

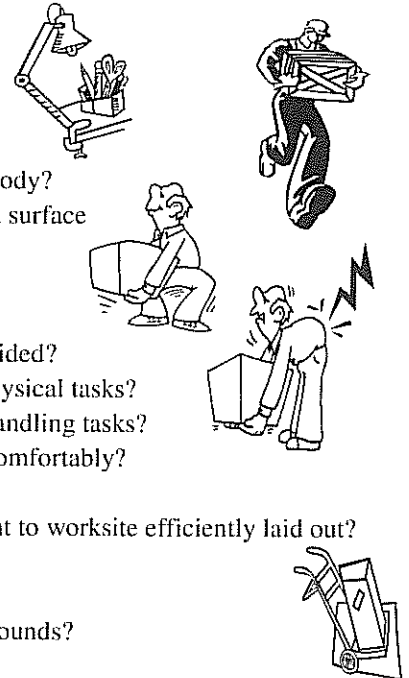
Job Name: _____ Job Site Location: _____

Date: _____ Start Time: _____ Finish Time: _____ Foreman/Supervisor: _____

Topic 52: Ergonomics in the Workplace

Introduction: *Ergonomics* is the study of how to improve the relationship between the physical demands of the workplace and the employees who perform the work. That means considering the variability in human capabilities when selecting, designing, or modifying equipment, tools, work tasks, and the work environment. If work is performed in awkward postures or with excessive effort, fatigue and discomfort may result. Under these conditions muscles, tendons, ligaments, nerves, and blood vessels can be damaged. Injuries of this type are known as musculoskeletal disorders, or MSDs. MSDs can increase the cost of doing business both directly and indirectly. Direct costs may include medical services and higher workers' compensation premiums. Indirect costs from increased employee turnover, absenteeism, and retraining may also occur. Below is a list of suggestions to help improve ergonomics in your workplace:

- **Can the work** be performed without employees experiencing eye strain or glare?
- **Is worker-adjustable** lighting available for tasks with high visual demands?
- **Is the height** of tables adjustable to allow neutral postures instead of bent postures for viewing and working on material?
- **Are devices** such as attached magnification provided to promote neutral head and neck postures during work inspection processes?
- **Can repetitive** lifting and lowering tasks be done without lifting and lowering the hands above shoulder level or below knee height?
- **Has a method** and standard operating procedure been established for lifting heavy loads? The method should include good lifting techniques and teamwork.
- **Are materials** handled at a uniform height to minimize lifting or twisting injuries?
- **Can tasks** be done without the worker having to hold his/her elbows out and away from the body?
- **Can tasks** be done without repetitive reaching more than 16 inches from the edge of the work surface?
- **Can workers** keep their hands and wrists in a neutral position when working?
- **Are mechanical assists** available to the worker performing materials-handling tasks?
- **Can the task** be done without having to bend the neck and shoulders to view the work?
- **Are pressure points** on any part of the body (i.e. wrists, forearms, backs of thighs) being avoided?
- **Are workers trained** to utilize their large muscle groups whenever possible to accomplish physical tasks?
- **Are there sufficient** rest breaks to relieve stress from repetitive-motion tasks and materials-handling tasks?
- **Are tools, instruments and machinery** shaped and positioned so that tasks can be performed comfortably?
- **Are all pieces** of furniture adjusted, positioned, and arranged to minimize strain on the body?
- **Have materials** been properly located near the worksite? Are paths of travel from arrival point to worksite efficiently laid out?
- **If a task** requires fixed work postures, can the task be redesigned to allow more motion?
- **Do carts** used to push and pull loads have appropriate handles?
- **Is work arranged** so that workers are not required to repeatedly lift and carry more than 25 pounds?
- **Are fixed work** postures avoided in the task?
- **If workers** have to push or pull objects using great amounts of force, are properly maintained mechanical aids provided?



Conclusion: Improving the work to worker relationship often involves a process of trial and error until an effective and appropriate solution is found. Maximizing ergonomics in the workplace reduces injuries, increases productivity, saves money, and improves product quality and job satisfaction.



Work Site Review

Work-Site Hazards and Safety Suggestions: _____

Personnel Safety Violations: _____

Employee Signatures:

(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

City of San Angelo Foreman/Supervisor's Signature: _____

These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.