

**Drug-Impaired Driving:
What the Research Says
(and what's still not known)**

**Jim Hedlund
Highway Safety North**

Lifesavers 2016
Long Beach, California
April 4, 2016



DRUG-IMPAIRED DRIVING

A GUIDE FOR WHAT STATES CAN DO

GHS FOUNDATION FOR ADVANCING ALCOHOL RESPONSIBILITY

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

GHS report released Sept. 30

- ▶ Written by Jim Hedlund, Highway Safety North
- ▶ Advised by a panel of experts

Glenn Davis, CO OTS	Jeff Michael, NHTSA
Darren Grondel, WTSC	Brandy Nannini, Responsibility.org
Jacqueline Hackett, ONDCP	Stephen Talpins, IBH
Barbara Harsha, BLH Consulting	Joanne Thomka, NTLC
Erin Holmes, Responsibility.org	Brian Ursino, AAMVA
Duane Kokesch, NTLC	
- ▶ Funding provided by the Foundation for Advancing Alcohol Responsibility (Responsibility.org)
- ▶ Available at www.GHS.org

3

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**

4

Yes, There Is Research

- ▶ **Studies with key words "drugs" and "driving" in the title as of April 2016**
 - 1990 and later: 581
 - 2000 and later: 440
 - 2010 and later: 170

5


Research Areas

- ▶ **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**

6

Background: What Drugs Can Impair

- ▶ **Illegal drugs**
 - Narcotics, stimulants, depressants, hallucinogens
- ▶ **Legal, non-medicinal**
- ▶ **Prescription medications**
- ▶ **OTC medications**



Hundreds of different drugs with more created constantly

- ▶ FARS has codes for 430 specific drugs or metabolites
- ▶ Marijuana is illegal, legal, or medicinal in different states
- ▶ Designer and synthetic drugs (e.g., synthetic cannabinoids/cathinones)

Report concentrates on **illegal drugs and marijuana**

7

Data: Problem Size and Characteristics

- ▶ **FARS 2014, dead drivers, known test results**
 - 41% with drugs; just under 1/3 of these were marijuana
 - 39% 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
- ▶ **Survey (NSDUH)**
 - About 20% of young adults age 18-25 and about 6% of adults age 26+ use illegal drugs or marijuana at least monthly
- ▶ **Needed: good data on drug involvement in crashes**

8

Science: Drug Levels, Impairment, Crash Risk

- ▶ **Any drug can impair – experimental studies**
 - Impairment can increase if drugs are used in combination or together with alcohol.
- ▶ **Any drug can increase crash risk**
 - Good crash risk studies are difficult; lots of not-so-good studies
- ▶ **Needed: crash risk for common drugs (perhaps impossible)**



9

Science: Presence vs. Impairment

- ▶ **Relationship between a drug's presence in the body and its impairing effects is complex and not well understood.**
- ▶ **Presence of a drug ≠ impairment**
 - Some drugs or metabolites may remain in the body for days or weeks after initial impairment has dissipated.
 - Individuals differ considerably in the rate of absorption, distribution, action, and elimination of drugs.
 - Some people are more sensitive to the effects of drugs, particularly first-time or infrequent users.
 - Wide ranges of drug concentrations in different individuals produce similar levels of impairment in experimental situations.

10

Science: Marijuana as an Example

- ▶ **Marijuana and impairment**
 - Marijuana impairs motor skills and cognitive functions including vigilance, distance perception, coordination, divided attention, and reaction time – in experimental studies.
- ▶ **Marijuana and crash risk**
 - Studies show increase in crash risk anywhere from 0% to 200%.
 - No scientific consensus.
- ▶ **Measuring marijuana in the body**
 - THC concentrations drop to 20% of peak 30 minutes after smoking, while impairment lasts for hours.
 - Marijuana metabolites can be detected weeks after smoking.
 - Contrast with alcohol: BAC ≈ impairment ≈ crash risk.

11

Laws: Types, Current Status

- ▶ **Impairment laws (driving under the influence of drugs-DUID)**
 - Illegal to drive while abilities impaired
 - All states
 - To enforce: observe behavior, link to evidence of a drug
- ▶ **Per se laws**
 - Illegal to drive with amounts over the *per se* limit
 - 6 states, for some drugs
 - To enforce: chemical evidence of drug
- ▶ **Zero tolerance laws**
 - Illegal to drive with any measureable amount (could include metabolites)
 - 15 states, for some drugs
 - To enforce: chemical evidence of drug


Needed: evaluations of *per se* and zero tolerance laws

12

Enforcement: SFST, DEC, Blood, Oral Fluid

- ▶ **At the roadside**
 - Stop driver for traffic violation, observe impairment
 - Screening: SFSTs can screen for some drugs
 - Oral fluid screening kits: 5 minutes, \$20
- ▶ **At the station**
 - DEC: need trained DRE, exam takes 90 minutes
 - Chemical evidence, usually blood: must draw quickly
- ▶ **At the lab**
 - Drug analysis can cost \$150-300; labs often backed up
- ▶ **Training**
 - Advanced Roadside Impaired Driving Enforcement (ARIDE)
 - Drug Evaluation and Classification (DEC) Program

Needed: accurate, quick, cheap roadside screening for common drugs



16

Sanctions and Treatment

- ▶ **Drug and alcohol screening**
 - New assessment tools:
 - **CARS: Computerized Assessment and Referral System**
Cambridge Health Alliance
 - **IDA: Impaired Driving Assessment**
American Probation and Parole Association
- ▶ **Drug treatment:** used in most states
- ▶ **Intensive supervision:** used in many states
- ▶ **DWI and Drug Courts**
 - 448 combined DWI/drug (hybrid) courts concentrating on DUID offenders
 - 2,800 drug courts

17

Education Challenge: Perceptions of Risk

- ▶ **There are many common misperceptions about drugged driving, specifically marijuana-impaired driving. Some people think that:**
 - Drugged driving is not a serious problem.
 - Drug use does not adversely affect driving and may improve it (due to compensation strategies).
 - There are no laws prohibiting drugged driving (i.e., it is not illegal).
 - The likelihood of detection and apprehension for drugged driving is low.
- ▶ **Needed: effective drugged driving education campaigns**

18

Recommendations for States



1. Planning
2. Education
3. Laws and sanctions
4. Training
5. Testing
6. Prosecution and adjudication
7. Data

19

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

Jim Hedlund (Highway Safety North)
• jhedlund@sprynet.com

Download a copy @ www.GHSA.org

21

Recommendations for States

- 1. Planning**
 - Assess your state's drugged driving issues
 - Build broad partnerships
 - Create a drugged driving strategic plan
- 2. Education**
 - Develop and implement a campaign
- 3. Laws and sanctions**
 - Zero tolerance for illegal drugs
 - Zero tolerance for drivers under 21 for all drugs
 - *Per se* law for marijuana if recreational use is legal
 - Examine your DUID laws and revise as needed
 - Screening tests, implied consent, separate DUI and DUID charges, etc.




22

Recommendations for States

- 4. Training**
 - Law enforcement: ARIDE and DEC
 - Prosecutors and judges: through NTL, TSRPs, NJC, JOLs
- 5. Testing**
 - Test all fatally-injured drivers for drugs
 - Test all DUID arrestees for drugs
 - Ensure that labs will provide timely drug test results
- 6. Prosecution and adjudication**
 - Screen and assess all DUID and DUI offenders
 - Use drug courts, intensive supervision, and drug treatment
- 7. Data**
 - Track DUID and DUI separately in crash, arrest, court data
 - Use surveys to track public knowledge and attitudes

23

National Needs

- ▶ **Education**
 - A national drug-impaired driving campaign
 - Materials for prosecutors, judges, legislators
- ▶ **Enforcement**
 - Accurate, cheap, convenient roadside oral fluid kits
 - Evaluate SFST usefulness for drugs
- ▶ **Data**
 - Drug testing best practices: which drugs, what thresholds
 - Improved drug reporting in FARS
- ▶ **Research**
 - Evaluate drug law and program effects
 - Study impairing effects of most common drugs

24
