ENFORCING ALCOHOL-IMPAIRED DRIVING AND SEAT BELT USE LAWS, BINGHAMTON, NEW YORK JOAnn K. Wells, Insurance Institute for Highway Safety

An integrated enforcement program aimed at reducing alcohol-impaired driving and increasing seat belt use was designed and implemented in Binghamton, New York. The program's emphasis is on the publicized use of sobriety and seat belt checkpoints, passive alcohol sensors, and seat belt law enforcement.

In New York, as in most states, it is illegal per se to drive with a BAC of 0.10% or higher, and the state has a primary seat belt use law. Before the program began, the City of Binghamton's Bureau of Police did not conduct sobriety or seat belt use checkpoints. The law against driving while intoxicated (DWI) was enforced mainly by officers in special patrol units--the DWI cars--and the seat belt use law received no special enforcement.

Approximately 75 officers were trained in the use of passive alcohol sensors during the program evaluation period (October 1988 November 1990). The passive alcohol sensor, essentially a small air pump and an alcohol-sensing device, is built into a unit similar to an ordinary police flashlight. After the program's announcement, each patrol car during the 3 p.m. to 11 p.m. and 11 p.m. to 7 a.m. shifts carried a passive alcohol sensor, and officers were instructed to use the passive alcohol sensor on every traffic stop.

Checkpoints were conducted largely during late night hours to focus on alcohol-impaired drivers. Officers checked seat belt use, licenses, registrations, and inspection stickers, and screened drivers for alcohol use. Warnings were issued to unbelted drivers and passengers. If an officer found a passive alcohol sensor reading or other evidence that suggested impairment, he or she proceeded with a standard DWI investigation. All other drivers were asked by a researcher to take a voluntary breath test. Eight daytime checkpoints were also conducted to enforce seat belt use and increase awareness of the state's seat belt use law. Seat belt use was observed at six Binghamton intersections, both at night and during the day, to provide information for evaluating the seat belt portion of the program.

Television, radio, and print coverage of the program followed a kick-off press conference and the press conferences held just before each checkpoint operation. Public service announcements featuring Binghamton's mayor and chief of police were broadcast by local stations and local cable channels. Posters were distributed featuring

a bloodhound next to a passive alcohol sensor with the caption, "Buckle up and drive sober. We'll sniff you out if you don't." Drivers who entered the checkpoints in spring 1989 received pamphlets on the program. The seat belt use warnings given to unbelted motorists were printed with the facsimile of a citation on one side.

Overall, there was a reduction of about 39% in the number of drinking drivers stopped at police checkpoints; this reduction remained constant from fall 1988 to fall 1990. Approximately 9,400 vehicles were processed through the checkpoints. Binghamton officers made 309 arrests for alcohol-impaired driving, issued 864 citations for seat belt law violations, and distributed about 5,000 printed warnings about seat belt use. In the two years prior to the program, Binghamton officers had arrested 234 alcohol-impaired drivers and issued 810 tickets for not wearing a seat belt.

The baseline checkpoints conducted in October and early November 1988 showed that 23% of the drivers stopped at the Thursday, Friday, and Saturday night checkpoints had been drinking -- that is, they had BACs of 0.01% or higher -- and that 9% had BACs at or above 0.05%. The proportion of drivers who had been drinking dropped to 14% during late November and December 1988, just after the start of the program. Similarly, 14% of the tested drivers at the fall 1989 and fall 1990 checkpoints had been drinking. The two spring checkpoint periods found that 18% (1989) and 19% (1990) of the drivers had been drinking.

Comparison of BAC distributions across the six periods suggests that the initial effects of the program were on drivers with low to moderate BACs. Comparison of the baseline checkpoints with the set conducted about two years later suggests that the program may eventually have affected the behavior of drivers at all BAC levels, although the reduction in the percentage of drivers with BACs of 0.10% or higher was not statistically significant.

Forty-six percent of drivers observed during the baseline period were using seat belts; this figure rose to 52% during late November and December 1988, just after the start of the program. Daytime seat belt use was 53% in fall 1989 and 51% in fall 1990; in spring 1989, it was 56%, and in spring 1990, 62%. The gains in seat belt

use at night were substantially greater. Baseline seat belt use at night was 35%; this figure rose to 45% just after the start of the program. The use rate continued to rise to 59% in spring 1990 and then dropped to 49% in fall 1990.

There were significantly fewer injury-producing crashes, and significantly fewer late-night crashes, during months when checkpoints were held. The Binghamton officers found the passive alcohol sensor to be an effective screening device at checkpoints but were less enthusiastic about using it on routine patrols.

Surveys indicated that Binghamton drivers' awareness of changes in the enforcement of New York's alcohol-impaired driving law, and their estimates of the likelihood of being caught driving with illegal BACs, was highest soon after the program's implementation. The response to this program suggests that checkpoints may have to be both constant and visible features of enforcement for their benefits to be lasting.

THE MASSACHUSETTS SAVING LIVES PROGRAM: SIX CITIES

Widening the Focus from Drunk Driving to Speeding, Reckless Driving, and Failure to Wear Seat Belts R.H. Hingson, J. Howland, T. Schiavone, M. Damiata

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During the 1980's in the United States, highway safety attention focused on reducing drunk driving. Over 700 new laws were passed nationwide accompanied by considerable activity by local citizen groups, such as Mothers Against Drunk Driving, MADD [sic] and Remove Intoxicated Drivers, RID, intensified media coverage, and increased police enforcement. Single vehicle, night fatal crashes (those most likely to involve alcohol) declined 20% between 1980 and 1985.

However, since 1986, total fatal crashes in the U.S. have begun to increase. In Massachusetts, where similar attention has focused on drunk driving, single vehicle, night fatal crashes declined 32% from 1980 - 1984, but since then fatal crashes have risen 10%, and injury crashes increased 17%.

Six Massachusetts communities have initiated comprehensive traffic safety programs in their communities to reverse the increase in fatal and injury crashes. The programs include: education about traffic safety issues in the schools, public education targeting all age groups, increased police enforcement, and a business for safety program to reduce drunk driving and increase safety belt use. A coordinator in the Mayor's office and a set of community task forces with public officials and

private citizens oversee the programs. An evaluation program is assessing traffic safety problems in each city at the outset of the program and community progress in reducing those problems.

An initial evaluation indicated that speeding and related risky driving behaviors at intersections, such as accelerating at yellow lights and running red lights, were much more common behaviors than drunk driving, and that these behaviors were increasing in program cities and were disproportionately found in drivers who rarely wear safety belts. The program has expanded its initiatives beyond drunk driving reduction to include these other behaviors as well.

COMMUNITY SYSTEMWIDE RESPONSE TO PREVENTING SUBSTANCE USE AND IMPAIRED DRIVING BY YOUTH

James Wright, National Highway Traffic Safety Administration

In 1985, a juvenile court judge from Lucas County, Ohio (Toledo) decided he had seen enough. Too many young people in his county were dying in crashes or drug overdoses or suffering the other drastic effects of drug use, including alcohol. He decided to take action, to become "pro-active." Becoming "pro-active" for a judge meant that he had to step away from the bench and talk about prevention with other key people in the community. Action such as this is not without risks for a judge who is comfortable with the power, and protection, of the court. But something had to be done for the young people in his community, and it had to be done before they became involved with his court.

One of the first steps the judge took, after he assembled the rudiments of a community action team, was to get the support of the local school boards. Support from a school board is not automatic, especially when the subject involves drug use of students from that school district. The judge addressed each school board and brought with him a pile of case folders which he laid next to him on the witness table. He never referred to the case files as he made his pitch for the active cooperation of the board members - and they never asked about them. Each and every school board he addressed in this manner gave him full endorsement to proceed with their blessing. He would then pick up his unopened files and go home.

The judge in this instance, Andy Devine, wanted to establish a community response, a systemwide response, to the substance use problem. He employed his power as a judge to convince the community of the extent of the problem and convene community leaders to develop