# Enhanced Court Supervision of Alcohol Monitoring and the General Deterrent Effect of Mandatory Alcohol Ignition Interlock Laws

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# Association for Comprehensive, Collaborative and Equitable Supervision and Service (ACCESS)

ACCESS is designed to provide education, training and monitoring that fills a gap in court involvement for high risk, repeat DUI offenders who do not have high treatment needs

# Identifying All High-Risk DUI Offenders

Most DUI offenders do not re-offend

Repeat DUI offenders have already done so

Groups over-represented in crashes
 BAC of .15% or greater
 Repeat DUI offenders

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### The Under-Recognized Group

- High-Risk for re-offense but low substance use disorder (SUD) needs
  - □Very different
  - □Issues generally cognitive behavioral
  - ■Need to be handled differently

## **Monitoring & Accountability**

#### The ACCESS model:

- ONE YEAR of alcohol (and drug) monitoring with installation verified
- ☐ FOUR TO FIVE times daily
- NO REVERSION to norm upon removal
- □ REDUCTION IN RECIDIVISM increases every year for the six years of measurement

## Monitoring & Accountability

### ■ The ACCESS model monitoring:

- □Ignition Interlock Device 100% ACCESS participation vs 25-30% norm
- □Portable Breath Testing
- Transdermal
- Urine or Oral Fluid

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### The ACCESS Model Works

- Serves a greater number of repeat offenders
- Lower cost model
  - □71% less overall
  - □85% less to taxpayer
- Lower recidivism
  - □ Fewer total crashes
  - □ Fewer HBD crashes
  - □ LIVES ARE SAVED

# Alcohol Monitoring of DUI Offenders Does Work

# The Effectiveness of Alcohol Monitoring as a Treatment for Driving-While-Intoxicated (DWI) Offenders:

### **A Literature Review and Synthesis**

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### **BACKGROUND**

#### Impaired Driving Problem in the United States

- □ Past 10 years: 10,000 people killed in crashes each year involving an intoxicated driver (BAC ≥ .08 g/dL)
- □ 1,000,000 drivers arrested each year for DWI
- □ About 1/3 of DWI offenders arrested each year are either repeat offenders, alcohol abusers, or alcoholics
- Most DWI offenders need some form of treatment and sanction

# APPROACH TO IMPAIRED DRIVING PROBLEM

#### **Public Health Approach Under Three Headings**

- 1) Primary prevention: Reducing/preventing risky drinking and risky driving
- 2) **Secondary prevention**: Reducing/Preventing people from combining drinking and driving
- 3) **Tertiary prevention**: Reducing/Preventing convicted impaired drivers from drinking and driving again



# TERTIARY PREVENTION OBJECTIVES

Change convicted DWI offender's risky behavior via education, treatment, sanctions and monitoring.

Protect the public from the risk presented by DWI offenders while their behavior is being modified.

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# EFFECTIVE STRATEGIES PROVIDING ALTERNATIVES TO JAIL

- House Arrest
- DUI courts
- Transdermal BAC Monitoring
- South Dakota 24/7 Sobriety Program
- Alcohol Ignition Interlocks



Conduct a comprehensive literature review and synthesis of the effectiveness of alcohol monitoring as a treatment for DWI offenders in reducing recidivism

#### Emphasis on:

- Strategies
- Obstacles to implementation
- Effectiveness in reducing recidivism and/or problem drinking



#### Inclusion

- Published between 2000 and 2020 (English)
- Usage and effects of some form of alcohol monitoring on DWI offenders

#### **Exclusion**

- Questionable study design, sample size, power, missing data
- Articles discussing opinions rather than science

### **SYNTHESIS**

Articles/Reports were assessed as:

- "Promising"
- "Moderate"
  - "Strong"

Criteria:

- Study design
- Size of effects
- Statistical significance



### RESULTS

Using key words such as alcohol monitoring, DWI, BAC, breath tests, alcohol ignition interlocks, abstinence, repeat offenders, treatment, biomarkers, etc.

First pass exceeded 2,000 hits Exclusion/Inclusion Criteria filtered the articles down to 131 articles, government reports, conference papers, etc.

# ALCOHOL MONITORING DEVICES FOUND











### **SUMMARY & SYNTHESIS**

There is **PROMISING to STRONG** evidence that alcohol monitoring is an effective strategy in the treatment of DWI offenders and in reducing recidivism (numerous citations).

The strengths of alcohol monitoring (specifically transdermal alcohol monitoring) include:

- Improvement in public safety [enforces abstinence; helps in recovery; better than random breath or urine tests]
- Cost efficient alternative to jail [eliminates jail costs; reduces case worker time; reduces public costs (offender pays for monitoring)]

# Alcohol Ignition Interlock Laws

## **Alcohol Ignition Interlocks**



- Reduces DWI recidivism by about 65% for offenders with interlocks (who sometimes use alternative vehicles) compared to similar offenders who did not get the interlock.
- Reduces recidivism by 70% for firsttime DWI offenders (on, then off).
- Reduces recidivism by 55% for multiple DWI offenders (on, then off).
- If installed on all vehicles of offenders, would probably prevent 95% of DWI behavior during installation period.



# Insurance Institute for Highway Safety

### Effects of All-Offender Alcohol Ignition Interlock Laws on Recidivism and Alcohol-Related Crashes [State of Washington]

McCartt, Eichelberger, Leaf (2013)

- Recidivism rates reduced by 12% for interlocked offenders
- Crash reductions associated with all-offender law suggests they can have a general deterrent effect



### States with Mandatory Interlock Laws for All Convicted DWI Offenders

#### 34 STATES PLUS DC:

AL, AK, AR, AZ, CO, CT, DE, DC, HI, ID, IL, IA, KS, KY, LA, ME, MD, MS, MO, NE, NV, NH, NJ, NM, NY, OK, OR, RI, TN, TX, UT, VT, VA, WA, WV



### Interlock Issues

- □ Interlock penetration for convicted DWI offenders ranges from 10% in some states up to 50% in other states.
- Once the interlock is removed, recidivism returns to the same level as pre-interlock
- □ Except for two studies, there is a lack of evidence of a general deterrent effect.

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# State alcohol ignition interlock laws and fatal crashes

Evaluation of Alcohol Ignition Interlock Laws in the States

Sponsored by the Insurance Institute for Highway Safety

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### Study goals

- Evaluate fatal crash reduction of laws mandating alcohol ignition interlock devices for:
- –Repeat offenders
- –High-BAC offenders
- First offenders (as deployed, includes all offenders)
- Used a national cross-sectional design that estimates effects across states,



### **Interlock Laws and Study Period**

- Study period 2001-14, 49 states and DC
- Excludes California because some laws apply only to four counties
- -Includes four combinations of laws

None

Repeat offenders

Repeat offenders and high-BAC offenders

All offenders (i.e. repeat offenders and first offenders)

- Law effects are coded in models as
  - -Repeat offenders vs. none
  - -Repeat and high-BAC offenders vs. none
  - -All offenders vs. none



# Interlock Law Effects on Impaired Drivers in Fatal Crashes

Percent changes in number of impaired drivers, 49 states and DC, 2001-14

	0.01+ g/dL	0.08+ g/dL	0.15+ g/dL
All-offender vs none	-16.1*	-15.9*	-12.5*
High-BAC + repeat vs none	-8.2*	-8.0*	-7.7*
Repeat-only vs none	-2.7	-2.6	-3.2



<sup>\*</sup> Statistically significant at 0.05 level

### **General and Specific Deterrence**

- General deterrence if people without interlocks improve on impaired driving
- Measured as drivers without prior DUIs, those unlikely to have had an interlock
- -Presumably first offender laws would be a greater deterrent than repeat offender laws
- Specific deterrence if people subjected to interlocks improve
- Cannot be identified from fatal crash data
- Drivers with prior DUIs taken as an overly-inclusive set
   Likely includes people subjected to interlock requirements



### General and Specific Deterrence

Percent changes in 0.08+ FARS drivers 49 states and DC, 2001-14

	Drivers with prior DUI	Drivers without prior DUI	All drivers
All-offender vs none	-32.4*	-13.8*	-16.1*
High-BAC + repeat vs none	-23.4*	-6.1*	-8.2*
Repeat-only vs none	-10.7*	-1.8	-2.7

<sup>\*</sup> Statistically significant at 0.05 level



### Conclusions

- All-offender laws are beneficial, with 16 percent fewer impaired drivers in fatal crashes compared to no law
- Repeat-offender laws are associated with a small benefit
- Laws covering repeat and high-BAC offenders are associated with an 8 percent benefit, compared to no law
- Stronger results for drivers with prior DUIs, suggesting possible specific deterrence effect or stronger effect for drivers more experienced in the impaired driving justice system
- States without all-offender interlock laws and have the goal of reducing alcohol-related fatal crashes should consider adopting these laws



### **Alcohol-Impaired Driving Fatalities**

Alcohol-Impaired driving fatalities occur in crashes where at least one driver has a BAC equal to or greater than the illegal per se limit in every State (.08 g/dL). There were 10,142 (28%) people killed in 2019 in alcoholimpaired driving crashes out of a total of 36,096 traffic fatalities. In 2020, there were 11,654 (30%) people killed in alcohol impaired driving crashes out of 38,824 traffic fatalities. There is another increase in 2021.

Source: Overview of Motor Vehicle Crashes in 2020. NHTSA (March 2022). DOT HS 813-266

### **How Can We Resume Progress?**

- Many countries around the world are committed to the vision of eliminating fatalities on their Nation's roads. The Zero Deaths vision is a way of describing how a combination of strategies is going to affect safety: Toward Zero Deaths.
- The goal was first adopted by Sweden in 1997
- The goal for most nations is Zero Traffic Fatalities by 2050.



### **How Can We Resume Progress?**

- Vision Zero" has evolved across the world and is supported by the World Health Organization and the United Nations.
- The approach uses a data-driven multidisciplinary approach involving highway design, vehicle safety features and the integration of education, enforcement, engineering and emergency medical services (www.TowardZeroDeaths.org).

### **How Can We Resume Progress?**



## Thank you.

Research You Can Trust



# QUESTIONS???

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