

Between night and day

Shift work can put you in the twilight zone.



A paving crew works the night shift on Interstate 405 in Portland. Photo courtesy of ODOT.

What's the difference between sleep-deprivation and drunkenness? As it turns out, not much.

Both delay reaction times, impair decision-making, and affect performance. One Harvard University study found that 24 hours of wakefulness had the same harmful effect on driving as a blood alcohol content of .10 percent—higher than Oregon's legal limit of .08 percent.

If you employ shift workers (employees who work hours that deviate significantly from a traditional eight-hour daytime shift), you may have already seen some of these effects. That's because shift work can negatively impact the body's circadian rhythms and create sleep disruption, excessive sleepiness, and reduced alertness on the job.

With a few simple strategies, however, employers can create an environment and culture that helps shift workers be more rested, alert, and productive.

A safe environment. It's always important to control safety hazards on the job, but it's especially important to do so for shift workers, who struggle with sleepiness more than daytime workers. You can help promote alertness by providing bright lighting and temperatures at the low end of the comfortable range.

Access to healthy food. Studies suggest that lack of sufficient sleep tends to disrupt hormones that control hunger and appetite. The research also suggests that workers who have access to healthy food options at night are less likely to give in to carbohydrate cravings that often accompany fatigue. It may be helpful for shift workers to schedule meals and snacks for the same times every day, whether it is a work day or not.

A place to sleep. Some employers might resist the idea of providing safe sleeping areas for shift workers, but the research suggests that taking a short nap during a lunch break may be the most effective way to stave off sleepiness, increase alertness, and improve morale. To be most effective, naps should be limited to about 20 to 30 minutes.



Access to exercise facilities. A burst of moderate-intensity exercise between 12:30 and 2:00 a.m. has been shown to delay release of melatonin, which promotes sleepiness. Studies suggest that exercise may also improve alertness the following day.

Sleep training. It's true that some employees never adjust to a daytime sleep routine, but many are able to improve their sleeping habits with adequate training on sleep skills. Research suggests that trained workers sleep longer, get better daytime sleep, and use less caffeine. It also helps to include families in sleep training programs.

A schedule that works for the employee. Scheduling for shift workers should consider business needs, nature of the work, crime and violence risks, availability of public transportation, child care considerations, and other factors that affect employees' work environment and work-life balance. The research suggests that employees who are involved in their own scheduling find it easier to stay awake at night.

Fatigue-management culture. The culture of your organization can go a long way toward promoting the health and alertness of your shift workers.

"It's important for everyone to be aware of the fatigue levels of those around them—including their own—and to speak up if needed."

—Deb Fell-Carlson, SAIF's policyholder safety and wellness adviser

SAIF encourages employers to solicit feedback from shift workers about how they manage fatigue. It's also important to consider fatigue levels when performing an accident/incident analysis.

"It should be OK for employees to report concerns about feeling fatigued," said Fell-Carlson. "The more you know about how your shift workers are feeling, the more you can offer support and training to foster a safe and healthy work environment." CN