# **Partnership** for A Healthy Iowa

# ON THE ROAD TO LESS COMPLICATED THE MEDICAL MARIJUANA PARADOX

## THAT IS "EXACTLY" THE PROBLEM

#### THE MEDICAL USE OF MARIJUANA is not the same as MEDICAL MARIJUANA LAWS

#### Important Distinction

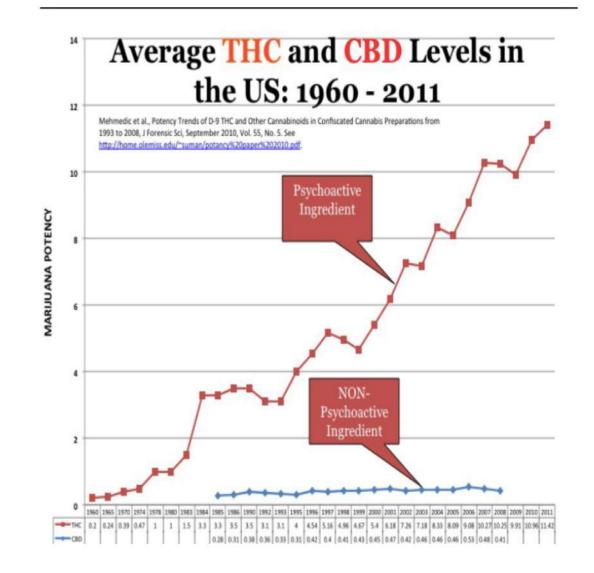
- Industry wants to argue whether MJ has MEDICAL USE.
   It does. So do cocaine, opium & meth.
- The question is: are MEDICAL MARIJUANA <u>LAWS</u> a good way to provide this medicine?

## CBD & THC — BOTH DERIVED FROM MARIJUANA

#### Iowa's CBD law is really a medical marijuana law.

People can get high on 3% THC.

1970s pot was < 2%, before hydroponics.



## TO FDA OR NOT TO FDA

#### Criteria for Approving a Medicine or Medical Delivery System (MMLs)

- 1. Has medical benefit.
- 2. No serious side effects.
- 3. If side effects, then significantly superior to available alternatives.
- Medical marijuana laws only pass criteria #1.



## THERE ARE SOME BENEFITS ...

#### Substantial Evidence of Medical Benefit

- Pain most studied neuropathic
- Spasticity of multiple sclerosis
- Nausea & vomiting of chemotherapy
- Small studies but good results
  - Appetite loss and wasting in cancer and maybe HIV patients
  - Crohn's disease



## THE RESEARCH IS SINGING A DIFFERENT SONG



#### Two caveats.

- Studies compare cannabinoids to placebo, not to other medicines.
- For all medical conditions, there are non-addictive medicines that work just as well as marijuana.

https://www.ncbi.nlm.nih.gov/pmc/articles/PM C3012235/

## **PRO-MARIJUANA CONCERNS IGNORE THE BEST RESEARCH**

Most studies were done with prescription cannabinoids, not marijuana.

- Marinol dronabinol synthetic THC
- Cesamet nabilone
- Sativex
- Epidiolex

- synthetic THC
- nabiximols THC & CBD
- cannabidiol Pure CBD



## A POPULAR, BUT UNSCIENTIFIC MARKETING SPIN

 2018 Study: 1500 pain patients on opioid pain medicine. Many also used marijuana.



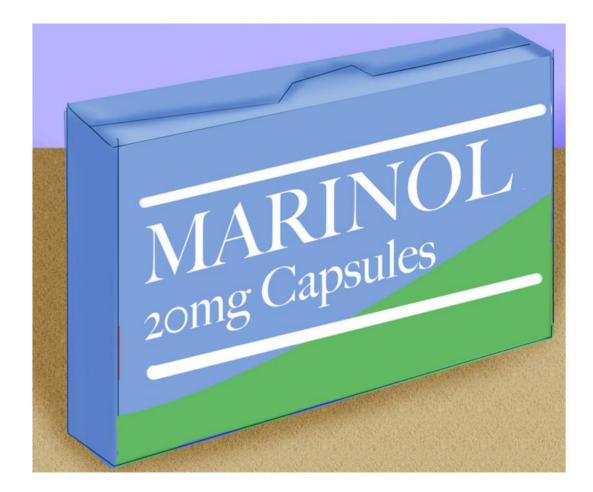
- "Those who used cannabis had greater pain and lower self-efficacy in managing pain."
- No evidence marijuana use reduced prescribed opioid use or increased rates of opioid discontinuation.

Effect of cannabis use in people with chronic non-cancer pain prescribed opioids: findings from a 4-year prospective cohort study *Lancet* July 2018 <a href="https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(18)30110-5/fulltext">https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(18)30110-5/fulltext</a>

## THERE ARE BETTER, FDA APPROVED "MEDICAL" CHOICES

#### 2013 Study: Marinol vs Marijuana

- Both drugs worked equally well for pain.
- But Marinol worked almost twice as long.
- Participants said: not as high from Marinol as from MJ.
  - Z.D. Cooper et al. "Comparison of the analgesic effects of dronabinol and smoked marijuana in daily marijuana smokers" (Sept. 2013) *Neuropsychopharmacology* www.ncbi.nlm.nih.gov/pubmed/?term=Comparison+of+the+Analgesic+Effect s+of+Dronabinol+and+Smoked+Marijuana+in+Daily+Marijuana+Smokers.



## UNINTENDED, BUT NOT UNKNOWN

#### No evidence and makes illness worse

- Glaucoma
- Epilepsy
- Alcohol or other drug abuse
- Not beneficial for any psychiatric illness
- Anxiety
- Depression
- PTSD



## MAY BE PUTTING OUR VETERANS AT RISK



Good PTSD Study – uses more than self-report (drug use, violent behavior, and employment.)

- 2,276 veterans in PTSD tx over 20 years.
- Never used MJ or quit had fewest PTSD symptoms.
- Long-term users or started in tx had most symptoms, more drug & alcohol abuse, and more violence.
- No difference in employment

 Wilkinson ST et al. Marijuana use is associated with worse outcomes in symptom severity and violent behavior in patients with posttraumatic stress disorder. J Clin Psychiatry. 2015;76:1174-1180.

## I GUESS THEY WERE WRONG IN THE '70S TOO!

## Glaucoma

- Decreases intra-ocular pressure but only for 3-4 hours requiring constant dosing to avoid rebound.
- Decreases intra-ocular blood flow making symptoms worse.
- No evidence of benefit.
- Not recommended for glaucoma.



## THAT SHIP APPEARS TO HAVE SAILED ...

Criteria for Approving a Medicine or Medical Delivery System (MMLs)

- 1. Has medical benefit Yes.
- 2. No serious side effects -- <u>Pending.</u> We shall see lots of side effects.
- 3. If side effects, then significantly superior to available alternatives – <u>No.</u> Prescription cannabinoids like Marinol work as well or better, and non-addictive medicines usually work just as well.



#### The FDA is right not to approve marijuana

- Suppose the FDA approved a drug that
  - increased traffic fatalities,
  - increased workplace injuries,
  - caused ½ million kids to do worse in school,
  - doubled the school dropout rate,
  - increased the number of suicides,
  - caused psychotic disorders,
  - was linked to violence including mass shootings,
  - and predisposed people to heroin addiction.

These are the side effects of marijuana & medical marijuana laws.



## MARIJUANA HAS LEARNED FROM BIG TOBACCO AND ALCOHOL

If other medicines work just as well, why do we have medical marijuana laws?

- The term medical marijuana was invented by NORML as a stepping stone to legalization https://www.nationalfamilies.org/legalization/redherring.html
- The idea did not come from physicians, health care providers or patient advocacy groups.
- Ballot measures sponsored by 3 pro-legalization billionaires.



## YOU ARE NOW THE PROUD OWNER OF THESE CONSEQUENCES

#### What are the side effects of marijuana?

The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research (2017) National Academy of Medicine

- Strong or moderate evidence for link to
  - Motor vehicle accidents
  - Overdoses by children in legalization states
  - Impaired learning.
  - Schizophrenia
  - Worsening bipolar disorder
  - Depression
  - Suicide
  - Social anxiety
  - Abuse of alcohol, tobacco or other drugs.



## THE "COST" OF DOING BUSINESS

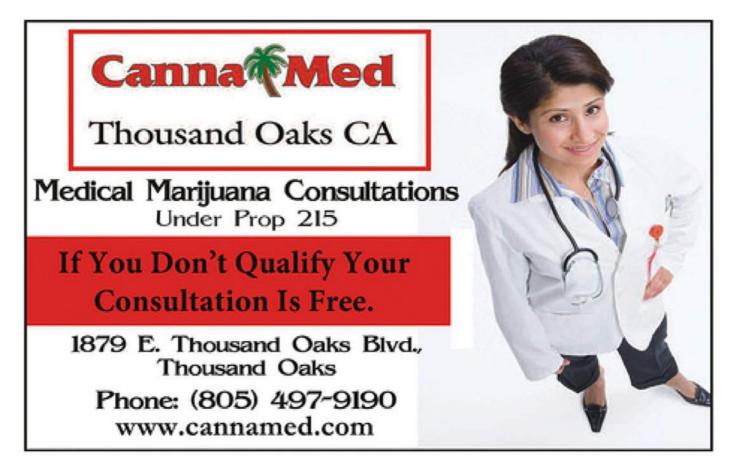
# What are the side effects of medical marijuana laws?

- Diversion to substance abuse
- Increased teenage & adult use
  - Worsens the opioid epidemic
  - Worsens PTSD & Bipolar
  - Increased traffic fatalities
  - Psychiatric illness schizophrenia, depression, social anxiety, suicide.
- Workplace turnover, absenteeism, poor performance
- A drain on state budgets.

## WHEN IS A DOCTOR NOT A "DOCTOR"

Diversion: How do medical marijuana laws encourage substance abuse?

- Step 1: Pot doctors.
- Patients don't go to PCP. They go to pot doctors who rarely say no.
- Study: 1655 pts applied for MM card. Only 2% turned down. Mostly because they would not pretend a medical condition. J Drug Policy Analysis 2011

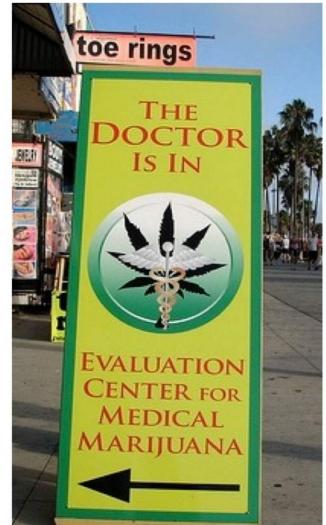


## **MONEY TALKS**

# A handful of doctors write most recommendations



- Montana, 2011:
- 10 docs wrote 90% of recommendations.
- One doctor wrote 40%.
- Arizona, 2012:
- 24 doctors wrote 73% of all certifications.
- Naturopaths wrote 62%.



## **DIVERSION EQUATES WITH ABUSE**

#### How medical marijuana laws cause diversion

- Substance abusers who make up or exaggerate a story of pain, or who convince themselves that their pain responds best to MJ.
- A pot doctor who only makes money if he says yes.
- It's a pretend physician-patient relationship that effectively legalizes the drug for any adult who wants it.



## IN SEARCH OF THE ILLUSIVE "CURE" FOR PAIN

#### Diversion: Step 2 Most patients claim pain, not serious Illness

Most common uses – pain, anxiety, depression, insomnia

- 2014 study of 7 states Sabet et al. "Why do people use medical marijuana? The medical conditions of users in seven U.S. states" The Journal of Global Drug Policy and Practice
- 91% Pain 3% Cancer 2% AIDS, Glaucoma, Alzheimer's, Hep C, ALS
- Cannabis and Cannabinoid Research 2016
- 61% Pain 58% Anxiety 50% Depression 3% Cancer 3% Crohn's
- *Health Affairs* 2019 Chronic Pain 62%

## PAIN

#### Arizona

Pain 93% (includes two conditions)

Cancer 2%

#### **Fable 4. Arizona Medical Marijuana Active Qualifying Patients Medical Condition Profile**

Patient medical condition profile of Active Cardholders <sup>¶</sup>	Totals	Percent Total
Alzheimer's	60	0.04%
Cachexia	138	0.08%
Cancer	3,857	2.28%
Chronic Pain	147,108	86.80%
Crohn's Disease	551	0.33%
Glaucoma	1,066	0.63%
Hepatitis C	821	0.48%
HIV/AIDS	650	0.38%
Muscle Spasms	989	0.58%
Nausea	817	0.48%
Post-Traumatic Stress Disorder (PTSD)	2,142	1.26%
Sclerosis	42	0.02%
Seizures	1,228	0.72%
Two Or More Conditions	10,009	5.91%
TOTAL	169,478	100.00%

<sup>¶</sup>Unique debilitating conditions

## PAIN

## Colorado

## Pain 93%

#### Cancer 5%

Reported Condition	Number of Patients Reporting Condition	Percentage of Patients Reporting Condition**
Cachexia	1,110	1.28%
Cancer	4,488	5.17%
Glaucoma	1,120	1.29%
HIV/AIDS	0	0.00%
Muscle Spasms	29,372	33.81%
Seizures	2,993	3.45%
Severe Nausea	13,873	15.97%
Severe Pain	80,735	92.93%
Post-Traumatic Stress Disorder (PTSD)	7,674	8.83%

\*\*Does not add to 100% as some patients report more than one debilitating or disabling medical condition.

## PAIN

#### **Rhode Island**

#### Pain 61%

#### Cancer 6%

Qualifying debilitating condition	Number of patients	Percentage of total patients
Severe debilitating, chronic pain	4,558	61.61
Severe nausea	922	12.46
Post-Traumatic Stress Disorder (PTSD)	613	8.29
Cancer or treatment	476	6.43
Severe and persistent muscle spasms	389	5.26
Seizures, including epilepsy	149	2.01
Cachexia or Wasting Syndrome	104	1.41
Hepatitis C or treatment	77	1.04
Glaucoma or treatment	71	0.96
Positive status for HIV or treatment	25	0.34
AIDS or treatment	11	0.15
Agitation related to Alzheimer's Disease	3	0.04

## PAIN ... A TREND UNRAVELLED

#### **The Pain Loophole**

- Easy to fake and hard to disprove. No objective test.
- Iowa's law allows "untreatable pain." .
- In Iowa, 52% of CBD patients claim pain.
- Are these genuine patients or substance abusers?



## MARIJUANA USERS ARE NOT YOUR AVERAGE PAIN PATIENTS

#### Diversion: Step 3 Who are the patients?

J Harm Reduction
 4117 mm applicants.
 Avg pt 32 yo male.
 88% used MJ < age 19.</li>

 Thomas J. O'Connell and Ché B Bou-Matar (Nov. 3, 2007) "Long term marijuana users seeking medical cannabis in California (2001-2007): demographics, social characteristics, patterns of cannabis and other drug use of 4117 applicants" Harm Reduction Journal

 Montana – 10% of all probation & parole had MMJ cards



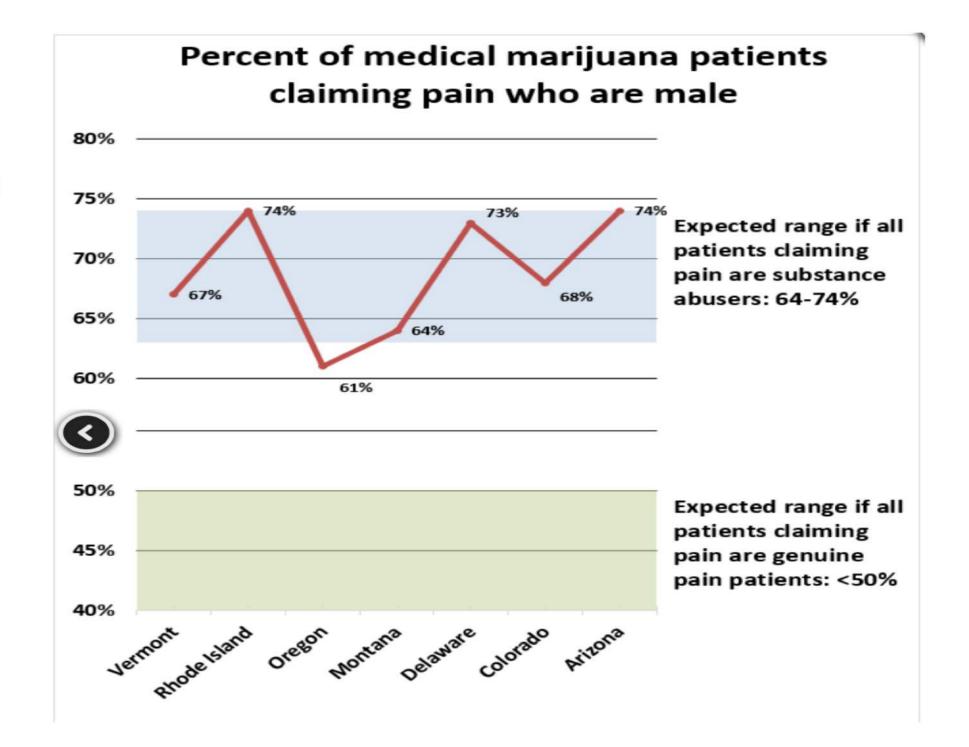
## THEY OFTEN "KNOW" WHAT THEY NEED

#### 90% claim pain & often believe it themselves. Are they motivated by pain or by substance abuse?

- Pain patients: Mostly female.
- Substance abusers (including MJ abusers)
  - 1/3 Female. 2/3 Male.
- So, if the patients at a pain clinic are 2/3 male, they are mostly substance abusers, not genuine pain patients.
- Contacted all Medical Marijuana Programs

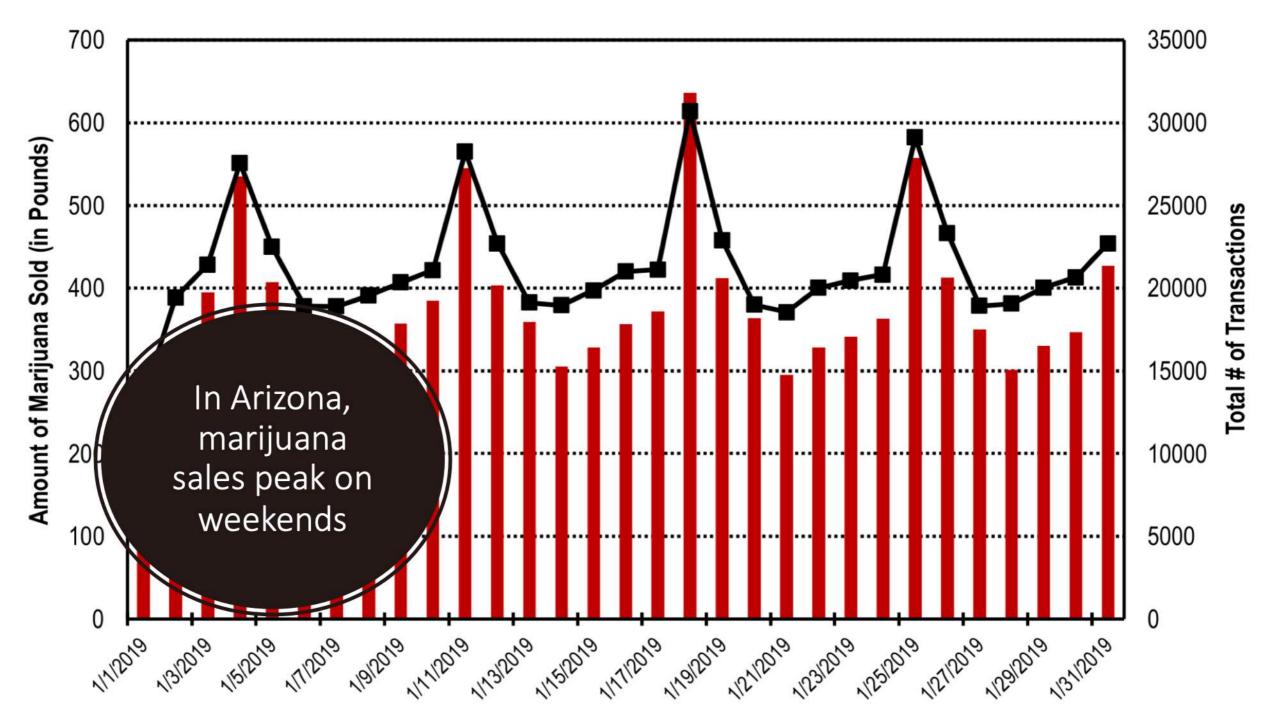
## A TREND EXPOSED

Gender ratio of MMJ pts matches substance abuse, not pain



#### ANOTHER TRENDY "QUIRK"

## DON'T WAIT FOR A FULL MOON



## THE TRUTH IS OUT THERE

## There are three types of MMJ patients

- 1) Just plain lying.
- 2) Substance abusers who believe they're treating pain, anxiety, or insomnia. Common form of denial.
- 3) Genuine medical patients



## BUT IT MAY NOT BE WHAT THE MJ "USER" THINKS IT IS

#### Why are substance abusers convinced pot works?

- Alcoholic: I drink because I'm depressed. Less depressed when quits drinking.
- Smoker: Cigarettes help me relax. Research shows more relaxed when quit smoking.
- Marijuana user: Weed calms me down. It's usually anger, not anxiety, and gets better when they quit.
- Why do they think it helps when it doesn't?
  - They're medicating withdrawal symptoms. (irritability)
  - They're medicating feelings which is what addicts do.
  - Brief burst of good mood, relaxation, calm but worse within minutes.
  - The addictive pathway says: this is the answer and they believe it. (overeating)
  - Euphoric recall test of depression during, after & recall.
  - The addict mind makes up symptoms to relieve.
- That's why medical marijuana patients are almost all substance abusers, and why they often get better when they quit using.

## **USE OR ABUSE?**

#### Most medical marijuana patients report using the drug "recreationally."

• One study: 55% acknowledged used MM recreationally. Morean ME, Lederman IR.

and correlates of medical cannabis patients' use of cannabis for recreational purposes. Addict Behav. 2019 Feb 7;93:233-

 Two studies: > 75% said they used medical marijuana recreationally. Wall MM, Liu J, Hasin DS, Blanco C, Olfson M. Use of marijuana

exclusively for medical purposes. Drug Alcohol Depend. 2019 Feb 1;195:13-15. Schauer GL, King BA, Bunnell RE, Promoff G, McAfee TA. Toking, Vaping, and Eating for Health or Fun: Marijuana Use Patterns in Adults, U.S., 2014. Am J Prev Med. 2016 Jan;50(1):1-8.



## WE'RE TRYING TO DO THE "RIGHT" THING

#### Iowa's CBD LAW is more tightly controlled than most medical marijuana laws

- < 3 % THC -- less attractive to drug users.
- Only capsules, tinctures & creams -- No quick high.
- No smokable plant -- No excuse for drug dealers.

## WE ARE NOT ALONE

12 States have THC levels < 1.0

CBD should not provide a high

Iowa should decrease its THC content to prevent misuse & diversion.

# Percent THC allowed in CBD Georgia 5 % Iowa 3 % Florida 0.8 % Mississippi 0.5 % Indiana 0.3 % Missouri 0.3 % Kansas 0 %

States with CBD Laws

From Hemp Kentucky, North Carolina, Wyoming Trace THC South Carolina, Tennessee Non-psychoactive CBD Alabama

## JUST BEING IN THE BUSINESS HAS RISKS & CONSEQUENCES

#### Side Effects of MM Laws

Diversion to substance abuse

#### Increased use by adults & teenagers

- Marijuana makes opioid addiction worse
- Marijuana increases psychiatric illness schizophrenia, depression, social anxiety, suicide. PTSD worse
- Increased traffic fatalities
- Workplace turnover, absenteeism, poor performance
- A drain on state budgets.

#### SAD BUT TRUE

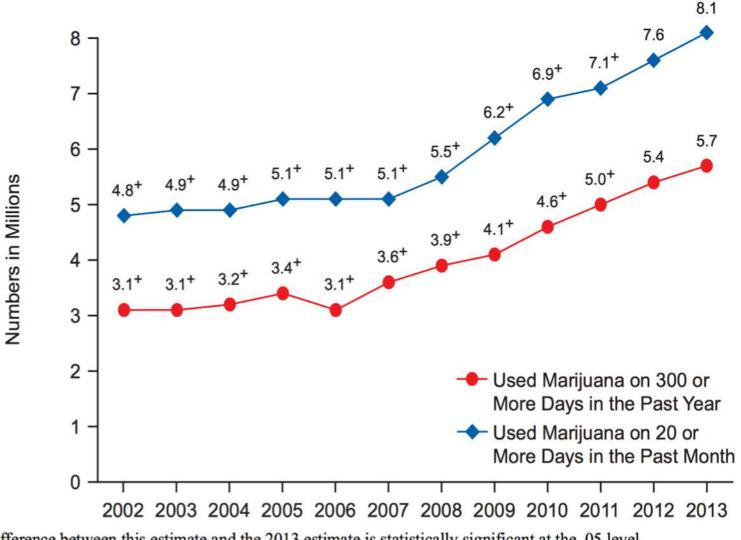
#### 2017 Study shows that: MMLs <u>caused</u> increased use and abuse

- MJ use & abuse are higher in medical marijuana states.
- No difference before MMLs.
- Difference started & widened after passing MMLs
- 2017 JAMA Psychiatry. US Adult Illicit Cannabis Use, Cannabis Use Disorder, and Medical Marijuana Laws: 1991-1992 to 2012-2013.

#### **AND THE BEAT GOES ON**

**Daily MJ use** doubled from 2006 - 2017

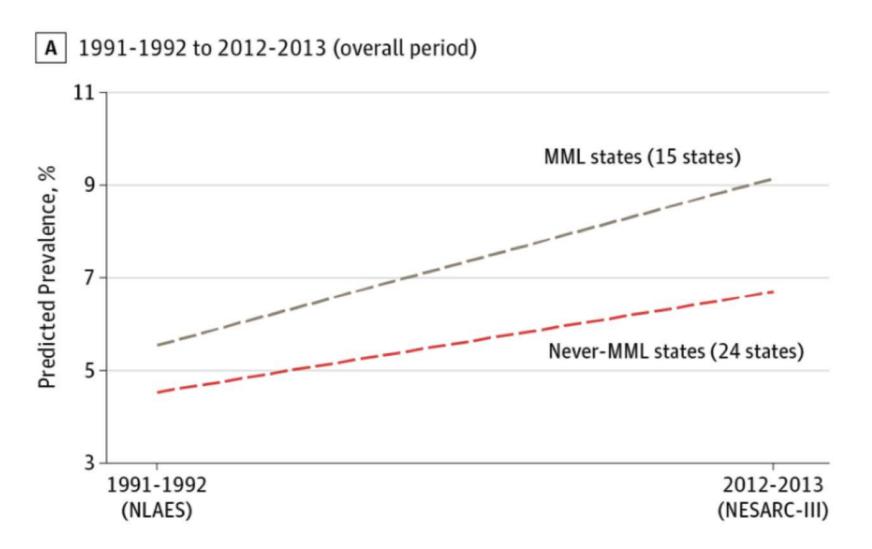




<sup>+</sup> Difference between this estimate and the 2013 estimate is statistically significant at the .05 level.

## **CORRELATION OR CAUSATION**

# Increase in marijuana use 66% larger in states with medical marijuana laws



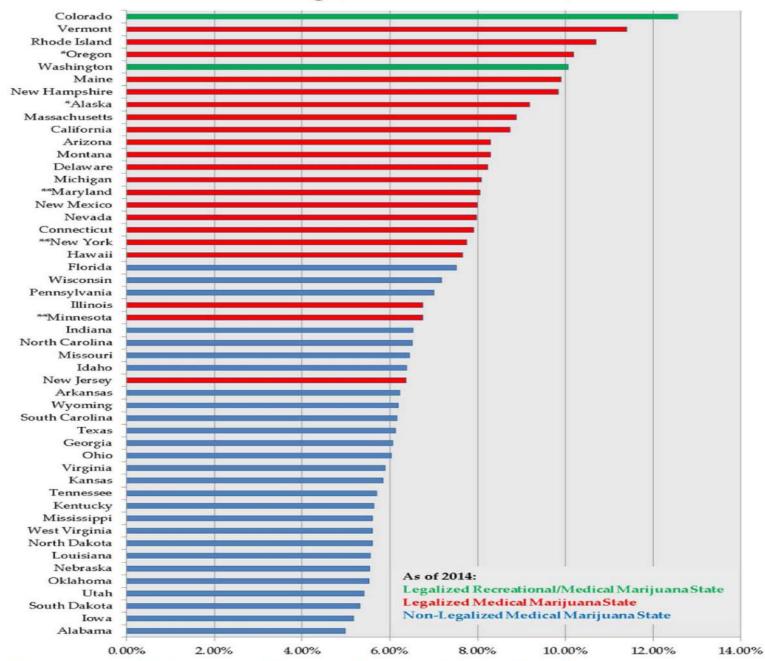
#### **MORE CONSEQUENCES?**

So medical marijuana laws caused the increased adult use and abuse of marijuana.

> • Did they also cause the increased teenage use?



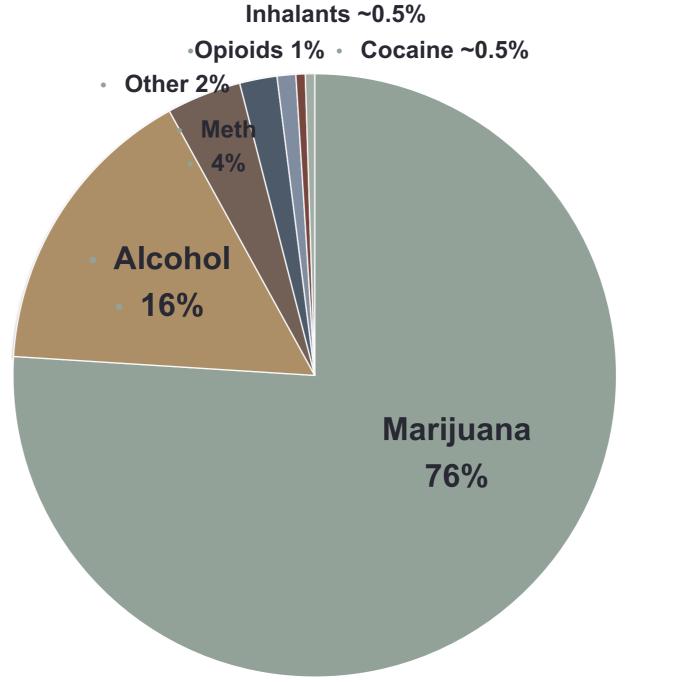
#### **DATA SPEAKS LOUDLY**



Past Month Usage, 12 to 17 Years Old, 2013/2014



#### Iowa Youth Drugs of Choice Primary Substance by Juvenile Clients Entering Treatment



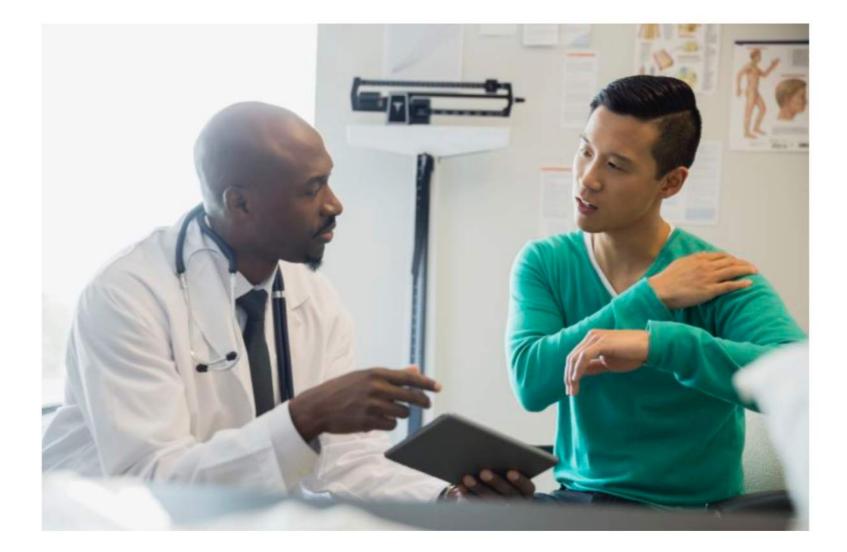
Iowa Department of Public Health, 2016

## THE TRUTH IS NOT A MYSTERY

American Journal of Psychiatry 2017: Marijuana makes opioid abuse worse

- Pain patients who used MJ were 3X more likely to abuse opioids
- Opioid abusers who used marijuana were 3X more likely to continue abusing opioids.
- Not less likely, more likely.

 Cannabis Use and Risk of Prescription Opioid Use Disorder in the United States Am J Psy 2017



#### THE TRUTH IS SCARY

#### **Gateway Effect**

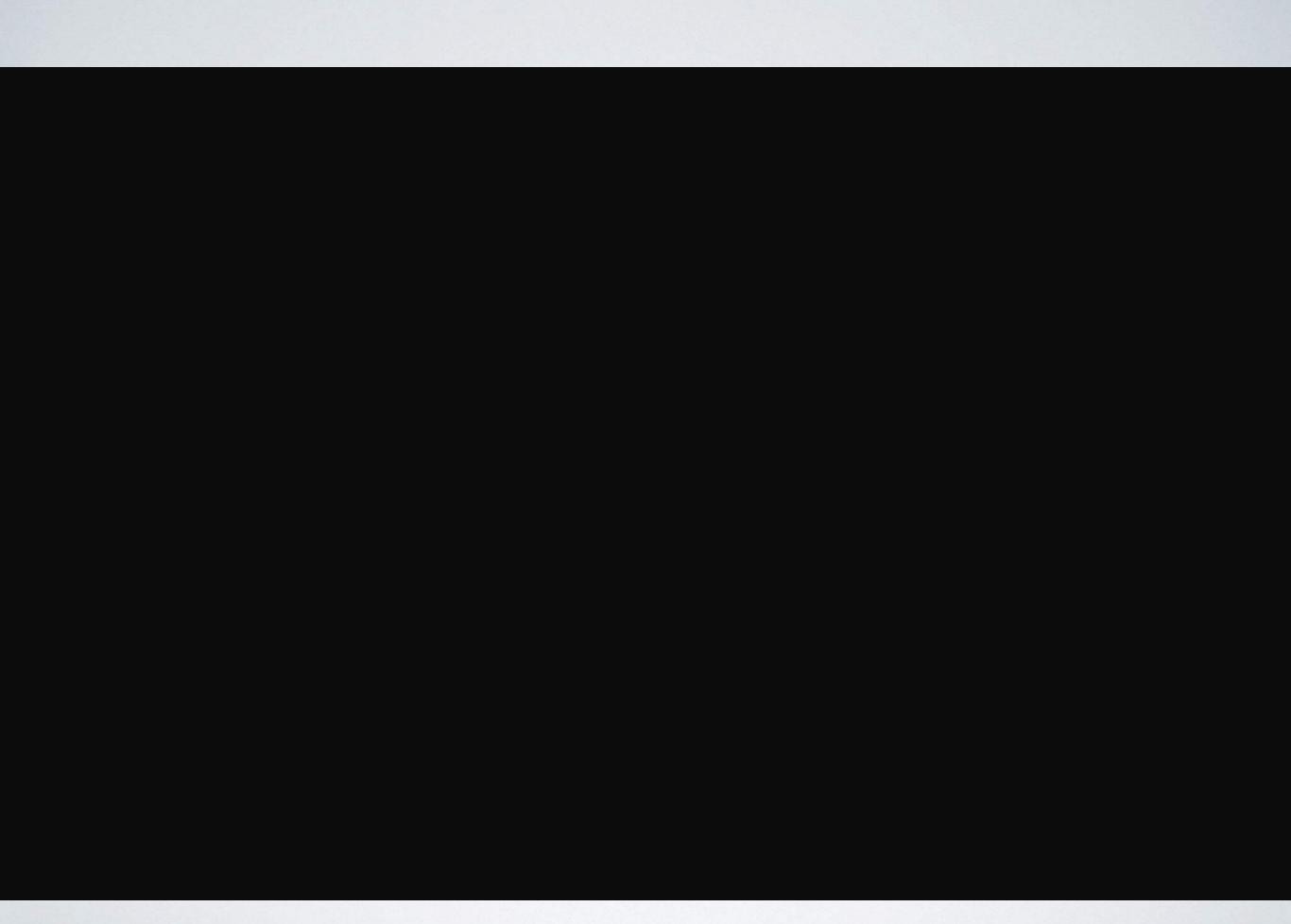
- A dozen studies: Teen MJ users more likely to abuse other illicit drugs.
- Several studies: MJ use almost always comes first.
- 2015 NSDUH: 96% illicit drug addicts start w/ MJ.
- Am J Psy 2017: Teen MJ users 2-3 times rate of opioid abuse.

#### THE RISK AND CONSEQUENCES WILL NEED TO BE MANAGED

Criteria for Approving a Medicine or Medical Delivery System (MMLs)

- 1. Has medical benefit.
- 2. No serious negative or side effects.
- 3. If side effects, then significantly superior to available alternatives.
- Medical marijuana laws only pass criteria #1.
- MEDICAL MARIJUANA LAWS HAVE LOTS
   OF NEGATIVE EFFECTS





## ... ANOTHER SUBSTANCE ABUSE EPIDEMIC?

# What caused the opioid pain reliever epidemic?

• Senator Claire McCaskill (D-Mo.): "This epidemic is the direct result of a calculated sales and marketing strategy [by] major opioid manufacturers ..."



## **Opioid Misuse: Precursors**

#### Heroin use is part of a larger substance abuse problem.

Nearly all people who used heroin also used at least 1 other drug.

Most used at least **3** other drugs.

Heroin is a highly addictive opioid drug with a high risk of overdose and death for users.

# People who are addicted to...Image: State of the s

#### ...more likely to be addicted to heroin.

SOURCE: National Survey on Drug Use and Health (NSDUH), 2011-2013.

(Marijuana use appears to increase—>2x—rather than decrease, the risk of developing nonmedical prescription opioid use & opioid use disorder. Offson, Wall, Liu, Blanco/American Journal of Psychiatry, September 2017)

#### WE'VE BEEN HERE BEFORE ...

#### The Marijuana Industry learns from Big Pharma

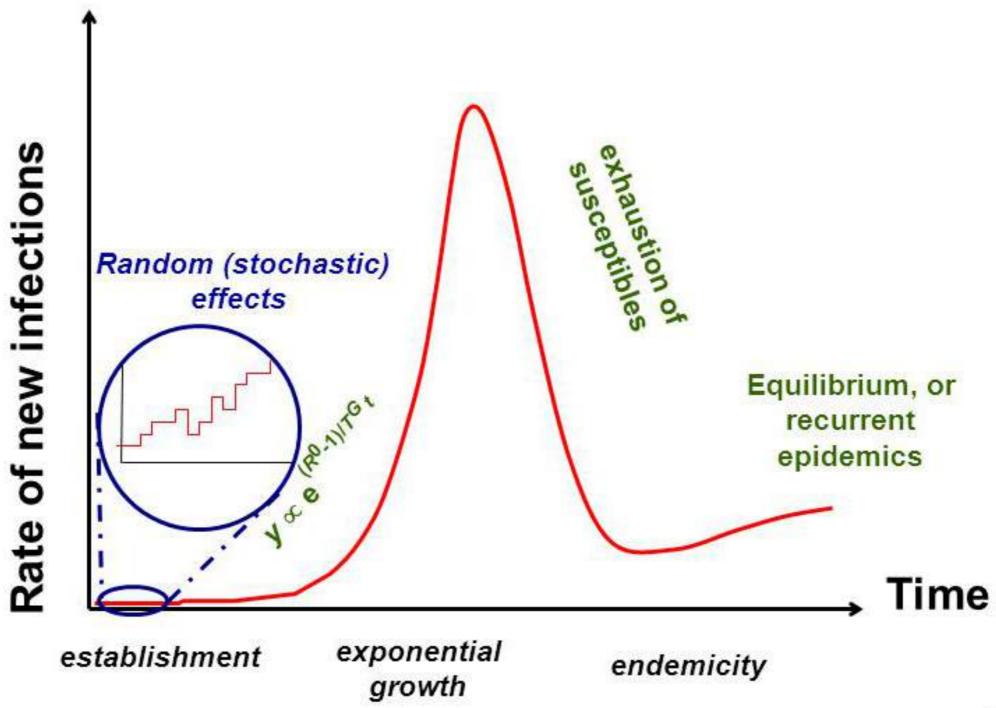
- The drug companies paid scientific experts
  - to produce deceptive research that they used to
    - tell doctors and the public
      - that opioids work well to treat chronic pain,
        - when the opposite is true.
- The marijuana industry convinced scientific experts
  - to produce deceptive research that they used to
    - tell doctors and the public
      - that marijuana works well to treat opioid addiction,
        - when the opposite is true.

# AN EXERCISE IN DISRUPTION

## THE MARIJUANA PARADOX

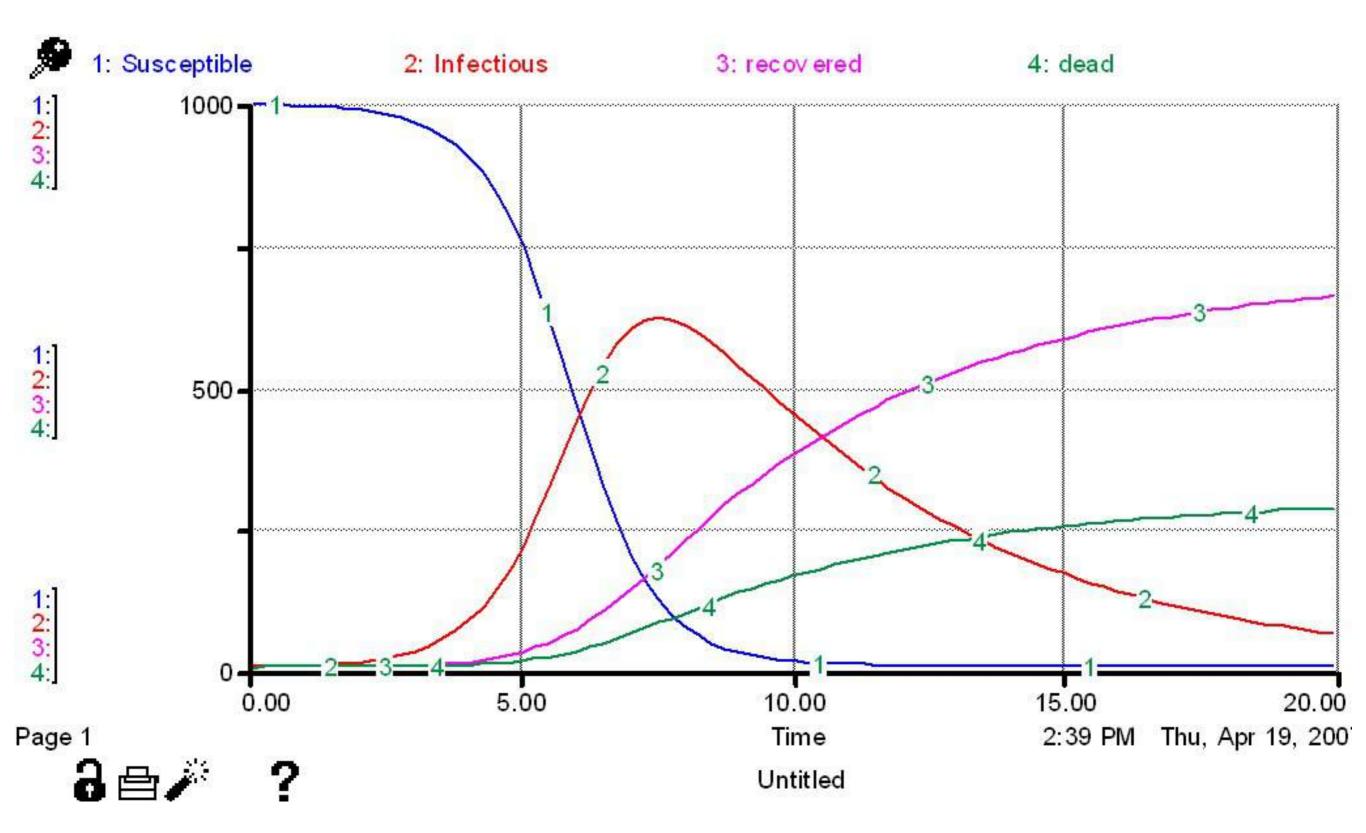


## The epidemic curve

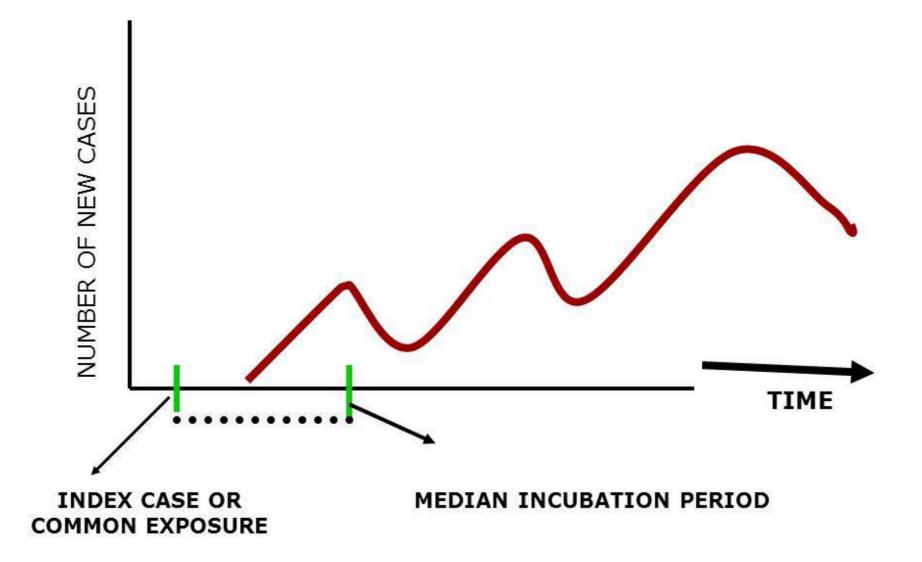


Department of Infectious Disease Epidemiology, Faculty of Medicine, Imperial College London

## The Life Cycles of an Epidemic

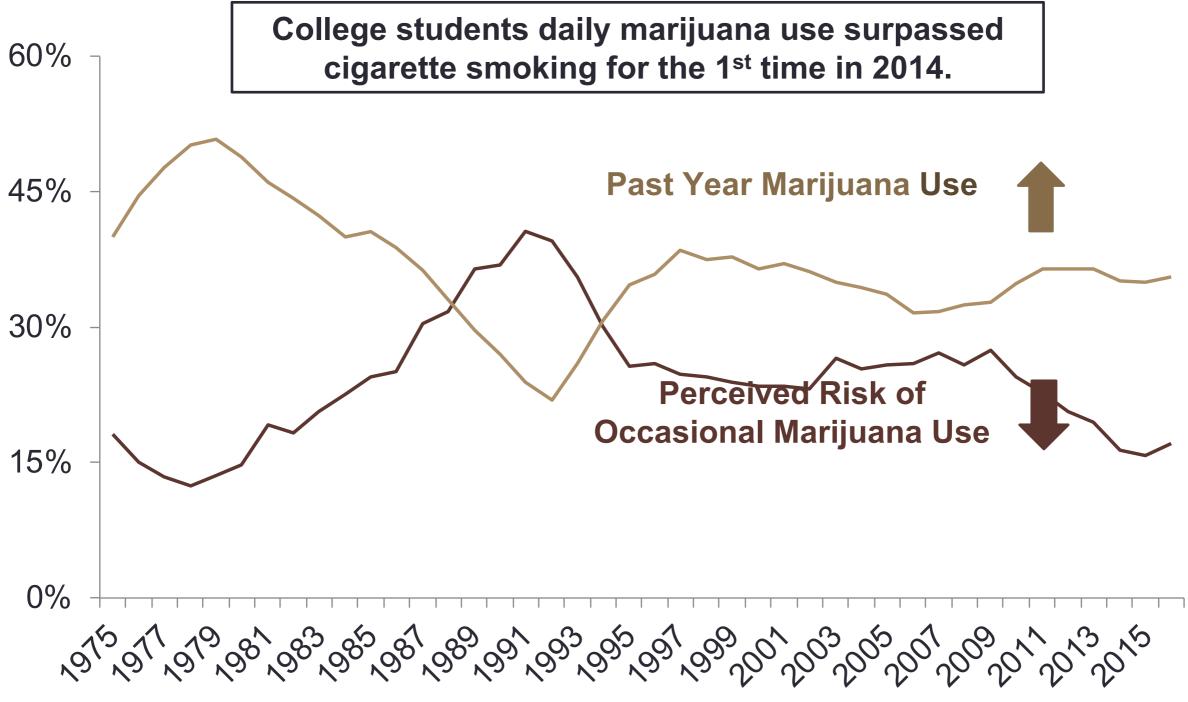


#### **EPIDEMIC CURVE – PROPAGATED EPIDEMIC**



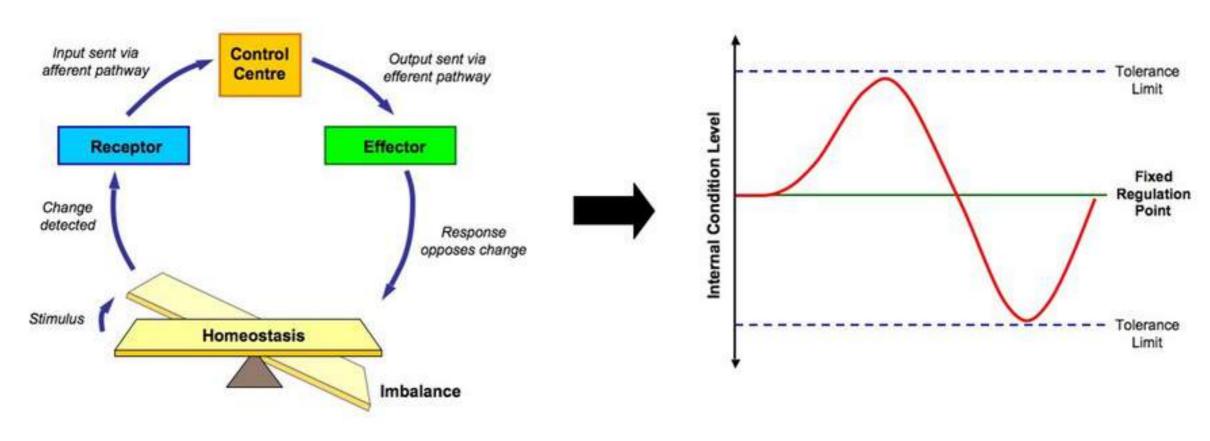
Recognize that as a whole, entire generations of profesionals, can keep propagating the ideas that will not only combat the disease of addiction but will contribute to the behaviors that prevent the disease.

#### Youth Marijuana Attitudes vs. Use Among U.S. 12<sup>th</sup> Graders



Monitoring the Future Survey, 2016

### HOMEOSTASIS – KEEPING THE "CAR" ON THE ROAD

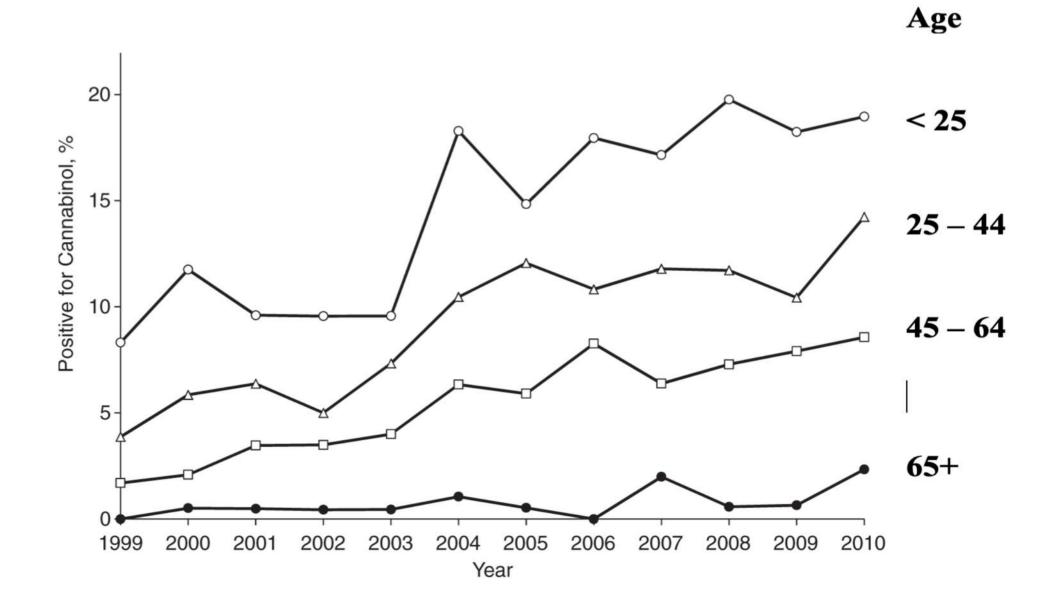


Type to enter a caption.

#### ALCOHOL OR MARIJUANA ... HOW HIGH IS TOO HIGH?

#### Stoned driving fatalities tripled from 1999 – 2010

http://www.ibtimes.com/driving-while-high-dangerous-fatal-car-accidents-involving-marijuana-triple-over-10-years-1553319





• In Maryland, the number of crashes involving marijuana increased 80% the year after decriminalization.

https://www.nbcwashington.com/investigations/Marijuana-Impaired-Driving-506001531.html?fbclid=IwAR1hCmw\_h6PvFTrxTIYYCWpfi4fXCPdNLQ\_fWXvmCRSCPgpMhql409Ak1HI

Traffic fatalities linked to marijuana are up sharply in Colorado. Is legalization to blame?



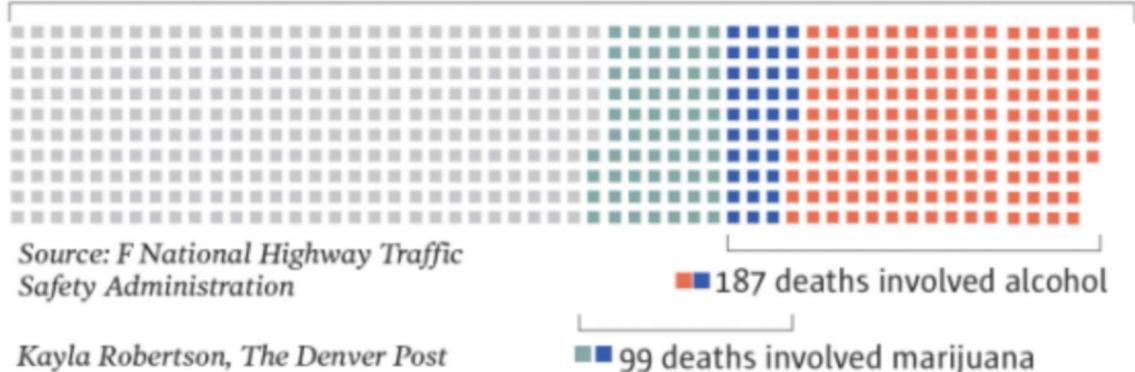


- Traffic fatalities w/ driver testing positive for active metabolite of THC
  - Washington: doubled the year after legalization
  - Colorado: tripled in the 3 years after legalization.
  - https://vancouversun.com/health/local-health/fatal-car-crashes-triple-among-drivers-high-on-marijuanaafter-legalization-in-colorado-double-in-washington-state
  - https://www.denverpost.com/2017/08/25/colorado-marijuana-traffic-fatalities/

#### In Colorado, marijuana is gaining on alcohol. Alcohol – 187 fatalities. Marijuana - 99

#### 547 total deaths

acconor and manjaana



#### AND YET:

- Half of all MJ users believe it's safe to drive while high. https://www.vaildaily.com/news/cdot-survey-more-than-half-of-colorado-marijuana-users-think-its-safe-to-drive-while-high/
- 1/3 of teenage MJ users believe they drive better while high. Larry Copeland

"Survey: Nearly a quarter of teens drive while impaired" (Apr. 25, 2013) USA Today www.usatoday.com/story/news/nation/2013/04/25/teens-drunken-driving-impaired-survey/2106325/

• In Michigan, 51% of medical marijuana pts admit driving high.

https://www.cbsnews.com/news/driving-while-high-university-of-michigan-study-finds-more-than-half-of-michigan-medical-marijuana-users-admit/?fbclid=lwAR1rHVB9xxqQR3oEGwuB7IWEuluXBQTe9w0cjxypkQjrrXrB2YjfUCJcaVo



## **IS EDUCATION THE ANSWER**

#### What works to prevent stoned driving? DUIC

- ¾ MJ users said they'd drive high even after shown risks.
- They believed effect minimal & could compensate for being high.
- So educating re risk does not work.
- Threat of punishment does work.
- Random roadside testing w/ arrests better deterrent than education campaigns.
- Hartman et al. Cannabis Effects on Driving Skills. Clin Chem. 2013 Mar https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3836260/#R73



## **APPARENTLY NOT.**

#### **More studies**

- Women in methadone treatment who use marijuana are 82% more likely to relapse to heroin & other illicit opioids.
  - Association between cannabis use and methadone maintenance treatment outcomes *Biology of Sex Differences* 2017





- Patients in opioid treatment who used MJ are more likely to drop out of treatment.
- All users 39% higher dropout rate.
- Heavy users 48 % higher dropout rate.

The impact of cannabis use on patients enrolled in opioid agonist therapy in Ontario, Canada PLoS One. 2017 Nov

#### FLYING THE "MARIJUANA" FRIENDLY SKIES

#### Pilots - 24 Hours After Smoking One Joint

- More difficulty in aligning with and landing on runway
- Lateral deviation twice pre-marijuana test.
- One pilot landed off the runway entirely
- Pilots not aware of any impairment. They all thought they were fine.

Carry-over effects of marihuana intoxication on aircraft pilot performance: a preliminary report. Am J Psychiatry 1985; Yesavage JA, Leirer VO, Denari M, Hollister LE. 142:1325-9.



#### IT MUST BE HARD TO FIND – DRUG FREE – EMPLOYEES?

#### Workplace problems -- JAMA 1990

- Postal Employees positive for MJ in pre-employment screen.
- Not using at work.
- Compared to non-users:
  - Accidents 55% higher
  - Discipline 55% higher
  - Turnover -- 56% higher
  - Sick/Missed -- 75% higher
- - Injuries 85% higher

C. Zwerling et al. "The efficacy of preemployment drug screening for marijuana and cocaine in predicting employment outcome" (Nov. 1990) Journal of the American Medical Association



#### **DEFINITELY NOT RECOMMENDED DURING PREGNANCY**

# Effect of maternal marijuana use on the next generation's drug use

 Fetuses of women who use marijuana during pregnancy have more mu opioid receptor activity in the amygdala (reward pathway). Alcohol and tobacco did not do this. Wang et al. Discrete

opioid gene expression impairment in the human fetal brain associated with maternal marijuana use. Pharmacogenomics J. 2006 Jul-Aug



#### **Medical Alcohol**

" gre **MAC** He erties the system pro ands that is why the de success mo ors prescribed altdo ne" Nu



"A Malt Extract without an Imperfection"

#### How Mother and Baby "Picked Up"

A case of Blatz Beer in your home means much to the young mother, and obviously baby participates in its benefits.

The malt in the beer supplies nourishing qualities that are essential at this time and the hops act as an appetizing, stimulating tonic.

#### Main 2400



#### **Physicians Advise**

convalescents and all who need Strength and Health to take the ideal Food Drink, ANHEUSER-BI

For it contains the great building and health producing properties the system demands. That's why the most successful doctors prescribe Malt-Nutrine in their practice-that's why their

may made ou ourcry. Malt-Nutrine is the perfect, predigested food in liquid form. Sold by all druggists and grocers.

Prepared by Anheuser-Busch Brewing Ass'n St. Louis, U. S. A.



## Is it always illegal If your husband ever finds out to KILL a woman?



#### According to repeated nationwide surveys, **More Doctors** Smoke CAMELS than any other cigarette!

some class. Counts by park where parks a



#### still taking chances on getting flat, stale coffee ... nose be unto you! For today there's a sure and certain way to test for freshness before you buy

... if he discovers you're

Why we have the youngest customers in the business

Dis young man is 11 meeting diff and by held one provident re-

#### For a better start in life start COLA earlier

 $a_{h}$ 

alet of PL PERSONAL OF C Long A RI Briege wies

Tanta

GARETT

#### **Medical Tobacco**



And Persons in Fight Rands of

Or. Batty's For Your Wealth 51807 1887 For the temporary relief of paroxysms of asthma IFFECTIVUT THERES ASTHMA, HAY FEVER, FOUL BREATH ALL DISEASES OF THE THROAT. HEAD COLDS, CANKER SOURS BRONCHIAL IRRITATIONS BECOMMENDED FOR CHILDREN UN

"Not recommended for Children under 6"

#### More Doctors Smoke CAMELS than any other cigarette!

Designed its survey terminal de la constant reminal de la constant la constant la constant la constan

For 30 days, test Canads in your Willow' ("Wer Theose, I'ver Tasta)



#### NOW...10 Months Scientific Evidence For Chesterfield

A MEDICAL SPECIALIST is making regular bimonthly examinations of a group of people from various walks of life. 45 percent of this group have smoked Chesterfield for an average of over ten years.

After ten mogths, the medical specialist reports that he observed ... no adverse effects on the nose, throat and shouse of the group from smoking Chesterfield.

CHESTERFIELD IS <u>BEST</u> FOR YOU





#### "Its cool to smoke marijuana"







# THE MYTHS EXPOSED

## THE MARIJUANA PARADOX

#### Myth #1: Jails & prisons are filled with MJ users. Legalizing pot would end mass incarceration.

- Who is in prison?
- Violent crime 50%
- Property crime 16%
- Drug crime 18%
- Public order crime 15%
- If we released all drug criminals, we'd still have mass incarceration.
   https://www.bjs.gov/content/pub/pdf/p17.pdf

SUCCESSION OF THE SUCCESSION O

#### April 2019, NCJ 252156

**U.S. Department of Justice** Office of Justice Programs *Bureau of Justice Statistics* 

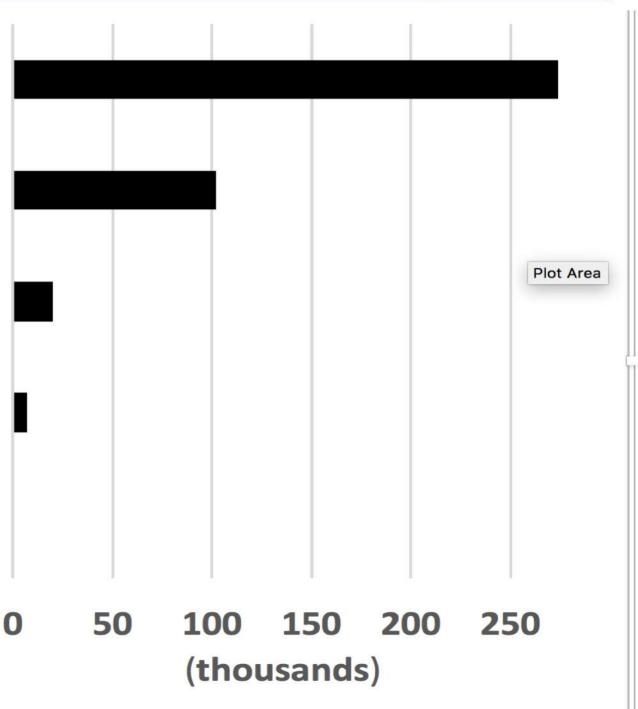
#### Prisoners in 2017

# Who are the drug criminals in prison?

- 80 90% -- drug sales/trafficking
  - 95% hard drugs cocaine, meth, opioids including heroin
- 10 20% -- drug possession & another type of crime (assault, burglary, DUI)
- 2-3% -- drug possession alone.
   So <1% of all prison inmates</li>
  - MJ possession 5-7% of that

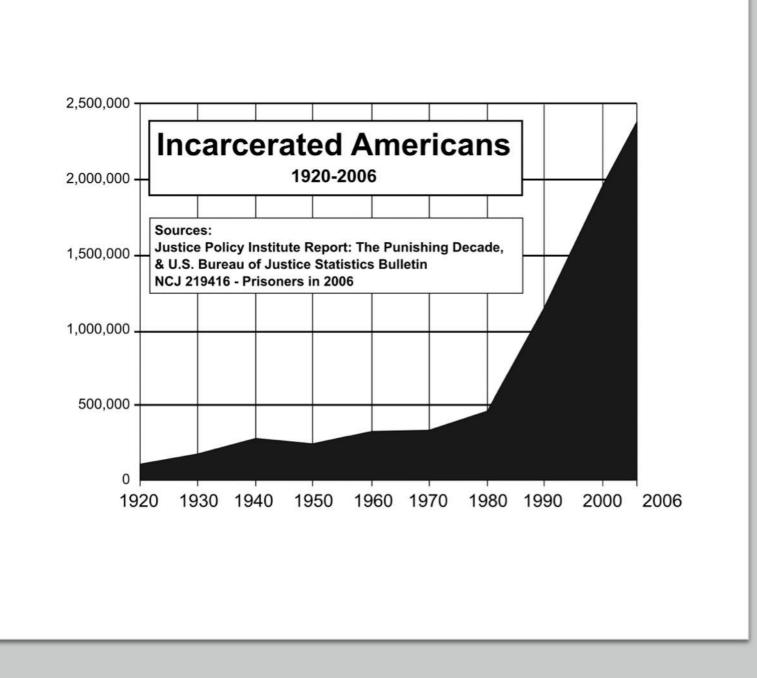
#### Caulkins & Sevigny 2005: Estimated number of inmates in prison for:

All Drug Crimes 274,000 **Drug Possession Conviction** 102,000 **Drug Possession: No intent to** sell; no other crime 20,000 **Drug Possession: No plea** deal; a drug they used 7,340 **Marijuana Possession Only** 400



#### So what did cause mass incarceration?

- Reagan-era laws for all crime – violent, property & drug.
  - Three strikes
  - Eliminate parole
  - Longer sentences
  - Mandatory minimums
- As a result, incarceration soared for all types of crime.



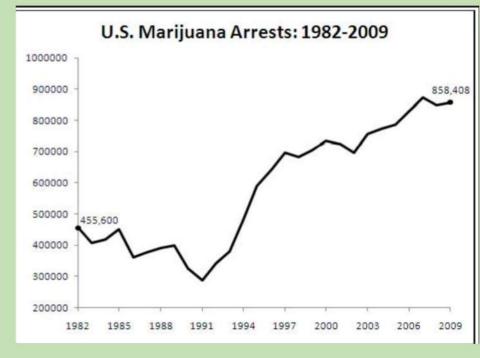
Myth #2: Police waste time & money pursuing MJ users. They should spend it on serious crime.

- No rock concert busts.
- No list of suspected marijuana users.
- No stake-outs to see if someone is smoking pot.
- Call with a tip and they'll laugh.
- Police don't look for possession.
- There is no war on users.



#### So why are there >1/2 million marijuana possession arrests every year?

- Most U.S. crime symptom of substance abuse.
- Arrestees 75% positive for illegal drugs;
- <u>50% for MJ.</u> Half are current MJ users. Arrestee Drug Abuse Monitoring Program 2013 Annual Repot
- Drug abusers carry drugs everywhere. Never plan on getting caught: do plan on getting high.
- So often carrying pot when arrested & searched.



Pot arrests are up; not prosecutions.

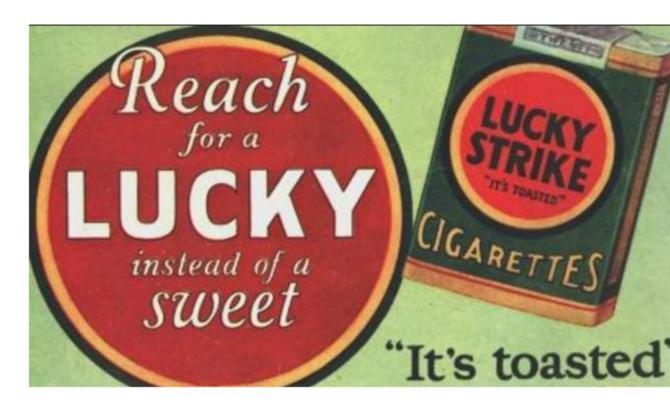
#### Myth #3: The drug war is a war on drug users

- Nixon ran on law & order. To stop crime, had to stop heroin epidemic.
- Nixon Drug War: 2/3 money for treatment. 1/3 overseas traffickers
- Nixon: "tighten the noose around the necks of drug peddlers, and thereby loosen the noose around the necks of drug users."
- 1<sup>st</sup> president to treat addiction as an illness. The Fix by Michael Massing
- Eliminated mandatory minimums for possession.
- Jerome Jaffe expert in treatment stop courts martial
- Opened methadone programs across the country.
- Called "War on Drugs" to mollify conservatives
- Success: overdoses & crime decreased in large cities.



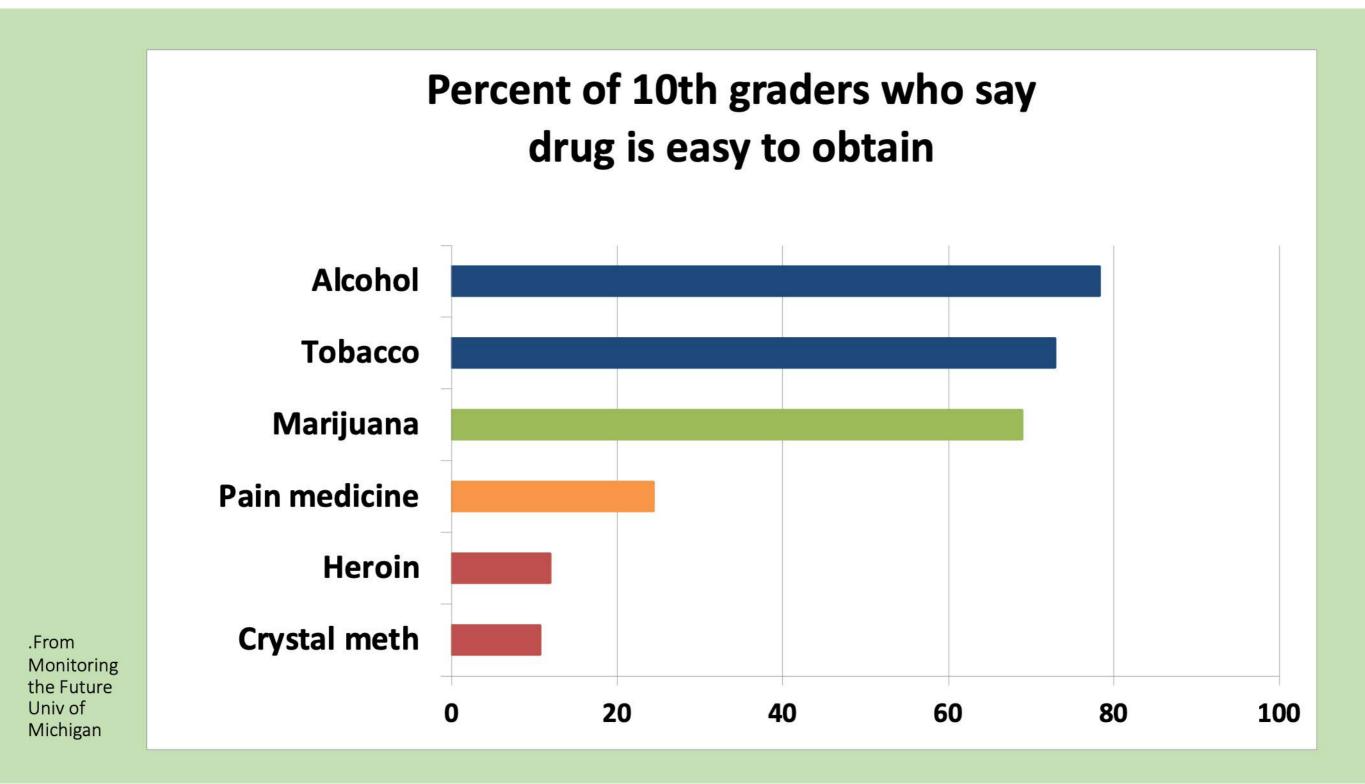
#### Myth #4: For teens, pot is safer than alcohol.

- Not if schizophrenia runs in your family.
- Pot users risk dropping out & being less successful.
   Alcohol users risk car crashes.
- Which do parents want for their kids? Neither one.



### Myth #5: Legalization will make it harder for teenagers to buy marijuana

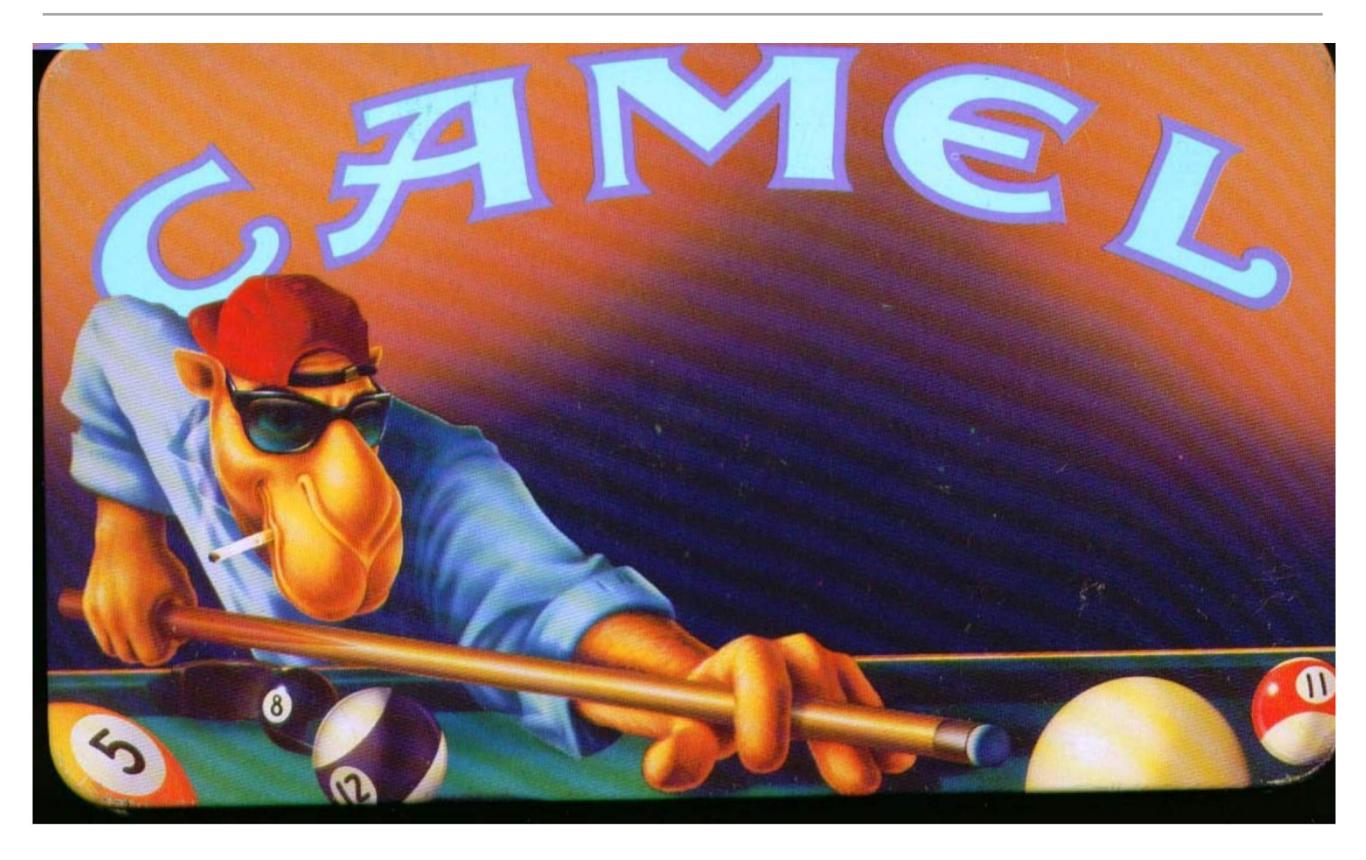




## Myth #6: If we legalize marijuana, drug dealers will no longer target our children.



# MARNING PARENTS How Big Tobacco targets kids today



#### TRIX ARE FOR KIDS ... & MARIJUANA TOO?

#### The MJ industry is targeting kids far more directly than Big Tobacco ever did



#### SHOPPING FOR "TREATS"

### Colorado marijuana stores are not full of bags of green leafy weed.



#### IT REALLY LOOKS LIKE .... CANDY?



#### OR SODA POP ...



#### **OR BREAKFAST** ....



#### **CANDY?**



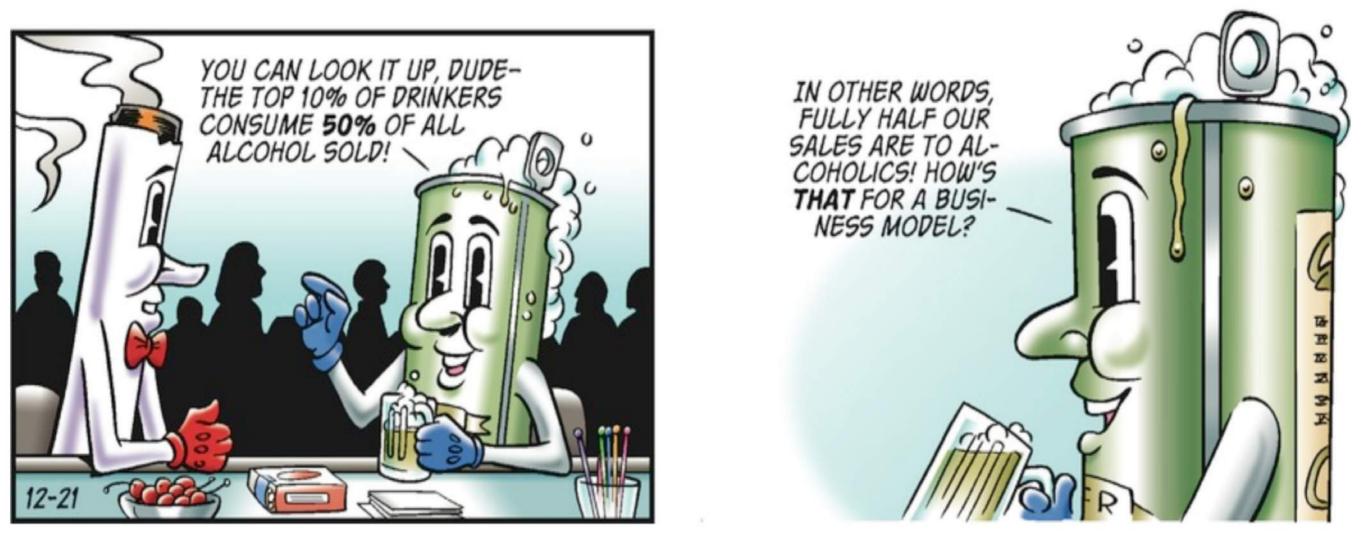
#### LET'S NOT FORGET THE BENEFITS OF VAPING - NOT!

#### Vaporizers designed to look like pens, can be used in class.



#### **80% OF SUBSTANCE ABUSERS STARTED BEFORE 16 YEARS OF**

#### Why do the addictive drug industries all target teens?



But marijuana and tobacco have alcohol beat

#### Like alcohol & tobacco, MJ industry depends on addicted, daily users

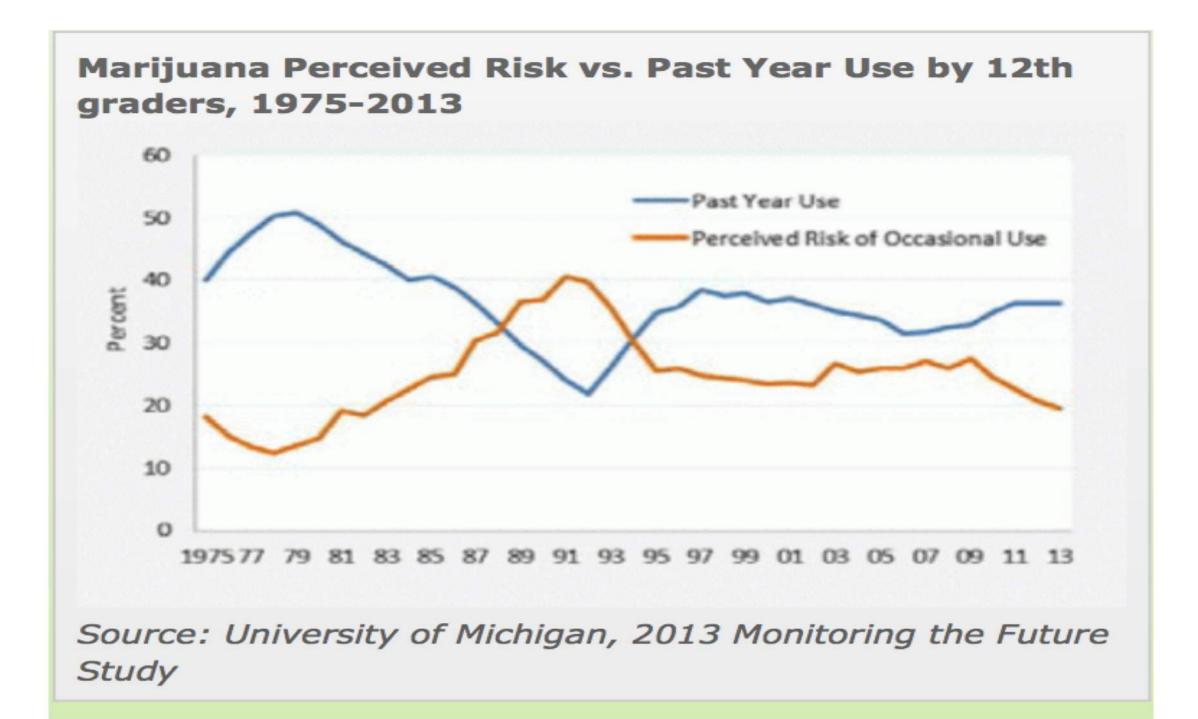
Colorado Dept Public Health

- Most MJ users occasional consume 4% of all marijuana
- 2-3% of population uses MJ daily consumes 87% of all marijuana
- Best way to create addicted users get them started as teens.
  - Teen brain is more prone to addiction.
  - Adults users who started as teens use 3X as much MJ.
- Marijuana, alcohol & tobacco industry need teenage use to survive.

#### Myth #7: Teens will use no matter what

- People who want to use drugs will find a way.
- Nothing we say or do will make a difference.

#### **PERCEPTION OF RISK CAN LOWER RISK TAKING**



#### AND PARENTS CAN MAKE A DIFFERENCE

#### Parent Movement Decreased Use by 80%

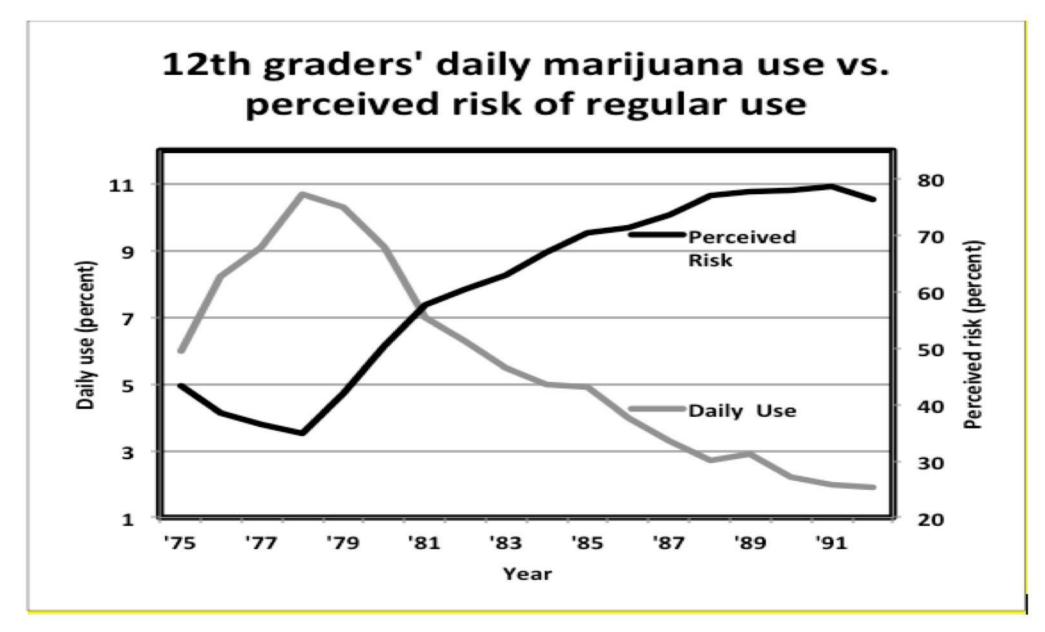
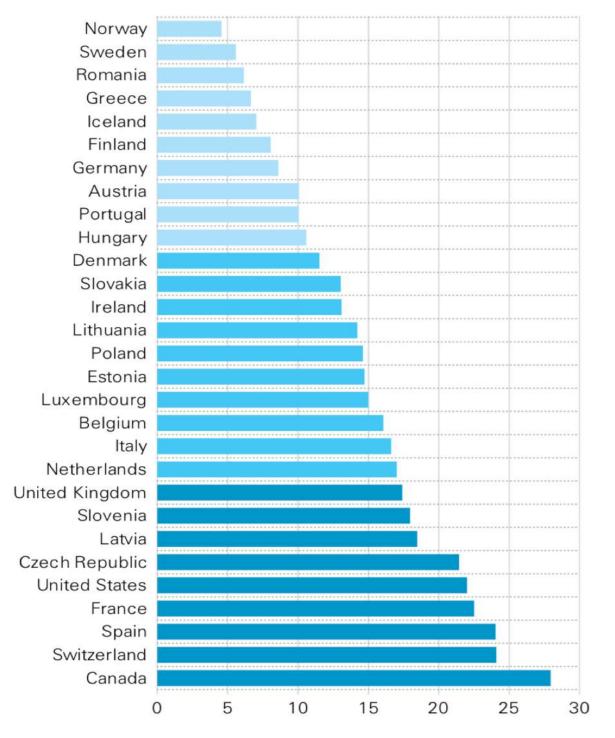


Figure 1-1. Data from Monitoring the Future 20139

#### Figure 4.2d Cannabis

% of children aged 11, 13 and 15 who report having used cannabis in the last 12 months



#### In Sweden & Norway, teenage marijuana use is 1/5 the rate in Canada & the U.S.

#### How did they do this?

Child well-being in rich countries. UNICEF 2013

#### **KNOWLEDGE CAN LEAD PEOPLE TO SAFETY**

#### Teenage use is almost entirely preventable (Adult use, too)

- 1) Keep it strictly illegal no industry marketing or advertising.
- 2) Stop telling people how wonderful it is.
- 3) Start talking about the harm it causes.
- Two Conclusions:
- 1) Teenagers make good decisions if they get good information.
- 2) There is no way to legalize a drug for adults without increasing teenage use.

#### Myth #8: MJ will be tax windfall for states

26,301 views | Sep 16, 2015, 09:54pm

#### Colorado Now Reaping More Tax Revenue From Pot Than From Alcohol

POLITICS 07/19/2017 03:19 pm ET | Updated Jul 19, 2017

#### Colorado's Marijuana Tax Revenue Exceeds Half A Billion Dollars

Here's How Much Money States Are Raking In From Legal Marijuana Sales



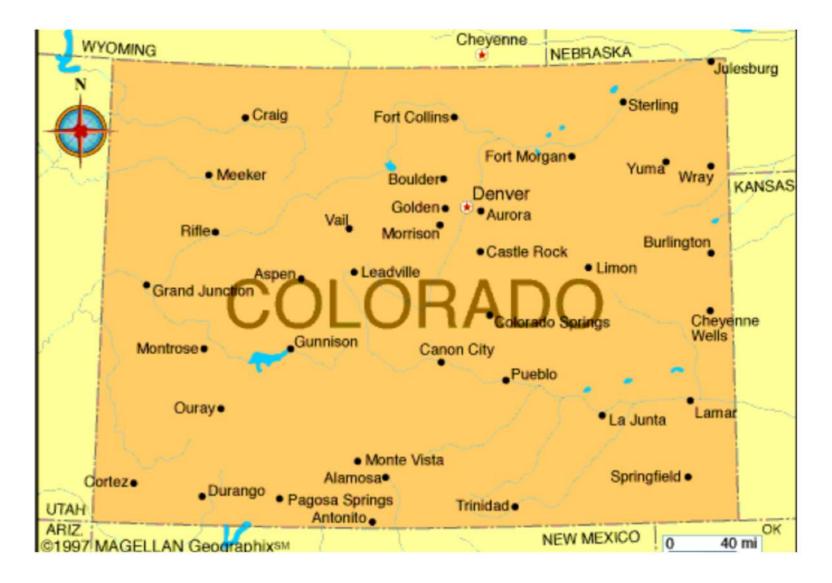
## News articles about tax revenue never mention the costs.

- CO expects to make \$134 mil in taxes, & spend \$130 mil on youth prevention, addiction treatment, anti-stoned driving campaigns, regulating marijuana stores, etc.
- Denver Post Apr 9, 2014



## All the tax revenue is spent cleaning up problems marijuana causes.

 Colorado Governor Hickenlooper on CNN: "I tell other governors that we are not making any extra revenue from pot..."



#### Economic and Social Costs of Legalized Marijuana

Centennial Institute November 15, 2018

#### CENTENNIAL INSTITUTE

**COLORADO CHRISTIAN UNIVERSITY** 

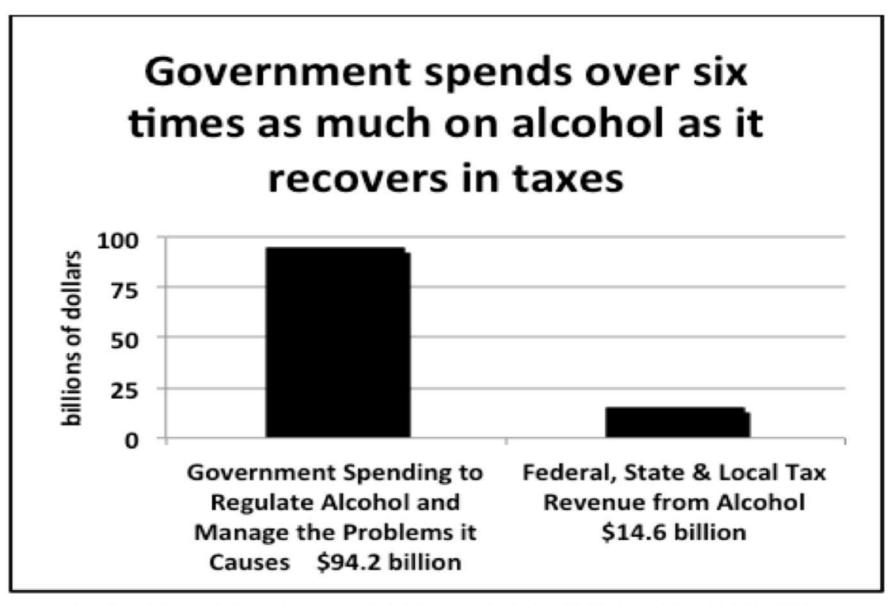
FAITH • FAMILY • FREEDOM • FUTURE

#### Marijuana costs more than it brings in

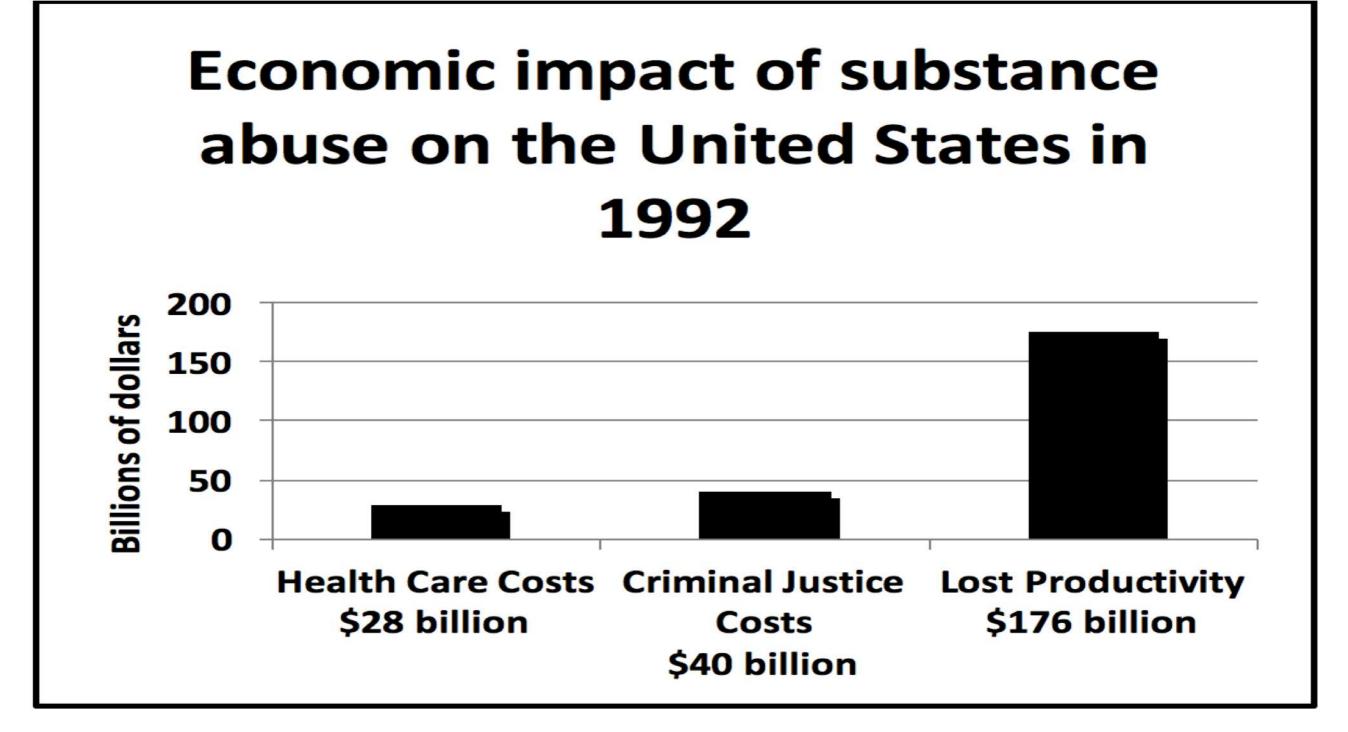
"For every dollar gained in tax revenue, Coloradans spent approximately \$4.50 to mitigate the effects of legalization."

#### THE COSTS ARE ... HUGE

#### Alcohol is a net drain on state budgets



The cost of substance abuse is mostly unseen.



#### Myth #9: Legalization eliminates cartels & black market

NEWS

#### Cartels cashing in on Colorado's pot industry

#### Illegal pot busts are booming across Colorado's forests. Are cartels to blame?

f 🕑 🖻

By David O. Williams As Originally Reported by Colorado Politics Sunday, April 22, 2018 5:03 AM Updated: Sunday, April 22, 2018 1:46 PM

G Select Language ▼



#### Foreign cartels embrace home-grown marijuana in pot-legal states

WORLD

TECH & MEDIA

THINK

SDUDTS

RUSINESS

POI ITICS

ILS NEWS

Foreign gangs are finding that black-market marijuana is profitable even in states that have legalized cannabis.





World

#### Why Colorado's black market for marijuana is booming 4 years after legalization



Marijuana grown in Colorado, the land of legal weed, is being smuggled out to states where it is still illegal



Briar Stewart · CBC News · Posted: May 28, 2018 4:00 AM ET | Last Updated: May 28, 2018

#### California's Illegal Weed Industry Is Doing Better Than Ever

Those in the weed business have discovered that the black market is still more profitable in many ways than the newly legal industry.







POLITICS

#### California proposes slashing pot taxes to help regulated industry compete with black market

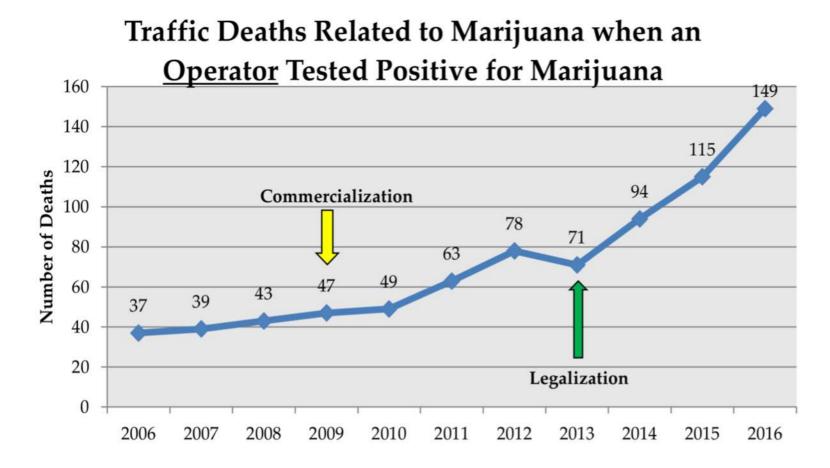
PUBLISHED MON, JAN 28 2019 • 7:18 PM EST | UPDATED TUE, JAN 29 2019 • 9:18 AM EST

*"If we don't do something this year, we're at risk of putting all legal cannabis out of business. The black market can operate at much lower cost with no oversight." --* California Assemblyman Phil Ting *L.A. Times* 5-16-19

#### Myth #10: Prohibition of alcohol failed

- Decreased alcohol consumption
- Decreased cirrhosis.
- Decreased disorderly conduct.
- Halted increasing homicides.
- Actually, Prohibition was a success. New York Times Oct 16, 1989
- Okrent, Daniel. Last Call: The rise and fall of Prohibition. 2010

#### **#11: A harmless drug that kills nobody.**

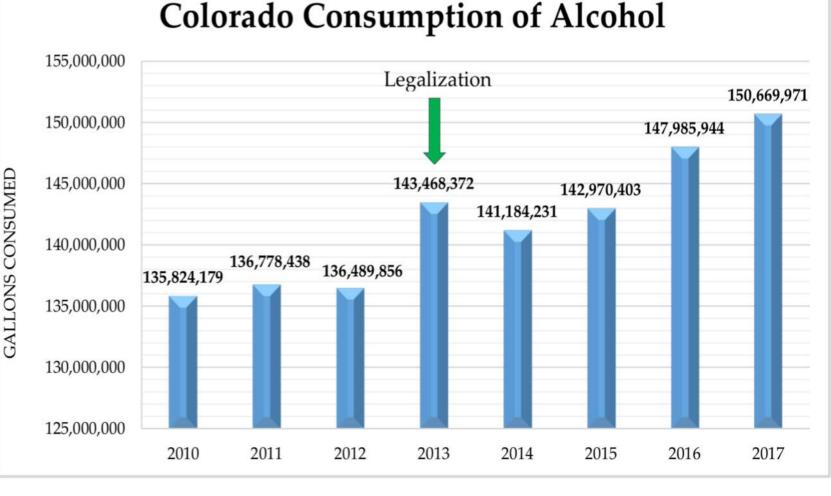




SOURCE:National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS),<br/>2006-2011 and Colorado Department of Transportation 2012-2016

#### Myth #12 People will use MJ instead of alcohol.

- People who abuse one drug use more of others, not less
- Alcohol sales in Colorado increased after MJ legalized.
- after MJ legalized.
   Hospital visits due to alcohol abuse & drug overdoses increased in CO after MJ legalized.





Colorado Department of Revenue, Colorado Liquor Excise Tax

#### **ANOTHER CASE FOR PERCEPTION OF RISK**

#### Social acceptability

• Ten percent of low risk teens (non-smokers, no drug-using friends) say they would try pot if it were legal. Palamar J et al. Correlates of

intentions to use cannabis among US high school seniors in the case of cannabis legalization. Int J Drug Policy. 2014 May;25(3):424-35.



#### **RISKY BUSINESS**

#### Three factors increase teenage use

(from Clearing the Haze by Thurstone & Tatum)

- Belief that the drug is safe
- Social acceptability of the drug
- Availability of the drug
- First, perception of safety.

#### THE FACTS

#### Myth #13: CO & WA are success stories

- CO now ranks at or near the top in teenage, college age & adult use.
- MJ tourists fill homeless shelters & camp along streets. Denver visitor bureau says losing business. In Seattle, homelessness is election issue.
- MJ-related visits to ER & calls to poison control doubled.
- Property crime up 25% in Seattle & 40% in Denver.
- Violent crime up in Colorado, Oregon & Alaska.
- Adult use in CO almost twice the national avg.
- Black use 50% higher than white use.
- Traffic fatalities MJ-driver tripled.



#### "MEDICAL" MJ LAWS LOOK LIKE LEGALIZATION TO THE PUBLIC

#### Legalization costs the state economy



- Medical Schizophrenia. Drug treatment. Car accidents.
- Criminal Justice Black market.
   More underage use & drugged driving.
- Lost productivity the largest cost.

# **Partnership** for A Healthy Iowa



## PETER@AHEALTHYIOWA.OR G

#### PARTNERSHIP FOR A HEALTHY IOWA

# **Partnership** for A Healthy Iowa