

## Basic Elements Understanding Impaired Driving Prevention

- Understanding of Risks
- Regulation of two behaviors:
  - Driving
  - Substance Access and Use
- Driver options, decisions, behaviors



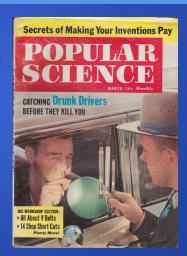
## Using Alcohol as a Model: Understanding the Risks

- 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.

## Technology made alcohol detection and research easier

- The Drunkometer (1930's); Breathalyzer (1954)
- Grand Rapids Study Risk (1960's)





# 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.

### **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).

### **Prevention Elements**

- Understanding the risks
  - Crash/Injury
  - Enforcement action
- Socially defined, and acceptance of, problem (note that this is complex for this topic: Medicines, illicit vs prescribed)
- Channel for healthier behavior
- Cues for action

## **Behavioral Engineering**

- "Put hot triggers in front of motivated people" BJ Fogg
  - Motivation elements may include both avoidance and promotion
  - Triggers should be proximal and understood (trigger can include any motivational element. So high visibility enforcement can work)
- Balance motivation and effort
  - Understand competing motivations and availability of alternatives
- Begin with easily obtained results and build from there

