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Behind the Wheel at Work

Behind the Wheel at Work is a quarterly eNewsletter bringing you the latest news from the NIOSH Center for Motor Vehicle Safety.

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Welcome

Research takes time— but you want information that you can use now. That's why we at the NIOSH Center for Motor Vehicle Safety invite you to subscribe to our new quarterly eNewsletter for motor vehicle-related research updates and practical tools to apply research-based strategies in the workplace. While you're here, we hope you enjoy learning a little more about us, too. As this is our first issue of the *Behind the Wheel at Work*, your feedback is an important part of its growth. We encourage you to reach out to us with comments and suggestions at kur4@cdc.gov.

In This Issue

NIOSH CMVS Tweets

Law enforcement officers – follow your agency's standard operating procedure (SOP) on temporary traffic control zon...
https://t.co/QujFiF3pSr

Law enforcement officers can lower their risk of being struck by a passing vehicle at crash scenes. Consider these...
https://t.co/J15kfTIits

More than 200 law enforcement officers died due to struck-by incidents from 2005-2019. Learn how to prevent struck-...
https://t.co/IfJ5UUjhn6

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5 Things You Should Know About the NIOSH Center for Motor Vehicle Safety

1. The NIOSH CMVS is the National Institute for Occupational Safety and Health's **focal point for research and prevention** of motor vehicle crashes, the leading cause of work-related deaths in the U.S.

2. We envision that all workers exposed to motor vehicle traffic risks while working have the **highest possible levels of protection** from the risk of motor vehicle crashes and resulting injuries.
3. Through the CMVS, NIOSH researchers and external partners work to **respond to emerging issues** and provide research-based guidance so that those who work in or near motor vehicles come home safely at the end of their work day.
4. We're working to ensure that **recommended solutions** are clearly communicated to employers and workers. The safety of workers who drive on the job is a responsibility shared by many—employers, workers, policy makers, vehicle manufacturers, and the research community.
5. Our **online resources** cover prevention information for employers and workers, motor vehicle safety management and policy, and trucking safety, among other motor vehicle safety topics.

Safety Tip for Employers!

Give workers information about the possible effects of prescription and non-prescription medications on their ability to drive safely.

NIOSH Survey Results Highlight Long-Haul Truck Driver Safety Issues

Long-haul truck drivers (LHTDs) are essential to transporting goods such as food and clothes across long distances, and in many cases across several states. In 2012, more than 1.7 million people were employed as heavy and tractor-trailer truck drivers in the U.S.—the majority of them being LHTDs. On average, LHTDs work 60 hours per week and drive more than 107,000 miles per year.

Due to limited information available on workplace safety and health of these workers, NIOSH conducted personal interviews with a nationally representative sample of 1,265 LHTDs at 32 truck stops across the U.S. in 2010. Interview questions covered roadway safety, work-related injuries, work environments, safety culture, self-reported driving behaviors, and drivers' opinions on their training, job-related frustrations, and job satisfaction.

Survey findings showed:

- More than 1 in 3 LHTDs had at least one truck crash at work during their career.
- 73% of LHTDs perceived their delivery deadlines as unrealistically tight, which may be an incentive for risky driving behaviors such as speeding (4.5% often and 26% sometimes), hours-of-service violations (10% often and 27% sometimes), and continuing to drive despite fatigue, bad weather, or heavy traffic (24% often and 47% sometimes).
- 14% of LHTDs stated that they sometimes or never wore a seatbelt. This is an important finding because wearing a seat belt is the most effective way to prevent injury or death in the event of a roadway crash.
- 38% of LHTDs reported receiving inadequate training at the beginning of their careers.
- 5% of LHTDs reported at least one non-crash injury involving days away from work in the previous 12 months; among company drivers, 68% of these non-crash injuries involving days away from work were not reported to employers.

Employers: What can you do to promote LHTD safety? Consider the following recommendations from CDC's Vital Signs:

- Ensure that drivers do not need to violate hours-of-service rules to make on-time deliveries.
- Educate drivers on seatbelt use, cargo securement and weight limits, safe driving, and ways to avoid drowsy or distracted driving.
- Ensure that entry-level truck driver training meets current needs.

The results of this first national survey of LHTDs highlight critical safety issues that are worthy of future research and interventions to keep truckers and others on the road safe.

Publication: National survey of U.S. long-haul truck drivers; Injury and safety. Accident Analysis and Prevention 2015; 85: 66-72. Chen GX, Sieber WK, Lincoln JE, Birdsey J, Hitchcock T, Nakata A, Robinson CF, Collins JW, Sweeney MH.

NIOSH Driving Simulator on the Road to Improving Specialized Vehicle Safety

Checking the rearview mirrors, pressing your foot to the gas pedal, and feeling the movement of a vehicle making a wide turn, you might almost forget you're in the NIOSH driving simulator. The simulator gives users a realistic physical driving experience in a virtual traffic environment and fuels research to improve the safety of specialized vehicles in occupations such as firefighting and law enforcement. **It's the centerpiece of the Vehicle Safety Lab, the NIOSH focal point for engineering and technology-based safety intervention research to reduce the number and severity of work-related motor vehicle crashes.**

Two high-performance computers control the driving simulator, which features:

- Three 70" high-definition display screens
- Commercial-grade foot controls
- A precision steering system
- A reconfigurable digital dashboard
- Four linear actuators for motion

NIOSH researchers are using the simulator with vehicle-modeling and gaming development software to create unique interactive driving scenarios featuring a range of vehicles for the purposes of different studies. They also have specialized equipment, including eye-tracking devices, to measure driver perception and performance.

Current project goals are to develop intersection-safety best practices and create design requirements for effective fire truck vehicle warning systems during an emergency response. Learn more about NIOSH traumatic occupational injury research labs.

Focus on NIOSH CMVS Researchers

Meet Stephanie Pratt, PhD

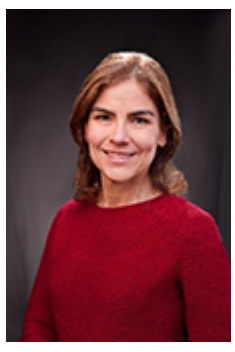
Describe your role within NIOSH.

I have worked at NIOSH for 22 years and currently direct the NIOSH Center for Motor Vehicle Safety. In this role, I promote research and action to address the leading cause of fatal injury to U.S. workers– motor vehicle crashes. Inside NIOSH, I lead strategic planning and program development for the Center and conduct epidemiologic research on work-related crashes. Outside NIOSH, much of my work involves developing and sustaining partnerships with public, private, and non-governmental sector groups such as the U.S. Department of Transportation, the Network of Employers for Traffic Safety, National Safety Council, American Society of Safety Engineers, Transportation Research Board, and UN Road Safety Collaboration.

How do you expect motor vehicle safety research to change over the coming years?

I think it will be increasingly important to work collaboratively across federal agencies and with partners to

Meet Rosa L. Rodríguez-Acosta, PhD



Tell us about your time at NIOSH.

I started my career with the CDC in November 2008 working as an epidemiologist at the Dengue Branch in San Juan, Puerto Rico. I came to NIOSH—and back to the field of occupational safety and health—in June 2012 to provide support to the Center for Motor Vehicle Safety. I provide administrative and scientific support to accomplish the Center's mission. Also, I respond to internal and external subject matter inquiries. Additionally, I am involved in a research project using national occupational fatality and motor vehicle crash data to look at risk factors leading to work-related fatal motor vehicle crashes.

Where can people see the effects of the Center's efforts?

Research conducted through the Center helps guide prevention policies and recommendations aimed at employers, workers, and the scientific community. We also generate information products to help workers stay safe when driving. Please visit our website to find out more!

leverage our resources to best advantage. Several of the Center's most successful collaborations have depended on partners coming together to share data, technical knowledge, research facilities, or access to workplaces. In addition, researchers are increasingly challenged to keep pace with the new technologies on our vehicles and roads. There will be a need to demonstrate the effectiveness of these new technologies in reducing crashes and injuries, as well as a need to help employers make informed choices when selecting vehicles and implementing policies.

What drives your interest in this work?

Motor vehicle safety is the perfect topic for me because it combines my interests in epidemiology and public policy. The field changes constantly, so there's always a new challenge and something new to learn. And, my job gives me the opportunity to work with knowledgeable and committed individuals from the public, private, and NGO sectors who share my interests. These relationships help me understand what the Center can do to better meet the information needs of employers and workers, and they reinforce the importance of the work we do to protect workers on the road.

Why do you continue to pursue this topic area?

It challenges me every day and many times takes me out of my comfort zone as a researcher. I love that work at the Center is very dynamic and diverse—and that I get to learn about many issues that play a role in motor vehicle safety from different perspectives. I've been able to identify specific areas of interest and start developing expertise in those areas. It is also a plus that I get to work with and learn from some of the most respected researchers in the field of work-related motor vehicle safety!

Please send your comments and suggestions to us at kur4@cdc.gov.

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