

Loss Control Bulletin

Over the past several years, there has been a significant increase in the frequency and severity of injuries because of employee exposure to ergonomic hazards.

Ergonomics is defined as the study of the mental and physical capacities of persons in relation to the demands made upon them by various job tasks.

Job tasks and equipment that exceed an employee's physical capabilities can result in job performance deficiencies and injuries. These may include acute and chronic injuries or cumulative trauma disorders such as eye strain, neck and back discomfort, carpal tunnel syndrome and tendonitis. The major risk factors are:

- Duration
- Force
- Environment
- Frequency
- Posture

The following is a list of the more commonly known industries and equipment having notable ergonomic exposures in the workplace environment:

- Meat Packing and Poultry Industry Agriculture Industry
- Electronic Assembling Automobile Manufacturing Clothing Manufacturing
- Video Display Terminals (VDT)

To prevent and reduce exposures to musculoskeletal injuries, it is recommended that an ergonomic management program be developed, implemented, and include:

1. Evaluation of workplace design and tools.
2. Equipment design and selection.
3. Employee and supervisor training program on the proper use of tools and equipment, design of workstations and how to identify early systems of cumulative trauma disorders.
4. Automation of portions of the production activities.
5. Evaluation of job tasks by developing a detailed job description and a job hazard analysis.

Employees engaged in the various job functions should be involved in the evaluation process since they are in a position to offer valuable information and suggestions.

Carpal tunnel syndrome (CTS) is a painful injury to the wrist that is caused by repetitive motion. This condition that results in numbness and a tingling sensation in the fingers, is caused by repetitive flexing of the wrist which causes swelling of the median nerve within a small bony structure of the carpal tunnel of the wrist.



Ergonomics – Carpal Tunnel Syndrome

The following precautionary measures should be taken to prevent and reduce the exposure to ergonomic hazards:

- Eliminate Awkward Movements Maintain Good Posture
- Take Regular Work Breaks Ergonomically Designed Hand Tools Rotation of Job Tasks
- Adjustable Furniture Exercises
- Discontinue Production Incentives (Piece Work)

Consideration should be given to establishing a pre-placement physical examination program to measure the actual ability of an employee to perform physical functions required for certain job tasks.

In conclusion, many ergonomic improvements in the workplace can be achieved without excessive costs and expensive studies. Through an internal analysis of injuries, accidents, injury trends and production methods, significant safety improvements can be made which can result in further improving safety, quality, and productivity.

The guidelines provided in this bulletin are only intended to provide an overview of some of the more important steps that can be taken by management to establish a safe workplace. The guidelines are not considered exhaustive of all measures and controls that can be implemented by management to address all potential loss or injury producing causes. Ultimately it is the responsibility of management to take the necessary steps to provide for employee and customer safety. It is not intended as an offer to write insurance for such conditions or exposures. The liability of Republic Indemnity Company of America and its affiliated insurers is limited to the terms, limits and conditions of the insurance policies underwritten by any of them. © 2022 Republic Indemnity of America, 4500 Park Granada, Suite 300, Calabasas, CA 91302.