

TRAFFIC TECH

® ¾ M ☆ NHTSA

Traffic Safety
Administration Technology Transfer Series

DOT HS 813 002 November 2020

Ignition Interlock Use Rates Following Changes in Interlock Legislation

Introduction

A breath alcohol ignition interlock device is a breath-testing unit mounted on or near the dashboard and connected to a vehicle's ignition. The interlock prevents the vehicle from operating unless the driver provides a breath sample into the device and the sample reveals the driver's blood alcohol concentration (BAC) to be lower than a predetermined level. Ignition interlocks, while installed, have proven to be effective at reducing driving under the influence (DUI) recidivism and have received widespread support among policy makers and traffic safety advocates as a DUI countermeasure. There is interlock-related legislation in every State, Puerto Rico, and the District of Columbia that makes interlock use either an optional or mandatory sanction for DUI offenses. Nonetheless, the use of interlocks among DUI offenders remains low relative to the number of DUI arrests.

There are barriers to the use of interlocks that arise from the legislative context that—intentionally or unintentionally—make some offenders ineligible for interlock programs. For example, an interlock program for repeat DUI offenders may exclude a first-time DUI offender from enrolling in the program. It follows that a basic strategy for increasing interlock use is to expand the pool of eligible offenders through legislation. Interlock legislation can be changed to remove legislative barriers to previously excluded offenders by increasing the pool of eligible offenders and incentivize interlock use among the already-eligible offenders, such as by offering less attractive options.

Objective

The goal of this project was to study the effect of changes in interlock legislation on interlock use. It was assessed using the following measures:

- the number of newly installed interlocks before and after the change in law
- the number of interlocks-in-place during a given period
- the rate of interlock usage among eligible offenders
- the rate of "low-use" interlock-equipped vehicles

Method

We sought to coordinate with States that had changed their interlock legislation and had access to interlock data. Florida and West Virginia were selected because they had different types of interlock laws and expressed interest in participating in the study by providing interlock data. We conducted a time series analysis on interlock data to compare interlock use before and after the changes to interlock law.

Results

Florida

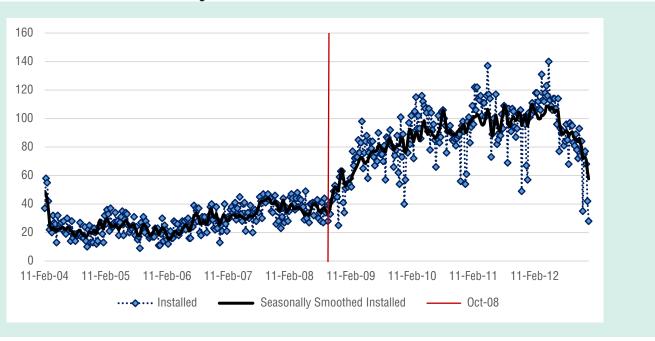
The intention of a 2008 law was to lower the perceived *too high* "high-BAC" threshold from .20 grams per deciliter (g/dL) to .15 g/dL. The result was an increase in the DUI offender pool mandated to install interlocks, particularly in the number of first-time offenders who otherwise would not be mandated to install interlocks (except for first offenses that involved a "high-BAC"). See Figure 1 for the numbers of first-time offenders who installed interlocks before and after the 2008 law went into effect. After the law was implemented, there was an increase in the number of newly installed interlocks. These changes were seen overall among all interlockmandated DUI offenders, but especially among first-time "high-BAC" offenders.

West Virginia

The effect of several interlock-related laws on interlock use were examined, including (1) a 2008 law that created an "aggravated" ("high-BAC") DUI offense, requiring an interlock and reduced hard revocation periods for voluntary interlock users; (2) a 2010 law that allowed the expungement of criminal charges for first-time offenders (except those with a "high-BAC") who completed an interlock program; and (3) a 2014 law that allows offenders to avoid a hard revocation in exchange for waiving their right to an administrative hearing and installing an interlock.

Significant increases in newly installed interlocks were seen after the implementation of the 2010 and 2014 laws. This effect was likely due to the influx of first-time offenders for whom interlock use had previously been voluntary (as interlock use was mandatory only for repeat-offenders). See Table 1 for the

Figure 1. Number of First Offenders Installing Interlocks in Florida Before and After 2008



number of interlock installations as a proportion of DUI arrests from 2011 to 2016. In contrast, "low-use" of interlock-equipped vehicles only declined after the implementation of the 2008 law (i.e., use of interlock-equipped vehicles increased). The authors also did not find a significant change in interlocks-in-place, but that finding may have resulted from data limitations.

Table 1. West Virginia: Interlock Installations as a Proportion of DUI Arrests, 2011 to 2016

	Number of DUI Arrests	Interlocks Installed	
		N	%
2011	9,412	2,755	29.3%
2012	9,874	2,864	29.0%
2013	10,182	3,038	29.8%
2014	9,363	3,694	39.5%
2015	9,055	3,976	43.9%
2016	8,349	3,206	38.4%

Conclusion

After implementing diverse interlock-related legislation, interlock use increased in both Florida and West Virginia. Some aspects of the legislation contributed to the increased use by expanding the pool of interlock-eligible offenders, while some aspects of the legislation contributed by making interlocks a more utilized sanction, thus, possibly incentivizing alreadyeligible offenders to choose interlocks. These increases in actual interlock-use manifested in various ways across the two States, such as through increased rates of newly installed interlocks and reductions in "low-use" rates of interlockequipped vehicles. In each State, laws were reportedly implemented easily due, in part, to strong communication between stakeholders during the legislative and planning process. In summary, if States want to expand interlock use, they may want to consider expanding the pool of DUI drivers eligible for interlocks, as well as incentivizing interlocks. Each of these strategies appears to be an effective approach to increasing interlock use among DUI offenders.

Suggested APA format citation for this report:

McKnight, A. S., & Tippetts, A. S. (2020, November). *Ignition interlock use rates following changes in interlock legislation* (Traffic Tech. Report No. DOT HS 813 002). National Highway Traffic Safety Administration.

TRAFFIC TECH is a publication to disseminate information about traffic safety programs, including evaluations, innovative programs, and new publications. Feel free to copy it as you wish. If you would like to be added to an e-mail list, contact TrafficTech@dot.gov.



U.S. Department of Transportation National Highway Traffic Safety Administration

1200 New Jersey Avenue SE, NPD-320 Washington, DC 20590

2 14883-111920-v4