

Sample Ergonomics Plan

I. Purpose of the program

A. The Ergonomics Protection Program is established to prevent the occurrence of work-related musculoskeletal disorders, primarily those in the back, upper and lower extremities. To do this, the program employs various strategies:

1. Informs employees about musculoskeletal disorders and the risk factors that can cause or aggravate them.
2. Promotes continuous improvement in workplace ergonomic protection.
3. Encourages new technology and innovation in ergonomic protection.
4. Identifies design principles that prevent exposure to risk factors.
5. Ensures ongoing and consistent management leadership and employee involvement.

B. _____ (person and position) is responsible for managing the Ergonomic Protection Plan. The ergonomic program health care provider, supervisors and the safety committee will assist in monitoring the effectiveness of the program.

II. Worksite analysis

A. Supervisor, with assistance from the program manager or a consultant, will conduct an ergonomic hazard analysis for each task in his or her area of responsibility. The purpose of worksite analysis is to recognize and identify existing ergonomic risk factors in the workplace. The analysis will include the use of an ergonomic checklist and employee questionnaire. Periodic surveys of the workplace will be conducted at appropriate intervals to evaluate changes in risk factors and effectiveness of work practices and engineering controls.

B. The OSHA 300 log will be reviewed to determine whether any musculoskeletal disorders have occurred during the last two years. If musculoskeletal disorders have occurred in the past two years, the supervisor will further analyze and evaluate the associated "at risk" work areas for ergonomic hazards

C. Each "at risk" task will be videotaped for the purpose of documenting work procedures, tools and materials used, and hazardous conditions encountered. The supervisor will analyze the task for ergonomic related hazard that could result in injury or illness. (See program description for instructions on videotaping)

1. The following risk factors should be considered in your analysis:

a. Performance of the same motions or motion pattern every few seconds for more than two hours at a time. Questions to ask:

- What is the task or cycle frequency per shift?
- Is the task continuous or sporadic?
- Does the worker perform the task for the entire shift or rotate with other workers?

b. Fixed or awkward work postures for more than a total of two hours: for example, overhead work, twisted or bent back, bent wrist, kneeling, stooping, or squatting. Questions to ask:

- What is the height of the workbench?
- What is the maximum reach to parts bins, etc.?
- What is the chair height?
- Is movement restricted due to confined workspace?

c. Use of hand tools. Questions to ask:

- What is the weight of tool being used?
- Are vibrating or impact tools or equipment used for more than a total of two hours?
- Is there air exhaust onto the worker's hand?

d. Manual handling of objects more than 25 pounds more than once each workshift.

e. The type of handwear being used. Questions to ask:

- Is handwear slippery?
- Do the gloves fit properly?

f. No worker control over work pace (e.g., work is mechanically or electronically paced) for more than four hours at a time (exclusive of regular breaks.)

g. Work performed in cold environment.

D. The use of outside ergonomics consultants to evaluate areas identified is encouraged. Their assistance may be extremely valuable in conducting the initial analysis. Coordinate with the program manager to request assistance.

III. Correct Actions

A. The supervisor with assistance from the program manager will determine the surface and root causes for all hazards (ergonomic and general) related to a task being analyzed. The following control strategies will be used to reduce or eliminate those hazards:

1. Engineering controls should be designed by a qualified ergonomist and may include workstation redesign, tool and handle redesign, and change of work methods. The goal is to make the job fit the person.
2. Work practice controls to include proper work techniques, new employee conditioning, and monitoring and modifications as necessary to reduce ergonomic stressors.
3. Administrative controls to reduce the duration, frequency, and severity of exposure to ergonomic stress. These controls may include job rotation, reduction of repetitions, and preventive maintenance of related equipment.
4. Personal protective equipment (PPE) may be used if appropriate. However, in all cases, if employees are not properly trained, or are reluctant to accept change, reducing ergonomic injuries and illnesses may be difficult at best.

IV. Employee involvement and training

A. Management will be involved in all stages of identifying, assessing, and controlling ergonomics hazards. Managers and supervisors will work closely with employees to determine hazards. Training in ergonomic awareness and safe work practices will be key in ultimately reducing injuries and illnesses, and involving employees in this training will improve the interest and quality of the training

B. All supervisors and employees will be educated on the early signs and symptoms of ergonomic injury and illness..

C. Further ergonomics training will be conducted for all "at risk" employees and supervisors, and will include specific information on the hazards associated with their jobs, reporting procedures, the risks of developing cumulative trauma disorders, symptoms of exposure, and how to prevent the occurrence of cumulative trauma disorders. The supervisor's training program will also be implemented to allow recognition of the signs of cumulative trauma disorders and to reinforce the ergonomics program. After training is completed, supervisors will provide regular feedback on work practices to their employees.

D. The training program will be conducted by a qualified health care provider.

V. Medical management

A. A medical management program will be established under the guidance of an appropriately qualified health professional. Appropriately trained health care providers will be available at all times, and on an ongoing basis as required. They will be knowledgeable in the prevention, early recognition, evaluation, treatment and rehabilitation of CTDs, and in the principles of ergonomics, physical assessment of employees, and OSHA recordkeeping requirements.

B. Program health care providers will conduct monthly, systematic workplace walk-through to remain knowledgeable about operations and work practices, identify risk factors for CTDs in the workplace, identify potential light duty jobs, and maintain close contact with employees. Findings

and recommendations will be documented and reported to the safety committee as soon as possible after the walk-through is completed.

C. Program managers will develop a symptoms survey to measure the extent of symptoms of work-related disorders for each area of the plant, to determine which jobs are exhibiting problems and to measure progress of the ergonomic program. Body diagrams should be used to facilitate the gathering of this information. Employee's identities and medical records, including surveys will remain confidential.

D. All employees who report pain or other symptoms possibly related to musculoskeletal disorders will be promptly evaluated by a health care provider, and appropriate treatment and follow-up will be provided.

E. Where an employee states that the injury or illness is work-related, and the case otherwise meets the criteria for recording, the case will be entered on the OSHA log pending final determination of the cause.

F. The employee will be monitored until he or she is able to perform work without restrictions. The idea is to detect any problem as early as possible to reduce the severity of the injury and associated costs.

G. The program health care provider will compile a list of light duty jobs with the lowest ergonomic risk. For such jobs, ergonomic risk(s) will be described.

E. New and current employees who are assigned to at risk jobs or tasks will be given a baseline survey by the health care provider to establish a base against which changes in health status can be evaluated. The baseline survey is not for the purpose of precluding people from performing particular jobs.

VI. Program Evaluation

A. The Ergonomics Protection Program will be evaluated by the program manager and safety committee annually for its ability to identify, assess, and eliminate ergonomic hazards in the workplace. Reductions in ergonomics related injuries and illness should ideally be experienced soon after the program is implemented.

B. Findings of the evaluation will be reported directly to the CEO.

Certification

Reviewed by (Signature) _____ Date _____

Approved by (Signature) _____ Date _____

The following is an example of a checklist to aid in an ergonomic hazard analysis of a specific job or workstation. It is designed to be used as a supplement to close visual observation or videotaping of the job/workstation.

Person performing analysis _____ Date _____
Job location _____ Bldg _____ Floor _____
Job name _____
Department _____
Job description _____

Number of employees on job _____
line speed _____ (pieces/minute)
Jobs rotated with _____
Rotation schedule _____
Break schedule _____

Workstation:

- ___ 1. Are there any sharp edges?
- ___ 2. What is the height of the work table? _____
- ___ 3. Adjustability:
 - ___ Can tools be moved around in the workplace?
 - ___ Can the work surface height be adjusted vertically?
 - ___ Can fixtures be tilted or rotated?
- ___ 4. What is the worker standing on? _____
(e.g., grate, mat, concrete floor)
- ___ 5. Is the floor or platform slippery? _____

Postural

- ___ 1. Can worker change postures (sit-to-stand or stand-to-sit)?
- ___ 2. What are the maximum reach distances in inches? Vertical ___
Horizontal ___

Tools

- ___ 1. Name of tool _____
- ___ 2. Type: Torque _____ reciprocating or vibrating _____
Other _____
- ___ 3. What is the weight of the tool? _____ lbs.
- ___ 4. Size of the handle: Span ___ inches, length ___ inches
material _____
- ___ 5. What is the source of power? _____
(e.g., air, electric)?
- ___ 6. If air, is the exhaust away from the hand? _____

___ 7. Is the tool counterbalanced? _____

Manual or hand tools

___ 1. Name of tool _____

___ 2. Weight _____ lbs.

___ 3. Size of the handle: Span ____ inches, length ____ inches
material _____

___ 4. Is there a place for tools in the workplace? _____
(e.g., holster, fixture)

Miscellaneous

___ 1. Are other objects or materials handled? _____

___ 2. What are they and what do they weigh?

Name _____
Weight _____ lbs.

___ 3. What is the temperature of the work environment?
_____ degrees (C./F.)

___ 4. What personal protective equipment is used? _____
(e.g., gloves, hard hats, aprons)

___ 5. Can the worker stop or control line speed?

___ 6. Are there opportunities for micro rest pauses?
If so, how many seconds? _____

___ 7. Estimate exertion or effort required to do the job (1 to 5)
_____ 1=low, 5=high

Ergonomic Protection Program Audit

Written Program

___ 1. Has a written ergonomics program been established?

___ 2. Is there a person assigned to manage the program?

Survey

___ 1. Are ergonomic surveys being conducted according to
a regular schedule?

___ 2. Do surveys determine the presence of ergonomic
related injuries and illnesses: for example,
musculoskeletal injuries to the neck, back,
shoulders, arms, hands, fingers?

___ 3. Are copies of survey being maintained?

Company procedures

- ___ 1. Are managers, supervisors, and all employees who may be exposed to hazardous ergonomic conditions knowledgeable of signs and symptoms of CTD?
- ___ 2. Does your employer have procedures for employees who report pain or other signs and symptoms related to ergonomic injury or illness?
- ___ 3. Are supervisors instructed on procedures when employees report pain or other symptoms of ergonomic injury or illness?
- ___ 4. Are employee reports of pain or other symptoms of ergonomic injury or illness being recorded?
- ___ 5. Are incentive programs in place that deter employees from reporting problems?

Evaluation

- ___ 1. Are the company's injury and illness logs evaluated on a regular basis for evidence of ergonomic related injuries and illnesses?
- ___ 2. Is the information gathered from evaluating logs used to identify, assess and control ergonomic hazards?
- ___ 3. Is there an effective medical protocol for evaluating and treating employees for complaints of upper extremity discomfort or back pain?
- ___ 4. Are trained health care providers available to diagnose and treat early stages of CTD?
- ___ 5. Following early detection of CTD symptoms or treatment, is the amount of time prescribed or allowed off work, and/or allotted for restricted activity, appropriate?

Treatment procedures

- ___ 1. Are medical restrictions being followed?
- ___ 2. Have ergonomic hazard analyses been conducted for all alternative work assignments (e.g., light/restricted duty jobs) for CTD potential?
- ___ 3. Are health care providers familiar with the jobs being used for alternative work assignments.
- ___ 4. Is job reassignment appropriate so as not to further exacerbate the condition or create another condition?
- ___ 5. Does your employer document all instances where a reassignment

did not help or actually worsen the CTD with explanation for the reason.

- 6. Do health care providers track and follow up the symptom process of all reassigned and/or treated employees?
- 7. Are appointments made for follow-up required and kept?
- 8. Has any decrease in employee pay or loss of overtime been an impediment to timely medical care resulting in CTD surgery.

Application of controls

- 1. Is your employer installing engineering controls: such as, equipment replacement or redesign.
- 2. Is your employer implementing administrative controls: such as, job rotation, rest periods, etc.
- 3. Are control strategies effective in reducing the incidence of ergonomic related injuries and illnesses?