CONCLUSIONS

The findings of the NTSB study will be useful in identifying the magnitude, scope, and characteristics of drug and alcohol use among drivers of heavy trucks. In addition, the problems of fatigue and medical conditions were identified. These data will help government and industry in their efforts to develop and implement programs to reduce these problems.

For a copy of the complete study report—Safety Study—Fatigue, Alcohol, Other Drugs and Medical Factors in Fatal-to-the-Driver Heavy Truck Crashes, PB 90917002, NTSB/SS-90/01—contact Barry M. Sweedler at (202) 382-6810 or fax the request to (202) 382-8006.

DRUG EVALUATION AND CLASSIFICATION PROGRAM Lt. J. C. Grant Arizona Department of Public Safety

I will not dwell today on the statistics associated with the hazards presented by the drug-impaired driver. Other speakers have very forcefully shown that the drug-impaired driver is, and should be, a very real concern to the traffic safety community. The cost in lives lost, injuries sustained, and economic impact is staggering. I will, however, offer one statistic that I feel is of importance: the National Highway Traffic Safety Administration (NHTSA), in its report to Congress entitled *Use of Controlled Substances and Highway Safety* (1988), disclosed that between 14 and 50 percent of impaired drivers detained by police showed some indication of drug involvement.

The dilemma faced by law enforcement officers is familiar: a driver is stopped and arrested on suspicion of alcohol-impaired driving, and a breath test is administered that indicates that the subject's blood alcohol is substantially below the level required to prove intoxication. At this point, the officer has several alternatives:

1. The officer can pursue charges of driving under the influence (DUI) against the suspect, placing the burden on the prosecutor to prove impairment. It is unlikely that the prosecutor will pursue the case because of a lack of evidence to prove the cause of impairment.

2. If local laws permit, the officer can request the suspect to submit to a blood or urine test to determine the presence of drugs. The expense of toxicological

testing precludes many agencies from testing for a wide range of possible drugs that may be present; and, if drugs are confirmed in the sample, the burden of proving that these drugs—and not some medical or other defect—are indeed the reason for the impairment still rests with the officer.

3. The officer can cite the suspect for a lesser offense, thus allowing the suspect to "skate" on the more serious offense of DUI drugs.

In the late 1970s, officers of the Los Angeles Police Department, recognizing the problem created by the drug-impaired driver, pioneered the development of a drug-recognition procedure. This procedure allowed a trained officer to examine an impaired suspect and obtain compelling evidence that impairment was consistent with ingestion of a certain type or category of drugs.

In 1984, NHTSA, in cooperation with the National Institute on Drug Abuse (NIDA), sponsored a controlled laboratory evaluation of the drug evaluation and classification (DEC) process. The evaluation showed that drug recognition experts (DREs) were able to classify 98.7 percent of high-dose subjects as impaired and identify the category of drugs for 91.7 percent of the high-dose subjects. This study was followed by a NHTSA-sponsored field validation, the results of which demonstrated that trained DREs were able to identify the presence of certain categories of drugs in a majority of cases. In fact, the study found that

• When DREs predicted the presence of drugs other than alcohol, the drugs were detected in 94 percent of the cases;

• When DREs identified a suspect as being impaired by a specific drug category, the drug category was detected in the suspect's blood 79 percent of the time; and

• Only 3.7 percent of the suspects who had used drugs had blood alcohol concentrations (BACs) equal to or greater than 0.10 percent. It is likely that most, if not all, of the remaining suspects would have been released if the DREs had not recognized the drug symptoms.

After these studies, NHTSA developed a standardized curriculum for training officers as drug recognition technicians and in 1987 initiated pilot programs in Arizona, Colorado, New York, and Virginia. As of this time, the Drug Evaluation and Classification Program has expanded to 16 states and the District of Columbia.

The DEC process is a standardized and systematic means of examining an impaired subject to determine (a) whether the suspect is impaired, (b) if so, whether the impairment is drug-related or medically related, and (c) if it is drug-related, the broad category (or categories) of drugs most likely to have caused the impairment.

The DEC process is a postarrest procedure that takes place in a controlled environment such as a police station or jail facility. The process is not a way to determine the exact drug a person has taken; instead, it allows the presence of drugs to be narrowed down to broad categories of drugs that have similar symptoms. The process is not a substitute for a chemical test. Although a DRT can testify that there is impairment and that certain types of impairment may be consistent with certain categories of drugs, scientific corroboration of this testimony is still highly desirable.

For purposes of the Drug Evaluation and Classification Program, a drug is defined as "any chemical substance, natural or synthetic which, when taken into the human body, can impair the ability of the person to operate a motor vehicle safely."

Seven broad categories of drugs can be identified through the DEC process. These categories are based on the observable symptoms produced by the drugs rather than on medical or pharmacological qualities. The categories are central nervous system depressants, central nervous system stimulants, hallucinogens, phencyclidines, narcotic analgesics, inhalants, and cannabis.

The drug evaluation process is standardized in that officers are taught to perform the evaluation in exactly the same manner each time for every suspect. No steps are to be left out of the process, and none are to be added. The process is systematic in that it is based on a variety of observable signs and symptoms that are known to be reliable indicators of drug impairment. A DRT's conclusion is based on the totality of facts and indicators observed, never on a single clue or element of the examination. These facts are obtained from careful observation of the suspect's appearance, behavior, performance on psychophysical tests, eyes, and vital signs. The drug evaluation consists of a 12-step process, and each step is performed in a prescribed sequence and manner.

It is often asked whether it would be much simpler to obtain a blood or urine sample from persons who are impaired but whose BACs do not account for the level of impairment. This approach appears reasonable, but it often does not result in successful prosecution of DUI drugs cases. There are several reasons for this. 1. Often courts require that there be probable cause, or at least articulable suspicion, that drugs are the cause of impairment. The mere absence of alcohol as a causative factor may not be so construed.

2. Conducting tests for the presence of a full range of drugs, even if the search is limited to those most commonly abused, is costly and time-consuming. Add to this the fact that many substances abused by drivers are not routinely tested for in drug-screening processes, and you quickly realize the value of the DRT in helping to direct the laboratory technicians toward likely causes of impairment.

3. At this time, there is no means by which we can assume that a certain concentration of a drug in the blood or urine of a subject will cause a given level of impairment. Even more complex is the situation caused when several types of drug are taken or when drugs are taken in combination with alcohol, as frequently happens with drug abusers.

For these reasons and many others, it is essential that the arresting officer, the DRT, and the toxicologist form a partnership in arresting, prosecuting, and convicting the drug-impaired driver. Each has an essential role, and the absence of any one greatly reduces the effectiveness of the others.

Any questions about the Drug Evaluation and Classification Program may be directed to J. Michael Sheehan, Chief, Police Traffic Services Division, NHTSA, 400 Seventh Street S.W., Room 5119, Washington, D.C. 20590.

ALCOHOL AND OTHER DRUG INVOLVEMENT IN SERIOUS TRAFFIC CRASHES: DEVELOPMENT OF A RESEARCH PROTOCOL Roy E. Lucke Northwestern University Traffic Institute, Evanston, Illinois

SUMMARY

Difficulties were encountered with project implementation, mostly on the issue of patient confidentiality, but they appear to have been sufficiently overcome (at the cost of delays) to permit a broader use of the proposed protocol. Two projects produced two results. First, methodology has been proposed and tested to permit researchers to more closely examine the roles of alcohol and drugs in nonfatal traffic crashes and the accuracy of police reporting of such involvement.