Marijuana and other drugged driving prevention challenges

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Basic Elements Understanding Impaired Driving Prevention

- Understanding of Risks

- Regulation of two behaviors:
  - Driving
  - Substance Access and Use

- Driver options, decisions, behaviors

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Very Early Images

The Pace That Kills

DON'T MIX 'EM
GAS
WHISKEY

WPA Funded Art 1936 or 1937

Death Rides the Highways

There's Think... DON'T DRINK
Copyright 1939 KANSAS UNITED DRY FORCES

Think... DON'T DRINK
Copyright 1939 KANSAS UNITED DRY FORCES

Circo 1910

Kansas United Dry Forces, 1939

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# Using Alcohol as a Model: Understanding the Risks

- In a sense, we've always known alcohol posed driving risk
  - The Horseless Age (1907) published that the "drunken driver" is the sort that would scare horses as he passed.
  - AAA banned alcohol at its races prior to 1917.
  - Hearings on Responsibility Legislation in 1930 identified drunk driving (even during prohibition) as a source of injury.
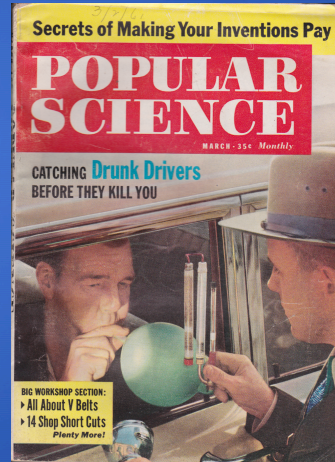
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Technology made alcohol detection and research easier

- The Drunkometer (1930's); Breathalyzer (1954)
- Grand Rapids Study Risk (1960's)
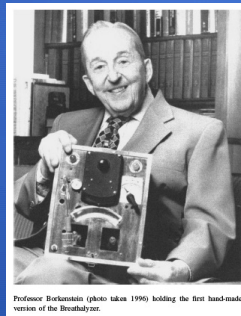
Professor Borkenstein (photo taken 1996) holding the first hand-made version of the Breathalyzer.

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Is Drugged Driving a "Silent Epidemic"

- Without good measures, we're incapable of quantifying the frequency or relative risk of drugged driving.
  - FARS data codes for drugs started at 1991 with changes in 1993 and 2010
  - Active/impairing levels not known based on FARS methods
  - Often urine tests or DRT are used to gather driver drug use
  - Roadside surveys only recently being conducted.
  - Saliva being validated, but may be limited with respect to manner of use.
  - Extremely large menu of possible drugs, with combinations potentially complicating risk estimates.

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Regulating Two Behaviors

- Driving behavior is well regulated already.

- Drug side regulation varies substantially from substance to substance:
  - Prescription drugs may be entirely legal for the driver to possess and use
    - Cannabis may also be from a state perspective
  - Are there restrictive driving policies for those on impairing medications, especially when self-administered?

- Are these substances provided in a manner that reduces the likelihood of use/driving combinations? For instance, is on-premise use of eatable forms of marijuana a possibility?

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Understanding Driver Decisions and Contextual Options

- Awareness of risks. First steps towards avoidance. For medications, are the warning labels specific enough to provide guidance?

- Motivations for use: How many of those with medications in their systems have valid prescriptions and are using according to their treatment recommendations?

- What are the social settings in which drug use occurs that leads to driving impaired?

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Driver Decisions

- "The most common strategies for reducing DUIC-related [DUI Cannabis] risk involved compensating for perceived impairments, whereas strategies involving forward planning were more frequently implemented for DUICA [DUI Cannabis and Alcohol]" (Swift, Jones & Donnelly, 2010).

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Social Context

- Source of benefits, protection, *and* risks
- We know, or at least have documented, very little about the social context of marijuana use. Even less is known for prescription medicines
- Context will change in legalized environment.
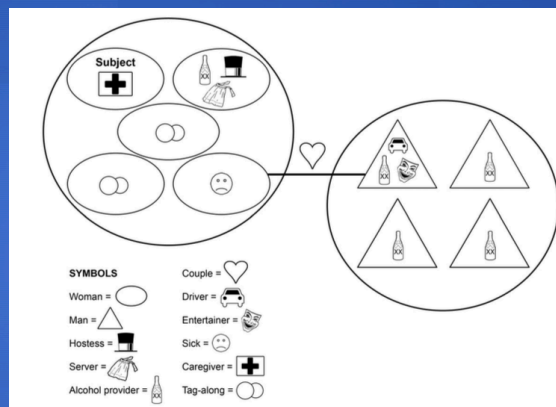
Lange, J. E., Devos-Comby, L., Moore,, R.S., Daniel, J., and Homer, K. "Collegiate Natural Drinking Groups: Characteristics, Structure, and Processes." *Addiction Research & Theory* 19, no. 4 (August 2011): 312–22.

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High Volume Video Blogs/ Shows: Not Useful for Context Information

Tequila Beer and Weed Strikeout! Beerfest style! - edited

Downloaded 4/16/15

Nick420CA 56,177 Subscribers 33,123Views

Appears to be commercial in nature

Extremely high tolerance

Urban Dictionary
"A Strikeout is possibly one of the most brilliant and best ways to get totally inebriated. The person in question must have ready a fully loaded
Bong, a shot of his or her favourite liquor, and a pint of his or her favourite Beer. The person in question then lights the bowl, takes a nice, long bong hit, then puts the bong down. While holding the weed smoke in, the person proceeds to take the shot of liquor back and then chugs the beer. After they finish the beer, they exhale the weed smoke."

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What to do for Now

- **Advise users to wait 3 (though some say 3-5) hours before driving.**
  - Eaten or drink-form cannabis use likely impairs for 3x as long (9-15 hours)
- **Drivers should not mix even low amounts of alcohol with cannabis.**
  - Currently no age restriction, but recommendations tend to emphasis risks for use-initiation prior to age-18

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