



## MUSCULOSKELETAL INJURY PREVENTION

OSHA Musculoskeletal Injury Prevention  
Course: Hours Instruction  
Hours: Class Room  
Hours: Field Instruction

Regulation  
Prerequisites:  
Fee:  
CE Credits:

Ergonomics is the scientific study of people at work. The goal of ergonomics is to reduce stress and eliminate injuries and disorders associated with the overuse of muscles, bad posture, and repeated tasks. This is accomplished by designing tasks, work spaces, controls, displays, tools, lighting, and equipment to fit the physical capabilities and limitations of employees because studies have shown a strong link between job physical exposures and work-related MusculoSkeletal Disorders (MSDs).

Because physically demanding tasks performed during work may be responsible for MSDs, and many ergonomics-related risk factors exist, industries have found ways to make the work less stressful through ergonomic solutions. Successful efforts to address this issue provide sufficient basis for replicating these actions to better protect workers though developing and implementing an ergonomic process or tailoring a recommended solution to a specific situation.

Proactive initiatives undertaken by industry include establishing ergonomic processes, incorporating ergonomic principles into new projects, and conducting facility walkthroughs to identify injury risks that have resulted in a reduction in worker injuries and illnesses.

**Who Should Take This Course:** Safety Personnel, Insurance Evaluators and Management for increased productivity through the reduction of ergonomic stress-related injuries.

### **Ergonomics-related injury risks:**

- Lifting heavy items
- Bending
- Reaching overhead
- Pushing and pulling heavy loads
- Working in awkward body postures
- Performing the same or similar tasks repetitively
- Exerting high levels of force to handle or move materials
- Doing the same or similar tasks repetitively
- Maintaining static (i.e., nonmoving) body postures for long periods
- Coming in contact with sharp edges that press into the skin
- Exposure to vibrating tools and work surfaces
- Localized pressure into the body
- The level of required effort
- The duration of the task



## **Observe worker behaviors:**

- Are workers making modifications to their tools, equipment, or work area to address potential risk factors?
- Are they shaking their arms and hands?
- Are they rolling their shoulders?
- Are workers bringing products, such as back belts or wrist braces, into the workplace?

## **Early symptoms of MSDs:**

- Pain
- Restricted joint movement
- Soft tissue swelling
- Numbness
- Tingling

Training prepares workers to actively participate in many aspects of the ergonomics process, including problem identification, solution implementation, and process evaluation.

## **Encourage and utilize reports of injuries:**

- Reinforce worker training on recognizing MSD symptoms
- Encourage early reporting of symptoms of MSDs
- Allow prompt medical evaluations for diagnosis, treatment, and follow-up care
- Reduce injury severity, the numbers of workers' compensation claims and associated costs, and the likelihood of permanent disability
- Provide guidance on return-to-work and work placement restrictions during the healing process
- Guide job modifications
- Provide a mechanism to track and trend MSD injuries
- Enables assessment of the effectiveness of work changes
- Understand work procedures for reporting work-related injuries and illnesses, as required by OSHA's injury and illness recording and reporting regulation (29 CFR Part 1904)

## **When training is effective the workers will:**

- Learn the principles of ergonomics and their applications
- Learn about the proper use of equipment, tools, and machine controls
- Use good work practices, including proper lifting techniques
- Become more aware of work tasks that may lead to pain or injury
- Recognize early symptoms of MSDs
- Understand the importance of addressing early indications of MSDs before serious injury develops

# UNITED SAFETY SOLUTIONS

P: 715.254.0638  
F: 715.254.0630



826 Bloom Rd  
Eagle River, WI 54521

## **Develop, Evaluate and Assess Progress for long-term success:**

- Determine whether goals set for implementing the ergonomic process are successful
- Evaluate whether:
  - The time between hazard identification and implementation of appropriate solutions has been reduced
  - The number of jobs analyzed and risk factors reduced or eliminated has increased
  - More workers have been trained on ergonomics
- Review facility first-aid reports, absenteeism rates, job transfer requests, or other similar indicators to determine if ergonomics-related efforts have had an immediate impact
- Obtain feedback from workers, supervisors, and involved healthcare professionals
- Discuss how the ergonomic process should be improved

## **Solutions and Results:**

Successfully implemented ergonomic solutions to address workers' MSD injury risks have included:

- Purchasing new equipment or tools or other devices to assist in the production process
- Modifying existing equipment
- Making changes in work practices
- Reduced physical demands
- Eliminated unnecessary movements
- Lowered injury rates and their associated workers' compensation costs
- Reduced employee turnover
- Increased work efficiency and productivity

## **United Safety Solutions Course Covers:**

- Increased employer and worker awareness of ergonomics-related risk factors
- Training to alleviate ergonomic risks
- Increased productivity
- Reduce the number and severity of work-related MSD and associated costs
- Understand proactive work procedures to report work-related injuries and illnesses
- Assess effectiveness of ergonomic work changes

## **Certification:**

Successful completion requires 80% on both classroom and practical skills.

Upon successful completion, participants receive a wallet card, documentation to satisfy OSHA.