Drugs and Driving: What We Know and What We Don’t

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Drugged Driving Call to Action
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In the next 7 minutes

- Data – what’s known about drugs and driving
  - Marijuana and opioids

- Key gaps
  - Research: What we’d like to know
  - Programs: What we can do
Americans use drugs

- **Marijuana**
  - Recreational use legal in 9 states and DC
  - Medical use legal in 29 states and DC
  - 22 million users – about 8% of population over age 12

- **Opioids**: prescription (OxyContin, Vicodin), heroin, fentanyl, …
  - 249 million prescriptions in 2015, about 38% of all adults
  - 11.5 million people misuse prescription opioids
  - 116 deaths daily from opioid overdose

- **Stimulants**: cocaine, amphetamines

- **Depressants**: barbiturates, tranquilizers (Valium, Prozac)

- **Hallucinogens**: LSD, Ecstasy

- **Anesthetics**: PCP
Drivers use drugs

- Fatally-injured drivers (FARS, known drug test results, 2016)
  - 44% drug-positive
    - Marijuana the most common drug: 41% of the drug-positive drivers
  - 38% alcohol-positive

- Drivers on the road (NHTSA roadside survey, 2013-14)
  - 22% drug-positive, both weekday days and weekend nights
    - Marijuana the most common drug: 9% of all drivers weekday days; 12% weekend nights
  - Alcohol: 1% weekday days, 8% weekend nights

- But presence doesn’t mean impairment
Drugs can impair

- Marijuana
  - Impairs attention, time and distance perception, reaction time, coordination, …

- Opioids
  - Impair cognitive function, cause drowsiness

- Stimulants, depressants, hallucinogens
  - Their names tell it all
Drugs can increase crash risk

- Some crashes caused by marijuana and opioids
  - Hard questions: How many crashes? Crash risk?

- Marijuana
  - Many studies, many with flaws
  - Consensus: increases crash risk by 25-35%

- Opioids
  - Fewer studies, similar flaws
  - Consensus: increase crash risk somewhat
State drugged driving laws inconsistent

- All drugs, all states: illegal to drive while impaired

- Marijuana
  - 12 states: zero tolerance for drivers – no measureable marijuana
  - 6 states: *per se* limits from 1 to 5 ng THC

- Opioids
  - 19 states: zero tolerance for some opioids
  - 2 states: *per se* limits for some opioids
Alcohol framework doesn’t apply to drugs

- **Alcohol**
  - Alcohol in blood or breath (BAC) = alcohol in brain = impairment = crash risk; basis of *per se* law
  - BAC declines gradually after drinking
  - Familiar impairment signs; easy to screen at roadside (SFST)
  - Breath test provides BAC evidence

- **Drugs**
  - Drug in blood or urine ≠ drug in brain ≠ impairment ≠ crash risk
  - THC declines quickly after use; marijuana metabolites present for weeks
  - Different drugs produce different impairment signs
  - Blood or urine test necessary to confirm drug presence
Research and program needs

- **Research**
  - Better data: drugs in impaired driving arrests and crashes
  - Better crash risk estimates for marijuana and opioids
  - Quick, cheap ways to detect drugs at the roadside
    - Oral fluid; breath for marijuana
  - Better process to measure drugs in drivers

- **Programs**
  - Educate the public, physicians, pharmacists
  - Train law enforcement: ARIDE, DEC
  - Inform prosecutors and judges
  - Standard drug test protocols
  - Encourage drug screening and treatment
Questions

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