

NSTSCCE

National Surface Transportation
Safety Center for Excellence

Outreach Activities

Myra Blanco, Ph.D.
NSTSCCE Outreach Coordinator

NSTSCE Outreach Goal

While research and technology development are the primary goals of NSTSCE, the stakeholders and research team understand the importance of disseminating the results to the surface transportation research community and to the public. While NSTSCE and its research programs are products of the entire team and are meant to stand on their merits, creation of an independent identity for NSTSCE provides a focal point for the public, policy makers, and the research community and thereby improves access and dissemination of research results.

1ST NSTSCE Outreach Project

International Symposium on Naturalistic Driving Research

- First - 2008
 - 126 Total Registered
 - 1 Workshop Topic
- Second - 2010
 - 130 Total Registered
 - 1 Workshop Topic
- Third - 2012
 - 153 Total Registered
 - 2 Workshop Topics

VirginiaTech
TRANSPORTATION
INSTITUTE
DRIVING TRANSPORTATION WITH TECHNOLOGY

FIRST HUMAN FACTORS SYMPOSIUM
NATURALISTIC DRIVING METHODS & ANALYSES
AUGUST 25-27, 2008
BLACKSBURG, VIRGINIA

Panel Sessions and Presentations will include:

- The importance of naturalistic driving to highway safety
- Naturalistic data collection and instrumentation through the years
- Data Extraction
- Data Analysis
- Using naturalistic data in product development

Symposium events:

- Opening comments from Robert Skinner, executive director of the Transportation Research Board
- Hours d'oeuvre reception at The Inn at Virginia Tech featuring Virginia wines and a bluegrass band
- Nighttime tour of the Virginia Smart Road featuring lighting and all-weather testing demonstrations

For more information, contact Sherri Box at 540/721-1049 or sbox@vti.edu
To Register: www.cpe.vt.edu/reg/ndmas www.vti.edu

SECOND INTERNATIONAL SYMPOSIUM ON
NATURALISTIC DRIVING
RESEARCH

AUG. 31 TO SEPT. 2, 2010 • BLACKSBURG, VA

REGISTER NOW

Agenda, registration, lodging, and travel information at <http://www.cpe.vt.edu/ndmas/>
For additional information, contact Sherri Box: sbox@vti.vt.edu, 540-231-1549

www.vtti.vt.edu

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REGISTER NOW

Third International Symposium on
Naturalistic Driving Research

August 27 - 30, 2012

Researchers and practitioners will gain hands-on experience with Naturalistic Driving Study data during the workshops, participate in various panel discussions, including an international review of naturalistic driving research, team driving research to the next generation of NDS studies.

Visit <http://www.vtti.vt.edu/conferences/ndrs-2012.php> for more information or contact Sherri Box: sbox@vti.vt.edu

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NSTSCE Senior Mobility Day



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Senior Mobility

REGISTER NOW!



Senior Mobility Awareness Symposium

When: December 6, 2012

Where: The Inn at Virginia Tech

Cost: \$90/person

□ Objective

- One-day senior driving and transportation topics
 - NSTSCE with the support of the Center for Gerontology at Virginia Tech.
 - Senior Mobility Awareness Symposium, December 6, 2012

□ Overview

- Train and educate community professionals on the changing driving and transportation needs faced by seniors and strategies used to address them
- Core group to establish a local coalition to enhance community response to the transportation and mobility needs of older adults living in the NRV
- Raise awareness (community leaders, policymakers) and the implications for building livable communities in the NRV

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Senior Mobility Symposium

Pre Symposium
Questionnaire –

Gain a better
understanding of
the issues
professionals
face working with
the aging
population

Survey for
**Senior
Mobility
Awareness
Symposium**

Tell us what you would
like to share and learn.



□ Featured Topics and Speakers

- **Opening Keynote Address: *Federal Perspective on Senior Mobility***
 - Essie Wagner, NHTSA
- ***Functional Assessment and Training***
 - Lisa Molnar, UMTRI/M-CASTL (Michigan Center for Advancing Safe Transportation Throughout the Lifespan)
 - Jon Antin, VTTI/NSTSCE
 - Jackie Banche, DMV
- **Lunch and Keynote Address**
 - Kathryrn Freund, iTNAmerica
- ***Vehicle, Infrastructure, and Education-Based Countermeasures***
 - Brian Reimer, MIT AgeLab
 - Bill Kallio, AARP
 - Nancy Brossoie, Senior Mobility in the NRV, VT Center for Gerontology
- **Demonstrations**
- **Panel Discussion: Urgent Needs in Senior Mobility**

NSTSCE Evaluation of Light-vehicle Driver Education Programs Targeting Sharing the Road with Heavy Vehicles: Case Study Analysis



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Drivers Ed Case Study



- Objective
 - ▣ Develop best light-vehicle practices on sharing the road with heavy vehicles
- Overview
 - ▣ Utilize information obtained from previous NSTSCE-funded survey study combined with newly acquired information from program evaluations to develop best practices
 - ▣ A case study will be implemented in a high school driver education program in West Virginia introducing one or more best practices

Drivers Ed Case Study: Outreach

- Journal articles in press
 - ▣ Journal of Safety Research (others to come)
- Design of a dedicated website for this research project
- Planning presentations at two to four conferences and presentations associated with teen driver education



NSTSCE Driver Health Website

The image shows a screenshot of the Driving Healthy website and its social media profiles. The website header features the text "DRIVING HEALTHY" in large white letters on a green background, with a red apple icon integrated into the word "HEALTHY". Below this is the tagline "Delivering Health and Wellness Information to Commercial Truck Drivers" and an illustration of a semi-truck. A white box on the right side of the website contains the text "Driving Healthy is on Facebook." and "To connect with Driving Healthy, sign up for Facebook today." with "Sign Up" and "Log In" buttons.

The social media section shows the Facebook profile for "Driving Healthy" with 307 likes and a "Like" button. Below the profile are icons for "Local Business", a location pin for "3500 Transportation Research Plaza 0536, Blacksburg, VA.", and links to the website and Twitter. There is also a YouTube play button icon, a thumbs-up icon with the number "307", and a map showing the location in Blacksburg, VA.

The Twitter profile for "@DrivingHealthy" is shown below, featuring the Driving Healthy logo, the name "Driving Healthy", the handle "@DrivingHealthy", and a "Follow" button. The bio reads: "Providing CMV drivers with the tools to take charge of their health and wellness. Check us out on Facebook or the web." and includes links to the Facebook page and the website. The profile statistics show 1,222 tweets, 592 following, and 578 followers.

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Driving Healthy

- Objective
 - To provide commercial drivers with relevant health information allowing them to make healthier lifestyle choices while on the road
- Overview
 - Commercial motor vehicle drivers are typically a medically underserved population
 - Drivers' health is related to driving safety
 - Current project seeks to improve usability by providing new outreach tools and updated and dynamic information

The screenshot shows the homepage of the 'Driving Healthy' website. The header features the logo 'DRIVING HEALTHY' with a red heart icon, and the tagline 'Delivering Health and Wellness Information to Commercial Truck Drivers'. Navigation links include Home, About, Eating & Living Healthy, Prevention & C&D Screening, Resource Center, and Contact Us. A main banner image shows a person wearing a CPAP mask with the text 'Maintaining Your Health' and a sub-headline: 'Some conditions, like obstructive sleep apnea, affect truck drivers more than most people. Fortunately, in many cases, there are effective treatments and prevention methods that you can adopt.' Below the banner are three columns of featured content: 'EATING HEALTHY' (focus on diet and hydration), 'LIVING HEALTHY' (focus on exercise and stress management), and 'LIVING WELL' (focus on sleep and mental health). The footer contains sections for 'About Driving Healthy', 'Colorectal Cancer Awareness Month', and 'Tips for Driving Healthy', along with social media links and a search bar.

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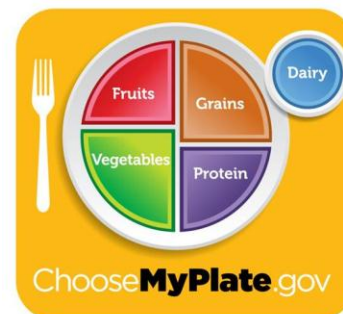
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Driving Healthy: Outreach

- DrivingHealthy.org
 - ▣ Enhanced driver resource center
 - ▣ Monthly health focus
 - ▣ Links to social media and RSS feed
- Health Conferences
 - ▣ NIH Conference on the Science of Dissemination
 - ▣ TRB Driver Health and Wellness Conference
- Connection to government health outreach efforts
 - ▣ Secretary of Transportation and NIOSH acknowledgment
 - ▣ ChooseMyPlate.gov community partner

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Driving Healthy Online



DrivingHealthy.org



@DrivingHealthy



Facebook.com/DrivingHealthy



<http://tinyurl.com/DrivingHealthyRSS>



NSTSCE CMV Driver Distraction Outreach

The screenshot shows the U.S. Department of Transportation Federal Motor Carrier Safety Administration website. The header includes navigation links for HOME, RULES & REGULATIONS, REGISTRATION & LICENSING, SAFETY & SECURITY, FACTS & RESEARCH, and ABOUT FMCSA. A search bar is located in the top right corner. The main content area is titled "CMV Web-Based Driving Tips" and includes a "Print" button. The text describes the purpose of the website, which is to raise awareness of common driving errors and provide valuable driving tips through an easily accessible tool. It mentions that the website was developed by the Virginia Tech Transportation Institute (VTI) and that the driving tips are supported with real-world video clips. A left navigation bar lists various driving tips categories such as Project Background, Failure to Buckle Up, Too Fast for Conditions, Unfamiliar Roadway, Inadequate Surveillance, Driver Fatigue, Driver Distraction, Following Too Closely, Inadequate Evasive Action, Documents, and References.

U.S. Department of Transportation
Federal Motor Carrier Safety Administration

FORUMS | CONTACT US | MEDIA | FMCSA PORTAL | DOT.GOV

Search All FMCSA Sites

HOME | RULES & REGULATIONS | REGISTRATION & LICENSING | SAFETY & SECURITY | FACTS & RESEARCH | ABOUT FMCSA

Home > [CMV Web-Based Driving Tips](#)

↑ Outreach & Education

CMV Driving Tips

- [Project Background](#)
- [Failure to Buckle Up](#)
- [Too Fast for Conditions](#)
- [Unfamiliar Roadway](#)
- [Inadequate Surveillance](#)
- [Driver Fatigue](#)
- [Driver Distraction](#)
- [Following Too Closely](#)
- [Inadequate Evasive Action](#)
- [Documents](#)
- [References](#)

CMV Web-Based Driving Tips

Even the most well-trained, safety-conscious Commercial Motor Vehicle (CMV) driver is at risk of engaging in driving behaviors that could lead to a crash on today's crowded highways. Weather conditions or road conditions change and suddenly "driving too fast for conditions" becomes a risk factor. Failing to look or looking and not seeing, impaired performance because of fatigue, inattention or daydreaming or an unexpected external distraction can all lead to a truck crash.

This Web site was developed to raise the consciousness of CMV drivers about common driving errors and to provide valuable driving tips through an easily accessible tool, the Internet. Fleet safety managers can also use this Web site for their driver training programs. These tips offer preventive measures that CMV drivers can take to help avoid crashes.

The driving tips, ideas, and suggestions on this Web site are supported with real-world video clips (25- to 30-second video clips) recorded in a naturalistic (open roadway, non-test track) driving study conducted by the Virginia Tech Transportation Institute (VTI). The video clips show examples of driver errors that will serve to motivate CMV drivers to become safer drivers and thereby avoid dangerous driving situations. Also, as a training exercise, each video clip is followed by a set of questions to help encourage you to think about and examine the driver's behavior.

Please click on any of the error categories (left navigation bar) under the "Driving Tips" section. Under each category you will find driving tips, interesting facts, video clips, a video description, and the training exercise questions.

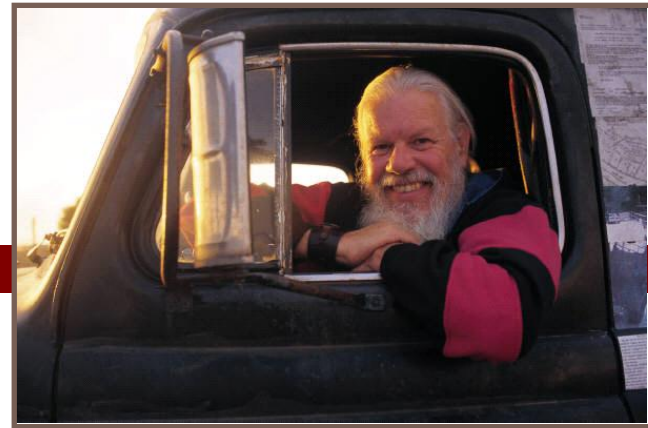
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fmcsa.dot.gov/about/outreach/education/drivertips

Distraction Outreach



□ Objective

- Expand and enhance the driver distraction section of the FMCSA-hosted CMV Web-Based Driving Tips site

□ Overview

- Update sites distraction section with information from the latest CMV distraction studies
- Simplify the current distraction text
- Create a printable driving tips sheet
- Translate all new material into Spanish

When driving, keep your mind engaged with driving-related information and try to avoid focusing on external objects such as billboards or buildings or internal objects such as a cell phone or paperwork.

Original Text – 17 Grade Level

You should avoid focusing on things outside of your truck that aren't related to driving. This includes things like billboards, buildings, and people.

Revised Text – 7 Grade Level

Distraction Outreach

□ Outreach

- Entire text was reviewed and revisions made to ensure that it was presented in a more direct and simple form
- New videos were identified illustrating the dangers of text messaging and dialing
- Distraction text and tips sheet translated to Spanish

Outreach & Education

CMV Driving Tips

- Project Background
- Failure to Buckle Up
- Too Fast for Conditions
- Unfamiliar Roadway
- Inadequate Surveillance
- Driver Fatigue
- Driver Distraction**
- Following Too Closely
- Inadequate Evasive Action
- Documents
- References

Driver Distraction

Distraction can be defined as any time a driver diverts his/her attention from the driving task. This may include external distractions, such as looking out the window at a passing building, street sign, or person, or internal distractions, such as talking on a cell phone, eating, reading, or adjusting the radio. The Large Truck Crash Causation Study (LTCCS) reported that 8 percent of large-truck crashes occurred when Commercial Motor Vehicle (CMV) drivers were externally distracted and 2 percent of large truck crashes occurred when the driver was internally distracted.¹⁵

Below are some tips that will help you stay attentive to the road ahead.


TIP # 1: DO NOT FIXATE ON NON-DRIVING RELATED OBJECTS

When driving, keep your mind engaged with driving-related information and try to avoid focusing on external objects such as billboards or buildings or internal objects such as a cell phone or paperwork. Remember that all distractions can be dangerous. Paying attention to driving-related information will help you determine when and where there are vehicles around you and will also enable you to react more quickly to any unforeseen event.

Did You Know? A study published in April 2006 found that driver inattention was the leading factor in crashes and near crashes. The study reports that nearly 60 percent of crashes involved some form of driver inattention within 3 seconds before the incident.¹⁴

Did You Know? Inattention or other mental activities distracting you from driving can cause you to gaze blindly at the road and/or objects ahead without actually seeing/recognizing them because your attention is focused somewhere else.⁰⁴

An example of an external distraction is shown in the video clip below. Training exercise questions follow the video clip.



VIDEO DESCRIPTION: The CMV driver is traveling in the right lane of a two-lane highway on wet pavement during the day. The driver becomes distracted with something out his right window as traffic begins to slow ahead of him. The driver returns focus to the forward roadway and has to brake quickly and move into the left lane.

Driver Distraction Section of the CMV Web-Based Driving Tips Site

Driver distraction is the diversion of attention from activities critical for safe driving to a competing activity.

English text

La distracción del conductor es el desvío de la atención de actividades esenciales para una conducción segura hacia otra actividad.

Spanish text

Heavy Vehicle Safety Outreach



□ Objective

- Create an instructional package for fleet safety managers and officials that may be delivered in an informal manner. This package will provide information on the latest research findings related to HV safety.

□ Overview

- The culmination of this project will be a pilot-session of the instructional package with a group of safety managers.

□ Outreach

- Make available to safety managers at commercial fleets the latest HV research findings in areas such as fatigue and distraction

Obstructive Sleep Apnea (OSA) Case Study

- Objective
 - Develop a set of best practices in implementing and maintaining a successful OSA program to serve as a guide for commercial vehicle operations (CVOs)
- Overview
 - Detail and compare/contrast two leading U.S. carrier's OSA programs
 - Assess opinions and perceptions of drivers and staff
 - Assess effectiveness of the program to screen, test, and treat OSA among CMV drivers in terms of safety, health and cost benefits
- Outreach
 - Working with several sleep, health, and transportation organizations to disseminate the findings of the case study



Driver Coach

❑ Objective

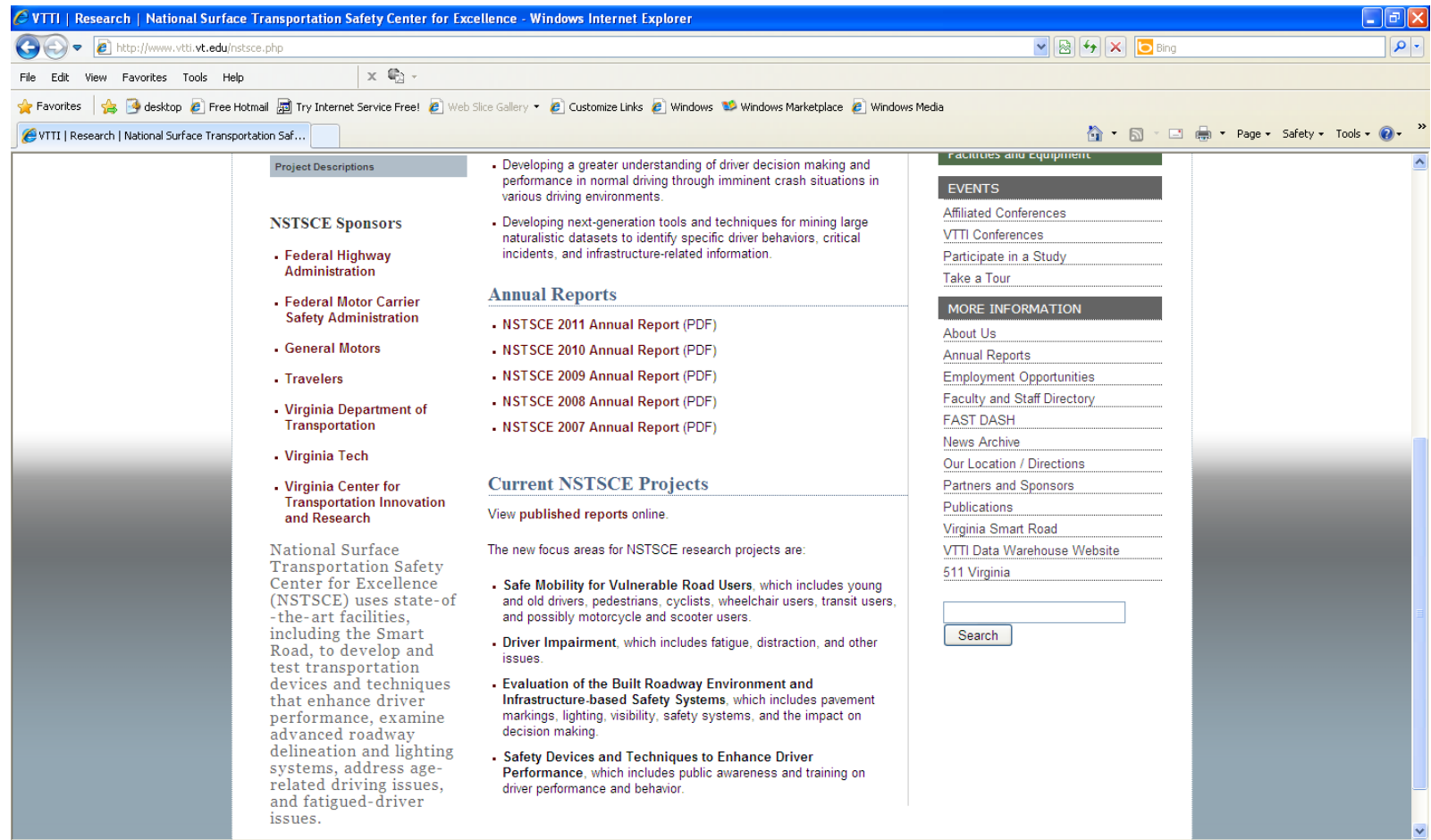
- Teen monitoring system to improve teen safe driving performance while they are learning to drive

❑ Outreach

- Present at Parent/Teen Safe Driving Meetings at area high schools
 - Inform parents and teens of the most risky activities teens do while driving and how to alleviate these risks with driving contracts
 - Presented to over 600 parents and teens (Montgomery County and Roanoke County high schools)



NSTSCE's Page: <http://www.vtti.vt.edu/nstsce.php>



The screenshot shows a Windows Internet Explorer browser window displaying the NSTSCE website. The address bar shows the URL <http://www.vtti.vt.edu/nstsce.php>. The page content is organized into several sections:

- Project Descriptions:** A list of two bullet points describing research goals, such as "Developing a greater understanding of driver decision making and performance in normal driving through imminent crash situations in various driving environments."
- NSTSCE Sponsors:** A list of sponsors including Federal Highway Administration, Federal Motor Carrier Safety Administration, General Motors, Travelers, Virginia Department of Transportation, Virginia Tech, and Virginia Center for Transportation Innovation and Research.
- National Surface Transportation Safety Center for Excellence (NSTSCE) uses state-of-the-art facilities, including the Smart Road, to develop and test transportation devices and techniques that enhance driver performance, examine advanced roadway delineation and lighting systems, address age-related driving issues, and fatigued-driver issues.**
- Annual Reports:** A list of links to annual reports from 2011 to 2007, all in PDF format.
- Current NSTSCE Projects:** A section titled "View published reports online." followed by "The new focus areas for NSTSCE research projects are:" and a list of three project areas: "Safe Mobility for Vulnerable Road Users", "Driver Impairment", and "Evaluation of the Built Roadway Environment and Infrastructure-based Safety Systems".
- Facilities and Equipment:** A section with a sub-header "EVENTS" and a list of links: "Affiliated Conferences", "VTTI Conferences", "Participate in a Study", "Take a Tour", "MORE INFORMATION", "About Us", "Annual Reports", "Employment Opportunities", "Faculty and Staff Directory", "FAST DASH", "News Archive", "Our Location / Directions", "Partners and Sponsors", "Publications", "Virginia Smart Road", "VTTI Data Warehouse Website", and "511 Virginia".
- Search:** A search box with a "Search" button.

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Current Editor Vikki Fitchett, vfitchett@vtti.vt.edu

Reports from NSTSCE at the Virginia Tech Transportation Institute

[VTTI Access Data](#)

- ▶ [Case Study on the Impact of Treating Sleep Apnea in Commercial Motor Vehicle Drivers: Sleep Apnea Programs from Two Leading U.S. Carriers and Focus Group Findings](#)

112-UI-017 [PDF 1.2 Mb]

J. Erin Mabry · Jeffrey Hidkman · Richard Hanowski

Approximately one in four commercial motor vehicle (CMV) drivers in the U.S. are estimated to possess mild or higher levels of obstructive sleep apnea (OSA), the most common sleep-breathing disorder that is associated with significant medical consequences (including cardiovascular disease and diabetes). A major symptom of sleep apnea is excessive daytime sleepiness, which is highly correlated to impaired driving performance and may result in an increased risk of being in traffic- or work-related incidents. The most prescribed and cost-effective first-line treatment for OSA is nasal continuous positive airway pressure (CPAP). Two leading U.S. carriers partnered with commercial sleep apnea providers to implement obstructive sleep apnea (OSA) programs that screen, diagnose, treat, and manage their OSA-positive CMV drivers. This case study provides an overview of these OSA programs; outlines each carrier's screening, testing, and compliance protocols; and compares and contrasts their approaches. Focus group research was also conducted with drivers and staff involved in each program to assess their perceptions and opinions of their respective OSA programs. While the majority of drivers expressed overall satisfaction participating in their carrier's OSA program, both drivers and staff stressed the difficulty of healthy eating, exercise, and weight loss as adjunct OSA treatments. Finally, staff expressed the importance of

Questions?

Research In Motion = Outreach!



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