

Implement a Fatigue Risk Management System



If your workplace is filled with hazardous chemicals and dangerous machinery, you may not even think about protecting workers from fatigue. After all, fatigue isn't a workplace hazard—it's just a fact of life that workers need to manage on their own. This kind of thinking about worker fatigue may be common but it's also short-sighted. For example, fatigue can lead to safety incidents because exhausted workers may have slowed reaction times or exercise poor judgment. The American College of Occupational and Environmental Medicine's (ACOEM) Presidential Task Force on Fatigue Risk Management recently published a guide on fatigue risk management systems. Here's a look at how you can use the guide to manage worker fatigue in your workplace.

Impacts of Worker Fatigue

Yes, everyone experiences some degree of fatigue as one point or another. But we're not talking about general sleepiness here. Sleepiness is merely the general tendency to fall asleep. On the other hand, fatigue, as the ACOEM guide explains, is the body's response to sleep loss or to prolonged physical or mental exertion. (See the box on the right for some of the physical, mental and emotional signs of excessive fatigue.)

Fatigue can have a variety of causes, including shift work such as working nights or rotating shifts. Many studies have

shown that shift work can lead to sleep issues, which in turn can lead to injuries. For example, a [study](#) by researchers at the University of British Columbia showed that Canadians who work nights and rotating shifts are almost twice as likely to be injured on the job than those working regular day shifts.

Fatigue and the decreased alertness resulting from insufficient or poor quality sleep can have several safety-related consequences, including:

- Slowed reaction time;
- Reduced vigilance;
- Impaired decision-making ability;
- Poor judgment;
- Distraction during complex tasks; and
- Loss of awareness in critical situations.

Safety isn't the only aspect of the workplace impacted by fatigue. For example, one study estimates that companies lost \$1,967 per worker per year in lost productivity due to sleep loss.

Implement a Fatigue Risk Management System

You can use a fatigue risk management system to address worker fatigue issues in your workplace. Such systems are similar to OHS systems and can, in fact, be incorporated into an existing OHS system. According to the guide, the key components of a fatigue risk management system include:

Fatigue management policy. This policy should spell out how the company plans to address fatigue in the workplace, including the roles and responsibilities of all stakeholders. (Click [here](#) for a Model Fatigue Management Policy.)

Fatigue risk management. To manage fatigue in your workplace, you must collect information on fatigue as a hazard, analyze its risks and implement controls to mitigate those risks. The guide says there are five basic ways to avoid safety errors

caused by fatigue:

1. Balance between workload and staffing;
2. Shift scheduling;
3. Worker fatigue training and sleep disorder management;
4. Workplace environment design; and
5. Fatigue monitoring and alertness for duty.

Fatigue reporting system. The guide recommends establishing a reporting system workers can use to report incidents caused by fatigue or when they feel so fatigued that they're unfit to work safely. This system should be simple and straightforward.

Fatigue incident investigation. When workers report incidents in which fatigue was a factor, you must investigate such incidents promptly and effectively. This investigation can simply be incorporated into your standard incident investigation. It should focus on the role fatigue played, why the worker was fatigued and why any fatigue-control mechanisms in place failed.

Fatigue management training and education. The company should train management and workers on the fatigue risk management system. The guide suggests that this training cover:

- Hazards of working while fatigued and the benefits of being well rested;
- Impact of chronic fatigue on personal relationships, mental/physical well-being and general happiness;
- Recognizing that although fatigue can't be eliminated, it can be managed and minimized;
- Adequate quantity and quality of sleep is key to managing fatigue;
- Basics of sleep physiology, circadian rhythms and what's considered adequate
- sleep;

- Sleep hygiene—that is, how to obtain adequate quality and quantity of sleep;
- Sleep disorders—why they matter, how to tell if you may have one and what to do about it;
- Importance of diet, exercise, stress management and management of other health conditions that affect fatigue;
- How to recognize fatigue in yourself or your co-workers; and
- Alertness strategies to be used while at work, such as appropriate use of caffeine, rest or exercise breaks and social interactions.

Sleep disorder management. One of the most common causes of fatigue is an underlying sleep disorder. So it's beneficial for companies to set up sleep disorder management programs that screen workers for sleep disorders and help them get appropriate treatment.

Process for internal and external auditing of the system. As with any safety management system, your fatigue risk management system should be regularly audited to ensure that it's effective and up-to-date and to implement any corrections or improvements.

Signs of Excessive Fatigue

Physical signs:

- Yawning
- Drooping eyelids
- Rubbing of eyes
- Head dropping
- Microsleeps
- Digestive problems

Mental signs:

- Difficulty concentrating on tasks
- Lapses in attention
- Difficulty remembering tasks being performed
- Failing to communicate important information
- Failing to anticipate events or actions
- Accidentally doing the wrong thing
- Accidentally not doing the right thing

Emotional signs:

- More quiet or withdrawn than usual
- Low energy
- Lacking the motivation to perform a task well

BOTTOM LINE

For a fatigue risk management system to be effective *all* stakeholders must be actively engaged in it. But the guide stresses that its success depends on the commitment of a senior manager who's ultimately accountable for managing fatigue risk. In addition, a positive safety culture in which workers and management trust one another and information about fatigue is openly reported is important to the successful implementation of such a system. Safety coordinators can use the ACOEM guide to get buy-in from both management and workers on the need for a fatigue risk management system and to set up such a system once approved.

INSIDER SOURCE

"Fatigue Risk Management in the Workplace," ACOEM Presidential Task Force on Fatigue Risk Management, *JOEM*, Vol. 54, No. 2, Feb. 2012.