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# Between the Lines

## About Alcohol Ignition Interlocks

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<http://www.tirf.ca>

**A**n alcohol ignition interlock is a sophisticated breath-testing device that is connected to the ignition system of a vehicle. When the device detects a pre-set level of alcohol in a breath sample, presumably provided by the driver, it prevents the vehicle from being started by blocking electrical power to the starter.

Advances in the ignition interlock field in the past two decades have been substantial. Sound research demonstrating the effectiveness of these devices in preventing impaired individuals from driving a vehicle has been amassed—research has consistently found reductions in recidivism of 45-90%. The technology is very advanced and has overcome most problems associated with circumvention. The device also provides extensive records of such things as attempts to start the vehicle and failures to do so. The characteristics of the devices are flexible, so they can be tailored to accommodate a broad range of jurisdictional requirements. Most states now have implemented enabling legislation as well as an interlock program.

Despite these advances there has been limited growth in interlock programs. Less than 10% of the 1.5 million impaired drivers arrested annually have such a device installed on their vehicle. One reason that participation rates in interlock programs in most jurisdictions are low is that most criminal justice professionals have limited opportunities to learn about these sophisticated devices and are not well-informed about programs operating in their own jurisdictions. Moreover, what they do know may be colored by urban myths, legends, and misinformation that has been widely circulated and never adequately addressed. Given such a situation, it is not surprising to learn that many prosecutors do not recommend and many judges do not order the device, even when mandated by law.

Greater efforts are needed to inform and educate criminal justice practitioners about the benefits of interlock devices and the operation of interlock programs to overcome existing misperceptions and maximize the potential of interlocks to reduce impaired driving.

To address this need, the Traffic Injury Research Foundation (TIRF) recently completed

an educational primer for judges entitled "Ignition Interlocks: From Research To Practice," under funding from Alcohol Countermeasure Systems, Inc. This brief, easy-to-read, educational piece provides an overview of the state of knowledge about ignition interlocks. Included sections highlight: how the technology works and the features of devices, what the research generally concludes about interlocks, and responses to common judicial concerns. Also included is list of "quick facts" for judges highlighting the most compelling reasons for using interlocks and the best ways to overcome attempts by offenders to avoid using the device. A companion booklet to the primer contains state-specific information. Booklets have been produced for Florida and New Mexico; booklets for other jurisdictions are underway. To order this and other publications, see [http://www.tirf.ca/publications/  
publications.cfm](http://www.tirf.ca/publications/publications.cfm).

**What follows is a summary of the most important facts criminal justice practitioners should know about interlocks.**

*Technology:*

- Contemporary interlock devices use highly reliable fuel cell technology—the same technology used in preliminary breath-testing devices and the majority of evidential breath testing devices and passive sensors. They are alcohol-specific and have greater stability, meaning they require calibration checks less frequently (60-90 days).
- Most devices have extensive anti-circumvention features including: sealed wiring, a data recording device that records all events and usage of the vehicle with a time/date stamp, technology to detect non-human breath samples, and a running retest which requires subsequent breath tests while the vehicle is in use.
- Devices have a range of programmable features that can be tailored to jurisdictional requirements (e.g., BAC threshold for lock-out of the vehicle, a lockout period following a positive BAC reading, a pull-over notice following a missed or failed breath

test, language settings, early recall for specified violations, emergency override).

- Future developments are likely to include devices with video and other biometric features to ensure courts can clearly identify the individual providing the breath sample and driving the vehicle.

#### Research:

- Research shows that interlocks reduce recidivism by 45-90%. Reductions in recidivism occur among first-offenders and repeat offenders.
- This research has undergone extensive peer-review. Studies have involved a range of populations, time periods and study designs, attesting to the veracity of the results.
- The main limitation associated with interlock research is self-selection (offenders volunteer to participate). However, this limitation was largely overcome in a Maryland study involving elements of random assignment that yielded similar reductions in recidivism.
- When the interlock device is removed from the vehicle, recidivism rates generally return to pre-interlock rates, demonstrating that the device is effective in preventing drinking and driving while it is installed. At the same time, it is clear that long term behavior modification may require extended use and/or treatment.
- The significant reductions in recidivism found in the research are evidence that few offenders drive an alternate vehicle to avoid the interlock. If offenders regularly selected to drive a non-interlocked vehicle, reductions in recidivism would be much smaller or non-existent.
- Research shows that elevated BAC readings and early-morning high BAC readings (captured by the data recording device) are the best predictors of future recidivism.

#### Facts about Interlocks:

- The goal of the interlock device is incapacitation—offenders are unable to drink and drive while the interlock is installed. However, ignition interlocks alone will not result in behavior change; when combined with treatment and other sanctions, these devices hold promise for such outcomes.
- Legislation in most jurisdictions does not require the offender to own the vehicle on which the interlock is installed.
- Up to 75% of suspended or revoked drivers continue to drive anyway. Having an interlock helps to ensure they are driving sober.
- Interlocks permit offenders to remain in the community, fulfill family and employment obligations, and participate in treatment. These devices are less expensive than incarceration or house arrest, and more effective than license suspensions.
- Driving an interlock-equipped vehicle is less of an inconvenience to family members than incarceration or a suspended/revoked license. Research suggests that there are positive benefits for family life when offenders are on an interlock.
- On average, ignition interlocks cost approximately

\$2.50/day—about the cost of one drink.

- Providing a sufficient breath sample is an issue for a very small number of offenders. Most devices can be adjusted to accept a reduced breath volume.
- Mouth alcohol (e.g., from mouth wash) can result in a positive reading in a limited number of cases. Similar to an evidential breath testing device, waiting 15 minutes or rinsing the mouth with water will clear mouth alcohol and permit the driver to start the vehicle, provided his or her BAC is below the pre-set level.
- Many offenders fail to install an ignition interlock, despite a court order to do so. Ordering a certificate of installation as a condition of probation can ensure offenders install the device.

Further details can be found in the TIRF educational primer “Ignition Interlocks: From Research to Practice.” Of note, several representatives from the judicial community graciously reviewed and provided input on the educational primer to ensure that it meets the needs of judges and is user-friendly. To order a copy, go to [http://www.trafficinjuryresearch.com/publications/pub\\_details.cfm?intPubID=217](http://www.trafficinjuryresearch.com/publications/pub_details.cfm?intPubID=217).

Plans are also underway to produce state-specific information packages for each jurisdiction which can be included in the primer.

In addition to this primer, TIRF has created an international inventory of interlock programs, under funding from Anheuser Busch Companies, which is posted on its Web site ([www.tirf.ca](http://www.tirf.ca)). This inventory contains program information from the United States, Canada, Australia, and Europe, legislative references for these jurisdictions, program contacts, research references, and proceedings from six international symposia on ignition interlocks hosted by TIRF.

We invite you to visit our Web site and see all that we have to offer. For additional information, please contact

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## PLEASE NOTE

**N**TLC is compiling case law addressing the evidentiary value of ignition interlocks. Has your jurisdiction held a *Frye* or *Daubert* hearing? Have you attempted to introduce this evidence at a probation violation hearing? If so, please contact us at [trafficlaw@ndaa.org](mailto:trafficlaw@ndaa.org) or 703.549.9222.

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