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EVALUATION OF VEHICLE IMPOUNDMENT ON SUSPENDED AND REVOKED DRIVERS IN CALIFORNIA

Many offenders who are convicted of DWI (Driving while intoxicated) or whose licenses have been suspended continue to drive illegally. Many others never get a valid license at all. In an attempt to reduce illegal driving, 44 states have passed laws that affect the vehicles -- vehicle impoundment, forfeiture, immobilization, installation of ignition interlocks -- or impose special marking or tags on the license plates to identify such offenders. Over the past decade the National Highway Traffic Safety Administration (NHTSA) has been investigating the potential effectiveness of these programs in reducing illegal driving and subsequent crashes.

California's impoundment program began in January 1995. It allows law enforcement officers to impound vehicles driven by drivers whose licenses have been suspended or revoked (S/R), or those who are unlicensed, for 30 days. Surveys of law enforcement agencies throughout the state found that more than 120,000 vehicles are being impounded each year. Another law, enacted in 1995, permits vehicle forfeiture when owners are caught driving illegally more than once.

NHTSA published the first evaluation of California's impoundment program last year (see *Traffic Tech* 180) that found that when drivers had their vehicles impounded their subsequent traffic violations and crashes were reduced substantially.

This second evaluation examined whether just the threat of getting a sanction imposed against the vehicle (impounded if caught driving or forfeited if owners are caught driving again), would be effective in deterring S/R drivers from subsequent driving and crash involvement.

The California DMV examined the driving records of more than 2,000,000 drivers whose licenses were suspended or revoked between January 1992 and January 1997, and compared them to a control group of 370,000 drivers whose licenses were not suspended or revoked.

They compared the monthly crash rates for the two groups both before the new vehicle impoundment and forfeiture laws became effective in January 1995, and after the laws were in place. Using a time series analysis, they developed a crash rate series by dividing the number of crashes in each time period (28 days) by the number of S/R (or control group) drivers in that time period.

Crash Rates of Suspended and Revoked Drivers

The figure below shows the crash rate for suspended and revoked drivers for each 28 day time period compared to the crash rate of the control group.



The crash rate for S/R drivers falls abruptly by 13.6 percent at the point when California's impoundment law went into effect, shown by the vertical line. Statistical analyses found this abrupt drop in crashes, while only temporary -- lasting approximately 6 months -- was statistically significant.

There is also an abrupt drop of 8.3 percent in crashes for the control group of drivers (not suspended or revoked) at the time of the new impoundment laws that was also statistically significant. Because drivers in the control group are not suspended or revoked and are not subject to impoundment or forfeiture, they should not be affected by these laws. Yet their crash rate also dropped once the laws became effective, suggesting that some other extraneous event caused crashes to decline for all drivers.

Additional analyses of the crash rate data for drivers with S/R licenses were conducted to statistically account for the crash rates among control drivers. Despite the approximately 5 percent difference in crash rates obtained for the S/R driver group (13.6 percent) as compared to the control driver group (8.3 percent), statistical analysis showed only a marginal effect ($p=.09$) for S/R drivers, after control group data were factored in the analyses. If a general deterrent effect occurred, it was small and dissipated rapidly.

The results of prior research and the current study suggest that vehicle impoundment is effective in reducing the driving risk posed by suspended, revoked, and unlicensed drivers who are apprehended and whose vehicles are seized, but that the threat of impounding or forfeiting vehicles was not sufficiently strong in the first two years of the California laws to deter the general population of drivers from driving after their licenses were sanctioned and from becoming involved in crashes. In other words, the vehicle impoundment laws have a specific deterrent effect on the individuals affected by them, but so far do not show a general deterrent effect on everyone else. A separate media campaign aimed at these drivers was not conducted in California, and it is unknown whether publicity about the laws and warnings of the consequences would have had an effect.

Interestingly, the figure shows that crash rates for drivers with suspended or revoked licenses have been declining for years and now approximate those of control group drivers. Preliminary analyses were conducted which ruled out some extraneous factors as contributing to the decline. Thus, the unanswered question remains: What are the reasons for this decline? More research is needed to answer this question.

HOW TO ORDER

To order a copy of *An Evaluation of the General Deterrent Effect of Vehicle Impoundment on Suspended and Revoked Drivers in California*, (42 pages), write to the Office of Research and Traffic Records, NHTSA, NTS-31, 400 Seventh Street, S.W., Washington, DC, fax (202) 366-7096, or download www.nhtsa.dot.gov/people/injury. Marv Levy, Ph.D., was the contract manager of this project.

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Administration**
400 Seventh Street, S.W. NTS-31
Washington, DC 20590

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Traffic Safety Programs
(202) 366-2759, fax (202) 366-7096
<mailto:lcogrove@nhtsa.dot.gov>

1200 New Jersey Avenue, SE, West Building, Washington, DC 20590 USA 1-888-327-4236 TTY: 1-800-424-9153

