## Remarks as prepared for Jeffrey W. Runge, MD, Administrator to the International Medical Advisory Group Conference Sponsored by the Alcoholic Beverage Medical Research Foundation

## "The Impaired Driving Problem in the United States: Progress and Research Needs"

## Niagara on the Lake, Ontario Canada October 21, 2003

• (*Slide #1: Title slide*) Thanks to Dr. Mitchell for invitation, introduction.

[Dr. Mack C. Mitchell, Jr., President, Alcoholic Beverage Medical Research Foundation]

- (*Slide #2: Photo of Bush and Mineta*) I am pleased to be here today to talk with you on behalf of President Bush and my boss, Secretary of Transportation Norm Mineta.
- Both the President and Secretary have made it very clear to all of us at DOT that we are safety advocates first and foremost in everything we do.
- Under their leadership we know that safety is the nation's top transportation priority. We are redoubling our efforts to achieve higher levels of safety than ever before.
- Secretary Mineta recently put out a call to "general quarters" for all DOT employees. He rallied his troops from the Federal Highway Administration, the Federal Motor Carriers Safety Administration, and NHTSA, to re-focus our efforts on the Department's #1 priority, reducing highway fatalities.
- He is very serious about increasing safety on U.S. roads. He directed the Department to devote the same energy and priority to reducing fatalities and injuries that we did when we created the Transportation Security Administration in the post 9-11 environment.
- First, a little history about who we are.
- NHTSA was created by Congress about 35 years ago to reduce deaths, injuries and the economic costs of motor vehicle crashes on the highways.

- (*Slide #3: Persons Killed and Rate per 100M VMT*) We have made tremendous progress since that time, bringing the fatality rate down from 5.5 deaths per 100 million VMT in 1966 to 1.51 deaths per 100 million VMT today.
- (*Slide #4: Persons Killed and Injured in Crashes*) Even with this progress, last year almost 43,000 people were killed in traffic crashes.
- However, injuries fell to an all-time low from just over 3 million in 2001 to 2.93 million last year (a decrease of 3.5%). The largest decrease in injuries was among passenger car occupants.
- (*Slide #5: Persons Killed in Traffic Crashes by Year*) Here you see the trend in the number of fatalities on U.S. roads from 1988 2002. It is relatively flat.
- (*Slide #6: MV Crashes as Leading Cause of Death*) Motor vehicle crashes are the #1 killer of persons from 4-34 years of age in the U.S., and are the 4<sup>th</sup> leading cause overall for years of life lost.
- (*Slide #7: Cost of Motor Vehicle Crashes*) In addition to the human toll, crashes cost the economy more than \$230 billion each year.
- This includes \$51 billion in costs for impaired driving, \$40 billion for speeding, and about \$17 billion in medical care and productivity losses for those who still fail to use safety belts.
- The total cost to the U.S. economy is equal to \$820 each year for every man, woman, and child in this country.
- At NHTSA we are faced with the daunting task of improving the safety of our nation's roadway system through science-based, data-driven programs.
- (*Slide #8: Predicted Lives Saved by Countermeasure*) I asked our analysts to evaluate the fatality reduction potential of the many different countermeasures we might implement.
- We found that about 2/3 of the expected lives to be saved would come from just 2 areas: increasing safety belt use and reducing impaired driving.
- The final 1/3 represents everything else combined, from eliminating roadway departures to improving truck or pedestrian safety.
- The data tell us where NHTSA needs to focus our efforts: safety belt use and impaired driving. I am here today to talk with you about impaired driving.
- (*Slide #9: Alcohol-Related Fatalities, United States*) There were 17,419 alcohol-related fatalities in 2002, roughly the same as the year before. However, the

fatality rate dropped a bit, from .63 to .62, because the number of miles traveled increased slightly.

- Note that more than 15,000 of these fatalities occurred in crashes involving at least one driver (or non-occupant) who had a BAC over .08g/dl. That is a lot of alcohol consumption.
- (*Slide #10: Impaired Driving Goal*) Looking ahead, we have established a target of not more than .53 alcohol-related fatalities per 100 million vehicle miles traveled in 2004.
- This translates to a savings of about 2,000 lives per year. Reaching it will be a challenge.

• (*Slide #11: Number of Alcohol-Related Fatalities*) The number of alcohol-related fatalities declined until 1995 and has remained essentially flat since then.

- (*Slide #12: Alcohol-Related Fatality Rate*) The trend in the number of alcohol-related fatalities is reflected in the alcohol-related fatality rate.
- (*Slide #13: Fatality Rate By BAC Level*) Most of the decline in the alcoholrelated fatality rate since 1982 has come from reducing the number of fatalities in crashes where the highest BAC among any driver or non-occupant was 0.08 or above. Since 1995 there has been little change in this rate.
- So we have our work cut out for us to reduce this rate. Lets us now take a closer look at the characteristics of alcohol-related crashes.
- (*Slide #14: A/R Fatality Rate by State, 2002*) You can see that the alcohol-related fatality rate varies greatly by state. In fact, 10 states have a fatality rate that is at .81 and above.
- We will not move the national numbers unless these states reduce their fatality rates to at least a level that is consistent with the rest of the country.
- In fact, we calculate that 80% of our impaired driving target can be attained by bringing just 12 states into alignment with the rest of the nation. We intend to devote significant resources to those states that need it to shore up their defense against impaired drivers.
- (*Slide #15: Alcohol-Related Fatalities by Location, 2002*) The majority of alcohol-related fatalities occur in rural, rather than urban environments.
- (*Slide #16: Alcohol-Related Fatalities by Time of the Day*) 77% of the alcohol-related fatalities occurred in nighttime crashes.

- (*Slide #17: Crash Type By Driver BAC*) Drivers with higher BACs (.08 and above) are much more likely to be involved in a single vehicle crash (65%) than a multiple vehicle crash (35%).
- (*Slide #18: Fatalities in Alcohol-Related Crashes by Role, 2002*) The majority of deaths in alcohol-related crashes are drivers (55%), with passengers making up 22%, pedestrians 13%, motorcyclists 8%, and other 2% [bicyclists included with other].
- Note that 35% of these deaths, or 6,100 people, were not the impaired drivers but were pedestrians and passengers, people who were not even driving. Some pedestrians involved in fatal crashes are also impaired.
- (*Slide #19: Alcohol Involvement Among Fatally Injured Adult Pedestrians*) In 2002, 40% of fatally injured pedestrians had a positive BAC. [Does not indicate causation.]
- (*Slide #20: Proportion of Alcohol Involved Drivers in Fatal Crashes by Vehicle Type*) This slide shows the relative involvement of alcohol among drivers of different types of vehicles.
- Motorcycle drivers involved in fatal crashes had higher alcohol involvement than drivers of passenger cars or light trucks.
- In 2002, about 27% of car and light truck drivers involved in fatal crashes had been drinking.
- By contrast, nearly 39% of the motorcycle drivers in fatal crashes had been drinking.
- Last year alone there was a 6% increase in the number of alcohol-related motorcycle deaths.
- <u>Last year was not unique</u>. Over the past 5 years motorcycle deaths have been rising, resulting in a 50% increase during this period.
- (*Slide #21: Drivers w/ BAC .08 and Above, by Gender*) The great majority of intoxicated drivers, 85%, are male.
- (*Slide #22: Driver Fatalities by Age, 2002*) More than 600 fatally injured drivers (at .08 and above) were 21 years old, the most for any age. In fact, the number of drivers involved in alcohol-related fatal crashes pretty much declines with every year of age after that.
- (*Slide #23: Restraint Use Among Fatally Injured Drivers in Alcohol-Related Crashes*) Despite the fact that there is a safety belt law in every state but one,

some 75% of passenger vehicle drivers killed in alcohol-related crashes are unrestrained. This compares to 59% for all passenger vehicle occupant fatalities.

- (*Slide #24: BAC Levels for Alcohol Positive Drivers in Alcohol-Related Fatal Crashes, 2002*) Drivers involved in alcohol-related fatal crashes are not people who have had just a drink or two before driving.
- Last year, 84% (12,344) of the drinking drivers involved in fatal crashes had BACs at or above 0.08 g/dl. These are primarily people who have consumed very large quantities of alcohol.
- (*Slide #25: Alcoholic Beverage of Choice Drivers Arrested for DWI*) Approximately 80% of drivers arrested for DWI report having consumed beer prior to driving. Only 20% self-report consuming liquor or wine.
  - (*Slide #26: Prior DWI Convictions*) Last year some 1,343 fatalities occurred in crashes involving drinking drivers who had at least 1 prior DWI conviction in the preceding 3 year period. This accounts for about 7.7% of all alcohol-related fatalities.
- In addition, 5% of drinking drivers with BACs of 0.01 to 0.07 had prior DWI convictions, as compared to 10% of drinking drivers with BACs of 0.08 or higher.
- (*Slide #27: Relative Crash Risk, 0 .24 BAC*) Recent research by NHTSA and NIAAA has shown just how dramatically the risk of crash involvement rises with BAC. The risk accelerates rapidly as BAC increases.
- (*Slide #28: Relative Crash Risk, 0 .12 BAC*) At .04 BAC a driver 18% more likely to be involved in a crash than a sober driver
  - At .08 BAC a driver is 2 1/2 times more likely.
  - At .10 BAC a driver is almost 5 times more likely.
  - At .15 BAC a driver is 22 times more likely to be in a crash.
- (*Slide #29: Strategies for Reducing Impaired Driving*) I realize that it's going to be hard to make immediate reductions in impaired driving and riding. If it were easy, we would have been moving the numbers more rapidly in recent years.
- The problem is that this is a complex system and we're spread thin. There are many possible countermeasures in the impaired-driving arena.
- We appointed an agency-wide team to re-consider impaired driving, and the team identified a number of possible actions.

- If we're going to break through, I believe we need to take a lesson from our success with safety belts. We need to focus on just a few priorities.
- We have identified 3 priorities that I believe we can all get behind, 3 things that can make a difference if we push hard and move them forward.
- The first is high visibility enforcement. This works. We've seen it work in the safety belt area with CIOT. That's why we are taking this approach with alcohol, engaging in a national "You Drink and You Drive. You Lose" campaign with paid and earned media support.
- The second priority is to expand the use of DWI courts and provide resources for training dedicated prosecutors.
- We have to do this because the general deterrence message does not work for everyone. There were 1.5 million arrests for DWI in 2001. This was second only to 1.6 million arrests for substance abuse-related crimes.
- As our enforcement efforts begin to generate more arrests, support is going to be needed downstream to ensure resources for prosecution and adjudication of DWI cases.
- The third priority is screening and brief intervention.
- This involves the physician asking a few questions to determine if the patient has an alcohol problem, then referring the patient for an assessment and possible treatment.
- Oftentimes impaired driving is a symptom of a deep-rooted problem. Dealing with these offenders may require more than just punishment.
- As a physician, I've screened and referred patients for alcohol problems, and I've done research on its effectiveness. I've seen it work.
- Research to date has clearly shown the effectiveness of highly visible and vigorous enforcement, so while we know this will help in the short-term, it is not a long-term solution to the impaired driving problem.
- There are significant gaps in our current knowledge and understanding. I am here today in part because of the tremendous resource you represent in terms of research and expertise in this issue.
- Your attention to this very serious problem can make a difference in reducing or eliminating this major cause of death and injury.

- (*Slide #30: Research Needs*) We need to improve our knowledge about the high BAC drinkers. We do not clearly know whether these drinking driver crashes involve someone who chronically drinks large quantities of alcohol or someone who drinks a lot but does so only on rare occasions.
- A recent study by Susan Baker of John Hopkins University [published in *Injury Prevention* 2002:8:221-226] examined the drinking habits of fatally injured drivers in relation to their BACs.
- The study found a surprising proportion of fatally injured drivers did not have indicators of problem drinking.
- Drivers with very high BACs [at 0.15 and greater] were far more likely than other fatally injured drivers to be described as having histories suggestive of problem drinking. This ranged from 21% to 61%, depending on the indicators used.
- However, there were significant limitations to this study, including the use of proxy reports, the small number of drivers with BACs of 0.10 –0.14 g/dl, and missing data. There was also no way to know how the findings about fatally injured drivers differ from characteristics of the general driving population.
- In fact, we do not know enough about the differences between high BAC drinkers, high BAC drivers, DWI arrestees, repeat offenders, or crash involved drivers. This information would certainly help us shape more appropriate and effective countermeasures.
- There is also a real need for more outcomes research. We need better information to know which interventions are most effective.
- (*Slide #31: Legal Countermeasures*) A large array of legal countermeasures has been directed toward DWI offenders. These include license suspension or revocation, fines and insurance penalties, ignition interlock devices, home detention, and the personal and social stigma of a criminal arrest.
- (*Slide #32: Education and Training*) Considerable effort is also expended to educate and train drivers. These activities include school based programs such as SADD, driver education, and driver improvement and DWI schools.
- Finally, there are social marketing efforts that are designed to alter behavior by focusing on the consequences of impaired driving, appealing to the driver's sense of social responsibility, or attempting to reinforce the fear of being caught and punished.
- (*Slide #33: Treatment*) We need to have greater insight into the effectiveness of treatment for alcohol problems. The likelihood of success for the different treatment approaches is not well documented nor understood.

• (*Slide #34: NHTSA logo*) Thank you. I may have time for a few questions.