

Sleep Deprivation Is Making Us Unsafe at Work

American workers are tired. According a 2017 Academy of Sleep Medicine and Sleep Research Society [study](#), about 36% of U.S. workers sleep less than the recommended minimum of 7 hours per night. The situation is so bad that the CDC has called insufficient sleep an epidemic. This problem has a multitude of causes, but the results are the same for everyone: an increased risk of injury and bad health outcomes. Research consistently shows that fatigue leads to an increased risk of work-related injuries, including during the daily commute. [Up to 6,000 fatal crashes](#) each year may be caused by drowsy drivers. Sleep deprivation is also linked to cardiovascular disease, obesity, diabetes, depression, and anxiety.

Workers in some occupations suffer more from sleep deprivation than others, especially those who work in shifts or for long durations. Production workers, health care professionals, and people who prepare and serve food have especially high rates of sleep deprivation, as do people who work in transportation. [According to NIOSH](#), “Time at work continues to increase in the United States. U.S. workers have the longest annual working hours among workers in all wealthy industrialized countries, reducing the time available for sleep.”

Many people try to make up for sleep deprivation by sleeping in on the days they don’t work, but this is ineffective, and may actually make things worse. Ideally, you should try to maintain a relatively uniform sleep schedule throughout the week and develop a routine.

It helps to develop a sleep routine. As bedtime approaches, try to keep your household lights dim, avoid drinking stimulants like caffeine or eating heavy meals, and do your best to reduce or eliminate time with bright screens like TVs or laptops. If your work schedule requires you to sleep when the sun is out, try to make your home as dark as you can, especially in the room where you sleep. If you can make a habit of reading or doing other calm activities in the half hour before going to bed, that should help too. Avoid drinking alcohol before going to sleep. You might go to sleep faster that way, but the quality of your rest will be much lower.

How Employers Can Help

Many of the conditions that drive sleep deprivation in the US are beyond workers’ control. Employers can help to fight the sleeplessness epidemic by educating their employees about the importance of sleep (by, for example, sharing articles like this one) and making sleep-friendly policies a priority. Furthermore, it’s in their interest to do so: while estimates vary, there is a broad consensus that sleep deprivation in the workforce costs employers money, both in terms of lost productivity (people get less done when they’re exhausted) and medical costs (sleeplessness can lead to increased work comp claims).

As much as possible, employers should try to give workers predictable, consistent schedules that balance business needs with the human need for sleep. Avoid scheduling workers for more than five or six consecutive day shifts or four consecutive night shifts, and make sure workers have at least two consecutive days off. Providing opportunities for brief naps in the workplace may also help people to stay alert on the job, and has been shown to improve morale and productivity. Altering workplace designs to increase alertness (for example, by increasing the brightness of the lighting, reducing the temperature, reducing humidity, and reducing droning sounds) may help as well, though ultimately sleep is the only true solution to sleep deprivation.



Are You Too Tired to Drive?

You may not be able to judge whether you’re too tired to be behind the wheel. Look out for these warning signs that you need to get off the road:

- Yawning or blinking frequently
- Difficulty keeping your head up
- Having a fixed stare
- Difficulty remembering the past few miles driven
- Drifting from your lane or hitting a rumble strip
- Suddenly tailgating other vehicles
- Wandering, disconnected thoughts
- Missing your exit



Additional Info: [NIOSH webinar series on Working Hours, Sleep, and Fatigue](#); [Safety and Health Magazine article](#); [National Sleep Foundation “sleep hygiene” advice](#); [CDC feature on sleep](#); [OSHA advice for workers and employers](#)

After You Fall: Understanding and Preventing Suspension Trauma

If you work at heights, you hopefully already know how important it is to have proper fall protection. What you might not know is that fall-arrest systems can also cause serious injuries and even death. In order to fully protect yourself and your colleagues from the dangers of falls, you need to understand suspension trauma—what causes it, how to recognize its symptoms, and how to prevent it.

Causes of Suspension Trauma

Imagine a worker whose fall-arrest system has saved her from a potentially lethal fall off a scaffolding. She's dangling upright, twisting in midair, supported by her harness. Because the worker is upright, blood may begin to accumulate in her legs. This is called "venous pooling." It's normal for people to experience some venous pooling—a person standing upright, or even seated in a chair, will naturally have more blood in their lower extremities than a person laying down. However, even people who are seated at desks typically move their legs from time to time, which helps blood to circulate back toward the heart. A person who is suspended in a harness may have difficulty moving their legs, which can very quickly lead to dangerous levels of venous pooling.

Harnesses may directly contribute to this problem, especially if they're a tight fit. With the suspended worker's entire weight supported by her harness, her leg veins may be pinched closed. This makes the venous pooling even worse. Now her body has less blood available to circulate through its systems. Her body reacts by increasing her heart rate in an attempt to provide enough blood flow to the brain, but without sufficient blood, this doesn't work. Her body then abruptly slows her heart, which reduces blood pressure in her arteries. If things get bad enough, the reduction in quantity and/or oxygen content of the blood flowing to her brain will cause her to faint. This can also cause failure in vital organs such as the kidneys. If that happens, the worker may die.

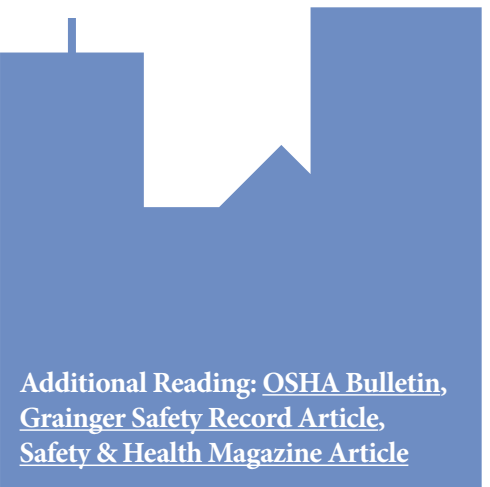
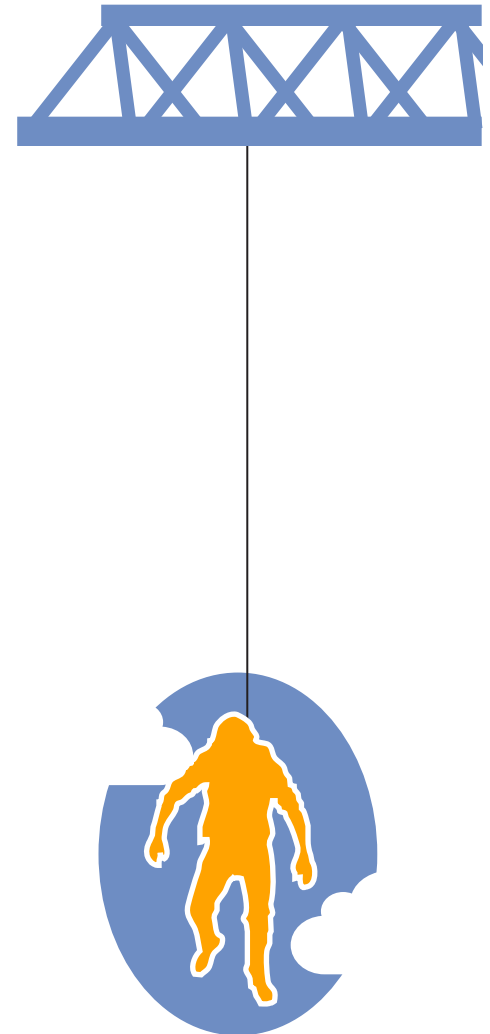
Signs and Symptoms of Suspension Trauma

Suspended workers must be rescued as quickly as possible. The following are signs and symptoms of approaching suspension trauma:

- Faintness
- Sweating
- Increased heart rate
- Dizziness
- Unusually low blood pressure
- Breathlessness
- Paleness
- Nausea
- Unusually low heart rate
- "Greying" or loss of vision

A variety of factors can increase the degree of risk of suspension trauma, including the following: inability to move legs, pain, injuries sustained during the fall, fatigue, dehydration, hypothermia, shock, cardiovascular disease, respiratory disease, and blood loss. A person who is unconscious and cannot move their legs will be at extreme risk.

This Article Continues on Page 4.



Additional Reading: [OSHA Bulletin](#),
[Grainger Safety Record Article](#),
[Safety & Health Magazine Article](#)



Helpful Hints for Safely Enjoying Your Bike

May is National Bike Month, and the summer provides many fun opportunities to get out and pedal. According to [a report](#) by the National Safety Council, 488,123 people were treated in emergency rooms in 2015 for injuries sustained while riding a bicycle. According to the same report, 1,100 deaths resulted from cyclists colliding with motor vehicles that year. This is not to say that you shouldn't use your bike at all—the potential health benefits of regular ridership are tremendous—but that you should be careful when you ride. Fortunately, there are several simple things that you can do to reduce your risk.



Research [consistently shows](#) that cyclists who wear helmets significantly reduce their risk of serious head and brain injuries in the event of an accident. Of course, even with a helmet, it's extremely important to do everything possible to avoid a collision. You should also wear bright clothing for rides during the day and reflective clothing for riding at night. A horn or bell, a rear-view mirror, and a bright headlight also come strongly recommended.

Many cyclists choose to violate traffic laws by running red lights or stop signs, riding against traffic, or ignoring other rules designed to control the flow of traffic. This is extremely unsafe. Remember that the traffic laws that govern cars also apply to cyclists, who are also subject to the same fines and penalties for traffic violations. You should also check local biking regulations if traveling through unfamiliar towns or territory. The key to safe traffic is predictability: if you behave in ways that drivers can't anticipate, that makes it more likely they'll hit you. Work to increase your predictability by signaling before you turn. Learn and use hand signals so other people know what you're going to do before you do it.



Finally, don't be distracted. It's alarmingly common for cyclists to wear headphones or earbuds while they ride. This is a terrible idea, as your hearing is one of the primary ways you can detect a car approaching you from behind. Keep your ears and eyes on the road.

Additional reading: [NSC advice](#) and [report](#), [NHTSA bike safety advice](#)



This June, Join Thousands of Organizations for National Safety Month

It's always Safety Month at the Heartland Center, but many organizations observe National Safety Month in June. You can learn more about the National Safety Council's No One Gets Hurt campaign by Googling "National Safety Month NSC." This year, Week 1 will focus on emergency preparedness, Week 2 will focus on wellness, Week 3 will cover Falls, and Week 4 will cover driving—all topics that are near and dear to our hearts. Learn more and get some free materials for your colleagues at the NSC's National Safety Month website: nsc.org/pages/nsm-public-materials

Preventing Suspension Trauma (Continued from Page 2)

The first step to preventing suspension trauma is knowing it can happen in the first place. It's essential to make sure that everyone who works at heights in your organization has proper fall protection, knows how to use that fall protection (including how to determine whether their PPE is properly worn and fitted), and also understands how successful use of fall-arrest equipment is only the beginning of a suspended worker rescue. The next step is to get them down quickly. OSHA regulations require that employers provide for "prompt rescue of employees in the event of a fall or shall assure that employees are able to rescue themselves." As stated above, suspension trauma can kill in less than half an hour, so you need to know how your coworker will be rescued before that can happen.

Some harnesses come with suspension trauma relief straps that allow them to "stand" while suspended. These straps create a loop that the worker can press against in order to simulate standing, pump their legs, and relieve pressure from their leg straps in order to increase circulation. Workers sometimes remove the pouches that contain these straps for convenience, so this is another reason to make sure your colleagues have been trained regarding the danger of suspension trauma and appropriate preventive measures. Workers without these straps should still be encouraged to pump their legs frequently while suspended if possible, potentially with the help of some nearby foothold, in order to slow venous pooling. However, any such measure is only temporary, as workers will become exhausted over time.

The suspended worker should be monitored continuously for signs and symptoms of suspension trauma. After rescue, the worker should receive standard trauma resuscitation. If they are unconscious, their air passages should be kept open, and they should receive first aid. The worker should also be monitored and evaluated by a health care professional afterward, and in some cases they should be hospitalized. Delayed effects like kidney failure will be difficult to assess immediately after the rescue.

What will you and your organization do to prevent suspension trauma after a fall? Now is the time to make plans.

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