FATIGUE

IN THE WORKPLACE

RISKY
EMPLOYER
PRACTICES

Part two of a three-part series • Based on results from the 2017 Employer Survey on Workplace Fatigue

Contents

WHAT IS
FATIGUE?

Fatigue is a debilitating and potentially deadly problem affecting many Americans.

The symptoms of fatigue include tiredness, sleepiness, reduced energy and increased effort needed to perform basic tasks. Many factors cause fatigue, the most obvious being sleep loss. However, factors in addition to sleep deprivation can play a role in employees' ability to get proper rest or how much fatigue they experience. Shift schedule, tasks performed and work environment also play a role. As reported in *Fatigue in the Workplace: Causes and Consequences of Employee Fatigue,* nearly every American worker (97%) is at risk for fatigue, and therefore fatigue likely affects every workforce.

About This Report

Fatigue in the Workplace: Risky Employer Practices is the second in a three-part series of reports produced by the National Safety Council on the prevalence of fatigue in the American workforce. This report releases new data from the Employer Survey on Workplace Fatigue conducted in June 2017 with 504 human resources decision makers who are responsible for health, safety and/or shift scheduling.

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About the National Employee Survey

The current report provides references to the National Employee Survey, with results released in the first part of this three-part series, *Fatigue in the Workplace: Causes and Consequences of Employee Fatigue.* The National Employee Survey are the results of a probability-based study of 2,010 working adults. The survey sample was balanced according to U.S. Census figures of age, gender, ethnicity and geographic region. Interviews were completed February−March 2017.

How is Fatigue Affecting My Workforce?

When employees are fatigued, it decreases their ability to think clearly, make informed decisions and be safe and productive. A 2014 meta-analysis of 27 observational studies estimated up to 13% of injuries in the workplace could be attributed to fatigue.[1] Risk of injury can be reduced by identifying and managing the many factors that contribute to fatigue.

Causes and Consequences

In the workplace, fatigue can be caused by a myriad of factors, such as work schedules, environmental conditions and job demands. Fatigued employees are less productive and more prone to mistakes and missing work. Fatigue also increases the risk of injury and near misses on the job.

Workplace vs. Employee Risk Factors

Fatigue is most commonly caused by not getting enough sleep or working against the body's natural clock. But fatigue can also be accrued in the workplace through risk factors such as long hours or a lack of rest breaks. In the report *Fatigue in the Workplace: Causes and Consequences of Workplace Fatigue,* employee risk factors for fatigue such as sleep loss and commute length were investigated. This report looks at risk factors in the workplace that may contribute to the accumulation of fatigue and put employees at risk.

Managing Fatigue in the Workplace

Identifying factors that cause fatigue and implementing countermeasures to control them are ways to reduce health and safety risks in the workplace. Managing fatigue risk is an important component of any safety management system.
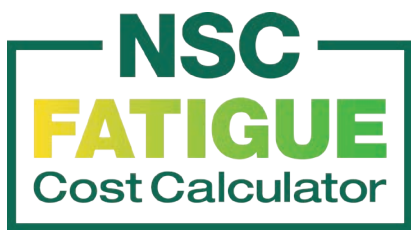
FATIGUE

[1]Uehli, 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.

Impact of Fatigue in the Workplace

Fatigue is a safety hazard in the workplace, and it affects productivity as well. Fatigue affects employees' ability to think clearly, slows reaction time, and decreases attention, vigilance, short-term memory, judgment and other functions. Tired employees are less productive (presenteeism) and more likely to miss work (absenteeism). When employees are not thinking clearly, they are more likely to make mistakes that can be costly or even deadly. For more information about the causes and effects of fatigue check out *Tired at Work: How Fatigue Affects Our Bodies* at nsc.org/TiredatWorkReport

90% of employers reported being negatively impacted by fatigue.

NSC FATIGUE Cost Calculator

47% of employers have experienced decreased productivity due to fatigue

50% of employers have had an employee fall asleep on the job

57% of employers report absenteeism due to fatigue

32% of employers report injuries and near misses due to fatigue

Do you know how much fatigue is costing your organization?

Sleep disorders are common, but they often go undiagnosed and untreated. Reduced alertness due to sleep deficiency or untreated sleep disorders contribute to missed workdays, lower productivity, increased health care costs, workplace injuries and motor vehicle crashes.

A typical employer with 1,000 employees can expect to lose more than $1 million each year to fatigue.

Visit nsc.org/TiredatWork to find out how much fatigue is costing your company.

Fatigue-Related Workplace Policies and Practices

Shift Scheduling Practices and Fatigue Risk

Our 24/7 culture of around-the-clock operations requires employees to cover shifts in the night and early morning hours. Manufacturing, transportation and emergency medical services must operate at all hours of the day. Humans are biologically programmed to be asleep at night, making shiftwork a risk factor for fatigue. Fatigue risk also increases when employees work extended hours or overtime.

Shift scheduling can contribute to fatigue, but identifying risky practices and implementing effective scheduling practices can help reduce or manage fatigue risk.

Night shift workers are three times more likely to be injured.

Swaen, G. M. H., Van Amelsvoort, L. G. P. M., Bültmann, U., & Kant, I. J. (2003). Fatigue as a risk factor for being injured in an occupational accident: results from the Maastricht Cohort Study. *Occupational and Environmental Medicine*, 60 Suppl 1(May), i88–i92.

Scheduling Practices for Employers Using Night Shifts

Employer practice	Risk effect	Percent of employers using this practice
Employees working a night shift immediately before or after a day shift	Increases fatigue risk	51%
No predetermined end time for night shifts	Increases fatigue risk	49%
Limiting the number of consecutive night shifts	Manages fatigue risk	40%
Allowing naps or rest breaks during night shifts	Manages fatigue risk	13%

## Night shifts

47% of employers rely on night shifts

Night shifts carry additional risk for fatigue and fatigue-related safety incidents. Night shift workers must fight against the body's natural clock during these hours, making them less alert on the job. They also struggle to get sufficient sleep during the day, commonly reporting a reduction in quantity and quality of sleep. This has safety implications, especially when commuting to and from work, or for those who work on safety-sensitive tasks.

Does your workplace have rest areas?

60% of employers have no designated area for employees to rest

Rest areas are an effective way for an employee to recuperate from fatigue that develops during a shift. Research shows short-duration rest breaks can reduce risk of work-related injuries.[2] Rest breaks that allow short naps are even more effective at mitigating fatigue.[3] Even a 20-minute nap can help employees stay alert for the remainder of their shift. Unfortunately, the survey found only 13% of employers with night shifts allow naps or rest breaks.

Research shows short-duration rest breaks can reduce risk of work-related injuries.
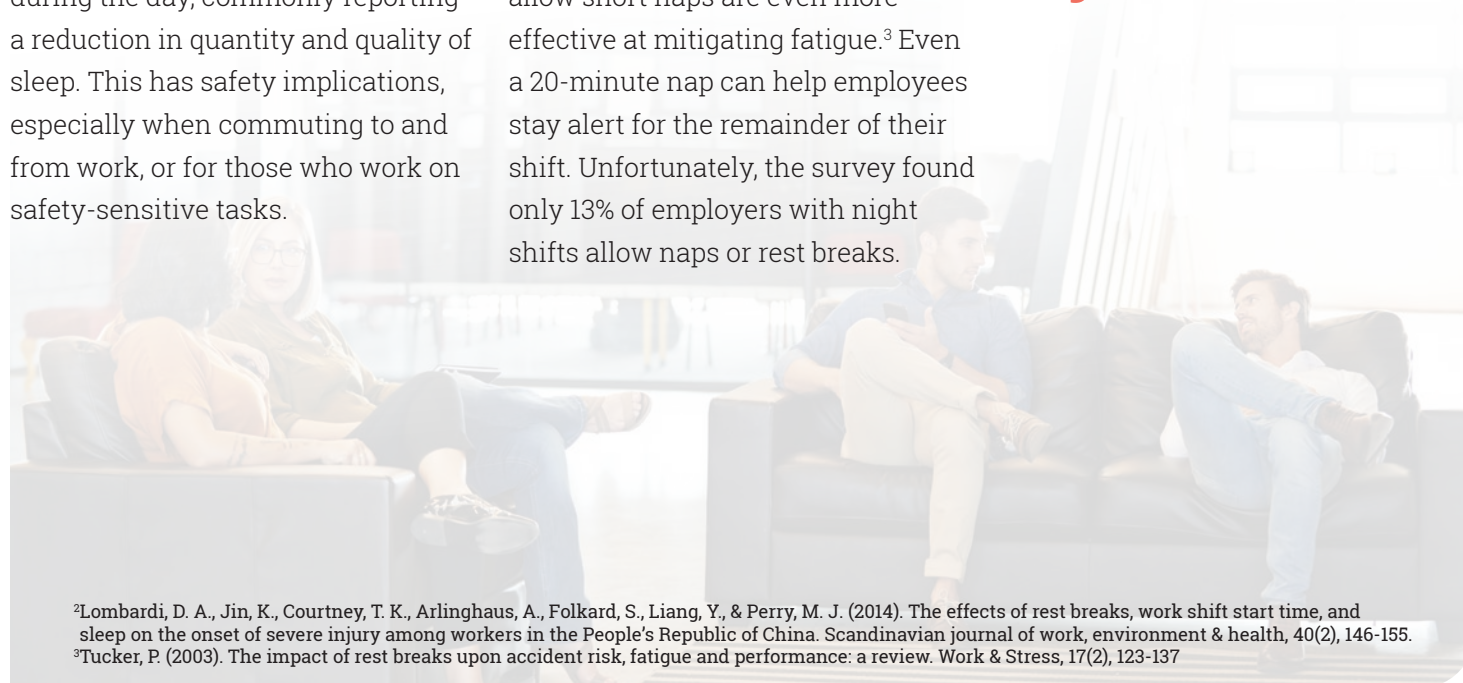
[2]Lombardi, D. A., Jin, K., Courtney, T. K., Arlinghaus, A., Folkard, S., Liang, Y., & Perry, M. J. (2014). The effects of rest breaks, work shift start time, and sleep on the onset of severe injury among workers in the People's Republic of China. Scandinavian journal of work, environment & health, 40(2), 146-155.
[3]Tucker, P. (2003). The impact of rest breaks upon accident risk, fatigue and performance: a review. Work & Stress, 17(2), 123-137

Overtime

46% use extended hours or overtime

Overtime or shifts with extended hours put a strain on the workforce. Most employers that use overtime rely on it most of the year to cover operations (77%). Employees who work long hours accumulate fatigue throughout the shift, increasing their risk for accident and injury. In fact, one study showed injury risk begins increasing after 8 hours, with a 13% increase on a 10-hour shift and a 30% increase on a 12-hour shift.[4] Long hours also takes away from time to recuperate with sleep. Working long shifts on a regular basis contributes to sleep deprivation which affects health and wellbeing.

Long Hours
The longer the shift, the higher the risk.

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Our National Employee Survey found more than half of employees working overtime were not getting enough sleep.

Written policies?
Almost two-thirds of employers (63%) have written policies limiting the number of hours an employee can work.

Managing fatigue through workplace policies and practices

Utilizing best practices in shift scheduling can help reduce the fatigue burden on shift workers.

General shift scheduling practices
- Forward-rotate shifts (day-afternoon-night) and provide at least 12 hours of time off between shifts
- Slowly rotate shifts (for example, two weeks on day shifts, two weeks on night shifts)

Manage the risk of long hours
- Avoid quick shift returns. Ensure employees have enough time off between shifts to allow for commuting, personal responsibilities and at least seven hours of sleep. Ten to twelve-hour shift return minimums should be considered.

Manage the risk of night shifts
- Provide opportunity for recovery rest when an employee rotates on or off of a night shift; a full night's rest is optimal
- End night shifts at a predetermined time to ensure adequate time off for rest; 12 hours off between shifts is optimal
- Limit the number of consecutive night shifts to four nights in a row, and allow ample opportunity for recovery rest
- Allow 30–40 minute naps during night shifts to decrease fatigue burden

[4]Folkard S, Lombardi DA. Modeling the impact of the components of long work hours on injuries and "accidents" American Journal of Industrial Medicine. 2006;49:953–963.

Fatigue & Workplace Safety Culture

Risk Factors for Fatigue in Workplace Safety Culture

Workplace culture is an important element of a safety management system. Culture refers to the attitudes, beliefs, and behaviors within an organization. Organizations with a strong safety culture report fewer injuries than organizations without strong safety cultures.[5]

Is your workforce tired?

74% of employers underestimate the prevalence of fatigue in the workforce

Most employers, 74%, believed only a minority of their workforce was at risk for fatigue. In fact, employers estimated on average that only 30% of their workforce was at risk for fatigue. Findings from our National Employee Survey showed that nearly every employee surveyed, over 2,000 nationwide, indicated at least one risk factor for fatigue. Even more surprising, 80% of employees reported two or more risk factors for fatigue. This demonstrates a lack of awareness among employers on how widespread the risk of fatigue is among the American workforce.

Do you talk about fatigue in the workplace?

73% do not communicate with employees about fatigue

The first step in managing fatigue risks is to have open and honest conversations about fatigue as a workplace hazard. Communicating about fatigue in the workplace increases awareness about the causes of fatigue, and the associated safety and performance risks. Workplaces that do not communicate about fatigue are missing an opportunity to strengthen their safety culture.

Do employees feel comfortable reporting safety concerns due to fatigue?

61% of employers believe employees would not be comfortable admitting they are too tired to perform their job safely

Fatigue can diminish an employee's ability to think clearly, perform optimally, and be a safe and productive worker. Tired employees can put themselves and others at risk. It's important to create a culture where employees feel comfortable telling a supervisor if they feel too tired to do their job safely. The survey found only 27% of employers have formal channels for employees to report feeling fatigued.

Does your workplace see long hours with little sleep as a badge of honor? Or as a safety hazard?

[5]National Institute for Occupational Safety and Health (2011). Stop Sticks Campaign. Access on March 9th, 2018 at https://www.cdc.gov/niosh/stopsticks safetyculture.html

How do employers handle an employee who is struggling with fatigue?

91% of employers believe they can recognize a fatigued employee

What do employers do when an employee repeatedly shows up for work too tired to perform optimally?

- 90% will meet with the employee to understand why
- 74% will review the employee's schedule
- 69% will issue a warning or disciplinary action
- 55% will adjust employees' schedule and/or tasks to accommodate

Disciplining employees for fatigue prevents open and honest communication and can prevent future reporting.

Managing fatigue through workplace safety culture

Many employers are beginning to recognize that long days and overly tasked employees do not produce better results, but instead produce burnout and fatigue, directly affecting employees' health and safety. Understanding that limitation and recognizing fatigue as a hazard in the workplace is the first step to managing the risks.

Communicate about fatigue

- Have an open dialog about fatigue as a workplace safety hazard
- Discuss the importance of sleep health, how to get better sleep, and how to get screened for a sleep disorder
- A 5-minute safety talk is an easy way to start talking about fatigue in the workplace

Rest breaks

- Provide areas for rest breaks
- Encourage employees to take breaks during their shift
- Worksites with night shifts should provide space and opportunities for short naps

Get educated on workplace fatigue and sleep health

- Learn about risk factors for fatigue in the workplace
- Educate employees on how to get better sleep, and how to get assessed for a sleep disorder

Fatigue risk management is a necessary component of an effective safety management system.

Managing Fatigue Through Safety Systems

An effective and comprehensive safety management system should recognize and address fatigue as a potential hazard in the workplace. The best way to identify fatigue risk is to conduct an assessment and include fatigue in incident reporting. Identifying and minimizing factors that cause fatigue allow you to control health and safety risks in the workplace.

Fatigue risk management systems include policies, practices, programs and procedures that incorporate fatigue management into an existing safety management system.

Do Employers Feel Prepared to Manage Fatigue?

Managing fatigue is key to reducing risk of accident or injury. It can be done through a combination of policies, practices, programs and a safety culture that recognizes fatigue as a hazard. Yet, a quarter of employers do not feel prepared to manage fatigue.

One in four employers do not feel prepared to deal with fatigue.

Resources for Employers

Explore the first report in this series, *Fatigue in the Workplace: Causes and Consequences of Employee Fatigue* at **nsc.org/FatigueReport**

What makes an employer feel prepared?

Having policies and programs in place to combat employee fatigue is the driving force in organizational preparedness. By comparison, the primary reason employers feel unprepared is lack of focus and not having policies in place.

Why do you feel your organization is prepared?

22% Policies or programs are in place
9% Organization promotes rest
8% Safety training
8% Limits on hours worked

Why do you feel your organization is not prepared?

22% Fatigue is not an organizational focus
21% No policies in place
11% Unexpected deadlines or emergencies may arise
10% No training

What are employers saying?

"Supervisors are taught to watch out for 'overworking' their employees, and offer days off every so often."

"There are no policies in place, and fatigue/worker morale is not talked about much."

"We have always taken the correct measures to ensure that workers are rested and ready for work or they take time off."

"Emergency situations constantly arise, causing overtime with little notice."

Learn more about fatigue in the workplace on our resource page at **nsc.org/fatigue**

Calculate the cost of fatigue in your workplace at **nsc.org/TiredatWork**

Visit
nsc.org/fatiguekit

Eliminating Preventable Deaths™