

IGNITION INTERLOCKS TURN THE

CAN TECHNOLOGY STOP DRUNK DRIVING?

BY JEANNE MEJEUR

Looking around for new weapons to combat impaired driving, states have rediscovered a forgotten ally: the ignition interlock. And it's not the ignition interlock of the 1980s, with all the concerns about how easy it was to defeat the device. This model is kicked-up, high-tech and ready to go.

For decades, drunk driving fatalities steadily decreased every year, as states adopted stricter standards and harsher penalties. But progress has stalled in the last five years, as the percentage of alcohol-related traffic deaths has remained constant, near 40 percent. Enter the high-tech ignition interlock.

Chuck Hurley, CEO of Mothers Against Drunk Driving (MADD) says we need to get serious about drunk driving and that ignition interlocks are the tool of choice for greater progress. With more than 16,000 alcohol-related fatalities every year, drunk driving is "still the most tolerated, frequently committed violent crime in America. We need to stop the 'catch and release' approach by the courts, make ignition interlocks required for all convicted drunk drivers, and work for advanced technology that will not allow drunk drivers to start their vehicles."

The premise is simple: separate drinking drivers from their vehicles. For drivers with alcohol in their breath, their car won't start.

Here's how it works: An ignition interlock device is installed on a car and connected to



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Ignition Interlock Design Features



KEY AND BLOW

the starter system. The device can be set to a specific BAC level for the offender, from .00 BAC to slightly higher levels, such as .02 BAC. When the offender wants to start the car, he or she has to blow into a breathalyzer tube. If the ignition interlock detects alcohol above the established level, the device won't send power to the starter system, and the car won't start.

One of the concerns on the early ignition interlocks was that an offender could start the car and then start drinking while driving. Not so with the new versions, which require periodical "rolling retests" while the car is running. As the offender drives, he or she gets a warning indicator that a test will be required soon, to give them time to pull over to more safely take the test. If they're unable to get out of traffic, they can blow into the device as they continue to drive. The retests are random, so the offender can't plan for them.

The rolling retests also eliminate the old gambit of driving to a bar, sober, and leaving the vehicle running while the driver enjoys happy hour. He'd return intoxicated to his car, ready to hit the road, or whatever else happened to get in his way.

As a safety feature, the ignition interlock won't turn the motor off, even if the device measures alcohol above the set limit. While that may seem counter-intuitive, think about it this way: the only thing worse than a drunk behind the wheel is a drunk behind the wheel with no steering capability. Since steering shuts down when the engine is turned off, the devices will not shut the engine down.

Instead, the ignition interlock records a violation on a data log. In fact, it logs everything that happens with the car. It tracks all

attempts to start the vehicle and the breath test results, whether the car starts or not. It records the results of all rolling retests and flags any attempt to tamper with the device.

Tampering was a problem with early models of ignition interlocks, where clever offenders could easily disable the devices. Today's models have sealed wiring and circuitry so any attempts to bypass the device are readily apparent when the car is brought in for regular maintenance checks of the ignition interlock. The regular checkups ensure that the devices are properly calibrated and measuring alcohol accurately.

THE CONSEQUENCES

So what happens when there is any kind of violation? The datalog preserves the entire record, with dates, times and breath test results. When violations occur, the offender must bring the car to the ignition interlock service provider, to have the device checked and reset. The record is also sent to the probation or parole officer. Whether the violation is prosecuted as a separate offense depends on the state, but it can be considered a violation of the terms of his or her probation, which may carry consequences of its own. Repeated violations could result in probation being revoked.

The record maintained by the datalogger has more value than just the violations it might record. It also shows the pattern of the offender's drinking habits, and his or her compliance with sentencing and treatment requirements. That can be very helpful knowledge for judges and probation officials in determining whether the sentence imposed is effective and whether or not the offender

- ◆ The hand-held device slightly larger than a cell phone is attached to the car ignition.
- ◆ Hum tones, "blow and suck" and coordinated breath pulses identify the driver and thwart bogus air samples.
- ◆ Rolling retests can be set at random or fixed intervals.
- ◆ Programming can limit the times a vehicle can be driven.
- ◆ Horn starts honking and device is locked if test is not taken when starting the car.
- ◆ A memory device records every interaction with the vehicle, including starts, shut-downs, device lockouts, time, date, BAC level, refused tests, violations, bypasses, long idle times, suspect breath samples, horn and light control activation, and tampering.
- ◆ Court or other monitoring officials are notified automatically of violations.
- ◆ A violations reset requires the user to have the device reset by a service provider following a violation; device will lock if not serviced.
- ◆ User must take vehicle to service provider for a device calibration check at regularly scheduled intervals.
- ◆ The device records and shuts down power if the car battery is disconnected.
- ◆ A dedicated power source preserves memory.
- ◆ An emergency restart allows vehicle to be restarted without test within one minute of previous shutdown, but the device must be serviced within a set time period to avoid a lockout. The emergency must be documented.

is complying with the terms of the probation. For example, if an offender has elevated but allowable alcohol levels in her breath when she starts her car in the morning to go to work, it shows that she may have been drinking heavily the night before.

That information is particularly useful in jurisdictions that couple ignition interlocks with alcohol treatment. "Ignition interlocks provide a window of opportunity by providing a time where it is much more difficult for offenders to drink, offering them their best chance to face their substance abuse issues," says Robyn Robertson, president of the Traffic Injury Research Foundation and a criminologist specializing in traffic safety research.

CHECK OUT the Traffic Injury Research Foundation's project on ignition interlocks. Find the link at www.ncsl.org/magazine.

NEWER AND BETTER

One of the more common concerns about the original ignition interlocks was that offenders could have someone else provide

a breath sample to start the car. New devices contain driver recognition systems that are much harder to circumvent. These include breath pulse codes, hum-tone recognition, and "blow-and-suck patterns." It's still possible to have someone else provide the sample but the use of the rolling retests, together with the driver recognition innovations, have curtailed this maneuver around the system.

The ultimate in driver recognition protections is a camera coupled with an ignition interlock. One of the newest devices includes a tiny unit that is mounted to the inside of the windshield in front of the driver. Only a cubic inch, the camera takes a photo at each required use of the ignition interlock. The new camera line of ignition interlocks are just hitting the market. No longer will offenders facing a violation be able to claim someone else was driving their vehicle.

The simplest and time-honored way to circumvent ignition interlocks is to drive another car. Many drivers have access to more than one vehicle, so for that reason judges are sometimes reluctant to require an ignition interlock. Though not an absolute

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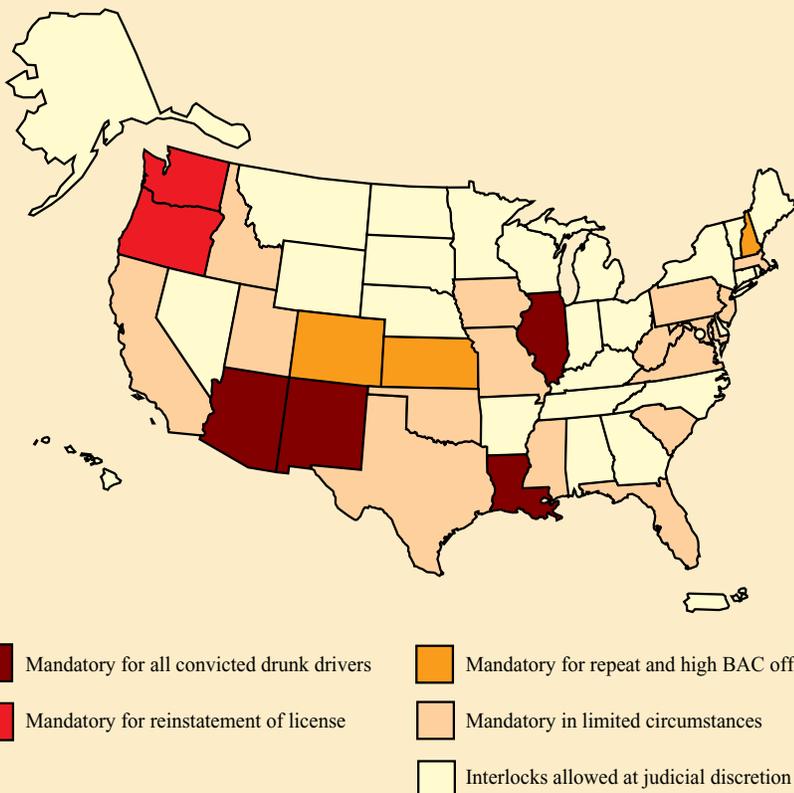
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State Ignition Interlock Laws



Source: Mothers Against Drunk Driving (MADD) 2007

guarantee, specifying that the car equipped with an ignition interlock be driven a minimum number of miles ensures that the car will be driven and the device will be used.

THEY WORK

So the devices are accurate and reliable. Manufacturers are working hard on technology to stay one step ahead of those who would circumvent the interlock in new ways. Are they effective in keeping drunk drivers off the roads? According to a report recently published by the Traffic Injury Research Foundation, the answer is “yes.” At least 14 studies in the United States and Canada from 1990 to 2002 show significant reductions in subsequent drunk driving offenses while the ignition interlock device is installed.

For the time that the ignition interlock remained on the vehicle, recidivism rates decreased anywhere from 50 percent to 95 percent in those studies. As a short-term intervention tool, it’s hard to argue with the effectiveness of ignition interlocks.

As a determinant of long-term behavioral change, the results are less positive. Once the ignition interlock device is removed, studies show that recidivism rates gradually increase to match the rates of those who never had an ignition interlock.

From the glass half-empty perspective, that may be reason to say “why bother?” with ignition interlocks in the first place. For the glass half-full crowd, ignition interlocks are worth it because they reduce drunk driving while they are installed. And while they are in place, they are preventing accidents and saving lives.

Four states have taken the lead on ignition interlocks by making them mandatory for all convicted drunk drivers, even first-time offenders. New Mexico was the first state, with a law passed in 2005, to require ignition interlocks for all offenders. The state has seen a 28 percent decline in alcohol-related fatalities since the new law went into effect. Since then, three more states—Arizona, Illinois and Louisiana—have passed similar laws that mandate an ignition interlock for every convicted drunk driver.

Oregon and Washington require ignition interlocks for all offenders who want to have their driving privileges reinstated. Colorado, Kansas and New Hampshire make them mandatory for repeat offenders and those convicted of so-called “high BAC” offenses. Sixteen states require them in some circumstances, while 20 states and the District of Columbia allow interlocks at the discretion of the courts. Only five states have no laws on interlocks.

THE PROBLEM OF COSTS

Costs are always a concern. Typically, offenders pay for installation, which runs about \$75, plus a monthly service fee. Monthly monitoring fees range between \$60 and \$90 in most jurisdictions. That averages out to \$2 or \$3 a day, about the same cost as a drink.

While the costs for ignition interlocks are relatively low, some offenders can’t afford to have the devices installed and monitored, even if they are ordered to do so by the court. So some states provide sliding-scale subsidies for indigent offenders, funded by other traffic fines.

Interlocks are an aggressive tool to reduce drunk driving, but alone they are not a magic bullet. It takes planning, adequate resources and coordination to make them effective. But they do save lives. And that makes them one of the best tools lawmakers have to keep drunk drivers off the road.

