

Shift Work and Accident Rates: Are They Related?

Shift work is defined as work performed primarily outside the typical daytime hours, includes evenings shifts, rotating shifts, irregular shifts, extended-duty shifts, and flextime. Shift workers do not follow the conventional pattern of human behavior, where activity is highest in the day and evening hours. So many industries utilize shift work schedules that nearly 15 million full-time workers in the United States work shifts outside the traditional 8 to 5 workday, according to the Bureau of Labor Statistics.

Many studies have been conducted to evaluate the effects of shift work and overtime on the rate of injuries in the workplace. These studies revealed the following:

- Work-related injuries increased 15.2 percent on second shift and 27.9 percent on third shift relative to the first shift.
- Injury risk increased linearly after the eighth hour of a shift, with risk increasing 13 percent on a 10 hour shift and almost 30 percent on a 12 hour shift.
- As consecutive shifts increase, injury risk also increases, but at a higher rate for night shifts than for day shifts. Average risk for injury is 36 percent higher on the last night of a four consecutive nights shift compared to 17 percent on day shift.
- Injury risk also increases as time between breaks increases. The last 30 minutes of a two hour work period has twice the risk of injury of the 30 minutes immediately after the break.

One way to combat these problems is to evaluate the combined effect of work scheduling factors rather than to just limit total work hours. For example, scheduling four 12-hour day shift with hourly

breaks will produce less risk than six 8-hour night shifts with hourly breaks. Both shift schedules add eight hours of work, but only one has significantly less risk of injury.

So why is the risk of injury in the workplace so much greater on night shift and with increased overtime? We need to look to the internal body clock or circadian rhythm which affect how alert people feel. This affects their ability to perform. People perform best when alertness and internal body activity are high and worst when alertness and activity are low. In the normal day-work, night sleep situation, people work when the circadian rhythm is high and sleep when it is low. On average, this schedule is best for performance, which means it also is best for safety. When working the night shift, a person is performing at the low-point of the circadian rhythm which affects his or her physical activity and the ability to concentrate. Poor performance could affect both productivity and safety.

For those situations when you have to schedule night shifts, here are some way to help combat the increased risk of injury:

- Keep consecutive night shifts to a minimum: Four night maximum in a row.
- Educate workers on the importance of getting enough good sleep. Suggest they use blackout drapes, turn off phone and use a fan or white noise to mask daytime noises.
- Consider alternatives to adopting permanent night shifts. Most workers never fully adapt to night shift work because they go back to daytime schedule during days off.
- Avoid quick changes, and adjust shift length to the workload.

(Source: JOEM and NIOSH)

Wellness in the Workplace

Wellness has become an important issue in all aspects of business. Employers need to be aware of the advantages that healthy employees bring into the workplace. If people are active and healthy they are likely to have more energy, and more energy is equivalent to a highly productive employee. Many employers may think they are too small to initiate a wellness program at their office, but in reality any business can start up a program.

There is a wide range of activities that employees can participate in. A small facility may start a walking or jogging program during the lunch hour or after work. Instead of having donuts in the morning, switch to bagels and light cream cheese, or a fruit plate. The larger the facility the more elaborate the program may become. Different companies have developed full service gyms on company property or made gym memberships available to their employees.

There is more to wellness than exercise, and companies can offer informational seminars to their employees. Some important topics in wellness are smoking cessation, stress management, weight reduction/control, blood pressure, and cholesterol. A company may have an employee well educated in wellness that could make presentation on these topics, or they may go to outside sources. There is a wealth of information available on the internet and your industrial medical clinic can also be a resource. HealthFirst has a video library available to our companies to utilize for their wellness programs.



The following are some of the benefits of offering a workplace wellness program:

- Lower Health Care Costs
- Reduced Absenteeism
- Higher Productivity
- Reduced Use of Health Care Benefits
- Reduced Worker's Comp/Disability
- Reduced Injuries
- Increased Morale and Loyalty

Tips to Increase Fuel Efficiency

With gas prices higher than ever and not expected to significantly decline in the near future, drivers should know that there are many actions they can take to improve gas mileage and save money.

- **Avoid idling.** Idling gets zero miles per gallon. Avoid drive-up windows, park and go inside instead.
- **Keep tires properly inflated.** Under-inflated tires can decrease your gas mileage by around 3 percent. Plus, properly inflated tires are safer and last longer.
- **Drive sensibly.** Aggressive driving (speeding, rapid acceleration and braking) wastes gas. It can lower your gas mileage by 33 percent at highway speeds and by 5 percent around town.
- **Observe the speed limit.** Gas mileage decreases rapidly at speeds above 60 mph. Each 5 mph you drive over 60 mph is like paying an additional \$0.15 per gallon of gas.
- **Consolidate trips.** Combining errands into one trip saves you time and money.
- **Minimize drag.** Drag reduces fuel efficiency. Driving with the windows open, using roof or rear mounted racks and carrying heavy loads increase vehicle drag.
- **Keep engine properly tuned.** Fixing a car that is noticeably out of tune or has failed an emissions test can improve its gas mileage by as much as 4 percent.
- **Check and replace air filters.** Replacing a clogged air filter can improve your car's gas mileage by as much as 10 percent.

(Source: Fuel economy.gov)

Reserve Flu Shots

HealthFirst Medical Group will be giving flu vaccinations starting in the early part of October provided we receive our order from our suppliers. We have a limited supply of injections, so please call **Karina De La Cruz at (562) 926-3440 x313** as soon as possible to reserve your shots and schedule a date. Don't let the flu catch your employees unprotected this year!