

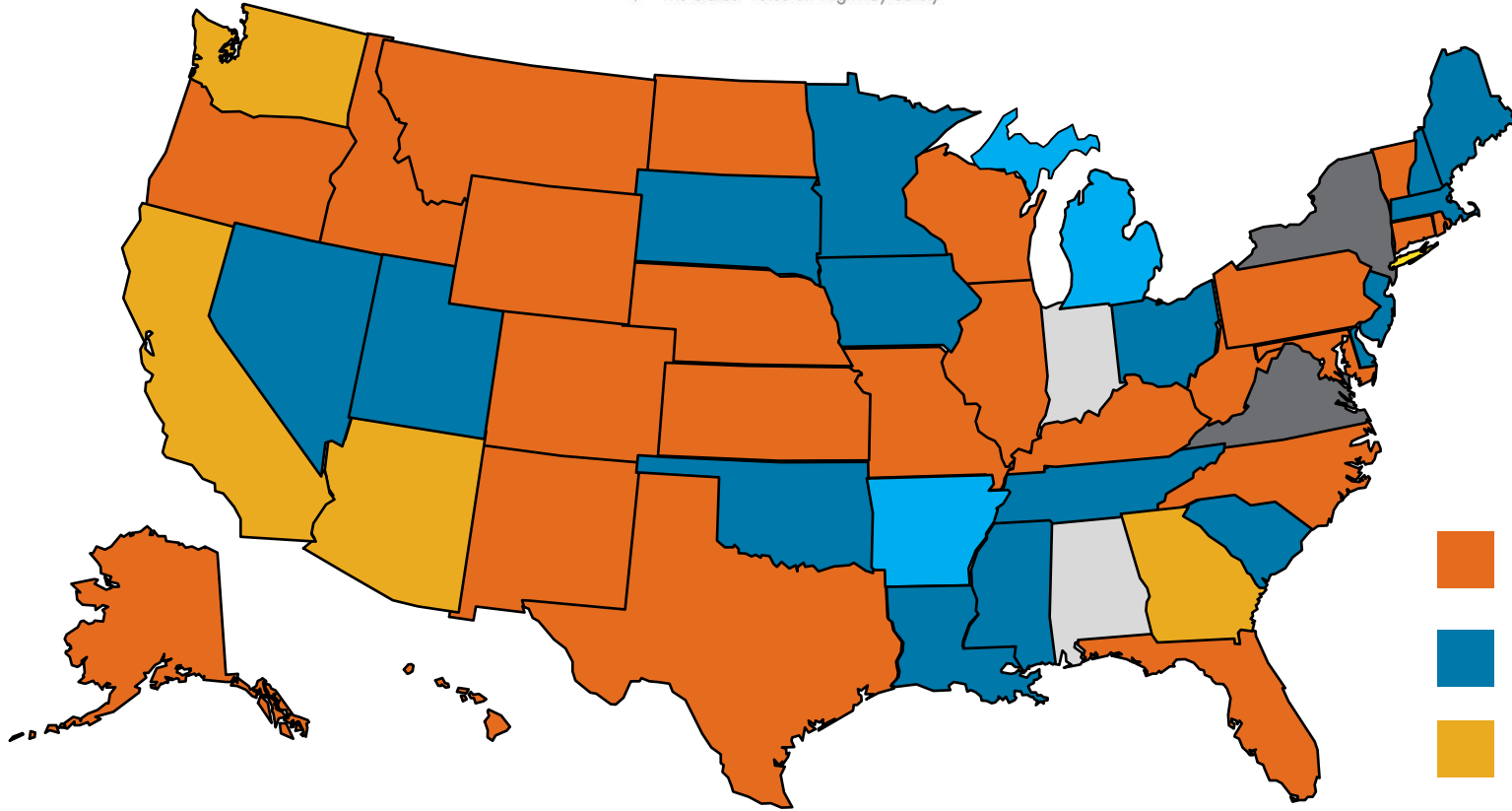


# Impact of Compliance-Based Removal Laws on Alcohol-Impaired Driving Recidivism

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<https://www.ghsa.org/resources/GHSA/CBR-Report23>





**Territories/DC:**

- **DC:** Dep't of Transportation
- **Northern Mariana Islands:** Dep't of Public Safety
- **Guam:** Dep't of Public Works
- **Puerto Rico:** Dep't of Transportation
- **US Virgin Islands:** State Police

- Department of Transportation (24)
- Department of Public Safety/Homeland Security (16)
- Independent Agency (4)
- State Police (2)
- Department of Motor Vehicles (2)
- Other Agency (2)

<https://www.ghsa.org/about/shsos>



# Acknowledgements

- Researchers/Authors: Tara Casanova Powell & Dr. Ryan C. Smith
- GHSA staff: project oversight, editorial direction & review
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# Background

A white mannequin is shown from the waist up, holding a clear glass filled with an amber-colored liquid (likely alcohol) in its right hand. In its left hand, it holds a dark-colored bottle with a green cap. The background is a plain, light gray color.

- In 2022, a total of 13,524 people were killed in alcohol-impaired-driving crashes, which accounted for 32% of all fatal crashes (NCSA, 2024).
- Compared to first-time offenders, repeat offenders more likely to be involved in fatal motor vehicle crashes (Dickson et al., 2013).
- DUI recidivism rates can be as high as 21% to 47% (Fell et al., 2009; Nochajski & Stasiewicz, 2006).

# GHSA Study Overview

- Hypothesis: States with a CBR requirement have a lower recidivism rate, and greater IID compliance, than states without a similar requirement.
- Comprehensive review of state IID policies; state data obtained to perform recidivism analyses.
- 2 measures of recidivism:
  - Individuals who were arrested for an additional DUI offense after IID installation.
  - IID extensions.



# Methods

- Law review
  - 34 states & DC have CBR laws, extensions - specific violations, non-compliance w/IID program reqs/court order
- Outreach to SHSOs/MVAs to confirm IID/CBR laws & data
- Four states included:
  - Tennessee & Washington (CBR State)
  - Arkansas & Iowa (Non-CBR State)

# Methods

- Requested data elements:
  - Driving arrests, convictions, IID installations and removals (1/1/2016-12/31/2019)
- Descriptive statistics calculated for each state – frequency of repeat offenses, IID compliance – to evaluate state data completeness.
- Confounding factors: lack of quality IID installation and removal data, infrequency of IID installations & large variance in data quality and formatting across states

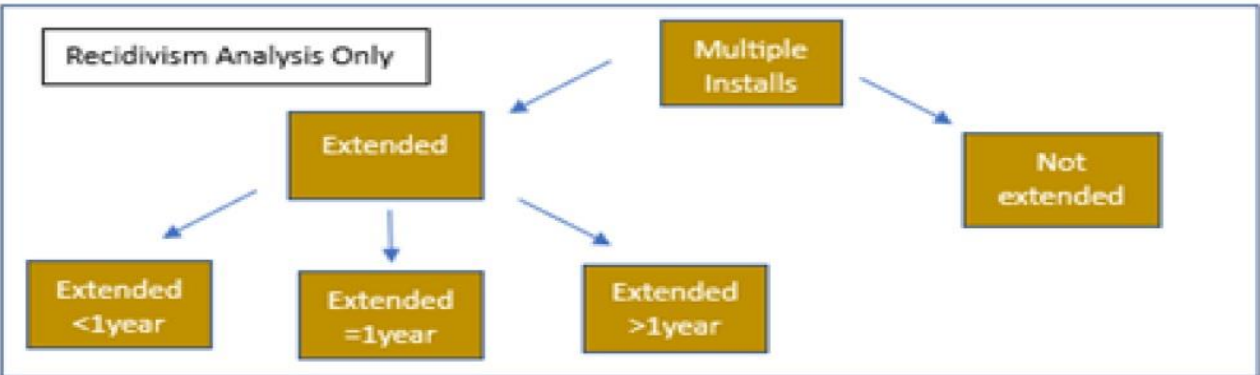
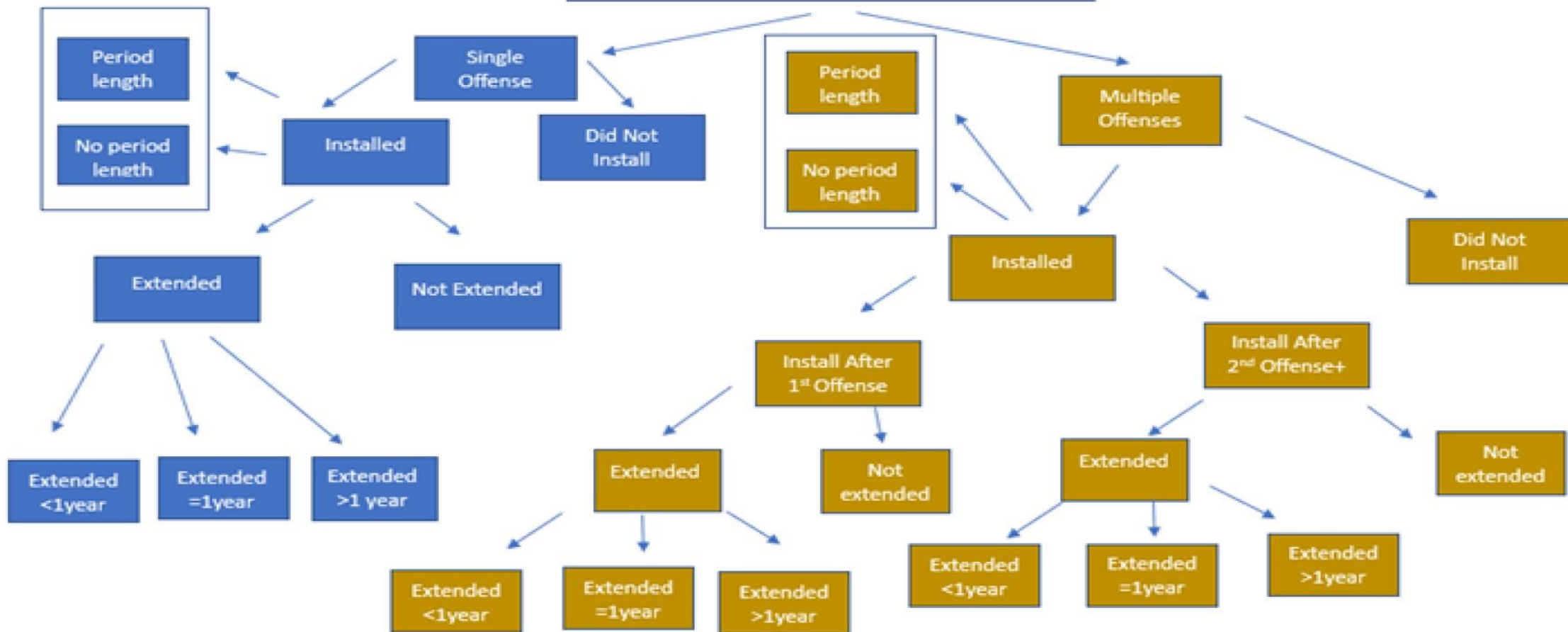
### Data Variables Provided by the Study States

Tennessee (CBR)	Washington (CBR)	Arkansas (Non-CBR)	Iowa (Non-CBR)
Driver License Number (DLN)	Unique Identifier	Customer Identifier	Customer Number
DUI Offense	State Jurisdiction	Arrest ID	Occurrence Date
Offense Date	Violation Type	Arrest Date	Lookup Value (Offense)
Conviction Date	Interlock Requirement Found	Interlock Duration	Interlock Device ID
Device Installation Date	Term of Requirement Days	Interlock Install	Install Date
Period Begin	IID Tolling*	Interlock Removal	Uninstall Date
Period End	Vehicle ID		
Number of Offenses	Installation Dates		
	Removal Dates		

\* A toll is a pause of the interlock requirement if an offender was involved in a traffic crash, their vehicle required unforeseen repairs or becomes inoperable due to uncontrollable circumstances through no fault of the offender.



# Tennessee Data Analysis Flow Chart – All Offenses



# Results

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- Recidivism primarily calculated as % of offenders w/ subsequent offense following IID installation:
  - Tennessee & Washington (CBR States) 1.7% & 3.7%
  - Arkansas and Iowa (Non-CBR States) 5.6% & 6.0%
- Secondary measure of recidivism, IID duration: % of individuals who recidivated based upon IID extensions
  - Tennessee lowest recidivism rate (11.5%)
  - Washington the highest (63.1%).
  - Quality of the IID installation duration data relatively low when compared to the offense data. Place greater emphasis on recidivism estimates that only use rearrests following an IID installation.

### Recidivism Rates by State

	CBR States		Non-CBR States		
<b>Recidivism</b>	Tennessee	Washington	Arkansas	Iowa	Average
<b>Recidivism<sub>1</sub></b>	1.7%	3.7%	5.6%	6.0%	4.3%
<b>Recidivism<sub>2</sub></b>	11.5%	63.1%	41.6%	48.0%	41.1%

*Note.* Recidivism<sub>1</sub> refers to the proportion of individuals who committed a second offense after IID installation during the study period. Recidivism<sub>2</sub> also includes IID duration outcomes in the analysis.

# Study Limitations

- Only 4 states (2 IID CBR law state versus 2 non IID CBR law state) included due to data availability.
- State data needed significant cleaning, notable limitations:
  - Arrest data not separated by level of offense (basic DUI, enhanced or aggravated DUI, high-BAC DUI, repeat DUI)
  - Various risk levels of offenders viewed as one group or cohort w/in each state
- Large variance in data quality during mandated period of IID installation
- Mandated extensions or simply a driver's decision to delay removal? Greater emphasis should be given to results examining re-offense after IID installation.



# The Road Ahead

- States with IID CBR laws had fewer incidences of impaired driving recidivism or rearrests.
- Study provides reasonable rationale for states to consider implementing IID CBR requirements to reduce the number of impaired driving events, serious injuries and fatalities.

# The Road Ahead

- Study creates important datapoint that can be added to the extremely limited empirical knowledge about IID CBR laws and their relationship to impaired driving recidivism.
- Crucial first step in understanding the potential value of IID CBR laws.
- Although lower rates of alcohol-impaired recidivism were observed in the two states with IID CBR requirements, additional research is warranted.



# Questions

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