The Effectiveness of the West Virginia Interlock Program on Second Drunk-Driving Offenders

A. Scott Tippetts and Robert B. Voas
*Pacific Institute for Research and Evaluation, Bethesda, MD.

INTRODUCTION

Thirty-four of the states have enacted legislation which authorizes or requires the use of Breath Alcohol Ignition Interlock Devices (BAIIDs) on the vehicles of offenders convicted for driving under the influence (DUI). These laws generally provide for two types of program administration: (1) through the probation power of the court or (2) through the driver license administration power of the state department of motor vehicles. The advantage of the latter is that the state agency generally has greater resources for managing an interlock program (Voas and Marques, 1992).

A limitation in the use of the State motor vehicle department to manage an interlock program is that its only method for motivating the offender to accept an interlock is control over the reinstatement of the driver’s license. Research has indicated (Voas and Tippetts, 1994; Voas and McKnight, 1989) that approximately half of DUI offenders do not reinstate their licenses when eligible. In contrast, the court has the power to require participation as a condition of probation where the consequences for failure to conform to the requirement could, at least nominally, be incarceration.

WEST VIRGINIA

This is a study of the West Virginia interlock program that is managed by the state motor vehicle department under a strong law that should motivate DUI offenders who wish to have their licenses reinstated to accept the breath alcohol ignition interlock device (BAIID) on their cars. A second DUI offense brings a 10-year suspension and a third offense a lifetime suspension.
suspension, unless the offender enrolls in an interlock program. Completion of the state-
specified treatment program, however, reduces the suspension period to 5 years for a second 
DUI offense and 10 years for a third offense. A 5-year suspension for second offenders can 
be reduced to approximately 2 years after 9 months of hard license suspension and 12 months 
on the interlock. Further, a local insurance company has discounted the usual DUI conviction 
penalty rates for offenders who install an interlock on their vehicles. This reduces by about 
half the $55 per month cost of the BAIID program. Between the long-term suspensions and 
the insurance incentive, the West Virginia program should provide a stronger motivation than 
in most states for a DUI offender to participate in an interlock program. This study is limited 
to an evaluation of the impact of the West Virginia program on second offenders for which 
the number of offenders (591) and the length of time the program has been in operation was 
great enough to permit valid evaluation.

The «Alcohol Test and Lock» Program (operated by the Interlock Group of West Virginia, 
Inc., a subsidiary of Life Sciences Corporation) uses an interlock device manufactured by the 
LifeSafer Corporation. The interlock provider has four installation locations around the state. 
Offenders must bring their vehicles to one of these locations once per month so that the data 
logger information can be downloaded from the BAIID. Eligibility to participate in the West 
Virginia interlock program requires that participants complete or be enrolled in the Safety and 
Treatment Program within 60 days of entering the program. Additionally, participants must 
not have been convicted of driving while their licenses were revoked or suspended in the last 
2 years. Those with DUIs causing death or serious injury, or with drug-related DUIs, are not 
eligible.

When their licenses are suspended or revoked, offenders are notified about the program by 
the motor vehicle department. In addition, the program operator mails advertisements to all 
DUI offenders shortly after conviction, using a mailing list provided by the department of 
motor vehicles. The program operator also does a small amount of newspaper and television 
advertising. A few participants are referred by the treatment program that is required of all 
DUI offenders.
METHODS

To determine the effectiveness of the West Virginia interlock program, the records of all drivers convicted of a DUI offense between January 1, 1990, and March 31, 1996, were drawn from the department of motor vehicle records. A data set of 35,822 driver records were obtained for the study. From that data set, second DUI offenders who participated in the interlock program were identified. Their driving records following conviction for DUI were compared with second offenders who did not participate in the BAIID program. The total number of DUI offenses committed in West Virginia in each of the years studied and the number of first and multiple offenders entering the interlock program are shown in Table 1. Since it required some time to process the cases through the courts and the offenders had to serve a period of full suspension and complete a treatment program before they were eligible for the interlock program, most entered the program at least several months after their index DUI offense. As can be seen, the

Table 1: Number of offenders in interlock program relative to number of DUI convictions 1990-1995

<table>
<thead>
<tr>
<th>Year of Offense</th>
<th>Total Number of DUI Offenses</th>
<th>Number of Offenders Eventually Receiving Interlocks</th>
<th>Interlocks as % of DUIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>6233</td>
<td>88</td>
<td>1.41%</td>
</tr>
<tr>
<td>1991</td>
<td>6265</td>
<td>148</td>
<td>2.36%</td>
</tr>
<tr>
<td>1992</td>
<td>6780</td>
<td>171</td>
<td>2.52%</td>
</tr>
<tr>
<td>1993</td>
<td>6531</td>
<td>189</td>
<td>2.89%</td>
</tr>
<tr>
<td>1994</td>
<td>7610</td>
<td>128</td>
<td>1.68%</td>
</tr>
<tr>
<td>1995</td>
<td>8744</td>
<td>117</td>
<td>1.34%</td>
</tr>
<tr>
<td>1996 (Jan-Mar)</td>
<td>2150</td>
<td>18</td>
<td>0.84%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>44,313*</td>
<td>859**</td>
<td>1.938%</td>
</tr>
</tbody>
</table>

* Number of DUIs exceeds number of driver records (35,822) because of multiple convictions.
** 45 additional interlock participants were convicted of DUI prior to 1990 and are not included in this total. Some offenders in the years shown may have entered the interlock program after March 1996, when this data set was drawn, and are not included in the numbers shown for interlock use.
proportion of all DUI offenders entering the interlock program was small despite the obvious advantages of having their license privileges restored.

The impact of participation in the interlock program on second DUI offenders was considered in two segments: first was the effect on recidivism while the BA IID was installed on the vehicle, and the second was the post-interlock period. The minimum time an offender was on an interlock was 12 months before June 1994. After that time, there was an 18-month requirement. No second offenders serving 18 months in the BA IID program had completed more than 12 months on the interlock during the study period, which ended March 1996. A comparison group was constructed using all second DUI offenders who did not participate in the interlock program. The Kaplan-Meier (1958) survival analysis method was used for comparing the interlock and noninterlock groups.

**RESULTS**

As shown in Table 2, during the 12-month period that the 761 members of the experimental group had the interlock installed, their recidivism rate was 1.6%. During the same 12-month period, the comparison group of 20,062 second DUI offenders had a re-offense rate of 6.4%. This difference was highly significant (Tarone-Ware = 18.46, df = 1, p<0.001). However, after 12 months when the interlock was removed, the second offender program participants had a greater rate of recidivism than the nonparticipant comparison group. Over the 2-year period, the second offenders, who had been on the interlock for the first 12 months, had virtually the same risk of having recidivated as the nonusers by the end of the 24th month, as demonstrated by the odds ratio of 1.003 in Table 2. This is a dramatic change considering that at 12 months (the end
Table 2: Kaplan-Meier survival analysis of second DUI offenders’ recidivism

<table>
<thead>
<tr>
<th>Period (N)</th>
<th>Tarone-Ware</th>
<th>Signif.</th>
<th>Percent having recidivated*</th>
<th>Odds-Ratio*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>591 Offender Interlock Group</td>
<td>20,062 Offender Comparison Group</td>
</tr>
<tr>
<td>On Interlock</td>
<td>18.46</td>
<td>&lt;0.001</td>
<td>1.62</td>
<td>6.43</td>
</tr>
<tr>
<td>Post-Interlock</td>
<td>5.00</td>
<td>0.025</td>
<td>11.00</td>
<td>10.96</td>
</tr>
</tbody>
</table>

* As of the end of the period. For the post-interlock percentages and odds-ratios, recidivism during the interlock period is also included in the calculations as it is cumulative.

Figure 1: Kaplan-Meier survival curves for second DUI offenders in (761) and not in (20,062) the interlock program

of the interlock period), the relative risk of recidivism for the interlock was only 0.253. The test of the survival functions for the post-interlock period shows that the second offender interlock group had significantly worse recidivism (p=0.025), suggesting that those likely to have recidivated without the interlock tend to «catch up» once it has been removed. This is
clearly shown in Figure 1. It is important to keep in mind that, under the law, all nonparticipants had to remain fully suspended as they were not eligible for reinstatement of their licenses for at least 5 years. In contrast, the BAIID participants were fully relicensed upon graduating from the 12-month interlock program. It is probable that the noninterlock multiple offenders whose licenses were still suspended were driving less and more carefully to avoid apprehension for driving while suspended throughout the 2-year study. The interlock group, on the other hand, was able to drive with the BAIID installed for the first 12 months and then were reinstated. They were therefore free to drive at will, for the next 12 months. This may account, in part, for the higher post-interlock recidivism rate of the program participants.

DISCUSSION

The data clearly indicate that while the interlock was in place, the second DUI offenders in the BAIID program had substantially lower recidivism rates than comparable offenders who were fully suspended and should not have been driving at all. Once the interlock was removed, the BAIID program offenders in this study appeared to have recidivism rates that were higher than the still-suspended DUIs who did not participate in the program. This is consistent with the results reported by Elliot and Morse (1993) in Cincinnati and Jones (1993) in Oregon. However, in the present case, the interpretation of the significantly higher recidivism rate for second offenders following removal of the BAIID is clouded because they were fully licensed while the nonparticipants were still suspended.

The small proportion of all DUI offenders in West Virginia who opted for the BAIID program in order to get their licenses back early presents a threat to the validity of the conclusion that the interlock reduces recidivism while on the vehicle. The desire of these interlock drivers to be reinstated is evidenced by their willingness to put up with the cost and inconvenience of the program, and may have been an important factor in their avoidance of drinking and driving during the interlock period. On the other hand, their rapid return to high-risk driving as indicated by the rise in their recidivism rate following the restoration of their licenses suggests that the motivation to drive alcohol-free in order to protect their licenses could not have been a major factor in the reduction of recidivism during the program.
Of particular significance in the present results is the low percentage of offenders who participated in the West Virginia Alcohol Test and Lock Program despite the long period of license suspension they faced and the insurance cost reduction that is available for program participants. The limited interest in this program could not be determined from the study’s findings. Although all DUI offenders are notified by mail of the interlock option, there may be a need to better publicize its existence and benefits. Another factor may be a reluctance to participate in the treatment program (which is required for interlock participation) because it requires urinalysis for alcohol use that might also disclose other drug use. Low participation may also reflect a belief on the part of offenders that they are unlikely to be apprehended if they drive while suspended. The experience in West Virginia, which has relatively strong inducements for offenders to participate in the state-run interlock program, may indicate the difficulty that will be faced by any state that relies upon the incentive of license reinstatement to motivate participation in the interlock program.

REFERENCES

Elliot DS, Morse BJ. In-vehicle BAC test devices as a deterrent to DUI. NIAAA Final Report. (January 1993)


