# Effectiveness of Alcohol Ignition Interlocks: What the Research Indicates

**September 21, 2022** 



## Impaired Driving Tertiary Prevention Objectives

- Change convicted DUI offender's risky behavior.
- Protect the public from the risk presented by DUI offenders while their behavior is being modified.

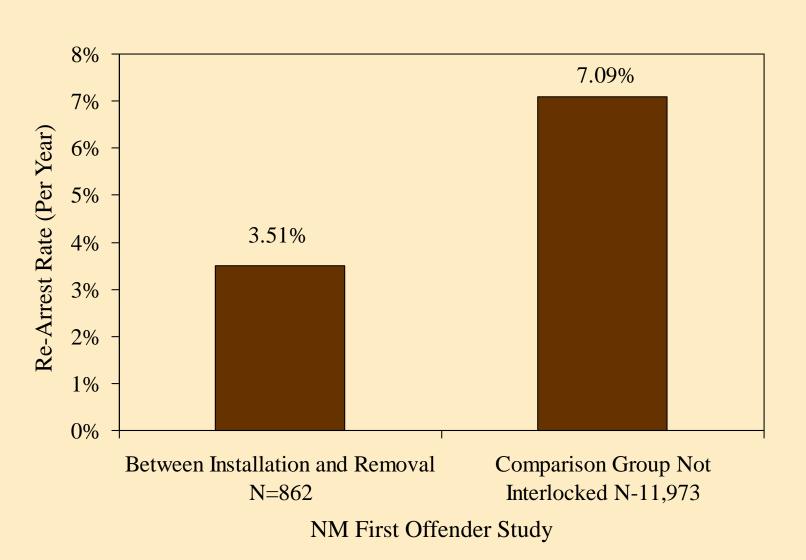
#### Alcohol Ignition Interlock Laws Reduce Offender Recidivism

#### **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.

#### New Mexico Effectiveness Study



#### Summary of Interlock Evaluation Studies

Authors/Year	Jurisdiction	Characteristics of population	Findings: Recidivism with interlock	Findings: Recidivism after interlock	Comparison Group
EMT Group (1990)	California	First and multiple	Interlock 3.9% Noninterlock 5.9%	1	Suspended
Elliot & Morse (1993)	Cincinnati, Ohio	First offenders over .20% BAC plus multiple offenders	Interlock 2.9% Noninterlock 8.4%	Interlock 6.6% Noninterlock 6.5%	Suspended
Jones (1993)	Oregon	Multiple offenders	Interlock 5% Noninterlock 8%	Interlock 10.8% Noninterlock 11.5%	Restricted
Popkin, Stewart, Beckmeyer, & Martell (1993)	North Carolina	Second offenders	Interlock 2.7% Restricted 7.1% Suspended 9.8%	Interlock same or higher than noninterlock	Restricted license & suspended
Weinrath (1997)	Alberta	Multiple offenders	Interlock 10% Noninterlock 25%	Interlock 7% Noninterlock 11%	Suspended
Tippetts & Voas (1997)	West Virginia	First and second offenders	Interlock 1.6% Noninterlock 6.4%	Interlock 10% Noninterlock 10%	Licensed & suspended
Beck, Rauch, Baker, & Williams (1999)	Maryland (Random assignment)	Second offenders	Interlock 2.4% Noninterlock 6.7%	Interlock 3.5% Noninterlock 2.6%	Licensed

### Summary of Interlock Evaluation Studies (cont.)

Authors/Year	Jurisdiction	Characteristics of population	Findings: Recidivism with interlock	Findings: Recidivism after interlock	Comparison Group
Voas et al. (1999)	Alberta	First offenders	(12 months) Interlock 0.1% Suspended 2.23% Ineligible 4.61%	Interlock 2.75% Reinstated 2.63% Still suspended 2.48%	Reinstated & ineligible
		Multiple offenders	(24 months) Interlock 0.85% Suspended 8.08% Ineligible 18.72%	Interlock 7.05% Reinstated 7.32% Still suspended 3.94% Ineligible 10.52%	Reinstated & ineligible
Vezina (2002)	Quebec	First and repeat offenders	1st (12 months) Interlock <.5% Suspended 2% 2nd (24 months) Interlock <2% Suspended 6%	24 months Interlock 4% Suspended 5% 36 months Interlock 4% Suspended 7%	Suspended
Frank, Raub, Lucke, & Wark (2002)	Illinois	Multiple	Interlock 1.3% Restricted 6.8%	Interlock 1.7% Restricted 2.0%	Restricted
Bjerre (2003)	Sweden	First and Multiple	Interlock 0% Revoked 2.9% Matched 1.6%	_	Revoked & matched

# Evidence that Alcohol Ignition Interlock Laws Serve as a General Deterrent to Impaired Driving



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

## **Another Study by the Insurance**Institute for Highway Safety

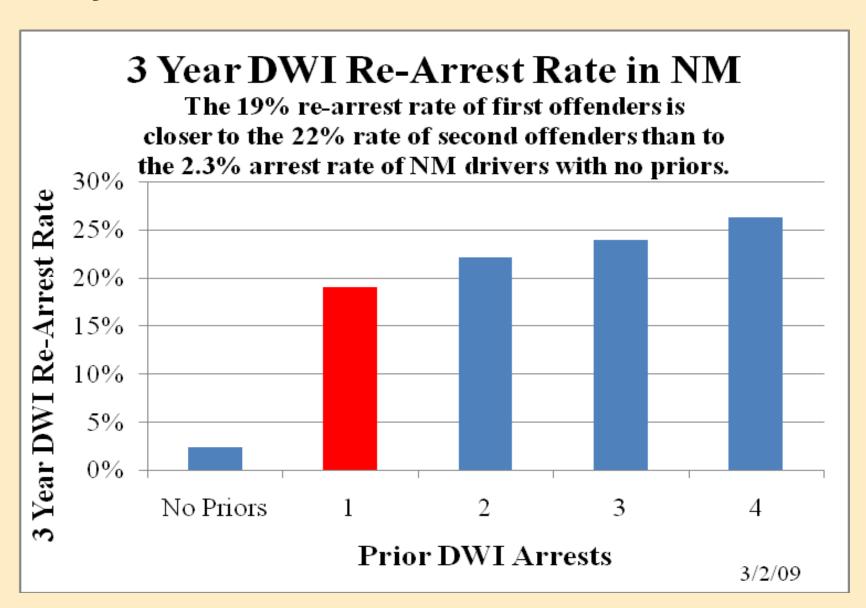
#### State alcohol ignition interlock laws and fatal crashes

Eric Teoh, IIHS, James Fell, NORC Michael Scherer, PIRE, Danielle Wolfe, IIHS March 2018

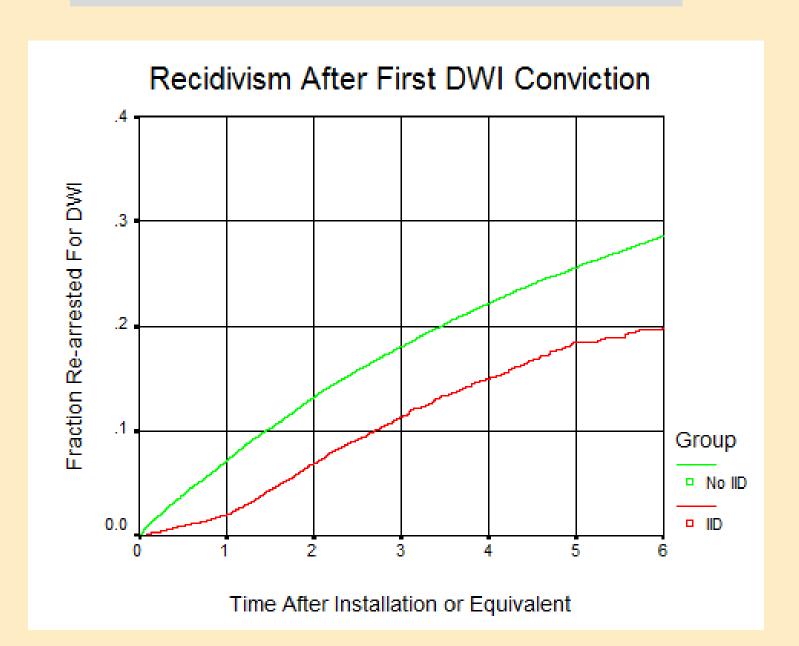
- All-Offender Laws associated with 16% fewer drivers with BACs≥.08 involved in fatal crashes compared to no law
- Repeat and High BAC Laws: 8% reduction compared to no law

## Mandatory Alcohol Ignition Interlock Laws for All DUI Offenders

#### Why Interlocks for First Offenders?



#### **New Mexico – Rearrests Over 6 Years**



## Do DUI Offenders Drive While their License is Suspended?

#### NHTSA Study of DUI Offenders Driving During License Suspension

- Systematic unobtrusive observations were conducted by surveillance professionals of first time DUI offenders in two cities.
- 88% of suspended DUI offenders in one city were observed driving. 36% of suspended DUI offenders were observed driving in the second city.
- Prevalence of driving while suspended is high and can vary substantially between jurisdictions

Source: McCartt, Geary & Berning (2003)

# What Does the National Academy of Sciences Engineering and Medicine Say?

#### National Academy of Sciences, Engineering and Medicine Report 2018

#### "Getting to Zero Alcohol-Impaired Driving Fatalities"

- Recommended mandatory alcohol ignition interlocks for all DUI offenders
- To increase effectiveness, States should consider increased monitoring periods based on the offender's BAC or past recidivism.

Source: NASEM (2018) National Academies Press, Washington, DC.



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