

Decriminalization of Marijuana and Potential Impact on CMV Drivers



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Director

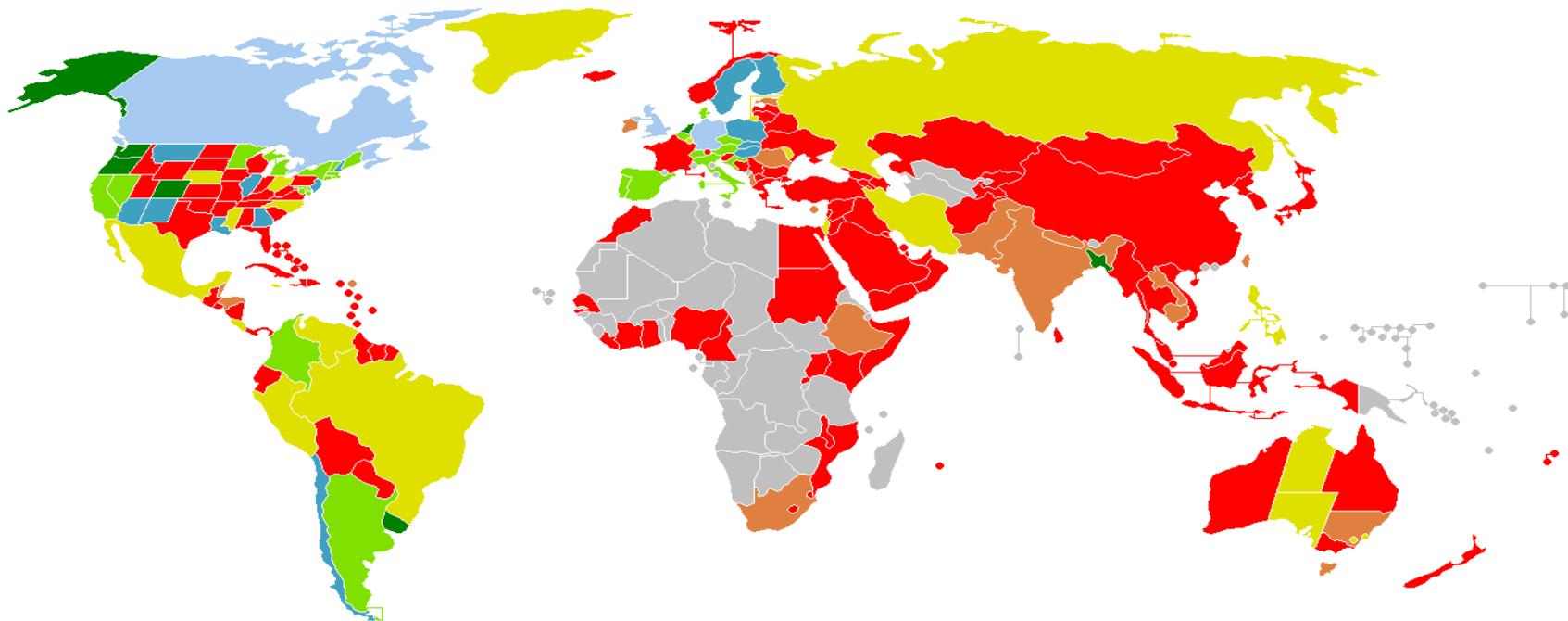
Washington Traffic Safety Commission

November 29, 2018

Denver, Colorado

**TARGET
ZERO** 

Global Perspective



- Both medical and recreational use legal
- Medical use legal, recreational use decriminalized
- Medical use legal, recreational use illegal, but law is often unenforced
- Medical use legal, recreational use illegal
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- Both medical and recreational use illegal, but law is often unenforced
- Both medical and recreational use illegal
- No information

Inhaling - Pulmonary

Smoking



Vaporizing



Dabbing



Inhaler



Oral - Digestive

Edibles



Capsules



Raw Marijuana



Trans mucosal – sublingual, intranasal, rectal, ocular

Tincture



Lozenges



Spray - oral/nasal



Suppository



Transdermal



No More of These...





Collaboration and Research

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

Signs and Symptoms of Marijuana Use

Relaxation

Euphoria

Relaxed Inhibitions

Disorientation

Altered time & distance perception

Lack of Concentration

Impaired Memory & comprehension

Jumbled thought formation

Drowsiness

Mood changes, including panic and paranoia with high dose

Heightened senses

Body tremors (Major muscle groups: quads, gluts, and abs)

Eyelid tremors

Red, Bloodshot eyes

Possible GVM or green coating on tongue

Dilated pupils

Marijuana and Alcohol Use in Washington State

Among all drivers involved in fatal crashes 2008-2016, one in three are positive for alcohol and/or drugs. This number is likely under-reported since not all drivers in fatal crashes are actually tested for alcohol and drugs (60 percent of fatal crash involved drivers were tested for alcohol and drugs 2008-2016).

Among drivers in fatal crashes 2008-2016 that tested positive for alcohol or drugs, 44 percent tested positive for two or more substances (poly-drug drivers). The most common substance in poly-drug drivers is alcohol, followed by THC. Alcohol and THC combined is the most common poly-drug combination.

Although research-based estimates of the risks posed by THC have varied greatly, all studies included in this review agree that giving alcohol to drivers who are already compromised by THC will only further inflate the level of impairment and crash risk. The deadly consequences of combining these two impairing substances and driving are already apparent in Washington fatal crash data.

For the first time in 2012, poly-drug drivers became the most prevalent type of impaired drivers involved in fatal crashes. Since 2012, the number of poly-drug drivers involved in fatal crashes have increased an average of 15 percent every year.

By 2016, the number of poly-drug drivers were more than double the number of alcohol-only drivers and five times higher than the number of THC-only drivers involved in fatal crashes.

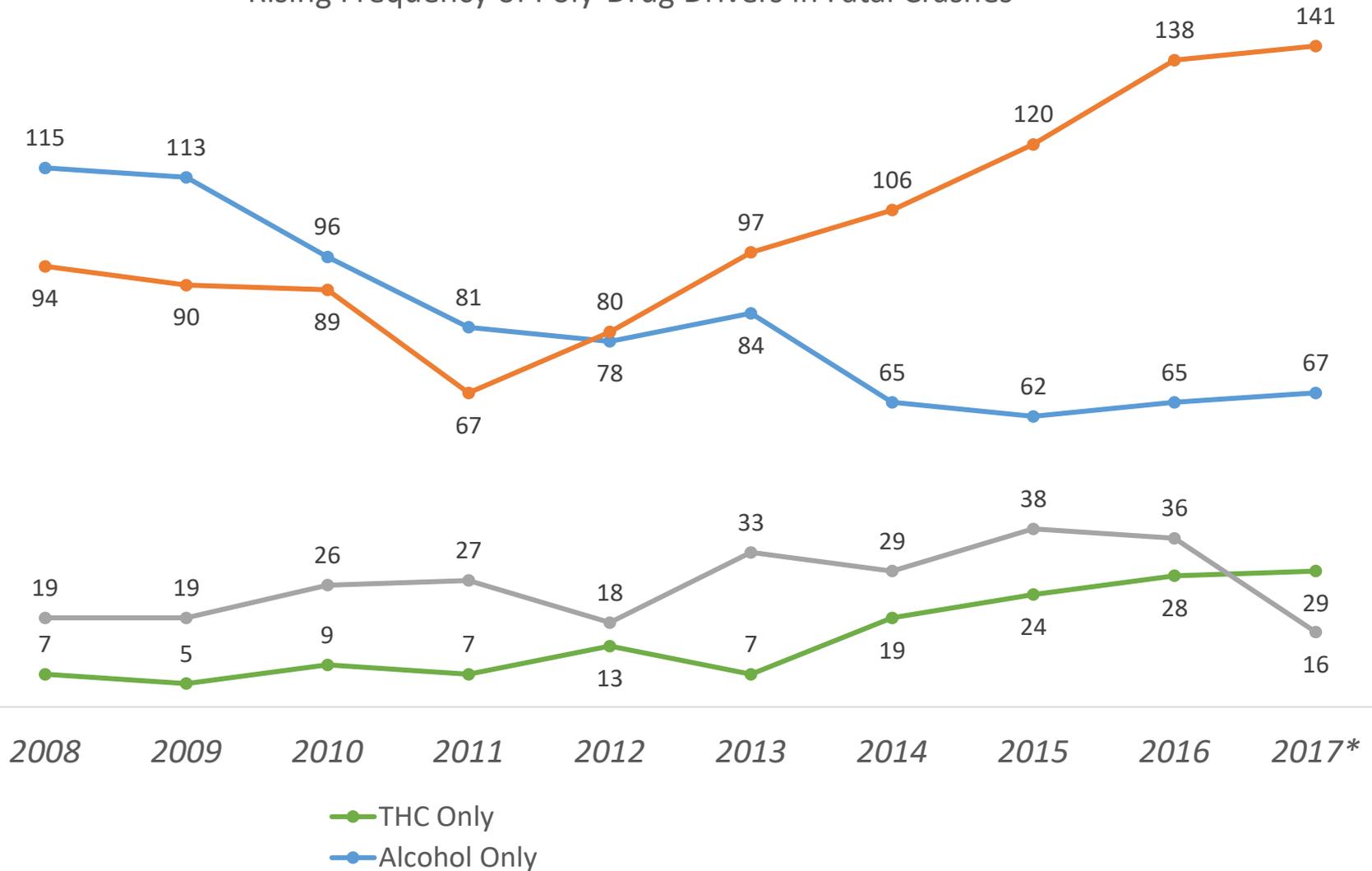
According to the biological results of Washington's Roadside Survey, nearly one in five daytime drivers may be under the influence of marijuana, up from less than one in ten drivers prior to the initiation of marijuana retail sales.

Legalization in Canada Impacts for CMV



Poly-Drug Driving Rising

Rising Frequency of Poly-Drug Drivers in Fatal Crashes

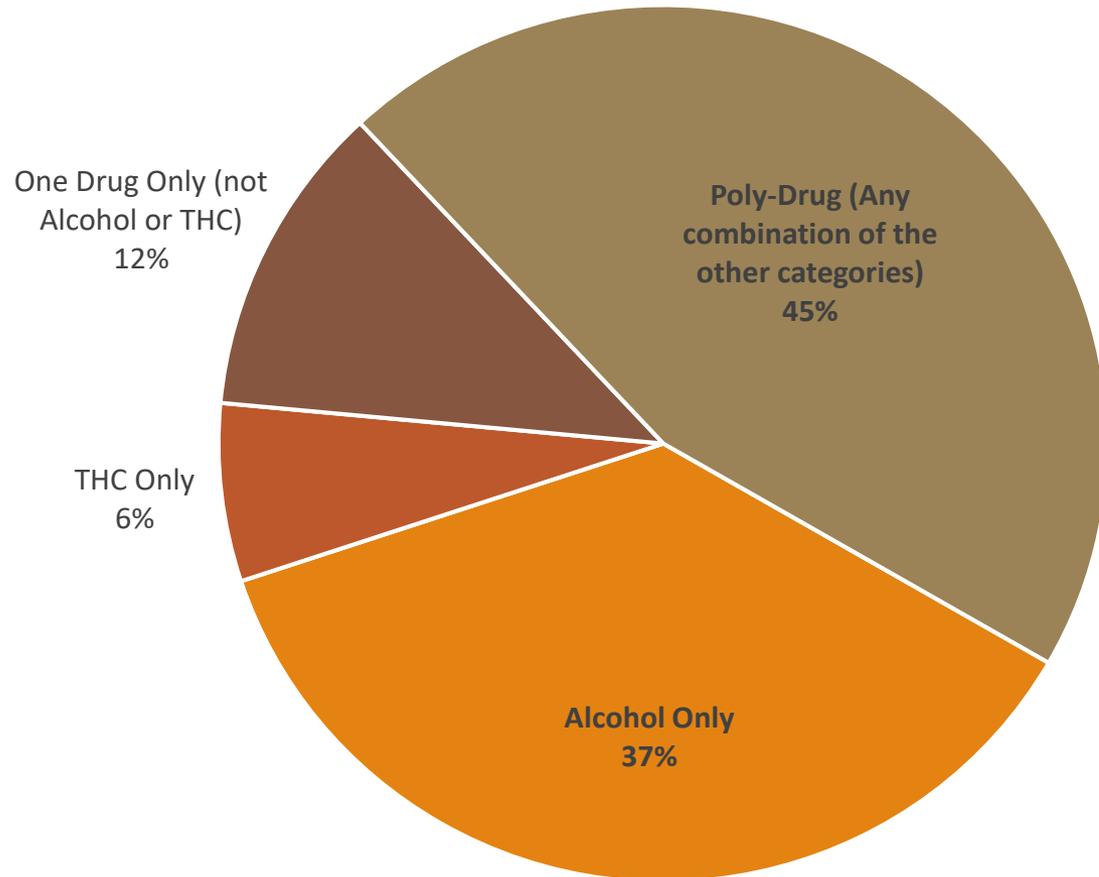


Poly-drug Drivers Most Common Impaired Driver

Alcohol and Poly-Drug Use in Fatal Crash-Involved Drivers Testing Positive for Alcohol and/or Drugs, 2008-2017pre

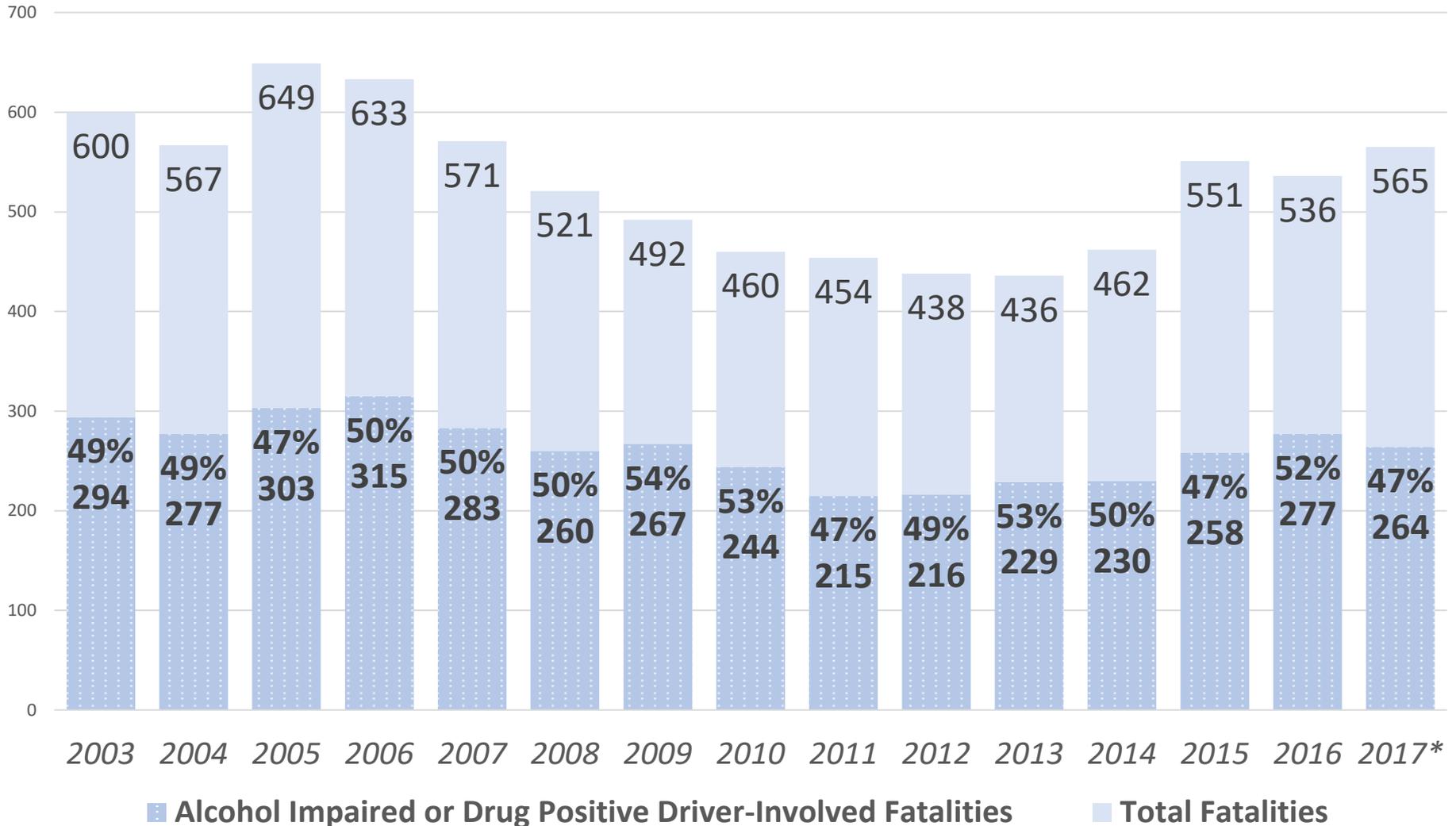
The most common poly-drug combination is alcohol and marijuana (THC)

One quarter of poly-drug drivers in fatal crashes are positive for both alcohol and THC.



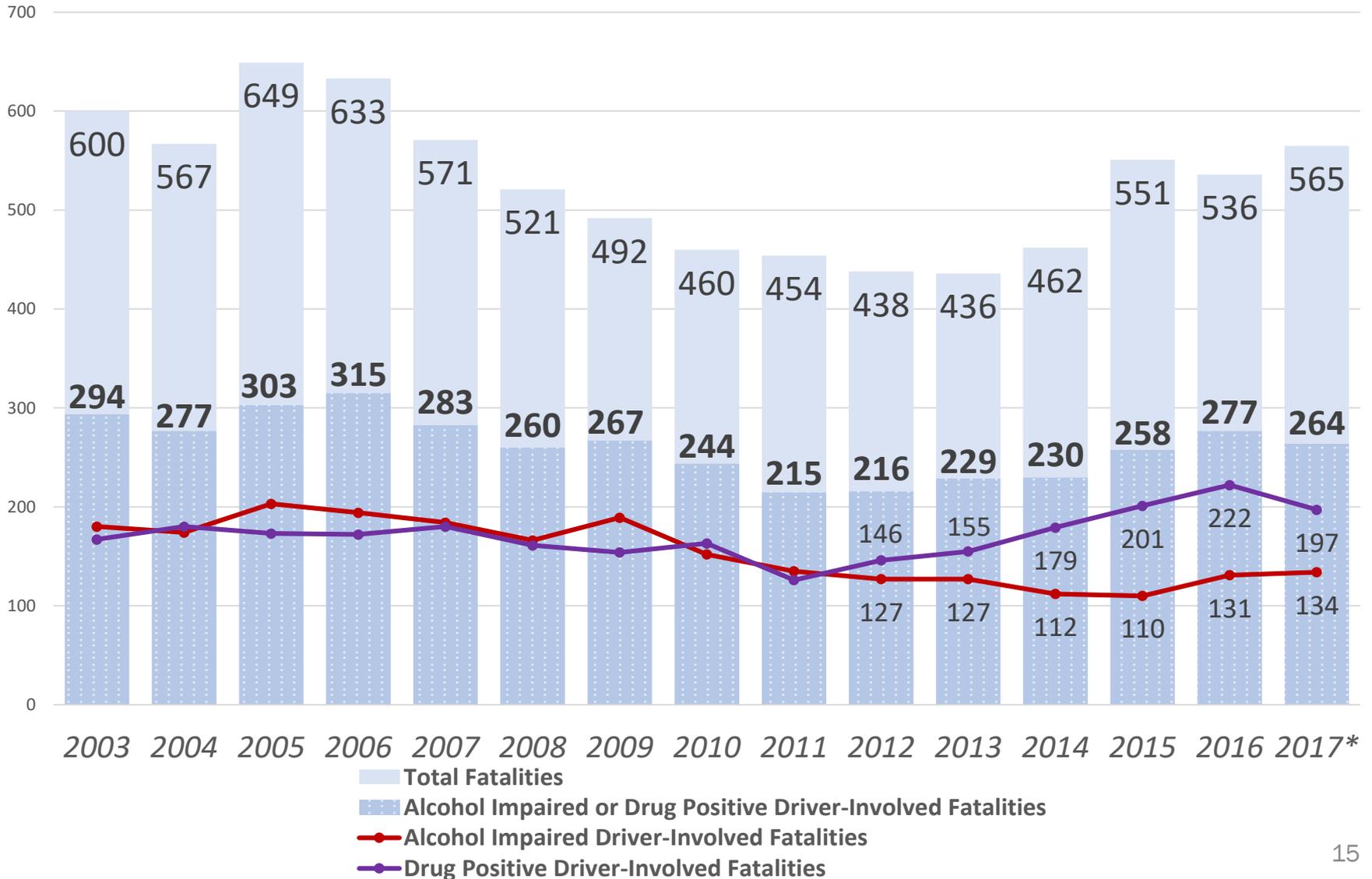
Impairment Involved in 50% of Traffic Fatalities

Alcohol Impaired and Drug Positive Driver-Involved Fatalities in Washington State



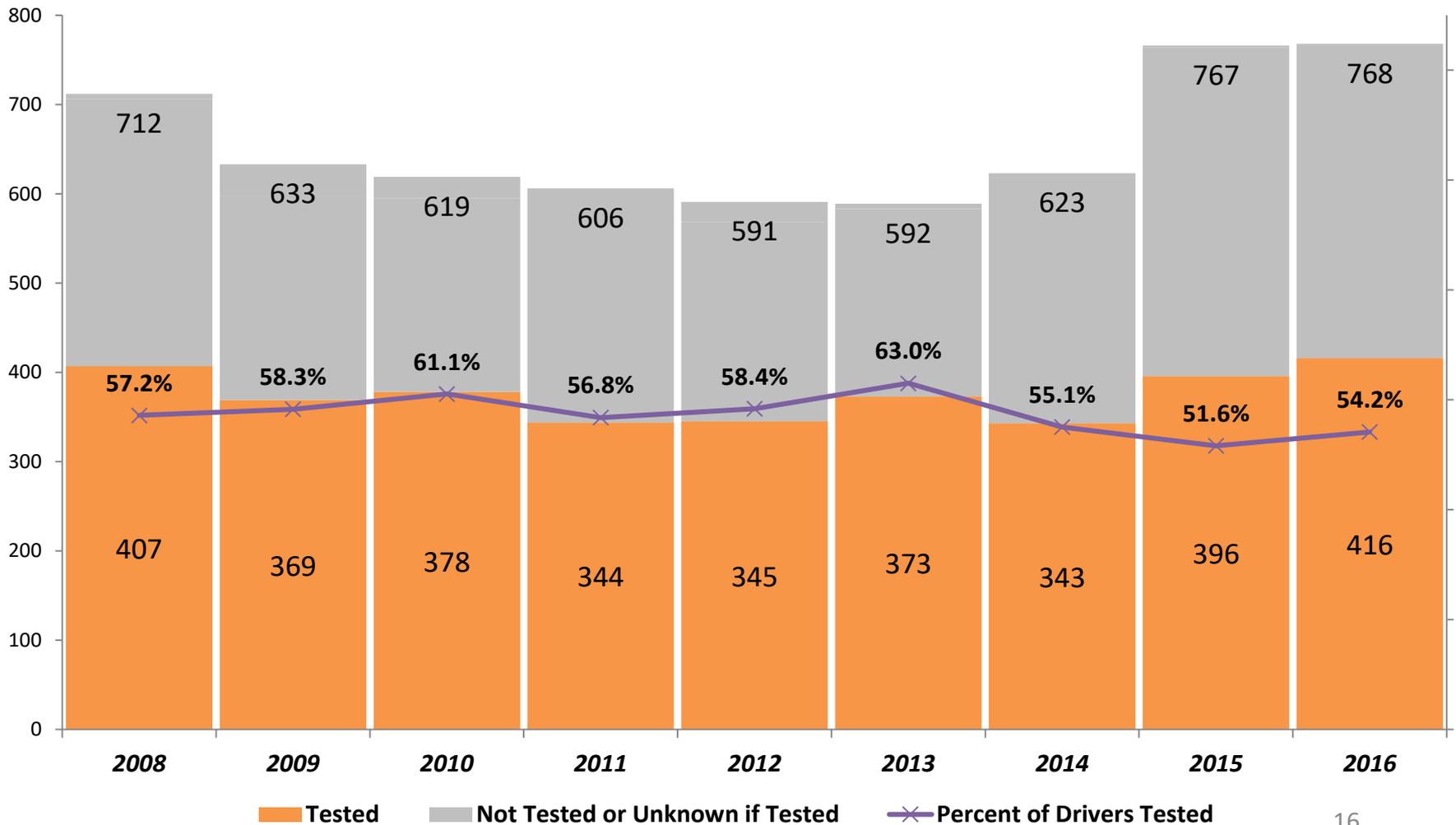
Drug Positive Drivers Increasing

Alcohol Impaired & Drug Positive Driver-Involved Fatalities in Washington State



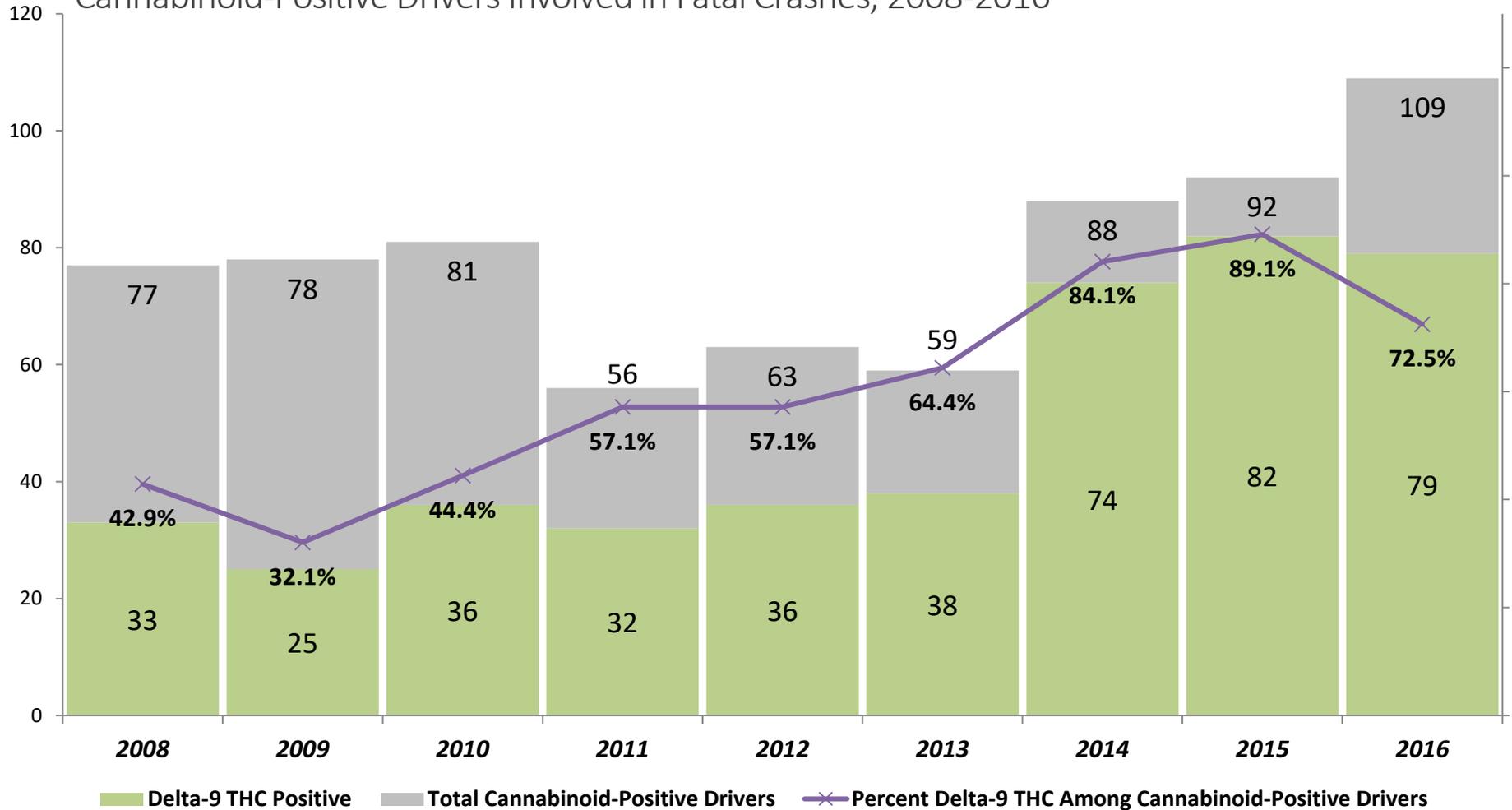
Drug Testing Rates Steady

Drug Testing Among Drivers Involved in Fatal Crashes, 2008-2016

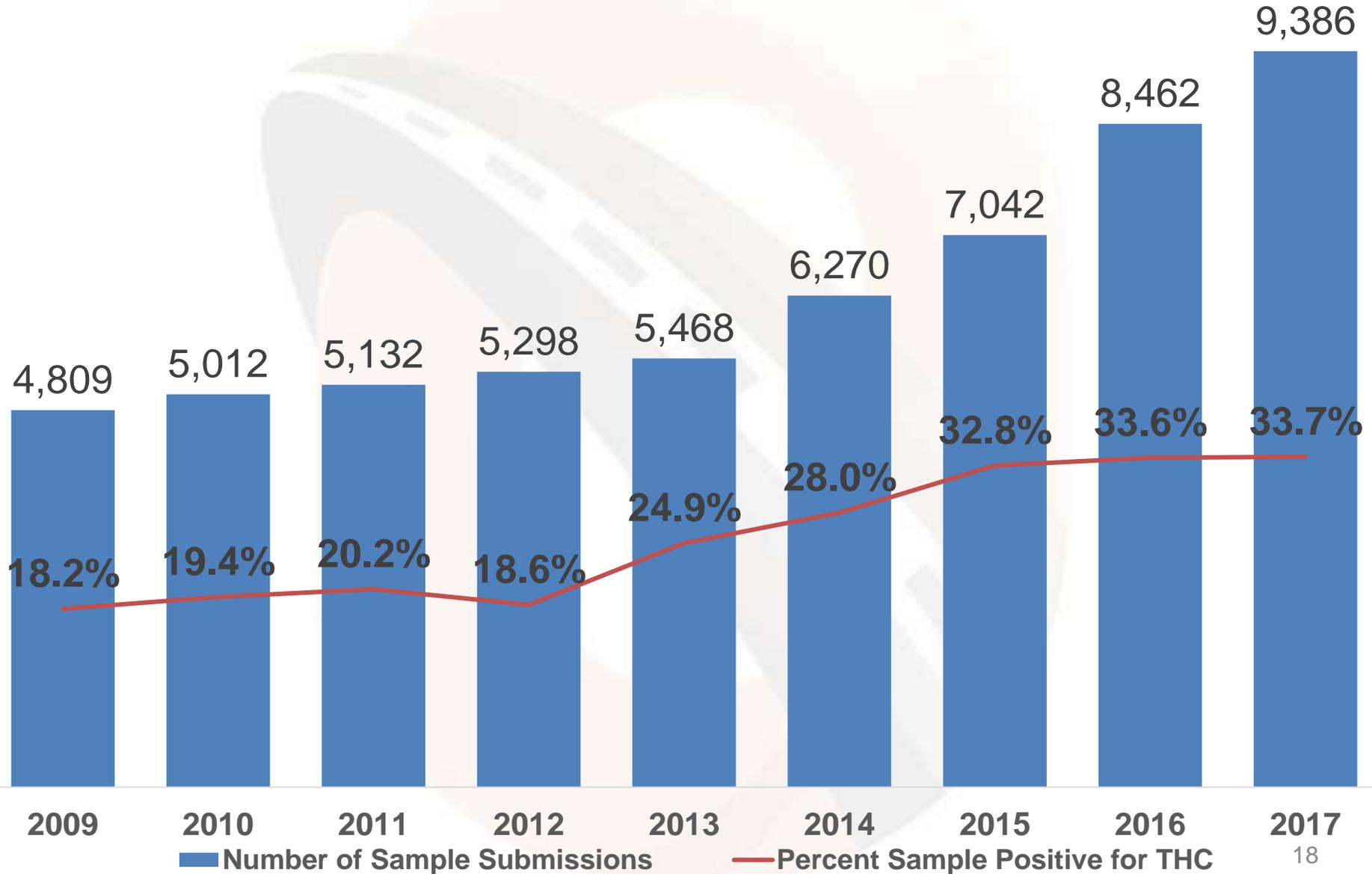


Marijuana Use in Drivers Increasing

Cannabinoid-Positive Drivers Involved in Fatal Crashes, 2008-2016

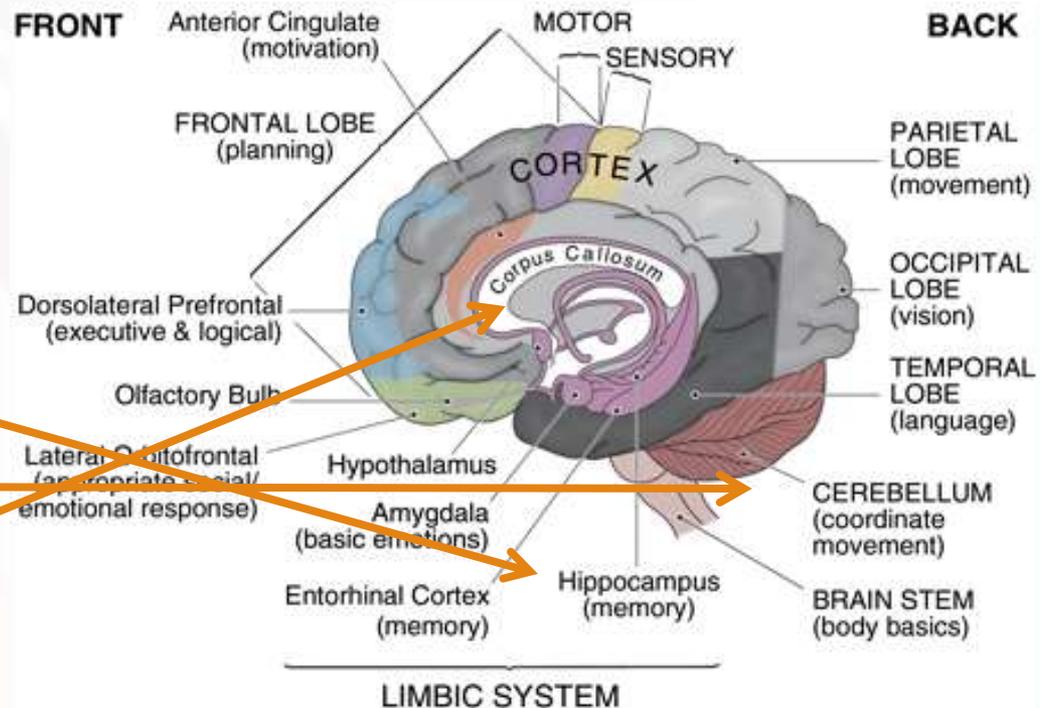


Washington State Patrol - Toxicology Lab Blood Sample Submissions for DUI Investigation



Signs and Symptoms of MJ Impairment

THC and similar compounds bind with receptors (CB1 and CB2) in the brain and other parts of the body affecting the function of the **hippocampus** (short-term memory), **cerebellum** (coordination) and **basal ganglia** (unconscious muscle movements).



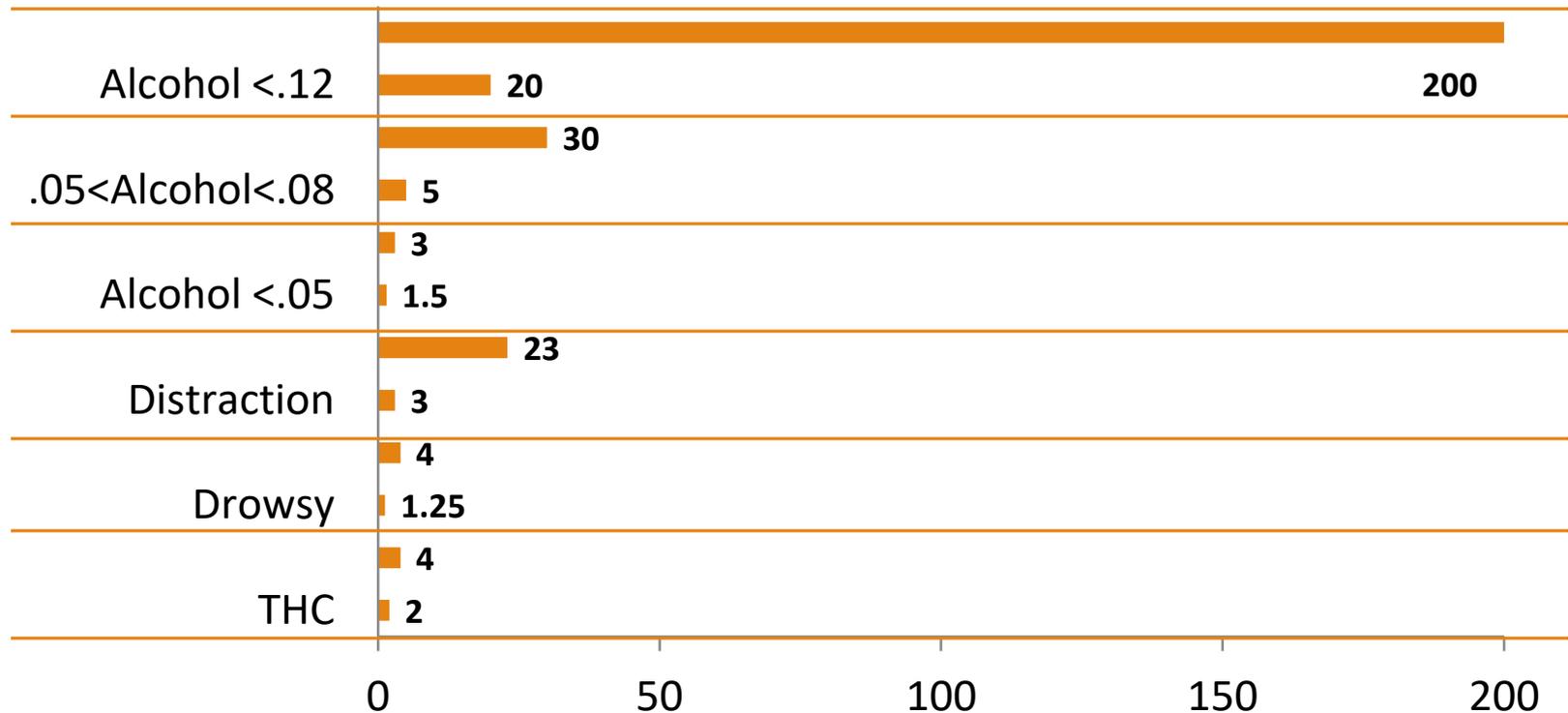
- Marijuana is a lipid (fat) soluble and tends to stay in the brain
- Alcohol is water soluble - blood

Estimated - Duration of Effects After Smoking or Ingesting THC

	Peak Effects (After last smoking episode)	Duration of Effects	Behavioral and psychological effects return to baseline	Residual Effects
Smoked	1-30 minutes	2-3 hours	3-5 hours	Up to 24 hours
Oral/Edible	1-3 hours	4-8 hours	Dose Dependent	Dose Dependent

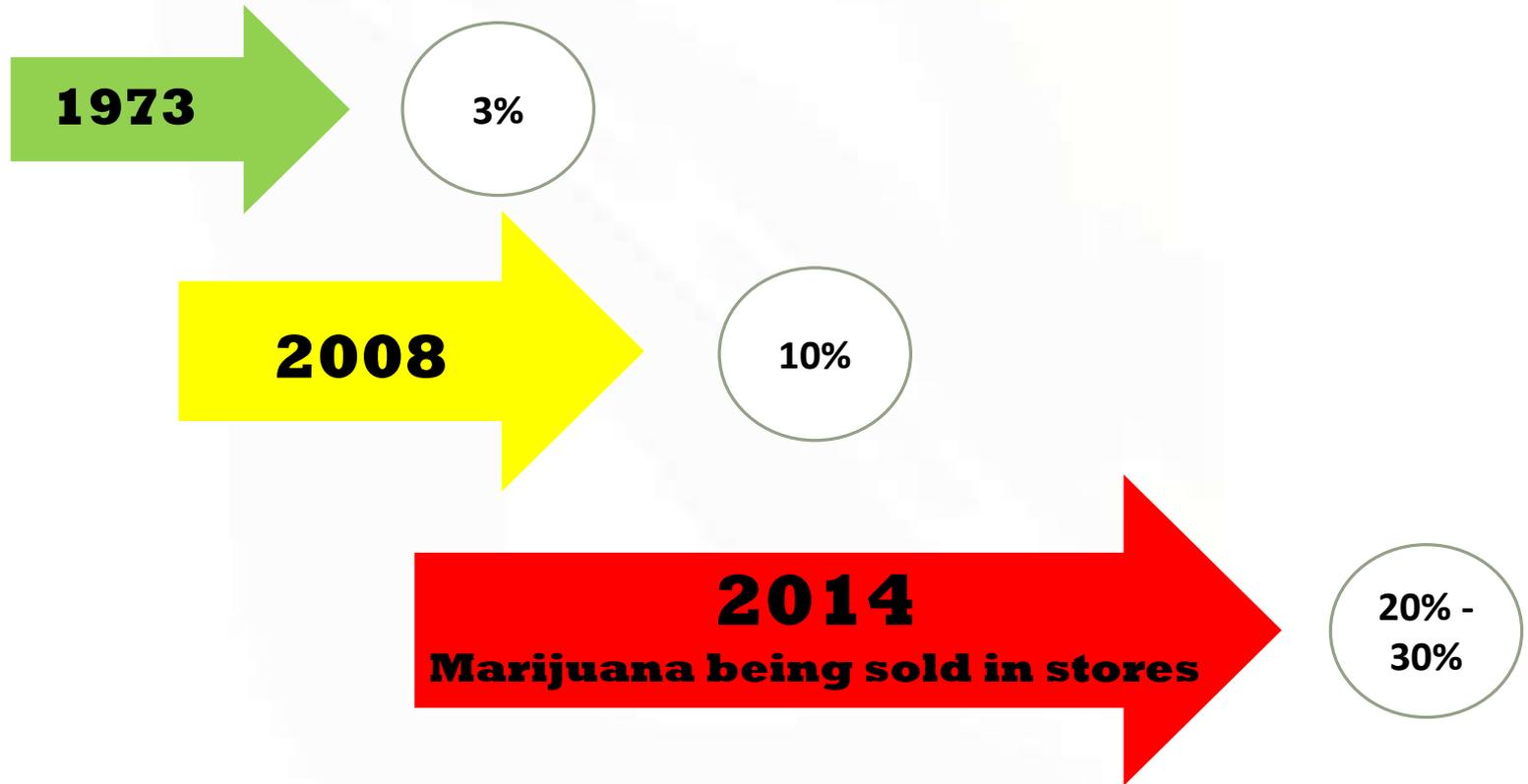
Note: Additional research is needed to understand all methods of ingestion and the effects, durations, and long term-impacts

Does Marijuana Use Increase Crash Risk??



Review of literature revealed varying crash risk and difficult with THC. Research could be under estimating risk since retail marijuana has far higher THC concentration levels.

“Not Your Daddy’s Woodstock Weed”



THC Potency Used in Most Government Studies

3 - 6 %
THC



Challenges and Impacts on CMV

Data – lack of good data on CMV crashes with DRE in WA and Nationally.

Public indifference on the issue of drugged driving vs. Alcohol impairment

Medical Marijuana– have all states adopted federal rules for Intrastate CMV operators?

49 CFR 382.60 – Supervisors required to attend 60 min of training for symptoms of alcohol abuse and another 60 min for controlled substances. A singular event no refresher.

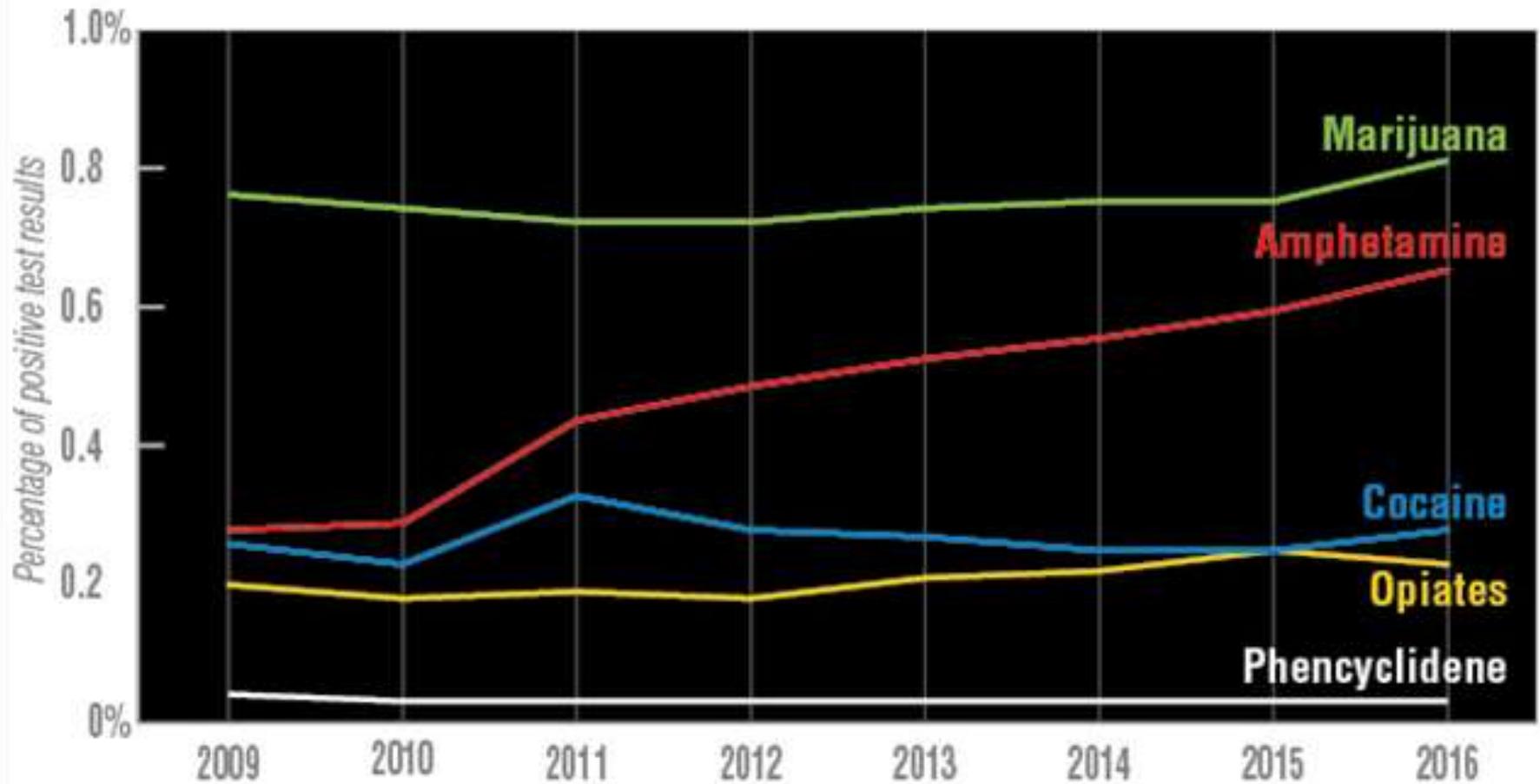
- Is this enough? Refresher? Compare to LE? This training should have considerations for expansion with high prevalence of drugged driving.

CVEO – trained in signs and symptoms (ARIDE or modified DRE). Can they identify potentially impaired drivers?

- Place a DRE at the scale house and have them interact with the drivers and do evaluations on suspected drivers.

National studies are focused on PV with little to no attention on CMV operators.

U.S. DOT Drug Testing Data (2009-2016)*



*Positive rates based on number of tests conducted each year, which can vary from year to year."

Source: U.S. DOT

This includes: random, pre-employment, post-crash, reasonable suspicion, and return-to-duty drug tests.

Transportation Topics – Eric Miller – Positive Drug-Test Rate up to 7-Year High, DOT Says June 2017

Drug Evaluation and Classification Program (DECP) States by Year Number of Drug Recognition Experts (DREs) per State



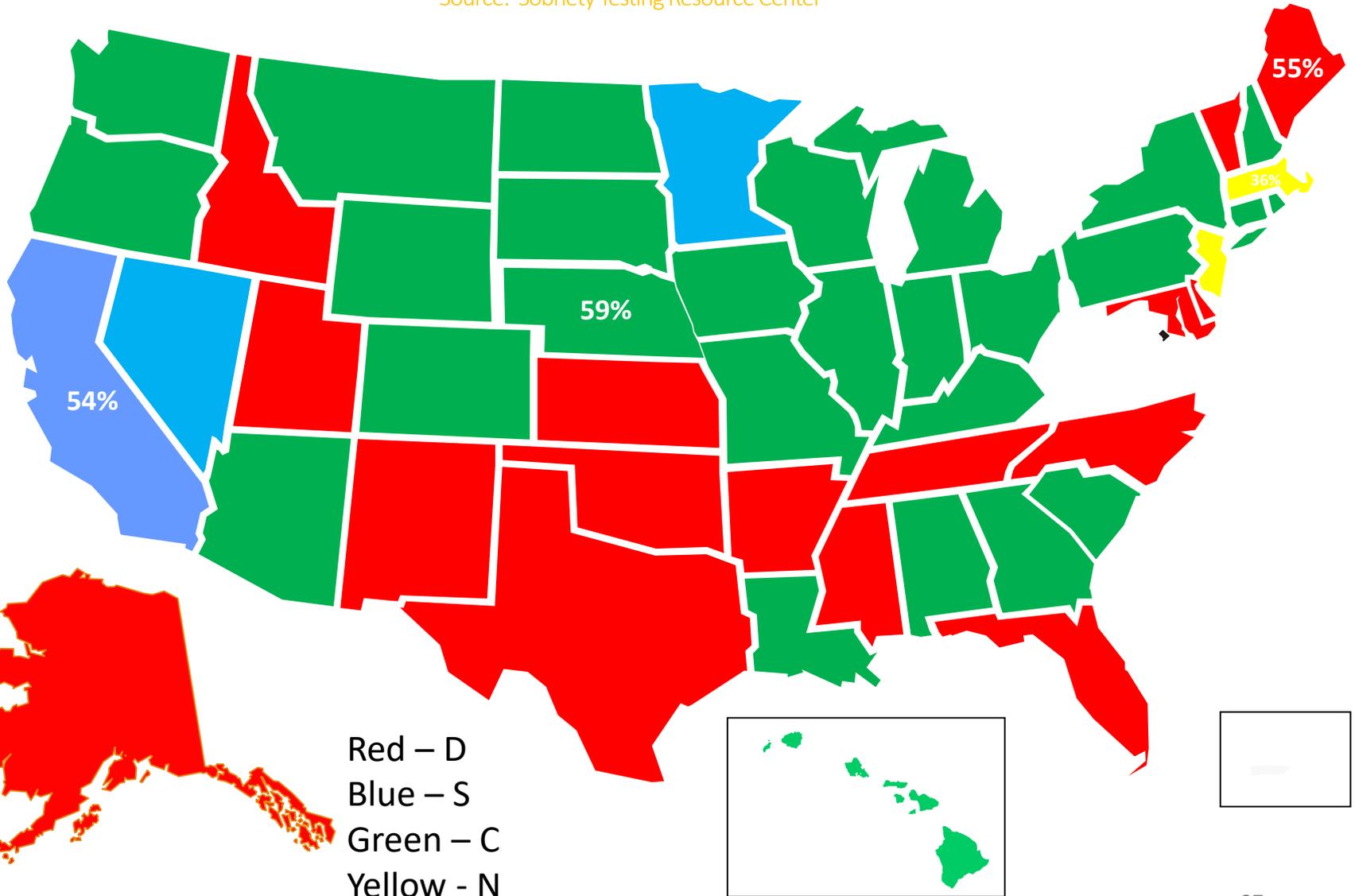
*LAPD DRE program - 1980

As of December 2016



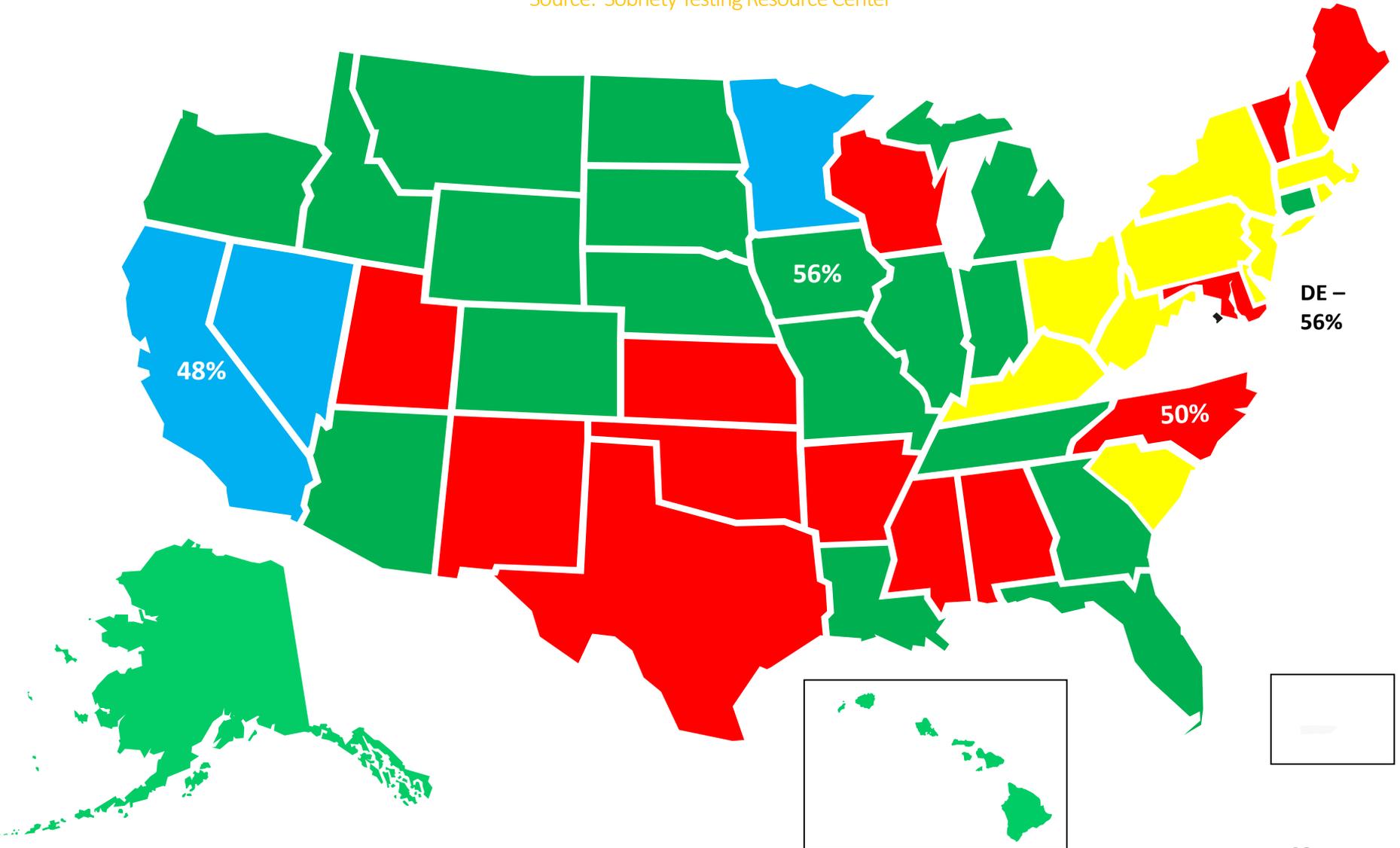
Leading Drug Per State / 2003-2012

Source: Sobriety Testing Resource Center



Leading Drug Per State / 2013-2014

Source: Sobriety Testing Resource Center



DRE Evaluations on CMV

Tox	Total Number (Enforcement Evaluations from 01-01-2014 to 12-31-2016 where Vehicle Type is Commercial)
Stimulants	59
Cannabis	45
Narcotics, Depressants	28
Depressants	25
Narcotics	25
Stimulants, Cannabis	14

Source: NHTSA Sobriety Testing Resource Center - DRE Tracking Database

CMV Enforcement Alcohol Violations WA

Year	Total stops	Drivers OOS
2012	47	44
2013	63	58
2014	68	61
2015	36	34
2016	64	64
2017	65	61

CMV Drugs in System or Vehicle WA

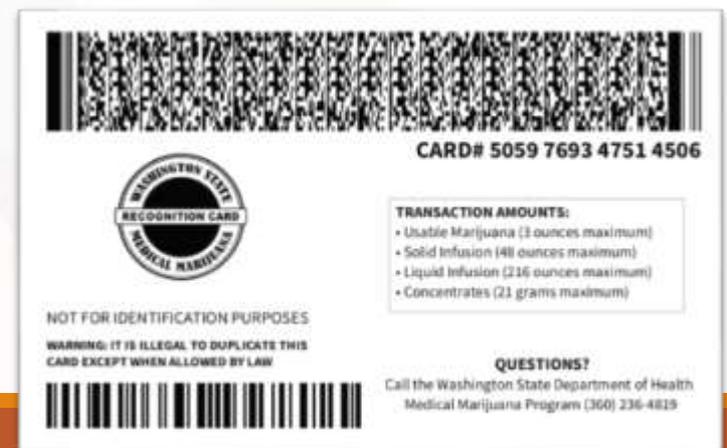
Year	Total stops	Drivers OOS
2012	14	12
2013	13	12
2014	13	9
2015	21	18
2016	24	24
2017	47	47

*Due to data limitations cannot separate out

Medical Marijuana Recognition Card

Under the new [medical marijuana law](#), recognition cards are required if patients and designated providers 21 and older wish to have access to the following benefits:

- Purchase products sales-tax free.
- Purchase up to three times the current legal limit for recreational users.
- Purchase high-THC infused products.
- Grow more than four plants in their residence.
- Have full protection from arrest, prosecution, and legal penalties, although patients will still have an affirmative defense.



Medical Marijuana – Qualifying Conditions

Under Section 16 of the Cannabis Patient Protection Act, the legislature finds that there is medical evidence that some patients with terminal or debilitating medical conditions may, under their healthcare professional's care, benefit from the medical use of marijuana.

<http://www.doh.wa.gov/YouandYourFamily/Marijuana/MedicalMarijuana>

Some of the conditions for which marijuana appears to be beneficial include, but aren't limited to:

- Nausea, vomiting, and cachexia associated with cancer, HIV-positive status, AIDS, hepatitis C, anorexia, and their treatments;
- Severe muscle spasms associated with multiple sclerosis, epilepsy, and other seizure and spasticity disorders;
- Acute or chronic glaucoma;
- Crohn's disease; and
- Some forms of intractable pain.

Humanitarian compassion necessitates that the decision to use marijuana by patients with terminal or debilitating medical conditions is a personal, individual decision, based upon their healthcare professional's professional medical judgment and discretion.

June 2014 Data Collection

Six counties, 5 locations

926 drivers eligible

97% (917) breath tests

96% (902) saliva

74% (711) blood

95% K & A surveys



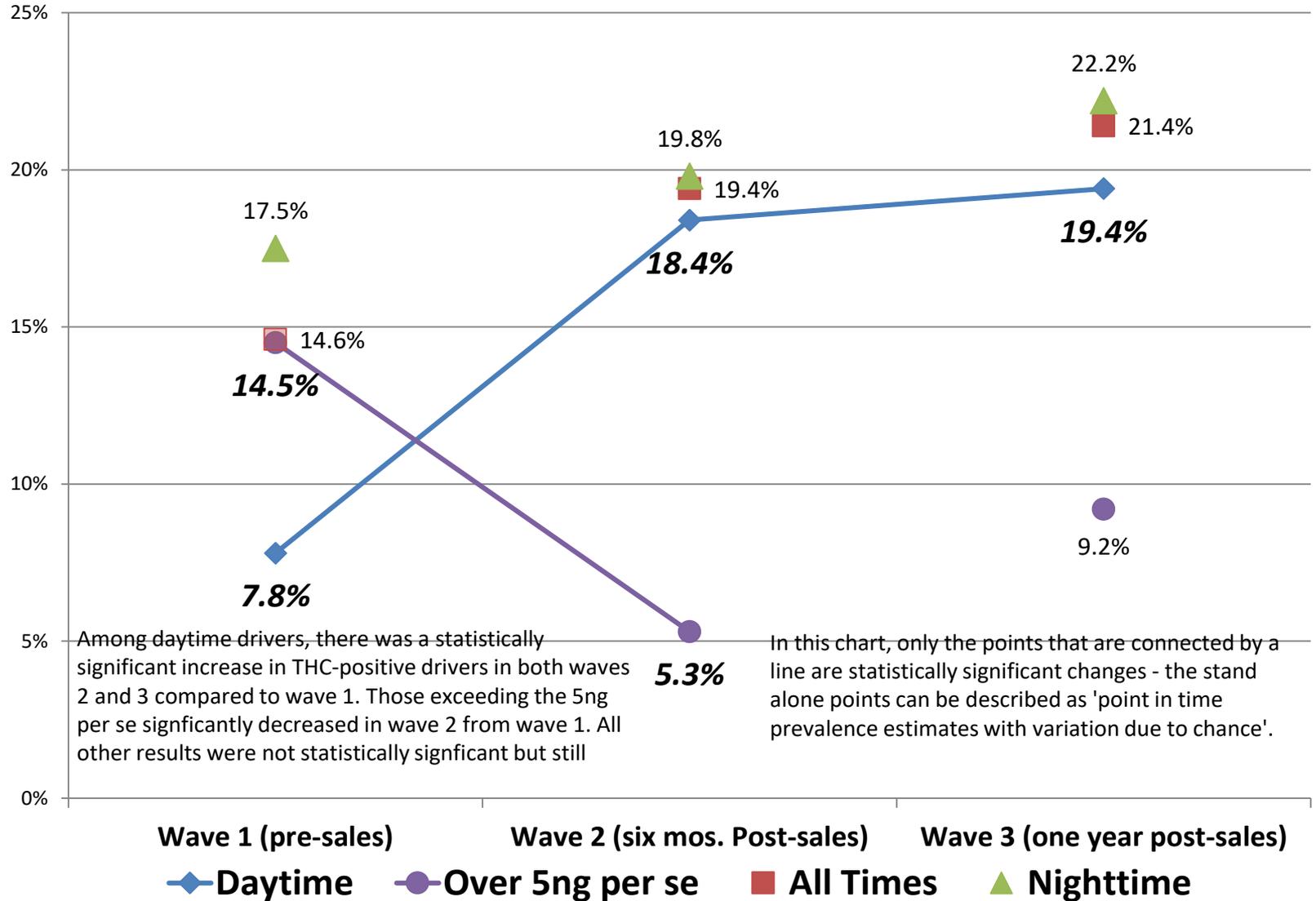
**Male drivers age 20 – 34
over-represented:**

*** 21% population**

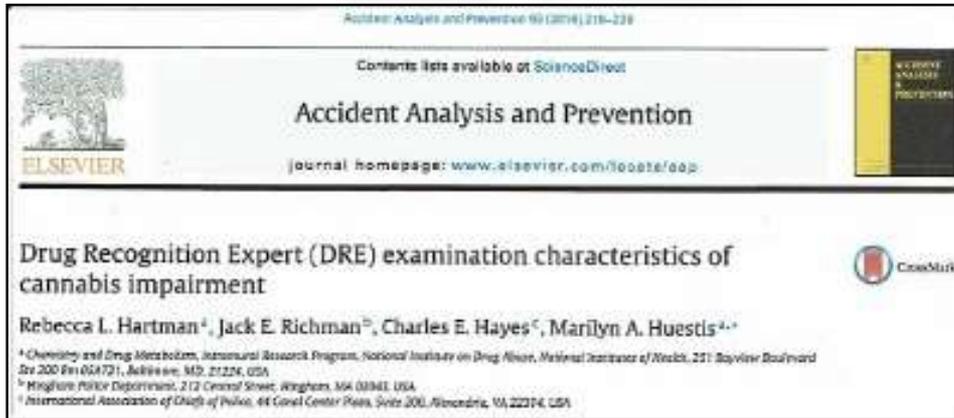
*** 45% survey sample**



Percentage of Washington Drivers THC-positive Before and After Recreational Marijuana Sales



“Drug Recognition Expert (DRE) Examination Characteristics of Cannabis Impairment” *FARS Analysis and Prevention, April 2016*

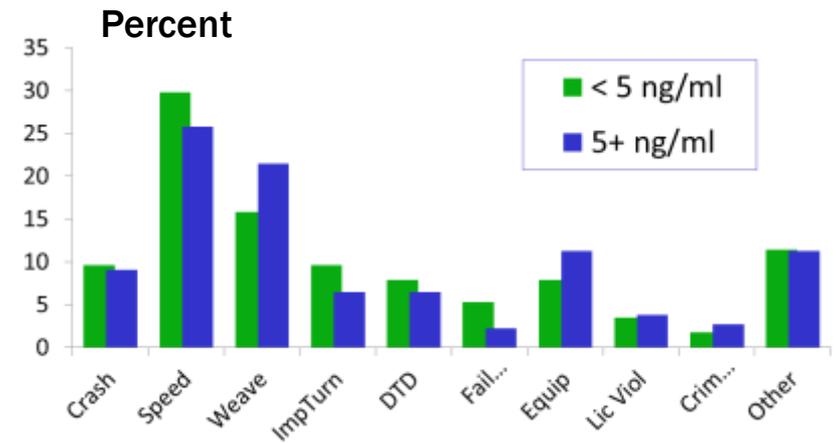
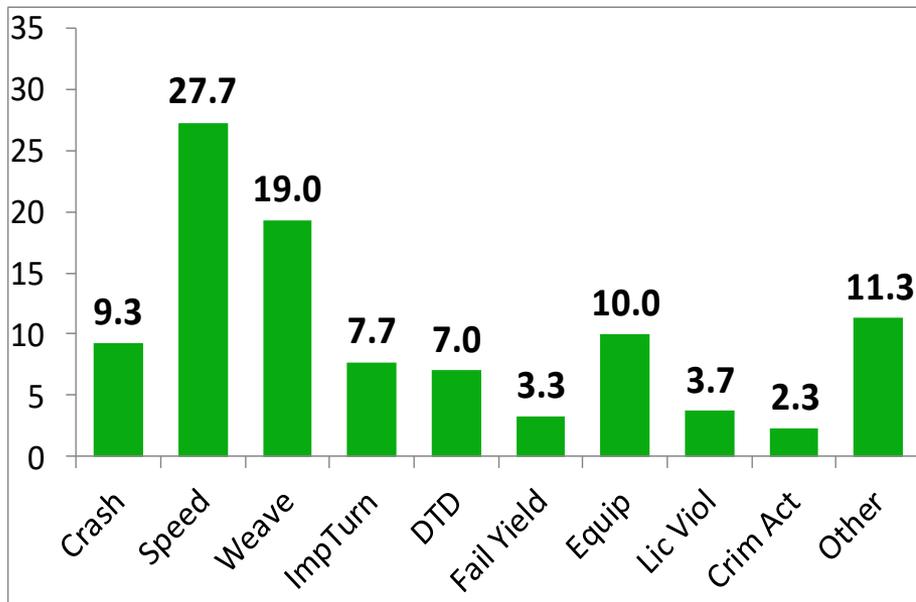


2014 FARS data revealed that speeding occurs in 35.8% of all fatal marijuana driving cases compared to 25.9% of no-alcohol or drugs cases.

Source: Crancer & Drum, *The Mercury News*, April 2016



Reason for the Traffic Stop



72% of cases involved one or more moving violations. (DTD – Disobeyed Traffic Device)

SHSO Grant Funds

Do you know the State Highway Safety Office? Director?

<http://www.ghsa.org/html/about/shsos.html>

Annual Traffic Safety Grants

- Competitive grant process or Assigned

Federal funds for impaired driving

- **402 Basic Grants**
- **405 (d) Impaired Driving**
 - SFSTs, ARIDE and DRE
 - Enforcement

Responsibility.org and Governors Highway Safety Association - Grant

Responsibility.org/GHSA has grants for Drugged Driving training efforts

Helped train an additional 2,000 officers

Responsibility.org is continuing the grant program in 2019 for DRE and ARIDE

Anticipating a large number of grant applications

- **Solid problem statements with data and information to support the need for funds**



Washington Impaired Driving Advisory Council

NHTSA Pilot Project

40 Representatives – multi-disciplinary

Prioritize DUI – DUID issues and challenges

Fund projects (State)

- BAC Fee \$250 of which \$75 goes to WTSC - \$1.4 Biennium

State funds for DRE call-out \$50k biennium

Saving lives through research and education



Prevalence of Marijuana Involvement in Fatal Crashes: Washington, 2010-2014

May 2016



MP1403946L, MW, Surta 2011 | Washington, DC 20051 | AAAFoundation.org | 202-438-5948

Saving lives through research and education



An Evaluation of Data from Drivers Arrested for Driving Under the Influence in Relation to Per se Limits for Cannabis

May 2016



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Car crashes rank among the leading causes of death in the United States.



Driving Under the Influence of Alcohol and Marijuana: Beliefs and Behaviors, United States, 2013-2015

May 2016



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Cannabis Use among Drivers Suspected of Driving Under the Influence or Involved in Collisions: Analysis of Washington State Patrol Data

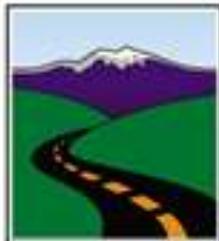
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