillip Morris, Altria recently bought the domain names “AltriaCannabis.com” and “AltriaMarijuana.com”



# In Summary

- Adolescence is a critical period for brain development
- Adolescents are prone to risk taking
- Marijuana has profound effects on brain development
- Protecting our kids from marijuana use is crucial. We must take action!



# Talking With Your Kids About Marijuana

- Focus on one goal: You do not want them to use.
- Stick to simple, straightforward arguments:
  - Marijuana makes it harder for your brain to make good decisions
  - Marijuana reduces motivation, increases impulsivity
  - For some people, once they start using marijuana, they can't or won't stop
  - Marijuana can keep you from doing and being your best





# Resources

<http://marijuanaharmlessthinkagain.org/>

[www.preventitalexandria.org](http://www.preventitalexandria.org)