

Every year, thousands of American workers are disabled by musculoskeletal disorders (MSDs). Jobs that expose workers to excessive repetitive motion, force, awkward postures, contact stress, or vibration are a major cause of this problem.

Ergonomics concentrates on making the job fit the employee, rather than forcing the employee to fit the job. It involves accommodating workers through design of tasks, work schedules, work stations, controls, tools, and equipment. In addition, it involves engineering and designing equipment that reduces a job's MSD risk.

How Ergonomics Affects You

Every day, your body is subject to tasks which could cause it harm. Some types of tasks or work conditions which may affect you include:

- Regular repetitive tasks.
- Forceful exertions.
- Inappropriate tools.
- Vibrations from power tools.
- Poor body mechanics.
- Restrictive work stations.
- Awkward postures.
- Lifting heavy or awkward objects.

Exposure Effects

Being exposed to ergonomic hazards can cause a variety of disorders and illnesses.

MSDs are injuries and disorders of the muscles, nerves, tendons, ligaments, joints, cartilage, and spinal discs. Examples of MSDs include:

- Tendinitis.
- Tenosynovitis.
- De Quervain's disease.
- Trigger finger.
- Raynaud's syndrome.
- Carpal tunnel syndrome.
- Tarsal tunnel syndrome.
- Carpet layers knee.
- Rotator cuff syndrome.
- Epicondylitis.
- Sciatica.
- Herniated spinal disc.
- Low back pain.

The symptoms of MSDs can include a dull aching sensation, discomfort with specific movements, tenderness to the touch, a burning sensation, pain, tingling, cramping, or stiffness. Symptoms often appear gradually and may disappear during rest. Symptoms usually become more severe as exposure continues (for example, tingling continues after work ends, numbness makes it difficult to perform the job, and finally, pain becomes so severe that the employee can no longer perform the job).

Back disorders can result from heavy, awkward, overexerted lifting, and by twisting, reaching, bending, and remaining in one position for an extended period of time.

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