



The National Institute for Occupational Safety and Health (NIOSH)

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Behind the Wheel at Work – Vol 8 No 1



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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Keep Oil and Gas Extraction Workers Safe on the Road

Motor vehicle crashes cause over 50% of work-related deaths in the **oil and gas extraction (OGE) industry**, according to the Bureau of Labor Statistics, Census of Fatal Occupational Injuries. This month we’re sharing research and resources related to keeping OGE workers safe on the road.

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OGE Companies: NIOSH Needs Your Help

The National Institute for Occupational Safety and Health (NIOSH) is looking for well servicing and drilling companies to collaborate on a study about motor vehicle safety. Our researchers are conducting virtual one-hour interviews with workers and focus groups with managers/supervisors across the U.S. As a research partner, you will get access to a combined summary of collected data findings for all participating companies (the summary will not include company names or identifying information). You are free to share the summary with workers at all levels of your organization. Contact Rosa Rodríguez-Acosta (rer3@cdc.gov or 304-285-6299) for more information.

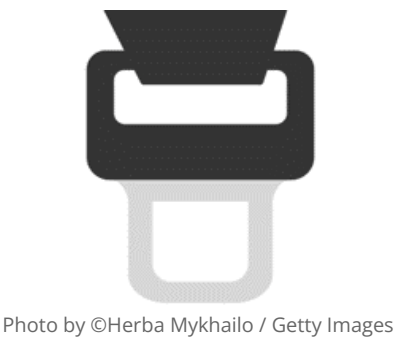


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What We Know about OGE Workers and Driving

The OGE workforce consists of three groups of workers:

- **Workers employed by oil and gas operators** that develop and operate field properties
- **Contractors employed by companies hired by oil and gas operators** that drill oil and gas wells and service existing wells
- **Contractors and self-employed workers from transportation, construction, and other industry sectors** that carry out specific activities such as hauling water used in the hydraulic fracturing process, constructing new oil and gas well pads, and servicing existing wells.

In 2021, 326,160 workers were employed in OGE industry.¹

How does their work relate to driving? Oil and gas extraction workers travel frequently between well sites and travel on rural roads which often lack firm shoulders and rumble strips. They also drive long distances from their homes, lodging sites, or equipment yards, and may not use seat belts. Additionally, OGE workers often work long and irregular hours, which can result in fatigue.

Overall, motor vehicle crashes cause over 50% of work-related deaths in the OGE industry.²

Survey Results: Motor Vehicle Crash Risks among OGE Workers

While several past research studies found that motor vehicle crashes are the leading cause of work-related deaths among oil and gas extraction workers, limited information is available on work-related factors that may influence motor vehicle crash risk for this workforce. Work-related factors may include work schedules, work hours, commuting time, sleep, and employer safety policies.



Photo by © LisLud / Getty Images

To learn more about relationships between these factors and risky driving behaviors, **NIOSH researchers surveyed 500 land-based OGE workers employed by 13 different companies in Colorado, North Dakota, and Texas.**

Results from the survey were recently published in the [American Journal of Industrial Medicine](#) and *Journal of Safety Research* (in press).

The survey revealed the following about commuting, sleep, work schedules, safety policies and risky driving behaviors among OGE workers:^{3,4}

- On average, OGE workers reported a long daily roundtrip commute (1.82 hours), long working hours (12 hours per day), and short sleep duration (6.7 hours on workdays).
- Among those who drove for work (n=363):
 - The majority of workers (67%) reported driving more than 25,000 work-related miles annually, indicating a substantial amount of driving exposure.
 - Many workers have reported engaging in risky driving behaviors, including driving while distracted using a hands-free phone (60%), a handheld cell phone (24%), or texting (18%). Furthermore, 26% of workers reported driving while feeling drowsy, and 27% even reported falling asleep while driving.
 - Few employers had policies on journey management (47%), fatigue management (42%), maximum work hours (39%), and bans on hands-free cell phone use while driving (35%).
 - Workers whose employers did not ban texting and hands-free cellphone use while driving were more likely to use a hands-free cell phone than workers whose employers banned both these activities.


How to Keep OGE Workers Safe from Motor Vehicle Crash Risks

Employers can implement the following motor vehicle safety policies and practices to manage crash risks among OGE workers due to distraction and fatigue.

Distracted driving



Distracted driving is preventable. Hands-free phones are not the solution to distracted driving. There is the misconception that hands-free phones take care of distracting driving, or at least reduce the dangers.



- Ban all phone use (texting, handheld, hands-free) while driving a work vehicle, and ban use of company-issued phones while driving a personal vehicle.
- Communicate to drivers that driving is their primary task when behind the wheel.
- Require drivers to pull over in a safe location to look up directions, text, or to make or receive a call.
- Consider using [cell phone-blocking technology](#)  to avoid cell phone use while driving.
- Consider using in-vehicle monitoring systems that detect and warn drivers of distracted driving behaviors (such as cameras that track eyes and alert the driver when eye gaze is not on the road).
- Remind drivers:
 - Keep eyes on the road and hands on the wheel while driving.
 - Do not use a phone while driving.
 - Pull over in a safe location to look up directions, text, or to make or receive a call.

Fatigued driving

Inadequate or poor-quality sleep, long hours of work or driving, shift work, stress, or sleep disorders, affect the ability to drive safely. There is no substitute for sleep.

- Implement a fatigue management policy and program, and integrate it into your existing health and safety management system.
- Limit the number of hours employees may work and drive per day or trip segment.
- Provide a rested driver to transport workers from remote sites after long shifts.
- Monitor compliance with [federal hours-of-service regulations](#)  for drivers covered by them.
- Implement a workplace sleep disorder screening/management program.
- Practice open communication and check in regularly with drivers to create a culture of caring.
- Provide worker training on sleep health and fatigue management.
- Allow for rest breaks and napping during extended work shifts.
- Offer alternative accommodations with a quiet, dark, and comfortable place to sleep on-site for night or extended shift workers.
- Give supervisors and workers fatigue-symptom checklists and encourage self-reporting.
- Encourage peer monitoring of fatigue symptoms among co-workers.
- Consider implementing an effective [fatigue monitoring and detection device](#)  in company vehicles.
- Remind drivers to:
 - Get enough sleep (7-9 hours each day) on a daily basis. If fatigue continues to persist after adequate sleep, seek screening for health problems that may be affecting your sleep.
 - Avoid driving during the peak sleepiness periods (midnight – 6 a.m. and late afternoon). If you need to drive during those, stay alert for signs of fatigue and drowsiness.
 - Get a good night's sleep before the start of a long commute, or you could put yourself and others at risk.
 - Plan trips to include safe places to take rest breaks.

- If you feel fatigued while you are driving, pull over, drink a cup of coffee, and take a 15–30-minute nap before continuing.

References

¹Bureau of Labor Statistics [2023]. [Quarterly Census of Employment and Wages, annual averages for Oil and gas extraction workers, 2021](#) [↗](#) . Create customized tables.

²Bureau of Labor Statistics, [Census of Fatal Occupational Injuries](#). [↗](#)

³Hagan-Haynes K; Ramirez-Cardenas A; Wingate KC; Pratt S; Ridl S; Schmick E; Snawder J; Dalsey E; Hale C. [On the road again: a cross-sectional survey examining work schedules, commuting time, and driving-related outcomes among U.S. oil and gas extraction workers](#). Am J Ind Med 2022 Sep; 65(9):749-761.

⁴Wingate KC, Pratt S, Ramirez-Cardenas A, & Hagan-Haynes K. The relationships between risky driving behaviors among oil and gas workers and their employers’ motor vehicle safety policies. Journal of Safety Research (2023), in Press.

Resources

- NIOSH web page: [Distracted Driving at Work](#)
- NIOSH web page: [Driver Fatigue on the Job](#)
- NIOSH web page: [Work and Fatigue](#)
- NIOSH fact sheets: [Oil and Gas Workers: How to Prevent Fatigued Driving at Work](#) & [Oil and Gas Employers: How to Prevent Fatigued Driving at Work](#)
- NIOSH newsletter: [In-Vehicle Monitoring Systems \(IVMS\)](#)

More Information

- Please send your comments and suggestions to us: kur4@cdc.gov
- Visit our webpage: [Motor Vehicle Safety at Work](#)