PLANES, TRAINS, AND AUTOMOBILES: OPERATING WHILE STONED

HEARING

BEFORE THE

SUBCOMMITTEE ON GOVERNMENT OPERATIONS
OF THE

COMMITTEE ON OVERSIGHT
AND GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRTEENTH CONGRESS

SECOND SESSION

JULY 31, 2014

Serial No. 113–130

Printed for the use of the Committee on Oversight and Government Reform

Available via the World Wide Web: http://www.fdsys.gov
http://www.house.gov/reform

U.S. GOVERNMENT PRINTING OFFICE

89–703 PDF WASHINGTON : 2014

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM

DARRELL E. ISSA, California, *Chairman*

JOHN L. MICA, Florida
MICHAEL R. TURNER, Ohio
JOHN J. DUNCAN, JR., Tennessee
PATRICK T. MCHENRY, North Carolina
JIM JORDAN, Ohio
JASON CHAFFETZ, Utah
TIM WALBERG, Michigan
JAMES LANKFORD, Oklahoma
JUSTIN AMASH, Michigan
PAUL A. GOSAR, Arizona
PATRICK MEEHAN, Pennsylvania
SCOTT DESJARLAIS, Tennessee
TREY GOWDY, South Carolina
BLAKE FARENTHOLD, Texas
DOC HASTINGS, Washington
CYNTHIA M. LUMMIS, Wyoming
ROB WOODALL, Georgia
THOMAS MASSIE, Kentucky
DOUG COLLINS, Georgia
MARK MEADOWS, North Carolina
KERRY L. BENTIVOLIO, Michigan
RON DESANTIS, Florida

ELIJAH E. CUMMINGS, Maryland, *Ranking Minority Member*
CAROLYN B. MALONEY, New York
ELEANOR HOLMES NORTON, District of Columbia
JOHN F. TIERNEY, Massachusetts
WM. LACY CLAY, Missouri
STEPHEN F. LYNCH, Massachusetts
JIM COOPER, Tennessee
GERALD E. CONNOLLY, Virginia
JACKIE SPEIER, California
MATTHEW A. CARTWRIGHT, Pennsylvania
TAMMY DUCKWORTH, Illinois
ROBIN L. KELLY, Illinois
DANNY K. DAVIS, Illinois
PETER WELCH, Vermont
TONY CARDENAS, California
STEVEN A. HORSFORD, Nevada
MICHELLE LUJAN GRISHAM, New Mexico
Vacancy

LAWRENCE J. BRADY, *Staff Director*
JOHN D. CUADERES, *Deputy Staff Director*
STEPHEN CASTOR, *General Counsel*
LINDA A. GOOD, *Chief Clerk*
DAVID RAPALLO, *Minority Staff Director*

SUBCOMMITTEE ON GOVERNMENT OPERATIONS

JOHN L. MICA, Florida, *Chairman*

TIM WALBERG, Michigan
MICHAEL R. TURNER, Ohio
JUSTIN AMASH, Michigan
THOMAS MASSIE, Kentucky
MARK MEADOWS, North Carolina

GERALD E. CONNOLLY, Virginia *Ranking Minority Member*
JIM COOPER, Tennessee
MARK POCAN, Wisconsin

CONTENTS

PLANES, TRAINS, AND AUTOMOBILES: OPERATING WHILE STONED

Thursday, July 31, 2014

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON GOVERNMENT OPERATIONS,
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM,
Washington, D.C.

The subcommittee met, pursuant to call, at 9:05 a.m., in Room 2154, Rayburn House Office Building, Hon. John Mica [chairman of the subcommittee] presiding.

Present: Representatives Mica, and Connolly.

Also Present: Representatives Fleming and Blumenauer.

Staff Present: Melissa Beaumont, Assistant Clerk; Will L. Boyington, Deputy Press Secretary; Molly Boyl, Deputy General Counsel and Parliamentarian; Sharon Casey, Senior Assistant Clerk; John Cuaderes, Deputy Staff Director; Adam P. Fromm, Director of Member Services and Committee Operations; Linda Good, Chief Clerk; Mark D. Marin, Deputy Staff Director for Oversight; Emily Martin, Counsel; Katy Rother, Counsel; Laura L. Rush, Deputy Chief Clerk; Andrew Shult, Deputy Digital Director; Jaron Bourke, Minority Director of Administration; Devon Hill, Minority Research Assistant; and Cecelia Thomas, Minority Counsel.

Mr. MICA. Good morning. I'd like to welcome everyone to the Committee on Government Oversight and Reform and our subcommittee hearing this morning. This is the Subcommittee on Government Operations and I welcome my ranking member, Mr. Connolly, and others who may join us this morning.

The title of today's hearing is Planes, Trains and Automobiles: Operating While Stoned. And this, I believe, is, what, our fifth hearing on the subject of the impact of changing laws on the increasing use of marijuana in our society.

And our subcommittee in particular has jurisdiction and part of our charter is the difference between Federal and state laws and the relationships and a whole host of issues that deal with, again, Federal-state issues and certainly in our most recent history, there's probably been nothing that has provided a greater difference in, say, current Federal statutes and changing state and local statutes than the marijuana issue. So it's an important matter and we try to approach it and look at all of the aspects and impacts.

The order of business this morning will be opening statements. I'll start with mine, yield to Mr. Connolly.

I see we have Mr. Fleming. I don't believe Mr. Fleming is a member of the committee, but I ask unanimous consent that, and with-

out objection, that he be permitted to participate in today's proceedings, and other members who may join us. Right now there are a number of conferences going on around the Hill.

With that, after the opening statements, we'll hear—I see we have four witnesses, we'll hear from them. We'll withhold questions until we've heard from all of our panelists and get to introduce you and swear you in after the opening statements. So with that, let me begin.

Again, I have an important responsibility to look at changing laws. This subcommittee has, in fact, been investigating the Federal response to state and local government legalization and change of laws relating to marijuana and examining the Administration's sometimes chaotic and inconsistent policies on marijuana.

In fact, most of our proceedings since the beginning of the year have been based on a statement that the President made, and he said that marijuana was not much different than alcohol and I think one of our first hearings was to bring in the Office of National Drug Control Policy, who differed with the President's statement. We looked at that issue, then we heard from the law enforcement agencies. DEA, they disagreed with that statement.

Then we saw the conflict in Colorado and other states. Department of Justice had issued some guidelines and statements relating to enforcement. We heard, as I recall, from the U.S. Attorney from Colorado, who testified about some of the problems. We heard from DEA and other agencies.

As we were doing one of the hearings, the District of Columbia changed its law on possession, tampering down the fine to $25 for 1 ounce of marijuana, and I illustrated by holding up a fake joint. Some people thought that was entertaining, but it was also designed to illustrate you could have 28 of those joints now in the District and that would be the results and the $25 fine. And then I held up in the other hand a list of 26 Federal agencies that were charged with enforcing conflicting Federal law, and it does create a serious dilemma and situation.

And, again, I think today is very important, because having chaired Transportation, and you see the results of the devastation, just for example, on our highways. Probably in the last dozen years, we've had a quarter of a million Americans slaughtered on the highways. Think about that: over a quarter of a million. We've gotten it down. It was down in the 30 some thousand, but it was running in the mid, almost mid 40,000, and that's fatalities and half of those fatalities are related to people who are impaired through alcohol or drugs.

And as we embark on this new era with many more people exposed to what is now still a Schedule I narcotic and more potent, as we heard from some of the scientific folks, we are going to have a lot more people stoned on the highway, and there will be consequences.

We do have Federal agencies, and we'll hear from the Department of Transportation to see how they're going to deal with both vehicles, both passenger vehicles, with commercial vehicles. And then also, and I don't know if we could put up some of those charts to see some of the devastation, but—or the photos. Aviation is another area. Maybe you could put some of those up there. We

haven't gotten into commercial, and we'll talk about that, but these are civil aircraft. Just keep flipping them. Every one of these were involved with people impaired.

And the way we find out right now if they were impaired was, in fact, by testing the corpse, the blood, and this is some of the results we see.

The worst train incident that we've had probably in recent memory—keep flipping that to—let's see if we can—this is the Metro link. Look at that, 25 people killed, and the engineer was impaired with marijuana and then automobiles again. I just showed one on automobile, but there are thousands of accidents that involve some just marijuana, some a deadly combination of marijuana and other drugs taking lives. So there are consequences to what's being done in our society.

Today I want to also focus on the aspect of not only the number of crash victims, but also those who are the most vulnerable in this whole process. Right now, listen to this, from 1999 to 2010, the number of crash victims with marijuana in their system has jumped from 4 percent to over 12 percent, and that's actually as some of this has been kicking in.

Furthermore, the influence of both alcohol and marijuana, they say, is now 24 times more likely to cause an accident than a sober person and I could cite some of these studies. In a study, 27 percent of the seriously injured drivers tested positive for marijuana.

Now, again, one of my major concerns is the impact of the most vulnerable in our society, and the trend is most troubling for our young drivers. Most recently one eighth grade school senior admitted driving after smoking—one in eight, I'm sorry, high school seniors admitted to driving after smoking marijuana, and nearly 28 percent of the high school seniors admit to getting into the car of a driver who had recently used marijuana or other illicit drugs. At night, 16 percent of the drivers under age 21 tested positive for drugs, whereas only 7 percent of the same drivers tested positive for alcohol.

As drugged driving fatalities have tripled, a study has found nearly half of the drivers fatally injured in car accidents are under the age of 25. That slaughter I talked about on the highways is impacting no other group as much as our young people and those particularly are teenagers and those under age 25. As much as 14 percent of fatal or sustained injury drivers tested positive for THC in 2012; however, we don't have to have data to understand the full scope of the problem.

Data collection policies are set up by states, and generally testing only occurs, unfortunately, with drivers with fatalities. Drivers who have used marijuana do not exhibit the same intoxication effects as drivers who have used alcohol, and traditional field testing is not always effective to identify and remove intoxicated drivers from the road. In fact, we have no standard test for marijuana, for drivers. There is no standard test. We don't have Federal standards of limits of THC, since right now at the Federal level, any level of THC is illegal, it is a Schedule I narcotic, and supposedly zero tolerance, but we have no way of testing that.

Currently, there's no roadside breathalyzer for marijuana, but technology is advancing and some countries have started to use a

roadside oral test. Now, this is one of those testing machines, and this is used actually in Europe and as I understand, it takes a swab. I was going to swab the panelists, but I thought I wouldn't do that today, but you could take a swab with this and it can tell you if anyone has used marijuana within 4 hours. But, again, we have no standard, we have no acceptable test, and we have no way of telling if people are impaired.

Most of the data we're getting right now is from, again, fatalities and you either have to take an individual to a hospital for a blood or urine test, or, again, the worst situation is to the morgue where we test their blood.

In the past 10 years, marijuana was a factor in nearly 50 aviation accidents. I showed some of the civil aviation. We haven't even begun to think of what can happen in the commercial market as more people are exposed to marijuana. We now have 23 states with medical use and two states who have knocked down most of the barriers and more people will have, again, exposure to use of marijuana and very little means of testing them.

The National Transportation Safety Board has investigated different accidents, and found, again, the use of THC in a number of these accidents, but, again, all of their testing is done after the fact and usually where a fatality is involved.

The witnesses today will tell us what, if anything, the Federal Government is doing to combat drug-impaired operation of any transportation mode. And, again, we have a whole host of modes that the Federal Government takes responsibility over, vehicular, simple passenger cars, commercial vehicles, cargo, of course rail, both passenger and cargo, and of course aviation, civil and commercial aviation.

We'll hear from Christopher Hart from the National Transportation Safety Board, Jeff Michael from the National Highway Traffic Safety Administration, Patrice Kelly from the Department of Transportation Office of Drug and Alcohol Policy Compliance, and Mr. Ronald, what is it, Flegel, Mr. Flegel of the Substance Abuse and Mental Health Administration.

So I look forward to today's further and continuing discussions on this issue that has a great impact on all of us.

And yield now to the ranking member, Mr. Connolly.

Mr. CONNOLLY. Thank you, Mr. Chairman, and thanks for holding today's hearing to examine the effects of marijuana on the ability to operate planes, trains and automobiles. I'm going to particularly focus in on the automobile, but not to the exclusion of everything else.

This hearing addresses an aspect of marijuana policy where I believe there's general agreement over the desired outcome: reducing the incidents of vehicle accidents resulting from driving while under the influence of any drugs. Across the political spectrum, there's widespread opposition to allowing driving while under the influence of any drug that impairs an individual's ability to operate a vehicle safely. Where differences emerge are over the most effective policy to achieve this widely shared outcome, which I think we can all agree remains a national challenge.

According to the National Survey on Drug and Health Use—Drug Use and Health, excuse me, approximately 10.3 million peo-

ple have admitted to driving while under the influence of illicit drugs in the past year. The Centers for Disease Control and Prevention report that in 2010, 10,228 people were killed in alcohol-impaired driving crashes, accounting for 31 percent of all traffic-related deaths in the United States.

These statistics are alarming and unacceptable. Our Nation must continue reducing the incidents of any drug-impaired driving deaths. A key component to this longstanding effort will be improving our knowledge base through better data and research.

With respect to the focus of today's hearing, there's been very limited research actually conducted by the Federal Government addressing the relationship between marijuana usage and driving safety. Reports from the National Highway Traffic Safety Administration conclude that THC, the psychoactive ingredient in marijuana has dose-related impairing effects on driving performance. For example, NHTSA has previously reported, quote, "the impairment manifests itself mainly in the ability to maintain a lateral position on the road, but its magnitude is not exceptional in comparison with changes produced by many medicinal drugs and alcohol, yet NHTSA also found that marijuana intoxication is short-lived. Peak acute effects following cannabis inhalation are typically achieved within 10 to 30 minutes, with the effects dissipating quickly after about an hour. According to NHTSA, drivers under the influence of marijuana retain insight in their performance and will compensate when they can, for example, by slowing down or increasing effort. As a consequence, THC's adverse effects on driving performance appear relatively small," unquote.

Meanwhile, the National Transportation Safety Board held a public forum to discuss the most effective data-driven, science-based actions to reduce accidents resulting from substance impaired driving. In May 2013, it released a safety report entitled, Reaching Zero: Actions to Eliminate Alcohol-Impaired Driving, in which it reiterated a recommendation from NHTSA to develop a common standard of practice for drug toxicology testing.

Scientific analysis and technological advances have standardized the use of a breathalyzer and the 0.8 percent blood alcohol concentration limit to determine alcohol intoxication; however, states beginning to implement marijuana decriminalization, and there are now 22 of them plus the District of Columbia, must act swiftly to address the fact that there really is no legal limit set for driving under the influence of marijuana as there is with alcohol.

For instance, field sobriety tests may be accurate and effective in detecting marijuana impairment. A study of the U.K. examining the accuracy of field sobriety tests in gauging the amount of marijuana participants had consumed, concluded that there is, quote, "a strong correlation between cannabis dose received and whether impairment was judged to be present," unquote.

Of course, anecdote must not substitute for rigorous scientific data. That's why I believe we must support further research in this field to inform the development of effective public safety policies regulating marijuana and my friend, Dr. Fleming, and I had a discussion at one of our hearings on this very matter, and I think we agree that that has to be the basis for moving forward, it's got to be based in science, and we need more of it.

My concerns over the ineffectiveness of our Nation's existing Federal policy of absolute marijuana prohibition is no more of an endorsement of its recreational purposes use than opposing prohibition of alcohol is an endorsement for drunk driving. Our Nation proved with respect to policies regulating the use of other potentially harmful substances that discouraging the inappropriate use of drugs need not, and perhaps should not, involve total prohibition and criminalization.

I've long believed that the Federal Government governs best when it listens and learns from our states, which are the laboratories of democracy. Right now those states are undergoing a great experiment with respect to this subject, and we need to learn from their experience and hopefully emulate them in regulations and policies in the future that address both use, appropriate use, medicinal purposes and, of course, the issue of criminalization.

Thank you, Mr. Chairman.

Mr. MICA. Thank the gentleman.

Mr. MICA. And I recognize now Mr. Fleming, if he had an opening comment.

Mr. FLEMING. Thank you, Mr. Chairman.

I would like to thank Chairman Mica and the other members of the Government Operations Subcommittee for allowing me to participate in today's hearing. I would also like to thank the chairman for holding this series of hearings that are so vitally important.

You know, it took us centuries of alcohol in our culture and it took a new organization, a then new organization, Mothers Against Drunk Driving, to realize that we were losing Americans wholesale, by the tens of thousands as a result of driving under the influence of alcohol.

It took us approximately 400 years to figure out that tobacco was similarly killing tens of thousands of Americans every year. In fact, as early as—or as recently as the early 1960's, there were commercials in which doctors were actually recommending certain types of cigarettes, saying that it was good for your throat. I worry that we're not, in fact, in the same situation in this case when it comes to marijuana.

Drugged driving is a serious problem. According to the statistics compiled by the 2012 National Survey On Drug Use and Health, about 10.3 million people 12 and over reported driving while under the influence of an illegal drug. Marijuana's active ingredient, THC, is the most common drug found in drivers and crash victims alike. Studies indicate that between 4 to 14 percent of drivers involved in accidents, fatal or otherwise, had THC in their system. Marijuana decreases a driver's response time, awareness and perception of time and speed, all of which are necessary for safe driving.

Another concern of mine is the combination of drugs and alcohol. You see, whenever you hear this debate, you often hear that marijuana is innocuous to begin with, and number two, it's either or: either someone smokes marijuana or they drink alcohol. That's not the way it works. Individuals who are driving under the influence of marijuana will have little inhibitions for drinking beer and alcohol and other substances as well, smoking a joint behind the weed or whatever it takes to get high or feel good.

The Rocky Mountain High Intensity Drug Trafficking Area, which works closely with the White House's National Drug Control Strategy, is collecting data on the impact of Colorado's legalization of marijuana. An August 2013 report indicated that in 2006, Colorado drivers testing positive for marijuana were involved in 28 percent of fatal drug-related vehicle crashes. That number increased to 56 percent by 2011. And understand that in states that are decriminalizing and legalizing marijuana, and certainly we know from NIDA, who's done some work on this, that as marijuana is destigmatized, as a threat to use is reduced, that use goes up, it finds its way into homes, into candy, into cookies and baked goods, and once it gets there, it finds its way into the brains of teens.

And we know from statistics that marijuana has a 9 percent addiction rate among adults, but those who start as teens, that rate doubles to one in six. So it's very important what's happening in these states who are legalizing and even decriminalizing or medicinalizing marijuana.

This Year's Rocky Mountain HIDTA report on 2012 data is also very alarming. Using data from the National Highway Safety Administration Fatality Analysis Reporting System, FARS, this year's report, due out in October, will show that between 2007 and 2012, while Colorado's overall traffic fatalities decreased by 15 percent, over that same time, marijuana-related fatalities increased 100 percent. Earlier this year, the University of Colorado released a study confirming that Colorado drivers are testing positive for marijuana and involved in fatal accidents is on the rise.

There is no hard and fast way to determine whether an individual is driving under the influence and there's yet to be established a uniform amount of marijuana which constitutes drugged driving, and that is very important, because, you see, in the case of alcohol, when you arrest someone for—if they've not been in an accident, you just caught them driving under the influence, with so many episodes of that arrest, that person loses their license, they're taken off the road. That's not happening with marijuana. We don't have a way to do that yet.

While driving under the influence is unquestionably a problem, it is also concerning that pot smoking American youth may also have trouble finding a job. This is especially true in the transportation arena. The U.S. Department of Transportation requires mandatory drug testing on pilots, air traffic controllers, railroad employees and commercial drivers, and that can include buses, it can include 18 wheelers, anything that requires a CDL license. These individuals are responsible for numerous lives, and it's critical that they are and remain drug free.

Marijuana will also become more pervasive as states continue to embrace permissible laws on medical marijuana, and the recreational use of marijuana in kids and youth will have easier access to a dangerous, addictive drug and, again, back to the medicinal marijuana, there's no reason why we can't use components of marijuana for disease treatment.

Right now we already have Marinol, which is a Schedule III, can be used under the monitoring and observation of a physician, closely monitored at the dosage precisely prescribed, and can be done safely, just like hydrocodone. It has the same activity and benefit

that the plant marijuana has. It is a synthetic THC. We have that already.

There is some claim that there are extracts, oils extracts of cannabis that can be used to treat certain rare seizures in children. Well, it has little or no THC activity. There's no reason why that—and it's under fast track FDA approval right now. There's no reason why that can't be taken out as well, but there's no reason to de-schedule or to make legal marijuana, which is now Schedule I, for those purposes. All of those things can be done without reducing the schedule or to legalize the marijuana plant itself.

Mr. Chairman, it's no surprise to you or to anyone here that I am opposed to the legalization of marijuana. What is surprising, however, is that the New York Times editorial board is fully supportive of the legalization of marijuana.

Mr. Chairman, I have two response pieces to the New York Times that I would like to submit for the record, one from the White House Office of National Drug Policy and another opinion piece by Peter Wehner published in The Wall Street Journal on Tuesday. Legalization is not the answer nor is it a prudent decision for America. Marijuana remains a dangerous, highly addictive drug. Even science will tell you that.

Thank you, and I yield back.

Mr. MICA. Without objection, both of those articles, statements will be made part of the record.

Mr. MICA. There being no further opening statements, members may have 7 days to submit opening statements for the record.

Mr. MICA. Now let me proceed and recognize our first panel.

The first panel consists of Christopher A. Hart, and he's the acting chairman of the National Transportation Safety Board; Mr. Jeff Michael is the associate administrator for research and program development at the National Highway Traffic Safety Administration; Ms. Patrice Kelly is acting director for the Office of Drug and Alcohol Policy and Compliance at the Department of Transportation; and Mr. Ron Flegel is the director for the division of workplace programs at the Center for substance abuse prevention at the Substance Abuse and Mental Health Administration. I welcome all of our panelists.

This is an investigative and oversight subcommittee of Congress. We do swear in all of our witnesses. If you'll stand, please, raise your right hand. Do you solemnly swear or affirm that the testimony you're about to give before this subcommittee of Congress is the whole truth and nothing but the truth?

All of the witnesses, the record will reflect, answered in the affirmative. Welcome them again.

And I gave misinformation on a statistic, and I didn't realize it until after I said it, and I want to clarify that for the record. I said nearly a quarter of a million people had been killed in the last dozen years on our highway. It's nearly a half a million people, a half a million people. Think about that. And half of those people died, that's nearly a quarter of a million, with either alcohol or some substance in their system. I'll get the exact numbers and we'll put them in the record, but I didn't give the rest of the story, as Paul Harvey would say.

Mr. MICA. With that correction for the record, let me first welcome and recognize Mr. Hart. Welcome, and you're recognized, sir.

WITNESS STATEMENTS

STATEMENT OF THE HON. CHRISTOPHER A. HART

Mr. HART. Good morning, Chairman Mica, Ranking Member Connolly, and members of the subcommittee. Thank you very much for inviting the NTSB to testify today.

The subcommittee's focus on Federal marijuana policies affecting transportation is very timely. We've been working extensively for many years to address alcohol use by drivers, which you've heard about already in the opening statements, but that still kills almost 10,000 people every year on our highways. Now we're becoming more concerned that our investigations also illustrate the problems of marijuana use in transportation operations.

Among the more egregious drug-involved accidents that are listed in my written testimony are a recreational boating accident in Ponte Vedra, Florida, that killed five, a daycare van driver in Memphis, Tennessee, who was high and crashed, causing five deaths, and a railroad accident in Chase, Maryland, that killed 16 that's already been referred to. But we don't have a good idea of the number of drug-related transportation fatalities.

We're not surprised about the growing evidence of drug use by drivers, pilots and others, however, given that as we have heard, many states have authorized medical marijuana programs and two states have decriminalized recreational use of the drug. In addition, recent news reports have noted pressure to decriminalize marijuana at the Federal level as well. Perhaps most disturbing, as we've heard mentioned in the opening statements, is evidence that marijuana use among teenage drivers is increasing and their perceived risk of marijuana use is decreasing.

In 2013, we completed a year-long review of substance-impaired driving, which included drug use and we concluded that there is not enough data on drugged driving. Consequently, we asked NHTSA to establish guidelines for collecting this data to enable policy makers to make more informed decisions regarding how to address this important issue, and we understand that NHTSA is working on this recommendation.

Lack of data about drug impairment is not only a problem in highway accidents, but also in other transportation modes. In general aviation, our investigators sometimes see evidence of drug use by pilots who are involved in accidents. So we've decided it was time to look at this issue in greater detail. In September, we will meet to discuss drug use in general aviation by examining toxicology testing results conducted on fatal injured general aviation pilots. We will look at over-the-counter, prescription, and illicit drugs in pilots. We are missing important data on the role of illegal drugs, and not only that, but the public is pretty much unaware of important information about how legal drugs may also affect their performance. We will also examine drug use in general aviation pilots as compared to trends observed in the U.S. Population in general. Information that we obtain in this September meeting

will help us evaluate whether there is a need for additional recommendations or other advocacy efforts on our part.

Fortunately, shifting state laws have not resulted in changes in illegal drug use policies for commercial operators. You'll hear on this panel today that the Department of Transportation has stated that it continues to have a zero tolerance policy for drug use, illegal drug use by commercial operators, and the NTSB fully supports that policy.

What is clear is that operator impairment places the public in jeopardy. Impaired drivers share the roadways with other drivers, impaired pilots share the air space with other pilots. Impaired mariners share the seas with other mariners. And across all modes, many operators have passengers that may be placed at risk.

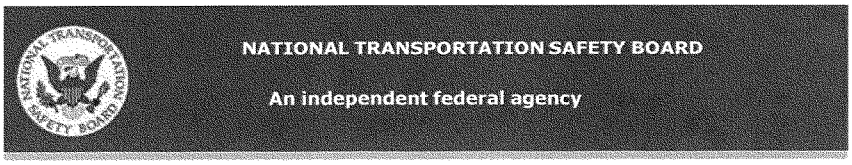
Too many people died on our roadways from alcohol-impaired driving before strong action was taken to combat it. That strong action has reduced fatalities tremendously, but there are still too many alcohol-related deaths, and every one of them is entirely preventable. Hopefully, we will not wait for more people to die from drug-induced transportation accidents before we take strong and decisive action.

Hearings like this one today will help inform policymakers on the issues that so that effective laws can be crafted, strong enforcement can be implemented, and robust education efforts can be accomplished in all modes of transportation, and we look forward to working with you to draw more attention to this issue.

Again, thank you for inviting me to testify. I look forward to responding to your questions.

Mr. MICA. Thank you. And we will withhold questions until we've heard from everyone.

[The prepared statement of Mr. Hart follows:]



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
July 31, 2014

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 a 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 coutermeasures 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.

Statement of The Honorable Christopher Hart,
Acting Chairman National Transportation Safety Board
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
July 31, 2014

APPENDIX

OTHER TOXICOLOGY ISSUES IN ACCIDENTS INVESTIGATED BY THE NATIONAL TRANSPORTATION SAFETY BOARD

Highway

Safety Study on Commercial Motor Vehicle Accidents Involving Drugs and Alcohol

In 1990, the NTSB published a safety study that focused on the role of fatigue, drugs, alcohol, and medical factors in fatal-to-the driver heavy truck crashes.[1] One hundred and eighty-two accidents involving 186 trucks were included in the study. From the toxicological tests, the NTSB found that 33 percent of the fatally injured drivers tested positive for alcohol and other drugs of abuse. The most prevalent drugs found in drivers who had tested positive were marihuana and alcohol (13 percent each), followed by cocaine (9 percent), methamphetamine/amphetamines (7 percent), other stimulants (5 percent), and codeine and phencyclidine (PCP) (less than 1 percent each). Stimulants (for example cocaine and amphetamines) were the most frequently identified drug class among fatally injured drivers. As a result of the study, the NTSB made several safety recommendations pertaining to drug screening and testing procedures to all levels of government, trucking associations, and the trucking industry.

Motorcoach Run-off-the-Road Accident

On May 9, 1999, about 9:00 a.m., a 1997 Motor Coach Industries 55-passenger motorcoach was traveling eastbound on Interstate 610 in New Orleans, Louisiana. The bus, carrying 43 passengers, was en route to a casino. The bus departed the right side of the highway, crossed the shoulder, and went onto the grassy side slope alongside the shoulder. The bus continued on the side slope, struck the terminal end of a guardrail, traveled through a chain-link fence, vaulted over a paved golf cart path, collided with the far side of a dirt embankment, and then bounced and slid forward upright to its final resting position. Twenty-two passengers were killed, the bus driver and 15 passengers received serious injuries, and 6 passengers received minor injuries.

---

[1] National Transportation Safety Board, *Fatigue, Alcohol, Other Drugs, and Medical Factors in Fatal-to-the Driver Heavy Truck Crashes*, Safety Study, NTSB/SS-90/01 (Washington, DC: NTSB, 1990), 2 Vols.

The ensuing investigation established that the motorcoach driver possessed a current commercial driver's license and medical certificate, but suffered from several life-threatening medical conditions of the kidneys and heart. The NTSB determined that small amounts of tetrahydrocannabinol (THC, the active substance in marijuana) and larger amounts of tetrahydrocannabinol carboxylic acid were detected in the driver's blood collected more than an hour after the accident. The agency also determined that the probable cause of this accident was the driver's incapacitation due to his severe medical conditions and the failure of the medical certification process to detect and remove the driver from service. Other factors that may have had a role in the accident were the driver's fatigue and his use of marijuana and a sedating antihistamine.[2]

15-Passenger Child Care Van Run-off-the Road Incident

On April 4, 2002, a 15-passenger van, driven by a 27- year-old driver and transporting six children to school, was southbound in the left lane of Interstate 240 in Memphis, Tennessee. The van was owned and operated by a private child care center. A witness driving behind the van stated that the vehicle was traveling about 65 mph when it drifted from the left lane, across two other lanes, and off the right side of the roadway. The van then overrode the guardrail and continued to travel along the dirt and grass embankment until the front of the van collided with the back of the guardrail and a light pole. The rear of the van rotated counterclockwise and the front and right side of the van struck the bridge abutment at an overpass before coming to rest. The driver was ejected through the windshield and sustained fatal injuries. Four of the children sustained fatal injuries and two were seriously injured.

The NTSB determined the driver consumed marijuana on the morning of the accident and was under the influence of the drug at the time of the crash and had drug testing been conducted, the driver's drug use would likely have been detected and he may have been prohibited from transporting children. As a result of the investigation, the NTSB made numerous safety recommendations, including two to child care transportation oversight agencies in the 50 States and the District of Columbia to implement an oversight program for child care transportation that includes preemployment, random, postaccident, and "for cause" drug testing for all transportation providers and the prohibition of anyone who tests positive for drugs from transporting children.[3]

Medical Oversight of Noncommercial Drivers

As the result of its investigation of six noncommercial vehicle accidents from 2001-2003 in which a driver's medical condition played a role, and a March 2003 public hearing at which the factors that contribute to medically related accidents were discussed, the NTSB prepared a

---

[2] National Transportation Safety Board, *Motorcoach Run-off-the-Road Accident, New Orleans, Louisiana, May 9, 1998,* Highway Accident Report, NTSB/HAR-01/01 (Washington, DC: NTSB, 2001).

[3] National Transportation Safety Board, *15-Passenger Child Care Van Run-off-the Road Accident, Memphis, Tennessee, April 4, 2002,* Highway Accident Report, NTSB/HAR-04/02 (Washington, DC: NTSB, 2004).

special investigative report to examine these issues.[4] The special investigative report pointed out that certain medical conditions can negatively affect driving activities, thereby increasing the safety risk of drivers who suffer from them. The extent of the overall impact of medically impaired drivers is not known because data are not available on the number of licensed drivers with particular medical conditions or (except for data on alcohol-related accidents) on the number of accidents where a driver's medical condition was a contributory factor. However, in order to offer some perspective on the medical oversight issues that State licensing agencies face the report identified the number of Americans with one or more of the following medical conditions:

- Epilepsy: 2.5 million (180,000 new diagnosed cases each year).[3]
- Diabetes: 18.2 million (1 million new cases diagnosed each year in those over 20 years of age).
- Sleep Disorders: 50 to 70 million.
- Cardiovascular Disease: 23.5million(41.7 million additionalhave hypertension).
- Alzheimer's Disease: 4.5 million (10 percent of those over 65 years and nearly 50 percent of those over 85 years suffer from the disease).

As a result of its accident investigations and discussions stemming from the public hearing, the NTSB identified the following safety issues:

- Need for more data on the extent to which medical conditions contribute to the cause of accident.
- Need for improved awareness and training for healthcare professionals, law enforcement, and the public regarding State medical oversight laws and practices.
- Existence of barriers to the reporting of medically impaired drivers.
- Lack of uniform medical assessment and oversight standards throughout the states.
- Deficiencies in alternative transportation options for those who should not drive.

In the special investigative report, the NTSB made numerous safety recommendations to US Department of Transportation, the National Highway Traffic Safety Administration, the National Committee on Uniform Traffic Laws and Ordinances, the American Association of Motor Vehicle Administrators, the Commission on Accreditation for Law Enforcement Agencies, the Liaison Committee on Medical Education, the American Osteopathic Association, the Association of American medical Colleges, and the Federation of State Medical Boards.

---

[4] National Transportation Safety Board, *Medical Oversight of Noncommercial Drivers*, Highway Special Investigative Report, NTSB/SIR-04/01 (Washington, DC: NTSB, 2004).

Aviation

Asiana Flight 214 and Postaccident Toxicological Testing

As part of its accident investigation, the NTSB reviewed post-accident flight crew testing following the Asiana Flight 214 crash at San Francisco International Airport on July 6, 2013. Current FAA regulatory requirements for drug and alcohol testing programs apply to U.S operators but not foreign air carriers. Therefore, the Asiana flight crew was not subject to postaccident testing in the U.S. The NTSB's counterpart agency in Korea, the Republic of Korea Aviation and Railway Accident Investigation Board, collected scalp hair samples from the two pilots nearly a month after the crash and submitted them to the Korea National Forensic Service for toxicological tests. No evidence of drug use was found. However, the case highlighted the complexities of postaccident toxicology testing involving foreign air carriers and international flight crew.

During the 38th session of the ICAO Assembly held last year, the United States presented a paper, authored by the FAA, proposing that ICAO develop an international standard on postaccident drug and alcohol testing of flight crewmembers. ICAO agreed to review existing standards, recommended practices, and guidance material to determine the need for a specific international standard to address postaccident drug and alcohol testing of flight crewmembers.

We will be happy to inform the Subcommittee of further ICAO developments as it considers developing and implementing postaccident drug and alcohol testing for flight crewmembers.

Marine

Investigation of Marine Allision Involving a Recreational Boat

On April 12, 2009, a 22.5-foot recreational boat carrying 14 persons collided with a 25.9-foot push boat (a type of towboat) moored near Ponte Vedra Beach in St. Johns County, Florida. An hour earlier, the recreational boat had departed a marina/restaurant in Jacksonville Beach, on route to St. Augustine, after refueling at the marina's fuel dock and after personal effects and beverages (including liquor, beer, and drink mixers) were loaded on board. After reaching St. Augustine, the boat passengers began the return trip to Jacksonville Beach. At this point, the regular boat operator showed signs of alcohol impairment and several group members objected to his operating the boat. The operator agreed to allow one of the passengers to take his place. As the boat proceeded north in the Intercoastal Waterway, two witnesses saw it run aground on a shoal. Approximately 45 minutes later, the boat struck the push boat, which was moored to a barge. Five persons on the boat died at the accident scene. The remaining nine persons were injured, seven seriously.

Although Florida law permits consumption of alcoholic beverages on recreational vessels by anyone at least 21 years old, it is a violation of Florida law to operate a vessel while impaired

by alcohol or drugs. Vessel operators are presumed to be impaired and under the influence of alcohol if their blood alcohol content (BAC) or breath alcohol content (BrAC) is 0.08 or above. For persons under 21 years of age, it is a violation of Florida law to have a BrAC of 0.02 or higher and to operate or be in physical control of a vessel. Postaccident drug and alcohol tests results revealed that 11 of the boat's occupants, including the regular operator, had a BAC above 0.08 (the regular operator's BAC was 0.204). The BAC of the designated operator, who died in the accident, was 0.035. Three occupants tested positive for marijuana, including the regular operator, and four others tested positive for cocaine. Other drugs such as benzodiazepine were also detected. A small amount of marijuana was found in the boat after the accident.

The NTSB determined that the probable cause of the collision of the recreational boat with the push boat was the inattention of the boat operators, most likely the result of alcohol impairment on the part of the regular operator and inexperience on the part of the designated operator. No specific safety recommendations or conclusions were listed in the marine accident brief.[5]

Rail

Rear-end Collision of Passenger Train and Freight Train

On January 4, 1987, a northbound Conrail train departed the rail yard at Baltimore, Maryland on track 1. Almost simultaneously, a northbound Amtrak train departed Pennsylvania Station in Baltimore on track 2. After the Conrail train entered track 2 without authorization, the signal indication on track 2 changed from *clear* to *stop*. The engineer for the Amtrak train saw the stop signal and placed his train into emergency braking but could not stop before colliding with the Conrail train. At the time of the collision, the speed of the Amtrak train was estimated at 108 miles per hour. Among the Amtrak passengers, there were 16 fatalities (including the Amtrak engineer), 10 serious injuries, 15 moderate injuries, and 149 minor injuries.

On January 6, 1987, Amtrak's general manager informed the NTSB that the dispatcher and the surviving Amtrak train crewmembers had not been required to submit to toxicological testing. Toxicology testing of the specimens obtained from the Conrail engineer and brakeman indicated the presence of marijuana metabolites in sufficiently high levels to show that they were heavy or frequent users of marijuana and may have used marijuana within 24 hours before the time they provided specimens.[6]

The NTSB determined that the probable cause of this accident was the failure, as a result of impairment from marijuana, of the engineer of the Conrail train to stop his train in compliance with the wayside signal and the failure of the Federal Railroad Administration (FRA) and Amtrak to require, and Conrail to use, automatic safety backup devices on all trains on the Northeast Corridor.[7] As a result of its investigation, the NTSB issued 17 safety

[5] National Transportation Safety Board, Marine Accident Brief, NTSB/MAB-10/01 (Washington, DC: NTSB, February 24, 2010).

[6] The engineer was charged with manslaughter by locomotive under Maryland law and sentenced to five years in state prison and one year of probation.

[7] National Transportation Safety Board, *Rear-end Collision of Amtrak Passenger Train 94, The Colonial,*

recommendations, including recommendations to Amtrak and Conrail regarding improved methods of identifying employees who abuse alcohol and/or drugs and to the FRA to expand and intensify oversight of Amtrak's operating practices and compliance with Federal safety regulations (including the requirements for post-accident toxicological testing).

---

and Consolidated Rail Corporation Freight Train ENS-121, on the Northeast Corridor Highway Accident Report, NTSB/HAR-04/02 (Washington, DC: NTSB, 2004).

Mr. MICA. And now let me recognize Jeff Michael, who's with the National Highway Traffic Safety Administration. You're recognized.

STATEMENT OF JEFFREY P. MICHAEL

Mr. MICHAEL. Good morning, Mr. Chairman, Ranking Member Connolly, and members of the subcommittee. I appreciate this opportunity to testify before you today on the National Highway Traffic Safety Administration's research on drugged driving.

NHTSA takes tremendous pride in our 40-year record of protecting Americans by partnering with states to enforce strong highway safety laws and by working to make vehicles safer. Since 1970, highway fatalities have declined by 36 percent, traffic deaths have fallen by 22 percent just in the past decade, but with more than 30,000 fatalities on America's roadways each year, we must continue looking at new and innovative ways to save lives.

Working with our state partners and other safety organizations, we've made substantial progress with critical safety behaviors, including drunk diving, seatbelt use, and have applied the same successful approaches to emerging concerns, such as distracted driving.

The legalization of marijuana under state laws poses new concerns, and we are actively working from our foundation of experience to understand these risks and develop appropriate countermeasures.

Available evidence indicates that alcohol is the most common source of driver impairment. In 2012, more than 30 percent of all traffic deaths involved a driver with blood alcohol level at or above the legal limit. With more than 40 years of research, several decades of data collection and a well established criminal justice process, traffic safety professionals have a good understanding of the scale and the nature of the drunk driving problem. Much more research is needed to gain a good understanding of the effects of drugs other than alcohol on safe driving.

In 2007, we obtained the first nationally representative information on the prevalence of drug use by drivers by including drug testing in our national roadside survey. Although this survey had been used to track driver alcohol use for several decades, this was the first time that information on drug use was collected. This survey, based on information from voluntary and anonymous participants, found that about 12 percent of weekend drivers were alcohol positive and about 9 percent were marijuana positive. We repeated the national roadside survey in 2013, and we are in the process of analyzing those data.

To understand how state level legalization might affect the prevalence of marijuana by drivers, we partnered with the State of Washington, at their invitation, this spring to conduct a similar roadside survey. This is a two-phase study that will assess the change in marijuana use by drivers before and following the date at which the state allowed retail sale of the drug.

In addition to prevalence research, we also need information on the degree of risk associated with drug use. We are in the process of completing a new study which compares the crash risk of drivers using drugs to those with no drugs in their system. This is the first

such investigation of drug-crash risk in the United States, and more research of various types will be needed to get a full understanding of the role of drugs in crashes. As we prepare to release the results of this new study, we plan to reach out to stakeholders, including committee staff, to inform them of the findings.

Strong laws and law enforcement are cornerstones of our efforts to address alcohol-impaired driving, and we are looking to the same solutions for drugged driving. We worked closely with the law enforcement community to develop a network of more than 7,000 drug recognition experts across the Nation. These trained officers can significantly facilitate the successful prosecution of drugged driving cases.

We are also looking closely at procedural barriers to effective drugged driving law enforcement, and recognize the challenges presented by drug testing methods. While the prosecution of alcohol-impaired driving cases is complex, evidential testing for alcohol can typically be done at the jurisdiction by local officials with a moderate amount of training. Testing for drug presence among suspected impaired drivers is often far less convenient, requiring that a blood sample be drawn, sent to a remote lab for analysis by highly trained personnel. The cost and delay of such testing can be a disincentive for criminal justice officials to pursue a drugged driving charge.

In conclusion, NHTSA's committed to reducing both alcohol and drug-impaired driving, we support the development of effective education enforcement programs with guidance for state officials based on sound research. Much progress has been made, however, impaired driving still claims more than 10,000 lives per year.

Thank you again for inviting me to testify before your committee, and I'm happy to take any questions you may have.

Mr. MICA. Thank you.

[The prepared statement of Mr. Michael follows:]

STATEMENT OF DR. JEFF MICHAEL
ASSOCIATE ADMINISTRATOR OF RESEARCH AND PROGRAM DEVELOPMENT
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
before the
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM
SUBCOMMITTEE ON GOVERNMENT OPERATIONS
U.S. HOUSE OF REPRESENTATIVES
hearing on
"PLANES, TRAINS AND AUTOMOBILES: OPERATING WHILE STONED"

JULY 31, 2014

Good morning, Mr. Chairman, Ranking Member Connolly and Members of the Subcommittee. I appreciate this opportunity to testify before you on the National Highway Traffic Safety Administration's research on drugged driving.

U.S. Roadway Safety

NHTSA takes tremendous pride in our 40-year record of protecting Americans by partnering with the States to enforce strong highway safety laws and by working to make vehicles safer. Since 1970, highway fatalities have declined by 36 percent. Traffic deaths have fallen by 22 percent just in the last decade. But, with more than 30,000 fatalities on America's roadways each year, we must continue looking at new and innovative ways to save lives while maintaining support for education and enforcement efforts that we know deliver results.

Working with our State partners and other safety organizations we have made substantial progress with critical safety behaviors including drunk driving and seat belt use, and have applied the same successful approaches to emerging concerns such as distracted driving. The legalization of marijuana under state laws poses new concerns and we are actively working from our foundation of experience to understand the risks and develop appropriate countermeasures.

Research on Drugged Driving

Available evidence indicates that alcohol is the most common source of driver impairment. In 2012, more than 30 percent of all traffic deaths involved a driver with a blood alcohol level at or beyond the legal limit of 0.08 percent. With more than 40 years of research, several decades of data collection and a well-established criminal justice process, traffic safety professionals have a good understanding of the scale and the nature of the drunk driving problem.

Much more research is needed to gain a good understanding of the effects of drugs other than alcohol on safe driving and their role in crashes. Our research explores four overarching issues:

1. Determining the Prevalence of Drug Use by Drivers;
2. Examining the Crash Risk Associated with Drug Use;
3. Developing Improved Detection and Enforcement Methods; and,
4. Examining New Drug Testing Technology.

Determining the Prevalence of Drug Use by Drivers

In 2007, we obtained the first nationally-representative information on the prevalence of drug use by drivers by including drug testing in our National Roadside Survey. Although this survey had been used to track driver alcohol use for several decades, this was the first time that information on drug use was collected. This survey, based on information from voluntary and anonymous participants, found that about 12 percent of weekend drivers were alcohol-positive, and about 9 percent were marijuana-positive. Other drugs were found at lower levels, including cocaine at about 4 percent and methamphetamine at 1 percent. We repeated the National Roadside Survey of Alcohol and Drug Use by Drivers in 2013 and are in the process of analyzing those data.

To understand how state-level legalization might affect the prevalence of marijuana use by drivers, we partnered with the State of Washington at their invitation this spring to conduct a similar roadside survey. This is a two-phase study that will assess the change in marijuana use by drivers before and following the date at which the State allowed retail sale of the drug.

Examining the Crash Risk Associated with Drug Use

In addition to prevalence research, we need information on the degree of risk associated with drug use. We are in the process of completing a new study which compares the crash risk of drivers using drugs to those with no drugs in their system. This study uses the same methodology which has been used to understand the crash risk odds at various levels of alcohol impairment. This is the first such investigation of drug crash risk in the United States and more research of various types is needed to get a full understanding of the role of drugs in crashes.

Findings of prior studies using a similar methodology have been inconsistent with regard to the crash risk associated with marijuana. These varying findings may reflect differences in study design such as the selection of subjects or the degree of certainty regarding drug presence. Our new study incorporates lessons learned in prior research and incorporates methods that we believe will improve the precision of drug crash risk odds calculations. As we prepare to release the results, we plan to reach out to stakeholders, including Committee staff, to inform them of the findings.

Following a complementary research approach, NHTSA is also working with the National Institute on Drug Abuse (NIDA) and the Office of National Drug Control Policy (ONDCP) on a study of driver impairment using the National Advanced Driving Simulator to assess the effects of inhaled cannabis, both alone and with alcohol, on driving performance.

Developing Improved Detection and Enforcement Methods

Strong laws and law enforcement are cornerstones of our efforts to address alcohol-impaired driving and we are looking to the same solutions for drugged driving. We have worked closely with the law enforcement community in developing a network of more than 7,000 Drug Recognition Experts across the nation. NHTSA supported the development of detailed protocols and training that prepare these officers from State and local jurisdictions to identify signs and symptoms of drug use. Their services significantly facilitate the successful prosecution of drugged driving cases. We recently partnered with the Office of National Drug Control Policy to introduce a new Advanced Roadside Impaired Driving Enforcement (ARIDE) curriculum that is being used to educate a broader group of law enforcement officers on detecting potentially drugged drivers and also enhance utilization of the highly trained drug recognition experts.

We continue to refine these programs and are currently evaluating the ARIDE program and assessing the predictive validity of the protocols used by the Drug Recognition Experts to detect drugged drivers.

Examining New Testing Technology

We are looking closely at procedural barriers to effective drugged driving law enforcement and recognize the challenges presented by current drug testing methods. While the prosecution of alcohol-impaired driving cases is complex, evidential testing for alcohol can typically be done at the jurisdiction by local officials with a moderate amount of training. Testing for drug presence among suspected impaired drivers is often far less convenient, requiring that a blood sample be drawn and sent to a remote lab for analysis by highly trained personnel. The cost and delay of such testing can be a disincentive for criminal justice officials to pursue a drugged driving charge.

NHTSA and ONDCP convened a roundtable of drug testing and criminal justice experts in 2012 and have since initiated a demonstration program to explore the feasibility of using portable saliva testing devices for drugged driving law enforcement purposes. If the demonstration program produces positive results, we would then provide guidance on drug testing that could streamline the criminal justice process.

Conclusion

In conclusion, NHTSA is committed to reducing both alcohol and drug impaired driving. We support the development of effective education and enforcement programs with guidance for state officials based on sound research. Much progress has been made since the agency began its work on this issue more than 40 years ago. However, impaired driving still claims more than 10,000 lives per year.

Further progress, particularly in the area of marijuana and driving, will require new research and a better understanding of how the drug affects individuals and how these effects

translate into driving performance and traffic risk. State officials are anxious for guidance, but need sound evidence which can support effective policies. We will continue to work with State and local officials to test promising strategies and collect information that will help address drug and alcohol impaired driving.

For further background information we have attached a compendium of prior agency research concerning drugs and driving.

Thank you again for inviting me to testify before the committee and I am happy to take any questions that you may have.

NHTSA OFFICE OF BEHAVIORAL SAFETY RESEARCH

RESEARCH ON DRUGS AND DRIVING

Extracted from NHTSA's *Compendium of Traffic Safety Research Projects 1985-2013*, DOT HS 811 847

Drug Use and Drug Impairment Studies

The Incidence of Driving Under the Influence of Drugs 1985: An Update of the State of Knowledge

December 1985, DOT HS 806 900

This project reviewed literature published from 1980 through 1985 to update a previous "state of knowledge" report produced in 1980. The project found that drugs other than alcohol are detected in 10% to 22% of crash-involved drivers, and that drugs alone (i.e., without alcohol) are found in 3% to 15% of crash-involved drivers. It was also found that the majority of drug-using drivers have high levels of alcohol in combination with the drugs. The reviewers cautioned that most of the available studies did not provide unbiased representative samples of crash-involved drivers, and tested for only a limited sample of drugs.

Author: Richard P. Compton, Theodore E. Anderson

Feasibility Assessment of Chemical Testing for Drug Impairment

September 1985, DOT HS 806 920

The study examined existing data on the concentrations of a variety of drugs in drivers to assess the feasibility of establishing chemical tests to detect drug-impaired driving. It was concluded that urine testing would be suitable for establishing the need to obtain and analyze blood specimens for THC (the active ingredient in marijuana), while saliva offered more promise for presumptive screening for other drugs. The study also found that, at the present state of knowledge, blood was the only body fluid that may serve in a limited manner to relate drug levels to impaired driving.

Author: R. E. Willette

Feasibility Assessment of Chemical Testing for Drug Impairment: Final Summary Report

September 1985, DOT HS 806 888

This project examined existing data on concentrations of marijuana, secobarbital, diazepam, diphenhydramine, and methaqualone in blood, saliva and urine to assess the feasibility of establishing chemical tests for police use in detecting drug-impaired drivers. The study employed pharmacokinetic methods to relate urine and saliva concentrations to blood levels, which were related to measures of behavioral impairment in laboratory tasks.

Author: Robert E. Willette

Use of Controlled Substances and Highway Safety: A Report to Congress

March 1988, DOT HS 807 261

The report reviewed the literature on the relationship of drug use to highway safety. It was found that substantial numbers of people sometimes drive after using drugs other than alcohol and between 10 and 22% of crash-involved drivers may have used drugs, often in combination with alcohol. Drugs appearing to have the greatest potential to be serious highway safety hazards were tranquilizers, sedative hypnotics, and marijuana.

Author: Richard P. Compton

Test Drives in the Daimler-Benz Driving Simulator with Drivers Under Diazepam

May 1990, DOT HS 807 569

The research investigated the influence of diazepam on the driving performance measured in the Daimler-Benz Driving Simulator. Test subjects were male students; 20 received a medium, and 20 received a high dosage of diazepam. A third group of 20 students served as a control group without diazepam. The test drive involved ten standardized driving tasks (scenarios) which either required a normal everyday response or represented an "emergency situation" with greater demands on the driver. No significant differences were found between the three groups. In all scenarios the individual differences within groups were higher than differences between the groups.

Author: B. Friedel, S. Joo, K. Reker, W. Kading, P. Klostermann, K. S. Saturnus, V. Schneider

Test Drivers in the Daimler-Benz Driving Simulator with Drivers under Diphenhydramine

January 1991, DOT HS 807 668

This study investigated the influence of diphenhydramine on driving performance as measured in the Daimler-Benz Driving Simulator. Subjects received either a placebo, medium, or high dosage of diphenhydramine. The test drive involved standardized driving tasks which either required a normal response or represented an emergency situation. No significant differences were found between the three groups. For all tasks, the individual differences within groups were higher than differences between the groups. Based on the results, the hypothesis was derived that compensatory mechanisms may take effect in particular dosage ranges.

Author: B. Friedel, S. Joo, K. Reker, W. Kaeding, P. Klosterman

The Incidence and Role of Drugs in Fatally Injured Drivers

October 1992, DOT HS 808 065

This study examined drug presence in blood specimens from nearly 2,000 drivers killed in motor vehicle crashes. Alcohol was found in slightly more than half of the specimens, other drugs in about 18% of the specimens. In about two-thirds of the drug cases, alcohol (usually at high levels), was also present. Analysis of crash responsibility suggested that drugs other than alcohol are most likely to present a hazard when combined with alcohol or other drugs.

Author: K. W. Terhune, C. A. Ippolito, D. L. Hendricks, J. G. Michalovic, S. C. Bogema, P. Santinga, R. Blomberg, D. F. Preusser

Marijuana and Actual Driving Performance

November 1993, DOT HS 808 078

Volunteer subjects participated in several sessions in which they were dosed on alcohol, marijuana, or a placebo, then drove motor vehicles in various controlled on-road traffic situations (e.g., closed interstate highway). Dual-controlled vehicles were used, and a researcher was always along to take control if warranted. Marijuana was found to have a performance impairment effect equivalent to an alcohol blood alcohol concentration (BAC) level between .04 g/dL and .08 in lane maintenance performance measures.

NHTSA Project Manager: James F. Frank

Author: Hindrik Robbe, James O'Hanlon

Driving after Drug or Alcohol Use: Findings from the 1996 National Household Survey on Drug Abuse

December 1998, DOT HS 808 838

This report contains findings from questions included in the 1996 National Household Survey on Drug Abuse (NHSDA). The data presented describe the prevalence and patterns of driving following drug use and/or alcohol use respondents representing over 166 million drivers age 16 and older in the United States. Results showed that 5% of drivers, representing approximately 8.9 million people, reported driving within two hours of drug use, with or without alcohol, in the past year. An additional 23% of drivers, representing approximately 39 million people, reported driving after alcohol use only. Results are presented in detail.

NHTSA Project Manager: Paul Tremont, Richard Compton

Author: Tara N. Townsend, Julie Lane, Carolyn S. Dewa, Angela M. Brittingha

Marijuana, Alcohol and Actual Driving Performance

July 1999, DOT HS 808 939

The purpose of this study was to determine separate and combined effects of low doses of marijuana and alcohol on visual search while driving. Sixteen volunteer subjects were given weight-calibrated doses of marijuana (THC) and alcohol, or placebos for one of both substances. It was concluded that THC alone in 100 to 200 micrograms per kilogram (ug/kg) doses impairs fundamental road tracking ability with the degree of impairment increasing as a function of the dose. The impairment from THC alone does not diminish and may even increase for up to 21 hours after marijuana smoking, regardless of the THC dose. Furthermore, THC in 100 to 200 ug/kg doses, in combination with alcohol sufficient for producing blood alcohol content (BAC) at 0.04 grams per deciliter (g/dl), severely impairs road tracking ability with the degree of impairment again increasing with the THC dose. THC and alcohol effects on road tracking ability appear to be additive in a pharmacological sense, but the risk of driving off the road increases exponentially with the combined drug effect.

Author: Hindrik Robbe, James O'Hanlon

Visual Search and Urban City Driving Under the Influence of Marijuana and Alcohol

March 2000, DOT HS 809 020

The purpose of this study was to empirically determine the separate and combined effects of delta-9-tetrahydrocannabinol (THC) and alcohol on visual search and actual city driving performance. On separate evenings, 16 subjects were given weight-calibrated doses of THC and alcohol, or placebos for one or both substances. The test was conducted over a fixed route within the city limits of Maastricht, The Netherlands. An eye movement recording system was mounted on the subjects' head. Visual search frequency of these subjects did not change when treated with alcohol or marijuana alone. However, when treated with the combination of alcohol and marijuana, the frequency of visual search dropped by 3%.

Author: C. Lamers, J. G. Ramaekers

Field Test of On-Site Drug Detection Devices

October 2000; DOT HS 809 192

This study reports the findings of a field evaluation of five-on-site drug screening devices used by law enforcement to screen for illicit drugs among drivers suspected of driving under the influence (DUI) of alcohol or other drugs. Detailed drug screening device performance is presented and implications for the uses of on-site devices by law enforcement for assessing illicit drug use by drivers are discussed.

NHTSA Project Manager: James F. Frank

Author: Rebekah K. Hersch, Dennis J. Crouch, Royer F. Cook

State of Knowledge of Drug-Impaired Driving

August 2003, DOT HS 809 642

This report presented an examination of the current state of knowledge of drug-impaired driving. The review covers a broad range of related research, including the detection and measurement of drugs in drivers, experimental research on the effect of drugs on the performance driving-related tasks, drug prevalence in various populations of drivers, drug-crash risk, and countermeasures for drug-impaired driving. The review covers scientific literature published since 1980.

NHTSA Project Manager: Amy Berning, Richard P. Compton

Author: Ralph K. Jones, David Shinar, J. M. Walsh

Antihistamines and Driving-Related Behavior: A Review of the Evidence for Impairment

May 2004, DOT HS 809 714

This was a review of the literature on antihistamines and driving-related skills. For each H1-antagonist generation, five drugs were evaluated: chlorpheniramine, clemastine, diphenhydramine, hydroxyzine and tripolidine for the 1st-generation, and astemizole, cetirizine, fexofenadine, loratadine and terfenadine for the 2nd-generation. Findings included: 1) There is some evidence of a connection between antihistamine use and traffic collision rates. However, studies were done primarily when only 1st-generation (but not 2nd-generation) antihistamines were prevalent. 2) There was overwhelming evidence from the experimental literature that the 1st-generation antihistamines produce objective signs of skills performance impairment as well as subjective symptoms of sedation. 3) While 2nd-generation antihistamines represent a triumph in reducing potential side effects, there still remains some evidence that all antihistamines, even the 2nd-generation drugs, may cause sedation and objective skills impairment at least in some cases and for some individuals. 4) Within both the 1st- and 2nd-generation antihistamine groupings, there is variation in objective evidence of impairment and in subjective effects such as sedation. Thus, there clearly are drugs that are to be preferred for use to avoid side effects such as sedation and driving-related performance impairment. 5) Methodologically, it is apparent that among the many diverse techniques for investigating driving-related impairment, some methods and behavioral domains are more sensitive to the effects of antihistamines. Future studies of antihistamines, therefore, must utilize the most methodologically-sound techniques so as to permit a better comparison between different drugs.

NHTSA Project Manager: Richard Compton

Author: Herbert Moskowitz, Candace Jeavons Wilkinson

Drugs and Human Performance Fact Sheets

June 2004, DOT HS 809 725

This report presented fact sheets on the impact of drugs on human performance. Based on a panel of international experts, the impact of 16 drugs on human performance was examined. The selected drugs included over-the-counter medications such as dextromethorphan and diphenhydramine; prescription medications such as carisoprodol, diazepam and zolpidem; and abused and/or illegal drugs such as cocaine, GHB, ketamine, LSD, marijuana, methadone, methamphetamine, MDMA, morphine, PCP and toluene.

NHTSA Project Manager: James F. Frank

Author: Fiona J. Couper, Barry K. Logan

Pilot Test of New Roadside Survey Methodology for Impaired Driving

January 2007, DOT HS 810 704

This study developed and tested procedures to enhance roadside survey procedures to include collecting and analyzing oral fluid and blood samples from the nighttime weekend driving population. Roadside surveys involve collecting information from a random sample of drivers. The findings indicated that this form of expanded roadside survey was practicable in the United States. The intent of this Pilot Test was to develop and test procedures that would be used in the next full-scale national roadside survey.

NHTSA Project Manager: Amy Berning

Author: John H. Lacey, Tara Kelley-Baker, Debra Furr-Holden, Katharine Brainard, and Christine Moore

Priorities and Strategies for Improving the Investigation, Use of Toxicology Results, and Prosecution of Drug-impaired Driving Cases: Findings and Recommendations

January 2007, DOT HS 810 708

This publication presented the findings and recommendations of expert panel meetings on drug-impaired driving. This group convened by the National Safety Council's Committee on Alcohol and Other Drugs (CAOD) included toxicologists, drug recognition experts and prosecutors. The panel was charged with identifying problems with the current system of prosecuting drug-impaired driving cases, from detection through adjudication. This report focused on the recurrent themes and major issues identified. The panel was also encouraged to identify solutions to the problems, and to assign responsibility for follow-up.

Author: Barry K. Logan

Results of the 2007 National Roadside Survey of Alcohol and Drug use by Drivers: Research Note

July 2009, DOT HS 811 175

[see also 2007 National Roadside Survey of Alcohol and Drug Use by Drivers: Methodology, December 2009, DOT H 811 237; 2007 National Roadside Survey of Alcohol and Drug Use by Drivers: Alcohol Results, December 2009, DOT HS 811 248; 2007 National Roadside Survey of Alcohol and Drug Use by Drivers: Drug Results, December 2009, DOT HS 811 249]

National Roadside Surveys have been conducted approximately every 10 years since 1973 to estimate the prevalence of alcohol-positive driving on US roads. The methodology of the 2007 survey was enhanced to also, for the first time, estimate the prevalence of drug-positive drivers. This Research Note summarizes the results from survey. Over 9,000 randomly-selected on-road drivers participated, and data was collected across 60 sites representative of the US. There was a downward trend in alcohol-positive drivers from past decades. Using the combined results of either or both oral fluid and blood tests, 16.3% of the nighttime drivers were drug-positive.

Author: Richard Compton, Amy Berning

A State-by-State Analysis of Laws Dealing With Driving Under the Influence of Drugs

December 2009; DOT HS 811 236

This study reviewed each State statute regarding drug-impaired driving as of December 2008. There is a high degree of variability across the States in the ways they approach drug-impaired driving. Current laws in many States contain provisions making it difficult to identify, prosecute, or convict drug-impaired drivers.

NHTSA Project Manager: Maria Vegega and Dereece D. Smither

Author: J. Michael Walsh

Drug-Impaired Driving: Understanding the Problem and Ways to Reduce It: A Report to Congress

December, 2009 DOT HS 811 268

This report summarizes a series of studies by the National Highway Traffic Safety Administration to address the general problem of drug-impaired driving. The report describes the research conducted on prevention, detection, and prosecution of driving under the influence of drugs; issues associated with determining what drugs impair driving; difficulties in relating blood levels of drugs and impairment; lack of information about what drugs are frequently used by drivers and what drugs elevate crash risk; problems in obtaining representative data about current enforcement, prosecution, and adjudication of drug-impaired driving; training for law enforcement officers in recognizing drug-impaired drivers; review of drug-impaired driving laws; and what is known about the role of drugs as causal factors in traffic crashes. It highlights the need for further research and concludes with recommendations to better address the problem of drug-impaired driving.

Author: Richard P. Compton, Maria Vegega, and Dereece Smither

2007 National Roadside Survey of Alcohol and Drug Use by Drivers: Methodology

December 2009, DOT HS 811 237

[see also, Alcohol-Impaired Driving: 2007 National Roadside Survey of Alcohol and Drug Use by Drivers: Alcohol Results December 2009, DOT HS 811 248; 2007 National Roadside Survey of Alcohol and Drug Use by Drivers: Drug Results, December 2009, DOT HS 811 249; Results of the 2007 National Roadside Survey of Alcohol and Drug Use by Drivers, Research Note, July 2009, DOT HS 811 175]

This report presented the methodology from the 2007 National Roadside Survey of Alcohol and Drug Use. Over 9,000 randomly-selected on-road drivers participated. Data was collected across 60 sites representative of the U.S. Drivers were requested to provide breath, oral fluid, and blood samples. Lab analyses were then conducted to determine the prevalence of alcohol- and drug-positive drivers in the U.S.

NHTSA Project Manager: Amy Berning

Author: John H. Lacey, Tara Kelley-Baker, Debra Furr-Holden, Robert Voas, Christine Moore, Katharine Brainard, A. Scott Tippetts, Eduardo Ramirez, Pedro Torres, and Amy Berning

2007 National Roadside Survey of Alcohol and Drug Use by Drivers: Drug Results

December 2009, DOT HS 811 249

[see also 2007 National Roadside Survey of Alcohol and Drug Use by Drivers: Methodology, December 2009, DOT HS 811 237; 2007 National Roadside Survey of Alcohol and Drug Use by Drivers: Alcohol Results, December 2009, DOT HS 811 248; Results of the 2007 National Roadside Survey of Alcohol and Drug Use by Drivers, Research Note, July 2009, DOT HS 811 175]

This report presented results from the 2007 National Roadside Survey of Alcohol and Drug Use. Over 9,000 randomly-selected on-road drivers participated. Data was collected across 60 sites representative of the U.S. Based on the oral fluid results, more nighttime drivers (14.4%) were drug-positive then were daytime drivers (11%). Based on the blood test results which were administered only at nighttime, 13.8% of the drivers were drug-positive. Using the combined results of either or both oral fluid and blood tests, 16.3% of the nighttime drivers were drug-positive.

NHTSA Project Manager: Amy Berning
Author: John H. Lacey, Tara Kelley-Baker, Debra Furr-Holden, Robert B. Voas, Eduardo Romano, Anthony Ramirez, Katharine Brainard, Christine Moore, Pedro Torres, Amy Berning

Drug Per Se Laws: A Review of Their Use in States

July 2010, DOT HS 811 317

This report summarizes a study of the implementation of drug per se laws in 15 States. These laws generally make it an impaired-driving offense to drive with a measurable amount of certain drugs in one's system. The specific prohibited drugs vary by State. The laws are generally integrated into the States' overall impaired-driving statute. Though all 15 States were studied to some degree, deeper study of the process was conducted in 6 States. This involved discussions with government officials and law enforcement officers, and a series of structured discussions with prosecutors. This study was not an impact evaluation of drug per se laws on crashes, but rather an attempt to gain an understanding of how the drug per se laws are implemented and perceptions about the law of those charged with implementing the law. It was initially intended that the study would also assess the effect of passing driving under the influence of drugs (DUID) per se laws on the volume of DUID arrests and on conviction patterns, but data to directly address those issues were not available. A general consensus among law enforcement officers we held discussions with was the adoption of drug per se laws did not necessarily make enforcement easier, but did have a positive effect on prosecution. This general perception was shared by prosecutors we interviewed. Because the drug per se laws have typically been adopted as a component of States' impaired-driving statutes, one difficulty of this study was obtaining accurate data on volume of arrests and conviction rates for the DUID component of the impaired-driving law was problematic. Recommendations include developing a procedure where impaired-driving citations indicate drugs, alcohol, or both, but also adopting procedures ensure information is integrated into computerized data systems of both law enforcement agencies and courts.

NHTSA Project Manager: Amy Berning

Author: John Lacey, Katharine Brainard, and Samantha Snitow

Drugged Driving Expert Panel Report: A Consensus Protocol for Assessing the Potential of Drugs to Impair Driving

March 2011, DOT HS 811 438

This report presented the discussions and conclusions of expert panel meetings on the impact of drugs on driving. Convened in 2008 and 2009, the panel was composed of an international group of behavioral scientists, epidemiologists, pharmacologists, toxicologists, and traffic safety professionals to examine the impact of drugs on driving. Discussions included prescription medications, as well as over-the-counter medications and illicit drugs. Panel conclusions included agreement that the lack of a common, standardized protocol for assessing the impairing

potential of drugs is a major barrier. The panel recognized the need for a structured, standardized protocol for assessing the driving impairment risk. This would lead to better classification of drugs in terms of driving impairment risk. The report also provided a description of the proposed protocol, and examples of its use.

NHTSA Project Manager: Dereece D. Smither

Author: Gary G. Kay, Barry K. Logan

The Drug Evaluation and Classification (DEC) Program

Identifying Types of Drug Intoxication: Laboratory Evaluation of a Subject Examination Procedure

May 1985, DOT HS 806 753

The project studied the ability of drug recognition experts (DREs) to determine if volunteer subjects were impaired, and if so, to identify the type of drug the subject had ingested. Results indicated that the DRE examination procedure was basically valid. Subjects assessed to be impaired had almost always ingested some drug, and DREs usually correctly identified the type of drug taken.

Author: G. E. Bigelow, W. E. Bickel, I. A. Liebson, P. Nowowieski

Field Evaluation of the Los Angeles Police Department Drug Detection Procedure

February 1986, DOT HS 807 012

This project compared Drug Recognition Expert's (DREs) assessments of actual arrested suspects with independent analyses of blood samples drawn from the suspects. Findings showed that DREs correctly identified at least one drug type in 87% of suspects assessed as drug impaired. A standardized curriculum was developed to train other officers to employ the Los Angeles Police Department procedure in a national program called "drug evaluation and classification" (DEC).

Author: Richard P. Compton

Evaluation of the Impact of the Drug Evaluation and Classification Program on Enforcement and Adjudication

December 1992, DOT HS 808 058

This study examined the effect of the drug evaluation and classification (DEC) program on impaired driving enforcement and adjudication. Eleven police agencies in five states with DEC programs were compared with similar police agencies without DEC. Prior to DEC implementation, arrests for drugged driving were very rare. After initiating the program, DEC sites showed increased drugged driving arrests and convictions while there were no similar increases in the comparison communities. In the DEC sites, drugged driving arrests were 1-2% of all impaired driving arrests. Overall, 1,842 suspects were evaluated in the DEC sites; drug presence was confirmed by chemical tests for most of the suspects accused of drug use; and most of the confirmed suspects were convicted.

NHTSA Project Manager: Richard P. Compton

Author: David F. Preusser, Robert G. Ulmer, Carol W. Preusser

Mr. MICA. And we'll now hear from Ms. Patrice Kelly, and she's acting director of the Office of Drug and Alcohol Policy at the department—Compliance at the Department of Transportation.

Welcome, and you're recognized.

STATEMENT OF PATRICE M. KELLY

Ms. KELLY. Thank you, Chairman Mica, Ranking Member Connolly, members of the subcommittee. I appreciate the opportunity to appear before you to discuss the potential impacts on commercial transportation of recent state and local legislation that allow recreational and medicinal marijuana use.

The transportation industry drug and alcohol testing program for commercial operations is a critical element of the Department of Transportation's safety mission. Airline pilots, truck drivers, subway operators, mariners, pipeline operators, airline mechanics, locomotive engineers, motor coach drivers and school bus drivers, among others, have a tremendous responsibility to the public, and we cannot let their performance be compromised by drugs or alcohol.

Today I will provide you with a brief history of our program, the scope of its application, and finally, an explanation of our policy regarding the use of marijuana for medical or recreational purposes by individuals who work in federally-regulated transportation industries.

The DOT drug and alcohol testing program was first established in 1988 following the Department of Health and Human Service's development of drug testing in alcohol—drug and alcohol testing for Federal employees. The DOT program was initiated in response to transportation industry fatal accidents that occurred due to illegal drug use.

In 1991, Congress enacted the Omnibus Transportation Employee Testing Act, OTETA, which required the DOT to expand the application of its program to include mass transit, and modify its regulations to address the statutory requirements.

The DOT program always has required transportation industry employers to have drug and alcohol testing programs that require their employees to be removed from performing safety sensitive duties immediately if they have drug or alcohol violations.

Throughout the history of our program, and consistent with Congress's direction in OTETA, we have relied on HHS for its technical and scientific expertise for determining the types of drugs for which we test, the testing methodology we must use in our program, and the integrity of the HHS certified laboratories in testing the specimens and reporting the results. We are limited to testing for the controlled substances included in the HHS mandatory guidelines.

Currently, those substances include Schedule I, illegal drugs, and Schedule II, legally prescribed drugs. The drugs and classes of drugs for which we test are cocaine, opiates, amphetamines, phencyclidine and marijuana. If an employee tests positive for any of those substances, the employer must take immediate action to remove the employee from performing safety sensitive duties until that employee successfully completes treatment and additional

testing. Currently there are approximately 5 million DOT-regulated safety sensitive employees that are subject to our drug and alcohol testing program.

The Department's policy on the use of Schedule I controlled substances has remained unchanged since our program began in 1988. There is no legitimate explanation, medical or otherwise, for the presence of a Schedule I controlled substance, such as marijuana, in an employee's system.

In December 2009, following the Department of Justice's issuance of guidance for Federal prosecutors in states that enacted laws authorizing the use of medical marijuana, we issued a reminder to our regulated entities that under the DOT testing program, medical marijuana use authorized under state or local law is not a valid medical explanation for transportation employees' positive drug test results. Although there has been recent movement by some states to allow recreational use of marijuana by their citizens, the DOT program does not and will not authorize the use of Schedule I controlled substances, including marijuana, for any reason by any individual conducting safety sensitive duties in the transportation industry.

In December of 2012, we issued a notice explaining that state and local government initiatives allowing the use of recreational marijuana will have no bearing on the Department of Transportation's drug testing program nor any individual subject to testing. It remains unacceptable for any safety sensitive employee subject to the DOT's drug testing regulations to use marijuana and continue to perform safety sensitive duties in the federally regulated transportation industries.

Chairman Mica, this concludes my testimony. I would be happy to answer any questions you or your colleagues have.

Mr. MICA. Thank you. And we'll hold questions.

Mr. MICA. Ron Flegel is the director for the Division of Workplace Programs at the Center for Substance Abuse Prevention, at Substance and Abuse Mental Health Administration.

Welcome, and you're recognized.

STATEMENT OF RONALD FLEGEL

Mr. FLEGEL. Thank you. Good morning, Chairman Mica, Ranking Member Connolly, and distinguished members of the subcommittee.

My name is Ron Flegel and I am the director of division of workplace programs at the Center of Substance Abuse Prevention within the Substance Abuse and Mental Health Service Administration, or SAMHSA. It's an agency of the Department of Health and Human Services. I am pleased to speak with you this morning about SAMHSA's role as it pertains to the issue of drug testing for marijuana, particularly as it relates to drugged driving.

SAMHSA's mission is to reduce the impact of substance abuse and mental illness on America's communities. SAMHSA strives to create awareness that behavioral health is essential for health, prevention works, treatment is effective, and people recover from mental and substance use disorders.

Driving under the influence of drugs or alcohol continues to pose a significant threat to public safety. The administration has focused on four key areas to reduce drugged driving: increased public awareness, enhancing legal reforms to get drugged drivers off the road, advancing technology for drug tests and data collection, and increasing law enforcement's ability to identify drugged drivers. These efforts remain the administration's focus for the upcoming year.

SAMHSA has several roles as it pertains to the issue of drugged driving. We conduct surveillance through the National Survey on Drug Use and Health, as said today; we provide funding for drugged driving prevention efforts; offer technical assistance about prevention of drugged driving to grantees and the general public; and evaluate grantees that are focused efforts on the problem.

SAMHSA administers the Federal Drug-Free Workplace Program, which includes the random testing of national security, public health and public safety positions within the executive branch agencies.

Currently, nine states are focused on drugged driving prevention efforts using SAMHSA's grant funds. SAMHSA also provides state-of-the-science training and technical assistance to states and communities, and thus addresses drugged driving if states and communities choose to make this a focus of their efforts and/or if the data suggests that drugged driving is an issue in their state or community.

SAMHSA's Division of Workplace Program has a unique and nationally important regulatory role and technical assistance role and responsibility for Federal and non-Federal workplaces with respect to their drug-free workplace policies and programs. DWP has oversight responsibility of the HHS certified laboratories operating under the mandatory guidelines for Federal workplace testing program requirements. The HHS certified laboratories conduct forensic drug testing for Federal agencies under Executive Order 12564, and the Federal drug-free workplace program issued by President Reagan in 1986, and the Supplemental Appropriations Act of 1987, public law 100–71, as well as specific federally-regulated industries.

The Federal drug-free workplace program was established as a deterrent program incorporating detection as well as referrals for treatment as needed for Federal employees in safety sensitive positions, while protecting national security and public safety.

Public law 100–71 directs HHS to publish mandatory guidelines using the best available technology to ensure the reliability and accuracy of drug tests and to specify the drugs for which Federal employees may be tested; hence, the mandatory guidelines established the scientific and technical guidelines for Federal drug testing programs and established standards for certification of laboratories engaged in drug testing for Federal agencies and the regulated industries.

Currently, 157 Federal agencies are affected by the guidelines based on public law and executive order. The executive order covers approximately 2.2 million executive branch employees and job applicants. The Department of Transportation and Nuclear Regulatory Commission utilize the SAMHSA guidelines in their regu-

latory testing programs requiring testing of over 5 million safety sensitive employees and applicants in DOT-regulated transportation related industries nationally, and an additional 2 million employees and applicants in the nuclear industry.

In the private, non-regulated sectors, we have approximately had 20 to 50 million Americans that are tested as applicants or employees using some aspect of SAMHSA's guidelines.

Currently, urine is the only specimen a Federal agency may collect under the guidelines for its workplace drug testing program. A Federal agency must ensure that each specimen is tested for marijuana and cocaine metabolites and is authorized to test each specimen for opiates, amphetamine and phencyclidine.

The SAMHSA guidelines are specific to testing of Federal employees for the purpose of workplace settings and do not directly govern issues related to drugged driving, however, the revised guidelines may impact testing for drugged driving through the provisions of scientific standards for oral fluid testing. The proposed revisions of the mandatory guidelines are still being finalized and will be posted in the Federal Register for public comment once completed.

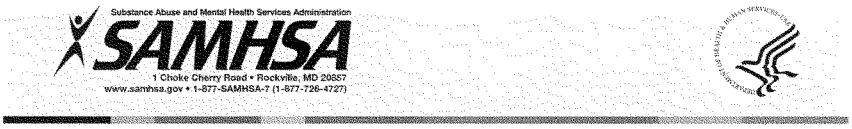
As I stated at the opening of my testimony, the issue of drugged driving continues to be a priority for SAMHSA and the administration. SAMHSA, along with other Federal agencies, continue to collaborate with state and local governments, non-governmental organizations and Federal partners to raise awareness of the dangers of drugged driving and meet the president's goal of reducing drugged driving in America.

The Administration continues to advance the work on this important issue, and we look forward to continuing to work with Congress on these efforts.

Chairman Mica, thank you for this opportunity. I welcome any questions from you or your colleagues may have.

Mr. MICA. Well, thank you.

[The prepared statement of Mr. Flegel follows:]



Testimony Before the

U.S. House Oversight & Government Reform - Subcommittee on Government Operations

Hearing on

"Planes, Trains and Automobiles: Operating While Stoned"

July 31, 2014

Mr. Ronald Flegel, B.S., MT (ASCP), M.S.

Director, Division of Workplace Programs

Center for Substance Abuse Prevention (CSAP)

Substance Abuse and Mental Health Services Administration

U.S. Department of Health and Human Services

Good morning Chairman Mica, Ranking Member Connolly, and distinguished Members of the Subcommittee. My name is Ron Flegel, and I am the Director of the Division of Workplace Programs at the Center for Substance Abuse Prevention (CSAP) within the Substance Abuse and Mental Health Services Administration (SAMHSA), an agency of the Department of Health and Human Services (HHS). I am pleased to speak with you this morning to talk about SAMHSA's role as it pertains to the issue of drug testing for marijuana, particulary as it relates to "drugged driving."

Administration's Goal: Reducing Drugged Driving

Driving under the influence of drugs or alcohol continues to pose a significant threat to public safety. A systematic review of the literature indicates that acute marijuana consumption is associated with an increased risk of motor vehicle collisions resulting in serious injury or death, compared with drivers not consuming marijuana.[1] Sadly, this is too frequently being demonstrated on America's roads. In 2009, marijuana accounted for 25 percent of all positive drug tests for fatally-injured drivers for whom drug-test results were known and for 43 percent among fatalities involving drivers 24 years of age and younger with known drug-test results.[2] Moreover, approximately one in eight high school seniors responding to the University of Michigan's 2013 Monitoring the Future survey reported driving after smoking marijuana within two weeks prior to the survey interview, more than the number who reported driving after consuming alcohol.[3]

Alcohol-impaired driving has been a focus of road safety for decades, and rates of drinking and driving on the roads have declined due to improved laws, enforcement, and sustained public awareness campaigns that have changed the social norm around alcohol-impaired driving. However, drugs other than alcohol—illicit (e.g., marijuana) as well as prescribed and over-the-counter—can affect driving performance with the potential to alter behavior. The issue of drugged driving continues to be a priority for the Administration. In the 2010 *National Drug Control Strategy,* the Administration set a goal of reducing drugged driving in America by 10 percent by 2015. Additionally, the Office of National Drug Control Policy and National Highway Traffic Safety Administration jointly developed the online Advance Roadside Impaired Driving Enforcement (ARIDE) program, which will train law enforcement personnel on how to observe, identify, and describe the signs of impairment related to drugs, alcohol, or a combination of both. The course will also help other public safety officials, including prosecutors, toxicologists, and judges, understand the signs of impairment to improve their ability to prosecute drugged drivers.

With the release of the 2014 *National Drug Control Strategy* earlier this month, the Administration continues to collaborate with state and local governments, non-governmental organizations, and Federal partners, including SAMHSA, to raise awareness of the dangers of drugged driving and meet the 2015 goal.

---

[1] Asbridge, M; Hayden, J.; Cartwright, J. (2012). Acute cannabis consumption and motor vehicle collision risk: systematic review of observational studies and meta-analysis. *BMJ* 201;344:e536. Available at http://www.bmj.com/content/344/bmj.e536

[2] Office of National Drug Control Policy. (October 2011). Drug Testing and Drug-Involved Driving of Fatally Injured Drivers in the United States: 2005-2009. Available at http://www.whitehouse.gov/sites/default/files/ondcp/issues-content/fars_report_october_2011.pdf

[3] Institute for Social Research, the University of Michigan. 2011 Monitoring the Future survey.

Results from SAMHSA's National Survey on Drug Use and Health (NSDUH) indicate that, in 2012, 9.7 million persons (4.1 percent) aged 18 or older reported driving under the influence of illicit drugs during the past year. The 2012 rate was lower than the 2002 rate (4.8 percent), but it was a slight increase from than the 2011 rate of 3.8 percent.[4]

The Administration has focused on four key areas to reduce drugged driving:

1. Increasing public awareness;
2. Enhancing legal reforms to get drugged drivers off the road;
3. Advancing technology for drug tests and data collection; and
4. Increasing law enforcement's ability to identify drugged drivers.

These efforts remain the Administration's focus for the upcoming year.

SAMHSA's Roles and Responsibilities

SAMHSA was established in 1992 and is directed by the Congress to effectively target substance abuse and mental health services to the people most in need of them, and to translate research in these areas more effectively and more rapidly into the general health care system. SAMHSA's mission is to reduce the impact of substance abuse and mental illness on America's communities. SAMHSA strives to create awareness that:

- Behavioral health is essential for health;
- Prevention works;
- Treatment is effective; and
- People recover from mental and substance use disorders.

SAMHSA serves as a national voice on mental health and mental illness, substance abuse, and behavioral health systems of care. It coordinates behavioral health surveillance to better understand the impact of substance abuse and mental illness on children, adults, and families, as well as the costs associated with treatment. SAMHSA helps to ensure dollars are invested in evidence-based and data-driven programs and initiatives that result in improved health and resilience.

SAMHSA applies strategic, data-driven solutions to field-driven priorities. To this end, SAMHSA helps states, territories, and Tribes build and improve basic and proven practices and system capacity by encouraging innovation, supporting more efficient approaches, and incorporating research-based programs and best practices into funded programs so they can produce measureable results. In addition, SAMHSA's longstanding partnerships with other Federal agencies, Tribal governments, systems, national stakeholders, and the public have uniquely positioned SAMHSA to collaborate and coordinate across multiple program areas, collect best practices and develop expertise around behavioral health services, and understand and respond to the full breadth of the behavioral health needs of children, individuals, and families across the country.

---

[4]Substance Abuse and Mental Health Services Administration. (2013). *Results from the 2012 national survey on drug use and health: Summary of national findings* (NSDUH Series H-46, HHS Publication No. (SMA) 13-4795). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Substance abuse, substance use disorders, poor emotional health, and mental illnesses take a toll on individuals, families, and communities. These conditions cost lives and productivity, and strain families and resources in the same way as untreated physical illnesses. SAMHSA works to focus the Nation's attention on these preventable and treatable problems.

Drugged Driving and SAMHSA's Roles

SAMHSA has several roles as it pertains to the issue of drugged driving:

1. Conducting surveillance through the NSDUH.
2. Providing funding and technical assistance to grantees for drugged-driving prevention efforts, and evaluating grantees implemented prevention programs that are focused on the problem.
3. Administering the workplace drug-testing program advised by the SAMHSA Drug Testing Advisory Board (DTAB), including issuing Mandatory Guidelines and maintaining a technical-assistance helpline.

NSDUH

The 2012 NSDUH Summary of National Findings and Detailed Tables[5] includes several tables presenting estimates of driving under the influence of illicit drugs in the past year. The data in these tables are broken out by various demographic characteristics (*e.g.*, age, gender, race/ethnicity), as well as education, employment status, and geographic division and county type.

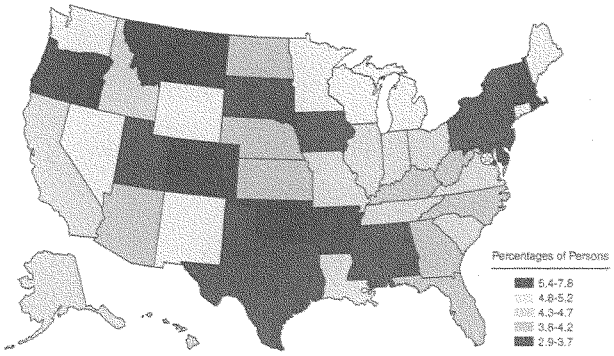
As noted above, in 2012, 9.7 million persons (4.1 percent) aged 18 or older reported driving under the influence of illicit drugs during the past year10.3 million persons, or 3.9 percent of the population aged 12 or older, reported driving under the influence of illicit drugs during the past year. The 2012 rate was lower than the 2002 rate (4.7 percent), but it was higher than the the 2011 rate of (3.7 percent). Across age groups, the rate of driving under the influence of illicit drugs in 2012 was highest among young adults aged 18 to 25 (11.9 percent); this rate for young adults was similar to the rate in 2011 (11.6 percent). Additionally, the rate of driving under the influence of illicit drugs during the past year among adults aged 26 or older increased from 2.4 percent in 2011 to 2.8 percent in 2012.

In May 2012, SAMHSA's Center for Behavioral Health Statistics and Quality (CBHSQ) issued a state-level short report (State Estimates of Drunk or Drugged Driving).[6] The report used combined 2006-2009 data to produce estimates by state that were then compared to the 2002-2005 estimates. According to this short report, the rates of drugged driving were among the highest in Rhode Island (7.8 percent) and Vermont (6.6 percent).

[5] http://www.samhsa.gov/data/NSDUH/2012SummNatFindDetTables/Index.aspx

[6] http://samhsa.gov/data/2k12/NSDUH109/SR109StateEstDrunkDrugDriving2012.htm

Percentages of Persons Aged 16 or Older Driving under the Influence of Illicit Drugs in the Past Year, by State: 2006 to 2009



NOTE: Some estimates may differ from previously published estimates due to updates (see End Note 6).

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2006 to 2009 (Revised March 2012).

SAMHSA Grantee Use of Funding, Technical Assistance and Evaluation

Currently, nine states are focused on drugged-driving prevention efforts using SAMHSA grant funds from their respective Substance Abuse Prevention and Treatment Block Grant, Strategic Prevention Framework State Incentive Grant, or Partnerships for Success grant.

SAMHSA's Center for the Application of Prevention Technologies (CAPT) provides state-of-the-science training and technical assistance to states and communities, and thus addresses drugged driving for a state or community that chooses to focus on this issue and/or if data suggest that drugged driving is a particular issue for that state or community. The CAPT has posted on its website a list of state efforts to address drugged driving and a data source to guide prevention planning.[7]

Among some of the highlights of the document are that:

- West Virginia, Wisconsin, and Wyoming are using SAMHSA funds to address driving while under the influence of drugs.
- West Virginia's Division on Alcoholism and Drug Abuse Bureau for Behavioral Health worked with the state police on "distracted driving," which includes drugged and "buzzed" driving.

[7] http://captus.samhsa.gov/access-resources/state-approaches-addressing-drugged-driving

- Wisconsin's Partnership for Success grant addresses drugged driving by increasing the number of Drug Recognition Experts, who are police officers trained to recognize impairment in drivers under the influence of drugs other than, or in addition to, alcohol.
- Wyoming Governor's Council on Impaired Driving is addressing this issue through a media campaign and they are working in collaboration with the Wyoming Partnership for Success Grant.
- Many states receive funding for addressing drugged driving through national highway safety grants and funds that come from states' offices of highway safety, departments of transportation, and departments of highway traffic and safety.

SAMHSA's Program Evaluation for Prevention Contract (PEPC) is focused on evaluations of implemented programs for SAMHSA's Partnership for Success grantees. This is noteworthy, because a number of grantees, such as the ones just described, will have data on drug-impaired driving, which SAMHSA will use for its cross-site evaluations, as reported by PEPC contractors.

Division of Workplace Programs

SAMHSA's Division of Workplace Programs (DWP) has unique and nationally important regulatory, knowledge development, and technical assistance roles and responsibilities for Federal and non-Federal workplaces, with respect to their drug-free workplace policies and programs.

The DWP has oversight responsibility of the HHS-certified laboratories operating under the Mandatory Guidelines for Federal Workplace Drug Testing Programs requirements. The HHS-certified laboratories conduct forensic drug testing for Federal agencies under Executive Order 12564, *Drug-Free Federal Workplace*, issued by President Reagan in 1986, and the Supplemental Appropriations Act of 1987 (Public Law 100-71), as well as specific Federally-regulated industries.

The most recent Mandatory Guidelines were published in the Federal Register on April 30, 2010, with an implementation date of October 1, 2010. In general, these Guidelines apply to:

1. Executive agencies;
2. The Uniformed Services, excluding the Armed Forces as defined;
3. Any other employing unit or authority of the Federal Government except the U.S. Postal Service, the Postal Rate Commission, and employing units or authorities in the Judicial and Legislative Branches;
4. The Intelligence Community, but only to the extent agreed to by the head of the affected agency;
5. Laboratories and instrumented initial test facilities (IITFs) that provide drug testing services to the Federal agencies;
6. Collectors that provide specimen collection services to the Federal agencies; and
7. Medical Review Officers that provide drug testing review and interpretation of results services to the Federal agencies.

In addition, the U.S. Department of Transportation is required to follow the laboratory and testing procedures for controlled substances that are set forth in these Guidelines in its regulatory program that requires drug and alcohol testing of employees who perform safety-sensitive duties in Federally-regulated transportation industries.

SAMHSA's Mandatory Guidelines do not apply to drug testing under authority other than Executive Order 12564, including testing of persons in the criminal justice system, such as, arrestees, detainees, probationers, incarcerated persons, or parolees.[8]

Currently, urine is the only specimen a Federal agency may collect under the Guidelines for its workplace drug testing program. A Federal agency must ensure that each specimen is tested for marijuana and cocaine metabolites and is authorized to test each specimen for opiates, amphetamines, and phencyclidine.

These guidelines are developed and revised based on recommendations from the DTAB, an advisory committee governed by the Federal Advisory Committee Act.The DTAB advises the SAMHSA Administrator based on an ongoing review of the direction, scope, balance, and emphasis of the Agency's drug testing activities and the drug testing laboratory certification program.

The DTAB reviews the Agency's program for national laboratory certification for Federal workplace drug testing programs as required by Public Law 100-71 and as described in the Mandatory Guidelines for Federal Workplace Drug Testing Programs. It considers and recommends areas for emphasis or de-emphasis, new or changed directions, and mechanisms or approaches for implementing recommendations. Periodically, the DTAB reviews specific science areas on new drugs of abuse and the methods necessary to detect their presence.

SAMHSA is in the process of revising the Mandatory Guidelines, as noted in ONDCP's 2014 *National Drug Control Strategy* and as discussed at DTAB open meetings. The proposed revisions address the DTAB's July 2011 recommendations, which, based on review of the science, recommended that SAMHSA revise the Mandatory Guidelines to include oral fluid as an alternative specimen to test; and and to include additional Schedule II prescription medicationssuch as oxycodone, oxymorphone, and hydromorphone, for testing.

The current SAMHSA Guidelines are specific to testing of Federal employees for the purpose of workplace settings and do not directly govern issues related to drugged driving. The proposed revisions to the Mandatory Guidelines are still being finalized, and will be posted in the Federal Register for public comment once completed.

Drug-Free Workplace Helpline

Finally, SAMHSA runs the Drug-Free Workplace Helpline[9], which assists employers and union representatives with policy development, drug testing, employee assistance, employee education, supervisor training, and program implementation.

---

[8] Although HHS has no authority to regulate the transportation industry, the Department of Transportation (DOT) does have such authority. DOT is required by law to develop requirements for its regulated industry that "incorporate the Department of Health and Human Services scientific and technical guidelines dated April 11, 1988, and any amendments to those guidelines."

[9] 800-WORKPLACE (800-967-5752)

Conclusion

As I stated at the opening of my testimony, the issue of drugged driving continues to be a priority for SAMHSA and for the Administration. SAMHSA, along with other Federal agencies, continues to collaborate with state and local governments, nongovernmental organizations, and Federal partners to raise awareness of the dangers of drugged driving and meet the Administration's goal of reducing drugged driving in America. The Administration continues to advance the work on this important issue, and we look forward to continuing to work with the Congress on these efforts.

Thank you for this opportunity. I welcome any questions that you may have.

Mr. MICA. Thank each of our witnesses. And we'll start a little round of questions.

Just, again, to give folks the most accurate information on the number of highway fatalities, from 2001 to 2012, and this doesn't include 2013, but during that dozen years that I spoke of, 468,743 highway fatalities. That's nearly half a million people and I'm sure if we include 2013, we would top that. That's just a phenomenal devastation and that's fatalities; that's not injuries, property damage and everything that has gone. Everyone in this room can probably name someone who's died or a family member in an automobile fatality. And, again, with the changing laws, there are significant consequences.

So, Mr. Hart, again, where do you see us going as far as reaching some positive steps in, one, containing the issue, then also adjusting our Federal laws, our regulations, adopting standards for tests, the whole spectrum of addressing these changing laws? Maybe you could comment generally.

Mr. HART. Thank you for the question. As the accident investigators, when we investigate accidents and see indication of impairment, as we have in every mode, then we're very concerned about the need for strong and decisive action, and typically that will mean, as you've heard from the other panelists, strong legislation, strong enforcement, and good education, and in addition, we are look at technologies to help us with the detection, so we see that—that needs to be——

Mr. MICA. Some of that has to be based on data. Some of what we have is really not that up to date.

And I think Mr. Michael testified they started collecting some data as recently as 2007, and then you said 2013 data we had collected, which we're going the do a comparison of is—but that has not been calculated, and when do you expect us to have that data?

Mr. MICHAEL. That is correct, Mr. Chairman. We have collected information in 2007 about the presence of drugs, and specifically marijuana among drivers on the roadway, and we repeated that same data collection during 2013. We are now analyzing that, and it will be compared.

Mr. MICA. But what—my question was when will we see that completed?

Mr. MICHAEL. We expect to have that information, sir, by the end of the year.

Mr. MICA. Okay. Well, if you could check even closer and advise the committee and staff, maybe we could ask that question. I would like to find out when we'll have that data.

Now, the next thing that comes to mind is, most of the 23 states, my state may follow, Florida has an initiative referendum coming in and other entities, state entities that may change their laws. Do you plan or will there be a plan to check some of these states? Now, Florida will change the law possibly and others have already changed the law. Some have changed the law for some time.

I'm getting back reports on California that a news reporter told me he went out and he said it's a whole different world in the uses. Again, much more dramatic than you would expect. It's not just medical marijuana use but it's spread, and he was telling me, just the societal change and behavioral change.

So it's having impact, but I think we need to look at doing testing. Those are the medical marijuana states, and each one of the languages may be a little bit different allowing more latitude, but then you have Colorado, which we have had some experience to date, but I think we ought to go in and look at Colorado. Washington is more recent, but where you have a change in law, if its medical marijuana, and again changes brought about by that law, and then you have a much more lax use or legalization as you have in Colorado, do you have plans to go in and do some testing there?

Mr. MICHAEL. Yes, sir. We are working with the State of Washington currently and using the same roadside data collection process that we've used across the country looking specifically at Washington before and after their legalizing the sale of marijuana to assess what effect that may have with the levels of use on the roadway.

Mr. MICA. Okay. Well, again, I think we need accurate data, and then we need to adopt our Federal regs and get to Ms. Kelly now.

You have a whole host of areas in which we do some testing but most of the testing is periodic, is it not, for marijuana use?

Ms. KELLY. Our program covers preemployment testing to start with, so before someone enters——

Mr. MICA. Right. But then actually——

Ms. KELLY. —the industry, and then random, and then there is reasonable cause testing. There is post-accident testing, and then if someone is being positive, then follow up.

Mr. MICA. The other thing, too, again, in some of these states—and the marijuana medical use, there is, again, different language and it's allowed more latitude in some states and people have taken advantage of that. Are you going in and doing more testing say in Colorado or Washington? For example, pilots would be more exposed, commercial drivers would be more exposed.

In states where you have, again, the possibility of—with liberalization of the law, are we taking some steps to try to ensure the safety of the public and again the transportation mode? An airline pilot, a commercial one can be taking a couple of hundred people in the air, passenger rail.

We didn't get into, in our headline here, pipeline safety or maritime or others, but they all pose different risks. Tell us where you're going with these modes that put public safety at risk?

Ms. KELLY. Well, we do feel that our program is effective, and the way our program is structured through the regulation——

Mr. CONNOLLY. Ms. Kelly, could I ask you to put that microphone closer to you. Thank you.

Ms. KELLY. Yes, sir. Thank you.

Under the regulations, our program is administered through the individual employers.

Mr. MICA. But it's historic and it's been developed, but it was—and it's applied, but it is—you're mostly talking in terms of how things have in the past or——

Ms. KELLY. Uh-huh.

Mr. MICA. But not how things are most recently and where we're going with this.

Ms. KELLY. We don't conduct the testing ourselves.

Mr. MICA. Yeah.

Ms. KELLY. We require the employers to conduct it.

Mr. MICA. Right.

Ms. KELLY. And so many of our employers are nationwide employers.

Mr. MICA. Have you changed any of those requirements?

Ms. KELLY. No, sir, we have not. We have maintained under the regulation, the random testing——

Mr. MICA. It's same old, same old, but see, that's my point is I think we're—you have to go to risk based when you're doing most of these approaches to try to ensure safety, and preemployment is one, we've done that in the past, we're doing that.

Now, we have a new situation with much more of this available narcotic on the market, and we've seen an increase in use just by the statistics that were presented by some of the panelists today. But are you adapting the Department of Transportation regulations or advisories to where we see the most risk?

Okay. We've got FAA, we've got Federal Railroad Administration, we've got National Highway Safety. Tell me if there have been any changes in directives in the last 24 months?

Ms. KELLY. There have not been any changes to our random testing rates, but many of our employees are interstate, and so if a pilot flies in and out of Denver, doesn't mean necessarily that he or she lives anywhere near Denver, so many of our employees throughout the different modes of transportation are not purely in one state. They operate cross states and——

Mr. MICA. Well, again, I think we need to be a little bit preemptive in DOT in protecting people. I had dinner the other night with a friend from Florida and asked him what he was going to do for a vacation. He says, well, we're putting it off a little and we're going to go skiing, and he said—he said—this is just in conversation. He said we had planned to go to Colorado, he says, but the last thing I want to do is take my three kids out there and have somebody stoned, you know, posing a risk to him. He's going to Utah. I mean, not just——

Mr. CONNOLLY. No risk there.

Mr. MICA. There will never be any risk in family friendly Utah, but I mean, that's one change a father in behavior. We are responsible for the safety of the public. You're responsible for administrating rules, regulation that impact pilots who carry passengers, trains—I mean, I showed that one crash, 25 people killed, and that's before some of these changes in law are granted, so—and we've seen that, again, incidents of use, whether it's young people or older, is more so.

You've told me there aren't any changes, and I want to get—we'll get a message to Mr. Fox and others that we do need to look at adapting this. We also need to get the data. Maybe there isn't the problem that is perceived, and the data would support that. Maybe it's worse than what we imagine, but we need to know. We need to act based on facts and act based on risk and preempt as much, as you can, bad effects on the general public and their safety.

Ms. KELLY. Well, and the data is a good point, sir. We collect data from the laboratories, the laboratory confirmed positives, and we've been doing that every 6 months in our office with Aggregate National Data, but what we've seen so far since 2008 is a steady

rate of marijuana positives ranging between 21,000 to 22,000 out of roughly 2.5 to 3 million employees tested each 6-month period, so we have seen those numbers remain the same across the nation. Again, as it comes in as Aggregate.

Mr. MICA. Again, I think it's important, too, that we look from a safety standpoint. I'm not selling any products, but this is the only one I found available, this particular European model for testing, and again, this swabs, can be used on site. I don't know if we're looking at these, using this kind of a test for truck drivers, train drivers, you know, where we're doing spot checking. We're not doing it—using anything like this now, are we?

Ms. KELLY. We're required by the statute, the Omnibus Transportation Employee Testing Act to follow the science as it's developed by the Department of Health and Human Services and implemented through the mandatory guidelines, so we look to——

Mr. MICA. But we have none of the—this is not accepted yet, Mr. Flegel, is it?

Mr. FLEGEL. Currently we are looking at having the oral fluid standards come out and then be implemented public.

Mr. MICA. And is that—and ITSA, or whatever it is.

Mr. FLEGEL. No, this would be through the mandatory guidelines.

Mr. MICA. Okay.

Mr. FLEGEL. Right, and——

Mr. MICA. But at least they're involved in setting standards; is that correct?

Mr. FLEGEL. We actually set the mandatory guideline testing cutoff——

Mr. MICA. Okay.

Mr. FLEGEL. —and standards. So, once those standards are out to the public and be commented, we would like to evaluate all these devices.

Mr. MICA. Can you give us, the committee, a chronological estimate as to when you're going to complete, again, your—what you're saying here before the committee, because dealing with some of the standards, I just pulled down the national standards and testing bill a couple of weeks ago, or within the last 2 weeks just because they had jerked us around for 10 years on a biometric standard for an iris I.D. and they promised and promised and not performed.

I don't want to be coming back to a hearing saying where are they, we are developing these things. We need some Federal standards and we need also new tests that have acceptable standards to evaluate people who are on the job in transportation and make certain the public is safe. Do you see my point?

Mr. Connolly.

Mr. CONNOLLY. Thank you, Mr. Chairman.

By the way, I know the chairman did not mean to suggest in any way that Colorado is not a safe place to go skiing. His friend at dinner may have a private view. I'm sure there are wonderful reasons to go to Colorado and Utah and anywhere else one wishes to ski, and I know my Colorado colleagues who aren't here would want me to say that, so I'm sure you didn't mean to suggest that, Mr. Chairman.

Mr. MICA. No. Maybe he could stay home in Florida or go to——

Mr. CONNOLLY. Right.

Mr. MICA. Go to Virginia.

Mr. CONNOLLY. Florida and Virginia, however, obviously are better.

Mr. Hart, there is legislation with respect to pilot licensed medical certification here in the Congress that would actually no longer require medical certificates for pilots whose craft carries up to five passengers. Are you aware of that legislation?

Mr. HART. Yes, I'm aware of that legislation.

Mr. CONNOLLY. And what do you think about it?

Mr. HART. Well, we are very concerned about pilots flying without, you know, inadequate medical standards.

Mr. CONNOLLY. Right.

Mr. HART. But we based our what we—our policy based on what we see in accidents, and so far we haven't seen enough accidents to warrant an agency position on it yet, but we are very concerned not only about not having to have a medical, but then, in addition to that, if you don't have a medical, you are less likely to pay attention to the FAA's list of prohibited legal drugs as well as obviously the illegal drugs——

Mr. CONNOLLY. Right.

Mr. HART. —but also the legal drugs, and we're concerned that that list will not be paid attention to by people who don't have a medical certificate.

Mr. CONNOLLY. It just strikes me as very odd. Here we are having a hearing on, you know, the utilization and potential harmful effects of any kind of drug or controlled substance in the operation of any kind of vehicle and meanwhile there is apparently legislation that would exempt a class, a subclass of people who fly airplanes, and I can't believe for a minute that if we really are concerned about the use of marijuana or any other drug, that we would ever countenance legislation like this.

I cannot believe that that could come to any good, so I encourage you, Mr. Hart, and your colleagues to re-examine that legislation and hopefully take a position on it because it seems to contradict everything we're talking about this morning at this hearing.

Mr. HART. We will certainly pay close attention to that in our future accident investigations.

Mr. CONNOLLY. Thank you.

Dr. Michael, I was just thinking about, talking about driving while impaired and things that we discourage. For example, we're worried about THC, but I mean, texting while driving, bad idea?

Mr. MICHAEL. Of course, sir, very bad idea.

Mr. CONNOLLY. Kills people?

Mr. MICHAEL. Of course.

Mr. CONNOLLY. Do we have data on it?

Mr. MICHAEL. Yes, we do.

Mr. CONNOLLY.How many people were killed on the roads last year texting while driving?

Mr. MICHAEL. Distraction in general is about 3,000 people. Texting alone is several hundred.

Mr. CONNOLLY. Right. Alcohol and driving?

Mr. MICHAEL. In 2012, 10,322 people died in crashes in which a driver had a blood alcohol limit above the legal limit.

Mr. CONNOLLY. Sleep deprivation?

Mr. MICHAEL. Sleep is harder to measure, of course, but we believe it is a significant problem.

Mr. CONNOLLY. Would it be fair to say, by the way, that studies on sleep deprivation and driving suggests that sleep deprivation mimics in almost exact detail drinking and driving in terms of impairment?

Mr. MICHAEL. At least in some details.

Mr. CONNOLLY. Aggressive driving, driving at unsafe speeds?

Mr. MICHAEL. As many as a third of crashes are attributed at least in part to excessive speeding.

Mr. CONNOLLY. And how many deaths can we attribute to THC in the bloodstream?

Mr. MICHAEL. Currently, that's difficult to say, sir.

Mr. CONNOLLY. Hmm. I just, fair enough, probably not zero.

Mr. MICHAEL. Probably not.

Mr. CONNOLLY. But we don't know.

Mr. MICHAEL. We don't. We don't have a precise estimate.

Mr. CONNOLLY. We do have precise estimates on distracted driving, 3,331. We have precise estimates of drinking and driving, so I just want to put it in context. No one is arguing that it's a good idea, but the fact of the matter is we don't have a lot of data.

Now, let me ask. Do we have a standard, if I could borrow your gizmo here for a minute.

Mr. MICA. You want to swap?

Mr. CONNOLLY. The chairman points out that in parts of Europe they take a swab sample, put it in here and measure THC. Do we have any such device that we use in our law enforcement in the United States?

Mr. MICHAEL. Yes. Excuse me, sir. There is some use of devices very similar to that by law enforcement. In fact, we are currently doing a pilot test in California to test the feasibility of more widespread use of devices very similar to that.

Mr. CONNOLLY. We have an alcohol standard that blood alcohol above a certain standard, you're in legal jeopardy. Would you remind us what that standard is?

Mr. MICHAEL. .08 blood alcohol.

Mr. CONNOLLY. And that's a national standard.

Mr. MICHAEL. Yes, it is.

Mr. CONNOLLY. And accepted by virtually all States?

Mr. MICHAEL. That's right.

Mr. CONNOLLY. Do we have a comparable standard for THC?

Mr. MICHAEL. No, we don't, sir. The available evidence does not support the development of an impairment threshold for THC which would be analogous to that for alcohol.

Mr. CONNOLLY. Why is that, Dr. Michael?

Mr. MICHAEL. The available evidence indicates that the response of individuals to increasing amounts of THC is much more variable than it is for alcohol, so with alcohol, we have a considerable body of evidence that can place risk odds at increasing levels of blood alcohol content. For example, .08 blood alcohol content is associated with about four times the crash risk of a sober person. The average arrest is .15 THC. That's associated with about 15 times the crash risk.

Beyond a—some broad confirmation that higher levels of THC are generally associated with higher levels of impairment, a more precise association of various THC levels and degrees of impairment are not yet available.

Mr. CONNOLLY. That's really interesting. So we don't have a uniform standard. The variability is much greater than that with other controlled substances such as alcohol.

Mr. MICHAEL. Yeah.

Mr. CONNOLLY. We actually can't scientifically pinpoint levels of impairment with any accuracy. We would all concede there's some impairment for some period of time, but it's very variable, and we're not quite sure yet, certainly not sure enough to adopt a uniform standard as to here's the maximum level beyond which we know there's serious impairment?

Mr. MICHAEL. That's fair to say, sir.

Mr. CONNOLLY. Wow. And that's a substance 1 controlled substance.

Well, I think it underscores—your testimony underscores, Dr. Michael, why we need a lot more science here, and I guess what really strikes me is that meanwhile, as I said in my opening statement, the laboratories of Democracy, 22 states plus the District of Columbia, have decided to legalize marijuana in some fashion, most of them for medical purposes, but some of them even for recreational purposes, and meanwhile, at least on a national level, we're not comfortable with the science, and in terms of the impact of THC on operating a vehicle of any kind. Fair statement?

Mr. MICHAEL. Yes. And of course, we're pursuing that science.

Mr. CONNOLLY. I understand. So, we're pursuing it. Is there a goal or an end, you know, date where we want to achieve so by a certain date we hope to have some preliminary—well, we hope to have the basis upon which to examine or adopt some preliminary standards comparable to other substances?

Mr. MICHAEL. We have sponsored some work with standards development with regard to measurement techniques and specific drugs to be measured in—among drivers involved in traffic crashes and also minimum cutoff levels that represent the analytical capabilities of existing technology. Those recommendations have been established. What we lack are a thresholds of impairment that are analogous to .08 BAC.

One step that is currently ongoing that will take us well into that direction is the crash risk study that I mentioned in my opening statement. This is the same sort of study that was done for alcohol a number of years ago which established those risk levels that I told you about. So this involves a very careful look at two groups of subjects, one group who has been involved in a crash, another group who has not, and looking for relative concentration levels of factors that might have caused a crash, factors such as THC use. Those kinds of studies can develop the risk odds that could potentially be used to develop a threshold in the future.

Mr. CONNOLLY. I thank you, and I wish you luck in your research. I just think it is amazing with some of the hyperventilated rhetoric about marijuana use and THC that 50 years after, I guess it's 50 years we've declared it a class 1 substance, we still don't

have enough data to know just how dangerous it is in operating a vehicle.

Mr. MICHAEL. That's correct.

Mr. CONNOLLY. And that really raises questions about either, you know, the classification itself and whether that makes any sense or raises serious questions about how our Government's operating in terms of the data it does not have and the science it does not know and yet the assertions that we make. And that is not a good recipe for rational public policy, and it's one of the reasons, I suggest, why 22 states have just headed in a different direction, but there's danger in that, too, because they're going in a direction also without the science, and there are lots of complications.

The previous hearing we had, and Dr. Fleming and I talked about this, along with the chairman, you know, you've got doctors in States where legalization for medicinal purposes has been granted who, nonetheless, really don't have protocols, really don't have the science to decide on, you know, levels of efficacy, mixing it with other drugs for enhanced efficacy, potential dangers, overdose, whatever, and I just think we're at a point where we've got to get a lot more serious about the science in order to have, to fashion rational public policies, including with respect to transportation safety.

I thank you all for your testimony, and Mr. Chairman, again, a thoughtful hearing, and I thank you.

Thank you, Dr. Fleming.

Mr. MICA. Thank you.

Dr. Fleming.

Mr. FLEMING. Thank you, Mr. Chairman.

Mr. Michael, to kind of follow up on some of the question from my good friend from Virginia. We don't have adequate science on the effects of marijuana, THC specifically on the body, and speaking as a physician and someone who's worked in the area of addiction, my understanding of this is that it's a much more complex interaction in physiology between the drug and the body. For instance, we know metabolites remain in the body for after 30 days after use. Much of it is stored in the fat, so fat body content can affect. Would that be a correct assumption on my part that that's really what makes this a more difficult issue in terms of measurement than alcohol?

Mr. MICHAEL. Yes, sir. Of course, you're completely right on that. The study of the effect of THC on driving is much more challenging in just about every aspect than that for alcohol.

Mr. FLEMING. Right. So really it's multidimensional as opposed to alcohol, which you can draw a straight line on the graph, again plus or minus a small tolerance level, .08 is when people become far more impaired, hitting a critical threshold. We just don't know that. Even if it exists in THC, it may be a much smoother graph.

Well, given the fact that we have certainly a lack of knowledge of the effects of THC on the body and on the brain and behavior, although we know we have a lot of examples of problems from it, would it lead you to be more restrictive until we get that information or less restrictive in the application and allowance of the use of that drug going forward?

Mr. MICHAEL. With regard to use on the roadway, which of course is my major concern, it's the decision of the States how they want to deal with these impairment issues. We've tried to provide them with guidance, with scientific evidence that they can use to support effective policies.

We've been able to do that with alcohol, and States have been able to respond very positively to alcohol impairment and drive those numbers down. In 2012, there were just over 10,000 killed in such crashes, 20 years previously, that number was well over 20,000.

Mr. FLEMING. But I mean, going beyond whether we're talking—comparing THC with alcohol or any other drug, and I'm asking your personal opinion, I'm going to ask the opinion of the rest of the panel members here as well. If you have a drug that you really can't define the effects adequately but we know that it can have serious, in fact, proof that it can actually kill people, does it make sense to be more aggressive in terms of relaxing the standards or does it make sense to be more conservative and wait for that science to develop?

Mr. MICHAEL. Well, I think that it makes sense to be very cautious with a policy when the complete evidence is not yet available.

Mr. FLEMING. Okay. Mr. Hart, what is your opinion, sir?

Mr. HART. As accident investigators, we follow where the accidents take us, and that's the reason that, for example, we did something that was very controversial, which was to recommend that the blood alcohol content number be reduced from .08 to .05 because we know any alcohol is impairing and there is no bright line that says this much is too much, and it's really a policy question of where should it be for legal enforcement. We would have that same approach with respect to any other substance, is that it's kind of wait and see based on our accident experience.

Mr. FLEMING. So certainly buzzed driving is the same thing as impaired driving.

Mr. HART. That's the slang for it——

Mr. FLEMING. Yes.

Mr. HART. —is buzzed driving, that's correct.

Mr. FLEMING. So whenever there's a question as to being more conservative and more protective and more restrictive, when in doubt, always be a little safer and a little more restrictive, would that be a safe estimate from your opinion?

Mr. HART. Well, we are the safety people, so we would always go in the direction that is for safety.

Mr. FLEMING. Okay. Very good. I am two for two here. How about you, Ms. Kelly?

Ms. KELLY. Well, we rely on the science, and we make the policy based on the science.

Mr. FLEMING. But when there's a lack of science, do you lean towards being more conservative until that science develops or to just full steam ahead, let's go ahead and give it a chance?

Ms. KELLY. We remain with the science on it. So when our scientists at the Department of Health and Human Services tell us that things have changed, then we follow under the Omnibus Transportation Employee Testing Act, we follow what they say. Until then, it remains a schedule 1, we treat it as a schedule 1.

Mr. FLEMING. Okay.

Ms. KELLY. With no excuses.

Mr. FLEMING. So you would agree that certainly being cautious, not being aggressive to change something to a more relaxed standard without the science to back that safety up, you're reluctant to move forward?

Ms. KELLY. We cannot make changes——

Mr. FLEMING. Yes.

Ms. KELLY. —without the science, yes, sir.

Mr. FLEMING. You, Mr. Flegel, how about you?

Mr. FLEGEL. As with my colleague here from DOT, under executive order, THC is mentioned directly, and we will continue to test for schedule 1 and schedule 2 drugs.

Mr. FLEMING. So, I think certainly we have somewhat of agreement here. I think we can all agree to the fact that until we have the science, we should be careful and cautious, and certainly one of the things about THC is, because it has been illegal, we haven't really been doing the studies, the research, and only now, I mean, even some of the important data that's come out has only come out very recently as it's become legalized.

For instance, we know that even in casual users, there's profound changes in the brain. We see that on MRI scans, and we've done a number of them to see that. We also know that a longitudinal study showed a progressive decline in IQ, so just even with early studies, we're beginning to see a lot of problems, and that's notwithstanding the up to 14 percent of fatal accidents involve THC.

Now, we hear about medicinal marijuana. It's interesting that in the State of California and in the city of Denver, we have more pot dispensaries than we do Starbucks, and I don't know what your opinion is, but I don't think people are that unhealthy in Denver and in California. Is there anyone on the panel that would disagree with that?

So, again, I question—and here's my question as it interacts with what you do. Do you treat someone who is on medicinal marijuana versus recreational marijuana any differently when it comes to traffic accidents, when it comes to being able to say fly an airplane, or to engineer a train, do you treat those people any differently? Anyone like to comment on that? Yes, go ahead.

Ms. KELLY. No, sir, we do not in the Department of Transportation. All the transportation safety sensitive employees are subject to the same testing, and we did issue the two statements, one in 2009 in response to the medicinal marijuana laws in States, and in 2012 on recreational. Everyone is to be treated the same. There is no legitimate medical explanation for the schedule 1 drug, marijuana.

Mr. FLEMING. Right. So for all intents and purposes, if someone is sick and needs marijuana, that person is disabled for the purpose of having a job in transportation?

Ms. KELLY. If that person tests positive, they will put—they will be required to be removed from safety sensitive functions.

Mr. FLEMING. All right, okay. Very good. Now, there was a mention here about, I think, I didn't catch all of the exchange there, but I believe there was a—Mr. Connolly brought up Mr. Rokita's

bill that would actually reduce the standards for private pilots such that all you would require is just a regular driver's license to be able to qualify in terms of safety standards to fly an airplane.

Mr. Hart, did I catch that right, or am I—or were you talking about a different subject?

Mr. HART. You are correct. It's legislation to allow private pilots to not have to have the medical examination that they are now required to have.

Mr. FLEMING. Right. So, in theory, someone could be with that standard, and maybe even under the current standard, a private pilot could be flying an airplane under the influence of marijuana, THC?

Mr. HART. That is possible, and we have investigated accidents where that was occurring. That's the reason we're having this forum, and we're going have this meeting in September to look at that and get——

Mr. FLEMING. Right.

Mr. HART. —more data and get more specific about it.

Mr. FLEMING. You know, I love to watch documentaries on TV, and I was watching one the other night that discussed airplanes and mid-air collisions, and what they focused on was private aircraft that had drifted in the wrong air lane and interacted with a commercial aircraft.

One that comes to mind, I was living in the area at the time was in San Diego. I believe it was 1978 where you had a private airplane that drifted in the wrong—they were actually in the wrong air space, they collided with a commercial aircraft, and hundreds of people died as a result of that.

So what that would suggest to me is that no matter what the highest standards you could ever come up with for a commercial pilot, when you have private pilots out there who could be impaired and not receive the same high standard, then they are, in effect, just as dangerous to the commercial passengers as the commercial pilot himself if his standards were lowered as well.

Would you agree or disagree with that? A private pilot flying with lower standards in effect has the same potential danger impact as if the pilot of the commercial aircraft is impaired instead.

Mr. HART. When we do our accident investigation, the issue of impairment, it may be independent of the issue of what their medical standard was. If they're impaired, whether they had a medical certificate or not, then we're going to put that in our probable cause if that was a cause of the accident.

Mr. FLEMING. Right. So certainly a private aircraft—the safety of aviation in general is no better than what the lowest standard for any pilot who is in the air, and so as we have pilots who in this case, hopefully it will never make it into law, but we have pilots who are flying with no more standard than to have a driver's license and hopefully will be certified to fly, of course, that makes sense but no medical standard beyond that, and then we have the legalization and the increased medicinalization and decriminalization of marijuana, then I see the risk to air travel to be growing in the future as we go forward with that.

So, certainly I would suggest, Mr. Chairman, that we look at this at both sides. One is the fact that there is many reasons, in my

view, why we should not go forward with legalization, medicinalization or even decriminalization, but also have the highest standards for all who fly in the air realizing that there are new threats when it comes to THC.

One last question. What sort of guidance are you getting from the White House? You know, the President has been giving some ambiguous cues on this. In 2011 he made very clear statements that marijuana should not be legalized, that it's a potential danger, and certainly young people should stay away from it, but in 2014, he made other statements that suggested that it's maybe no worse than tobacco or alcohol, so I'd love to hear from you as Government agencies what sort of guidance, if any, are you getting from the White House. Mr. Michael?

Mr. MICHAEL. We work closely with the White House Office of National Drug Control Policy, and we are a part of the national drug strategy. The office has provided us support for our roadside survey and for other research that we've done, so I would say that we are getting very good input and very good support.

Mr. FLEMING. Okay. Anyone else?

Mr. FLEGEL. I would say also the same. We work closely with the Office of National Drug Control Policy in setting standards. They set policy, we set the regulatory side, so we've worked well with them over the last year.

Mr. FLEMING. But have you been moved in any direction towards relaxed standards or legalization of marijuana from the White House, any guidance in that direction?

Mr. FLEGEL. We are currently, as I stated, under executive order, so we are under executive order to test for schedule 1 and schedule 2 drugs, and that will remain.

Mr. FLEMING. Okay. All right.

Thank you, Mr. Chairman. A very interesting discussion——

Mr. MICA. Thank you.

Mr. FLEMING. —and panel. Thank you so much.

Mr. MICA. Thank you, Dr. Fleming.

Didn't the President, after he made his statement it was no worse than alcohol or tobacco, we did have testify the ONDCP, I think it was his deputy, and he said he disagreed with the White House. So you-all said you've been working with ONDCP, you would agree with them more than you would with the President, Mr. Hart? Come on, I want to put you on the spot.

Mr. HART. Our guidance is to investigate accidents, find out what happened, and recommend what is necessary to——

Mr. MICA. And that's right. You didn't commit yourself on that, but Dr. Michael did. Okay, Dr. Michael, you said you were working with ONDCP and you concurred with them, so which—you agree with what they said, ONDCP?

Mr. MICHAEL. We are in agreement with ONDCP, and I would like to say we are in agreement with the President as well.

Mr. MICA. Oh, now. I could make a funny comment now but I won't. We might have to get the testing equipment out here.

Mr. Flegel.

Mr. FLEGEL. And again, we work closely with ONDCP on everything as far as, both in setting——

Mr. MICA. But again——

Mr. FLEGEL. —the standards.

Mr. MICA. —the President said one thing. We hauled in the deputy director. He disagreed with the President. We had a whole host of people, DEA, other agencies who also disagreed with the President on—and that was my point. I tried to embarrass you, but it didn't work.

So Dr. Michael, you said it's the decision of the States really, but the Federal Government does set some standards, and we have a .08 standard now. If you don't comply with that, we can penalize you and that is an incentive, is it not?

Mr. MICHAEL. Yes, the Congress established a statute.

Mr. MICA. Yeah, and that's come down. In fact, I just read your office, or one of the office's—yeah, it's your office said just recommended going to .5; is that right?

Mr. MICHAEL. I believe that was a recommendation from——

Mr. MICA. Mr. Hart. Okay. I knew one of you did, but there's a recommendation, and then we do assess penalties to states that don't comply where there is some, some reduction in their eligibility for programs or funds. But that was your recommendation, Mr. Hart?

Mr. HART. That was our recommendation, that's correct, Mr. Chairman.

Mr. MICA. One of the problems we have here is we don't have federal standards. We do have States adopting standards. Colorado, it's five nanograms per milliliter, I guess, and is there any consideration of any standard under way other than what the national standards board is considering? Are you guys looking at anything? Dr. Michael.

Mr. MICHAEL. Yes, we are. We, recognize that we need more testing of drivers at the state level.

Mr. MICA. And then you need some means of testing and I want you also to comment, you said you're using some similar devices in testing. There's nothing with a standard, there's nothing that has been accepted as an acceptable or certified, I'm sure you haven't certified anything yet, piece of equipment that can test, correct?

Mr. MICHAEL. That's right. The technology, which you have in your hand, is developing rapidly, and we think this will improve testing quite a lot.

Mr. MICA. You said California you're doing some testing?

Mr. MICHAEL. Yes, we're doing some pilot tests in four locations in California as we speak to test the feasibility of those with the idea, if they are working well, that encouraging their use by states. More testing, we believe, would also call——

Mr. MICA. Is this just internal, or are you working with the national standards testing agency?

Mr. MICHAEL. This test is—we're working with State officials on this.

Mr. MICA. But not with the ones who are setting the standard, or at least looking at setting some standards which would be our National Standards testing, NS, whatever the initials are——

Mr. MICHAEL. Yeah.

Mr. MICA. It's NS.

Mr. MICHAEL. No, we are not working with——

Mr. MICA. I think it would behoove you to contact them, and we'll also. I'll ask the committee to put you in touch with them. I've had my go-arounds with them, and they do take awhile to develop a standard. I mean, it's an important responsibility and you have to be accurate, and whatever you adopt does become a standard. So, I would suggest that, you know, I don't do these hearings just to hear ourselves talk. We're trying to also stay ahead of the curve.

We have changing, dramatically changing laws that our states—and it changes social behavior, and we don't have the same—Mr. Connolly was talking about the marijuana when he went to college or something, and this is much more powerful——

We've had testimony that confirms this that we've got people more at risk, we've got laws rapidly changing, societal view of the risk, and then we talked about teens are most susceptible and also the most vulnerable and the most slaughtered by transportation, by a vehicle, many of them by alcohol, some by substance abuse, and we see increasing use of that particular among the most vulnerable who are now viewing this as less of a risk, so we do have some serious issues here.

No standards, no testing capability, and then we haven't done—we've done some testing in the past, 2007, 2013, we don't have that data back. I want to see some data and I want to see Fox and others looking at beefing up the testing and the regulations where we have now more exposure to a schedule 1 narcotic being more available to the public and the implications on public safety and transportation. So, that's something hopefully positive that can come from this.

Also, it's my understanding marijuana stays in the system longer than alcohol. We've got a whole host of things that need to be looked at, and again, implications from a different type of substance that is posing a risk. I've been on transportation for two decades, says something good about some institutional knowledge, but one of the things we focused on transportation, when you see people getting slaughtered by the tens of thousands a year, we did some simple things. We put in guardrails in the median, there were so many crossover—we put in simple, what do you call it, the rumble strips so people who fall asleep are awakened or shaken alert. We've encouraged the safety airbags on the side and structural changes.

Now, if we don't do something when we see a danger of a new narcotic, again, the potential of more people impaired, driving while impaired, whether, again, a vehicle, manning a train, piloting, and I showed just a few samples of the civil planes that went down. We have pages and pages. I shared four. I showed one picture of a teenage fatality, and we know from the blood test, the people say no one gets killed from smoking marijuana, well, I differ with that, so it's a serious issue. We have serious responsibility, and I intend to pursue the matter beyond even this hearing.

So I thank each of you for coming out, for being part of today's hearing. Hopefully we can all do a better job, and there being no further business, well, let me see. With the concurrence of the minority, we'll leave the record open for 10 additional days. We may have additional questions, and I've asked for additional information to be submitted for the record. Without objection, so ordered.

Mr. MICA. No further business before the Government Operations Subcommittee, this hearing is adjourned. Thank you.

[Whereupon, at 10:51 a.m., the subcommittee was adjourned.]

APPENDIX

MATERIAL SUBMITTED FOR THE HEARING RECORD

THE WALL STREET JOURNAL.
WSJ.com

July 29, 2014, 4:39 PM ET

Science Collides With the Push to Legalize Pot

ByPeter Wehner

A variety of recreational marijuana during packaging operations at Sea of Green Farms in Seattle this month.
Associated Press

The New York Times began a multi-part editorial series Sunday in favor of repealing the federal ban on marijuana.

THINK TANK
Capital Journal's home for outside analysis from policy and political thinkers.

This is a very bad idea, in part because of the harmful medical effects of marijuana use. Consider just some of what we know:

The potency of marijuana is much greater than in the past, with the mean concentration of THC more than doubling from 1993 to 2008. "It's much more potent marijuana, which may explain why we've seen a pretty dramatic increase in admission to emergency rooms and treatment programs for marijuana," **Nora Volkow**, director of the National Institute on Drug Abuse, told the New York Times last year.

Medical research is piling up about marijuana's negative effects on brain development, particularly for young people. **Staci Gruber**, a leading figure in neuroimaging at McLean Hospital in Boston, reports that imaging scans have found detectable differences in how their brains worked.

"The frontal cortex is the last part of the brain to come online, and the most important," Dr. Gruber told the Times. "Early exposure [to marijuana] perhaps changes the trajectory of brain development, such that ability to perform complex executive function tasks is compromised."

Studies have also shown that regular marijuana use can lower IQs and worsen the symptoms of psychotic disorders.

More in Think Tank
America's Aging Economy
Why the 'Top Two' Primary System Won't Solve the Turnout Problem
Were GAO Warnings About HealthCare.Gov Unheeded?
What This Cycle's Special Elections Suggest About November
3 Reasons for John Kerry to Be in India While the Rest of the World Burns

"If parents who are spending thousands of dollars on SAT prep courses knew about the cognitive effects marijuana has on their kids' brains, they would be up in arms," **A. Eden Evins**, director of the Center for Addiction Medicine at Massachusetts General Hospital, told the Times.

Yet even as medical evidence increasingly shows marijuana use to be harmful, calls for legalization increase. Colorado and Washington state have legalized marijuana for recreational purposes, with many other states weakening their drug laws. The result will be many more people using marijuana. And most people addicted to harder drugs started out using marijuana.

I prefer that we craft our laws in ways that align with science and medicine; that we act in ways that make society safer and better; and that adults act in ways that advance rather than undermine the well-being of young people.

Peter Wehner is a senior fellow at the Ethics and Public Policy Center. He served in the last three Republican administrations and blogs regularly for Commentary magazine.

ALSO IN THINK TANK:

How Palin's Call for Impeachment Is at Odds With Conservative Politics

What Slants Our Perception of Events in Iraq

Response to The New York Times Editorial Board's Call for Federal Marijuana Legalization

Posted by ONDCP Staff on July 28, 2014 at 06:40 PM EDT

The New York Times editorial board opined in its Sunday July 27, 2014 edition that the Federal government should legalize marijuana for adults aged 21 years and older. *The New York Times* editorial board compares Federal marijuana policy to the failure of alcohol prohibition and advocates for legalization based on the harm inflicted on young African American men who become involved in the criminal justice system as a result of marijuana possession charges. We agree that the criminal justice system is in need of reform and that disproportionality exists throughout the system. However, marijuana legalization is not the silver bullet solution to the issue.

In its argument, *The New York Times* editorial team failed to mention a cascade of public health problems associated with the increased availability of marijuana. While law enforcement will always play an important role in combating violent crime associated with the drug trade, the Obama Administration approaches substance use as a public health issue, not merely a criminal justice problem.

The editorial ignores the science and fails to address public health problems associated with increased marijuana use. Here are the facts:

- **Marijuana use affects the developing brain.** A recent study in *Brain* reveals impairment of the development of structures in some regions of the brain following prolonged marijuana use that began in adolescence or young adulthood.[1] Marijuana use is associated with cognitive impairment, including lower IQ among adult chronic users who began using marijuana at an early age.[2]
- **Substance use in school age children has a detrimental effect on their academic achievement.** Students who received earned D's or F's were more likely to be current users of marijuana than those who earned A's (45% vs. 10%).[3]
- **Marijuana is addictive.** Estimates from research suggest that about 9 percent of users become addicted to marijuana. This number increases to about 17 percent among those who start young and to 25-50 percent among people who use marijuana daily.[4]
- **Drugged driving is a threat to our roadways.** Marijuana significantly impairs coordination and reaction time and is the illicit drug most frequently found to be involved in automobile accidents, including fatal ones.[5]

The editors of *The New York Times* may have valid concerns about disproportionality throughout our criminal justice system. But we as policy makers cannot ignore the basic scientific fact that marijuana is addictive and marijuana use has harmful consequences. Increased consumption leads to higher public health and financial costs for society. Addictive substances like alcohol and tobacco, which are legal and taxed, already result in much higher social costs than the revenue they generate. The cost to society of alcohol alone is estimated to be more than 15 times the revenue gained by its taxation.[6] For this reason, the Obama Administration and the Office of National Drug Control Policy remain committed to drug use prevention, treatment, support for recovery, and innovative criminal justice strategies to break the cycle of drug use and associated crime. This approach is helping improve public health and safety in communities across the United States.

Research also indicates that policies making drugs more available would likely not eliminate the black market or improve public health and safety, as promoted by marijuana advocates. Reports from the nonpartisan RAND Institute found that the potential economic benefits from legalization had been overstated, citing that:

The White House Blog
Middle Class Task Force
Council of Economic Advisers
Council on Environmental Quality
Council on Women and Girls
Office of Intergovernmental Affairs
Office of Management and Budget
Office of Public Engagement
Office of Science & Tech Policy
Office of Urban Affairs
Open Government
Faith and Neighborhood Partnerships
Social Innovation and Civic Participation
US Trade Representative
Office National Drug Control Policy

CATEGORIES

AIDS Policy
Blueprint for an America Built to Last
Civil Rights
Defense
Disabilities
Economy
Education

- Marijuana legalization would not eliminate the black market for marijuana.[7]
- Dramatically lowered prices could mean substantially lower potential tax revenue for states.[8]

We are also keeping a close eye on the states of Washington and Colorado in conformance with the directive provided by the Attorney General in August 2013.

Any discussion on the issue should be guided by science and evidence, not ideology and wishful thinking. The Obama Administration continues to oppose legalization of marijuana and other illegal drugs because it flies in the face of a public health approach to reducing drug use and its consequences. Our approach is founded on the understanding of addiction as a disease that can be successfully prevented and treated, and from which people can recover. We will continue to focus on genuine drug policy reform -- a strategy that rejects extremes, and promotes expanded access to treatment, evidence-based prevention efforts, and alternatives to incarceration.

[1] Zalesky A, et al. 2012. Effect of long-term cannabis use on axonal fibre connectivity. Brain: A Journal of Neurology. 135 (7): 2245-2255. Available at http://brain.oxfordjournals.org/content/135/7/2245.full.pdf+html

[2] Meier et al., "Adolescent-onset cannabis and neuropsychological health." Proceedings of the National Academy of Sciences.

[August 27, 2012]. Available: http://www.pnas.org/content/early/2012/08/22/1206820109

[3] Centers for Disease Control and Prevention, Department of Health and Human Services. Alcohol and Other Drug Use and Academic Achievement. 2010. Available at http://www.cdc.gov/healthyyouth/health_and_academics/pdf/alcohol_other_d...

[4] Anthony, JC; Warner, LA, Kessler, RC. 1994. Comparative epidemiology of dependence on tobacco, alcohol, controlled substances, and inhalants: Basic findings from the National Comorbidity Survey. Experimental and Clinical Psychopharmacology 2:244-268.

[5] Brady JE, Li G (2014) Trends in Alcohol and Other Drugs Detected in Fatally Injured Drivers in the United States, 199-2010," American Journal of Epidemiology [Epub ahead of print].

[6] Ellen E. Bouchery, Henrick J. Harwood, Jeffrey J. Sacks, Carol J. Simon, Robert D. Brewer. Economic Costs of

Excessive Alcohol Consumption in the U.S., 2006. American Journal of Preventive Medicine - November 2011

(Vol. 41, Issue 5, Pages 516-524, DOI: 10.1016/j.amepre.2011.06.045). Available:

http://www.ajpmonline.org/article/S0749-3797(11)00538-1/fulltext xiii Kilmer, Beau, et al., Reducing Drug Trafficking Revenues and Viol

[7] Kilmer, Beau, et al., Reducing Drug Trafficking Revenues and Violence in Mexico: Would Legalizing Marijuana

in California Help? RAND Corporation. [2010]. Available:

http://www.rand.org/content/dam/rand/pubs/occasional_papers/2010/RAND_OP...

[8] Kilmer, Beau, et al., Altered States? Assessing How Marijuana Legalization in California Could Influence

Marijuana Consumption and Public Budgets. RAND Corporation. [2010]. Available:

http://www.rand.org/content/dam/rand/pubs/occasional_papers/2010/RAND_OP...

Energy and Environment
Equal Pay
Ethics
Faith Based
Working Families
Fiscal Responsibility
Foreign Policy
Grab Bag
Health Care
Homeland Security
Immigration
Innovation Fellows
Inside the White House
Middle Class Security
Poverty
Rural
Seniors and Social Security
Service
Social Innovation
State of the Union
Taxes
Technology
Urban Policy
Veterans
Violence Prevention
White House Internships
Women
Additional Issues

ARCHIVES

August 2014
July 2014
June 2014
May 2014
April 2014
March 2014
February 2014
January 2014
December 2013
November 2013
October 2013
September 2013
August 2013
July 2013
June 2013
May 2013
April 2013
March 2013
February 2013
January 2013
December 2012
November 2012
October 2012
September 2012

1. What steps are the Department of Transportation (DOT) and the National Highway Traffic Safety Administration (NHTSA) taking to get reliable metrics on drugged driving statistics? In other words, what are you doing to oversee how states are distinguishing DUI alcohol from DUI drugs in terms of arrests and convictions, so that there can be accurate analysis and tracking of the impact of marijuana legalization has on public safety?

Answer:

We note that this question has been asked of both the DOT and NHTSA. NHTSA, on behalf of DOT, is responsible for this area of research and analysis. The following describes NHTSA's, and thus the DOT's, approach in tracking and analyzing both alcohol related DUI's and drugged driving DUIs.

In a 2009 Report to Congress, *Drug Impaired Driving: Understanding the Problem and Ways to Reduce It*, NHTSA recommended that States develop record systems that are capable of distinguishing among cases involving drugs, alcohol or both. The Report to Congress also recommended that State record systems be capable of documenting which drugs are used by drug-impaired driving offenders. Recognizing that record keeping is often aligned with State policies, the Report to Congress further recommended that State statutes provide separate and distinct sanctions for alcohol and drug impaired driving. Such sanctions could be used individually or in combination, as appropriate, for a single case.

NHTSA conducts research to understand the prevalence of drugged driving and the role of drugs in crashes. These important projects will help us gain a better understanding of how marijuana legalization impacts traffic safety. NHTSA is now analyzing data collected in 2013-2014 for the National Roadside Survey of Alcohol and Drug Use by Drivers and will release a final report by the end of 2014. The National Roadside Survey is a voluntary and anonymous survey that the agency conducts on an approximately ten-year cycle to measure the proportion of nighttime weekend drivers who have alcohol or other drugs in their system. This is the second time that the survey has included drug testing, so we will soon be able to compare current levels of use with those measured in 2007.

Using similar methods, NHTSA partnered with the State of Washington to conduct a roadside survey to explore the prevalence of marijuana use among drivers before retail sales of the drug were legalized. Follow-up surveys will be conducted over the coming year to assess changes in driver marijuana use after legalization. Findings from this study will be released in the fall of 2015.

In addition to tracking the prevalence of marijuana use among drivers, the agency is conducting a crash risk study to determine how marijuana affects crash risk odds. Data collection for this study is complete and analyses are near completion. Findings from this study will be released in the fall of 2014.

2. What is NHTSA doing to help states with the roadside testing needed to determine when fatalities and injuries are the result of crashes involving marijuana?

Answer:
In late 2012, NHTSA and the Office of National Drug Control Policy (ONDCP) co-hosted a roundtable on drug testing technology and the criminal justice process. One result of that discussion was a NHTSA study now underway on the feasibility of the use of portable drug screening devices by law enforcement officers. This study will evaluate the practicality of these devices in a law enforcement setting and their utility in facilitating the criminal justice process. If the results of this investigation support broader use of these devices, NHTSA will develop information for use by the States.

NHTSA also supports a nationwide network of law enforcement officers who are specially trained to serve as Drug Recognition Experts (DREs). More than 7,000 of these DRE officers have received the required two weeks of training and practicum to prepare them to identify and document signs and symptoms of drug use. Drug evaluations are conducted of drivers who have been arrested for impaired driving or involved in a crash and are suspected of being under the influence of substances other than alcohol. These evaluations are performed according to strict science-based procedures and have proven to be effective in supporting prosecution. NHTSA recently worked with ONDCP on the development of an online training program that is available to a broader group of officers, enabling them to better utilize the services of the more highly trained DREs. More than 10,000 officers completed this basic level drug recognition training in 2013.

NHTSA is working with the ONDCP, the Substance Abuse and Mental Health Services Administration and the National Transportation Safety Board on the development of a compendium of drug tests that are most critical for drivers. Experts have gathered for a number of meetings and coordination is taking place with a concurrent process regarding the use of oral fluids in the Federal Workplace Drug Testing Program.

3. Have you solicited input from law enforcement officials regarding roadside testing technology, including those from States that have legalized marijuana?

Answer:
NHTSA has taken several steps to solicit law enforcement viewpoints on the potential use of roadside drug testing technology. In 2012, NHTSA and the Office of National Drug Control Policy (ONDCP) co-hosted a roundtable on drug testing technology and the criminal justice process. Experts on drug test technology, toxicology, and impaired driving met with representatives of the judiciary, prosecution and law enforcement to discuss the potential benefits of improved testing technology and identify functional attributes that would be necessary to enable its use in the criminal justice setting.

In 2013, NHTSA initiated a study following a recommendation of the 2012 roundtable focusing on the feasibility of the use of portable drug screening devices by law enforcement officers. This study will evaluate the practicality of these devices in a law enforcement setting and their utility in facilitating the criminal justice process. This study is being conducted in the State of California in several locations with sufficient frequencies of drugged driving offences and with law enforcement agencies which are willing and able to accommodate the necessary research protocols. If the results of this investigation support broader use of these devices, NHTSA will provide appropriate information to the States.

The State of Washington invited NHTSA to conduct a roadside survey of drug and alcohol use by drivers before and following their legalization of retail sales of marijuana. Data collection took place in June 2014 before legalization and is planned to be repeated later in 2014 after legalization begins.

4. Similarly, have you discussed the need to adopt impairment standards that accurately reflect when a DUI drugs occurs?

Answer:
At the current time, there is no scientific consensus for the establishment of impairment thresholds for other drugs that would be analogous to the 0.08 breath alcohol concentration for alcohol. With regard to marijuana, a sufficiently precise and reliable correlation has not been identified between levels of the active compound detected in an individual's system and driving impairment.

While research continues on methods for detecting impairment, measures of drug presence can be utilized to support criminal justice actions. Seventeen States have adopted drug per se laws under which driving with a specified minimal measurable amount of certain drugs is an impaired driving offense. Other States can utilize drug presence as supporting evidence for an impaired driving charge along with an officer's observation of driving impairment.

NHTSA is working with the Office of National Drug Control Policy, the Substance Abuse and Mental Health Services Administration and the National Transportation Safety Board on the development of national guidance regarding the types and specifications of testing that are most critical for confirming drug presence among drivers. Experts have gathered for a number of meetings, papers have been written for discussion purposes and coordination is taking place with a concurrent process for the development of workplace drug testing. Completion of this national guidance is anticipated during 2015.

STATEMENT OF PATRICE M. KELLY
ACTING DIRECTOR OF THE OFFICE OF DRUG AND ALCOHOL POLICY AND COMPLIANCE
U.S. DEPARTMENT OF TRANSPORTATION
before the
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM
SUBCOMMITTEE ON GOVERNMENT OPERATIONS
U.S. HOUSE OF REPRESENTATIVES
hearing on
"PLANES, TRAINS AND AUTOMOBILES: OPERATING WHILE STONED"

JULY 31, 2014

Chairman Mica, Ranking Member Connolly, and Members of the Subcommittee:

I appreciate the opportunity to appear before you to discuss the potential impacts on commercial transportation of recent state and local legislation that allow recreational and medical marijuana use. The transportation industry drug and alcohol testing program for commercial operations is a critical element of the Department of Transportation's (DOT) safety mission. Pilots, truck drivers, subway operators, mariners, pipeline controllers, airline mechanics, locomotive engineers, motor coach drivers and school bus drivers – among others – have a tremendous responsibility to the public, and we cannot let their performance be compromised by drugs or alcohol. Today, I will provide you with a brief history of our program, the scope of its application, and finally, an explanation of our policy regarding the use of marijuana for medical or recreational purposes by individuals who work in federally-regulated transportation industries.

The DOT drug and alcohol testing program was first established in 1988 following the Department of Health and Human Services' (HHS) development and implementation of drug and

alcohol testing for federal employees. The DOT program was initiated in response to transportation industry fatal accidents that occurred due to illegal drug use. In 1991, Congress enacted the Omnibus Transportation Employee Testing Act of 1991 (OTETA), which required the DOT to expand the application of its program to include mass transit, and modify its regulations to address the statutory requirements.

The DOT program always has required transportation industry employers to have drug and alcohol testing programs that require their employees to be removed from performing safety-sensitive duties immediately if they have violated drug and alcohol testing rules. Throughout the history of our program, and consistent with Congress' direction in OTETA, we have relied on HHS for its technical and scientific expertise for determining the types of drugs for which we may test, the testing methodology we must use in our program, and the integrity of the HHS' certified laboratories in testing the specimens and reporting results. As a result of OTETA, we are limited to testing for the controlled substances included in HHS' Mandatory Guidelines. Currently, those substances include Schedule I, illegal drugs, and Schedule II, legally prescribed drugs, as set forth in the Controlled Substances Act. The drugs and classes of drugs for which we test are: cocaine, opiates, amphetamines, phencyclidine, and marijuana. The mere presence of these drugs in an employee's system at or above the threshold levels set by HHS for the Federal Drug-Free Workplace Program, if reported as positive by a Medical Review Officer, is a violation of our drug testing program and requires employers to take immediate action to remove the employee from performing safety sensitive duties until that employee successfully completes treatment and additional testing.

Specifically, an employee who tests positive or refuses to submit to testing cannot return to the performance of safety-sensitive functions for any DOT-regulated employer until that

employee successfully completes the return-to-duty process. This includes an evaluation by a Substance Abuse Professional, successful completion of any recommended education and/or treatment, and a negative result on a return-to-duty test. To ensure the employee remains in compliance once he or she returns to work, the DOT requires that the employer continues to monitor the employee through unannounced drug testing conducted under direct observation. The rate and length of time at which the employee is subject to this testing is determined by a Substance Abuse Professional and may range from a minimum of 6 tests in 12 months, to any number of tests over a 5-year period.

Currently, there are approximately 5 million DOT-regulated safety-sensitive employees that are subject to our drug and alcohol testing program. These include approximately 3.9 million employees regulated by the Federal Motor Carrier Safety Administration; 450,000 employees regulated by the Federal Aviation Administration; 111,300 employees regulated by the Federal Railroad Administration; 290,000 employees regulated by the Federal Transit Administration; 190,000 employees regulated by the Pipelines and Hazardous Materials Safety Administration; and 150,000 employees regulated by the U.S. Coast Guard. Although the U.S. Coast Guard is no longer a part of the DOT, it continues to follow the Department's drug and alcohol testing program requirements through a Memorandum of Understanding.

The Department's policy on the use of Schedule I controlled substances has remained unchanged since our program began in 1988: there is no legitimate explanation, medical or otherwise, for the presence of a Schedule I controlled substance (such as marijuana) in an employee's system. With respect to marijuana use specifically, we have repeatedly cautioned Medical Review Officers against considering "innocent" ingestion and exposure defenses by individuals. In 2000, the DOT amended its regulations to specifically prohibit Medical Review

Officers from considering "innocent," or unknowing, ingestion and exposure defenses as legitimate medical explanations from individuals who test positive for Schedule I controlled substances. In December 2009, following the Department of Justice's issuance of guidance for Federal prosecutors in states that enacted laws authorizing the use of "medical marijuana," we issued a reminder to our regulated entities that under the DOT drug testing program, medical marijuana use authorized under state or local law is not a valid medical explanation for a transportation employee's positive drug test result.

Although there has been recent movement by some states to allow recreational use of marijuana by their citizens, the DOT program does not, and will not, authorize the use of Schedule I controlled substances, including marijuana, for any reason by any individual conducting safety-sensitive duties in the transportation industry. In December 2012, we issued a notice explaining that state and local government initiatives allowing the use of recreational marijuana will have no bearing on the Department of Transportation's drug testing program, nor any individual subject to such testing. It remains unacceptable for any safety-sensitive employee subject to drug testing under the Department of Transportation's drug testing regulations to use marijuana and continue to perform safety-sensitive duties in the federally regulated transportation industries.

Chairman Mica, this concludes my testimony. I would be happy to answer any questions you or your colleagues may have.

○