Safety Manual > Ergonomics

G. Ergonomics

Preventing Work-Related Musculoskeletal Disorders (WMSDs)

1. Why Are WMSDS a Problem?

   Work-related musculoskeletal disorders occur when there is a mismatch between the physical requirements of the job and the physical capacity of the human body. More than 100 different injuries can result from repetitive motions that produce wear and tear on the body. Back pain, wrist tendinitis and carpal tunnel syndrome may all stem from work-related overuse. Specific risk factors associated with WMSDs include repetitive motion, heavy lifting, forceful exertion, contact stress, vibration, awkward posture and rapid hand and wrist movement.

2. Rules to Prevent WMSDS
   a. Look at injury and illness records to find jobs where problems have occurred.
   b. Talk with workers to identify specific tasks that contribute to pain and lost workdays.
   c. Ask workers what changes they think will make a difference.
   d. Encourage workers to report WMSD symptoms and establish a medical management system to detect problems early.
   e. Find ways to reduce repeated motions, forceful hand exertions, prolonged bending or working above shoulder height.
   f. Reduce or eliminate vibration and sharp edges or handles that dig into the skin.
   g. Rely on equipment-not backs-for heavy or repetitive lifting.
   h. Keep physically fit, maintain good muscle tone. Exercise at desk or work station.
3. Simple Solutions Often Work Best

   Workplace changes to reduce pain and cut the risk of disability need not cost a fortune. For example:

   a. Change the height or orientation of the product, such as using knives with curved handles to prevent bending wrists unnaturally for a particular task.
   b. Provide lifting equipment to prevent back strain when working alone.
   c. Offer workers involved in intensive keyboarding more frequent short breaks to rest muscles.
   d. Vary tasks to avoid repeated stress for the same muscles.
4. Contact EHS for Assistance

   EHS can review a particular task or operation that may be troublesome upon request.