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# DWI Recidivism in the United States: An Examination of State-Level Driver Data and the Effect of Look-Back Periods on Recidivism Prevalence

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In 1995, the National Highway Traffic Safety Administration estimated that one-third of all drivers arrested or convicted of driving while intoxicated (DWI) were repeat offenders. This study was conducted to update the 1995 estimate, and it determined that since 1995 the proportion of recidivism among drivers arrested for DWI has decreased from 31% to 25%, a decline of 19%. This report describes the methods used for data collection and analysis. The analysis explored emerging trends of recidivism based on data regarding arrests, convictions, and license suspensions. This study also examined the extent to which recidivism prevalence differs based on the look-back period used by the State (i.e., the period of time DWI offenses remain on driver records as prior offenses).

## Background

In 1995, the National Highway Traffic Safety Administration estimated that one-third of all drivers arrested or convicted of DWI were repeat offenders (Fell, 1995). This statistic continues to be cited, although it was calculated nearly 20 years ago (Chaudhary, Tison, McCartt, & Fields, 2011; Eibner, Morral, Pacula, & MacDonald, 2006; Gur et al., 2007; Jones, Lacey, Berning, & Fell, 1996; Kasar, Gleichgerrcht, Keskinkilic, Tabo, & Manes, 2010; Lapham, Stout, Laxton, & Skipper, 2011; Lapham & England-Kennedy, 2012; Malek-Ahmadi, 2008; Ouimet et al., 2007; Voas, 2010; Warren, Nunez, Klepper, Rosario, & King, 2010; Zimmermann & Jackson, 2010, Sloan, Platt, & Chepke, 2011). In this article, NHTSA updates the estimate and expands its analysis.

The 1995 statistic was a national estimate of repeat DWI offenders in the United States, based on information collected from 12 States regarding their DWI arrests and convictions.

Since 1995, the number of DWI arrests has decreased by an estimated 25% (from 1.6 million in 1992 to 1.2 million in 2011) (Fell, 1995; Federal Bureau of Investigation [FBI], 2011). DWI arrests are also no longer the most common arrest category in the United States. DWI arrests now rank fifth behind property crime (1.6 million arrests), drug abuse violations (1.5 million arrests), larceny-theft (1.3 million arrests), and assaults (1.2 million arrests) (FBI, 2011). Although DWI arrests have decreased, DWI repeat offenders are still believed to make up a sizeable proportion of DWI arrests.

While the number and rate of alcohol-impaired drivers involved in fatal crashes has decreased significantly since 2002, the percentage of alcohol-impaired driving fatalities (fatal crashes involving at least one driver with a blood alcohol concentration [BAC] of .08 grams per deciliter [g/dL] or higher) has remained the same. The number of alcohol-impaired driving fatalities decreased by 27% in 10 years (from 13,472 in 2002 to 9,878 in 2011), and the rate of alcohol-impaired driving fatalities decreased by 28% (from 0.47 per 100 million vehicle miles traveled in 2002 to 0.34 in 2011) (National Highway Traffic Safety Administration [NHTSA], 2010; Sloan, Platt, & Chepke, 2011). The percentage of alcohol-impaired drivers involved in fatal crashes has remained relatively constant since 2002 at 31%. Of fatally injured drivers in crashes that involved a drinking driver in 2011, 66% (6,507) had BACs of .08 or higher (NHTSA, 2012). Historically, drivers with prior DWI convictions have been overrepresented in fatal crashes, and the risk

elevates for drivers with multiple DWI convictions (Fell, 1995; Sloan, Platt, & Chepke, 2011).

According to one study, only a small percentage of impaired drivers are detected and arrested; about one in 200 drivers (Beitel, Sharp, & Glauz, 2000). Another study estimated that there were 112 million alcohol-impaired driving episodes in 2010 and only 1% of drivers involved in those episodes were arrested (Bergen, Shults, & Rudd, 2011). The low percentage of arrests is believed to be due, in large part, to the low statistical probability that law enforcement agencies with limited resources can monitor all roads and drivers adequately.

States apply a variety of sanctions for impaired drivers through their courts and administrative license suspension and revocation systems. The severity of the sanctions varies depending on the offender's BAC level at the time of arrest, whether the individual is a repeat offender and other risk factors. Having accurate estimates of recidivism prevalence can help inform decisions related to the selection of appropriate sanctions, the allocation of resources and strategic planning.

This paper seeks to update and expand the 1995 analysis.

## Methods

Data was sought from all 50 States and Puerto Rico. NHTSA hoped to obtain State-specific data from 2007 to 2011 regarding DWI offenders in three categories:

1. Drivers arrested for DWI
2. Drivers convicted of DWI
3. Drivers with license revocations or suspensions for DWI

NHTSA also sought to obtain data on the number of repeat offenders in each category, and the look-back period for DWI offenses in each State. Look-back periods are the period of time DWI offenses remain on a driver's record as prior offenses.

If data were available in one or two categories, the State was included in the analysis if recidivist data were available also for the category. In some cases, information about the look-back period was obtained from NHTSA's National Center for Statistics and Analysis.

Previous arrests were used as the numerator in all three categories to calculate recidivism prevalence in order to capture the largest number of subjects. The conviction and license suspension categories overlap the arrest category. Using previous arrests also controls for the different adjudication processes States use to punish DWI offenders. For example, following an arrest, offenders in some States may lose their driver's license administratively, but may not be convicted of an impaired-driving offense. An offender in other States may be convicted of an impaired-driving offense and may be required to install an ignition interlock or be granted a conditional driver's license, but may not be subject to a license suspension. Data would be reported regarding the offenders in all of these States based on the arrest, but may or may not be reported based on the conviction and license suspension. The previous arrests category includes data from all States regardless of how offenders are processed.

### *Data Analysis*

The data were coded, entered into Microsoft Excel 2010, and analyzed using descriptive procedures to calculate recidivism prevalence. Weighted means were calculated to take into account the number of drivers in each State. The categories were also stratified by two look-back periods, 10-years or longer (longer) and less than 10-years (shorter), to examine the extent to which the recidivism prevalence differs by look-back period. To account for States that could not provide information for all of the years requested (2007 to 2011), yearly State data was aggregated to calculate the recidivism prevalence. All of the analyses were performed using Excel.

## Results

From April to October 2012, NHTSA obtained information on DWI arrests and recidivism from 40 States. Information that fit the criteria for at least one of the categories was obtained from 36 States. Categorical breakdowns are as follows: NHTSA obtained information that fit the criteria for Category 1 (arrests) from 13 States, Category 2 (convictions) from 22 States, and Category 3 (suspensions or revocations) from 18 States.

In Category 1 (arrests), DWI recidivism ranged from 11 to 41%, the median was 25% and the weighted mean was 25%. Minnesota had the highest percentage of repeat DWI offenders with 41%, and Mississippi had the lowest percentage of repeat DWI offenders with 11%. The number of drivers arrested for DWI in each State varied significantly, but there was no relationship between the number of drivers arrested and the percentage of repeat offenders. For instance, Minnesota had 166,962 DWI arrests with 41% recidivism; North

Dakota had 18,485 DWI arrests with 29% recidivism; Missouri had 185,273 DWI arrests with 13% recidivism; and West Virginia had 46,454 DWI arrests with 20% recidivism. The figures are detailed in Table 1.

Table 1

| Drivers Arrested for DWI | | | | | |
|---|---|---|---|---|---|
| State | # of Drivers Arrested for DWI | # of Drivers With Prior DWI Arrest | Year | Percent Repeat DWI Offenders | Look-Back Period (Years) |
| CT | 19,813 | 4,986 | 2007–2011 | 25% | 10 |
| DE | 30,859 | 10,750 | 2007–2011 | 35% | 10 |
| IL | 185,583 | 30,069 | 2007–2010 | 16% | Lifetime |
| IN | 191,994 | 75,977 | 2007–2011 | 40% | Lifetime |
| MN | 166,962 | 67,832 | 2007–2011 | 41% | Lifetime |
| MO | 185,273 | 23,550 | 2007–2011 | 13% | 10 |
| MS | 152,185 | 17,325 | 2007–2011 | 11% | 5 |
| ND | 18,485 | 5,453 | 2009–2011 | 29% | 7 |
| NY | 104,673 | 22,477 | 2007–2010 | 21% | 10 |
| OK | 92,957 | 25,538 | 2007–2011 | 27% | 10 |
| UT | 74,739 | 28,258 | 2007–2011 | 38% | 10 |
| VA | 179,081 | 35,414 | 2007–2011 | 20% | 5 |
| WV | 46,454 | 9,260 | 2007–2011 | 20% | 10 |

| | |
|---|---|
| Median | 25% |
| Weighted Mean | 25% |
| Range | 11–41% |

In Category 2 (convictions), DWI recidivism ranged from 11 to 69%, the median was 29.5% and the weighted mean was 30%. Pennsylvania had the highest percentage of repeat DWI offenders with 69%, and Mississippi had the lowest percentage of DWI offenders with 11%. California only had data for 2007, 2008, and 2009, but had the highest total of DWI convictions with 498,347 and 26% recidivism. In comparison, North Dakota had the lowest number of DWI convictions (15,103) with 36% recidivism, and Delaware had the second lowest number of DWI convictions (19,723) with 26% recidivism. The figures are detailed in Table 2.

Table 2

| Drivers Convicted of DWI | | | | | |
|---|---|---|---|---|---|
| State | # of Drivers Convicted of DWI | # of Drivers With Prior DWI Arrests | Year | Percent Repeat DWI Offenders | Look-Back Period (Years) |
| AZ | 115,979 | 24,308 | 2007–2011 | 21% | 7 |
| CA | 498,347 | 131,284 | 2007–2009 | 26% | 10 |
| CT | 21,044 | 4,260 | 2007–2011 | 20% | 10 |
| DE | 19,723 | 5,086 | 2007–2011 | 26% | 10 |
| FL | 194,872 | 50,422 | 2007–2011 | 26% | 100 |
| GA | 184,224 | 61,031 | 2007–2011 | 33% | Lifetime |
| IA | 79,549 | 28,230 | 2007–2011 | 35% | 5 |
| IL | 73,836 | 9,334 | 2007–2010 | 13% | Lifetime |
| IN | 151,222 | 64,450 | 2007–2011 | 43% | Lifetime |
| MN | 137,029 | 58,473 | 2007–2011 | 43% | Lifetime |
| MO | 87,021 | 18,634 | 2007–2011 | 21% | 10 |
| MS | 135,393 | 15,451 | 2007–2011 | 11% | 5 |
| MT | 33,727 | 5,730 | 2007–2011 | 17% | 25 |
| NE | 55,008 | 20,861 | 2007–2011 | 38% | 12 |
| ND | 15,103 | 5,453 | 2009–2011 | 36% | 7 |
| OH | 224,428 | 76,033 | 2007–2011 | 34% | 6 |
| OK | 42,955 | 16,073 | 2007–2011 | 37% | 10 |
| OR | 31,525 | 6,664 | 2007–2009 | 21% | 10/15* |
| PA | 74,051 | 50,883 | 2008–2010 | 69% | 20 |
| SC | 57,334 | 31,698 | 2007–2011 | 55% | 10 |
| UT | 37,204 | 15,761 | 2007–2011 | 42% | 10 |
| VA | 148,915 | 24,191 | 2007–2011 | 16% | 5 |

| | |
|---|---|
| Median | 29.5% |
| Weighted Mean | 30% |
| Range | 11–69% |

*The look-back period is 15 years for offenders with diverted sentences

In Category 3 (suspensions), DWI recidivism ranged from 11–73%, the median was 34% and the weighted mean was 32%. Vermont had the highest percentage of repeat DWI offenders with 73%, and Mississippi had the lowest percentage of DWI offenders with 11%. Category 3 had the highest total of States with recidivism prevalences of 40% or greater: Florida (58%), Iowa (40%), Indiana (43%), Minnesota (41%), Utah (59%), and Vermont (73%). The figures are detailed in Table 3.

Table 3

| Drivers With License Revocations or Suspensions for DWI | | | | | |
|---|---|---|---|---|---|
| State | # of Drivers With Suspensions for DWI | # of Drivers With Prior DWI Arrests | Year | Percent Repeat DWI Offenders | Look-Back Period (Years) |
| AZ | 115,979 | 24,308 | 2007–2011 | 21% | 7 |
| CA | 709,952 | 193,115 | 2007–2010 | 27% | 10 |
| CT | 21,275 | 3,641 | 2007–2011 | 17% | 10 |
| FL | 166,852 | 97,052 | 2007–2011 | 58% | 100 |
| GA | 202,188 | 58,642 | 2007–2011 | 29% | Lifetime |
| IA | 102,404 | 40,737 | 2007–2011 | 40% | 5 |
| IN | 178,917 | 76,787 | 2007–2011 | 43% | Lifetime |
| MN | 166,962 | 67,832 | 2007–2011 | 41% | Lifetime |
| MO | 37,938 | 12,759 | 2007–2011 | 34% | 10 |
| MS | 135,393 | 15,451 | 2007–2011 | 11% | 5 |
| ND | 15,891 | 5,453 | 2009–2011 | 34% | 7 |
| NE | 48,576 | 17,808 | 2007–2011 | 37% | 12 |
| OK | 79,187 | 28,370 | 2007–2011 | 36% | 10 |
| SC | 84,733 | 14,235 | 2007–2011 | 17% | 10 |
| UT | 70,560 | 41,409 | 2007–2011 | 59% | 10 |
| VA | 148,915 | 24,191 | 2007–2011 | 16% | 5 |
| VT | 28,132 | 20,474 | 2007–2011 | 73% | Lifetime |
| WV | 46,454 | 9,260 | 2007–2011 | 20% | 10 |

| | |
|---|---|
| Median | 34% |
| Weighted Mean | 32% |
| Range | 11–73% |

The analysis conducted in 1995 estimated the DWI recidivism prevalence to be 31% for arrests and 31.5% for convictions (Fell, 1995). This analysis estimates the median DWI recidivism prevalence to be 25% for arrests, 29.5% for convictions and 34% for license suspensions. The comparison is detailed in Table 4.

Table 4

| Comparison of Current Median DWI Recidivism Prevalence to the 1995 Analysis | | | |
|---|---|---|---|
| | Drivers Arrested for DWI | Drivers Convicted of DWI | Drivers With License Suspensions for DWI |
| Current DWI Recidivism Prevalence | 25% | 29.5% | 34% |
| 1995 DWI Recidivism Prevalence | 31% | 31.5% | — |

See Tables 4A-4D in the Appendix for complete comparison and analysis.

## Bivariate Analysis by Look-Back Period

In conducting this analysis, it became apparent that the States had a variety of look-back periods. Accordingly, to determine the extent to which look-back periods have an impact on recidivism prevalence, a bivariate analysis was conducted. In this analysis, States were divided into two groups: one with look-back periods of 10 years or more and the other with look-back periods of less than 10 years.

In Category 1 (arrests), there were 10 States with longer look-back periods and 3 States with shorter look-back periods. The percentage of recidivism ranged from 16–41% for States with longer look-back periods, and 11–29% for States with shorter look-back periods. The medians for the longer and shorter look-back periods were 26% and 20%, and the weighted means for the longer and shorter look-back periods were 27% and 17%, respectively. The comparisons are detailed in Tables 5A and 5B.

Table 5A

| Drivers Arrested for DWI 10-Year or Longer Look-Back Period | | | | | |
|---|---|---|---|---|---|
| State | # of Drivers Arrested for DWI | # of Drivers With Prior DWI Arrest | Year | Percent Repeat DWI Offenders | Look-Back Period (Years) |
| CT | 19,813 | 4,986 | 2007–2011 | 25% | 10 |
| DE | 30,859 | 10,750 | 2007–2011 | 35% | 10 |
| IL | 185,583 | 30,069 | 2007–2010 | 16% | Lifetime |
| IN | 191,994 | 75,977 | 2007–2011 | 40% | Lifetime |
| MN | 166,962 | 67,832 | 2007–2011 | 41% | Lifetime |
| MO | 185,273 | 23,550 | 2007–2011 | 13% | 10 |
| NY | 104,673 | 22,477 | 2007–2010 | 21% | 10 |
| OK | 92,957 | 25,538 | 2007–2011 | 27% | 10 |
| UT | 74,739 | 28,258 | 2007–2011 | 38% | 10 |
| WV | 46,454 | 9,260 | 2007–2011 | 20% | 10 |

Table 5B

| Drivers Arrested for DWI Less than 10-Year Look-Back Period | | | | | |
|---|---|---|---|---|---|
| State | # of Drivers Arrested for DWI | # of Drivers With Prior DWI Arrest | Year | Percent Repeat DWI Offenders | Look-Back Period (Years) |
| MS | 152,185 | 17,325 | 2007–2011 | 11% | 5 |
| ND | 18,485 | 5,453 | 2009–2011 | 29% | 7 |
| VA | 179,081 | 35,414 | 2007–2011 | 20% | 5 |

| Summary of Drivers Arrested Tables 5A-B | | |
|---|---|---|
| | 10-Year or Longer Look-Back Period | Less Than 10-Year Look-Back Period |
| Range | 16%–41% | 11%–29% |
| Median | 26% | 20% |
| Weighted Mean | 27% | 17% |

In Category 2 (convictions), there were 16 States with longer look-back periods and six States with shorter look-back periods. The percentage of recidivism ranged from 13 to 69% for States with longer look-back periods, and 11 to 36% for States with shorter look-back periods. The medians for the longer and shorter look-back periods were 29.5% and 27.5%, and the weighted means for the longer and shorter look-back periods were 32% and 24%, respectively. The comparisons are detailed in Tables 6A and 6B.

Table 6A

| Drivers Convicted of DWI 10-Year or Longer Look-Back Period | | | | | |
|---|---|---|---|---|---|
| State | # of Drivers Convicted of DWI | # of Drivers With Prior DWI Arrests | Year | Percent Repeat DWI Offenders | Look-Back Period (Years) |
| CA | 498,347 | 131,284 | 2007–2009 | 26% | 10 |
| CT | 21,044 | 4,260 | 2007–2011 | 20% | 10 |
| DE | 19,723 | 5,086 | 2007–2011 | 26% | 10 |
| FL | 194,872 | 50,422 | 2007–2011 | 26% | 100 |
| GA | 184,224 | 61,031 | 2007–2011 | 33% | 10 |
| IL | 73,836 | 9,334 | 2007–2010 | 13% | Lifetime |
| IN | 151,222 | 64,450 | 2007–2011 | 43% | Lifetime |
| MN | 137,029 | 58,473 | 2007–2011 | 43% | Lifetime |
| MO | 87,021 | 18,634 | 2007–2011 | 21% | 10 |
| MT | 33,727 | 5,730 | 2007–2011 | 17% | 25 |
| NE | 55,008 | 20,861 | 2007–2011 | 38% | 12 |
| OK | 42,955 | 16,073 | 2007–2011 | 37% | 10 |
| OR | 31,525 | 6,664 | 2007–2009 | 21% | 10–15 |
| PA | 74,051 | 50,883 | 2008–2010 | 69% | 20 |
| SC | 57,334 | 31,698 | 2007–2011 | 55% | 10 |
| UT | 37,204 | 15,761 | 2007–2011 | 42% | 10 |

Table 6B

| Drivers Convicted of DWI Less Than 10-Year Look-Back Period | | | | | |
|---|---|---|---|---|---|
| State | # of Drivers Convicted of DWI | # of Drivers With Prior DWI Arrests | Year | Percent Repeat DWI Offenders | Look-Back Period (Years) |
| AZ | 115,979 | 24,308 | 2007–2011 | 21% | 7 |
| IA | 79,549 | 28,230 | 2007–2011 | 35% | 5 |
| MS | 135,393 | 15,451 | 2007–2011 | 11% | 5 |
| ND | 15,103 | 5,453 | 2009–2011 | 36% | 7 |
| OH | 224,428 | 76,033 | 2007–2011 | 34% | 6 |
| VA | 148,915 | 24,191 | 2007–2011 | 16% | 5 |

| Summary of Drivers Convicted Tables 6A-B | | |
|---|---|---|
| | 10-Year or Longer Look-Back Period | Less Than 10-Year Look-Back Period |
| Range | 13%–69% | 11%–36% |
| Median | 29.5% | 27.5% |
| Weighted Mean | 32% | 24% |

In Category 3 (suspensions), there were 13 States with longer look-back periods and five States with shorter look-back periods. The percentage of recidivism ranged from 17–73% for the States with longer look-back periods, and 11–40% for States with shorter look-back periods. The medians for the longer and shorter look-back periods were 36% and 21%, and the weighted means for the longer and shorter look-back periods were 35% and 21%, respectively. The comparisons are detailed in Tables 7A and 7B.

Table 7A

| Drivers With License Revocations or Suspensions for DWI 10-Year or Longer Look-Back Period | | | | | |
|---|---|---|---|---|---|
| State | # of Drivers With Suspensions for DWI | # of Drivers With Prior DWI Arrests | Year | Percent Repeat DWI Offenders | Look-Back Period (Years) |
| CA | 709,952 | 193,115 | 2007–2010 | 27% | 10 |
| CT | 21,275 | 3,641 | 2007–2011 | 17% | 10 |
| FL | 166,852 | 97,052 | 2007–2011 | 58% | 100 |
| GA | 202,188 | 58,642 | 2007–2011 | 29% | 10 |
| IN | 178,917 | 76,787 | 2007–2011 | 43% | Lifetime |
| MN | 166,962 | 67,832 | 2007–2011 | 41% | Lifetime |
| MO | 37,938 | 12,759 | 2007–2011 | 34% | 10 |
| NE | 48,576 | 17,808 | 2007–2011 | 37% | 12 |
| OK | 79,187 | 28,370 | 2007–2011 | 36% | 10 |
| SC | 84,733 | 14,235 | 2007–2011 | 17% | 10 |
| UT | 70,560 | 41,409 | 2007–2011 | 59% | 10 |
| VT | 28,132 | 20,474 | 2007–2011 | 73% | Lifetime |
| WV | 46,454 | 9,260 | 2007–2011 | 20% | 10 |

Table 7B

| Drivers With License Revocations or Suspensions for DWI Less Than 10-Year Look-Back Period | | | | | |
|---|---|---|---|---|---|
| State | # of Drivers With Suspensions for DWI | # of Drivers With Prior DWI Arrests | Year | Percent Repeat DWI Offenders | Look-Back Period (Years) |
| AZ | 115,979 | 24,308 | 2007–2011 | 21% | 7 |
| IA | 102,404 | 40,737 | 2007–2011 | 40% | 5 |
| MS | 135,393 | 15,451 | 2007–2011 | 11% | 5 |
| ND | 15,891 | 5,453 | 2009–2011 | 34% | 7 |
| VA | 148,915 | 24,191 | 2007–2011 | 16% | 5 |

| Summary of Drivers With License Revocation or Suspension Tables 7A-B | | |
|---|---|---|
| | 10-Year or Longer Look-Back Period | Less than 10-Year Look-Back Period |
| Range | 17%–73% | 11%–40% |
| Median | 36% | 21% |
| Weighted Mean | 35% | 21% |

## Discussion

This analysis updated and expanded the previous recidivism analysis from 1995 in a number of distinct ways. This analysis included more States (36 States versus 12 States), used weighted means to account for the number of drivers in each State, collected information in three categories (arrests, convictions and license suspensions) as opposed to the two categories used in the previous analysis (arrests and convictions), and examined DWI recidivism prevalence by look-back period.

For the individual categories, the percentage of recidivists from the arrests category were consistently the lowest. The medians for the arrest, conviction, and suspension categories were 25%, 29.5%, and 34%; and the weighted means for the arrest, conviction, and suspension categories were 25%, 30%, and 32%, respectively. There were no noticeable trends for States that appeared in multiple categories.

When comparing the recidivism estimates by look-back period, a number of trends emerge. The weighted means for the longer look-back periods were higher than shorter look-back periods in all three categories: arrests (27% versus 17%), convictions (32% versus 24%) and license suspensions (35% versus 21%). The medians for the longer look-back periods were also higher than the shorter look-back periods in all three categories: arrests (26% versus 20%), convictions (29.5% versus 27.5), and license suspensions (36% versus 21%). States with longer look-back periods had more variability in the convictions and suspension categories as evidenced by the broader ranges: convictions (13 to 69% versus 11 to 36%) and license suspensions (17 to 73% versus 11 to 40%). There were no significant differences in variability for the arrests category; the longer look-back period States ranged from 16 to 41% and the shorter look-back periods States ranged from 11 to 29%.

NHTSA's National Center for Statistics and Analysis (NCSA) uses data captured by the Fatality Analysis Reporting System (FARS) to determine the number of drivers involved in fatal, alcohol-impaired-driving crashes who are repeat offenders. It should be noted that the NCSA recidivism calculation is based on fatal crashes, and is determined using a 3-year look-back period, which suggests their recidivism rate may be low. This study demonstrates that longer look-back periods have higher recidivism prevalence estimates.

Current estimates of DWI recidivism can be helpful in a number of different ways. For example, "specific deterrence" strategies are those that are applied to "specific" offenders, such as driver license suspensions, installation of ignition interlocks, enrollment in DWI courts, other close supervision strategies or jail for individuals who are arrested and convicted of impaired driving. "General deterrence" strategies are those that are applied "in general" to drivers who may drive impaired, but haven't yet been arrested and entered the criminal justice system. Current DWI recidivism estimates can help policy makers, criminal justice professionals and other State and local officials determine the scope of the problem and make informed decisions about which specific or general deterrence strategies they should apply and the level of resources that should be dedicated to each type. This type of data can be used by State and local officials also to measure the impacts of the strategies they select.

## Limitations

There were a number of limitations related to the information that NHTSA was able to obtain. There is no national or centralized database of State DWI recidivism data, so State estimates were calculated based on data from different State databases. This study did not differentiate between the different definitions States use for DWI offenders. For example, drug impaired offenders could be included in some of the State DWI recidivism estimates, but may not be included in others. There were several limitations using the previously arrested variable in all three categories to calculate recidivism estimates. Although arrests permit the capture of more data because the convictions and license suspension categories overlap with the arrest category, arrests do not necessarily mean the drivers were guilty of the alleged crime. The arrest figures also do not reflect the number of individuals who have been arrested; rather, the arrest data shows the number of times people are arrested and some people may have been arrested multiple times. It should also be noted that the States in the categories for this analysis differed from the States used in the previous 1995 analysis.

Also, it should be noted that it is impossible to obtain fully accurate data on recidivism rates as many offenders take many impaired driving trips before they are detected by law enforcement. The more effective law enforcement activity is in detecting or deterring DWI offenders and the more resources devoted to DWI enforcement in a jurisdiction, the greater the rate of repeat offenders being detected and caught.

## Conclusion

The prevalence of DWI recidivism is important in that it can improve the allocation of resources expended to reduce DWI. If only a small number of DWIs are responsible for a relatively large percentage of impaired driving trips and crashes, then from a policy and programmatic perspective one would like to devote considerable effort implementing specific deterrent programs targeting these repeat offenders. However, if most crashes and impaired driving trips are due to drivers without prior offenses then a general deterrence approach would be indicated. The allocation of resources between these two complimentary approaches should be informed by data on recidivism rates.

Our findings indicate that the prevalence of DWI recidivism may have decreased since the initial analysis in 1995 by 19% for arrests (31% in 1995 versus 25% in 2010) and 6% for convictions (31.5% versus 29.5%). This study enhanced and added several elements to make the analysis more robust than the previous one. More States were included in this analysis, recidivism was analyzed from different categorical perspectives, and recidivism was compared and analyzed by look-back period.

The lowest prevalence estimate was in the arrest category and this estimate was believed to be the best indicator among the three categories, because it controlled for the various adjudication processes States use to punish DWI offenders, captured the greatest number of offenders, and had the least variability between the three categories.

The look-back period analysis provided evidence that shorter look-back periods result in lower DWI recidivism prevalence. The look-back period for the States in this analysis ranged from five years to lifetime. The prevalence was highest for the States with longer look-back periods and lowest for the States with shorter look-back periods in every category. These findings indicate that caution should be used when comparing and calculating prevalence estimates using various look-back periods, and that shorter look-back periods may underestimate the prevalence of recidivism.

## Future Implications on Policy

A number of interventions have been implemented over the past 20 years that are designed to reduce recidivism among DWI offenders. Some of these interventions are applied judicially; others through administrative action. They include DWI courts, alcohol ignition interlocks, vehicle and license plate sanctions, and various forms of close supervision of DWI offenders. Evaluations for many of these interventions can be found in *Countermeasures That Work* and published elsewhere in the literature (NHTSA, 2010). Some or all of these interventions may have played a role in the reduction of DWI recidivism over the past 20 years.

The larger number of States from which we obtained data in this study compared to previous studies should have improved the estimate of recidivism. Also, the wide availability of relatively long look-back periods suggests that these long look-back periods should always be used when a number is needed for programmatic purposes. Decision-makers should be able to base their decisions on all of the available data and not some arbitrarily small subset. This study clearly shows that the longer look-back periods result in higher recidivism rates and this information would be useful when allocating resources.

# Appendix

Table 4A

| Drivers Arrested for DWI | | | | | |
|---|---|---|---|---|---|
| State | # of Drivers Arrested for DWI | # of Drivers With Prior DWI Arrest | Year | Percent Repeat DWI Offenders | Look-Back Period (Years) |
| CT | 19,813 | 4,986 | 2007–2011 | 25% | 10 |
| DE | 30,859 | 10,750 | 2007–2011 | 35% | 10 |
| IL | 185,583 | 30,069 | 2007–2010 | 16% | Lifetime |
| IN | 191,994 | 75,977 | 2007–2011 | 40% | Lifetime |
| MN | 166,962 | 67,832 | 2007–2011 | 41% | Lifetime |
| MO | 185,273 | 23,550 | 2007–2011 | 13% | 10 |
| MS | 152,185 | 17,325 | 2007–2011 | 11% | 5 |
| ND | 18,485 | 5,453 | 2009–2011 | 29% | 7 |
| NY | 104,673 | 22,477 | 2007–2010 | 21% | 10 |
| OK | 92,957 | 25,538 | 2007–2011 | 27% | 10 |
| UT | 74,739 | 28,258 | 2007–2011 | 38% | 10 |
| VA | 179,081 | 35,414 | 2007–2011 | 20% | 5 |
| WV | 46,454 | 9,260 | 2007–2011 | 20% | 10 |

| | |
|---|---|
| Range | 11%–41% |
| Median | 25% |
| Weighted Mean | 25% |

Table 4B

| Drivers Arrested for DWI (1995 Analysis) | | | | | |
|---|---|---|---|---|---|
| State | # of Drivers with Suspensions for DWI | # of Drivers With Prior DWI Arrests | Year | Percent Repeat DWI Offenders | Look-Back Period (Years) |
| CO | 99,848 | 26,335 | 1989–1991 | 26% | 5 |
| MN | 30,717 | 14,034 | 1993 | 46% | 30 |
| SD | 8,821 | 2,090 | 1993 | 24% | 5 |
| TX | 352,372 | 125,941 | 1987–1990 | 36% | 10 |

| | |
|---|---|
| Range | 24%–46% |
| Median | 31% |
| Weighted Mean | 34% |

Table 4C

| Drivers Convicted of DWI | | | | | |
|---|---|---|---|---|---|
| State | # of Drivers Convicted for DWI | # of Drivers With Prior DWI Arrests | Year | Percent Repeat DWI Offenders | Look-Back Period (Years) |
| AZ | 115,979 | 24,308 | 2007–2011 | 21% | 7 |
| CA | 498,347 | 131,284 | 2007–2009 | 26% | 10 |
| CT | 21,044 | 4,260 | 2007–2011 | 20% | 10 |
| DE | 19,723 | 5,086 | 2007–2011 | 26% | 10 |
| FL | 194,872 | 50,422 | 2007–2011 | 26% | 100 |
| GA | 184,224 | 61,031 | 2007–2011 | 33% | 10 |
| IA | 79,549 | 28,230 | 2007–2011 | 35% | 5 |
| IL | 73,836 | 9,334 | 2007–2010 | 13% | Lifetime |
| IN | 151,222 | 64,450 | 2007–2011 | 43% | Lifetime |
| MN | 137,029 | 58,473 | 2007–2011 | 43% | Lifetime |
| MO | 87,021 | 18,634 | 2007–2011 | 21% | 10 |
| MS | 135,393 | 15,451 | 2007–2011 | 11% | 5 |
| MT | 33,727 | 5,730 | 2007–2011 | 17% | 25 |
| NE | 55,008 | 20,861 | 2007–2011 | 38% | 12 |
| ND | 15,103 | 5,453 | 2009–2011 | 36% | 7 |
| OH | 224,428 | 76,033 | 2007–2011 | 34% | 6 |
| OK | 42,955 | 16,073 | 2007–2011 | 37% | 10 |
| OR | 31,525 | 6,664 | 2007–2009 | 21% | 10–15 |
| PA | 74,051 | 50,883 | 2008–2010 | 69% | 20 |
| SC | 57,334 | 31,698 | 2007–2011 | 55% | 10 |
| UT | 37,204 | 15,761 | 2007–2011 | 42% | 10 |
| VA | 148,915 | 24,191 | 2007–2011 | 16% | 5 |

| | |
|---|---|
| Range | 11%–69% |
| Median | 29.5% |
| Weighted Mean | 30% |

Table 4D

| Drivers Convicted of DWI (1995 Analysis) | | | | | |
|---|---|---|---|---|---|
| State | # of Drivers Convicted of DWI | # of Drivers With Prior DWI Arrests | Year | Percent Repeat DWI Offenders | Look-Back Period (Years) |
| CA | 216,453 | 72,728 | 1998 | 34% | 7 |
| IA | 18,000 | 3,780 | 1992 | 21% | 6 |
| LA | 101,161 | 24,918 | 1989–1993 | 24% | 5 |
| NE | 146,619 | 38,547 | 1965–1994 | 26% | 30 |
| NM | 16,184 | 7,637 | 1990 | 47% | 30 |
| NC | 65,714 | 21,028 | 1988 | 32% | 7 |
| OH | 637,678 | 211,280 | 1980–1993 | 33% | 5 |
| WI | 169,390 | 52,073 | 1984–1988 | 31% | 5 |

| | |
|---|---|
| Range | 21%–47% |
| Median | 31.5% |
| Weighted Mean | 32% |

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