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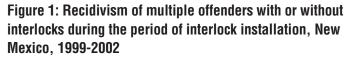
Evaluation of the New Mexico Ignition Interlock Program

Impaired driving is a major factor in vehicle crashes and traffic fatalities. The use of ignition interlocks is growing as a countermeasure to combat the high rate of offender recidivism for driving while intoxicated (DWI).

New Mexico currently has the highest rate of interlock installations per capita in the nation. The changes in usage, from its first interlock law in 1999 to its comprehensive interlock law passed in 2005, make it an ideal location to examine the use of interlocks. NHTSA therefore funded a series of studies to evaluate the New Mexico interlock laws, the New Mexico Ignition Interlock Program, and the impact on impaired driving.

Study #1-Recidivism of Multiple Offenders With and Without interlocks: The first study compared license-revoked multiple offenders who were ordered by the courts to install interlocks (but prohibited from using those interlocked vehicles) to multiple offenders who were similarly prohibited from driving but not required to install interlocks under the early interlock law. Statistically controlling for age, gender, arrest blood alcohol concentration (BAC), and prior DWIs, there were significant differences in DWI recidivism between the two groups. Multiple offender rearrest rates were 66% lower than the rearrest rates of those without interlock devices during the portion of the study period that the interlock was actually on their vehicles, (see Fig. 1); however, after the interlocks were removed, there was no appreciable difference between the group who had used the interlocks and those who did not use them (see Fig. 2). During the full study period (1999-2002), including both the time on interlock and after interlock, the rearrest rate for those who installed the interlock was 22% less than the rearrest rate for those without the interlock.

Study #2—Recidivism of High-BAC First Offenders With and Without Interlocks: A second study examined first-time offenders arrested for aggravated DWI (defined as BAC of .16 g/dL or greater, refusing breath test, or causing bodily injury while driving intoxicated) between January 2003 and December 2005. High-BAC first offenders who installed an interlock under court mandate, were compared with similar high-BAC first offenders without interlocks. Statistically controlling for age, gender, arrest BAC, and prior DWIs, results revealed a strong interlock effect. The first offenders who had interlocks installed had an overall 39% lower recidivism rate during the full study period (both during and after interlocks) than the first offenders who did not install interlocks. When comparing only the period interlocks were on their vehicles, first offenders rearrest rates were 61% lower than those of first offenders without interlocks. Once the interlocks were removed, there was still an 18% lower recidivism rate for the interlock group, but this difference was not statistically significant.



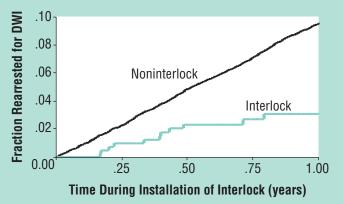
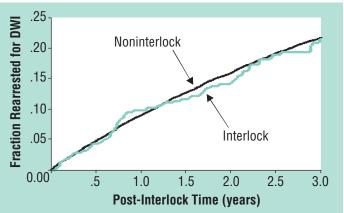


Figure 2: Recidivism of multiple offenders with or without interlocks during the 3-year period after interlock removal, New Mexico, 1999-2002



Study #3—Voluntary Interlock Installations After Third DWI Offense: In the past, New Mexico required a 10-year revocation of licenses for people convicted of a third DWI offense. When given the option to voluntarily install an interlock device and continue driving, only 9.8% of these DWI offenders chose to do so, a rate similar to other studies of voluntary interlock installations. The evidence suggested that voluntary interlock programs do not attract many offenders. Nonetheless, among those who did install interlocks, the recidivism rate was 32% lower compared to those who did not do so. However, because this program is voluntary, the effect may be self-selection bias.

Study #4—Alternative Sentence of House Arrest: In 2003-2005, one New Mexico jurisdiction expanded the use of interlocks through a mandatory alternative sentence of house arrest. When faced with the choice of either house arrest or installing an interlock, 71% of people convicted of DWI chose to install interlocks. This is the highest rate of interlock installation on record in the United States, significantly higher than the 13% rate statewide in New Mexico during that time period (the statewide rate is much higher now). Offenders without interlocks were 2.5 times more likely to be rearrested than those offenders with interlocks, as long as the interlocks were still installed. This approach succeeded in bringing higherrisk offenders into the interlock program, which resulted in this jurisdiction having fewer rearrests (15%) than the State as a whole (29%) during the full study period. Recidivism reduction while the interlocks were installed was virtually identical for this jurisdiction and the State as a whole (61% and 62%, respectively). A district court judge later rejected the use of the mandatory house arrest to increase interlock installation. Today, installation rates in this jurisdiction have declined and are now near the Statewide average. Offenders can claim having no vehicle or no intention to drive and avoid having to install interlocks on their vehicles.

Study #5—Pattern of Interlock Failures by Day and Time: Offenders with installed interlock devices must pass an alcohol breath test on the interlock to start their vehicles, as well as perform retests after the vehicle has been started while the vehicle's engine is still running. In the New Mexico study, 10.1 million BAC tests were logged. These tests showed a pattern similar to other interlock studies. Most BAC tests (99%) were passed. Tuesdays had the fewest lockouts and Saturdays had the most lockouts. Weekday mornings between 6 a.m. and 9 a.m. when most people first try to start their cars show a big spike in positive BACs. Those hours of elevated

BAC tests shifted to 9 a.m. to 12 p.m. on weekends. In both cases, the morning BAC test lockouts are indicative of alcohol remaining from heavy drinking the night before.

Study #6—Predictors of Recidivism: Predictors of recidivism in the New Mexico Ignition Interlock Program are similar to those found in other studies. Dependable predictors of future recidivism are younger age, prior DWI, rate of failed interlock BAC tests, and failed morning BAC tests. No relationship was found between recidivism and procedural violations, such as trying to circumvent the interlock, failure to take retests, or failed retests; however, that may be a consequence of different procedural codes used by different interlock manufacturers.

Study #7—Discussions With Representatives of Interlock System: Key informant discussions were held with judges, prosecutors, and probation officers involved with the interlock system. These public servants managing the DWI problem in New Mexico were generally supportive of the interlock program, seeing it as an important tool to prevent impaired driving. Concerns were voiced regarding the financial burden of interlocks on low-income offenders, loopholes in the laws, and the added burden of administering the interlock program. Some judges wanted to use interlocks to enforce abstinence, while others saw the role of interlocks as one of preventing impaired driving.

Study #8—Discussions With Offenders: Discussions were also held with DWI offenders. Offenders expressed embarrassment at having to use the interlocks. Many DWI offenders noted that interlocks changed the way they drink, appreciated being able to drive legally, and reported family support for interlocks. Offenders voiced concerns over costs and device accuracy.

Note: Along with interlock programs, other programs were implemented in New Mexico during the time of these studies, so changes in traffic safety in New Mexico cannot be attributed solely to interlocks.

How to Order

To order *Evaluation of the New Mexico Ignition Interlock Program* (131 pages), prepared by Pacific Institute for Research and Evaluation, write to the Office of Behavioral Safety Research, 1200 New Jersey Avenue SE., Washington, DC 20590, fax 202-366-2766, or download from www.nhtsa.gov. Randolph Atkins, Ph.D. was the Contracting Officer's Technical Representative for this project.



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