



NATIONAL TRANSPORTATION SAFETY BOARD

An independent federal agency

**The Honorable Christopher Hart
Acting Chairman**

Before the

**Subcommittee on Government Operations
Committee on Oversight and Government Reform
United States House of Representatives**

Hearing on

Planes, Trains and Automobiles: Operating While Stoned

**Washington, DC
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Good morning Chairman Mica, Ranking Member Connolly, and Members of the Subcommittee.

Thank you for the invitation to appear before you today to discuss important safety issues resulting from the National Transportation Safety Board's (NTSB) efforts in investigating and studying the role played by marijuana usage in accidents across all modes of transportation.

The Role of the NTSB in Transportation Safety

The National Transportation Safety Board is an independent Federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation – railroad, highway, marine and pipeline. The NTSB determines the probable cause of the accidents and issues safety recommendations aimed at preventing future accidents. In addition, the NTSB carries out special studies concerning transportation safety and coordinates the resources of the Federal Government and other organizations to provide assistance to victims and their family members impacted by major transportation disasters.

Since our inception, we have investigated more than 140,500 aviation accidents and thousands of surface transportation accidents. On call 24 hours a day, 365 days a year, NTSB investigators travel throughout the country and internationally to investigate significant accidents and develop factual records and safety recommendations with one aim—to ensure that such accidents never happen again. The NTSB's annual Most Wanted List highlights safety-critical actions that the US Department of Transportation (DOT) modal administrations, the Coast Guard, and others need to take to help prevent accidents and save lives.

To date, we have issued over 14,000 safety recommendations to nearly 2,300 recipients. Because we have no formal authority to regulate the transportation industry, our effectiveness depends on our reputation for conducting thorough, accurate, and independent investigations and for producing timely, well-considered recommendations to enhance transportation safety.

Drug Use and Transportation

Throughout its history, the NTSB has investigated, studied, and documented the profound and tragic impacts of impairment by legal and illegal drugs on transportation safety. The appendix to my testimony discusses NTSB studies on impairment, NTSB findings of inconsistencies on drug policies, and NTSB accident investigations in which impairment by drugs was cited as causal. Currently, across the transportation modes, commercial operators are generally subject to pre-employment, periodic, random, reasonable cause, and postaccident testing for alcohol and 11 other legal and illegal potentially impairing substances, including marijuana. Regulations specify the maximum allowable drug and alcohol concentration levels, testing intervals, postaccident testing procedures, and reporting guidelines. Yet, despite the commitment of vast resources and intensive efforts over many decades in our country to address the many societal issues surrounding the use and abuse of drugs, their impact on the safety of the traveling public is still a major concern, and we still have a long way to go.

The Subcommittee's continuing focus on Federal marijuana policies is timely, particularly in light of recent developments across the United States.¹ First, many states have decriminalized or legalized the use of marijuana. Currently 20 states and the District of Columbia have authorized medical marijuana programs. Two states, Colorado and Washington, have decriminalized recreational use of the drug. Second, there is growing evidence of drug use by drivers. For example, the National Highway Traffic Safety Administration (NHTSA) 2007 Roadside Survey involved over 13,000 randomly selected vehicles at 300 locations across the country. That survey analyzed biological (breath, oral fluid, and/or blood) samples for alcohol and 20 groupings of legal and illegal drugs. 11% of daytime drivers and 14.4% of nighttime drivers tested positive for at least one drug, and marijuana was the most commonly found drug for both groups. Third, there is evidence that among teenage drivers, marijuana use is rising, and their perceived risk of marijuana use is falling. In one recent survey, 12.7 percent of young adults aged 18-25 reported drug use while driving.²

As you will hear today from NHTSA and the Substance Abuse and Mental Health Services Administration (SAMHSA), the incidence of driving after using illegal, prescription, and the over-the counter (OTC) drugs remains a persistent problem. According to NHTSA Fatality Analysis Reporting System, in 2009, 3,952 fatally-injured drivers tested positive for drugs. In addition SAMHSA's National Survey on Drug Use and Health reported that in 2012 roughly 10.3 million people admitted to driving under the influence of illicit drugs in the past. The rate had declined steadily between 2002 and 2011, from 4.7 to 3.7 percent, before increasing to 3.9 percent in 2012. Similarly, the Office of National Drug Control Policy, in its report entitled "Drug Testing and Drug-Involved Driving of Fatality Injured Driving in the United States, 2005-2009," concluded

- In 2009, 21,978 drivers were killed in motor vehicle crashes nationwide, and 12,087 of these drivers were successfully tested (i.e., the results are known) for the presence of drugs.
- Of those fatally injured drivers for whom the results are known, 3,952 tested positive for drugs, representing 18 percent of all fatally injured drivers, and 33 percent of drivers with known drug test results.
- This 33 percent of fatally injured drivers with positive drug tests in 2009 is an increase from 28 percent in 2005.

The NTSB recognizes that the mere presence of a drug may not equate to impairment. Nonetheless, in recognition of the relationship between increasing drug use, the potential for impairment, and crash risk, the NTSB recently made a significant modification to its annual Most Wanted List of the NTSB's top advocacy priorities for addressing the most critical changes needed to reduce transportation accidents and save lives. Since 1990, the NTSB has included alcohol impaired driving, in one form or another, in its annual most wanted list; however, starting in November 2012, the NTSB broadened the topic to include "Eliminate Substance-Impaired Driving."

¹ Included as an Appendix to this Statement is a summary of other accidents and recommendations with significant toxicological issues.

² <http://www.samhsa.gov/data/NSDUH/2k10Results/Web/PDFW/2k10Results.pdf>

The NTSB's increased attention to substance-impaired driving was due, in part, to the information provided at an agency-sponsored public forum in May 2012 entitled "Reaching Zero: Actions to Eliminate Substance-Impaired Driving." The purpose of the forum was to identify the most effective, scientifically-based actions needed to "reach zero" accidents resulting from substance-impaired driving. Numerous impaired driving countermeasures were discussed at the forum, including laws, enforcement strategies, adjudication programs, substance treatment programs, ignition interlocks, and educational campaigns. One problem area identified and discussed at the forum is that limitations on state data collection and reporting continue to limit regulators' and law enforcement agencies' ability to understand and address the problem of impaired driving and to measure the effectiveness of countermeasures. In addition, states vary widely in how many drivers get tested, what drugs are tested for, and what amounts of drug constitute a positive finding. This significantly limits the ability to make generalizations about national data and prohibits state-to-state comparisons. Among the factors that create variability are different laws, policies, practices, test types, concentration thresholds for reporting, refusals, contamination, police accident reports, and the availability of appropriately-credentialed laboratories. Of note, when they test drivers, most states test for marijuana but the exact tests, laboratory cutoffs for a positive result, and reporting standards vary.

As a result of the Reaching Zero Forum, in November 2012, the NTSB issued two recommendations to NHTSA. One of the recommendations addresses data limitations and inconsistencies regarding drug impaired driving. It reads as follows:

Develop and disseminate to appropriate state officials a common standard of practice for drug toxicology testing, including (1) the circumstances under which tests should be conducted, (2) a minimum set of drugs for which to test, and (3) cutoff values for reporting the results. (H-12-33)

NHTSA responded to this recommendation in early 2013 and indicated it is: working with the ONDCP to develop an effective drug impairment testing program; and evaluating the workplace drug testing program currently used by the states as a framework for an expanded program for driver testing.

In that November 2012 recommendation letter, the NTSB also called for better tracking of place of last drink data, and we made recommendations to the states and International Association of Chiefs of Police and the National Sheriffs' Association accordingly.

In December 2012, the NTSB held a board meeting on wrong-way driving collisions, during which the NTSB called on NHTSA and the Automotive Coalition for Traffic Safety, Inc. to accelerate implementation of the Driver Alcohol Detection System for Safety (DADSS). DADSS refers to passive vehicle-based systems that would identify driver alcohol use by touch or by measuring a driver's exhaled breath; it then would prevent vehicle operation by driver above the legal limit. We have also recommended that all states mandate the use of interlocks for all first time driving while intoxicated offenders.

This year-long review culminated in a May 2013 safety report to promote the following elements to achieve meaningful reductions in alcohol-impaired driving crashes: stronger laws, improved enforcement strategies, innovative adjudication programs, and accelerated development of new in-vehicle alcohol detection technologies. The report recognizes the need for states to identify specific and measureable goals for reducing impaired driving fatalities and injuries, and to evaluate the effectiveness of implemented countermeasures on an ongoing basis. In total, the NTSB issued 19 new recommendations during the year-long review.

Progress has been made in aviation regarding standardizing postaccident toxicology testing, partly as a result of the crash of Central Airlines Flight 27 on March 30, 1983. The airplane, a Gates Learjet model 25, crashed while landing at Newark International Airport, Newark, New Jersey. Flight 27 was operating as a nonscheduled cancelled bank check courier under 14 CFR Part 135. The airplane was destroyed on impact and the two pilots died as a result of the accident. Various toxicology tests were performed by the medical examiner, the Civil Aerospace Medical Institute (CAMI), and the Armed Forces Institute of Pathology. Evidence indicated recent use or inhalation of marijuana by both pilots in the 12 to 24 hours before the accident, but more specific determinations could not be made. The NTSB determined that the probable cause of the accident was: a) loss of control following ground contact; b) an unstabilized approach; and c) likely impairment of the flight crew's judgment, decision making, and flying abilities by a combination of physiological and psychological factors.

In August 1984, the NTSB issued the following safety recommendation to the Federal Aviation Administration (FAA):

Establish at the Civil Aeromedical Institute the capability to perform state-of-the-art toxicological tests on the blood, urine, and tissue of pilots involved in fatal accidents to determine the levels of both licit and illicit drugs at both therapeutic and abnormal levels. (A-84-93)

Over the next several years, the FAA improved the quality and completeness of toxicology testing and in 1990 established the Forensic Toxicology Laboratory at the CAMI. The lab currently performs toxicology testing for fatally injured flight crew in all civil aviation accidents in the US and can identify more than 1300 different drugs using standardized techniques and accepted forensic laboratory processes.

In 1992, the NTSB published a safety study, *Alcohol and Other Drug Involvement in Fatal General Aviation Accidents, 1983 through 1988*. There were only a small number of fatal general aviation accidents during the study period—35—in which the NTSB cited drugs as a cause or factor. Multiple drug use was identified in 15 (43 percent) of the 35 accidents. Of the drugs detected in toxicological tests, cocaine and marijuana were the most frequently identified (12 and 9 accidents, respectively). The study noted, however, that due to quality control problems at the laboratory used by the NTSB to test for drugs of abuse, few conclusive toxicological tests for drugs were obtained by the agency and test results from the years of the study period were less reliable than test results from the latter years of the study period. Since 1990, those issues have been resolved.

Forthcoming Safety Study on Drug Use Trends in Aviation

Staff work is now underway at the NTSB to complete a safety study that examines trends in the prevalence of OTC, prescription, and illicit drugs identified by toxicology testing of fatally injured airmen between 1990 and 2012. The study is analyzing data from the toxicological database and the NTSB accident database and assessing evidence of fatally injured pilots' drug use prior to flying and the associated potential for impairment. We plan to hold a public meeting in September for the NTSB to consider this study and issue potential recommendations based on the study's findings. We will be pleased to share the results of this study and brief the Subcommittee on our findings and safety recommendations.

Postaccident Toxicological Testing of US Coast Guard Military and Civilian Personnel

Merchant mariners are subject to Coast Guard regulations for postaccident toxicological testing, which were originally adopted in 1989 (drugs) and 1994 (alcohol). These regulations specify the maximum allowable drug and alcohol concentration levels, testing intervals, postaccident testing procedures, and reporting guidelines. In 2006, the regulations were improved in part as the outcome of an NTSB special investigation report.³ The report, which studied 28 marine accident investigations, resulted in 11 recommendations to the Coast Guard.

Although merchant mariners are subject to the revised Coast Guard regulations for postaccident toxicological testing, Coast Guard personnel are not. The Coast Guard has different and weaker sets of standards for testing its own personnel. For example, the timeframe for testing Coast Guard military personnel is not defined; instead, Coast Guard policy merely states that these personnel should be tested "as soon as possible" after a mishap. Moreover, with respect to alcohol testing of Coast Guard military personnel, Coast Guard policy does not address whether blood or breath samples should be collected, nor associated custody procedures. In addition, Coast Guard policy is not specific as to which Coast Guard personnel should be toxicologically tested after a mishap—different standards apply to Coast Guard military personnel than to Coast Guard civilian personnel. By contrast, regulations addressing merchant mariners clearly specify which mariners are subject to postaccident toxicological testing.

As a result of 5 serious marine accidents investigated by the NTSB between 2007 and 2011, in November 2012, we issued safety recommendations to the Coast Guard to align its standards for postaccident toxicological testing of Coast Guard personnel with the requirements specified for merchant mariners and to disseminate internal guidance so that commanding officers have unambiguous instruction detailing the requirements for timely drug and alcohol testing of Coast Guard military and civilian personnel whose work performance may be connected to a serious marine incident.

³ *Postaccident Testing for Alcohol and Other Drugs in the Marine Industry and the Ramming of the Portland-South Portland (Million Dollar) Bridge at Portland, Maine, by the Liberian Tankship Julie N on September 27, 1996*, Special Investigation Report NTSB/SIR-98/02 (Washington, D.C.: National Transportation Safety Board, 1998).

Earlier this year, Coast Guard provided its concurrence in these safety recommendations and advised it would amend its drug and alcohol testing policies. We will continue to follow its efforts to update its regulations.

Conclusion

The issues discussed today are a reminder that there is much to be done to eliminate safety risks due to the presence of substance impaired operators in our transportation systems. Eliminating substance-impaired driving—Reaching Zero—remains a battle that is far from over. Eradicating impairment by drug use across all modes of transportation is an even loftier goal. An ongoing critical first step is improving the standardization of data. We look forward to helping with this important effort to improve transportation safety.

Mr. Chairman, this completes my statement, and I will be happy to respond to any questions you may have.