

# Alcohol ignition interlocks: Installations & program trends in North America

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# About TIRF

TIRF is a registered charity providing the following services:

- > Research on road crashes;
- > Program and policy development;
- > Evaluation plans, program, and policy evaluations; and
- > Knowledge transfer



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The **vision** of TIRF is to ensure people using roads make it home safely every day by eliminating road deaths, serious injuries and their social costs.

TIRF's **mission** is to be the knowledge source for safer road users and a world leader in research, program and policy development, evaluation, and knowledge transfer.



# Overview

- > Background
- > Key features of interlock programs
  - » Administrative rule and legislation
  - » Program funding
  - » Data management and communication
  - » Vendor oversight
  - » Interlock technology features
  - » Driver compliance
- > Alcohol Interlock Curriculum for Practitioners



# Background

- > In the past 30 years, studies and evaluations of alcohol interlocks have shown they have a positive impact on road safety by preventing impaired driving among impaired driving offenders.
  - » Reduce impaired driving recidivism (when installed) (Elder et al. 2011, Marques et al. 2010).
  - » Reduce alcohol-related crashes (Vanlaar et al. 2017; Kaufman & Wiebe 2016; Toeh et al. 2018).
- > In the past decade there have been significant increases in interlock usage with more jurisdictions implementing mandatory installation requirements.
  - » Overall installation rate across the United States is less than 50% among eligible offenders (Robertson et al. 2020).

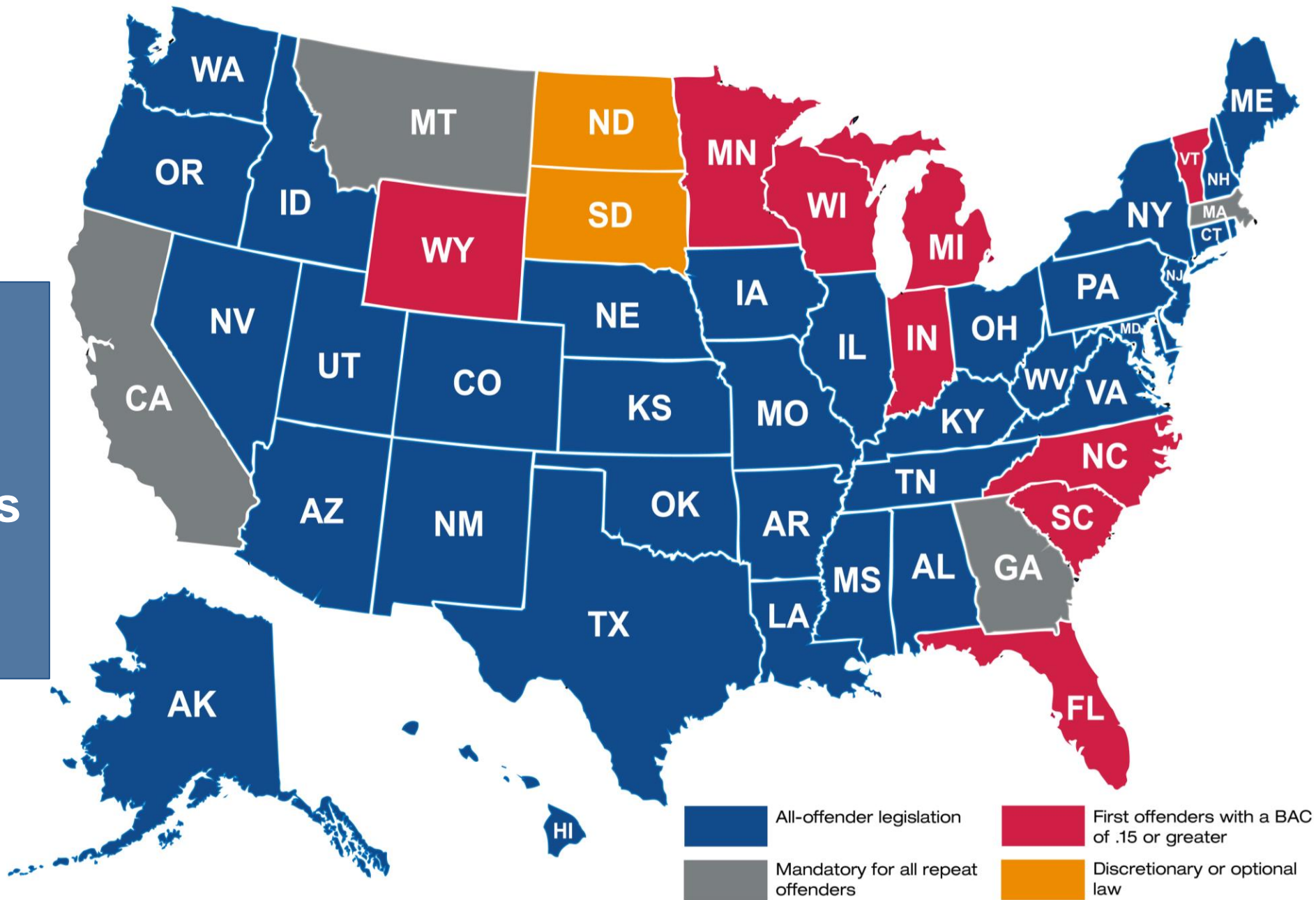


# Key features of interlock programs

- > Administrative rule and legislation
- > Program funding
- > Data management and communication
- > Vendor oversight
- > Interlock technology features
- > Driver compliance



# Laws mandating IIDs





# Hybrid interlock programs

- > Hybrid interlock programs are characterized as programs that combine features of both administrative and judicial programs, which necessitates a great deal of coordination among the various administrative and judicial operations.
  - » **Administrative.** A department of motor vehicles or similar agency requires the installation of an interlock device as a condition of licensing for a suspended driver, for license reinstatement.
  - » **Judicial.** The courts mandate an interlock device for offenders, either pre-trial or post-conviction





# Hybrid interlock programs

- > Hybrid programs incorporate the strengths of both the administrative and judicial systems within the State's legal framework, developing a more efficient and effective program.
- > Hybrid programs face the challenge of coordination between the administrative and judicial systems, as well as a potential for increased costs associated with the involvement of a larger number of governmental entities.
- > Across the US, 26 states have hybrid programs, 18 are administrative, and 7 are judicial.



# Administrative rule & legislation

- > **Hard suspension requirement.** A hard suspension requirement is a length of time drivers are required to wait, without a driver's license, prior to obtaining an interlock license. During this time period, which varies by state and offense level, drivers are *unable* to drive legally.
  - » 26 states have hard suspension legislation for first impaired drivers.
  - » 27 states have a hard suspension for repeat impaired drivers.
  - » One state has an indefinite hard suspension for second and subsequent impaired drivers, which is only lifted upon proof of interlock installation.



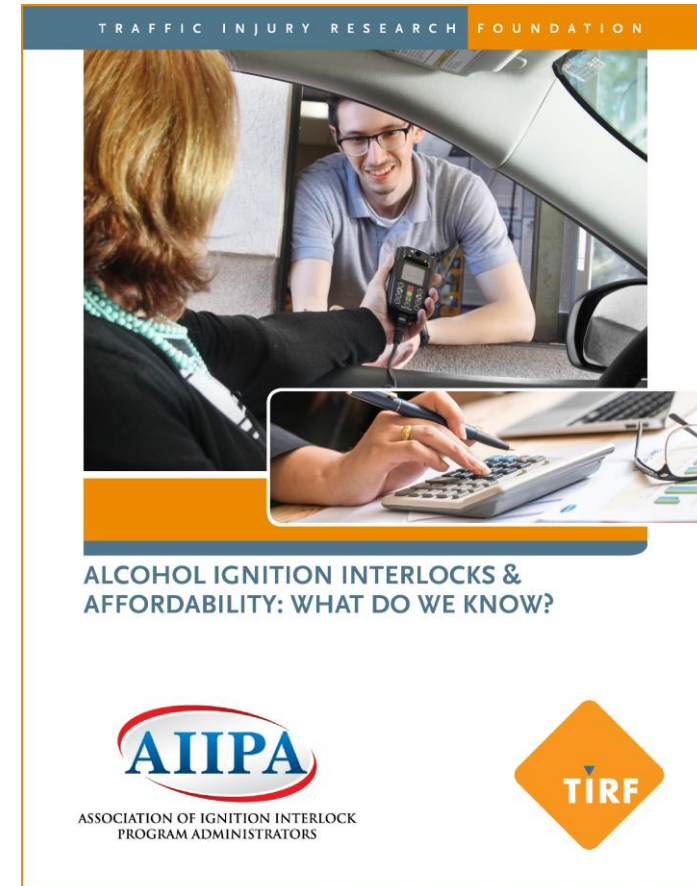
# Administrative rule & legislation

- > Lack of political leadership, limited budget, and competing priorities are some barriers to legislation implementation.
  - » Interlock program staff in two states reported state employees are unable to approach the legislator and need a champion to do so on their behalf.
  - » Program staff in three states indicated their agencies are limited by the number of bills they can bring forward every legislative session.
  - » Program staff in three states reported the primary challenge with passing interlock legislation within the state is funding. Legislators are concerned to put forward program improvements which may increase the cost for participants.
  - » Stakeholder education is one of the biggest barriers experienced in three states.



# Program funding

- > Indigency and unaffordability funding
  - » **Indigency:** inability of impaired drivers to afford interventions and/or sanctions.
  - » **Affordability:** objective is to provide a more holistic picture of the impaired driver's finances and monthly expenses.
  - » **Willingness to pay:** the amount a person is willing to pay to receive the value of a service.
- > 36 states and DC provide indigent funding to eligible interlock participants.





# Program funding

- > Indigency and unaffordability funding:
  - » Based on data collected from states, indigent funding eligibility requirements include the following:
    - » below the poverty line (15 states);
    - » receipt of food stamps or enrollment in a state nutrition program (11 states);
    - » determined by court (7 states);
    - » individual application process (i.e., paper-based forms and proof of income) (4 states), and;
    - » determined by DMV (1 state).



# Program funding

- > Indigency and unaffordability funding:
  - » **Virginia.** The Virginia Alcohol Safety Action Program (VASAP) grants less than 1% of requests for indigent funding. Offenders must first be declared indigent by the courts and then apply to VASAP for assistance, at which point they assess whether interlock fees should be waived entirely or reduced.
  - » **South Carolina.** The indigent fund is sustained by charging all non-indigent offenders a \$30 monthly surcharge. Indigency is determined using the Federal Poverty Guidelines. Applications for indigent funding are reviewed by a committee and are approved for a 90-day period.



# Program funding

- > Indigency and unaffordability funding:
  - » **New Mexico.** The Department of Transportation Traffic Safety Division oversees the indigent fund. Eligibility is determined through participation in any approved assistance program (i.e., food stamps, supplemental security income, temporary assistance for needy families) along with application. The fund pays for fees related to device installation and removal, monitoring, and administrative cost.



# Data management

- > Although interlock data may be collected across states, it is often not useable to inform program improvements.
- > A 2023 survey of states revealed 16 indicated the need for better data collection and management tools and processes.
- > Five states reported all interlock data was collected and owned by vendors within the state, making the data unusable or inaccessible to interlock program staff.





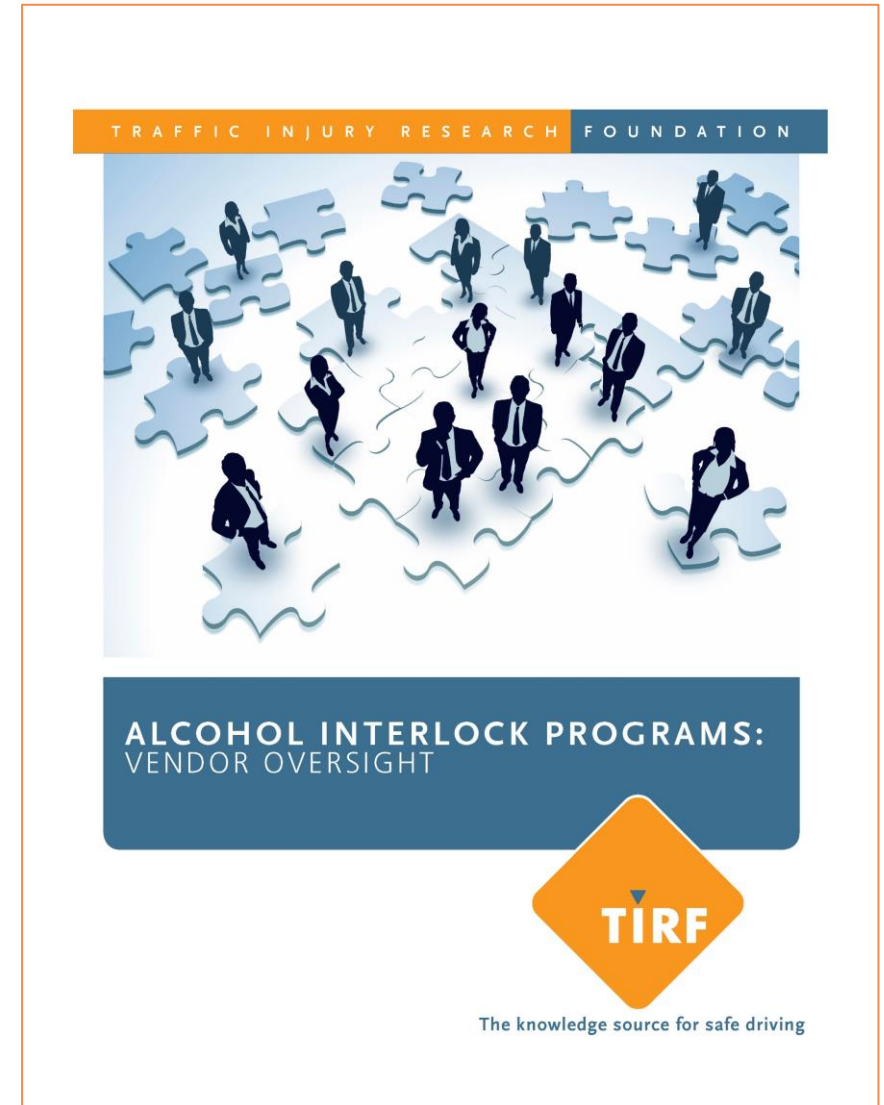
# Data management

- > The implementation of an automated data management system has the potential to make offender management much more efficient and save jurisdictions money by increasing efficiency and decreasing staff workload.
- > In Maryland, the Motor Vehicle Administration (MVA) pioneered an automated interlock monitoring program that combines electronic data receipt and program management which led to a reduction of an average of 20,000 paper documents each month.



# Vendor oversight

- > The purpose of this feature is to ensure the use of high-quality devices that are accurate, reliable, and prevent drivers from starting the vehicle with a BAC at the determined set point.
- > This feature can ensure uniform and professional service delivery across manufacturers and service centers within a jurisdiction.
- > There are many benefits of a vendor oversight feature.





# Vendor oversight

- > The state agency responsible for vendor oversight varies.
  - » In six states the Department of Public Safety is responsible for vendor oversight, and in nine states responsibility belongs to the DMV.
  - » Four states have programs in which the state patrol is responsible for the vendor oversight program.
- > Agencies responsible for vendor oversight typically approve and re-certify vendors, conduct service center inspections, manage interlock program client complaints regarding vendors, service centers, and technicians, and communicate with vendors regarding law changes.



# Vendor oversight

- > Vendor approval process:
  - » Nineteen states have application process for vendors who wish to provide services within their state.
  - » The application process differs, but commonly includes a letter of intent, proof of compliance with the most recent NHTSA model specifications, insurance, a maintenance manual for the device, a sample device, any training materials provided to clients, and a quality assurance plan.
  - » Among the nineteen states with an application process, thirteen require the vendor to apply for re-certification. Re-certification occurs as frequently as annually, or up to every three years.



# Vendor oversight

- > Service center locations:
  - » Nine states require vendors to have service center locations within specific radius requirements (i.e., within a certain number of miles from any participant).
    - » Two states require vendors to have service centers located in each judicial district.
    - » Two states require vendors to have service centers located in each county.
    - » Five states have numerical radius requirements.



# Vendor oversight



- > Technician certification
  - » Requiring technician certification ensures that all interlock technicians within the state are held to the same standard.
  - » Technician certification typically requires technicians to meet educational standards and undergo testing before permitting them to install interlock devices.
    - » **Washington.** Technicians complete an application form, a knowledge and skills exam administered by the impaired driving section and receive a score of 80% or higher, and submit a criminal history report. Technicians must renew and pay applicable fees for their certification annually.



# Interlock technology features

Association of Ignition Interlock Program Administrators

**ALCOHOL IGNITION INTERLOCK: TECHNOLOGY UPDATE**



Enhancements to alcohol interlock technology have been substantial in the past seven years. This rapid pace of advancement has facilitated the monitoring of program participants by providing access to the visual identification of drivers, geographic location and real-time information. It has also created flexibility and enabled program administrators to tailor the level of participant supervision in accordance with risk. However, these advances have also necessitated concerted efforts by states to keep pace with changes in device technology and ensure that program regulations and practices are adapted to acknowledge new features. At the same time, the importance of device management and maintenance remains paramount to protect the integrity of these programs.

This fact sheet summarizes important highlights from presentations about technology during the May 2019 Association of Ignition Interlock Administrators annual conference. Sensor technology is described along with important information related to calibration of devices and field testing. Global position system features are also described.

**FUEL CELL SENSORS**

**Are fuel cell sensors the most viable technology for ignition interlocks?**

Yes, fuel cell sensors are highly efficient, easy-to-use and provide an accurate measure of a driver's breath alcohol concentration (BrAC). Fuel cell sensors use an electrochemical process where the alcohol in a person's breath reacts with a catalytic electrode and produces an electrical current. The strength of the current can be used to measure the level of alcohol in the breath sample.

**What are the benefits of a fuel cell sensor?**

Fuel cell sensors are highly accurate and are specific to alcohol. Additionally, these devices

are not affected by ambient air in the vehicle, meaning the system does not need to be purged after a test. This reduces the recovery time needed between breath tests. Furthermore, fuel cell sensors are not susceptible to positives from organic hydrocarbons such as cigarette smoke, and can hold their calibration (i.e., the ability to measure accurately and repeatedly over time) longer than devices using semiconductor sensors.

**INTERLOCK DEVICE CALIBRATION**

**Why is the regular calibration and maintenance of interlock devices important?**

The calibration of devices is essential to the accuracy and reliability of breath alcohol

ALCOHOL IGNITION INTERLOCK: TECHNOLOGY UPDATE

- > Three common enhanced interlock technology features are cameras, GPS, and real-time reporting.
  - » **Cameras.** Increases the likelihood of holding interlock users accountable for their circumvention attempts and breath test failures.
  - » **GPS.** Can be used as a risk management tool for offenders who are noncompliant with the interlock program requirements.
  - » **Real-time reporting.** Data is obtained from the device in a timely, accurate, and accessible manner every day.



# Interlock technology features

- > Most (34) states require an enhanced technology feature alongside the interlock device.
- > Thirty-three states have a camera requirement for the interlock device, seven require GPS, and nine require real-time reporting.
- > Of the thirty-four states with an enhanced technology feature requirement, only four require all three features be activated on the interlock device.





# Driver compliance

- > Compliance-based removal occurs when interlock users have been compliant for a set amount of time (i.e., 90 days), or for a specified time at the end of their interlock period, they are able to have the interlock removed.
  - » Thirty-one states require compliance-based removal as an exit requirement for the interlock program.
  - » The violation-free time period ranged across states, as did the length of the extension. Violation-free time periods ranged from 30 to 90 days, and extensions ranged from 30 to 120 days.
  - » Five states reduce the interlock program period for compliance, three states do this as part of a first impaired driver program, and two states do so at the discretion of the court.



# Practitioner education & training

- > At present, immense workload associated with law enforcement can result in high levels of staff turnover within these agencies.
- > Impaired driving cases are often assigned to new prosecutors despite the fact these cases are complex and typically involve technical scientific evidence, making them among the most challenging to prosecute.
- > This situation has resulted in a continuing demand for education and training for frontline practitioners regarding interlock devices. Strategies to develop and retain a knowledgeable and experienced staff are an ongoing need.



# Agency communication

- > Cooperation and communication between and among criminal justice agencies can ensure DWI offenders are detected, appropriately sanctioned, and removed from the road to protect the public and reduce alcohol-related deaths and injuries.
- > Good cooperation and communication enables police officers to correctly identify impaired drivers as first offenders or repeat offenders at the roadside, and make sure compelling and much-needed evidence is correctly gathered, documented, and presented in court.



# Agency communication

- > **Impaired-Driving Task Forces.** An effective tool to focus public attention on the impaired-driving problem in the State, identify necessary improvements to the system, and establish public and political support to implement and fund, if necessary, such improvements.
- > **Ignition Interlock Program Advisory Group.** These working groups provide a mechanism for collaborating and advising implementation for ongoing interlock program quality improvement and evaluation projects.



# Alcohol Interlock Curriculum for Practitioners

- > Contains a variety of instructional materials that can assist agencies and organizations in educating their staff and members about IIDs.
- > Provides general information about IIDs to the public.
- > Allows registered instructors to tailor educational materials to meet their respective needs.
- > Designed to meet the educational needs of law enforcement, prosecutors, the judiciary, probation and parole officers, treatment professionals, and driver licensing professionals.



# Welcome

Welcome

[Overview](#)

[Research](#)

[Technology](#)

[Certification, Field Testing, and Calibration](#)

[Implementation](#)

[Legal Concerns](#)

[Vendors/Service Providers](#)

[Program Evaluation](#)

## Welcome to the Alcohol Interlock Curriculum for Practitioners!

This website contains a variety of instructional materials that can assist agencies and organizations in educating their staff and members about alcohol ignition interlocks.

An alcohol ignition interlock is a breath testing device that connects to the starter or ignition, or other on-board computer system of a vehicle.

The device prevents the vehicle from starting if breath test results shows a breath alcohol concentration (BrAC) is found to exceed a certain pre-set limit (usually corresponding to blood alcohol concentration of .02). This device also requires the driver to continue to pass




## Research

# Questions & Answers

Research > Questions & Answers

Overview


Do alcohol interlocks reduce alcohol-impaired driving recidivism among offenders? 

Research >

Technology

Do alcohol interlocks reduce recidivism among first time offenders? 

Certification, Field Testing, and Calibration

Do alcohol interlocks reduce recidivism among repeat offenders? 


Implementation

Do alcohol interlocks reduce alcohol-related crashes? 

Legal Concerns

How often do judges impose sentences which require alcohol interlock? 

Vendors/Service Providers

What are some factors that contribute to judicial reluctance to impose alcohol interlocks as a sentence? 

Program Evaluation




## Technology Questions & Answers

[Technology](#) > [Questions & Answers](#)

[Overview](#)

How does the alcohol interlock work and how is it installed? 

[Research](#)

What technologies are used in alcohol interlocks to detect alcohol in breath samples? 

[Technology](#) >

[Certification, Field Testing, and Calibration](#)

How accurate are alcohol interlocks in detecting alcohol? 

[Implementation](#)

Are there technical standards established for alcohol interlocks? 

[Legal Concerns](#)

How does mouth alcohol affect the alcohol interlock device? 

[Vendors/Service Providers](#)

How do temperature and altitude (elevation) affect the performance of the alcohol interlock? 

[Program Evaluation](#)





# Explore the Data

Use the program features listed below to search for states that meet the search criteria. These search features can be used alone or in combination with the quick search interlock technology feature.

## Search by State

## Interlock program eligibility

Can impaired drivers 'wait out' their interlock requirement

Yes  No

## Type of Program

Administrative

Hybrid

## Filter by: Interlock Technology Feature

Camera  GPS  None  Real-time Reporting



Alabama



Alaska



Arizona



Arkansas



California



Colorado



Connecticut



Delaware



## Colorado Legislation

Year of last legislative change: 2019

Year of last revision to administrative code: Awaiting data

### **Most challenging aspects associated with introducing and passing interlock legislation:**

The Department of Revenue is limited on the number of bills they can bring forward each legislative session.

### **Changes for program improvement being pursued:**

Application process for new manufacturers. Service center visits. Streamlined data collection with manufacturers

### **Who is eligible for an interlock in your state according to legislation (Data provided by CIIM):**

All impaired drivers

### **Can impaired drivers 'wait out' their interlock requirement:**

Yes

### **Is an interlock required on test refusal:**

Yes

# Thank you

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