



NTSB 2017-2018
MOST WANTED LIST OF
 TRANSPORTATION SAFETY IMPROVEMENTS

Reduce Fatigue-Related Accidents



MARINE

MWL
 MOST WANTED LIST



The traveling public can unknowingly and unwillingly be placed at risk because a fatigued operator cannot safely execute his or her duty.

What is the issue?

Marine vessels are machines that require complex human interaction and an operator's complete attention and proficient skill. All too often, however, operators, maintenance personnel, and other individuals performing safety-critical functions are impaired by fatigue stemming from insufficient or poor-quality sleep.

To manage the risks of operator fatigue in public transportation, companies must ensure that employees have sufficient off-duty time to obtain high-quality sleep. Moreover, employees must actually use their off-duty time to get adequate sleep, as well as make personal choices to attend to medical and quality-of-life problems that negatively affect their fitness for duty and sleep quality.

Over the years, we have investigated many accidents in all transportation modes in which fatigue was cited as the probable cause or a contributing factor. Nearly 20 percent of the 182 major National Transportation Safety Board investigations completed between January 1, 2001, and December 31, 2012, identified fatigue as a probable cause, contributing factor, or a finding.

The consequences of fatigue on human performance can be subtle. Operators, maintenance personnel, and other individuals may not recognize loss of attention, slowed reaction times, and poor judgment until it is too late. The traveling public can unknowingly and unwillingly be placed at risk because a fatigued operator cannot safely execute his or her duty.

Human fatigue can be acute or chronic; both often arise from poor sleep and inadequate health management. Fatigue impairs performance and degrades a person's ability to stay alert, attentive, and engaged in the task of controlling a vehicle safely.

What can be done?

People need to be awake and alert to be at their best, but when they operate vehicles while fatigued, they are endangering themselves and others. We must acknowledge that fatigue is a real threat to transportation safety, and there is no single solution to it. We must draw attention to the medical conditions that may affect sleep quality,



Continued on next page



Continued from previous page

including sleep disorders like obstructive sleep apnea (OSA), insomnia, and restless legs syndrome.

We have issued more than 200 safety recommendations addressing fatigue-related problems across all modes of transportation. Addressing the problem of human fatigue in transportation requires a comprehensive approach that focuses on research, education and training, technology, sleep disorder treatment, hours-of-service regulations, and on- and off-duty scheduling policies and practices.

All vehicle and vessel operators must be better educated about medical conditions and impairing drugs that can impact the quality and duration of their sleep as well as their on-duty performance. Regulators can help commercial operators, airlines, vessel operators, and rail agencies identify high-risk drivers, pilots, mariners, and operators.

Companies must establish fatigue risk management programs and continually monitor their success to reduce risks for personnel performing safety-critical tasks. Fatigue risk management programs take a comprehensive, tailored approach to address the problem of fatigue within an industry or workplace. Such programs include policies or practices to address scheduling, attendance, education, medical screening and treatment, personal responsibility during non-work periods, task/workload issues, rest environments, commuting, and napping.

The best countermeasures to combat fatigue depend on the task at hand, work–rest cycles, and sleep opportunities. Data on the habits of workers in different transportation modes, along with the results of existing fatigue management programs and research into possible alternatives, will allow for a better analysis to determine the best fatigue countermeasures to employ in every situation.

Ultimately, fatigue-related accidents can be avoided with a combination of science-based regulations, comprehensive fatigue risk management programs, and individual responsibility. ■



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 NTSB 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.

 @NTSB

 #NTSBMWL

Follow NTSB on 

Related Accidents*

Date	Location	Accident ID
Sep. 23, 2014	Virgin Passage, Caribbean Sea, PR	DCA14PM019
Dec. 5, 2014	Jetty A, off Cape Disappointment, Ilwaco, WA	DCA15LM007
Feb. 15, 2015	Long Island, AK	DCA15LM013

*For detailed accident reports visit www.nts.gov

NTSB

MWL
MOST WANTED LIST

**Critical changes
needed to reduce
transportation
accidents and
save lives.**

