

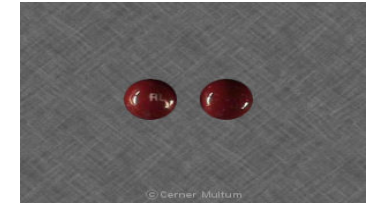
Marijuana – Cost\$ to Society

P. Drum, Pharm D, FCSHP
May 2018

We **DO** have approved THC products since 1985 – they are just **NOT** “marijuana”

REAL “Medical Marijuana” – FDA-approved products

- dronabinol (Marinol[®], generic) – CS III
 - Δ 9 **THC**
 - Use: increase appetite, nausea and vomiting associated w/ chemotherapy, HIV weight loss
 - Strengths: 2.5mg, 5 mg, 10 mg (maximum FDA-approved)
- nabilone (Cesamet[®], generic) – CS II
 - synthetic cannabinoid, mimics THC
 - Use: nausea and vomiting associated w/ chemotherapy
- **Neither** commonly used due to antiemetics and anti-retrovirals (anti-AIDS) medicine FDA-approved in the 1990’s
- (Non-US approved) nabiximols (Sativex[®])
 - Oral sublingual spray
 - Δ 9 THC and cannabidiol
 - In Phase II and III studies in US: MS spasticity, cancer pain



Cannabidiol is available for FREE – ClinicalTrials.gov

Cannabidiol (CBD) and Epilepsy – 37 studies (as of 5/28/18)

- Phase II and III studies
 - 1 in 4 children with rare seizures respond over 14% placebo response
 - 80% experience side effects
- Over 50 researchers have been approved

Marijuana (cannabinoids, Cannabis, Sativex)

- Over 848 studies

(... someone, please, tell the neurosurgeon Sanjay Gupta, MD ...)

<https://clinicaltrials.gov/ct2/results?term=CBD+and+epilepsy&Search=Search>

NIH U.S. National Library of Medicine
ClinicalTrials.gov
Find Studies ▾ About Studies ▾ Sub

Home > Search Results

Modify Search Start Over

37 Studies found for: **CBD and epilepsy**
Also searched for **Cannabidiol** and **Epileptics**. [See Search Details](#)

NIH U.S. National Library of Medicine
ClinicalTrials.gov
Find Studies ▾ About Studies ▾ Submit

Home > Search Results

Hide Search Start Over

Condition or disease ⓘ Other terms ⓘ

marijuana

Country ⓘ

X

Search Advanced Search

848 Studies found for: **marijuana**
Also searched for **Cannabinoids**, **Cannabis**, and **Sativex**. [See Search Details](#)

Tell the Congress & the candidates to STOP LYING ...

Control Schedule I makes marijuana “unable to research” – FALSE!!!



- **848 National Institutes of Health grants** currently are funded by the U.S. Government related to marijuana research.
- **over 500 studies** are listed in clinical trials (**human studies**) with the search term marijuana
- **over 23,000 manuscripts** have been published with the search term marijuana
- **over 120 investigators** currently are licensed by the DEA to do research with marijuana and cannabinoids
- **18 investigators** are licensed by the DEA to **do research in humans with smoked marijuana.**

Psst: they are doing this to USE THE BANKS!! (can NOT use U.S. Banks for selling a CS I drug RICO violation)

THC, 11-OH-THC (hydroxy), THC-COOH (carboxy)

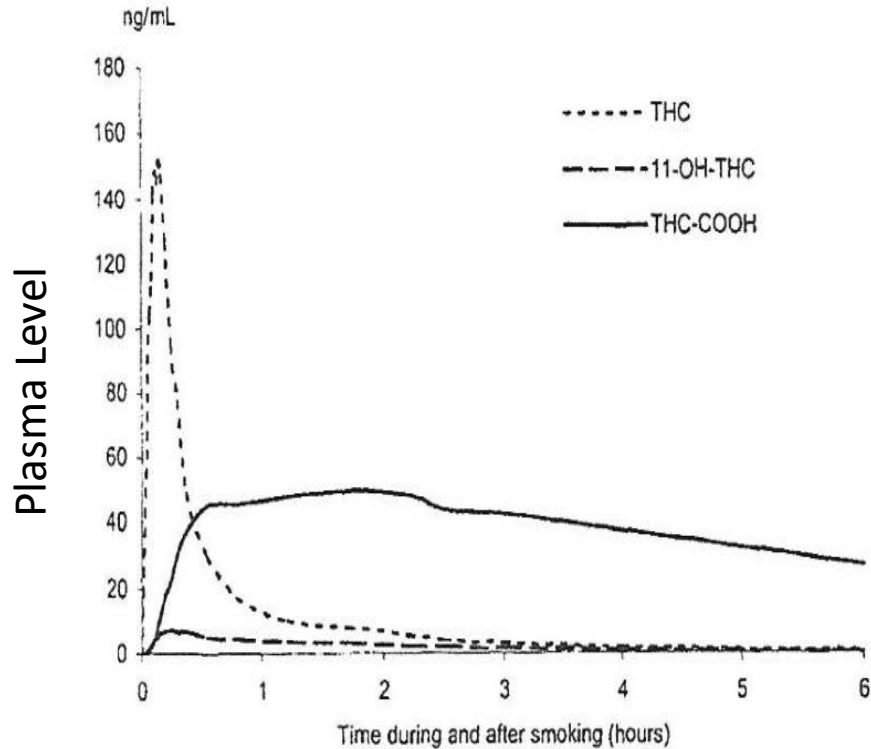


Figure 1. Mean plasma levels of THC and its metabolites 11-OH-THC and THC-COOH for six subjects smoking a cannabis cigarette containing 34 mg THC (drawn from data in Huestis et al. 1992a).

Inhaled marijuana

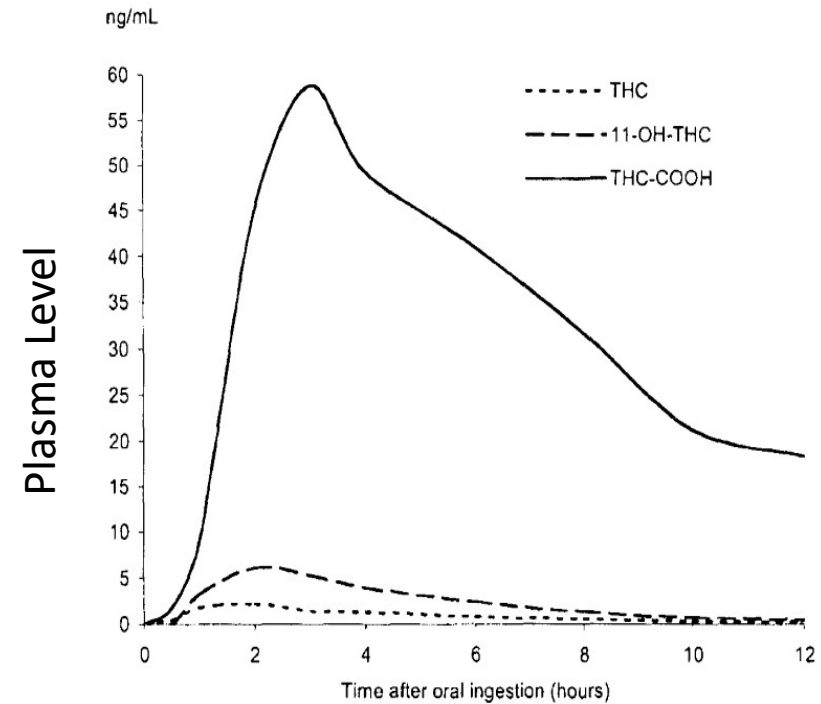


Figure 2. Mean plasma levels of THC, 11-OH-THC, and THC-COOH of six cancer patients after eating an oral dose of 15 mg THC (estimated from individual graphs for each patient by Frytak et al. 1984).

Oral marijuana

NOTE: Unlike alcohol which has a standard (zero-order) elimination rate – 0.015 gm%/hr, marijuana does NOT has a consistent rate of elimination

Marijuana – CO\$T to society



MJ DUI suspected in head-on crash that killed pregnant taxi passenger – 3/19/14

WSP: 1 dead in DUI crash on I-5, others hurt in second crash

TUMWATER, Wash 7/4/2015

In their honor: DUI emphasis dedicated to teens killed in crash

2/26/16 GIG HARBOR, Wash Thursday, June 11, 2015



2 students killed, 2 injured in Ferndale crash

Students were outside for PE class, authorities said



Lives

Police: Driver who admitted smoking 'bowl of marijuana' charged with vehicular homicide – 1/9/2014



Driver who hit jogger near Silverdale in March arrested Published 7:39 p.m. PT Sept. 1, 2017

Vancouver driver smoked marijuana hours before fatal Halloween crash, court documents say – 10/31/14

Auto crashes are on the rise in marijuana states

- Three states that have approved the sale of marijuana for recreational use have shown an increase in car accident claims.
- The number of vehicle collisions is 3 percent higher than what would have been if pot weren't legal, the study claims.

[Phil LeBeau](#) | [@Lebeaucarnews](#)

Published 12:01 AM ET Thu, 22 June 2017 Updated 9:13 AM ET Thu, 22 June 2017

Legal pot and car crashes: Yes, there's a link

By Ed Leefeldt MoneyWatch June 22, 2017, 12:01 AM

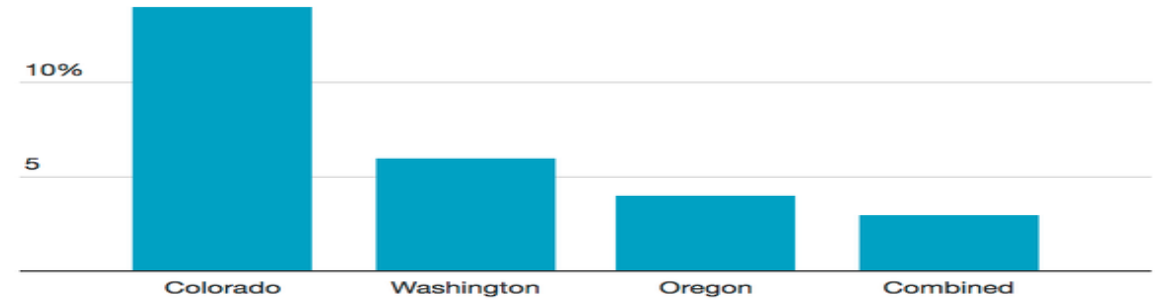
<https://www.cnn.com/2017/06/21/auto-crashes-are-on-the-rise-in-marijuana-states.html>

<https://www.denverpost.com/2017/08/25/colorado-marijuana-traffic-fatalities/>

<https://www.cbsnews.com/news/legal-pot-and-car-crashes-yes-theres-a-link/>

Increase in collisions

Compared with neighboring states where recreational marijuana is not legal; 2012 to 2016



THE DENVER POST

Subscribe Log In Membership Newsletters

News ▼ Sports ▼ Business ▼ Entertainment ▼ Lifestyle ▼ Opinion ▼ Politics ▼ Cannabis Classifieds ▼ Video

Search



Exclusive: Traffic fatalities linked to marijuana are up sharply in Colorado. Is legalization to blame? – 8/25/2017



WA Marijuana (Mj) Drivers in Fatal Crashes by Time of Day & Day of Week, with DUI Comparison, 2015 FARS Data

Crash Hour	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Total	% Mj	% WA DUI	
Mid-3:59am	2	1	1	2	2	3	5	16	18.2%	34.3%	
4am-7:59am	2	1	3	0	1	3	0	10	11.4%	6.1%	
8am-11:59am	0	2	1	1	1	1	0	6	6.8%	2.0%	
Noon-3:59pm	2	1	1	2	2	1	0	9	10.2%	7.1%	
4pm-7:59pm	4	2	2	5	2	6	4	25	28.4%	23.2%	
8pm-11:59pm	4	1	4	2	2	3	5	21	23.9%	25.3%	
Unkn. Hours	0	0	1	0	0	0	0	1	1.1%	2.0%	
Total	14	8	13	12	10	17	14	88	100.0%	100.0%	
% MJ	15.9%	9.1%	14.8%	13.6%	11.4%	19.3%	15.9%	100.0%			
% WA DUI	7.1%	7.1%	9.1%	9.1%	19.2%	20.2%	28.3%	100.0%			

In Washington, THC positive driving crashes:

- have an increased occurrence during rush hour traffic periods
- Do NOT increase in frequency on weekends (like alcohol)

State of WA - DUI law (RCW 46.61.502)



- (1) A person is guilty of driving while under the influence of intoxicating liquor, marijuana, or any drug if the person drives a vehicle within this state:
 - (a) And the person has, within two hours after driving, an alcohol concentration of 0.08 (gm%) or higher as shown by analysis of the person's breath or blood made under RCW [46.61.506](#); or
 - (b) The person has, within two hours after driving, a **THC concentration of 5.00 (ng/ml) or higher** as shown by analysis of the person's **blood** made under RCW [46.61.506](#);
- 4 (b) Analyses of **blood samples obtained more than two hours** after the alleged driving may be used as evidence that within two hours of the alleged driving, a person had a THC concentration of 5.00 (ng/ml) or more in violation of subsection (1)(b) of this section, and in any case in which the **analysis shows a THC concentration above 0.00** may be used as evidence that a person was under the influence of or affected by **marijuana** in violation of subsection (1)(c) or (d) of this section.

90% of impaired drivers test below 5 ng/ml THC

Driving under the influence of cannabis: a 10 year study of age and gender differences in the concentrations of tetrahydrocannabinol in blood.

Addiction, 2008, 103, 452-461

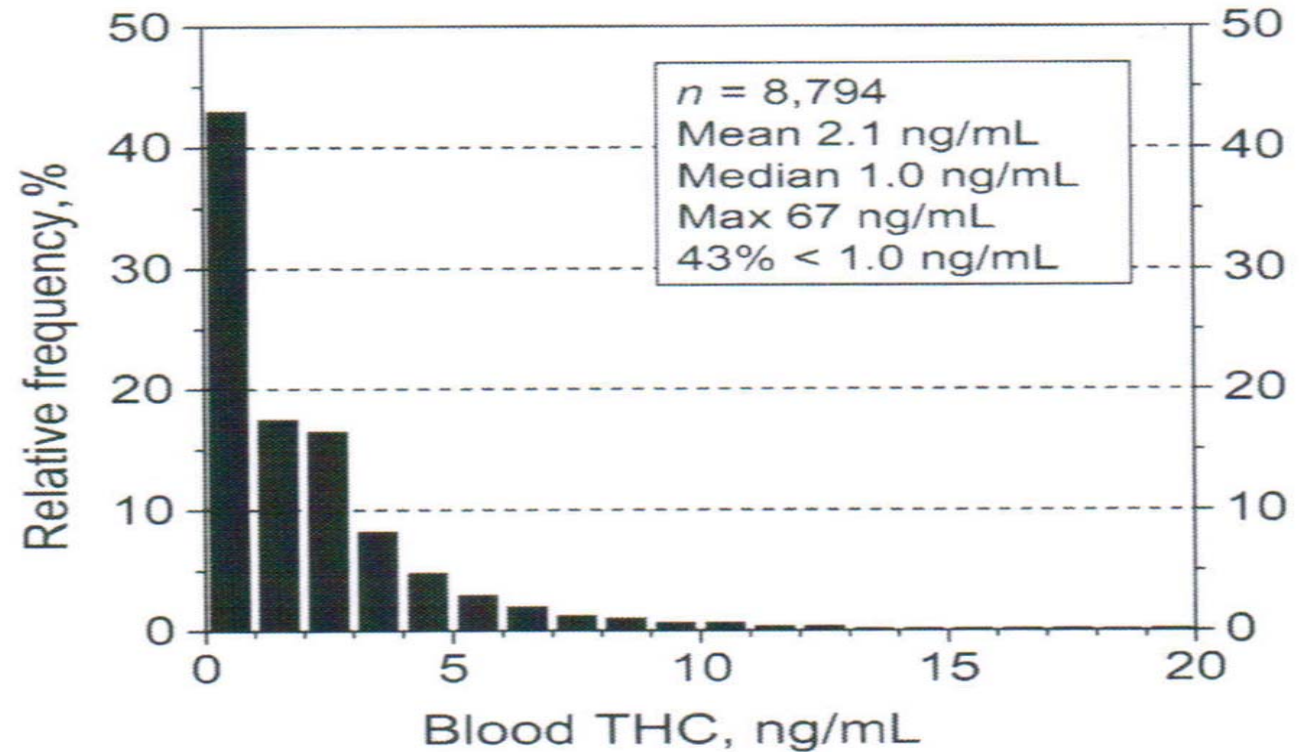


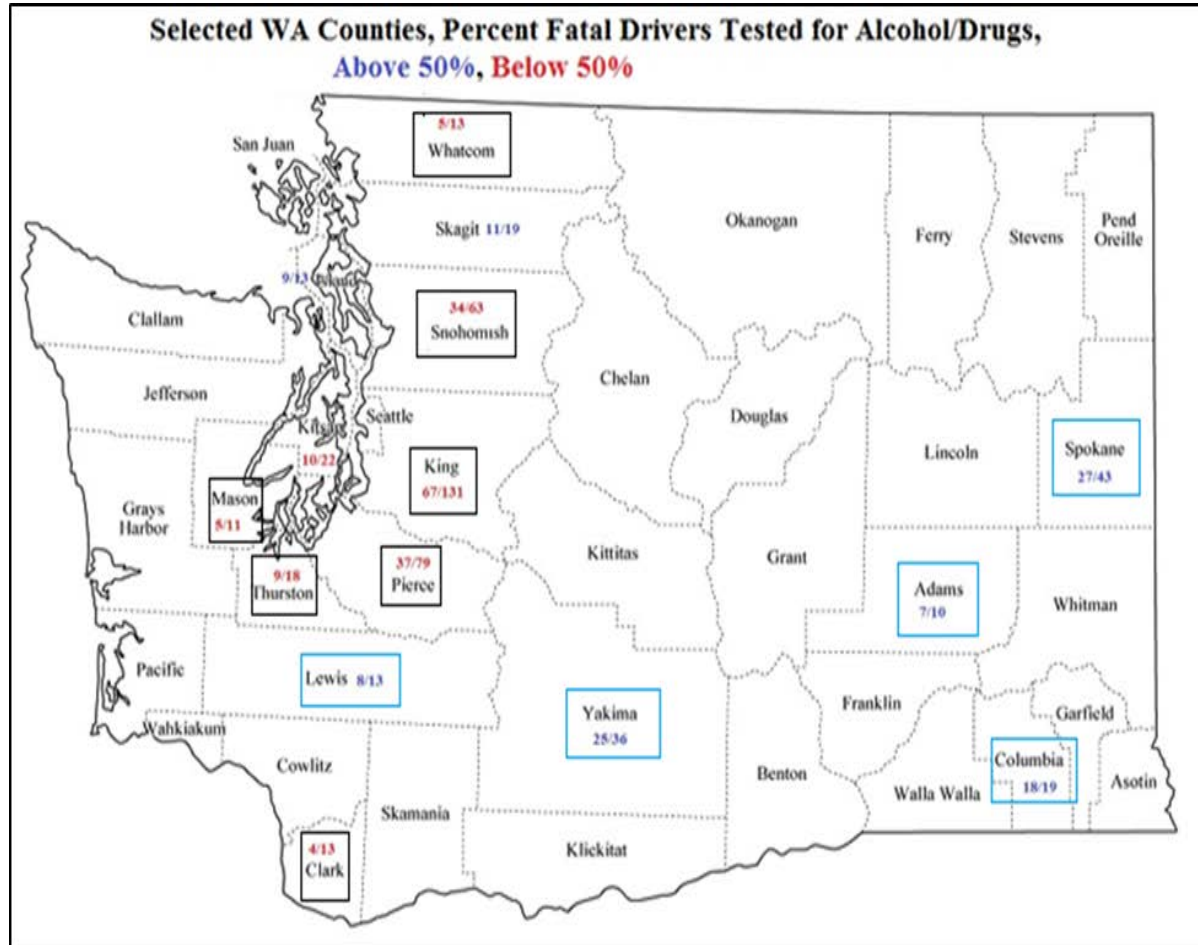
Figure 3 Relative frequency distribution of the concentrations of Δ^9 -tetrahydrocannabinol (THC) in blood samples from driving under the influence of drugs suspects apprehended over a 10-year period; $n = 38$ cases (0.43%) with a THC concentration above 20 ng/ml are not plotted for clarity

Comparison of Cannabis and DUI (0.08+BAC) for Recreation Cannabis States, 2015 vs 2016 FARS Data						
Status	2015	2016	Change	2015	2016	Change
Recreational States	% Cannabis	% Cannabis	Up 2016/2015	% DUI	% DUI	Up 2016/2015
Colorado	22.2%	28.4%	x	29.0%	29.7%	x
Oregon	14.5%	22.6%	x	33.8%	31.4%	
Washington	23.3%	26.1%	x	24.4%	29.1%	x
Recreational Cannabis States	20.0%	25.7%	up 3 of 3 up 28.4%	29.1%	30.0%	up 2 of 3 up 3.1%
Medical C States	19.9%	24.6%	up 16 of 21 up 23.9%	30.1%	30.1%	up 9 of 21 up 0%
Non-Legal C States	14.5%	15.8%	up 16 of 27 up 9.0%	27.2%	27.2%	up 15 of 27 up 0%
All States	16.8%	18.2%	up 35 Of 51 up 8.6%	27.4%	27.0%	up 26 of 51 Down 1.2%

Economic Cost of Vehicle Accidents Resulting in Fatalities & DUI - 2010

- 32,999 fatalities, 3.9 million injured, 24 million vehicles damaged in US in 2010
- Each fatality resulted in ave discounted lifetime **cost = \$1.4 million/life lost**
- Economic cost of all 2010 crashes = \$242 billion
 - Property Damage – 31%
 - Medical – 10%
 - Legal – 5%
 - Market Prod – 24%
 - Household Prod – 8%
 - Workplace – 2%
 - Congestion – 12%
 - Insurance – 8%
- First driving-under-the-influence offense – est \$10,270

Not drawing blood in Fatal Car Crashes – WA by County, 2015 FARS

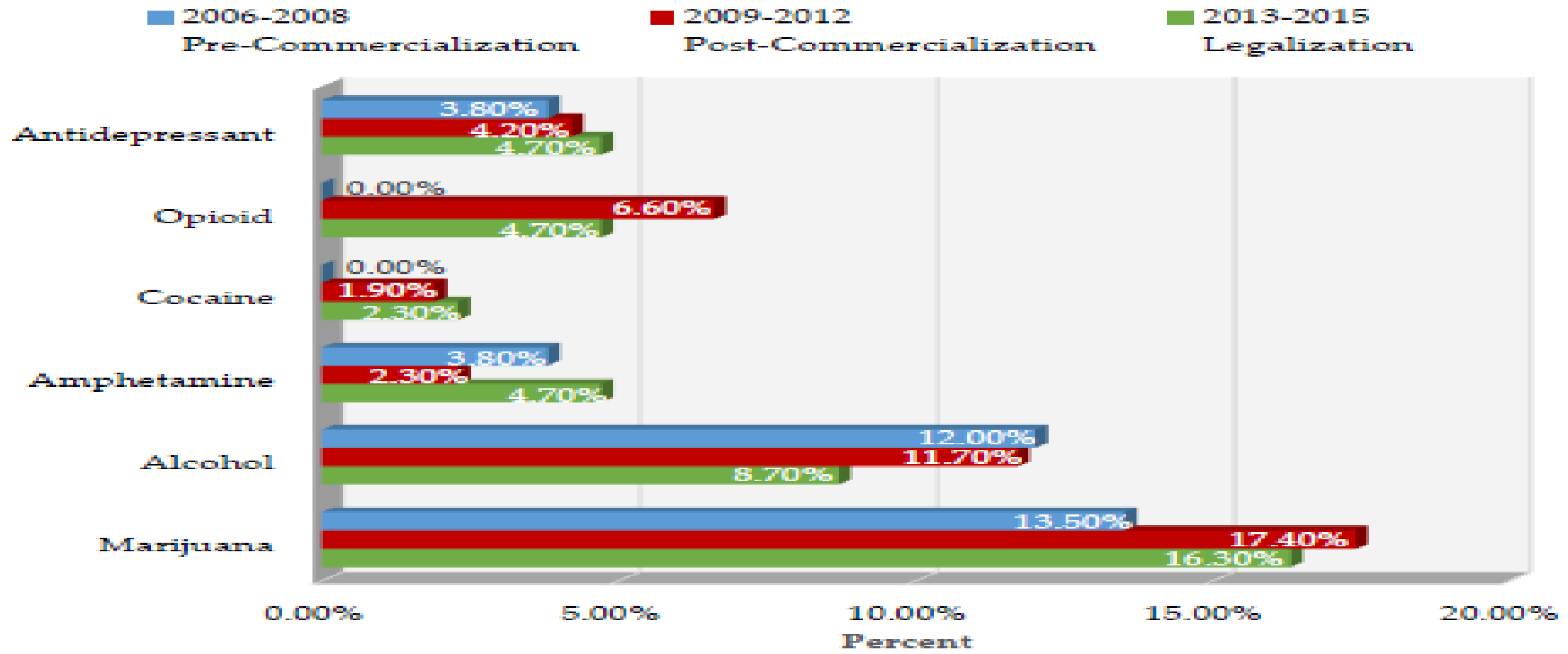


WA State Counties with 10+ Fatal Crash Drivers by % Alcohol Drivers Tested , 2015 FARS Data				
County	Total tested	Total Not Tested	Total Drivers	% Not Tested
KING	67	64	131	48.90%
PIERCE	37	42	79	53.20%
SNOHOMISH	34	29	63	46.00%
SPOKANE	27	16	43	37.20%
YAKIMA	25	11	36	30.60%
KITSAP	10	12	22	54.50%
SKAGIT	11	8	19	42.10%
COLUMBIA	18	1	19	5.30%
THURSTON	9	9	18	50.00%
GRANT	10	8	18	44.40%
CLARK	4	9	13	69.20%
WHATCOM	5	8	13	61.50%
LEWIS	8	5	13	38.50%
ISLAND	9	4	13	30.80%
MASON	5	6	11	54.50%
CLALLAM	6	5	11	45.50%
KITTITAS	6	5	11	45.50%
STEVENS	6	5	11	45.50%
ADAMS	7	3	10	30.00%
State Total	356	289	645	44.80%

DRE Examination Characteristics of Cannabis Impairment

- 302 toxicologically-confirmed THC (≥ 1 ng/ml) successfully identified by DRE compared to 302 control non-impaired subjects
- For all performance characteristics to be **above 96.7% prediction of cannabis impairment** - need to identify **two or more** of the following:
 1. have **3 or more** failures in Finger to Nose (**FTN**) test
 2. **eyelid tremors** during Modified Romberg balance (**MRB**) test
 3. **two or more** One leg stand (**OLS**) clues
 4. **two or more** Walk and Turn (**WAT**) clues
- Other common symptoms at clinical significance: incr HR, incr SBP, dilated pupil size.
- Other common symptoms did not reach clinical significance (but favorable for THC): pupil rebound dilation and lack of convergence.

Average Toxicology of CO Suicides Among Adolescents (10 – 19 yo) 2006-2015

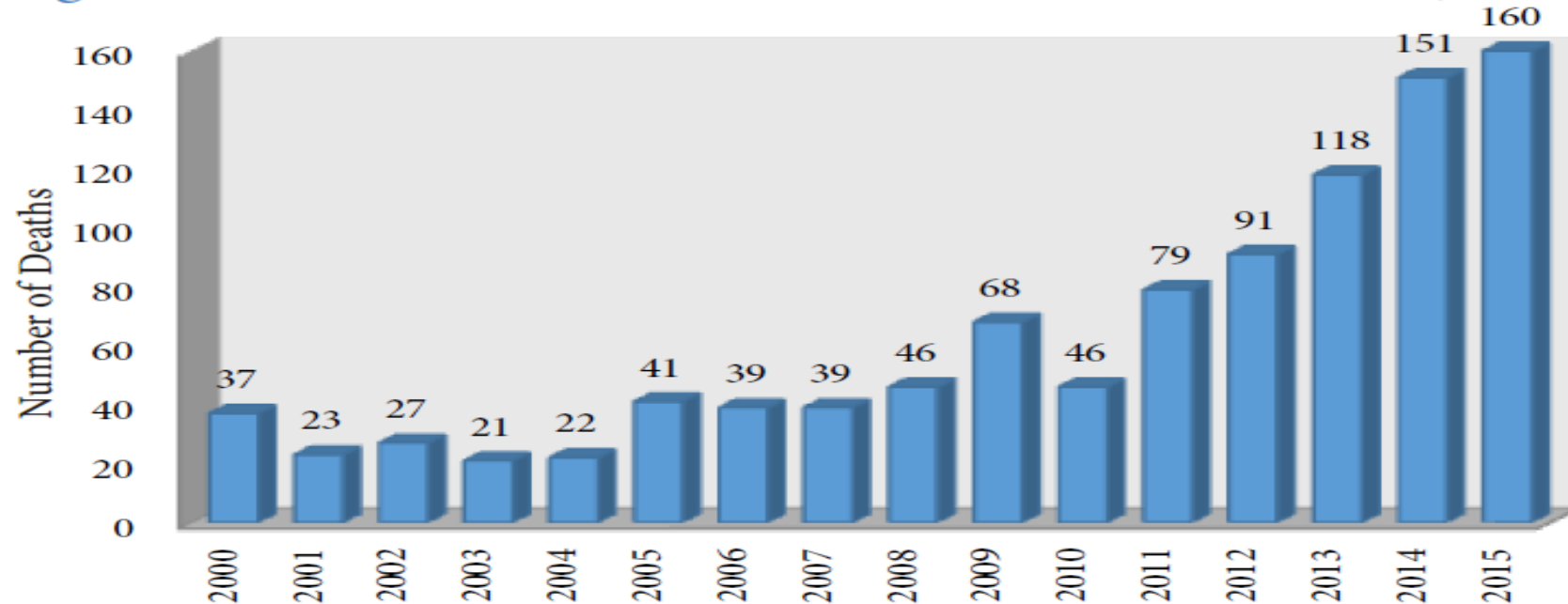


Do NOT believe the Pot Communities lies ... Increasing MJ use INCREASES opiate deaths

Colorado's Heroin Overdoses are **INCREASING** – with MJ legalization

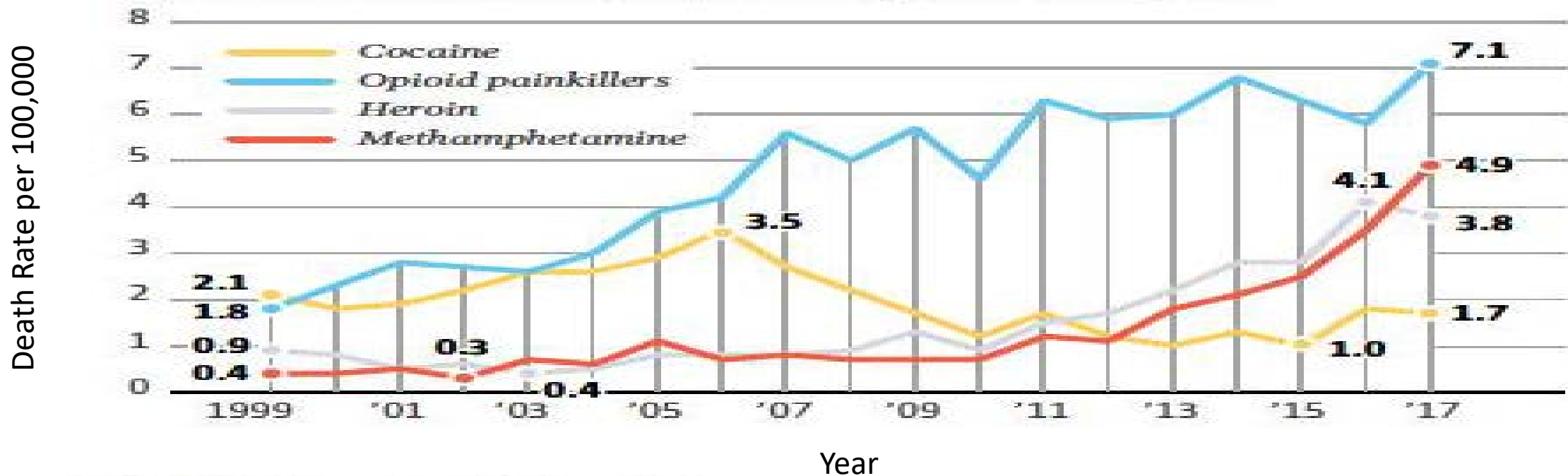
Source: Colorado Department of Public Health and Environment (CDPHE)⁴

Figure 2.2 Number of Heroin Overdose Deaths in Colorado, 2000-2015



Source: Colorado Department of Public Health and Environment (CDPHE)⁴

Denver Post – Even THEY admit the problem is getting WORSE



Opioid deaths at an all-time high

Opioid overdose deaths in Colorado hit a new high in 2017. While the death rate* for painkillers, which include legal prescription drugs and drugs manufactured illegally, have climbed steadily since 1999, the rate for heroin deaths spiked in in 2016. For the first time since 2007, there were more overdose deaths from methamphetamine than heroin in 2017.

Pregnancy and Marijuana in WA

- Study participants from nine counties in Washington State ($N = 1,359$) were questioned about their substance use
- **Marijuana use** at exit from the Parent–Child Assistance Program (PCAP) **increased significantly after marijuana legalization** in the state.
- Women who were not abstinent from marijuana at program exit were **likely to report use of other substances as well.**

J Stud Alcohol Drugs 2018 Jan;79(1):88-95.

The screenshot shows the homepage of the Journal of Studies on Alcohol and Drugs (JSAD). The header features the journal title in large white font on a red background, with 'est. 1940' and 'CENTER OF ALCOHOL STUDIES' below it. A navigation bar includes links for Home, Browse, Subscribe, Article Submission, For Authors, For Reviewers, News, and About JSAD, along with social media icons for Facebook and Twitter. A search bar is located below the navigation bar. The main content area displays the article title 'Use of Marijuana and Other Substances Among Pregnant and Parenting Women With Substance Use Disorders: Changes in Washington State After Marijuana Legalization' in bold. Below the title, the journal citation is shown: 'Journal of Studies on Alcohol and Drugs, 79(1), 88–95 (2018)'. The authors are listed as 'Therese M. Grant, Ph.D.,^{a,*} J. Christopher Graham, Ph.D.,^b Beatriz H. Carlini, Ph.D., M.P.H.,^b Cara C. Ernst, M.A.,^b & Natalie Novick Brown, Ph.D.^a'. An 'Article Tools' dropdown menu is visible. On the right side, there are links for 'Add to Favorites', 'Email to a Friend', 'Download Citation', 'Track Citations', and a Rutgers Center of Alcohol Studies logo with text about its mission and a list of areas: EDUCATION & TRAINING, RESEARCH, and CLINICAL.

Marijuana impacts in Pregnancy

- NOT to use while breastfeeding get into child (THC is fat soluble)
- Increased risk for ventricular septal defects (hole in heart)
- Low birth weight
- Poor motor skills, impulsive, inattentive, hyperactive and delinquent
- Impacts (reduces) fertility in men and women

Marijuana

Science-based information for the public.

ADAI

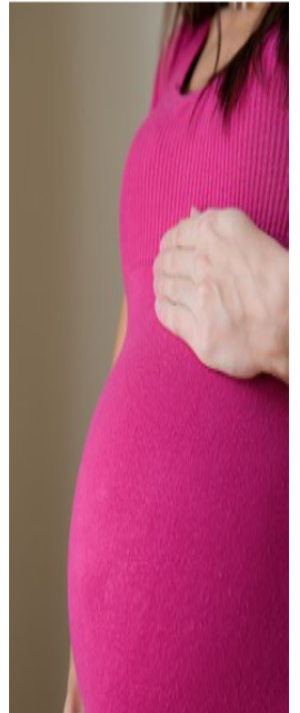
ALCOHOL &
DRUG ABUSE
INSTITUTE

UNIVERSITY of WASHINGTON

Marijuana, Reproduction, and Pregnancy

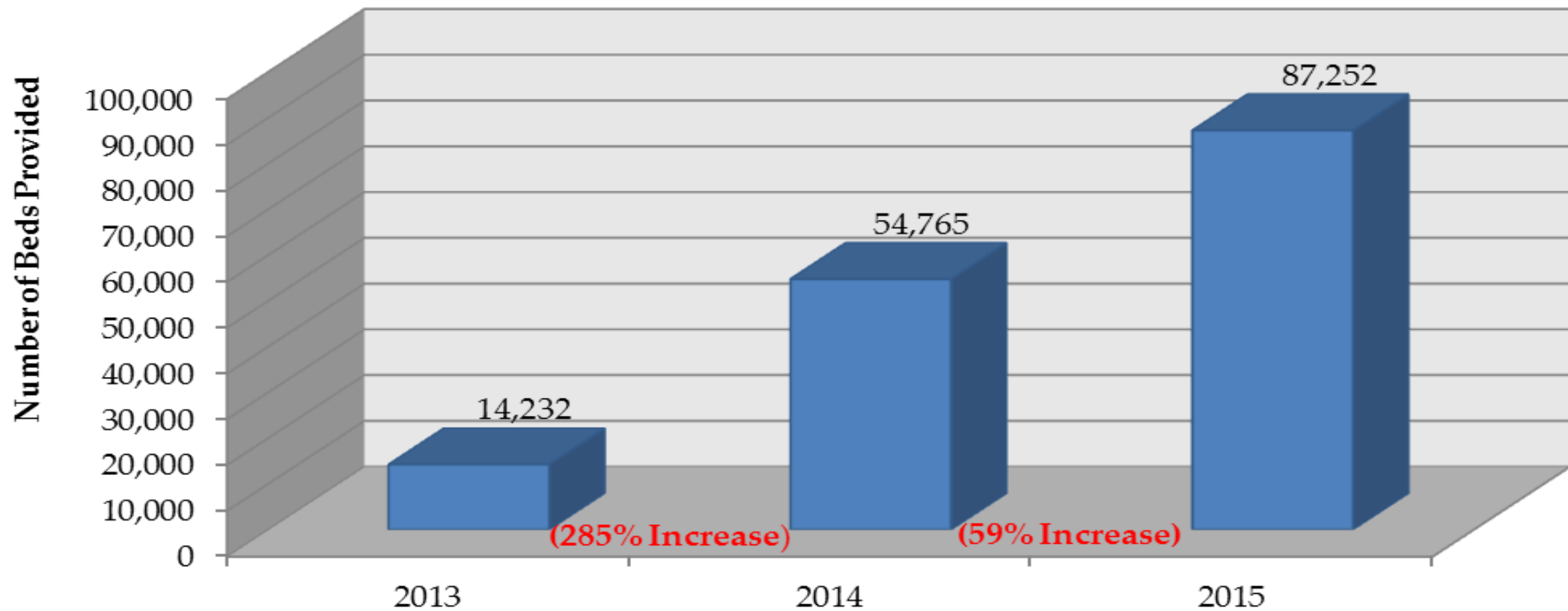
Marijuana is the most commonly used illicit drug among women of reproductive age or by women who are pregnant.

It is difficult to be certain about the specific effects of marijuana on pregnancy and the developing fetus, in part because those who use it often use other drugs as well, including tobacco, alcohol, as well as the influence of social and genetic factors¹³, and ethical and practical problems in conducting prospective longitudinal studies. We don't know enough yet to be certain about all of the possible risks. We do know that THC, the psychoactive component in marijuana, crosses the placental barrier and is secreted into breastmilk of nursing mothers⁸. This raises important concerns about the potential impact of maternal marijuana use on the developing child, so to be safe, it is strongly recommended that pregnant and breastfeeding mothers do not use marijuana.



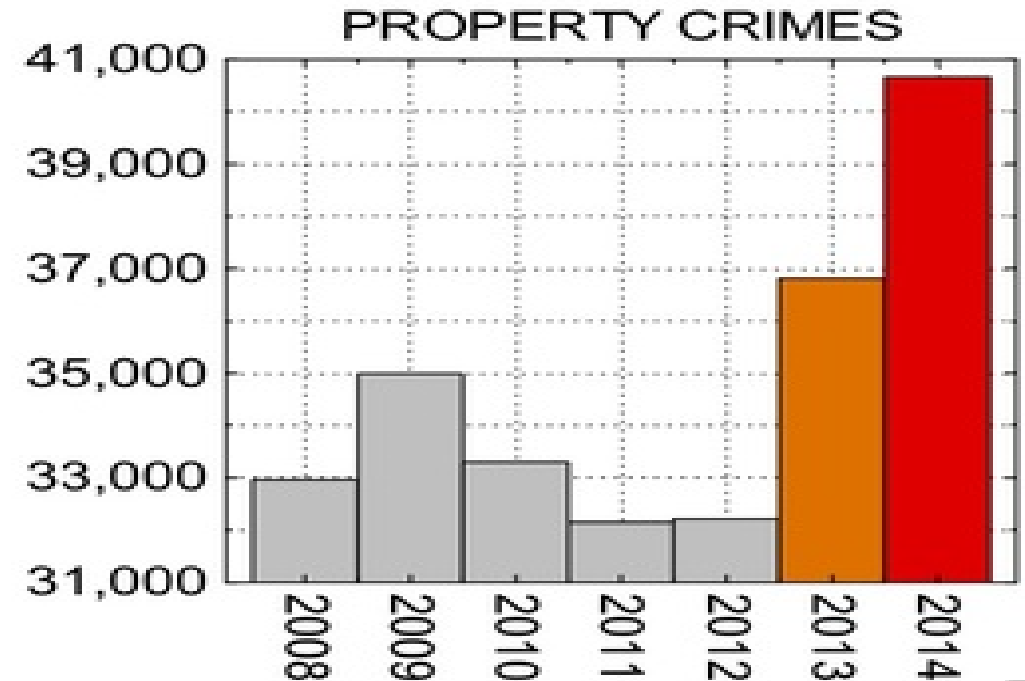
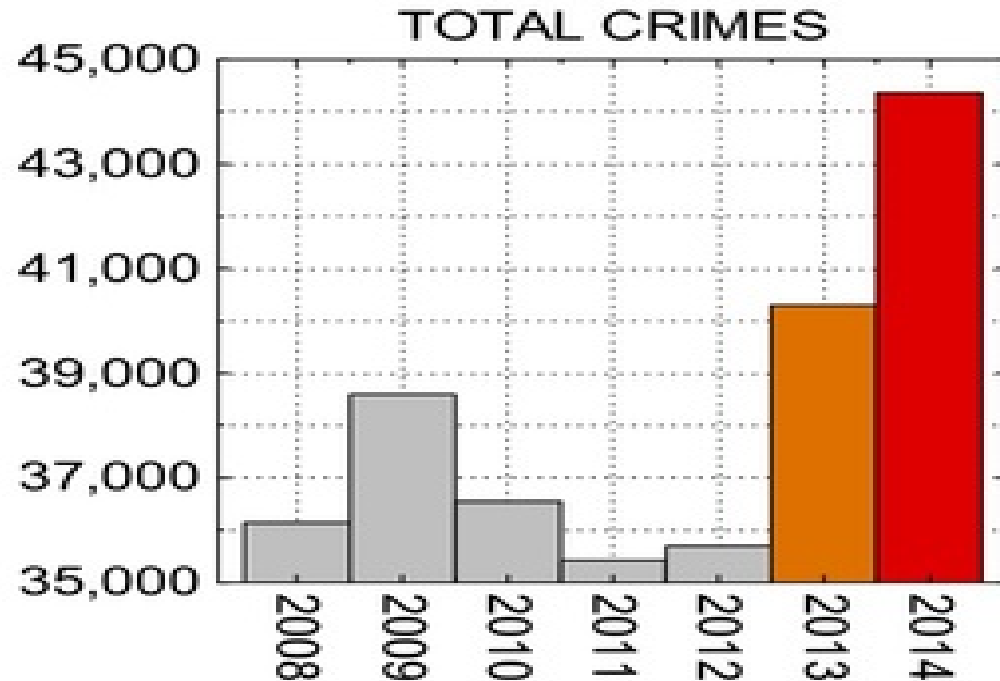
Influx of Homelessness in Colorado

Total Overnight Beds Provided, January Through June



The Salvation Army, Intermountain Division

Crime Wave in Seattle, WA since MJ Legalization



- Total Crimes and Property Crimes WERE decreasing/stable from 2009 thru 2012
- Crimes increased 13% from 2012 to 2013, up by 24% to 2014
- Property crimes increased 14% from 2012 to 2013, up by 26% to 2014
- Increase also seen in violent crime (8%), burglaries (10%), larceny thefts (27%) and vehicle thefts (54%)



THE JOURNAL OF GLOBAL DRUG POLICY AND PRACTICE

The Hidden Costs of Marijuana Use in Colorado: One Emergency

Department's Experience

Kenneth Finn, MD, President Springs Rehab, PC

Rochelle Salmore, MSN, RN, NE-B, Nurse Scientist, Penrose St. Francis Health Services (retired)

Background

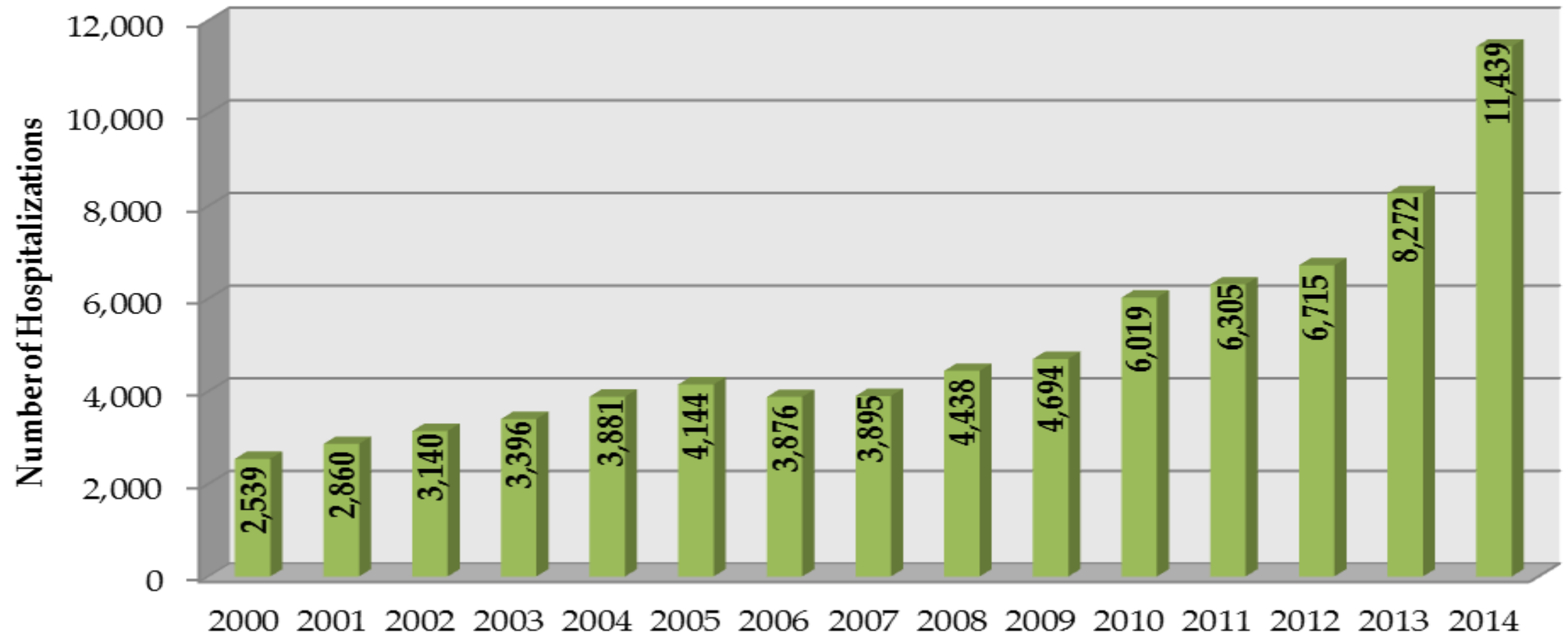
522 bed acute care hospital in Colorado Springs (pop 440,000)

- 104,000 annual ED visits, 98 medical mj dispensaries
- Looked at ED visits from 2009 – 2014 w/ cannabis DRG and + urine MJ

Results:

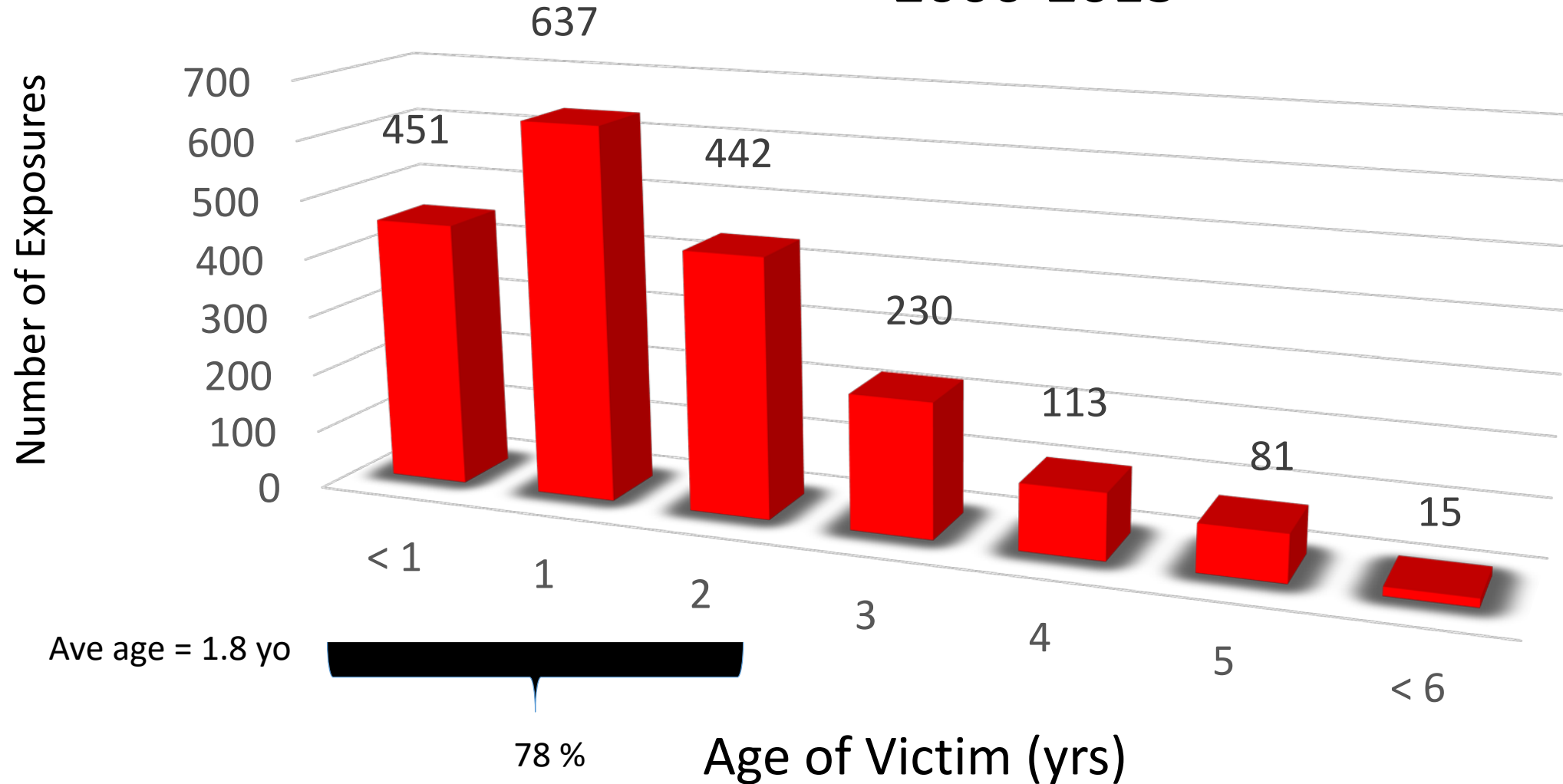
- 2009 = 545 ED visits w/ MJ DRG compared to 2014 = 2,042 ED visits (**375% increase**)
- **MJ Admission rate:** 2009 = 9% to **2014 = 15.3%**
- ED charges unable to be collected increased 192% over the 6 years
- Estimated **\$20M true loss in charges** over 6 years

Colorado Hospitalizations Related to Marijuana



Colorado Hospital Association, Hospital Discharge Dataset. Statistics prepared by the Health Statistics and Evaluation Branch, Colorado Department of Public Health and Environment

US Marijuana Exposures and Age of Victim 2000-2013



Costly Vets bills due to Accidental Ingestions



24/7 Animal Poison Control Center
855-764-7661
\$59 USD per incident fee applies



Pet Marijuana Intoxication on the Rise



When dogs or cats **ingest** marijuana in any form, or are **exposed to secondhand smoke**, toxicity can result. Symptoms often occur within three hours of exposure and may include:

- Depression
- Incoordination
- Decreased heart rate
- Low blood pressure
- Slowed respiratory rate
- Dilated pupils
- Drooling
- Dribbling urine
- Seizures
- Coma

Accessed 5/3/17: <http://www.petpoisonhelpline.com/uncategorized/pet-marijuana-intoxication-rise/>
<https://www.caninejournal.com/dogs-and-marijuana/>



Kennewick man blows up townhouse cooking hash oil

By Jake Dorsey

March 21, 2018 05:48 PM

Read more here: <http://www.tri-cityherald.com/news/local/article206316579.html#storylink=cpy>



BHO Explosions

Man sentenced to 9 years in fatal Bellevue hash-oil blast

by KOMO Staff & GENE JOHNSON

Associated Press

June 7 2015

"I only got involved in this because I thought that the legalization movement of marijuana in Washington would provide me with funds to be a part of my boys lives, and it **went so far in the opposite direction** I can't think of it without crying, or having a panic attack," he wrote. **"Looking back and seeing the percentage that marijuana took up of my life makes me sick."**



Behind the scenes of a deadly hash oil explosion in Portland

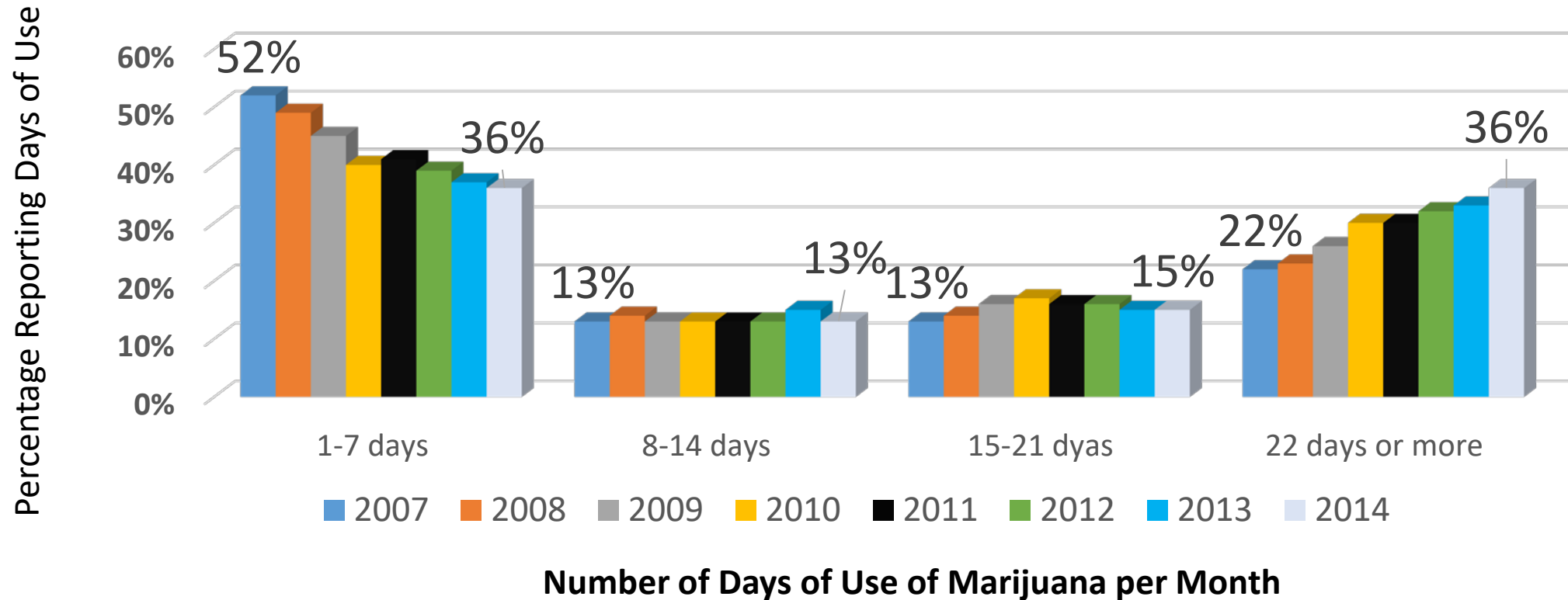
- Posted July 28, 2017 at 01:07 PM



BIG Marijuana NEEDS addicts to sustain their profits ...

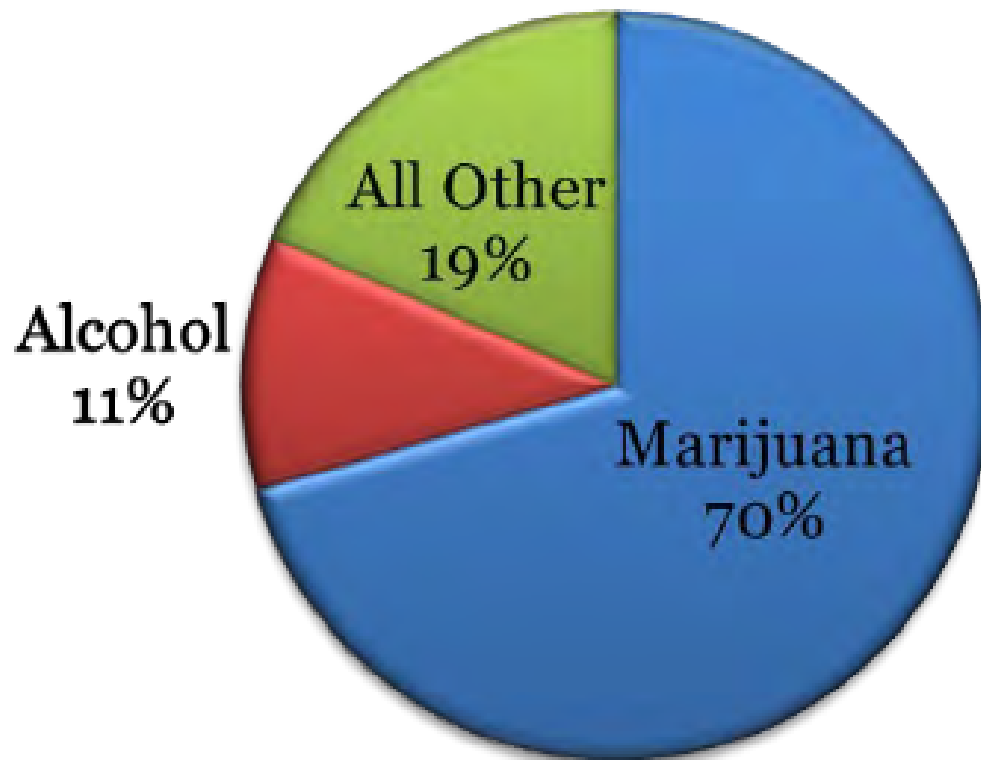
Creating Marijuana ADDICTS in Colorado

Reported Marijuana use in past 30 days, by number of reported days of use in CO, 2007-14



Source: Colorado Department of Human Services, Office of Behavioral Health, Drug/Alcohol Coordinated Data System.

Youth Treatment Admissions for 2015*



SOURCE: SCOPE and NWHIDTA
2015*: January – September 2015

MARCH 2016



Washington State
Marijuana Impact Report
Northwest High Intensity Drug Trafficking Area



Dave Rodriguez, Director
300 5th Avenue, Suite 1300
Seattle, WA 98104

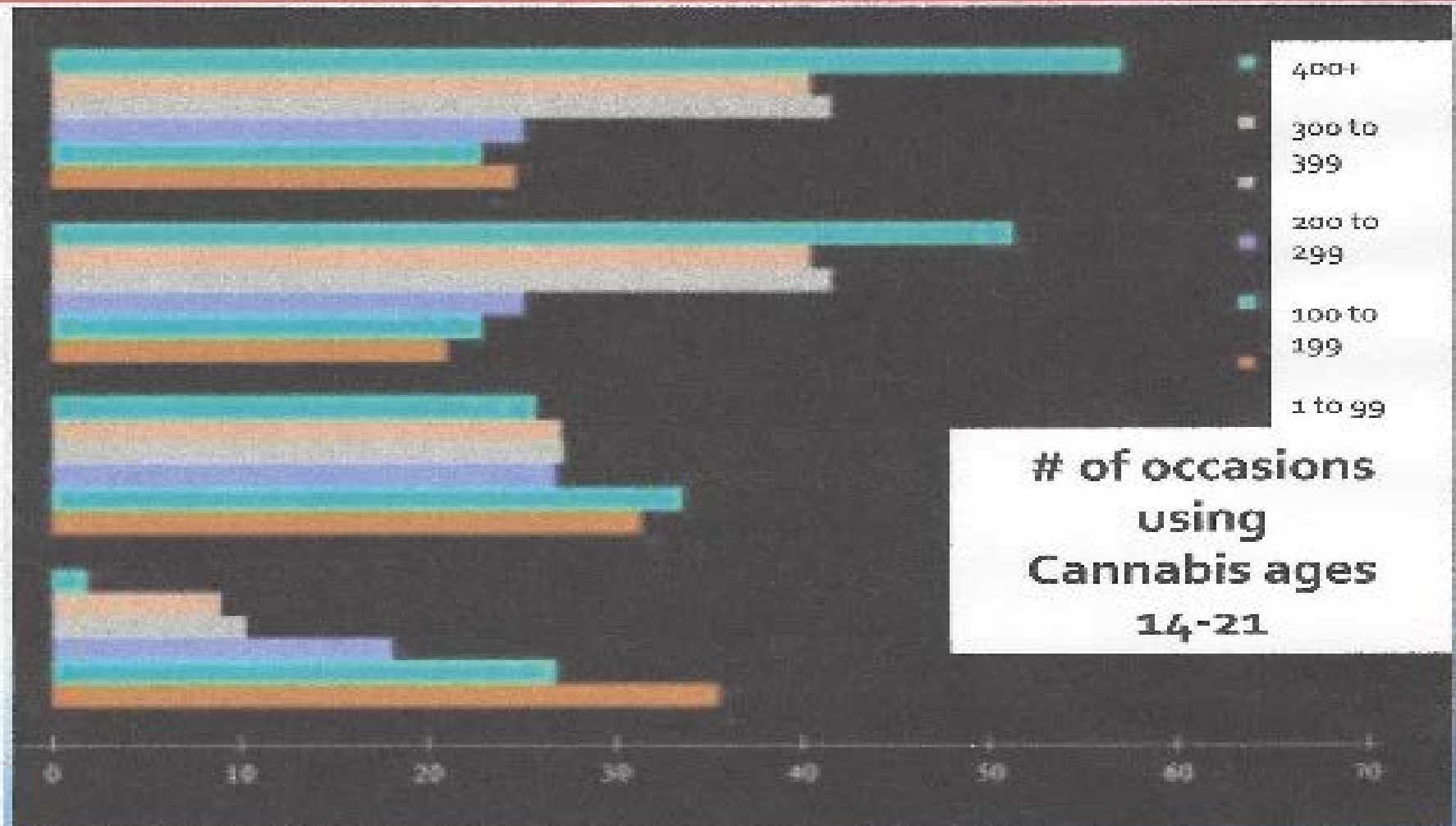
More Use of Cannabis Associated with Worse Social Outcomes at Age 25 (New Zealand Study)

% welfare
dependent
(ages 21-25)

% Unemployed
(ages 21-25)

mean personal
income
in thousands of NZ
\$
at age 25

% gained university
degree
by age 25

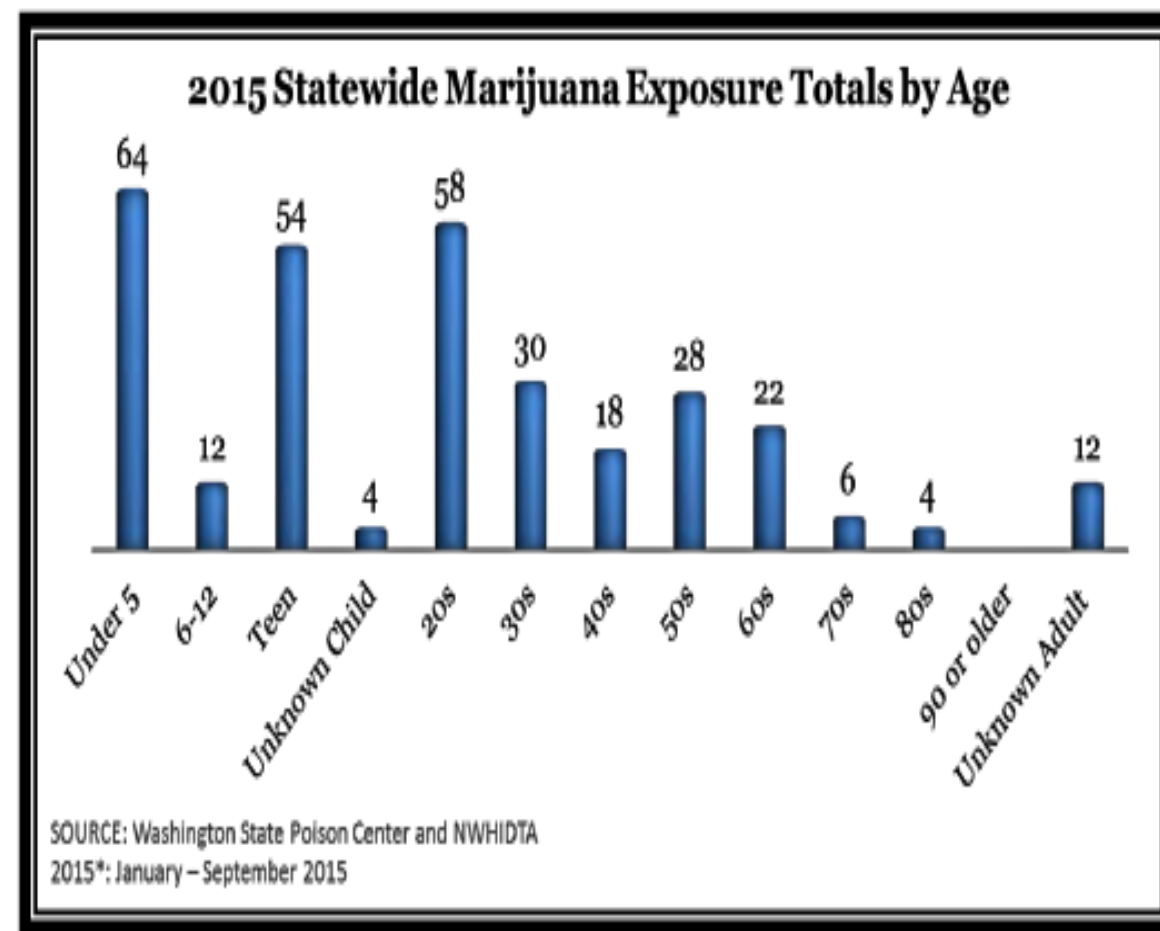
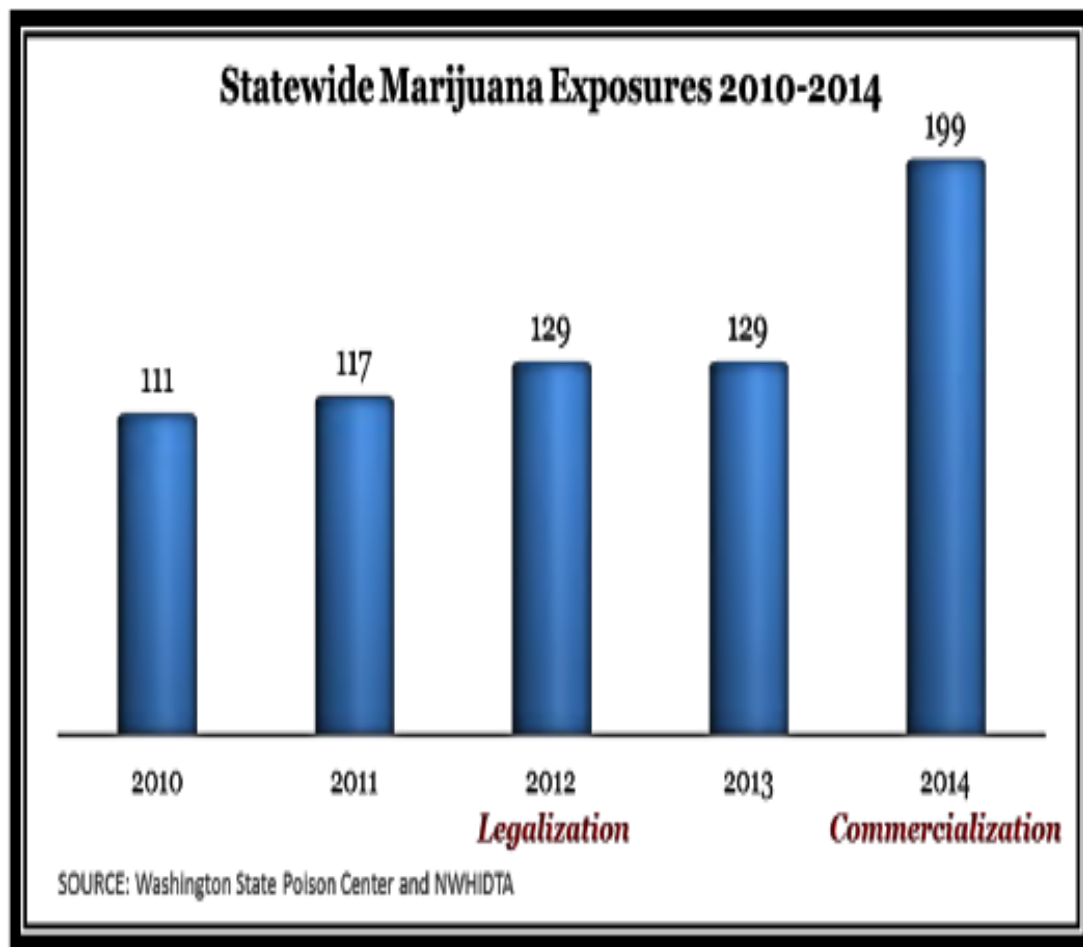


of occasions
using
Cannabis ages
14-21

WA State Marijuana Exposures

54% increase

Largest Rates in
under 5 & teens



“Marijuana is completely safe ...” “It is just like alcohol ...”

As the # MJ dispensaries increase so does MJ associated hospitalizations

- Analysis of California dispensaries from 2001 thru 2012 by zip code location
- Total of 1,650 CA MJ dispensaries in 2012, average 1 MJ dispensary per zip code
- In 2001 – 17,469 MJ hospitalizations; in 2012 – 68,408 MJ hospitalizations (4 fold increase)
- Greater number of marijuana hospitalizations (for MJ abuse or dependence)
 - Higher density of marijuana dispensaries
 - Lower median household income
 - Lower population density
- Lower number of marijuana hospitalizations
 - Residents with greater than Bachelor’s degree
- **Additional one dispensary per sq mile = 6.8% increase in # MJ hospitalizations**

NOTE: This is talking about adding MEDICAL MJ dispensaries ... NOT recreational

Increased Alcohol outlets associated with higher incidence of: crime and violent assaults, drinking and driving events, and intimate partner violence.

Marijuana in Vermont and the Increased Economic Burden of Schizophrenia

By Dean Whitlock and Christine L. Miller, Ph.D.

2015

- Marijuana creates a **7-fold increased risk for suicide in teens**
- Marijuana triggers **temporary psychosis in 12-15%** (compared to alcohol at 0.5%)
- **Psychosis conversion to schizophrenia** is 5% for alcohol yet **46% for marijuana**
- Added annual economic burden that would be placed on Vermont if marijuana were legalized was **\$11.1M to treat schizophrenia induced by marijuana (total burden \$20M)**

Marijuana-Suicide Association 2013 Vermont YRBS

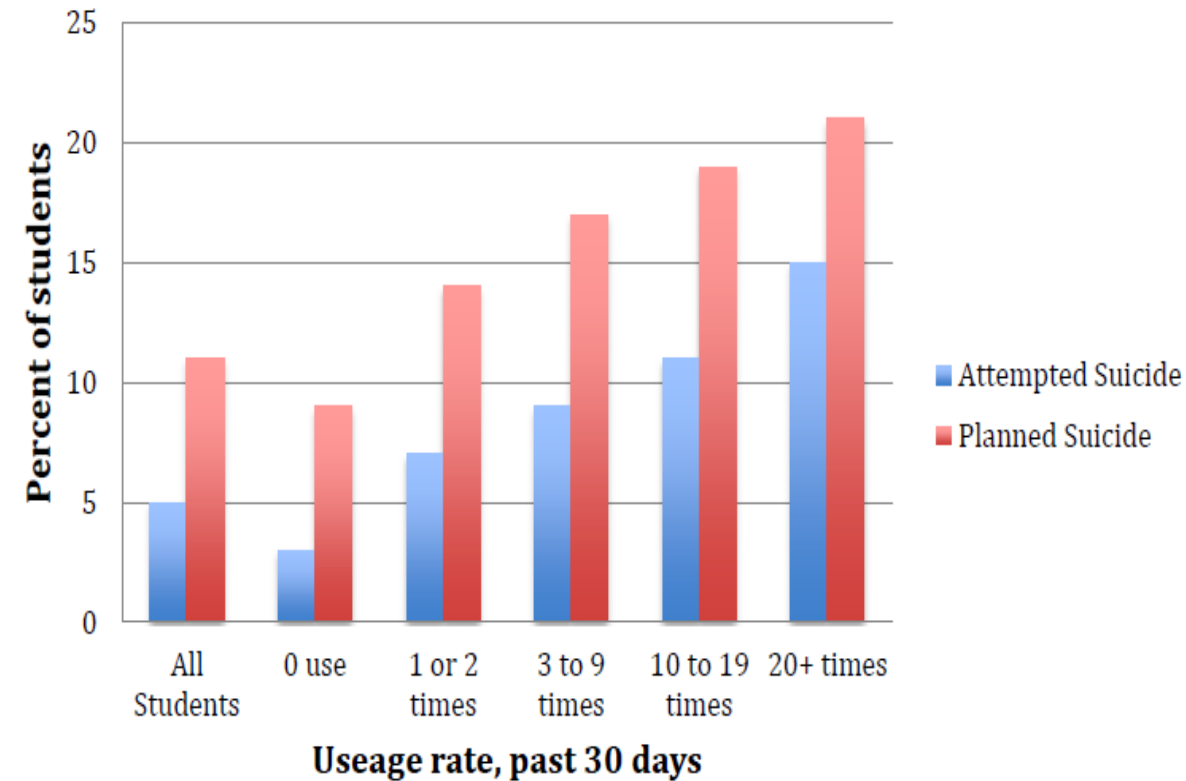


Figure 2 (data from Vermont High School YRBS, 2013)

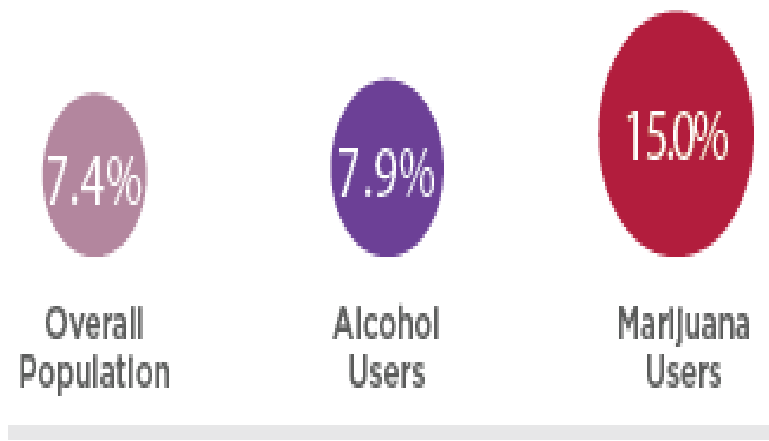
YRBS = youth risk behavior survey

Marijuana use is linked to low productivity and job performance

- Employee marijuana use is linked with increased:
 - absences, tardiness, accidents, worker's compensation claims, and job turnover

Source: NIDA, 2011

PERCENTAGE OF PEOPLE WHO MISSED WORK DURING THE PAST 30 DAYS "BECAUSE [THEY] JUST DIDN'T WANT TO BE THERE"

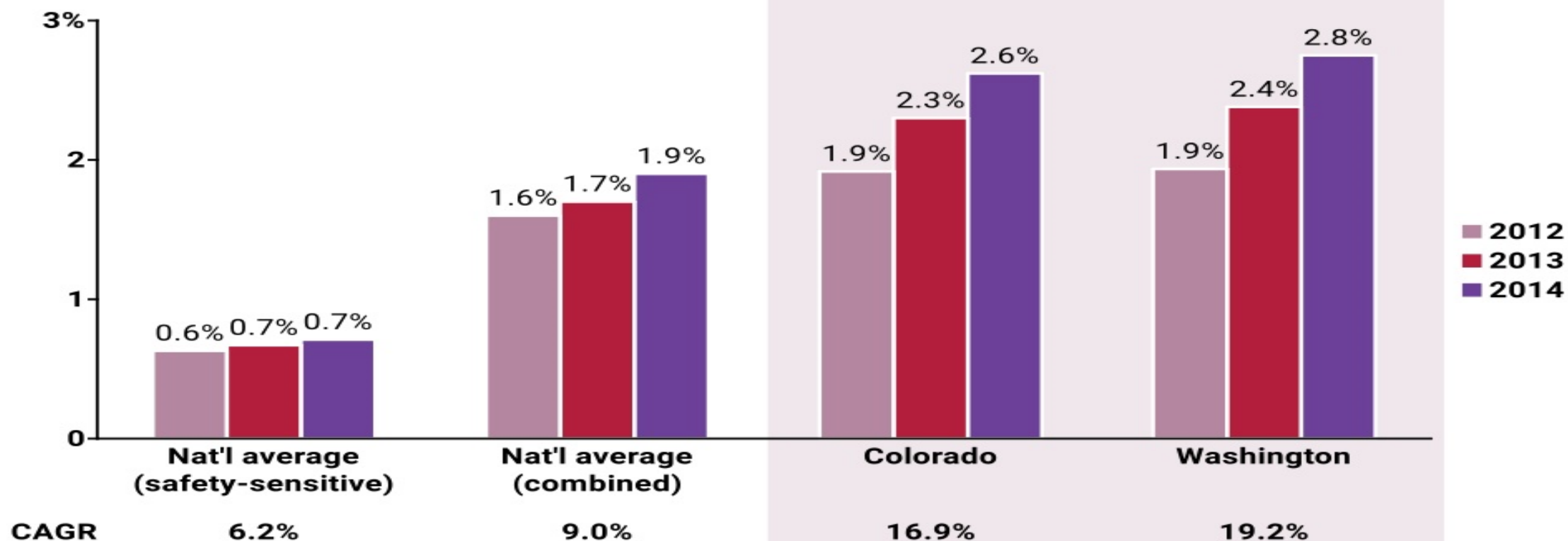


Accidents, injuries, absenteeism, and disciplinary problems among pot users all increase costs

CONTROL GROUP (TESTED NEGATIVE FOR POT USE)	POT USERS
100% INDUSTRIAL ACCIDENTS	155%
100% DISCIPLINARY PROBLEMS	155%
100% ABSENTEEISM	178%
100% INJURIES	185%

Workplace marijuana use is rising across the board, and especially in CO and WA

% increase in positivity rate
for workplace MJ urine tests



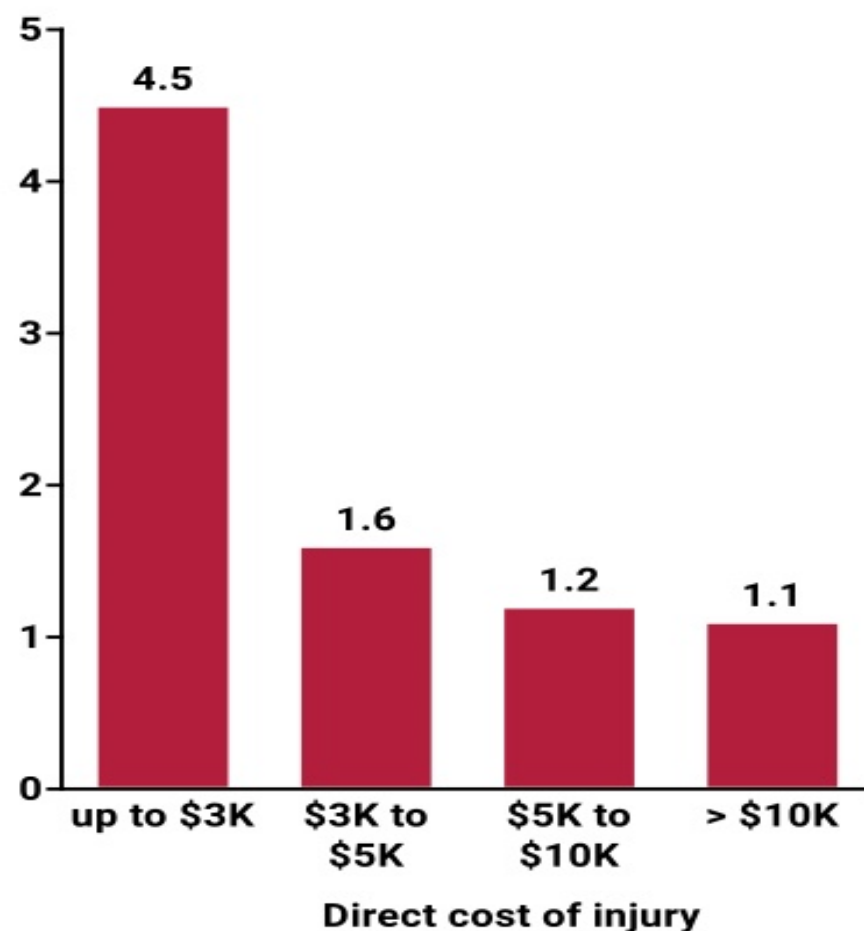
The average costs to an employer for the average workplace injury can exceed \$40,000

\$38,000

Estimated
average direct
costs of worker's
compensation
claim

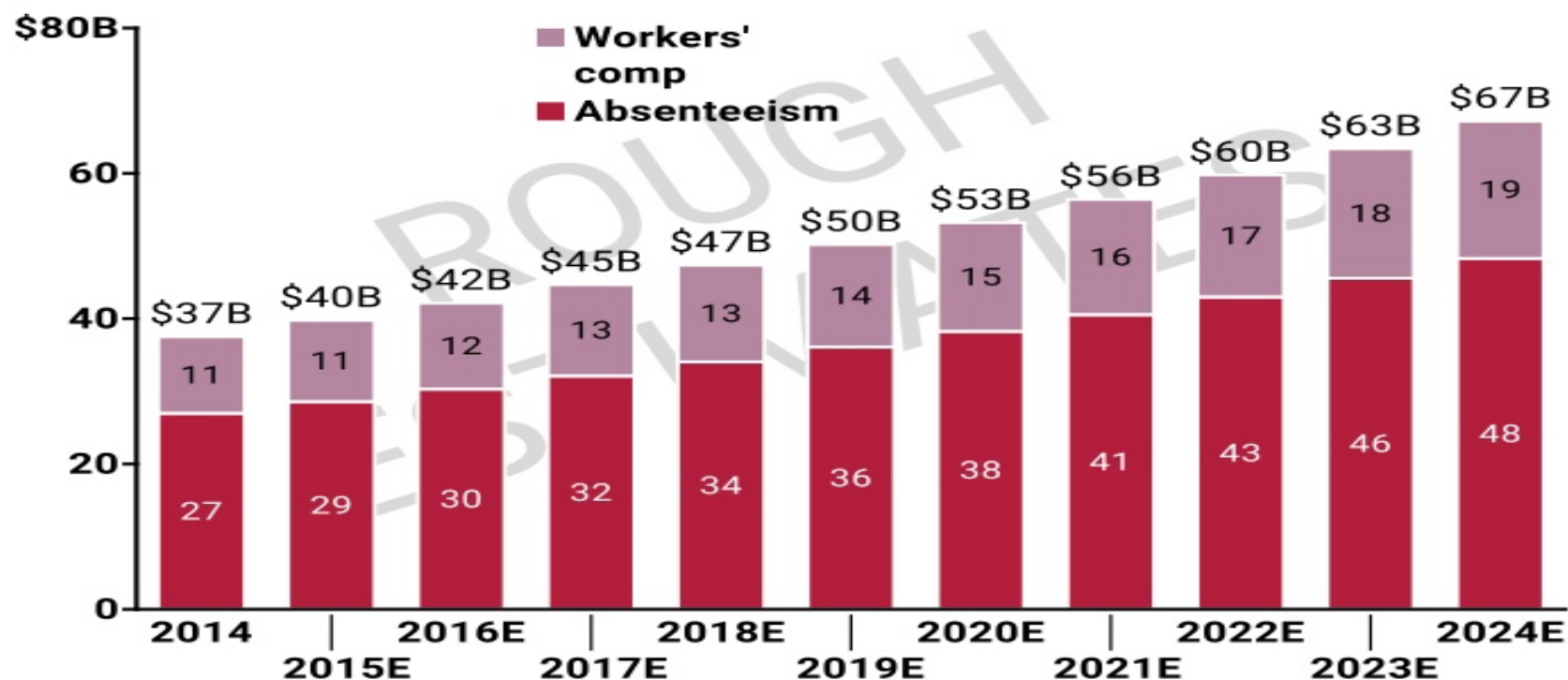


Indirect costs as multiple
of direct costs



More injuries & absenteeism could cost the U.S. economy \$67B by 2024 for FT employees

Additional potential costs to employers due to marijuana use by full-time employees



And if, in 2024, people used pot at the rate...

*...that they use **tobacco** now, the cost could be up to:*



\$78.8B

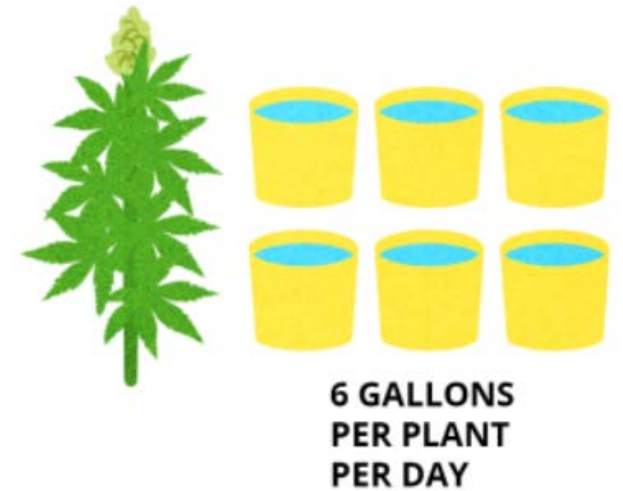
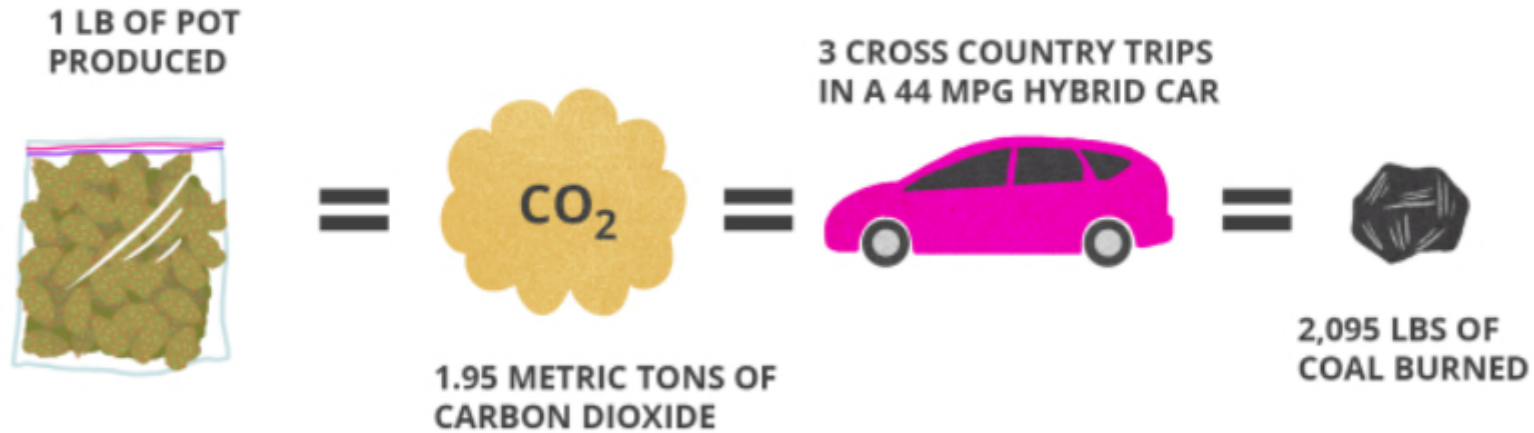
*...that they use **alcohol** now, the cost could be up to:*



\$264.6B

Environmental Damage from Marijuana

Legal indoor growers plug into the grid, and about two-thirds of the electricity on the grid is generated by fossil fuels. That means:



That's also the amount of carbon sequestered by 1.6 acres of U.S. forests in a year.

Accessed on 5/3/17: <http://grist.org/living/everything-you-need-to-know-about-pots-environmental-impact/> ;
http://e360.yale.edu/features/the_high_environmental_cost_of_illicit_marijuana_cultivation



Quality Assurance Testing and Pesticides

When I-502 was passed, the initiative did not require pesticide testing for any marijuana product.

The WSLCB and Washington State Department of Agriculture (WSDA) have been given oversight for regulating the use of these chemicals. Under WAC 314-55-084, there are rules addressing pesticides, fertilizers, and other growing mediums for the production of marijuana⁴⁹.

WSDA refers producers to a twenty-five page list of approved pesticides for use with a total of 271 pesticides to choose from⁵⁰.

Pesticides pose a threat not only to the end consumer but to the workers at the growing facilities as well. Little is known about the health risks from the pesticides used and ingested or their long-term effects.

Under WAC 314-55-087, records must be kept of all pesticide applications including what was used, the amount used per plant, and who applied the chemicals⁵¹.

MARCH 2016



Washington State
Marijuana Impact Report

Northwest High Intensity Drug Trafficking Area



Dave Rodriguez, Director
300 5th Avenue, Suite 1300
Seattle, WA 98104

Caught selling to a minor, again, from 2/8/18 –
so much for Regulations and following the law

The Columbian News Sports Business Life Opinion Blogs Neighbors Obituaries More

Herbery location faces 30-day closure after selling to minor
Store owner plans to appeal



The Herbery marijuana location in east Vancouver faces a 30-day suspension, beginning Feb. 27, and a \$1,000 fine for selling marijuana products to an underage investigator from the state Liquor and Cannabis Board in January. (The Columbian files)

By **Troy Brynson**, Columbian staff writer
Published: February 8, 2018, 6:08 PM

Marijuana shop The Herbery faces a monthlong closure of one of its shops after selling to an underage investigator from the state Liquor and Cannabis Board.

MEMORIAL DAY SALE Friday-Monday Only
LAUREL \$699 in 7 colors
25% OFF STOREWIDE 0% INTEREST FOR 36 MONTHS

Unlimited digital access for only \$9.99/month.
Subscribe



The Columbian

<http://www.columbian.com/news/2018/feb/08/herbery-location-faces-30-day-closure-after-selling-to-minor/>

Watch the Marijuana Societal COSTS Soar when you Legalize it

Increased Child Exposures

Increased Addictions

Increased Marijuana Driving Fatalities

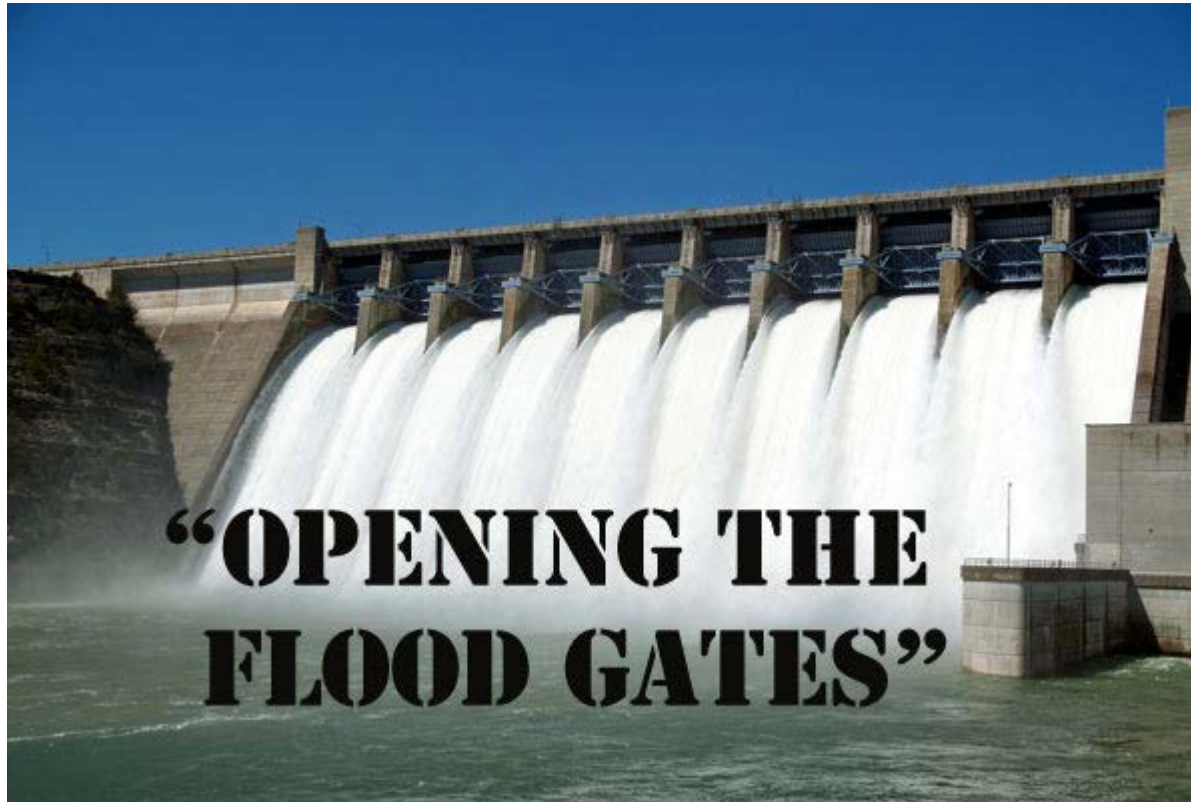
Increased Homelessness

Increased Black Market

Increased Teen Use

Increased Emergency Room Visits

Increased Low Birth Weights



Just like Tobacco and Alcohol – for every \$1 in Marijuana Taxes Received will COST Society \$10

Increase Poison Control Calls for Marijuana Poisonings

BHO Building Explosions

Increased Hospitalizations

Increased Environmental Damages

Increased Violence

Increased Marijuana Positive Birth Rates

Increased Crime

US life expectancy declines for first time in 20 years

8 December 2016

Life expectancy in the United States has declined for the first time in more than two decades.

Data from the [National Center for Health Statistics](#) showed a drop for men from 76.5 years in 2014 to 76.3 in 2015, and from 81.3 to 81.2 for women.

Death rates have risen for eight out of 10 of the leading causes of death: heart disease (0.9% rise), chronic lower **respiratory diseases (2.7% rise)**, **unintentional injuries (6.7% rise)**, stroke (3% rise), Alzheimer's disease (15.7% rise), diabetes (1.9% rise), kidney disease (1.5% rise) and **suicide (2.3% rise)**.

Cannabis, Psychosis, and Mortality: A Cohort Study of 50,373 Swedish Men

Edison Manrique-Garcia, M.D., Ph.D., Antonio Ponce de Leon, Ph.D., Christina Dalman, M.D., Ph.D., Sven Andréasson, M.D., Ph.D., Peter Allebeck, M.D., Ph.D.

Objective: The authors assessed 1) the overall risk of death among cannabis users compared with nonusers and the extent to which psychosis affects excess mortality; 2) mortality among persons with psychotic disorders and the extent to which cannabis use affects excess mortality; and 3) the interaction effect of cannabis use and diagnosis of psychotic disorders on mortality.

Method: This was a longitudinal study of 50,373 Swedish male military conscripts (ages 18–19) who were followed in the National Cause of Death Register up to around age 60. Cox proportional hazard modeling was used to assess risk of death in relation to baseline cannabis use and diagnosis of psychotic disorders.

Results: Subjects with a baseline history of heavy cannabis use had a significantly higher risk of death (hazard ratio=1.4, 95% CI=1.1, 1.8) than those without such a history. The authors found an excess mortality among subjects with

psychotic disorders, but the level did not differ between those with a history of cannabis use (ever users: hazard ratio=3.8, 95% CI=2.8, 5.0; heavy users: hazard ratio=3.8, 95% CI=2.6, 6.2) and those without such a history (hazard ratio=3.7, 95% CI=3.1, 44). No interaction was observed between cannabis use and diagnosis of psychotic disorders with regard to mortality.

Conclusions: The results suggest that individuals with an early history of heavy use of cannabis are at a higher risk of death than those with a history of no use of cannabis. Although the authors adjusted for several confounders at baseline, the results should be interpreted with caution because of a lack of information on confounders in the period after conscription.

Am J Psychiatry 2016; 173:790–798; doi:10.1176/appi.ajp.2016.14050637

- Swedish study Men, +/- marijuana use, followed up to age 60 (Am J Psych 2016; 175:790-98)
- Found 40% increase risk of mortality in heavy users (used > 50 times in life), no association with psychosis

Cannabis Addiction – Mortality Rate compared to other substances

- Those treated for addiction to **cannabis (marijuana) had a higher mortality rate (3.85 times higher than controls)**, higher if compared to death rate risk of cocaine use disorder (2.96), alcohol use disorder (3.83), but **lower than opioid** use disorder (5.71) **or methamphetamine** use disorder (4.67).
- The study demonstrates that individuals with cannabis (marijuana) use disorders have a higher mortality risk than those with diagnoses related to cocaine or alcohol, but lower mortality risk than persons with methamphetamine Or opioid –related disorders.
- Callaghan et al., All-cause mortality among individuals with disorders related to the use of methamphetamine: A comparative cohort study.

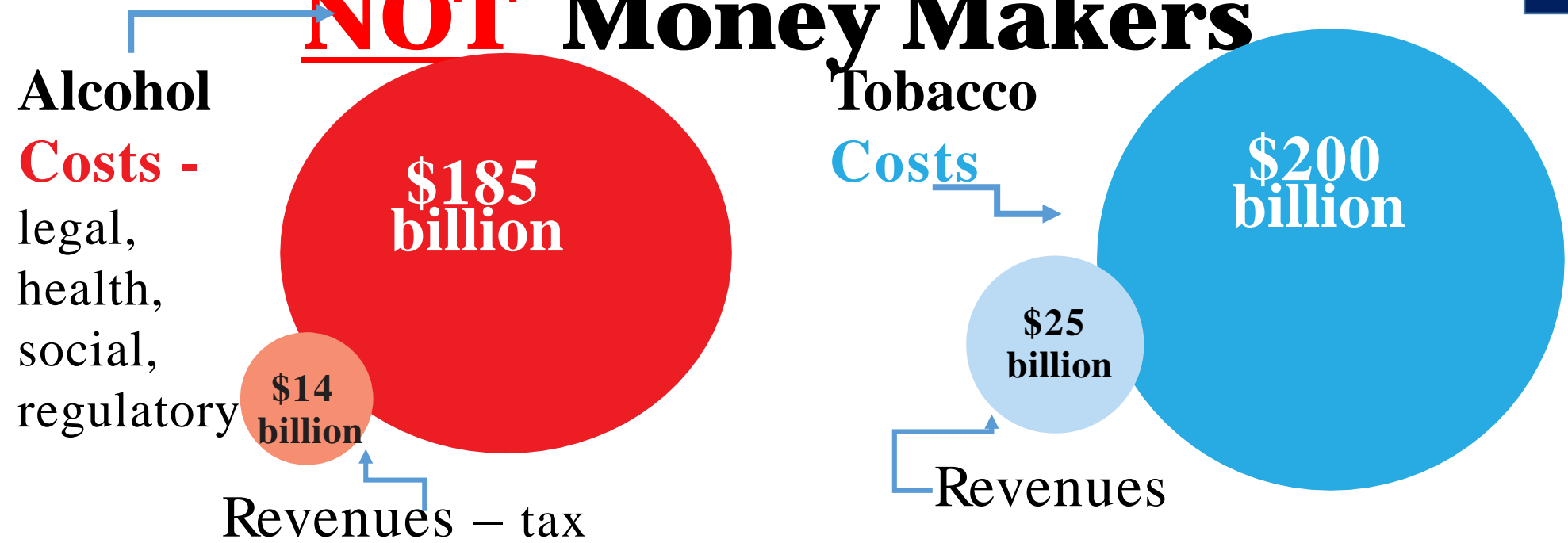
Drug Alcohol Depend. 2012 Oct1:125(3):290-4.

“The marijuana tax dollars will end state debt ...”

Alcohol & Tobacco are Dollar Drainers

NOT Money Makers

Approx 10:1 ratio
\$10 cost for every
\$1 revenue
(that’s a budget
deficit!)



State estimates found at <http://www.nytimes.com/2008/08/31/weekinreview/31saul.html?em>; Federal estimates found at https://www.policyarchive.org/bitstream/handle/10207/3314/RS20343_20020110.pdf; Also see <http://www.tobaccofreekids.org/research/factsheets/pdf/0072.pdf>; Campaign for Tobacco Free Kids, see⁴⁴ “Smoking-caused costs.” on p.2.

Does Your Child Know the Difference?



Let's Hope so ...



**A MARIJUANA
IMPAIRED
DRIVER
KILLED
MY SISTER.**

**POT HAS BEEN
AND ALWAYS
WILL BE A
HALLUCINOGEN.
NOBODY'S "HIGH"
WAS WORTH MY
SISTER'S LIFE.**

**--Phillip Drum,
Pharm D**