

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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Resource(ful)

Where do you look for motor vehicle safety information? Do you prefer content that is specific to a worker group or covers general road safety topics? In this month's newsletter, you'll learn about new resources from NIOSH and our partners. [Access previous issues of our newsletter](#)

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NIOSH CMVS Tweets

It's time to take a fresh look at what employers can add to their toolbox of policies and interventions to protect... <https://t.co/2ka0X2Dt0B>

Any business whose employees drive during work hours should have a motor vehicle safety program in place. Here are... <https://t.co/1mWQ7nv4NO>

RT @NETS_RoadSafety : NETS keynote presenters announced for annual #StrengthINNumbers Fleet Safety Benchmark Conference! Register today a... <https://t.co/Y3T9MavMq9>

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Designing Motor Vehicle Safety Materials with Employers' and Workers' Needs in Mind

In 2016 and 2017, RTI conducted a study on behalf of NIOSH to find out what motor vehicle safety topics and products would be of greatest use to small businesses. Four focus groups were conducted with 33 managers of employees who drive for work.



Recently, NIOSH and RTI shared [key findings](#) from the focus groups on the NIOSH Science Blog.

The bottom line: Small employers prefer tailored, engaging content designed for quick review and conversation.

Safety tip for employers!



Set work schedules that allow workers to obey speed limits and follow applicable rules such as hours-of-service regulations.

Tips for Driving in Heat



Winter isn't the only season that can take a toll on driving safety. It is important to keep workers safe on the road during summer, too. Extreme heat can damage your company's fleet vehicles and put workers at risk of a breakdown. Workers who drive as part of their job may be sharing the roads with fatigued or impaired travelers on their way to or returning from vacation. Many workers are themselves travelers, and some may be driving a company vehicle approved for personal use.

This year we're sharing ways that employers can keep their workers safe while driving in hot weather conditions. Use the following tips for on- and off-the-job driving.

- Conduct a vehicle safety check before workers travel.
 - Check tire pressure and tread wear. Make sure any spare tires are also in good condition.
 - Check the cooling system, including coolant (antifreeze) level and quality.
 - Check oil, brake, transmission, power steering, and windshield washer fluids.
 - Check the condition of all belts and hoses.
 - Check air conditioning performance.
- Provide workers with a sunshade to block heat when the vehicle is parked and a driver emergency kit that includes: bottled water, nonperishable snacks, portable phone charger, flashlight, batteries, flares, jumper cables, and a first aid kit.
- Give workers information about road construction/closures. Remind them to allow time for possible delays.
- Set policies that allow drivers to consult with their supervisors to adjust driving hours if they have trouble seeing at night, and to stop driving if they are too tired or the weather is bad.
- Remind workers:
 - Buckle up: every trip, every person. It only takes a second.
 - Do not drive if you are fatigued. Stop and take breaks as needed.
 - Keep alert and aware of your surroundings. Other drivers may be impaired, fatigued, or rushing to reach their destinations.
 - Talk to your supervisor and co-workers about potential hazards on your planned route, including road construction, bad weather, or dangerous curves.

Get [more summer driving tips](#) [↗](#) from our friends at the National Highway Traffic Safety Administration.

The bottom line: Keep your fleet cool in the summer heat.

How to Reduce Speeding in Your Fleet



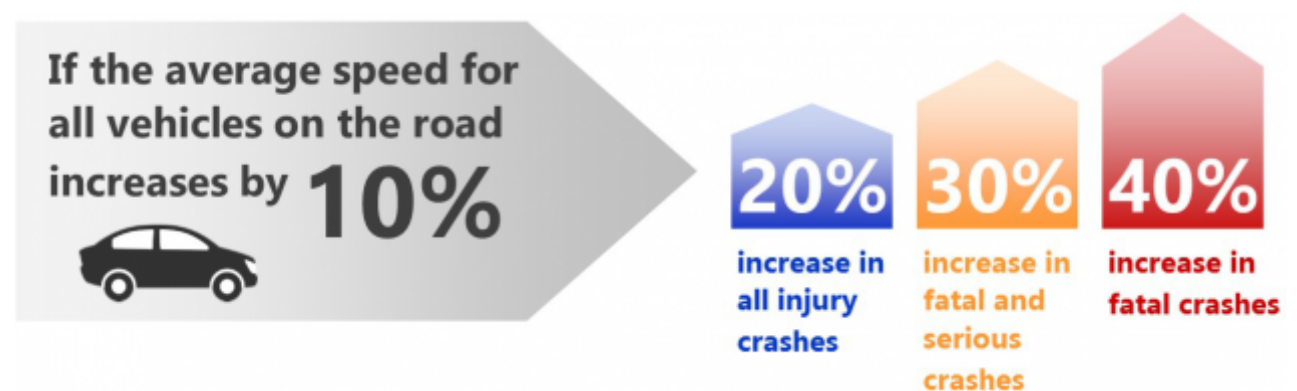
Speeding means that the driver is going faster than the speed limit. It also includes driving too fast for road or weather conditions, even if you're not going over the speed limit. In 2016, over 10,000 people died in speeding-related crashes in the United States – 27% of all traffic deaths.¹ To put that in context, only slightly more – 28% – involved a driver with a BAC of .08 g/dL or higher.²

While drunk driving has come to be socially unacceptable, this is not yet true of speeding. The [AAA Foundation's 2017 Traffic Safety Culture Index](#) found that drivers' attitudes about speeding are much different than what they actually do on the road. They believe speeding drivers are a threat to their safety, but they themselves do it.

Why is speeding so dangerous?

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For an employee driver: As your speed increases, so do the chances you will be involved in a crash, and so do the chances you will be seriously injured or killed. Why? A driver needs at least 1 second to react. The faster you drive, the farther your car will continue to travel before it can stop. This means you're more likely to crash. And, the faster you drive, the greater the amount of mechanical (kinetic) energy that must be absorbed by the impact. This means you're more likely to be killed or seriously injured. Consider the following widely-used model:³



For a pedestrian: The higher the speed of the vehicle that hits you, the greater your chances of injury or death. A pedestrian hit at 16 mph has a 10% chance of severe injury or death. This increases to 50% at 31 mph and 90% at 46 mph.⁴

How can employers manage the risks of speeding?

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Through management practices:

- Require drivers to report speeding tickets and other traffic violations. Check their motor vehicle records regularly for this information.
- Weigh speeding tickets heavily in criteria for maintaining eligibility to drive a company vehicle.
- Consider setting fleet speed limits that are lower than posted speed limits. This might be done fleet-wide, or on regularly-used routes based on risk assessments or crash data.
- Assess whether drivers can complete their assigned driving tasks or routes at safe speeds. Consider not just speed limits, but also whether weather or road construction might affect travel time.

Through training and education:

- Driver training – whether online, classroom, or behind-the-wheel – can send clear messages about the dangers and consequences of speeding.

Through technology:

- In-vehicle monitoring systems (IVMS) generally collect data on vehicle speed. Use IVMS data to coach drivers on the dangers of speeding, and discuss how work can be completed without speeding.

- Intelligent speed adaptation (ISA) systems determine the speed limit by comparing a vehicle's GPS location against a database of posted speed limits and using onboard cameras to recognize speed limit signs. The system gives the driver visual or sound alerts when the speed limit is exceeded, but the driver is responsible for slowing the vehicle. ISA is available on some vehicles sold in the U.S. More advanced ISA systems in Europe that actually take actions to control the vehicle have been shown to be very effective.
- "Speed governors" or "speed limiters," used primarily on large trucks, keep the vehicle from exceeding a set maximum speed.

Driving at high speeds reduces fuel efficiency. +

The U.S. Environmental Protection Agency reports that for most vehicles, gas mileage usually decreases rapidly at speeds above 50 mph. In general, each 5 mph you drive over 50 mph is like paying an additional 20 cents a gallon for gas.

The bottom line: Driving within the speed limit keeps your drivers and others on the road safer, and it can also improve your company's bottom line.

Sources:

¹ 2016 Speeding Traffic Safety Fact Sheet [↗](#)

² 2016 Alcohol-Impaired Driving Traffic Safety Fact Sheet [↗](#)

³ Nilsson, G. (2004). Traffic safety dimensions and the power model to describe the effect of speed on safety. Bulletin 221, Lund Institute of Technology, Lund.

⁴ Tefft, Brian. 2011. Impact Speed and a Pedestrian's Risk of Severe Injury or Death. Washington, DC: AAA Foundation for Traffic Safety.

New Road to Zero Report



The Road to Zero Coalition, managed by the National Safety Council, released a [comprehensive report](#) [↗](#) laying out strategies to end roadway deaths in the U.S. by 2050. The Coalition identified 3 main initiatives to reduce roadway fatalities: double down on what works through proven, evidence-based strategies; advance life-saving technology in vehicles and infrastructure; and prioritize safety by adopting a safe systems approach and creating a positive safety culture

New Fatigued Driving Products



Motor vehicle crashes cause over 40% of work-related deaths in the oil and gas extraction industry. Driver fatigue is a factor in some of these crashes. NIOSH has [employer](#) and [worker](#) fact sheets that identify factors linked to fatigued driving and provide recommendations for keeping oil and gas workers safe on the road. Also consider using our new [Oil & Gas GIF](#) to promote worker safety.

New Law Enforcement Products



Motor vehicle-related incidents are a leading cause of on-the-job deaths for law enforcement officers in the U.S. This NIOSH [infographic](#), [↗](#) co-branded with the National Law Enforcement Officers Memorial Fund, recommends ways that officers can prevent crashes and injuries. Consider using this [GIF](#) in the slides of your next safety presentation.



Questions? Comments? Email kur4@cdc.gov.



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