



NTSB 2016 MOST WANTED TRANSPORTATION SAFETY IMPROVEMENTS

END SUBSTANCE IMPAIRMENT IN TRANSPORTATION



What is the issue?

For more than 30 years, we have known that drinking and driving kills. In the last 15 years alone, data show that one-third of highway deaths involved an alcohol-impaired driver.

But our new reality is this: impaired driving does not just involve alcohol. Drugs can also affect the ability to drive or operate any vehicle.

Illegal, prescription, or over-the-counter drugs can have impairing side effects. But, unlike alcohol, drugs can affect each person differently, which makes tackling drugged-impaired driving or vehicle operation a particularly challenging endeavor.

NTSB investigations have found substance impairment as a cause or a contributing factor in numerous transportation accidents in recent years—and not just on the highway. Complex machinery such as cars, planes, trains, ships, and pipelines require operators to be at their best—not impaired by alcohol or drugs.

With more than 90 percent of transportation-related deaths each year occurring on our roadways, we look there first as we begin to define the problem.

In a 2013 AAA Foundation for Traffic Safety survey, 13 percent of drivers said they thought that they had driven close to or over the legal blood alcohol concentration (BAC) limit in the previous year. According to the Centers for Disease Control and Prevention, drivers make about 112 million alcohol-impaired trips each year.

According to the National Highway Traffic Safety Administration, the proportion of fatally injured drivers who had drugs in their system rose from 13 percent to 18 percent from 2005-2009. In 2012, 10.3 million people reported driving under the influence of illicit drugs in the past year.

But impairment isn't just a highway problem. The NTSB is seeing impairment-related accidents in all modes.

The NTSB recently studied drug use among fatally injured pilots. The prevalence of potentially impairing drugs increased from an average of 11 percent of fatally-injured accident pilots during the period from 1990-1997 to an average of 23 percent of accident pilots during the period 2008-2012. During the same time periods, positive marijuana results increased from

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1.6 percent to 3.0 percent. But the most commonly found impairing substance in fatal crashes was diphenhydramine, a sedating antihistamine found in over-the-counter medications.

What can be done?

When it comes to alcohol use, we know that impairment begins before a person's BAC reaches 0.08 percent, the current legal limit in the United States. In fact, by the time it reaches that level, the risk of a fatal crash has more than doubled. That is why states should lower BAC levels to 0.05— or even lower.

Unfortunately, for most drugs, the relationship between the amount consumed and crash risk is not well understood. We need more and better data to understand the scope of the problem and the effectiveness of countermeasures.

In commercial transportation industries, operators and enforcement authorities must not neglect required post-accident testing. Additionally, states should increase collection, documentation, and reporting of driver BAC test results, both for alcohol and drugs, following crashes.

Drivers and other transportation operators need good information to make informed decisions. While many recognize the impairment potential of illicit drugs, they may not appreciate the potentially impairing effects of prescribed or over-the-counter medications, especially in combinations.

Additionally, drivers of any vehicle type should discuss their transportation activities with their doctor before taking a medication, and discuss the impairing effect of any medical condition, as it might increase their risk of having an accident. A person's medical condition and medications should not always exclude them from operating a vehicle, but such conditions and medications need to be monitored. If any medication label warns against operating heavy machinery, that warning includes vehicles.

Also, while the danger of drinking and driving is more broadly understood than that of driving under the influence of drugs, many do not know that even low levels of alcohol can degrade skills and increase crash risk.

Certain countermeasures have been shown to reduce the rate of alcohol-impaired driving and alcohol-related crashes, including stronger impaired driving laws and increased use of high-visibility enforcement, such as sobriety checkpoints.

Other countermeasures are needed to ensure that people who are caught driving while impaired (DWI) do not do so again. For example, requiring ignition interlocks for all alcohol impaired-driving offenders can ensure that vehicles will not start if the driver has been drinking. For repeat offenders, DWI courts (modeled after drug courts) provide a tailored approach that involves treatment and supervision.

Finally, emerging in-vehicle technology, such as the Driver Alcohol Detection System for Safety—a system that will use touch-based or breath-based systems to detect driver alcohol use—may one day ensure no drivers operate impaired.



*RELATED ACCIDENTS:

Aviation: April 12, 2007; Traverse City, MI; DCA07FA037; no injuries or fatalities

Highway: September 26, 2014; Davis, OK; HWY14MH014; 4 dead

Marine: August 13, 2014; New Orleans, LA; DCA15LM016; 1 dead

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Critical changes needed to reduce transportation accidents and save lives



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The NTSB Most Wanted List highlights safety issues identified from the NTSB's accident investigations to increase awareness about the issues and promote recommended safety solutions.

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.

National Transportation Safety Board
490 L'Enfant Plaza S.W.
Washington, DC 20594

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202-314-6000