



Ergonomics

## eSafetyLine – Safety Talk

### **Overhead Work**

Another common position construction workers often find themselves in is working overhead. This includes reaching up with one or both arms raised above the shoulder, sometimes with the head tilted back for a better view. This awkward position puts stress on the shoulders and neck that can eventually lead to serious Work-Related Musculoskeletal Disorders (WMSDs). The risk of serious injury increases with the amount of time spent in this position, the use of repetitive movements and the amount of force used. Overhead work can also reduce an employee's ability to do the job safely and productively. In this position vision is often obscured, the employee's footing may be unstable and the employee may have a harder time using a tool correctly.

The most common injuries associated with overhead work involve the shoulders and the neck. The shoulder is constructed much like the knee. There are fluid filled sacs called bursa between the bones of the upper arm and the tendons used connect arm muscles to the bones. Long periods spent with the arms above the shoulders can cause these sacs to get squeezed, swollen and stiff even inflamed (bursitis). Bursitis can make it painful or even impossible to lift the arm. Another common shoulder injury is a tear of the rotator cuff. This cuff is a group of tendons that hold the shoulder together and allow it to move in many directions. Stress on the shoulder can cause them to tear making movement painful and difficult. The neck is made up of a series of joints between the bones of your back (vertebrae) and the flexible "jelly" filled pads called discs as well as muscles and ligaments (used to support the muscles).

When doing overhead work the muscles work harder and the ligaments flex and stretch. Ligaments can eventually partially tear, causing a neck sprain making overhead work very painful. Look periods pent looking up can cause muscle strain resulting in tension neck syndrome. It can cause neck stiffness, muscle spasms and pain moving from the neck and down the arms.

It is impossible to completely eliminate overhead work from construction but some simple changes can help to make it easier on the body. These changes include changing:

- Materials or work process. This would mean using materials, building components or work methods that are less labor-intensive so employees would spend reaching overhead. The problem is that these types of changes can affect the cost or the contract and would probably require the approval of the architect, engineer or general contractor.
- Tools and/or equipment. The use of tools with extension handles will allow employees hold the tool at waist or shoulder level rather than above the head. Using mechanical lifts or hoists to raise and position materials rather than lifting them manually will certainly decrease stress to the shoulders and neck. The lift can also be used to elevate the employee to where the work is to be done.
- Work rules and provide training. Site rules can be set that require the use of mechanical lifts or hoists that will reduce the need for employees to raise their arms. Limits can also be put into place that limits the amount of time employees can do overhead work without a break.

Most of these solutions are cost effective and can help keep the employees safe and productive.

### **Discussion Questions**

What are the most common injuries associated with overhead work?

How can these injuries be avoided?

# MEETING / TRAINING ATTENDANCE ROSTER

COMPANY: \_\_\_\_\_

\_\_\_\_\_ SAFETY MEETING

JOB/DEPT: \_\_\_\_\_

\_\_\_\_\_ SAFETY TRAINING

DATE: \_\_\_/\_\_\_/\_\_\_

TIME: \_\_\_\_\_

TOPICS ADDRESSED: \_\_\_\_\_

\_\_\_\_\_

## EMPLOYEE'S SIGNATURES

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

EMPLOYEE SUGGESTIONS AND RECOMMENDATIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ACTION TAKEN: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Supervisor's Signature

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Date

\_\_\_\_\_  
Safety Coordinator's Signature

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Date