

Drug Trend Update

TZD 2016

Duluth, Minnesota

November 2016

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Tipping Point =

The critical **point** in a situation, process, or system beyond which a significant and often unstoppable effect or change takes place.

Drugged driving is more complicated than drunk driving.

	DRUGGED DRIVING	DRUNK DRIVING
Number:	Hundreds of drugs	Alcohol is alcohol
Data on Use by Drivers & Crashes:	Limited	Abundant
Use by Drivers:	Increasing	Decreasing
Impairment:	Varies by type	Well-documented
Crash Risk:	Varies by type	Precise
Beliefs & Attitudes:	No strong attitudes – public indifferent	Socially unacceptable



RESPONSIBILITY.ORG

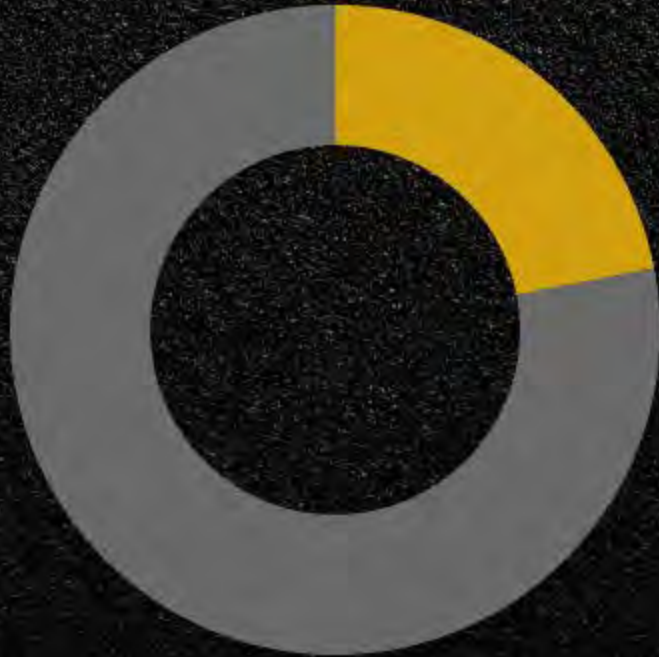
40% of fatally-injured drivers with a known test result tested positive for drugs, almost the same level as alcohol at any positive BAC.



Source: 2013 Fatality Analysis Reporting System (FARS)



RESPONSIBILITY.ORG



22%
of all drivers in a
recent roadside survey
tested positive for some
drug or medication.

Source: NHTSA 2013-2014 Roadside Survey



RESPONSIBILITY.ORG

Marijuana

Legal recreational use:

Colorado

Washington

Oregon

Alaska

Washington D.C.

California

Massachusetts

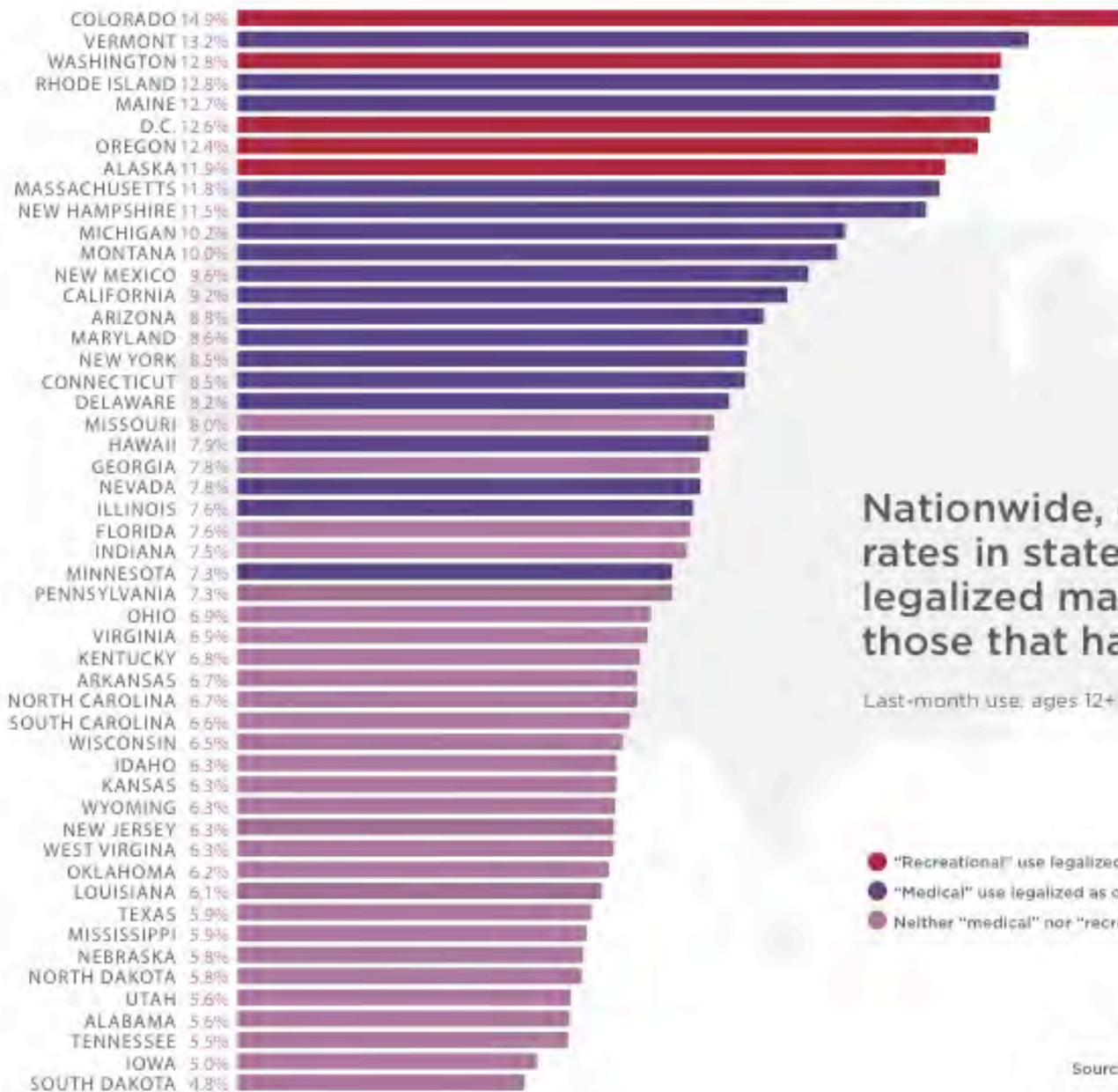
Nevada

Maine

LESSONS LEARNED
AFTER 4 YEARS
of MARIJUANA LEGALIZATION

October 2016

Smart Approaches
to Marijuana (SAM)

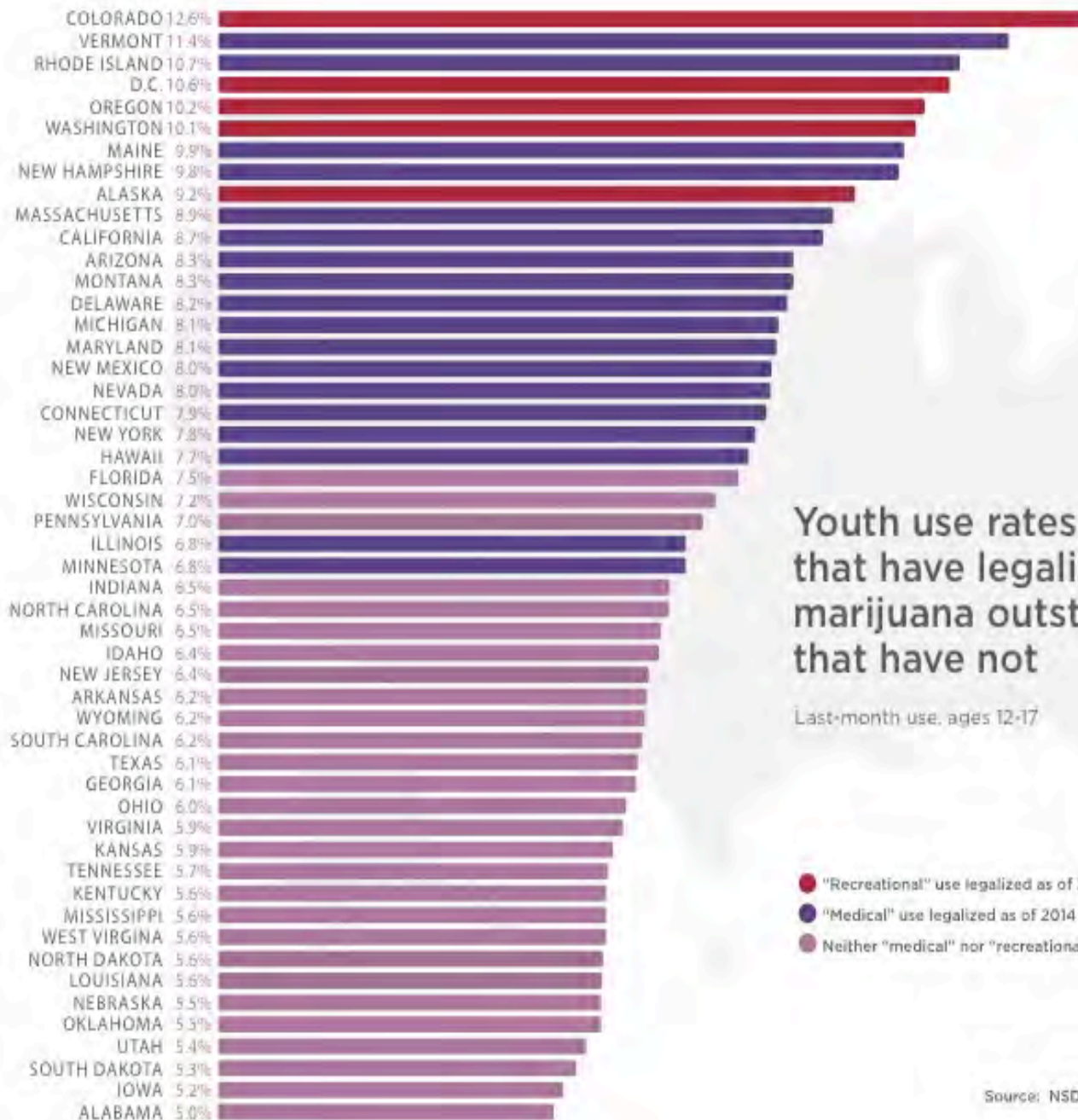


Nationwide, overall use rates in states that have legalized marijuana outstrip those that have not

Last-month use, ages 12+

- "Recreational" use legalized as of 2014
- "Medical" use legalized as of 2014
- Neither "medical" nor "recreational" use legalized as of 2014

Source: NSDUH state estimates (2013-2014)



Youth use rates in states that have legalized marijuana outstrip those that have not

Last-month use, ages 12-17

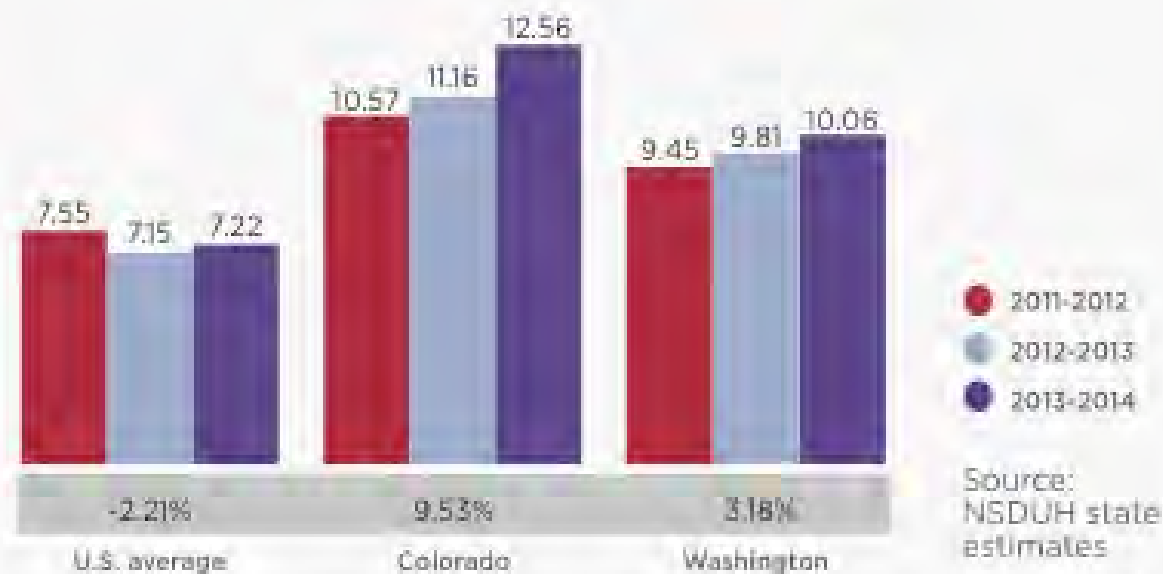
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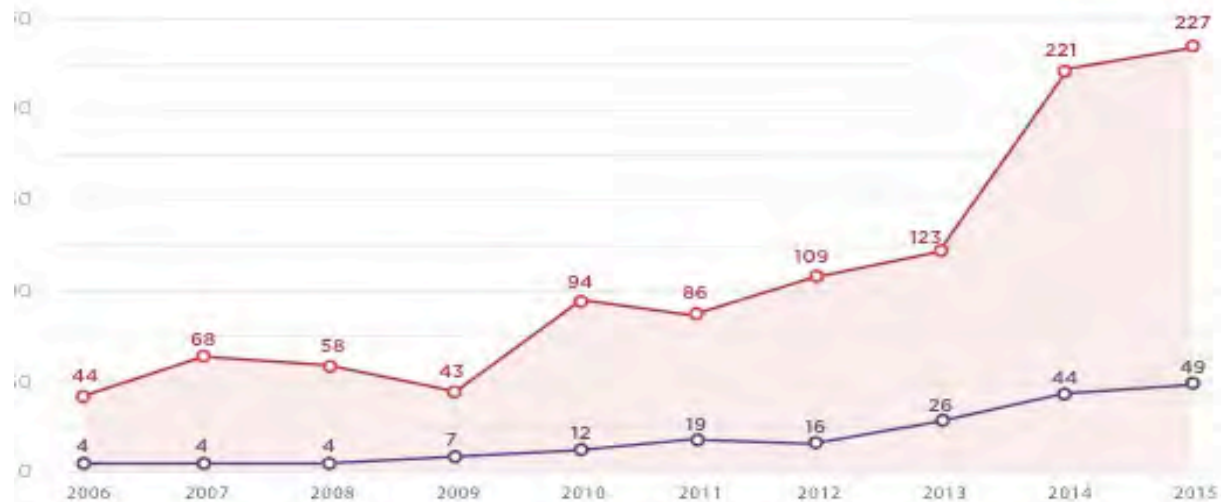
Overall use in CO and WA is both higher than and rising faster than the national average



The same trend is seen among minors (ages 12-17)



EMERGENCY MARIJUANA-RELATED POISON CONTROL CALLS IN CO



Increase post-legalization
(2012-2015):

Avg. annual chg.
2008-2015:

● ALL AGES

108%

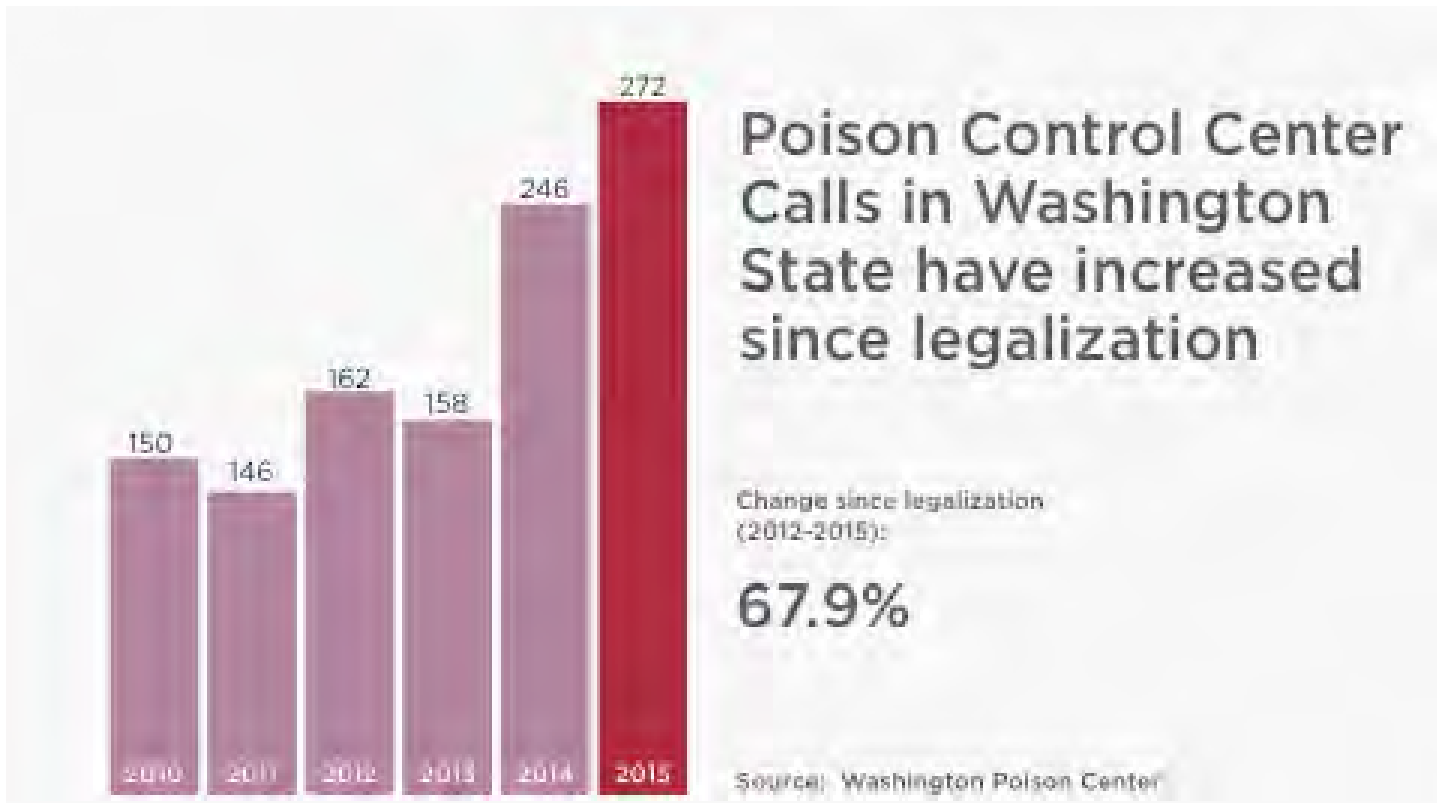
22%

● AGES 0-8

206%

43%

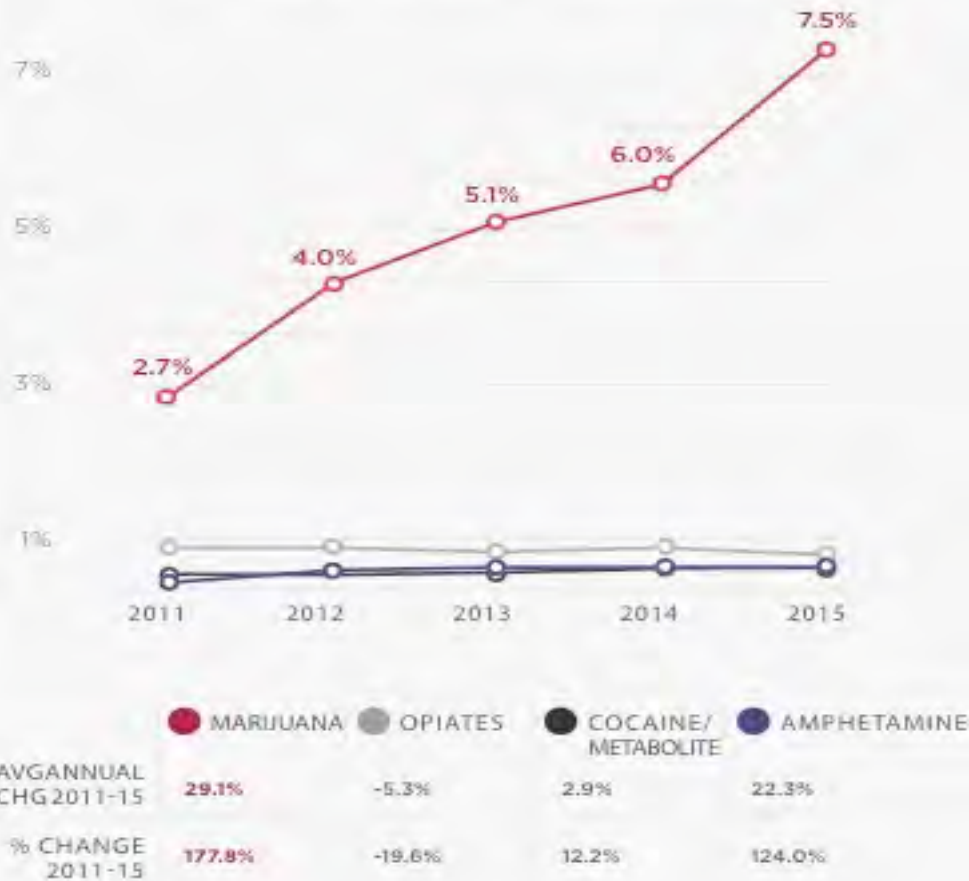
Source: Rocky Mountain Poison and Drug Center



150

272

POSITIVE WORKPLACE ORAL DRUG TEST RESULTS



Source: Quest Diagnostics, 2015 data from over 900k tests from Jan to Dec 2015.

2.7

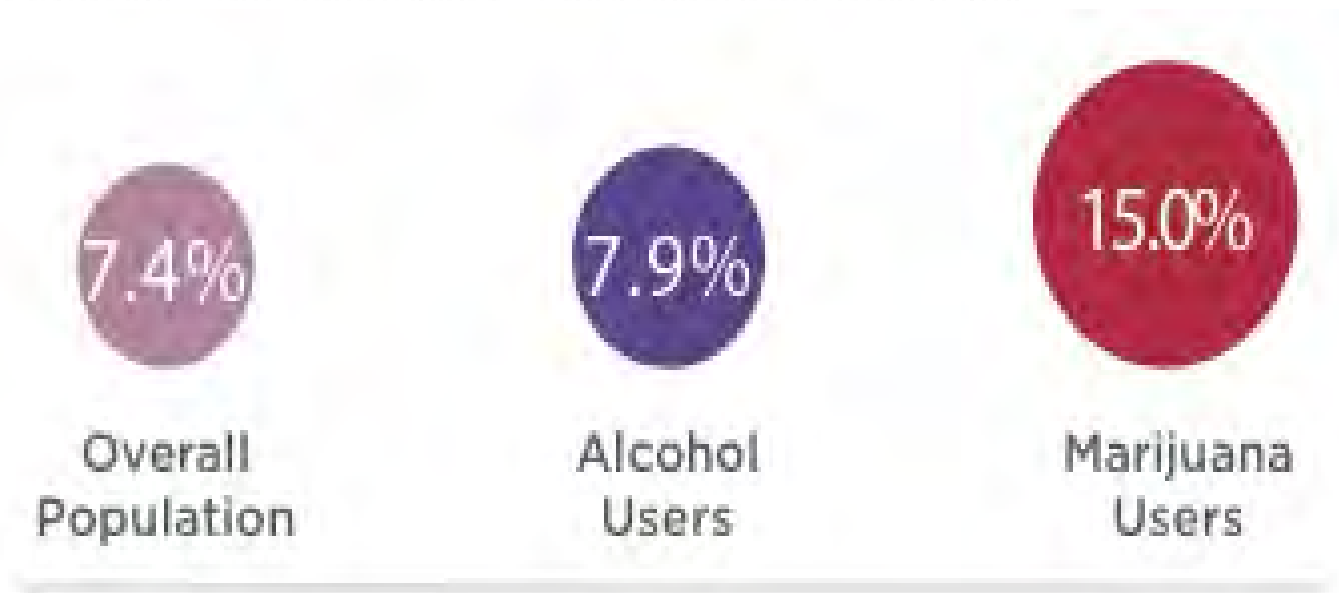
7.5

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



SOURCE: NSDUH Tables

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

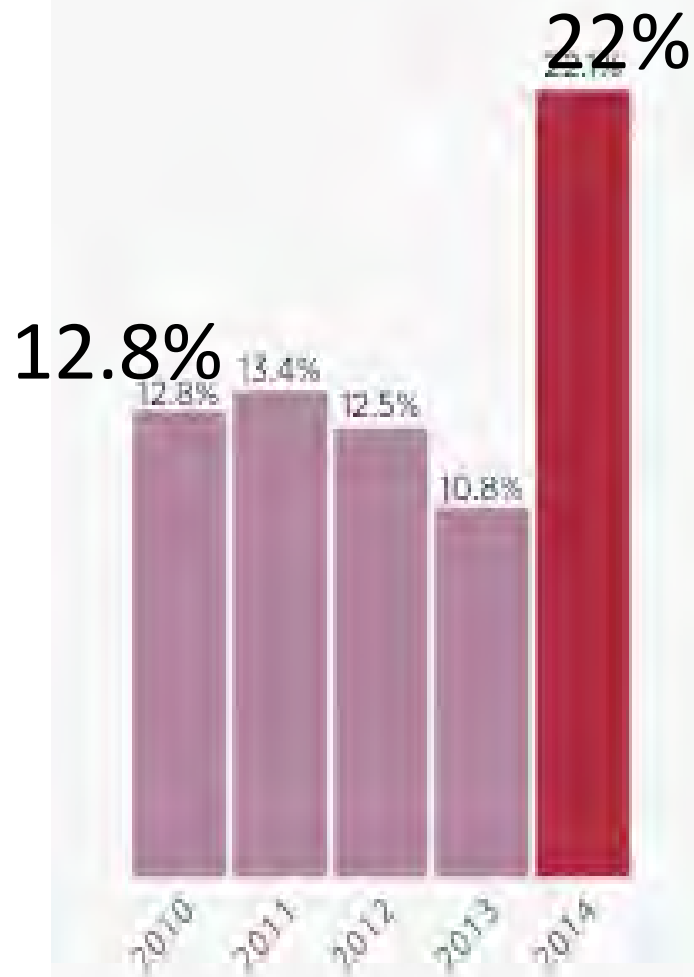


DRIVING WHILE HIGH: A SERIOUS AND GROWING PROBLEM IN LEGALIZED STATES

2015	—	32.7%
2014		28.0%
2013		24.7%
2012		18.6%
2011		20.2%
2010		19.4%
2009		18.2%

The percentage of
DUI cases relating
to driving while
high has risen
considerably in
Washington State
since legalization

Source: Washington Traffic Safety Commission



Percentage of WA traffic fatalities where driver tested positive for recent marijuana use

more than doubled the year recreational marijuana sales began.

Source: AAA Foundation for Traffic Safety

Percentage of all traffic fatalities in CO where the operator tested positive for marijuana



Source: Fatality Analysis Reporting System and Colorado Department of Transportation (CDOT), as reported in Rocky Mountain HDTA report #4 (September 2016)

Medical marijuana

28 states and Washington D.C.

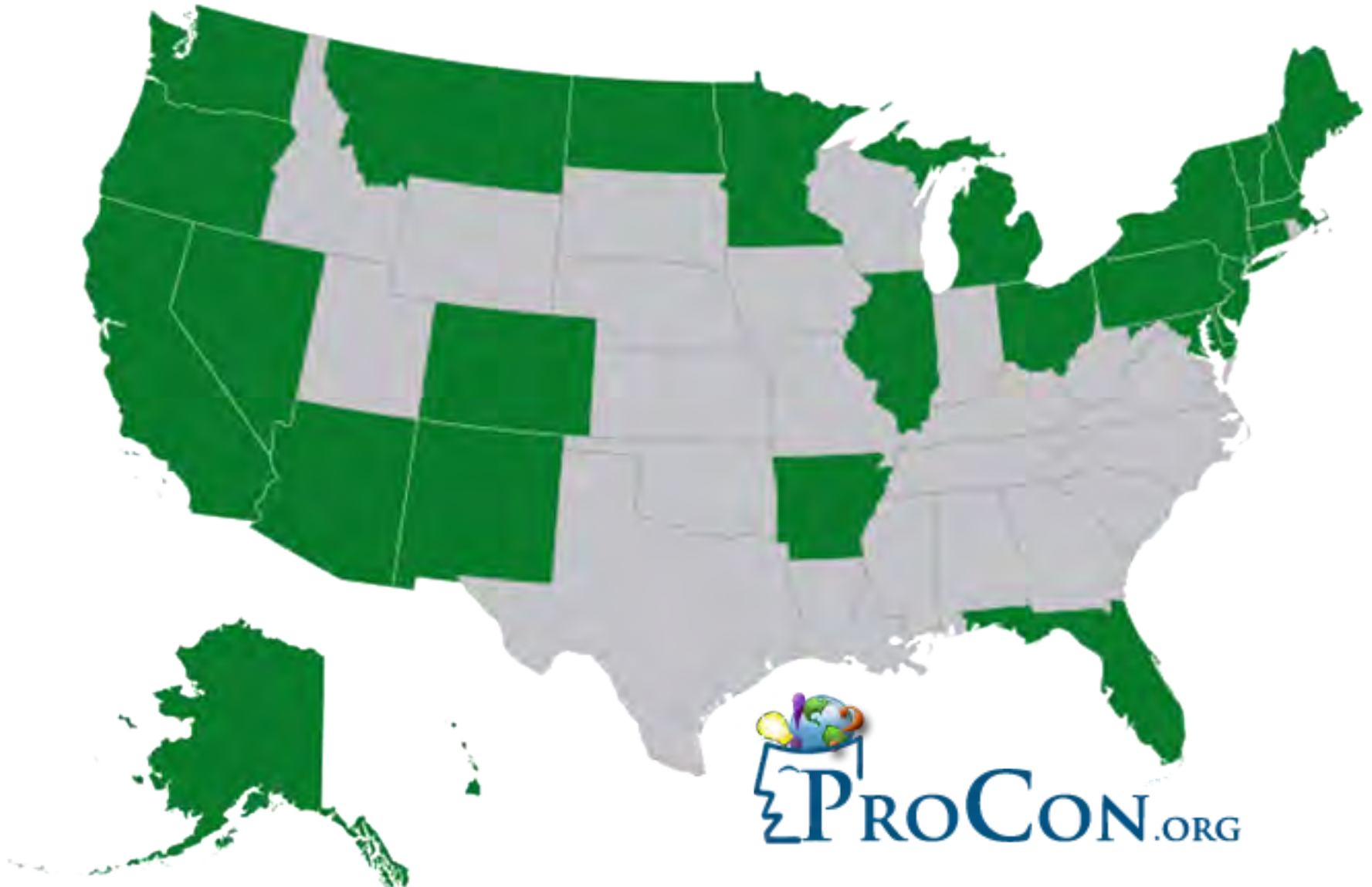
Florida

ND

AK



28 LEGAL MEDICAL MARIJUANA STATES AND DC



SOURCE: medicalmarijuana.procon.org/view.resource.php?resourceID=000881

“...cannabis is a dangerous drug and as such is a public health concern...the sale of cannabis should not be legalized.”

- American Medical Association (AMA)



Marijuana is a Schedule I Drug

The drug or other substance has a high potential for abuse.

The drug or other substance has no currently accepted medical use in treatment in the United States.

There is a lack of accepted safety for use of the drug or other substance under medical supervision.

Schedule I substances include heroin, gamma hydroxybutyric acid (GHB), lysergic acid diethylamide (LSD), marijuana, and methaqualone.

News on 8-11-2016

The DEA recommended that marijuana continue to be maintained in Schedule I of the CSA. . . with support of and the Department of Health and Human Services (HHS) and The Food and Drug Administration (FDA).

Marijuana meets the three criteria for placing a substance in Schedule I of the CSA under 21 U.S.C 812(b)(1)

Accordingly, HHS recommends that marijuana be maintained in Schedule I of the CSA.

FDA's Center for Drug Evaluation and Research's current review of the available evidence and the published clinical studies on marijuana demonstrated that since our 2006 scientific and medical evaluation and scheduling recommendation responding to a previous DEA petition, **research with marijuana has progressed. However, the available evidence is not sufficient to determine that marijuana has an accepted medical use. Therefore, more research is needed into marijuana's effects, including potential medical uses for marijuana and its derivatives.**

Marijuana



Marijuana is a Schedule I Drug under the Federal Controlled Substances Act

- Medical practice
- Law enforcement
- Banking
- Interstate commerce
- Drug free workplace laws

Marijuana Variations

“The *new* marijuana”

Synthetic THC products

Anxiety attacks

Agitation

Elevated heart rates

Elevated blood pressure

Vomiting, paranoia

Hallucinations



Hospitals Report Hundreds of Cases of Illness Caused by Synthetic Marijuana

April 28th, 2015

Hospitals across the country have been reporting hundreds of cases of seriously ill people coming to the emergency room after using synthetic marijuana. In New York City, more than 120 cases were reported in a single week, according to NPR.

[SOURCE: http://www.drugfree.org/join-together/hospitals-report-hundreds-cases-illness-caused-synthetic-marijuana/](http://www.drugfree.org/join-together/hospitals-report-hundreds-cases-illness-caused-synthetic-marijuana/)

Synthetic Cannabinoid POISON CENTER Calls:

2013 – 2,668

2014 – 3,682

2015 – 7,794

SOURCE: American Association of Poison Control Centers, 2016.

Marijuana Concentrates

Wax, honey oil, budder, butane hash oil, butane honey oil (BHO), shatter, dabs (dabbing), shatter, and glass.

Marijuana Concentrates

Butane hash *oil* or *honey oil*—a gooey liquid

wax or *budder*—a soft solid with a texture like lip balm

shatter, glass —a hard, amber-colored solid

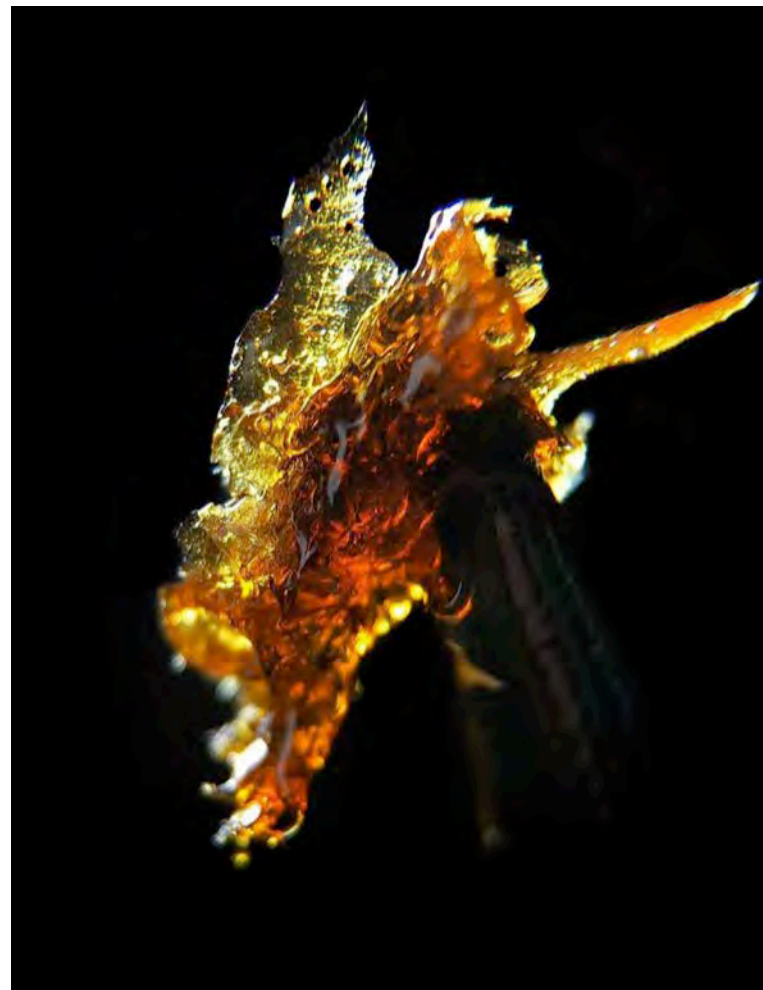
These extracts can deliver **extremely large amounts of THC** to users, and their use has sent some people to the emergency room.

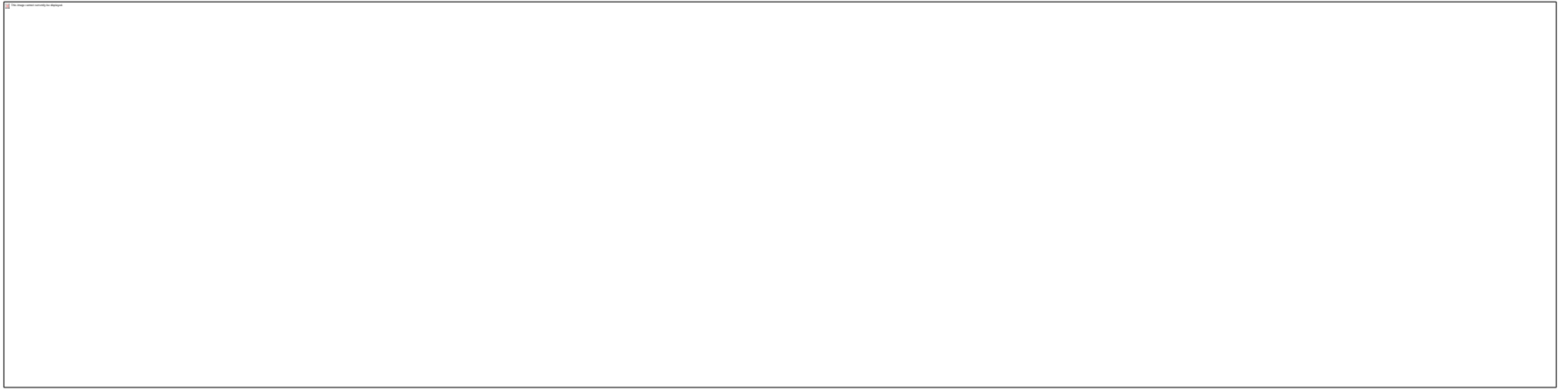
Another danger is in preparing these extracts, which usually involves butane (lighter fluid). A number of people who have used butane to make extracts at home have caused fires and explosions and have been seriously burned.

Marijuana Concentrates



Marijuana Concentrates





Effects of short-term MJ use

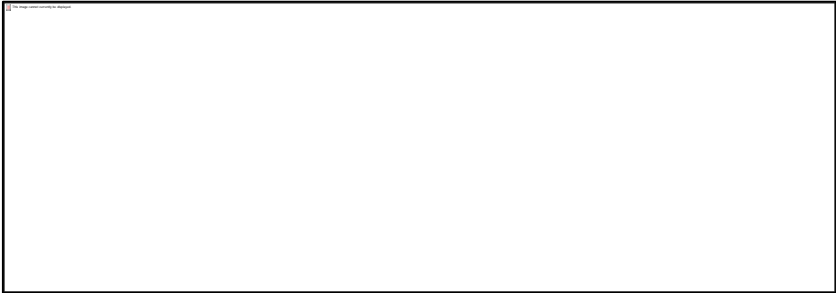
- Impaired short-term memory (making it difficult to learn and retain information)
- Impaired motor coordination (heightening risk of injury and accidents)
- Altered judgment
- In high doses, paranoia and psychosis

Effects of long-term or heavy MJ use

- Addiction*
- Altered brain development*
- Poor educational outcome* (increased drop-out risk)
- Cognitive impairment* (lower IQ function among frequent adolescent users)
- Diminished life satisfaction and achievement*
- Symptoms of chronic bronchitis
- Increased risk of chronic psychotic disorders (including schizophrenia) in predisposed individuals

* the effect is strongly associated with initial MJ use in early adolescence

Clinical conditions with symptoms that may be relieved by MJ/cannabinoids:

- Epilepsy
 - Glaucoma
 - Nausea
 - Multiple Sclerosis
 - AIDS associated wasting syndrome
 - Chronic pain
 - Inflammation
- 

Marijuana:

The changing public opinion

58% of Americans favor legalization

OTHER NEWS

JUNE 15, 2015

TIME

They're the most
**powerful
painkillers**
ever invented.

And they're creating
the worst addiction
crisis America
has ever seen.

By Massimo Calabresi



June 15, 2015

Prescription Drug USE in the US (past 30 days)

48.7% of people use at least one Rx drug

21.8% of people use three or more Rx drugs

10.7% of people use five or more Rx drugs

Source: [Health, United States, 2015, table 79 \[PDF - 9.8 MB\]](#)

67% of physician office visits involve drug therapy

Most frequently prescribed therapeutic classes:

- Analgesics
- Antihyperlipidemic agents
- Antidepressants

54 million Americans have misused a Rx drug at least once

Most commonly misused medications:

Opioids—usually prescribed to treat pain

CNS depressants (this category includes tranquilizers, sedatives, and hypnotics)—used to treat anxiety and sleep disorders

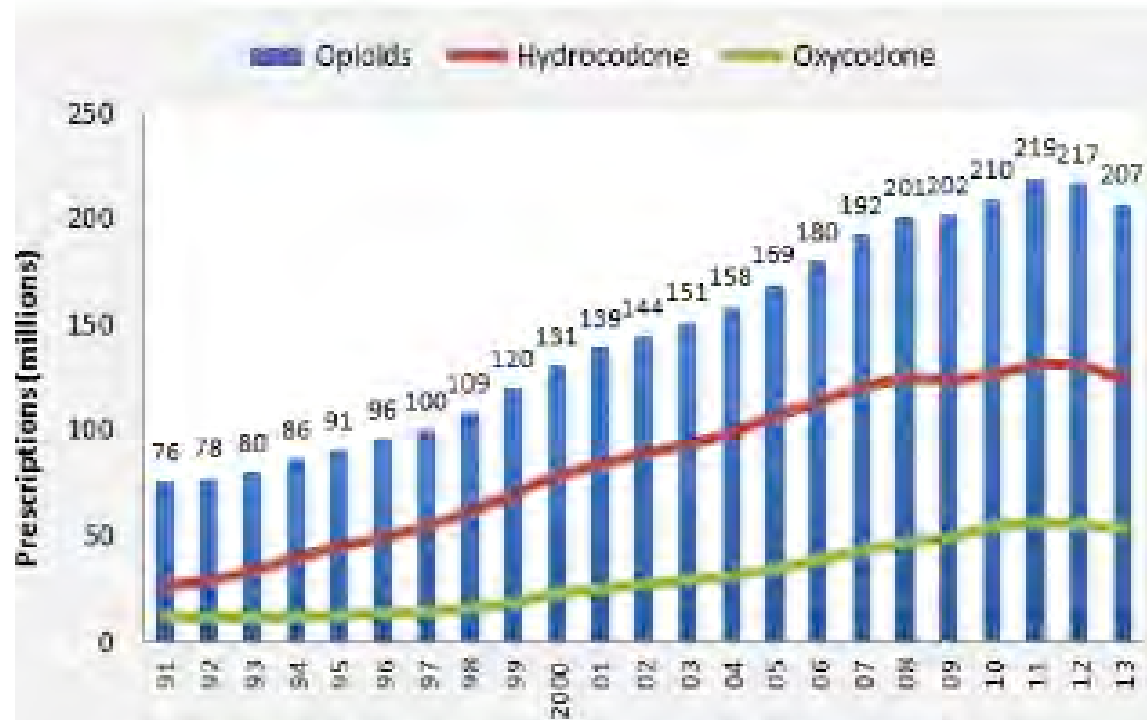
Stimulants—most often prescribed to treat ADHD

The U.S. consumes 80% of opioids worldwide



SOURCES: 2009 National Survey on Drug Use and Health (NSDUH). SAMHSA and the Division of Pharmacologic Therapy, Center for Substance Abuse Treatment, SAMHSA, 2012.

Opioid prescriptions dispensed by US retail pharmacies: 1991 - 2013



IMS Health, Vector One: National, Years 1991 to 2011,
Data Extracted 2012

IMS Health, National Prescription Audit,
Years 2012 & 2013, Data Extracted 2014

Opioid and heroin overdose deaths: 2000 - 2014

SOURCE: CDC, NVSS 2000 – 2014.

Most people who need specialized treatment for a drug or alcohol problem do not receive it.

23.2 million persons (9.4 percent of the U.S. population) aged 12 or older **needed treatment** for an illicit drug or alcohol use problem in 2007.

Of these, only **2.4 million** (10.4 percent of those who needed treatment) **received treatment** at a specialty facility (i.e., hospital, drug or alcohol rehabilitation or mental health center).

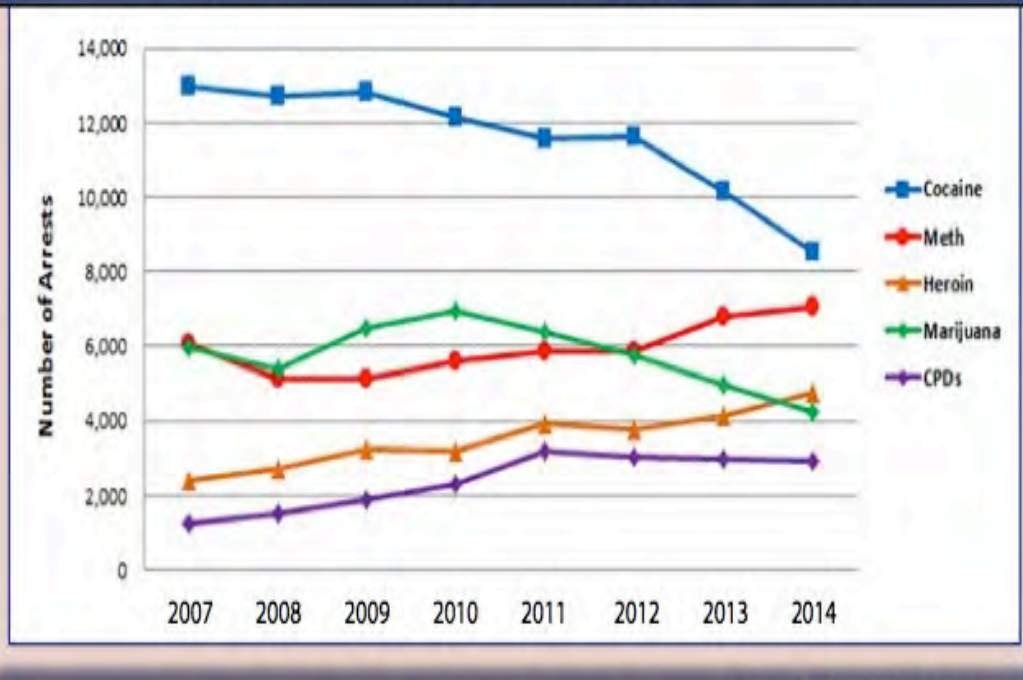
SOURCE: Substance Abuse and Mental Health Services Administration. *Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings*. NSDUH Rockville, MD, 2011.

**OF PEOPLE WHO
NEED TREATMENT**



do not receive it

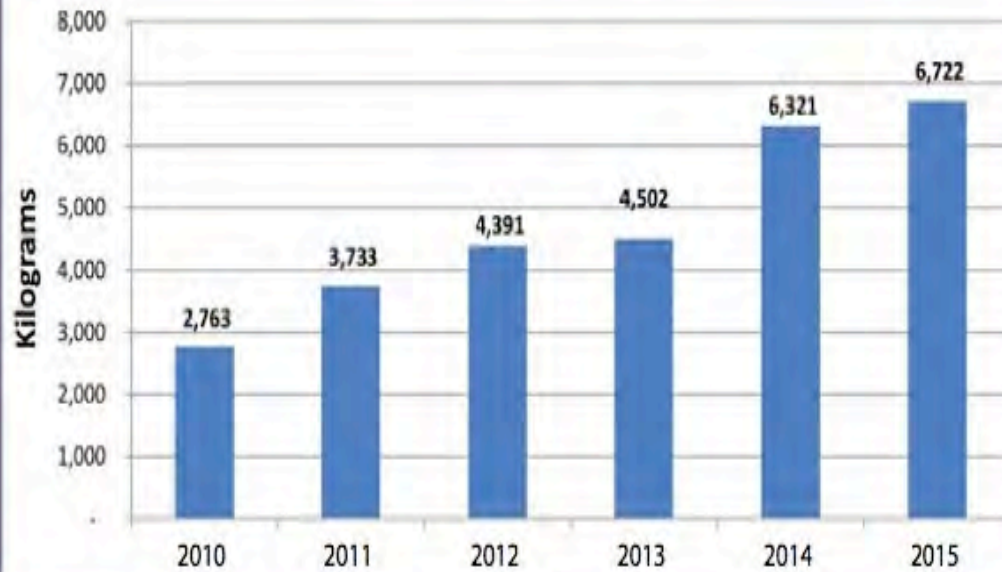
(U) Chart 3. DEA Arrests, By Illicit Drug Type, 2007 to 2014



Source: Drug Enforcement Administration

CPDs= controlled Rx drugs

(U) Chart 4. Heroin Seizures in the United States, 2010 to 2015



Source: National Seizure System

Addressing a drug epidemic:

- **Law enforcement/curtail supply**
- **Prevention**
- **Access to evidence-based addiction treatment services**

Addressing the OPIOID epidemic:

Changes medical practice:

- Require education about addiction and pain
- Screening for SUDs
- Develop new pain management tools
- Rx monitoring programs

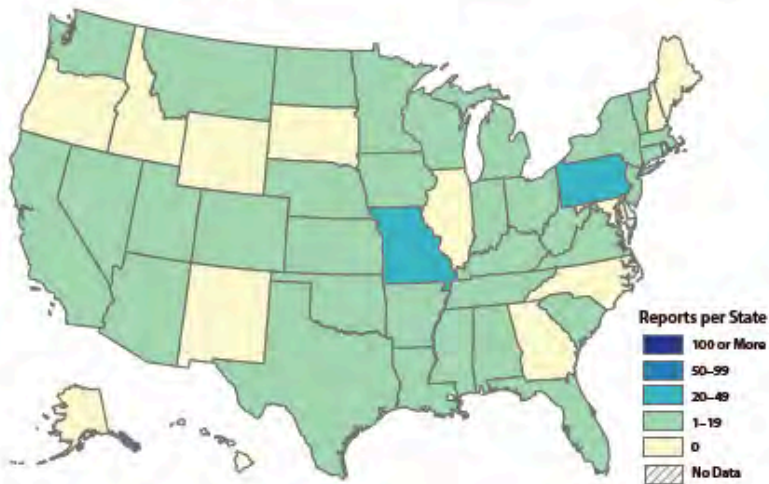


**RELATED
NEWS**

Fentanyl NFLIS reports

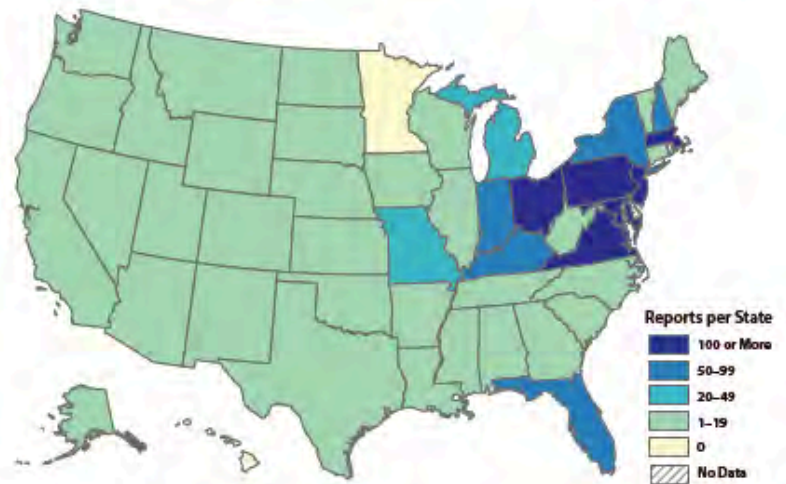
2009

Figure 5 Fentanyl reports in NFLIS, by State, January–June 2009



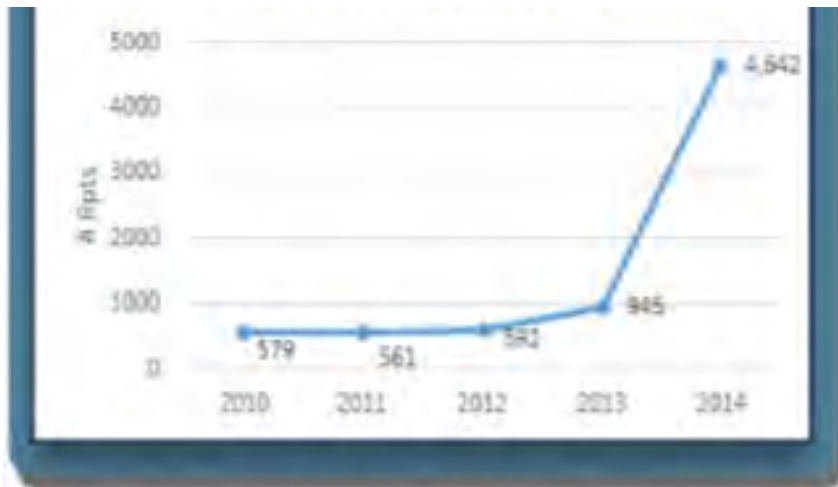
2014

Figure 6 Fentanyl reports in NFLIS, by State, January–June 2014

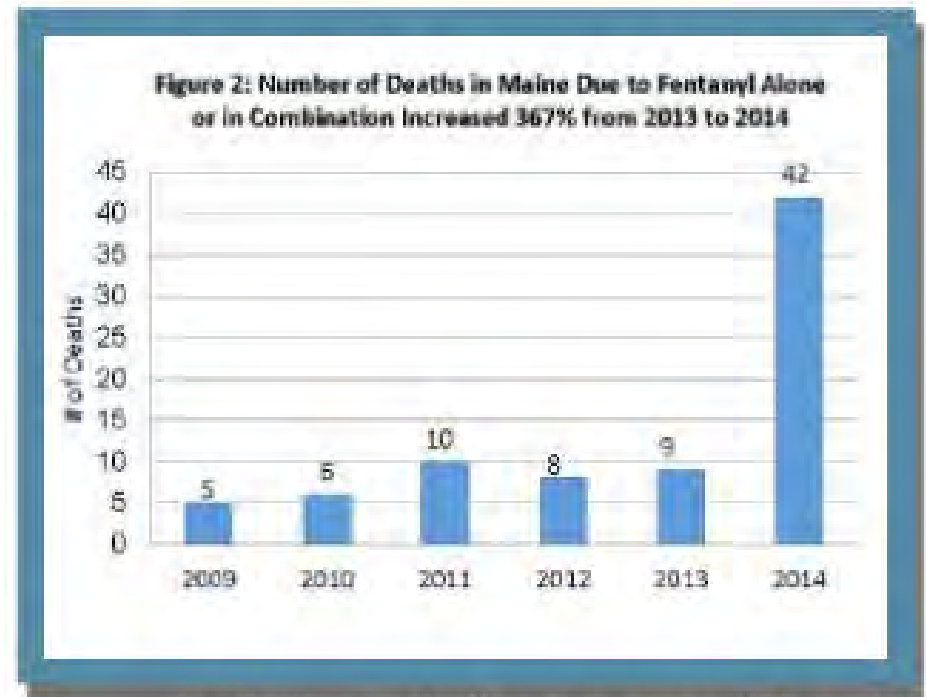


Fentanyl Deaths in MAINE

Fentanyl seizures increased almost 400% from 2013 to 2014



Source: DOJ, DEA. NFLIS 2010, 2011, 2012, 2013, & 2014 Annual Report.



80% of Fentanyl seizures came from 10 states: Florida, Kentucky, Ohio, Maryland, New Hampshire, New Jersey, Maryland, Massachusetts, Pennsylvania and Virginia (CDC, 2015).

Counterfeit Pharmaceuticals

Counterfeit pharmaceuticals are fake products manufactured illegally in clandestine labs that resemble legitimate pharmaceutical drugs.

These synthetic opioids in tablets and powders dramatically increase the risk of overdose among people using them because their actual ingredients and dosage amounts are unknown.

Reports of counterfeit Rx drugs in the US and Canada include OxyContin[®] tablets, Percocet[®] tablets, Xanax[®] tablets, and Norco[®] tablets.

These tablets often contain a synthetic opioid different from the active substance users believe is present.

Novel synthetic opioids that have been used in these products are fentanyl and fentanyl analogues.

Other substances that have been used or might be used include **W-18, U-47700, AH-7921 and MT-45.**

Contact: DEA Public Affairs (202) 307-7977

DEA Issues Carfentanil Warning to Police and Public
Dangerous opioid 10,000 times more potent than morphine and 100 times more potent than fentanyl

SEP 22, 2016 (WASHINGTON) –

DEA has issued a public warning to the public and law enforcement nationwide about the health and safety risks of carfentanil. Carfentanil is a synthetic opioid that is 10,000 times more potent than morphine and 100 times more potent than fentanyl, which itself is 50 times more potent than heroin. DEA, local law enforcement and first responders have recently seen the presence of carfentanil, which has been linked to a significant number of overdose deaths in various parts of the country. Improper handling of carfentanil, as well as fentanyl and other fentanyl-related compounds, has deadly consequences.

Contact: DEA Public Affairs (202) 307-7977

DEA Issues Carfentanil Warning to Police and Public
Dangerous opioid 10,000 times more potent than morphine and 100 times more potent than fentanyl

SEP 22, 2016 (WASHINGTON) –

“Carfentanil is surfacing in more and more communities.” said DEA Acting Administrator Chuck Rosenberg. “We see it on the streets, often disguised as heroin. It is crazy dangerous. Synthetics such as fentanyl and carfentanil can kill you. I hope our first responders – and the public – will read and heed our health and safety warning. These men and women have remarkably difficult jobs and we need them to be well and healthy.”

Carfentanil

Exercise extreme caution.

Be aware of any sign of exposure. Seek IMMEDIATE medical attention.

Be ready to administer naloxone in the event of exposure.

Remember that carfentanil can resemble powdered cocaine or heroin.

Carfentanil



OTHER NEWS

Kratom

Kratom a Southeast Asian plant often used to self-treat opioid withdrawal, chronic pain, anxiety, and PTSD. Also used recreationally.

Kratom is being studied at Columbia University, Memorial Sloan Kettering Cancer Center, and the UCSF. It appears to cause less respiratory depression than opioid painkillers.

Kratom

- DEA reconsidered its ban on the herbal supplement kratom
- More public comment period



CHEMICAL FREE - ALL NATURAL



KRATOM
Mitragyna Speciosa
5 Jumbo Capsules
Maeng Da Powder

Maeng Da Mitragyna Speciosa
capsules with



OTHER NEWS

Synthetic drugs

- Manufactured in China
- Sold online
- Labeled “not for human consumption”
- Unknown chemical compounds
- Unknown & unpredictable effects
- State and Federally banned
- Chemists develop new compounds
- DEA reports 5 - 6 new ones /month

“Bath Salts”

3,4-Methylenedioxyamphetaminone

Substituted cathinones

- “Molly”
- Methylone
- MDPV
- FLAKKA

Produce effects like MDMA
and amphetamines

“Research chemicals”

- Depicted as research chemicals to be used by fellow researchers
- Most contain phenylethylamines – long-acting hallucinogens
- 2-CB “Nexus”
2C-E “Europa”
2C-I/2 C-T-7,
NBOMe.

Can result in **“excited delirium”** which involves psychotic or violent behavior, kidney failure and an extreme increase in body temperature.

"These are really guinea-pig drugs, and the population that's now taking what they think is MDMA is consuming literally poisons."

Jim Hall

Nova SE University

Ft Lauderdale, FL

OTHER NEWS

Tipping Point =

The critical **point** in a situation, process, or system beyond which a significant and often unstoppable effect or change takes place.

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Outside the Pan



*Carol
Falkowski*

Meatloaf in a League of Its Own



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This beer's served warm.



Meat n' Potato Beer
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