

TOOLBOX TALK #1

CUMULATIVE TRAUMA DISORDER

A cumulative trauma disorder, also known as CTD, is defined as the excessive wear and tear on tendons, muscles and sensitive nerve tissue caused by continuous use over an extended period of time. CTDs can develop from improper work positioning, repetition or force. Millions of Americans work in awkward positions every day. Three risk factors found in construction-type work that can lead to CTDs are:

- Awkward posture and position such as working above the shoulders or below the knees, bent wrists, elbows held away from the body, outstretched arms and slumped shoulders.
- Repetitive action from hammering, swinging or squeezing.
- Use of excessive force to get the job done.

Although these risk factors cannot be totaling eliminated, they can be controlled by adjusting the work, varying worker position, reducing continuous or repetitious actions, and periodically stretching throughout the day. Employers can assist in helping supply workers with a near-neutral work position by supplying aids that will adjust the work height as well as tools to achieve a neutral position when in use.

Key elements to providing a good, ergonomically sound work environment can include:

- Provide tools with ergonomically engineered handles. These tend to keep worker's wrists in a neutral position.
- Provide cushion in areas where force is felt. This could be on the machine itself or the use of personal protective equipment such as padded gloves or shoulder pads.
- Try to keep the work height level between the knees and the shoulders. Examples of construction equipment that achieve this is hydromobile scaffolding, scissors lifts, and aerial lifts.
- Perform stretching exercises at the beginning of the shift and maybe even after lunch break. Encourage employees to perform compensating stretches throughout the shift.



The appropriate placement of tools and materials will also allow workers to maintain neutral body positions, perform more efficiently and work more comfortably. Although no single “correct” posture or arrangement of materials will fit everyone, basic ergonomic design principles can improve workers’ ergonomic positioning to help eliminate or lessen the potential for CTDs.