Drug-Impaired Driving: What’s New

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Highway Safety North

Lifesavers 2017
Charlotte, North Carolina
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Today

1. GHSA drug study update
2. Washington State studies
3. Two NHTSA studies now underway
April 2017 Update
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
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

![Graph showing dead drivers with known test results over years, indicating increasing drug use and decreasing alcohol use.]

Percent

Year

Dead drivers, known test results

- >.00
- >.08
- Drugs
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

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
Marijuana, Other Drugs, and Alcohol Use by Drivers in Washington State.
  ◦ 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
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
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

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<tr>
<td>THC</td>
<td>20.0%</td>
<td>19.0%</td>
<td>18.4%</td>
<td>21.3%</td>
<td>24.7%</td>
<td>24.6%</td>
<td>26.5%</td>
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<td>median THC</td>
<td>4.0</td>
<td>4.6</td>
<td>4.8</td>
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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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