The Physiology of Job Stress

Occupational stress is one of the major health hazards of the modern workplace (in which CWA members are employed). It accounts for much of the physical illness, substance abuse, and family problems experienced by millions of blue and white-collar workers. Occupational stress and stressful working conditions have been linked to low productivity, absenteeism, and increased rates of accidents on and off the job.

Work is a central part of human life. It is the expression of the basic need to accomplish, to create, to feel satisfaction, and to feel meaningful. Rewarding work is an important and positive part of our lives. However, when work denies people an opportunity to utilize their creativity, intelligence, and decision-making ability, it causes stress.

The traditional response of management has been to "blame the victim," defining stress as an individual or "personal" problem that workers bring from home to work. In contrast to this approach that blames people for their inability to fit into an inhumane work environment, it is important to analyze the structure of job requirements and social relationships at work as the primary sources of stress.

With the introduction of new technologies, many jobs have become more fragmented and job tasks have been narrowed, leaving workers more disconnected from the final product. This process of "deskilling" has created increased levels of boredom, making work less challenging and less satisfying for many workers. Offices are becoming factories with rows of workers connected to computers that are capable of monitoring every key punched. The knowledge that every minute of one's working day is being recorded has intensified the pressure of the job, which, in turn, has led to an increased rate of cardiovascular health problems/heart disease among office and clerical workers.

Occupational or job stress may be defined as a "mechanism whereby the human body attempts to adapt to the environment." The body has a normal mechanism for dealing with stressful situations that is known as the "fight or flight" response. As soon as the brain senses danger, it sends messages (electrical, chemical, and hormonal) that stimulate the extra energy needed to fight the danger or run away from it. The stress cycle always includes the danger stimulus, the removal of the danger, and a state of relaxation.

The "fight or flight" response is extremely functional when we confront short-term specific dangers. When the danger or challenge is removed or has been dealt with, the body returns to a state of equilibrium.

Many of the sources of stress at work have a different character--they are more subtle, more pervasive, and come from a variety of factors. Whether it's increased workload, eyestrain from
staring into computers, unpredictable disciplinary action by a supervisor, or never being complimented about the quality of work we produce, these all cause the "fight or flight" response to be triggered. Since we have "gotten used" to working in stressful environments, however, we may be unaware of the body's reaction. Yet even if we are not conscious of it, the demands of being in a constant "on-alert" state takes its toll on our physical health and emotional well-being.

When the cause of the stress can be identified, is of short duration, and can be responded to by a specific set of actions that eliminate the cause, this is a healthy stress reaction. However, when the source of the stress is not identifiable, becomes excessive, repeated, prolonged, or continuous, it becomes "distress" and creates unhealthy physiological and psychological reactions.

To understand why exposure to stress, especially prolonged stress, can cause ill health, it is helpful to know what changes take place in the body during the "fight or flight" response. The heart starts beating faster in order to get more blood to the muscles, adrenaline and other hormones are released to provide more energy, additional stomach acids are secreted, and respiration increases. All these changes are intended to prepare the body for action. When these bodily processes are constantly functioning, however, our bodies are working overtime. Under these circumstances, the entire system is weakened and the weakest spots are the first to show signs of strain. If this burden continues over long periods of time without adequate chances for relaxation, the entire body may start to break down.

Although office work has always been stressful, several scientific studies and surveys have helped focus attention on the issue of job stress. The Framingham Heart Study, completed in February 1980, found that female clerical and secretarial workers developed coronary heart disease at twice the rate of other workers. The National Institute for Occupational Safety and Health (NIOSH) found that operators of computers experienced greater job stress than any other occupational group that NIOSH had ever studied. The CWA/North Carolina Occupational Safety and Health Project Office (Computer) Workers Stress Survey found that computer use and job stress might result in the occurrence of chest pain among CWA members who use computers.

Further, the landmark CWA National Occupational Stress Study (1990) found that one stressor, electronic performance monitoring, was a major cause/promoter of physical and psychological health complaints. Monitored workers reported more boredom, high tension, extreme anxiety and depression, anger, and severe fatigue than non-monitored workers. Also, monitored workers reported more musculoskeletal problems (i.e., wrist, arm, shoulder, neck and back problems) and headaches than non-monitored workers.

In 1992, NIOSH reported the findings of a scientific study regarding computer use and associated musculoskeletal health effects involving CWA members employed by US West. (This study was strongly supported by both CWA and US West). This investigation identified several factors such as fear of being replaced by computers, increasing work pressure, lack of job diversity with little decision making opportunity, high information processing demands, and surges in workload as being related to computer worker musculoskeletal repetitive motion illnesses. In addition to
the above variables, uncertainty about one’s future (occupation), as well as a lack of co-worker and supervisor support were found to be associated with the occurrence of computer worker musculoskeletal repetitive motion health symptoms.

During 1998, CWA’s Occupational Safety and Health Department and the School of Public Health, Johns Hopkins University completed a major computer study involving Union leaders and members of Locals 2101 and 2150 located in Baltimore, Maryland. The nearly 250 participating members were employed as service representatives by Bell Atlantic and American Telephone and Telegraph (AT&T). The scientific investigation, initiated in 1996, addressed the relationship among occupational stress, stress at home, and health symptoms of musculoskeletal disorders or repetitive motion illnesses.

The findings from the study indicated that computer workplace repetitive motion health symptoms involving the hands, elbows, shoulders, neck, back, and legs occurred among a large number of participants. In addition, the scientific data found that job demand occupational stressors (e.g., constant and fast pace of the job, sales and adherence requirements, and scheduling) were directly related to the occurrence of computer workplace musculoskeletal disorder symptoms. Of particular importance, the investigation did not find any relationship between non-occupational stressors (e.g., stress at home) and the causation of repetitive motion health symptoms.

**Job Controls and Job Demands**
There are a number of working conditions that we encounter on a daily basis which contribute to making work stressful. These working conditions are called “stressors” and consist of those things which have a negative effect on a worker’s physical or emotional well-being. In addition these working conditions or stressors are associated with two job characteristics: job control and demand.

**Job control** determines how much or how little control a worker has over her/his job. It can be defined in terms of one's ability to make decisions about how work is done and the ability to use a range of skills on the job.

**Job demand** determines how much or how little production or productivity pressures there are on the worker and the quality of the physical work environment.

Examples of job control stressors include:

- Lack of control over your work,
- Lack of recognition for work done,
- Job insecurity,
- Fear of layoffs,
- Harassment,
• Lack of respect from supervisors,
• Racism,
• Age discrimination,
• Inadequate pay,
• Isolation from fellow employees either physically or psychologically, and
• Lack of promotion opportunities.

Examples of job demand stressors include:
• Contracting out work,
• Fragmentation/job declassification,
• Poor ventilation and heating,
• Poor lighting,
• Forced overtime,
• Shift-work,
• Speed-ups,
• Conflicting job demands,
• Physical danger,
• Fear of accident or even death on the job,
• Poor computer workstation design,
• Monitoring (e.g., AWT standards),
• Lack of training, and
• Unnecessary paperwork.

The Psychology of Stress
For most people work is the central part of their lives. It's the place where they spend most of
their waking hours and most of their energy. Moreover, how we judge ourselves and measure our
self-worth is very much determined by the work we do. The status and rewards that society
attaches to jobs is one of the primary ways others see us. Therefore, if work is unfulfilling in that
it prevents workers from fully realizing their own potential and developing their human
capacities, the nature of work becomes a primary stressor in our lives. Under these conditions, we
experience an important aspect of our daily lives as an assault on our dignity as human beings.
The myth that our social and economic system is based on rewarding merit often results in people blaming themselves and co-workers for problems they encounter in dealing with stressful working conditions. In turn, management uses this "blame the worker" attitude to control and divide workers upon racial, ethnic, sexual, age, religious, and occupational differences.

Keeping workers divided, distrustful, and believing they are different from one another helps frustrate attempts by workers to challenge existing working conditions. Many of these strategies are devised by management consulting firms and then implemented in the workplace. Union-busting courses are now a multi-million dollar yearly enterprise. So keeping workers divided has become big business and it is up to workers and their unions to make sure that the natural alliances within the workforce are maintained and strengthened.

Besides the existing divisions that have been identified as some of those often used by management to keep workers divided, the belief that "you get what you deserve" also keeps us from relating to co-workers. How does this happen? When we are feeling inadequate, upset, insecure, or threatened, we often hesitate to talk about it, due to the belief that we are the only ones experiencing these problems. By doing this, we keep ourselves from connecting with co-workers and the Union and, thus, end up feeling isolated. Learning to appreciate co-workers as allies is the first step in overcoming the divisions and isolation. Moreover, it is only through the Union that workers can effectively develop and implement common strategies to challenge stressful working conditions.

Among the major negative effects of job stress are its impact on a person's self-image and self-esteem, which in turn, affects one's relationship with family, friends, and co-workers. The problems last far longer than the time we spend at work and are not easily left behind at the end of the day. So analyzing working conditions as a primary source of stress is an important first step in overcoming it, especially because in many situations the long-term effects show up in our private lives and the workplace link can be lost altogether.

Since the effects of occupational stress do not end when workers check out at the end of the day, the families of CWA members may also be affected by the problems of job stress. Many workers have long been subjected to criticism for "bringing their problems from home to work." Yet increasingly, people are becoming aware that the primary source of their stress is on the job-stress they then bring home- rather than the other way around.

Both single and married people face stress from work, which they bring home with them. Single people, however, often encounter the special problem of not having anyone to listen to them or "put band-aids on their fatigue," while having to do all the household chores themselves.

As more and more households are occupied by two wage earners (or working people), the impact of work stress on home life becomes compounded. We are taught that "our home is our castle" and expect it to be a refuge from the problems we encounter at work. Yet this myth only makes things worse when our home lives are affected by the tensions we encounter at work.
people need attention simultaneously, although neither has much to give. Then resentments on
the part of both partners often surface and spill over into relationships with children and others.
In addition, use of alcohol and drugs can create further tensions at home. Since work situations
make no allowances for taking care of a family, working parents are under constant pressure to
juggle the demands of their jobs with those of their families.

Responses to Occupational Stress
The issue of occupational stress, which is closely related to the impact of new technology in the
workplace, is making new demands on labor unions for creative strategies. The rapidly changing
nature of work has resulted in new and far-reaching mechanisms for management control in the
form of monitoring, layoffs, and changes in work rules, all of which contribute to increased
levels of occupational stress.

CWA National and Local leaders have responded to these demands and begun to develop
successful approaches to challenge stressful working conditions. Some of the specific strategies
that have been used to fight occupational stress are:

- **Educating the Membership**- Conducting classes or seminars on stress.

- **Collective Bargaining**- Negotiating clauses such as notice about the introduction of new
technologies, stress days off, and more flexible attendance policies all reduce the impact
of job stress on workers.

- **Legislative and Political Action**- Introduction of CWA-sponsored legislation on
computers and workplace design and demands for increased staffing levels in public
sector workplaces.

- **Stress Surveys**- Document the link between working conditions and negative health
effects. (For copies of the CWA Occupational Stress Questionnaire, please contact the
CWA Occupational Safety & Health Department).

- **Medical Screenings**- Union-sponsored screenings for vision or hearing problems can
generally be arranged with local occupational health clinics or doctors.

- **Workers' compensation**- Filing for workers' compensation benefits on behalf of
members.

CWA recognizes that occupational stress is a major problem in today's "high tech" society.
However, by using existing structures such as safety and health committees to address the issue
of job stress, local unions can begin to adopt creative strategies to improve working conditions.
Some unions have used their safety and health committees to deal with stress as a health hazard
while others have established new committees dealing exclusively with stress. In both situations,
the activities undertaken by these committees have included some of the following:

- **Conduct regular walkaround inspections,**

- **Investigate incidents that might be related to stress,**
• Review health, absenteeism, and other available records,
• Assist other committees on problems related to stress,
• Train other committee members and stewards how to recognize stressful situations and workers suffering from stress,
• Collect resource material related to stress for the union’s library,
• Review changes in work-practices and procedures for potential as stressors,
• Recommend changes that might reduce stress,
• Participate in training programs on job stress and job design,
• Document activities and events related to potential stressful situations,
• Hold educational sessions on job stress for membership,
• Form Local Union discussion groups,
• Include the issue of occupational stress in member assistance groups,
• Publish news articles on job stress in union publications,
• Develop stress-related materials for dissemination to members and new hires during orientation sessions,
• Conduct on and off-the-job relaxation and physical conditioning programs,
• Become actively involved with personnel at research and academic institutions developing and carrying out scientific studies on occupational stress, and
• Initiate and develop cooperative relations and activities with other unions.

Local leader use of these suggested strategies to identify and minimize/eliminate job stressors will help improve members' health and well-being. In addition, absenteeism and lost-work time will significantly decrease and productivity will increase-- an important concern to management.

The local occupational safety and health or other committee that deals with occupational stress should always coordinate its activities with the local officers, appropriate CWA Representatives, and the negotiated safety and health committees.

In addition, CWA members may obtain information and assistance by contacting the:
CWA Occupational Safety and Health Department
501 Third Street, NW
Washington, D.C. 20001-2797
Webpage: www.cwasafetyandhealth.org,
Phone: (202) 434-1160.