



National Transportation Safety Board

NTSB Fatigue-Related Crashes and Lessons Learned

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We Thank You!



Overview

- Who is the NTSB?
- Determining fatigue as causal
- Highlight crash investigations
- Fatigue management program
 - Importance
 - Key elements

Who is the NTSB?

- Independent Federal Agency
- Aviation, Marine, Rail, and Highway
- Headquartered in Washington, DC
- About 400 staff nationwide





2019-2020 NTSB
**MOST
WANTED
LIST** OF
TRANSPORTATION
SAFETY
IMPROVEMENTS

**Critical changes needed
to reduce transportation
accidents, injuries,
and fatalities.**

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AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE



2019–2020 NTSB
**MOST
WANTED
LIST** OF
TRANSPORTATION
SAFETY IMPROVEMENTS

Fatigue is a pervasive problem in transportation that degrades a person's ability to stay awake, alert, and attentive to the demands of safely controlling a vehicle, vessel, aircraft, or train. **We are calling for a comprehensive approach to combatting fatigue in transportation, focusing on research, education, and training; technology; sleep disorder treatment; hours-of-service regulations; and on- and off-duty scheduling policies and practices.**



**Reduce Fatigue-Related
Accidents**

The Final Product

- Report Development
 - Follow-up trips
 - Testing / research
 - Reporting writing
- Report Types
 - Brief Report
 - Full Report Board Meeting





NTSB News

The National Transportation Safety Board is scheduled to conduct a board meeting Oct. 20, 2020, at 1 p.m. (EDT), to consider the agency's investigation of the fatal, Sept. 2, 2019, fire aboard the dive boat Conception off Santa Cruz Island, California.

Read More

Investigating Fatigue

- Physical evidence
- HOS - in compliance?
- 72- hour history
- Available rest periods
- Electronic record

Human Factors

- DOT medical certification
- Medical records
- Medications, toxicology
- BMI > 30
- Obstructive sleep apnea

Doswell, VA

May 31, 2011



Chattanooga, TN

June 25, 2015



Laredo, TX

May 14, 2016



St. Marks Florida

July 2, 2016



Cranbury, NJ

June 7, 2014

- 1:00 am
- Work zone
- 1 fatal, 4 injured
- DE- GA -DE
- Awake 24 hours



Pre-Crash

- No restrictions on distance to terminal
- Did not analyze critical events
- Lacked a fatigue management program

Post Crash

- New fatigue policy
- Work Commute Plan
- Safety Alerts on Qualcomm
- Defensive driving training
- Implemented an FMP

Importance of FMP

- Failure to manage the risk can be deadly
- HOS compliance is not FMP
- People can't work 24/7
- Fatigue - poor decision making, slowed response, risky behavior, loss of situational awareness
- CMV drivers are most vulnerable

Safety Culture



Source: NAFMP

Policies and Procedures

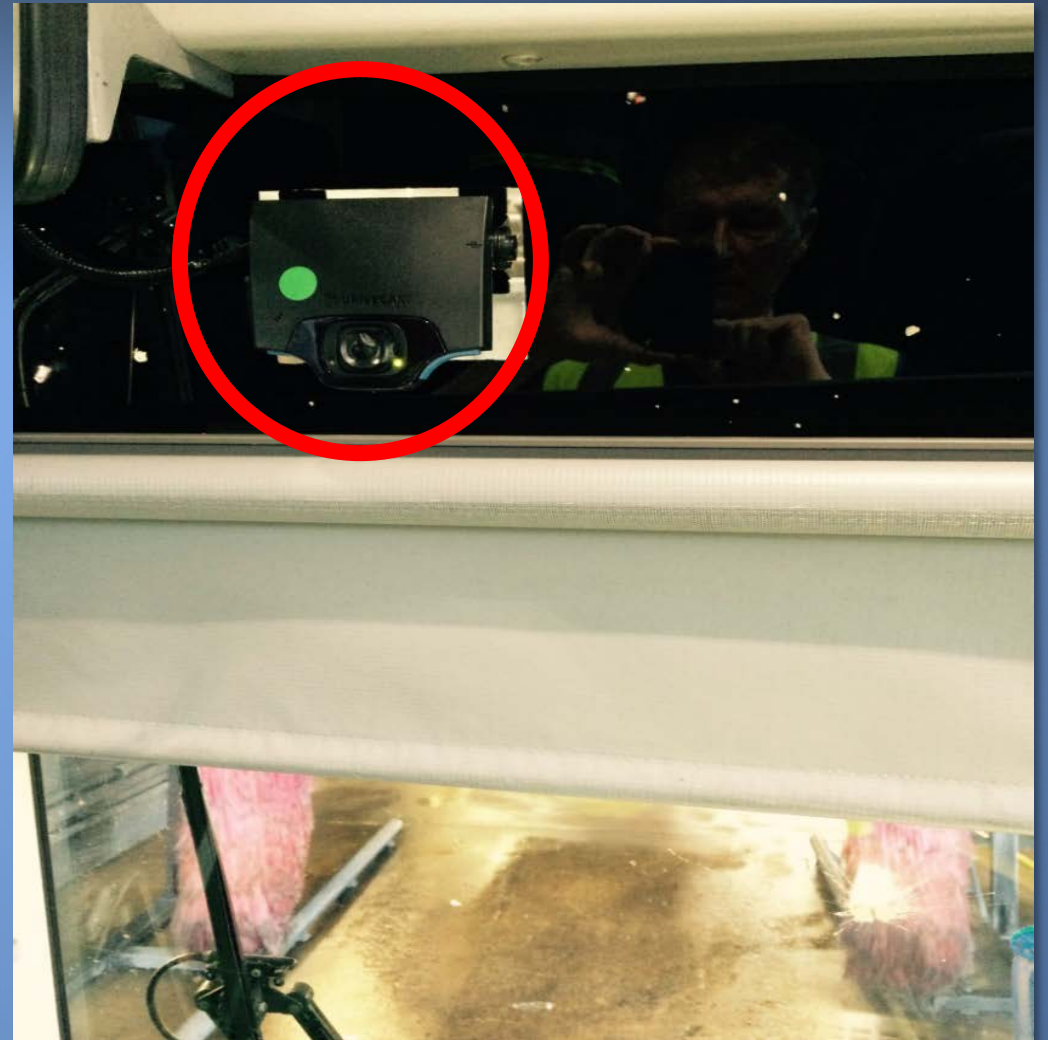
- Written SOPs
- Fatigue policy
- Distance to terminal
- Acknowledged
- Driver handbook
 - Adverse driving
 - Sleep apnea
 - Driver wellness

Training & Education

- Initial & recurrent
- Post-accident
- HOS compliance
- Off duty hours
- Family members
- Shippers
- Documented

Evaluation

- Accident register
- Loss runs
- Insurance
- Technology
 - Critical events
 - Analyze the data



Summary

- Fatigue should be on everyone's "Most Wanted List"
- North American Fatigue Management Program
- FMP – safety culture, policies / procedures, training & education, and evaluation



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