



Mobilizing the Public to Report Impaired Drivers

Moderator: James C. Fell
33rd Annual Lifesavers Conference
Chicago, Illinois
March 15, 2015

Workshop Speakers

- Jim Fell, PIRE, Moderator
- Andy Murie, MADD Canada
- Captain Tom Didone, Montgomery County (MD) Police Department

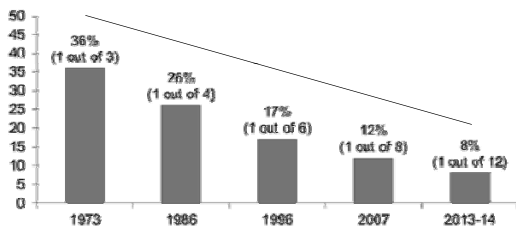


Impaired Driving Problem in America

Impaired Driving Problem in the United States

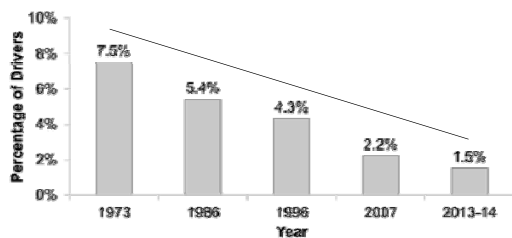
- 10,000 – 11,000 killed by intoxicated drivers.
- 300,000 people injured in drinking driving crashes.
- \$125 billion in annual costs to society.
- 1,400,000 drivers arrested annually for DWI or DUI.

Percent of Drivers on the Road with Positive BAC Levels (BAC ≥ .01) (Weekend Evenings)

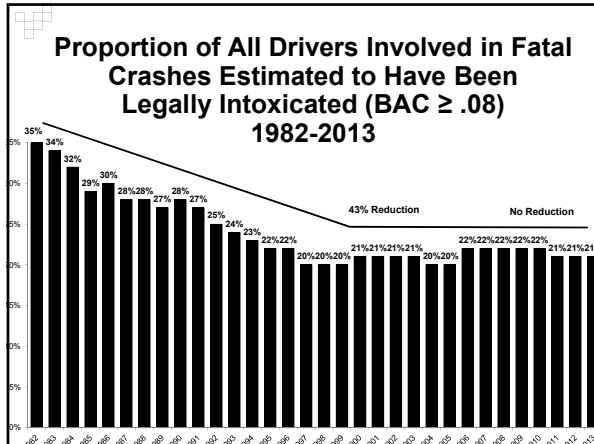


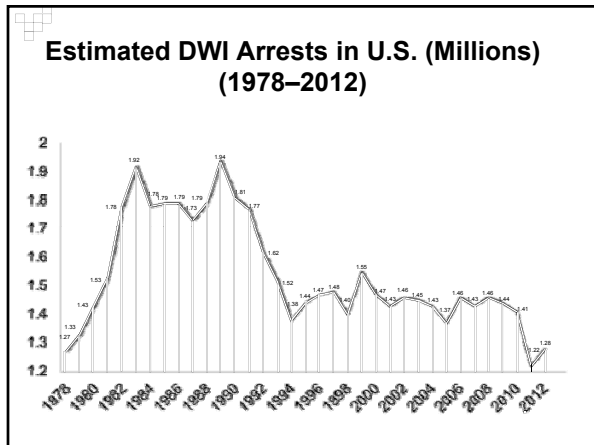
Source: National Roadside Surveys

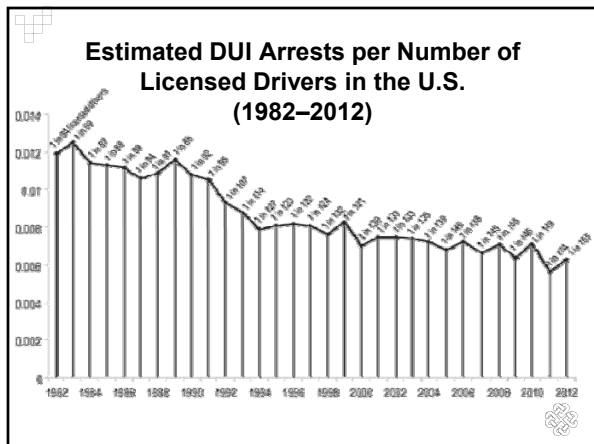
Percentage of Weekend Nighttime Drivers with BACs ≥ 0.08 g/dL* in the Five National Roadside Surveys



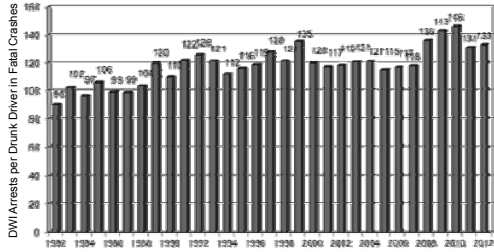
*During the period from 1973 through 1996, the States had BAC limits that ranged from 0.08 to 0.15 g/dL.







Number of DWI Arrests for Every Drunk Driver (BAC ≥ .08) Involved in a Fatal Crash, 1982-2012



DWI Enforcement in the United States

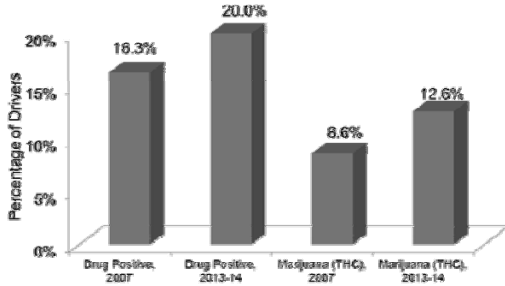
- 1.4, 1.3, 1.2 million drivers arrested for DWI
- 1 DWI arrest for every 170 licensed drivers
- 1 DWI arrest for every 1016 trips taken by drivers with BACs ≥ .08
- 1 crash for every 788 trips taken by drivers with BACs ≥ .08
- 130-140 DWI arrests for every driver with a BAC ≥ .08 involved in a fatal crash

Sources: FBI; FHWA; Zaloshnja, Miller, Blincoe (2013); NHTSA, FARS

DWI Enforcement in the United States

- Law enforcement resources are shrinking on a per capita basis.
- Law enforcement duties are increasing (homeland security; terrorism threats, etc.) leaving less time for DWI enforcement.
- DWI arrest rates per capita are important: drivers on the roads in communities with fewer than 3.7 DWI arrests per capita have 2.7 times the odds of being BAC-positive compared to communities with more than 38 DWI arrests per capita.
- Traffic Stops (visibility) are important: drivers on the roads in communities with fewer than 228 traffic stops per capita have 3.6 times the odds of having BACs ≥ .05 and 3.8 times the odds of having BACs ≥ .08 compared to communities with 1275 traffic stops per capita.

Percentage of Drivers on U.S. Roads in 2007 and 2013-14 with Drugs Other than Alcohol (Oral Fluid and Blood)



ALCOHOL and THC

- The odds of being in a crash for drivers with THC (marijuana) in their systems is 1.05 (adjusted for age & gender) compared to drivers with no THC.
- The odds of being in a crash for a driver with a BAC = .05 is 2.07 (adjusted for age & gender) compared to drivers with a BAC = .00.
- The odds of being in a crash for drivers with a BAC = .08 is 3.93 (adjusted for age & gender) compared to drivers with a BAC = .00.
- The odds of being in a crash for drivers with a BAC = .15 is 12.18 (adjusted for age & gender) compared to drivers with a BAC = .00.

Source: NHTSA, Compton & Berning (2015), DOT HS 812-117

Studies of Citizen Reporting of Impaired Drivers

Citizen Reporting of DWI

- 2006: Citizen Reporting of DUI – Extra Eyes to Identify Impaired Driving. Kelley-Baker, et al., PIRE, for NHTSA. DOT HS 810 647.
- 2007: Programs Across the United States That Aid Motorists in the Reporting of Impaired Drivers to Law Enforcement. Fiorentino, et al., SCRI, for NHTSA. DOT HS 810 750.

Citizen Reporting of DWI

- 2008: Implementing a Citizen's DWI Reporting Program Using the Extra Eyes Model. Kelley-Baker, et al., PIRE, for NHTSA. DOT HS 811 038.
- 2013: A Guide to Setting-Up an Effective 911 Program to Report Impaired Drivers. Andrew Murie, MADD Canada.
- 2014: Call 911 Programs for Reporting Suspected Impaired Driving in Four Canadian Communities. Fisher, et al., PIRE.





Citizen Reporting of DWI

- Montgomery County (MD): 1 DWI arrest on average on a typical night: On Extra Eyes nights DWI arrests increased to 2.5 in 2002, 6 in 2003, 8 in 2005.
- In New Mexico, a toll-free hotline was established: 2600 calls made in 2006. After publicity, 21000 calls made in 2009 resulting in 418 DWI arrests.
- In a California OTS survey in 2010: 60% recalled "Report Drunk Drivers-Call 911" and 37% said they were less likely to drink and drive since seeing the 911 program.



What Should Citizens Look For? What Are the Signs of Impaired Driving?



NHTSA DWI Detection Guide Probability Driver BAC ≥ .08

Weaving plus any other cue: p = at least .65
Any two cues: p = at least .50

■ Problems Maintaining Proper Lane Position

p = .50- - .75

- Weaving, Weaving across lane lines, Straddling a lane line, Swerving, Turning with a wide radius, Drifting, Almost striking a vehicle or other object.

■ Speed and Braking Problems

p = .45- - .70

- Stopping problems (too far, too short, or too jerky), Accelerating or decelerating for no apparent reason, Varying speed, Slow speed (10+ mph under limit)



DWI Detection Guide

■ **Vigilance Problems**

p = .55- - .65

- Driving in opposing lanes or wrong way on one-way, Slow response to traffic signals, Slow or failure to respond to officer's signals, Stopping in lane for no apparent reason, Driving without headlights at night, Failure to signal or signal inconsistent with action



DWI Detection Guide

■ **Judgment Problems**

p = .35- - .90

- Following too closely, Improper or unsafe lane change, Illegal or improper turn (too fast, jerky, sharp, etc.), Driving on other than the designated roadway, Stopping inappropriately in response to officer, Inappropriate or unusual behavior (throwing up, arguing, etc.), Appearing to be impaired.



DWI Detection Guide


p > .50 when combined with any other cue:

- Driving without headlights at night; Failure to signal or signal inconsistent with action.

NOTE: The probability of detecting DWI by random traffic enforcement stops at night has been found to be about two or three percent (.02 - .03).



An Innovative Impaired Driving Enforcement Strategy



Reducing Impaired Driving by Identifying Repeat Target Vehicles

James Stewart, Saint John, New Brunswick, Canada
[Journal of Safety Research, 2012, 43(1), 39-47]

- MADD Campaign 911 is a citizen reporting of impaired drivers program
- Out of 3125 calls for service for impaired driving, 2480 had complete license information. Out of those 2480 vehicles, 512 (20.6%) appear in the system 2 or more times. These are termed Repeat Target Vehicles (RTVs).
- Almost a quarter (24.3%) of repeat impaired driving calls occur within 30 days of the first incident.
- Of 7 RTVs examined, 4 were later involved in crashes.

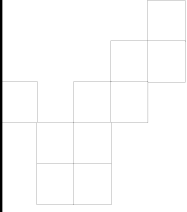


Reducing Impaired Driving by Identifying Repeat Target Vehicles


James Stewart, Saint John, New Brunswick, Canada
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- Of 64 alcohol-impaired driving crashes occurring since 2000, 26 crashes (41%) involved a vehicle with a prior call for service for impaired driving.

- (1) RTVs are now sent notification letters: "...your vehicle has been flagged for possible impaired driving...patrol members are aware...vehicle checks will be made."
- (2) Spot checks are now conducted near locations where RTVs have been reported.
- (3) RTV information is given to judges before sentencing of offenders convicted of DWI.



Summary

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- Law enforcement cannot be everywhere.
 - DWI arrest rates have been declining.
 - DWI in fatal crashes has remained at the same level for 15 years.
 - Strategies are needed to deter impaired driving in the first place.
 - Citizen reporting of impaired drivers has the potential to increase DWI detection and arrests.



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