

Material Handling and Ergonomics

Material handling can be a major source of occupational injuries whether the work is done manually or with mechanical assistance. Jobs that involve manual, mechanical or repetitive handling present the highest risk of injury.

To schedule an Ergonomics Evaluation or Job Hazard Analysis

Email: mdooley@astate.edu or call 870-972-2862

Summary

Material handling requires careful consideration of many factors including the area of ergonomics. Every

job that involves manual, mechanical or repetitive handling should have a job analysis performed to

determine how worker injury can be minimized.

Most back injuries that occur on the job are a result of poor lifting technique. Lifting and carrying objects

should be designed out of jobs whenever possible. When lifting cannot be avoided, employees should

get assistance with heavy and awkward object. The risk of injury can be reduced by staying in good physical shape, planning the lift and removing all obstacles, getting a good grip, getting load close to the

body and lifting with the legs. Avoid twisting the back and lifting a load above shoulder height.

Lower

the load carefully, again bending the knees and keeping the back straight.

Training

Each department is required to provide adequate training to all employees who are susceptible to material handling injuries. This would include proper lifting techniques, proper adjustment of workstations and specialized training in how to use material handling equipment on the job. OSHA specifies that employees involved in the following materials handling operations must receive training:

- Powered industrial trucks (In-person and Taleo)
- Cranes (In-person training)
- Powered platforms (in-person training)
- Proper Lifting
- Home Office Ergonomics Training (available in Taleo)

Inspections

Mechanical equipment: both frequent and periodic inspections must be conducted of powered industrial trucks and cranes.

Recordkeeping

All training sessions and inspections should be appropriately documented and maintained by the

individual departments. Training sessions should have a sign-in sheet. Proof of required training should

be maintained in the employee's personnel file.

Ergonomics

Ergonomics is a multi-disciplinary science which emphasizes the importance of designing workstations

(i.e. office furniture or industrial work areas and equipment) to fit the individual worker. The objective is

to design out as many ergonomic hazards as possible in an effort to reduce cumulative trauma disorders. A properly arranged workstation can prevent injuries.

The four elements of an effective program are:

- Worksite analysis
- Hazard prevention/control
- Medical management
- Training/education
- Training

Employees in problem jobs and their supervisors shall receive ergonomic awareness and job specific

training in:

- Recognition of workplace risk factors and methods of control.
- Identification of workplace risk factors and methods of control.
- Importance of early reporting.
- Employer's medical management procedures. (See Accident Prevention Program)
- Reporting procedures and report distribution.
- Corrective actions to be implemented and role of each individual involved and how to participate in the process.
- How to procure ergonomic protection standard.

Reporting

Employees involved in conducting job analyses shall demonstrate competency in the following areas:

- Identification of workplace risk factors and how they relate to the specific job.
- Job analysis methodologies.
- Implementation and evaluation of control measures.
- Problem solving methodologies.

Inspections

The employer shall use the OSHA workplace risk factor checklist or a variation of to identify problem

jobs

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