

compared the first five States to lower their BAC limit to 0.08 (California, Maine, Oregon, Utah and Vermont) with five nearby States that retained the 0.10 BAC limit. The results of this study suggested that 0.08 BAC laws, particularly in combination with ALR laws, reduced the proportion of fatal crashes involving drivers and fatally injured drivers at blood alcohol levels of 0.08 percent and higher by 16 percent and those at a BAC of 0.15 percent and greater by 18 percent.

The immediate significance of these findings is that, the 0.08 BAC laws, particularly in combination with ALR laws, not only reduced the overall incidence of alcohol fatalities, but they also reduced fatalities at the *higher* BAC levels. The effect on the number of extremely impaired drivers was even greater than the overall effect. The study concluded that if all States lowered their BAC limits to 0.08, alcohol-related fatalities would decrease nationwide by 500–600 per year, which would result in an economic cost savings of approximately \$1.5 billion.

More recently, additional studies have been conducted to determine the effectiveness of 0.08 BAC laws. For example, in August 1999, NHTSA sponsored a study conducted by the Pacific Institute for Research and Evaluation, entitled “The Relationship of Alcohol Safety Laws to Drinking Drivers in Fatal Crashes,” which analyzed the relationships between the passage of key alcohol safety laws and the number of drinking drivers in fatal crashes. Specifically, the study evaluated the extent to which the reduction in alcohol-related fatalities could be attributed to ALR laws, 0.10 BAC laws and/or 0.08 BAC laws. Study results indicated that all three laws were associated with significant reductions in fatal crashes involving drinking drivers. In particular, 0.08 BAC laws were associated with 8 percent reductions in the involvement of both high BAC and lower BAC drivers in fatal crashes. The study concluded that if all 50 States had 0.08 BAC laws in 1997, 590 lives could have been saved.

Also, Illinois’ 0.08 BAC law, which was enacted in July 1997, was analyzed in a NHTSA-sponsored study conducted by the Pacific Institute for Research and Evaluation in December 2000. This study, entitled “The Effectiveness of the Illinois .08 Law,” found that after enactment of the 0.08 BAC law, the number of DUI arrests of offenders in the new 0.08 to 0.09 range increased statewide, while the average BAC of arrested drivers declined. In addition, the proportion of offenders with BACs higher than 0.15 decreased, and the

proportion of offenders in the 0.10 to 0.14 range increased slightly. Moreover, the State experienced an overall reduction of 13.7 percent in the proportion of alcohol-related fatalities, whereas surrounding States without a 0.08 BAC law showed no similar decline. Illinois also experienced an increase, by almost 11 percent, in the number of total impaired driving arrests, and it was estimated that the 0.08 law may have saved 47 lives in 1998 alone. However, only 18 months of data were available for the report, so the above-mentioned reductions are limited somewhat by the relatively short period of post-0.08 law data available and the possible effects of other legislation implemented at the same time as the 0.08 law.

An update to the Illinois study was published in December 2001. The update, entitled “Evaluation of the Illinois .08 Law: An Update with the 1999 FARS Data,” concluded that Illinois’ 0.08 law reduced the percentage of drinking drivers involved in fatal crashes by 13.65%. In addition, it was estimated that during a two-year period (1998 and 1999), the 0.08 law had saved approximately 105 lives.

Another recent study sponsored by NHTSA, entitled “Relative Risk of Fatal Crash Involvement by BAC, Age, and Gender,” provides further support for a 0.08 BAC limit. The study reported that the relative risk of involvement in a fatal passenger vehicle crash increased with higher driver BAC levels in every age and sex group, among both fatally injured and surviving drivers. Even a BAC increase of 0.02 percentage points among 16–20 year old male drivers was estimated to more than double the relative risk of a fatal single-vehicle crash injury. In addition, at the midpoint of the 0.08 to 0.10 BAC range, the relative risk of a fatal-single vehicle crash injury varied between 11.4 percent for drivers 35 and older to 51.9 percent for male drivers aged 16–20. The study concluded that drivers at non-zero BACs somewhat lower than 0.10 percent pose substantially elevated risks to themselves and to other road users.

In addition, the results of a study, entitled “A Review of the Literature on the Effects of Low Doses of Alcohol on Driving-Related Skills,” were published by NHTSA in 2000. The study indicated that alcohol impairs some driving skills, beginning with any significant departure from zero BAC. Moreover, significant impairment was reported at 0.05 BAC, and by 0.08 BAC, more than 94 percent of the reviewed studies showed impairment in measurable skills. The study concluded that all

drivers can be expected to experience impairment in some driving-related skills by 0.08 BAC or less.

Also in 2000, NHTSA published a study conducted by the Southern California Research Institute, entitled “Driver Characteristics and Impairment at Various BACs.” The study reported that there is evidence of significant alcohol-related impairment throughout the range from 0.02 to 0.10 BAC. In addition, the study found that the percentage of people exhibiting impairment and the magnitude of that impairment grows as BAC levels increase. The study concluded that a majority of the driving population is impaired in some important measures at BACs as low as 0.02 BAC.

TEA–21, Section 163 Incentive Grant Program

On June 9, 1998, the Transportation Equity Act for the 21st Century (TEA–21) was signed into law. Section 1404 of the Act established a \$500 million incentive grant program under 23 U.S.C. 163 to encourage States to adopt tough 0.08 BAC laws. Section 163 provides that the Secretary of Transportation shall make a grant to any State that has enacted and is enforcing a law that provides that any person with a BAC of 0.08 percent or greater while operating a motor vehicle in the State shall be deemed to have committed a *per se* offense of driving while intoxicated or an equivalent *per se* offense.

On September 3, 1998, NHTSA and the FHWA (the agencies) published a joint interim rule, establishing the criteria that States must meet and the procedures they must follow to qualify for an incentive grant. *See* 63 FR 46881. On July 1, 1999, the agencies published a final rule, implementing the Section 163 incentive grant program. *See* 64 FR 35568.

Effects of Section 163 Incentive Grant Program

Before the Section 163 program was implemented, only 16 States had enacted laws that established 0.08 BAC as their legal *per se* limit. Fifteen of these States had laws already in effect, so they were eligible to receive Section 163 incentive grant funds in FY 1998. One State, Washington, enacted a 0.08 BAC law on March 30, 1998, but the law did not become effective until January 1, 1999. Thus, Washington was not eligible to receive Section 163 incentive grant funds until FY 1999. Between June 1998 and October 2000, only two additional States (Washington and Texas) and the District of Columbia enacted and began enforcing 0.08 BAC laws that met all of the Section 163 criteria. Although both