



Workplace Fatigue: Causes, Consequences and Managing Risks

Fatigue describes feelings of tiredness, reduced energy and increased effort needed to perform tasks at a desired level. It decreases a worker's ability to think clearly, make informed decisions, and be a safe and productive worker. Fatigue affects every workforce.

Causes

There are three main causes of fatigue in the workplace:

1.) Sleep Loss

Humans require adequate sleep (7-9 hours for adults) in order to function. Sleep loss, a cause of fatigue, happens when a person loses a sufficient amount of sleep or stays awake for a long period of time. More than 1 in 3 Americans are working with sleep debt. Major barriers to getting proper sleep are sleep disorders. There are 80 types of sleep disorders, but the most common are sleep apnea and insomnia. Nearly 90% of cases go untreated.


2.) Time of Day

Humans are biologically programmed to be asleep at night and alert during the day. When we work during nighttime hours we are working against our biological clock, called our circadian rhythm. Working at night also means needing to sleep during the day, which is very hard for most people.

3.) Time on Task

It is difficult for us to conduct the same task for long periods of time. Tedious tasks cause us to lose our attention. Cognitively demanding tasks are simply tiring. The longer you perform the same tasks the more your attention, speed and accuracy decline.

Organizational factors like safety culture, shift scheduling practices and absence of a fatigue risk management system can also contribute to the fatigue burden in the workplace. Characteristics of the work environment may contribute to the occurrence of fatigue, such as temperature, lighting and noise. The type of task an employee does can affect his or her level of fatigue.



Fatigue is a problem that goes largely unaddressed.

The Consequences

Fatigue affects our basic cognitive functions which decreases our job and safety performance. In the long-term, fatigue has both health and economic consequences.

Cognitive declines

When fatigued, an individual will experience a decrease in their ability to perform basic cognitive functions resulting in a decline in a number of vital activities such as attention, vigilance and memory.

Job and safety performance

Decreases in cognitive performance lead to a decline in job and safety performance. An individual will become slower, more error prone and less productive thus increasing their risk of a negative safety incident. In fact, one study estimated fatigue contributes to 13% of workplace injuries. The National Transportation Safety Board estimates fatigue is a contributing factor in 20% of their investigations.

Health and economic costs

Research has demonstrated that fatigued individuals are an economic strain to themselves, employers and society due to decrease productivity, increased risk of negative safety outcomes and increased illness. A chronically fatigued individual will become more at-risk to health problems like cancer and heart disease.

What Employers Can Do

Fatigue is a problem that affects all of us, has negative effects on our health and safety both on and off the job. Yet, it goes largely unaddressed.

- 1.) Learn** about fatigue in the workplace, its costs, its causes and how fatigue can lead to a higher rate of safety incidents
- 2.) Educate** employees on fatigue, sleep health and sleep disorders
- 3.) Investigate** the causes of fatigue in their workplace, and implement fatigue risk management as part of a safety management system

¹Uehli, K., Mehta, A. J., Miedinger, D., Hug, K., Schindler, C., Holsboer-trachsler, E., ... Künzli, N. (2014). Sleep problems and work injuries: A systematic review and meta- analysis. *Sleep Medicine Reviews*, 18(1), 61–73

²National Transportation Safety Board. (2016). *Most Wanted Transportation Safety Improvements. Reduce Fatigue-related Accidents.*

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