Perhaps, now more than ever, job stress poses a risk to the health of workers in the United States. One survey reported that one-fourth of employees view their jobs as the number one stressor in their lives (Northwestern National Life Insurance Company, 1991). Another study reported that three-fourth of employees believe the worker has more on-the-job stress than a generation ago (Princeton Survey Research Associates, 1997). The scope, demands, and overall nature of work is changing at an enormous pace, which may have implications to the health of workers and/or contribute to various organizational failures, including workplace accidents. The following information highlights the causes of stress at work and recognizing stress so that steps can be taken to prevent stress at work.

**WHAT IS JOB STRESS?**

According to the National Institute of Safety and Health (NIOSH), job stress can be defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health and even injury.

The concept of job stress is very often confused with challenge, but these concepts are not the same. Challenge energizes us psychologically and physically, and it motivates us to learn new skills and master our jobs. When a challenge is met and overcome, we feel relaxed and satisfied. Thus, challenge is an important ingredient for healthy and productive work.

But the main difference between job stress and job challenge can be described when the challenge has turned into a job demand or list of demands that cannot be met, relaxation has turned to exhaustion, and a sense of satisfaction has turned into feelings of stress. When this occurs, a faulty foundation has been poured that is conducive to job failure, which may include physical injuries and/or illnesses.

**NIOSH APPROACH TO JOB STRESS**

Based on experience and research, NIOSH favors the view that working conditions play a primary role in causing job stress. However, the role of individual factors should not be ignored. According to NIOSH, exposure to stressful working conditions (called job stressors) can have a direct influence on worker safety and health. Individual and other situational factors can intervene to strengthen or weaken this influence. For example, a person’s need to care for his/her ill mother, a death in the family, marital or family strife are examples of individual or situational factors that may intensify the effects of stressful working conditions. Ways to reduce the effects of stressful working conditions from such...
individual and situational factors include the following:

- Balance between work and family or personal life
- A support network of friends and coworkers
- A relaxed and positive outlook

Figure 1 (below) depicts NIOSH’s model of job stress. Stressful working conditions can influence worker safety and health, but individual and situational factors can intervene to increase or decrease the risk of occupational injuries and illnesses.

Examples of job conditions that may lead to stress include the following:

1. **The Design of Tasks**: Heavy workload, infrequent rest breaks, long work hours and shiftwork; hectic and routine tasks that have little inherent meaning, do not utilize workers' skills, and provide little sense of control.

2. **Management Style**: Lack of participation by workers in decision-making, poor communication in the organization, and lack of family-friendly policies.

3. **Interpersonal Relationships**: Poor social environment and lack of support or help from coworkers and supervisors.

4. **Work Roles**: Conflicting or uncertain job expectations or too much responsibility.

5. **Career Concerns**: Job insecurity and lack of opportunity for growth, advancement, or promotion; rapid changes for which workers are unprepared.

6. **Environmental Conditions**: Unpleasant or dangerous physical conditions such as crowding, noise, air pollution, or ergonomic problems.

**JOB STRESS AND HEALTH**

Stress can also have a negative impact on a person's well being. Our bodies are designed with a set of automatic responses to deal with stress. Stress sets off an alarm in the brain, which responds by preparing the body for defensive action. The nervous system is aroused and hormones are released to sharpen the senses, quicken the pulse, deepen respiration, and tense the muscles. This response (sometimes called the fight or flight response) is important because it helps us defend against threatening situations. Everyone responds in much the same way, regardless of whether the stressful situation is at work or home. The body's preprogrammed response is called "Generalized Stress Response" and includes the following:

- Increased blood pressure
- Increased metabolism (e.g., faster heartbeat, faster respiration)
- Decrease in protein synthesis, intestinal movement (digestion), immune and allergic response systems
- Increased cholesterol and fatty acids in blood for energy production systems
- Localized inflammation (redness, swelling, heat and pain)
- Faster blood clotting
- Increased production of blood sugar for energy
- Increased stomach acids

(Workplace Safety and Insurance Board of Ontario, 2006)

Short-lived or infrequent episodes of stress pose little risk. But when stressful situations go unresolved, the body is kept in a constant state of activation, which increases the rate of wear and tear to biological systems. Ultimately, fatigue or damage results, and the ability of the body to repair and defend itself can become seriously compromised. As a result, the risk of injury or disease escalates.

Early warning signs of job stress are usually easy to recognize, which include headaches, sleep disturbances, difficulty in concentrating, short temper, upset stomach, job dissatisfaction, and low morale. But the effects of job stress on chronic diseases are more difficult to see because chronic diseases take a long time to develop and can be influenced by many factors other than stress. None-the-less, evidence suggests that stress plays a role in several types of chronic health problems as indicated below.

- **Cardiovascular Disease**: Many studies suggest that psychologically demanding jobs that allow employees little control over the work process increase the risk of cardiovascular disease.

- **Musculoskeletal Disorders**: Research by NIOSH and many other organizations suggest that job stress increases the risk for development of back and upper-extremity musculoskeletal disorders.
• **Psychological Disorders**: Several studies suggest that difference in rates of mental health problems (such as depression and burnout) for various occupations are due partly to differences in job stress levels.

• **Workplace Injury**: Although more study is needed, there is growing concern that stressful working conditions interfere with safe work practices and set the stage for injuries at work.

• **Suicide, Cancer, Ulcers, and Impaired Immune Function**: Some studies suggest a relationship between stressful working conditions and these health problems.

**STRESS, HEALTH, AND PRODUCTIVITY**

Some employers assume that stressful working conditions are a necessary evil to remain productive and profitable in today’s economy. However, research findings challenge this belief. Studies show that stressful working conditions are actually associated with increased absenteeism, tardiness, and intentions by workers to quit their jobs - all of which have a negative effect on the bottom line.

According to a 2001 report by the American Institute of Stress (AIS), job-related stress costs the U.S. industry $300 billion annually, as assessed by absenteeism, diminished productivity, employee turnover, direct medical costs, compensation claims, and legal and insurance fees. AIS estimates that one million workers are absent on an average workday because of stress-related complaints. Studies of so-called healthy organizations suggest that policies benefiting worker health also benefit the bottom line. A healthy organization is defined as one that has low rates of illness, injury, and disability in its workforce and is also competitive in the marketplace. Research conducted by NIOSH has identified organizational characteristics associated with both healthy, low-stress work, and high levels of productivity. Examples of these characteristics include the following:

• Recognition of employees for good work performance.
• Opportunities for career development.
• An organizational culture that values the individual worker.
• Management actions that is consistent with organizational values.

**PREVENTING STRESS AT WORK**

Job stress can be a significant causal factor to poor health and/or organizational failures, including workplace accidents. Preventing stress at works involves a comprehensive approach, which includes stress management and organizational change. See our companion article, “Preventing Stress at Work.”
Recognize warning signs
Signs and symptoms of excessive job and workplace stress include:

- Feeling anxious, irritable, or depressed
- Apathy, loss of interest in work
- Problems sleeping
- Fatigue
- Trouble concentrating
- Muscle tension or headaches
- Stomach problems
- Social withdrawal
- Loss of sex drive
- Using alcohol or drugs to cope

Reduce job stress by taking care of yourself.

- Exercise regularly.
- Eat healthy.
- Drink alcohol in moderation and avoid nicotine.
- Get enough sleep.

Reduce job stress by prioritizing and organizing.

- Time management: Create a balanced work/family schedule, do not over-commit yourself, and plan regular breaks.
- Task management: Prioritize tasks by importance, break projects into small steps, and delegate responsibility.

Reduce job stress by improving emotional intelligence.

- Realize when you are stressed.
- Learn to laugh – have humor.
- Resolve conflict in healthy, constructive ways.

Reduce job stress by breaking bad habits.

- Do not expect perfectionism.
- Clean up your act by getting to work on time and keeping your workspace organized.
- Flip your negative thinking. Try to think positively. Avoid negative-thinking co-workers.
- Control what you can control and not the uncontrollable.

Learn how managers or employers can reduce job stress.

- Improve communication.
- Engage and empower employees as part of the decision-making process.
- Cultivate a friendly social climate

(Segal, 2012)

BIBLIOGRAPHY


