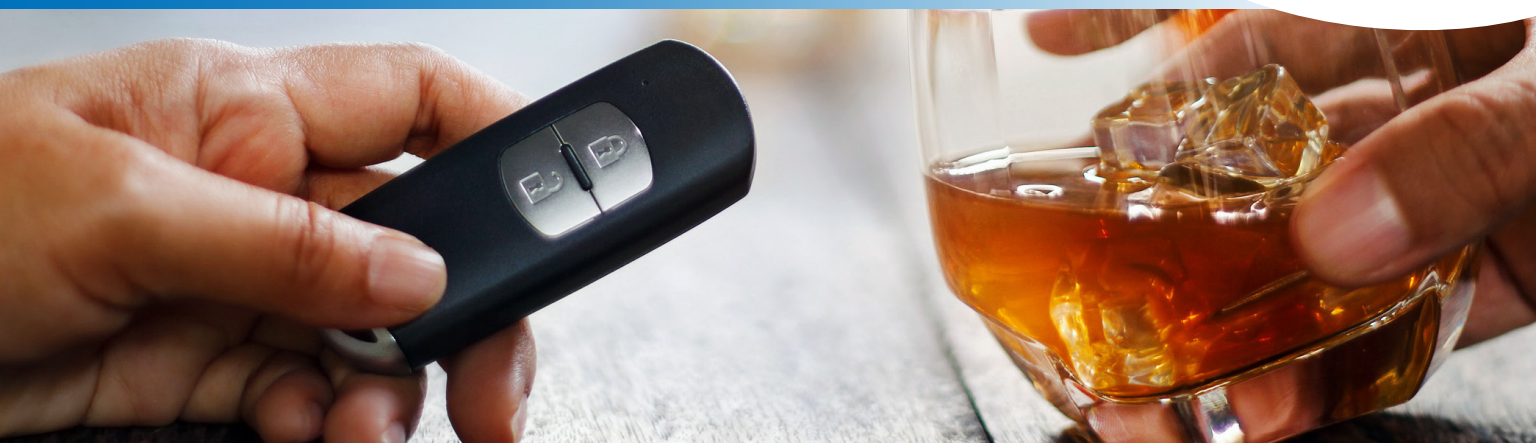
ALCOHOL INTERLOCKS & IMPAIRED DRIVING TRENDS | RESEARCH UPDATE



More than half of all US states (34 states and Washington, D.C.) require all first and repeat alcohol-impaired driving offenders to install an interlock device as of July 1st, 2022. Such legislation has been widely adopted as a result of research showing that alcohol ignition interlocks are one of the most proven and effective tools to prevent impaired driving. Not only do these devices reduce repeat offenses, but they also reduce alcohol-related crashes (Willis et al. 2005; Kanable 2010; Elder et al. 2011; Fielder et al. 2013; McCartt et al. 2013; Voas et al 2013; Beck et al. 2015; Vanlaar et al. 2016; Kaufman and Wiebe 2016; McGinty et al. 2017; Teoh et al. 2018; 2021). As a result, more jurisdictions have focused on strategies to increase installation rates and implemented various tactics to ensure all impaired driving offender are subject to the device. New research continues to inform program administrators, legislators, and the public about the effectiveness of alcohol ignition interlocks programs and program features. These findings also provide much-needed guidance to shape the development of operational practices and new program features. This fact sheet summarizes recent trends in impaired driving fatal crashes, interlock installations data, state interlock laws and pre-trial services, including diversion programs.

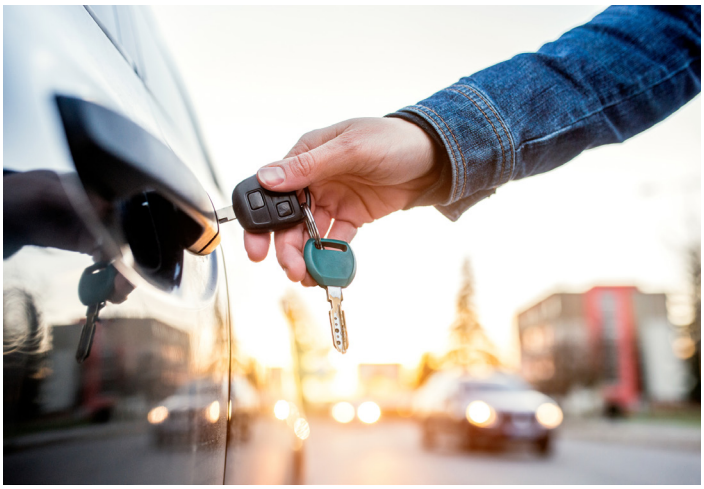
IMPAIRED DRIVING TRENDS IN FATAL CRASHES, ENFORCEMENT, AND TRAUMA DATA

According to data from the Fatality Analysis Reporting System (FARS), the overall impaired driving fatality rate decreased from 2016 to 2019 before rising in 2020. Vehicle miles traveled (VMT) decreased by 11% from 2019 to 2020 and the estimated fatality rate per 100 million VMT decreased by 3.5% from 1.14 in 2018 to 1.11 in 2019 before rising to 1.34 in 2020 (NHTSA, 2022). According to recent NHTSA data, there was a 14.9% increase in alcohol impaired driving fatalities from 2019 to 2020. Fatalities involving a driver with a blood alcohol concentration (BAC) of .08 or greater accounted for 30% of total motor vehicle crashes fatalities in 2020 (or 11,654 lives lost) compared to 2019, when the number of fatalities was 10,142 (28.1% of total crashes fatalities) (NHTSA, 2022). The percent of alcohol-impaired driving fatalities of all driving fatalities in 2020 represents the highest percentage since 2015 and an increase of 6.8% from 2019. Moreover, early estimates of traffic fatalities for 2021 project an estimated 42,915 people died in motor vehicle traffic crashes, a 10.5% increase from 2020, and alcohol-involved crashes are estimated to increase by 5%.

Of interest, in the first half of 2020 (Q1 and Q2), the number of fatalities was lower compared to 2019, however, what was surprising was that the fatality rate per 100 million VMT increased substantially.

	2019	2020
Q1	1.05	1.10
Q2	1.08	1.42

To understand why this occurred, it is important to note research has shown in previous recessions, while unemployment increased, VMT, alcohol and other risks, and fatalities decreased. However, during 2020, VMT decreased, while unemployment, alcohol and other risky behaviors, and fatalities increased.



An important factor was massive reductions in enforcement as a result of the pandemic, and this occurred in many countries around the world. As of October 2021 in the US, more than 900 first responders died as a result of COVID-19 with law enforcement comprising two-thirds of these deaths. For safety reasons and to prevent the spread of COVID-19, many law enforcement agencies implemented policies limiting interactions with the public and arrests. This resulted in reduced enforcement in terms of traffic stops, DWI arrests, speeding and seatbelt citations. As such, deterrence typically achieved through high visibility enforcement initiatives waned.

Trauma patient data similarly revealed the proportion of drivers involved vehicle crashes with alcohol, marijuana, and opiates in their system increased from September 2019 to March 16, 2020 (pre-pandemic) compared to post-pandemic. Alcohol increased from 21.8% to 28.3%, cannabinoids (THC) increased from 20.8% to 32.7% and opioids increased from 7.5% to 13.9%. The most common substance among fatally injured drivers was cannabis (active THC), followed closely by alcohol, with opioids, stimulants, and sedatives also present at notable levels.

Ultimately, crash data revealed increases in impaired driving fatalities despite deceases in VMT resulting from the pandemic. Understanding the rise in risky driving behaviors is important in making sense of the increased fatalities and identifying strategies to re-start a downward trend in future years.

Based on a presentation by Jennifer Davidson (NHTSA)

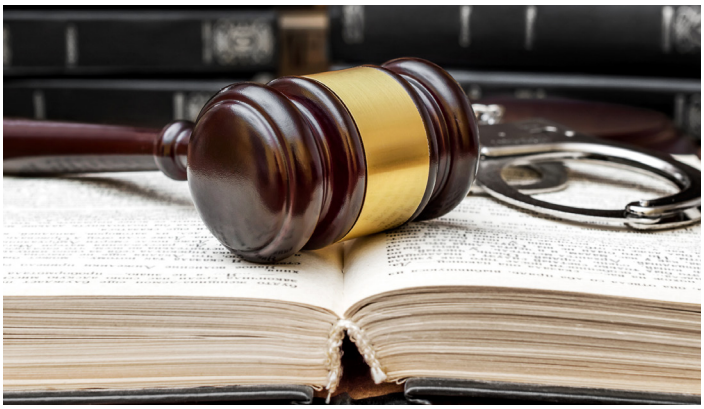
TIRF USA: 2020 IGNITION INTERLOCK INSTALLATIONS

The Traffic Injury Research Foundation, USA, Inc. (TIRF USA), with support from the Association of Ignition Interlock Program Administrators (AIIPA) conducted the annual ignition interlock installation data collection in February 2022 for the 2020 data year. Twenty states and Washington, D.C. reported 2020 interlock installation data, which is slightly fewer from the 27 states and Washington, D.C. reporting 2019 installation data in 2021. The impact of the COVID-19 pandemic may have affected the ability of some agencies to provide data for this report.

Based on reported data, there were 99,570 new ignition interlock devices installed among the 13 states and Washington, D.C. providing data for 2020. A comparison of new interlock installations among the 11 states and Washington, D.C. reporting data for both 2019 and 2020 showed a 21% decrease in installations from 96,899 in 2019 to 76,836 in 2020. A comparison of new interlock installations among the 11 states and Washington, D.C. reporting new installation data for both 2019 and 2020 showed a 21% decrease in installations from 96,899 in 2019 to 76,836 in 2020. However, an analysis of data from two states (Iowa & Pennsylvania) reporting annual data since 2014 showed a 26% increase in new installations.

There were 135,648 active installations reported in 12 states in 2020. A comparison of active installations in the 10 states providing active installation data for both 2019 and 2020 showed a 5% decrease from 110,095 in 2019 to 105,112 in 2020. However, there was a 21% increase in active installations revealed in an analysis of data from five states (Arkansas, Colorado, Florida, Iowa, & Pennsylvania) providing this information since 2018.

Data also indicated there remained a large number of eligible offenders who failed to install an interlock; and this is perhaps more pronounced in arrest and conviction data which showed the only 27.6% of DWI arrests in 2020 installed an interlock, however, 79.7% of DWI convictions had a device installed. While indicators for device installations per DWI arrests and convictions have increased over time, ultimately, they have not yet achieved close to 100%. In other words, the effectiveness of these devices demonstrated by research have not yet been attained in the real world due to conditions for offenders to fail to install a device.



In light of the unprecedented year in 2020 due to the pandemic, data revealed a decline across all interlock programs within the reporting states, however, fewer states were able to report data. Despite increases in interlock installations since 2014, the data continue to confirm a relatively low installation rate among all eligible offenders, providing opportunities among states for increased driver compliance strategies.

The full interlock installation report is available online at: https://tirf.us/download/ignition-interlock-installations-2020-state-data/?tmstv=1684164029

Based on a presentation by Dr. Ward Vanlaar (TIRF)

STATE ALCOHOL IGNITION INTERLOCK LAWS AND FATAL CRASHES

A 2021 study from the Insurance Institute for Highway Safety (Teoh et al., 2021) measured the reduction in fatal crashes to evaluate laws mandating alcohol ignition interlock devices for repeat offenders, high-BAC offenders, and first offenders. The study period was from 2001- 2014 and included 49 states and the District of Columbia. California was excluded as some interlock laws only applied to four counties but not the entire state. Four categories of laws were examined: no law, repeat offender laws, repeat offender and high-BAC offenders laws, and all offender laws (i.e., repeat and first offenders).

Results showed when compared to no interlock law, all-offender laws decreased the number of impaired drivers in fatal crashes at the .08g/dL BAC level by 15.9%. Compared to no law, high-BAC offender and repeat offender laws decreased the number of impaired drivers in fatal crashes at the .08g/dL BAC level by 8%. Lastly, when compared to no law, a repeat offender only law decreased the number of impaired drivers in fatal crashes at the .08g/dL BAC level by 2.6%.

Ultimately, results demonstrated that all interlock laws, even when for just repeat offenders decreased impaired driving fatalities. All-offender laws were the most effective since they produced the largest decrease in fatal crashes. As such, states without all-offender laws should consider adopting this law as they reduce alcohol-related fatal crashes.

The full evaluation is available online at: https://pubmed.ncbi.nlm.nih.gov/34686075/

Based on a presentation by Dr. James C. Fell (University of Chicago)

THE USE OF INTERLOCKS IN PRE-TRIAL SITUATIONS: CASE STUDIES

Based on a recent upward trend in impaired driving crashes and fatalities, it is more important than ever that evidence-based strategies are essential to change behavior to mitigate the number of crashes and reduce risky driving behaviors. Pre-trial services within the impaired driving system are one such strategy to achieve this reduction. Diversion programs are one alternative to prosecution to divert impaired drivers from traditional court

processing into appropriate supervision and services. The purpose is to increase public safety and ensure court appearances while also protecting individual rights. These services typically are initiated at arrest and occur after a court appearance before a judge within 24-48 hours. Pre-trial practices include bail and bond decisions, pre-trial detention in jail, pre-trial diversion programs with specific criteria, varying conditions of pre-trial release, and other local pre-trial services. Risk assessments may be utilized to inform the pre-trial services needed to appropriately balance public safety and rehabilitative strategies available to offenders. Monitoring is critical to ensure accountability among impaired drivers. Technology, such as alcohol interlocks, can aid in monitoring and supervising impaired drivers which can facilitate behavior change and reduce recidivism rates.

Validated risk assessment tools provide relevant information to inform conditions imposed on offenders. These tools provide the court with an objective measurement of an offender's potential to fail to comply with pre-trial conditions. Of importance, impaired drivers are a unique population which may pose a significant threat to public safety. High rates of substance use and mental health disorders are evident among offenders, so it is important to identify the risk impaired drivers pose to the community, and to identify key need factors related to offending behaviors. Utilizing validated measures for impaired drivers is critical to change behavior. Validated risk and need assessments include DUI-RANT, Impaired Driving Assessment (IDA), and the Computerized Assessment and Referral System (CARS).

At present, impaired driving diversion programs lack uniformity across the US. Many jurisdictions struggle with requiring impaired drivers to participate in services while still maintaining the presumption of innocence for offenders. Pre-trial programs are typically voluntary in nature, as such offenders who do not choose to participate in these programs are often released without supervision and may continue to pose a threat to their community. Further, some of these programs do not use a validated risk assessment which results in improper sanctioning and treatment. Additionally, these programs bring costs that offenders may not be able to afford.

Oregon DUII Diversion Program

- Eligible first offenders participate in an alcohol and drug evaluation, education, and rehabilitation program in lieu of being convicted of impaired driving.
- Court costs are lower for diversion offenders compared to convicted offenders. The filing fee for participation in the diversion program is less than a fine for conviction, and there is no license suspension period, required jail time, or required community service work for diversion program participation.
- First offenders are given 30-days to file a diversion petition and the court either approves or denies the petition. The driver must plead guilty or no contest to participate.
- An assessment is conducted by an Alcohol and Other Drug Screening Specialists (ADSS) and the driver is referred to participate in education and/or treatment.
- Interlock vendors report device installations, removals, and tampering attempts to the ADSS and this information is submitted to the court via a monthly report by the ADSS.
- Program violations result in a termination of the diversion agreement. The driver does not receive a trial and they are convicted of impaired driving.
- Once all program requirements are completed the impaired driving conviction is dismissed, but the arrest record is maintained on the driving record.
- Challenges of the program include the inability to track interlock compliance statewide as there is no centralized data repository and the court has discretion to require or waive and interlock requirement if the offense does not involve alcohol (i.e., drug impaired driving).

South St. Louis County DWI Court

- The program includes pre-plea, post-plea, pre-conviction, and post-conviction impaired driving participants and involves early intervention treatment services.
- Includes offenders many DWI courts exclude as they often have significant mental health issues and several co-occurring disorders in addition to their substance abuse issues.
- Offenders are retained in jail prior to their first court appearance and screened for eligibility at arraignment or probation violation using DUI-RANT. They are then referred to the DWI Court, where entry into the program is approximately one week from arrest.
- An in-house assessment is utilized to define mental health, substance abuse, and other factors that may affect treatment. This is followed by intensive supervision, which is a primary component of the program and includes ignition interlocks.
- Behaviors are mitigated through corrective action at the first sign of non-compliance throughout the program.
- Challenges of the program include funding. The primary cost are the urinary analysis costs that are paid for by the participant ($100/month).

In sum, pre-trial programs are an untapped resource when dealing with impaired driving as it provides an opportunity to intervene early in the criminal justice process. Programs incorporating evidence-based best practices can change behavior to prevent subsequent impaired driving offenses. Technology, including interlocks, has evolved to become extremely sophisticated and is a useful tool to assist in monitoring and supervising the impaired driving population and enhancing public safety. Expanding pre-trial programs through devoting resources to assess, supervise and treat impaired drivers as quickly as possible with evidence-based interventions could further reduce alcohol-impaired driving fatalities across the US.

Based on a presentation by Tara Casanova Powell (Casanova Powell Consulting)

ABOUT THE ASSOCIATION OF IGNITION INTERLOCK PROGRAM ADMINISTRATORS

The Association of Ignition Interlock Program Administrators (AIIPA) is an organization composed primarily of federal, state, county, parish, or municipal employees who provide specialized knowledge to an ignition interlock program. The organization was formed in November, 2011 as a result of the National Ignition Interlock Summit sponsored by the Governors Highway Safety Association (GHSA), the National Highway Traffic Safety Administration (NHTSA), and the Centers for Disease Control and Prevention (CDC).

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