New Study Examines Causes of Occupational Fatigue

Safety professionals know that fatigue is a safety hazard that can impair workers' mental and physical performance, causing serious errors and injuries. Sleep deprivation and lack of quality sleep can clearly result in fatigue. But are there other causes as well'

According to a review and update published in the October issue of the *Journal of Occupational and Environmental Medicine*, sleep loss and poor working conditions are the most important causes of occupational fatigue.

Matthew Hallowell, PhD, and colleagues of University of Colorado at Boulder analyzed previous research to develop a 'comprehensive systems model' of the interrelated causes and consequences of occupational fatigue. Fatigue, which may be acute or chronic, is defined as 'a decreased ability to perform activities at the desired level due to lassitude or exhaustion of mental and/or physical strength.'

Based on available data, the researchers found that the major drivers of fatigue were sleep deprivation and factors in the work environment, such as noise, vibration and temperature. These causes could all interact with other factors, such as increased work load and long work hours.

The most significant consequences of fatigue were short-term degradation in thinking and physical functioning. Illnesses, human error and injuries also occurred to a lesser extent.

Evidence suggested that some consequences of fatigue can make other outcomes worse, reinforcing fatigue and leading to a ‘downward cycle.’

The OHS Insider has information and resources you can use to prevent fatigue from impacting workers’ job performance and endangering their safety, including:

- The impact of sleep apnea on worker safety
- Implementing a fatigue risk management system
- A Model Fatigue Management Policy
- Fatigue Hazards Identification Checklist
- Fatigue Self-Reporting Form
- A worker fatigue infographic.