Fatigue: The Safety Risks and How to Manage Them

April 18, 2012 – Electricity, toxic chemicals, bone-crushing machines, fall hazards and fire are just some of the dangers the 20th century workplace health and safety programs were designed to root out.

The safety program of the new millennium must deal not just with these old enemies but new threats that are still not fully recognized or understood—ergonomics, workplace violence, mental stress and what may be the newest of the newfangled hazards—fatigue.

Fatigue as a Safety Hazard

Fatigue is more than simply sleepiness. It's the body's response to sleep loss and/or prolonged physical or mental exertion, e.g., as a result of working nights or rotating shifts. Over time, this can result in physical and mental damage.

But it's the immediate effects of fatigue that make it such a significant safety risk. Fatigue does things to workers' minds and bodies that make them more likely to get hurt on the job, such as:

- Slowing their reaction time;
- Reducing their level of vigilance;
- Impairing their judgment and ability to make decisions;
- Making them more distractible; and
- Causing them to lose awareness in critical situations.

(By the way, fatigue also reduces productivity—to the tune of $1,967 per worker each year, according to one study.)

Managing Fatigue Risks

Progressive companies have been quick to grasp the danger and develop systems to manage it. If you're wondering what the state-of-the-art fatigue risk management system looks like, a Feb. 2012

guide from the American College of Occupational and Environmental Medicine's (ACOEM) is a pretty good place to look.

The Fatigue Risk Management System

Such systems are similar to OHS systems and can be incorporated into an organization's existing OHS system, according to the ACOEM. The guide lists the key elements of a fatigue risk management system, including:

A fatigue management policy spelling out how the company plans to address fatigue in the workplace and lists the roles and responsibilities of all stakeholders.

Fatigue risk management which involves collecting and analyzing relevant data to assess fatigue hazards and implementing controls to minimize identified risks. The ACOEM identifies 5 types of controls:

1. Balancing 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 that workers can use to report when they feel unfit to work safely as a result of fatigue or report workplace incidents caused by fatigue.

Fatigue incident investigation which should basically parallel standard incident investigation but also focus on the role played by fatigue, why the worker was fatigued and why any fatigue-control mechanisms in place failed.

Fatigue management training and education of both management and workers on the fatigue risk management system, including:

- 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;
- Recognition that while fatigue can’t be eliminated, it can be managed;
- The key role quantity and quality of sleep play in managing fatigue;
- Basics of sleep physiology and circadian rhythms;
- Sleep hygiene, i.e., how to get adequate sleep;
- The potential results of sleep disorders and how to manage them;
- Importance of diet, exercise, stress management and management of other health conditions;
- How to recognize fatigue in themselves or co-workers; and
- Alertness strategies to use at work, e.g., caffeine, rest or exercise breaks.

Sleep disorder management programs that screen workers for sleep disorders and help them get appropriate treatment.

System auditing on a regular basis to ensure that it’s effective, identify weaknesses and implement corrections or improvements.