



Drug-Impaired Driving: What's New

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Today

- 1. GHSA drug study update**
- 2. Washington State studies**
- 3. Two NHTSA studies now underway**



DRUG- IMPAIRED DRIVING

A GUIDE FOR WHAT STATES CAN DO

April 2017 Update



**FOUNDATION FOR
ADVANCING ALCOHOL
RESPONSIBILITY**

What's in the Report

- ▶ **Definition:** what drugs can impair
- ▶ **Data:** problem size and characteristics
- ▶ **Science:** drug levels, impairment, and crash risk
- ▶ **Laws:** different types, what states have in place now
- ▶ **Enforcement:** SFST, DEC, oral fluid, blood testing
- ▶ **Prosecution and adjudication:** challenges and strategies
- ▶ **Training:** what's available and useful
- ▶ **Sanctions and treatment:** what's effective
- ▶ **Education:** what are states doing now
- ▶ **Recommendations for states**

Very Brief Background

▶ **Four drug types**

- Illegal, legal non-medicinal, prescription meds, OTC

▶ **Hundreds of drugs, more created daily**

- FARS has codes for 430 specific drugs or metabolites

▶ **FARS 2015, dead drivers, known test results**

- 43% with drugs; more than 1/3 of these were marijuana
- 38% with alcohol (any BAC)

▶ **NHTSA roadside survey 2013-14**

- 22.5% with drugs, both weekday days and weekend nights
- 13% with marijuana on weekend nights
- 8% with alcohol on weekend nights; 1.5% with BAC .08 or above

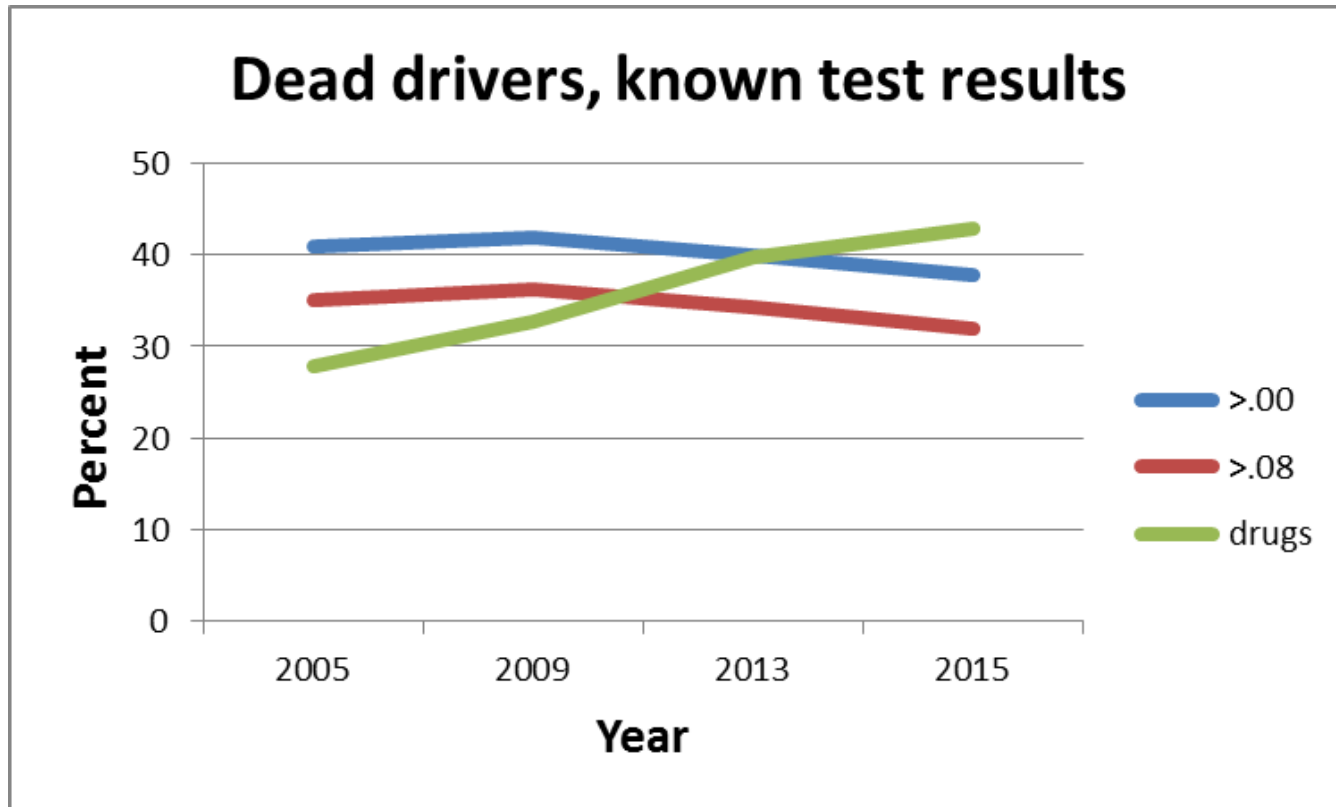


Very Brief Background

- ▶ **Any drug can impair – experimental studies**
 - Impairment can increase if drugs are used in combination or with alcohol
- ▶ **Drug presence ≠ impairment**
 - Some drugs dissipate rapidly while impairment remains; other drugs remain in the body long after impairment has dissipated
 - Wide ranges of drug concentrations in different individuals produce similar levels of impairment in experimental situations
- ▶ **Any drug can increase crash risk**
 - Good crash risk studies are difficult; lots of not-so-good studies
 - No equivalent of .08 BAC for any drug

What's New: Data

- ▶ Drug use increasing; alcohol decreasing



What's New: Marijuana Laws

- ▶ **Recreational marijuana now allowed in 8 states and DC**
 - Voters approved in CA, MA, ME, and NV in 2016
 - Previously legal in AK, CO, OR, WA, and DC
- ▶ **Medical marijuana now allowed in 28 states and DC**
 - Up from 23 in 2015
- ▶ **Marijuana use decriminalized in 21 states and DC**
 - Up from 20 in 2015; these include recreational states

What's New: Research

- ▶ **33 new studies cited in 2017 update**
 - Recent data on driver drug use, beliefs
 - Effects of recreational marijuana in CO and WA
 - Oral fluid drug test devices

What's New: Programs

- ▶ **Law enforcement training: DRE and ARIDE**
- ▶ **State public information programs**
- ▶ **NY DEC data system**

Drug-Impaired Driving: A Guide for What States Can Do: 2017 Update

Available April 2017 @ www.GHSA.org

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Washington State Studies

- ▶ November 1999: medical marijuana approved
- ▶ November 2012: recreational marijuana approved
- ▶ July 2014: legal sales of recreational marijuana began

Washington State Studies

- ▶ **Marijuana, Other Drugs, and Alcohol Use by Drivers in Washington State.**
 - Ramirez, A., Berning, A., Carr, K., et al. (2016)
 - NHTSA Traffic Tech DOT HS 812 307
- ▶ **Cannabis Use among Drivers Suspected of Driving Under the Influence or Involved in Collisions: Analyses of Washington State Patrol Data.**
 - Banta-Green, C., Rowhani-Rahbar, A., Ebel, B.E. et al. (2016)
 - AAAFTS

Ramirez et al. – Goal and Methods

- ▶ **Goal: how did legal marijuana affect driver marijuana and alcohol use**
- ▶ **Method: roadside surveys**
 - Three waves: just before, 6 and 12 months after July 2014 legalization
 - Six sites for each wave
 - Friday daytime, Friday and Saturday nights
 - Alcohol from breath, drugs from oral fluid or blood

Ramirez et al. – Results

	Wave 1	Wave 2	Wave 3
Marijuana overall	14.6%	19.4%	21.4%
Daytime	7.8%	18.4%	18.9%
Nighttime	17.5%	19.8%	22.2%
Alcohol	6.0%	3.9%	4.4%

- ▶ **Marijuana increased, but not statistically significant**
 - Daytime increase was significant
- ▶ **Alcohol did not increase**
- ▶ **Marijuana levels higher than national roadside survey**
 - 12.6% nighttime, 2012-2013
- ▶ **Marijuana levels much higher than alcohol**

Banta-Green et al. – Goal and Methods

- ▶ **Goals: how did legal marijuana affect**
 - Driver marijuana and alcohol use
 - Law enforcement staffing, arrests, procedures
 - THC levels in marijuana-positive drivers
- ▶ **Methods:**
 - Arrest and toxicology data, 2005-2014
 - Interviews

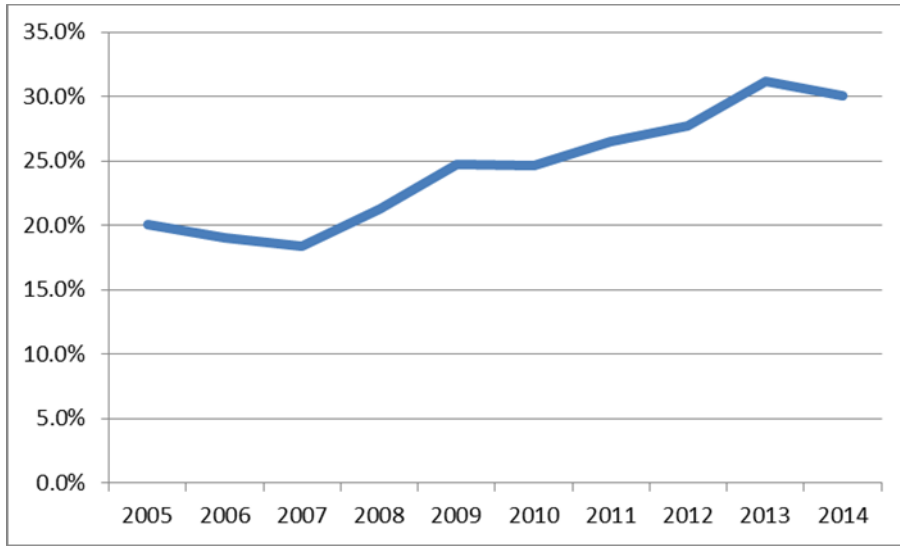
Banta-Green et al. – Results

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
THC	20.0%	19.0%	18.4%	21.3%	24.7%	24.6%	26.5%	27.7%	31.1%	30.1%
median THC	4.0	4.6	4.8	5.1	6.1	5.5	5.4	6.6	5.5	5.6

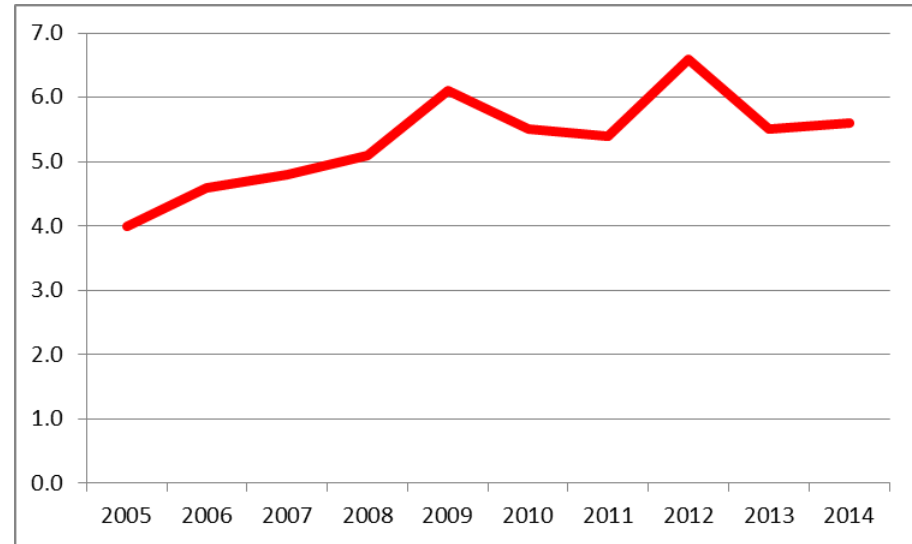
Drivers tested in crashes or DUI cases excluding alcohol-positive drivers

- ▶ **Marijuana increased from 20.0% in 2005 to 30.1% in 2014**
- ▶ **Median THC increased from 4 ng in 2005 to 5.6 ng in 2014 (and 6.6 ng in 2012)**

Banta-Green et al. – Results



Percent with marijuana



Median THC

Two NHTSA Studies Now Underway

Legal Marijuana Effects on the DWI System

▶ Phase I: Expert Panel

- July 2015
- Identified areas impacted, how to measure effects

▶ Phase II: VTTI, for NHTSA

- Ryan Smith, PI
- Schedule
 - Award fall 2016
 - Select case study states spring 2017
 - Conduct case studies fall 2017
 - Final report spring 2019

Legal Marijuana Effects on the DWI System

- ▶ **Case studies of 3-5 states, both recreational and medical**
- ▶ **Effects on**
 - Law enforcement
 - Prosecution
 - Courts and adjudication
 - Probation and parole
 - Treatment
 - Drug testing
 - Driver licensing and education
 - Data systems (criminal justice, traffic safety)
 - Budgets and staffing

National Survey of Drinking, Drug Use, and Driving

▶ **Background**

- Eight telephone surveys of alcohol only, 1991 - 2008
- Knowledge, attitudes, self-reported behavior

▶ **Current survey: RTI, for NHTSA**

- Tom Duffy, PI
- Web and paper survey, adds OTC, prescription, and illegal drugs
- Schedule
 - Award fall 2016
 - Survey design spring 2017
 - IRB and OMB approvals 2017
 - Conduct survey 2018
 - Results 2019

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