



**TEAMSTERS**

# **Safety & Health FACTS**

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## **OVERTIME AND EXTENDED WORK SHIFTS: INJURIES, ILLNESSES, AND OTHER EFFECTS**

### **Scope of the Problem**

The effects of overtime and extended work shifts on worker health and safety and its harmful effects on families are gaining increased attention from the scientific community, labor representatives, and industry. Between 1970 and the 1990s, American workers and families have been working increasing numbers of regular and overtime hours. Almost one-third of the workforce regularly works more than the standard 40-hour week and one-fifth work more than 50 hours. In 2002, according to the International Labour Organization, U.S. workers were putting in the longest hours in the industrialized world while other industrialized nations were seeing declining annual hours worked. Union workers are generally better protected from mandatory overtime than are nonunion workers, since union contracts can specify upper limits on overtime, establish a scheme to make overtime more orderly or voluntary, or establish a system of compensatory leave. Many workers report feeling more rushed today and 60% express wanting to work fewer hours.

For this document, *overtime* is defined as more than 40 hours per week and *extended work shifts* are defined as shifts longer than 8 hours. An extended workday schedule is not necessarily the same as a compressed workweek. Work schedules can also differ by the time of day (day, evening, night), fixed versus rotating schedules, number of consecutive days worked, and number of rest days on weekends.

### **General Health Effects**

The National Institute for Occupational Safety and Health (NIOSH) reports that a number of studies have associated overtime with poorer perceived general health, increased injury rates, more illnesses, or increased mortality.

Among twenty-nine studies evaluated by NIOSH, some reported the following effects for overtime work:

- ◆ Increased risk of heart attacks;
- ◆ Poorer perception of general health;
- ◆ Increased neck or musculoskeletal discomfort;
- ◆ Higher on-the-job injury rates in construction workers or health care workers;
- ◆ Increased risk of unhealthy weight gain, smoking, or alcohol use.

Of fifteen studies evaluated by NIOSH, some showed the following effects for extended work shifts:

- ◆ Increased risk for back disorders;
- ◆ Increased leg pain and visual complaints;
- ◆ A higher risk for injury after the 8<sup>th</sup> or 9th hour at work, especially for evening and night shifts;
- ◆ Increase in needlestick and biological fluid exposure rates during the last 2 hours of 12-hour shifts;
- ◆ Increased risk of smoking and alcohol use on extended or rotating night shifts;
- ◆ 12-hour shifts having some flexibility in start times were associated with more favorable sleep quality, psychological well-being, and alertness, as compared with rigid schedules.

Of six field studies evaluated by NIOSH, some showed the following effects for extended work shift combined with more than 40 hours work per week:

- ◆ Increased risk for neck, shoulder, and back disorders;
- ◆ More cardiovascular and musculoskeletal complaints.

According to NIOSH, however, few studies have considered the effects of long working hours on older workers, women, workers with hazardous occupational exposures, and those with pre-existing health problems.

## **Effects on Physical and Chemical Exposures**

Government health and safety regulations are typically based on levels that nearly all workers may be repeatedly exposed to during a conventional 8-hour workday and a 40-hour workweek, without harmful effects. Noise, extreme temperatures, chemical exposures, vibration, repetitive motion, and heavy lifting are examples of workplace hazards which may adversely affect the health and safety of workers by lengthening exposure times and shortening recovery times during extended work shifts and overtime.

## **Recordkeeping of Injuries and Illnesses**

The employer is required by OSHA to record certain injuries and illnesses. To establish a link between overtime work and accidents at a facility, these records could be examined for types and frequencies of injuries and illnesses. *See IBT Safety and Health Department Fact Sheet on OSHA's Revised Recordkeeping Rule (Form 300)*

## Effects on Performance

Although overtime may have short-term benefits that make it attractive to employers, it may also result in harmful effects for an organization by decreasing quality, increasing mistakes, and reducing productivity.

According to several studies, overtime hours were associated with:

- ◆ Increased neck or musculoskeletal discomfort;
- ◆ Feelings of decreased alertness and increased fatigue and depression;
- ◆ Reduced cognitive function and vigilance on task measures;
- ◆ Increased smoking, or alcohol use; and
- ◆ Slower pace of work.

In the health care field, patient care can suffer because of high patient load and fatigue from long hours. Medical residents have mentioned fatigue as a cause for their serious mistakes and two studies have attributed infection outbreaks at hospitals to overtime work.

## Effects on the Family

Between 1989 and 1998, the typical middle-income family worked six more weeks a year. Longer work hours make it more difficult to balance the conflicting demands of work and family. One study found that those workers who put in more than 50 hours a week reported high levels of work-family conflict. Long hours at work increase work-family conflict and this conflict may, in turn, be related to depression and other stress-related health problems.

## Shiftwork

According to the Bureau of Labor Statistics (BLS), about 14.5 % of all full-time wage and salary workers (14.5 million), work evening, night, rotating or split shifts, or employer-scheduled irregular schedules. Shiftwork is common among service-oriented occupations, such as protective service (which includes police, firefighters, and guards) and food service, and operators, fabricators, and laborers. Many transportation and public utility workers, especially long-haul truck drivers, also work shifts.

In its publication, *Plain Language About Shiftwork*, the National Institute for Occupational Safety and Health (NIOSH) addresses the health and safety problems associated with shiftwork and ways to lessen its effects. NIOSH makes the following suggestions to employers about shiftwork:

- ◆ Change shiftwork schedules based on all aspects of the worker's job and home. Examples include alternatives to permanent night shifts, avoiding quick shift changes, and adjusting shift length to the workload.
- ◆ Schedule heavy or demanding work when workers are most alert, provide training, health care, and counseling services to new shiftworkers, workers with non-traditional schedules, and their families.

- ◆ Workers may also attempt to cope with shiftwork by getting good sleep, establishing a suitable sleep routine, and employing exercise, diet, and relaxation techniques to counter stress.

## Legislation on Hours of Work

The increased interest from the scientific community, labor representatives, and industry, has led to increased legislative activity nationwide on long work hours and involuntary overtime.

The Fair Labor Standards Act of 1938 (FLSA), which regulates overtime, imposes no limits on overtime hours and does not prevent firing or any other penalty for declining overtime work. Proposals are spreading through the states to cap the number of overtime hours that can be forced in a given time period, or to make overtime more of a voluntary choice in select occupations. Connecticut, Maine, Maryland, Minnesota, New Jersey, Oregon, Washington, and West Virginia are states that have passed legislation that places some limits on mandatory overtime for nurses.

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