UNITED STATES MARINE CORPS
MARINE CORPS RECRUIT DEPOT/WESTERN RECRUITING REGION
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DepO 5103.1A
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DEPOT ORDER 5103.1A

From: Commanding General
To: Distribution List

Subj: ERGONOMICS PROGRAM

Ref: (a) MCO P5100.8F (NOTAL)
(b) OPNAVINST 5100.23E (NOTAL)
(c) DoD Ergonomics Program Requirements Policy Memorandum of 4 Feb 97 (DUSN) (ES)

Encl: (1) Ergonomics Program Elements

1. Situation. Ergonomics is the study of the design of work in relation to the physiological and psychological capabilities of people. The aim of the discipline is the evaluation and design of facilities, environments, jobs, training methods, and equipment to match the capabilities of users and workers, thereby reducing the potential for fatigue, error, or unsafe acts.

2. Cancellation. DepO 5103.1.

3. Mission. To publish procedures and requirements to implement an Ergonomics Program for the Marine Corps Recruit Depot and Western Recruiting Region, San Diego, as required by the references.

4. Execution

a. Commander's Intent

(1) The ergonomics program seeks to prevent injuries and illness by applying ergonomic principals to the workplace. Ergonomic hazards are conditions that create a biomechanical stress on the body. Ergonomics seeks to adapt the job and workplace to the worker by designing tasks and tools that are within the worker's capabilities and limitations. Examples of ergonomic hazards include: tasks involving repetitive movements, forceful exertion, awkward posture, excessive vibration, environmental extremes, or power tools or vehicles and workstations lacking adjustability.

(2) Cumulative Trauma Disorders (CTD) are health disorders arising from repeated biomechanical stress. Other terms that have been used for such disorders include repetitive motion injury, occupational overuse syndrome, and repetitive strain injury. CTD involves damage to the tendons, tendon sheets, and related bones, muscles, and nerves of the hands, wrist, elbows, shoulders, neck, and back. Disorders in this class may also be referred to by medical terms describing a specific injury or diagnosis, such as carpal tunnel syndrome, tennis elbow, tendonitis, tenosynomitis, and low back pain.

(3) Hazard Prevention and Control. A review of work place assignments, operations, facilities, and equipment should be conducted in order to eliminate as much as possible, ergonomics hazards. To reduce ergonomic stress, the

potential for back injury, and other CTDs, the review of operations should identify where reduction can be obtained in weight lifting, twists, turns, lifting heights, operational heights, repetitive motion forces required for gripping objects, use of awkward postures, vibration levels, or other factors that may cause ergonomic stress.

b. Concept of Operations

(1) Commanding Officers

(a) Designate a unit representative to the Depot's Ergonomics Advisory Team (EAT).

(b) Ensure personnel who risk exposure to musculoskeletal hazards receive appropriate ergonomics awareness training.

(c) Ensure ergonomic principles become a fundamental consideration to any process improvement.

(2) AC/S, Quality Management Department

(a) Provide ergonomics training and education as required.

(b) Oversee the ergonomics program.

(c) Designate a representative from the Safety Office to the EAT.

(d) Review incidents related to musculoskeletal injuries and develop trend analysis; report results to the EAT and Occupational Safety and Health (OSH) Council.

(3) Director, Facilities Maintenance Division

(a) Designate a representative to the EAT.

(b) Where feasible, implement ergonomics principles into new or redesigned facilities and work stations.

(c) Ensure supervisors, managers, and employees receive appropriate ergonomics awareness training.

(4) Director, Human Resources Office

(a) Designate a representative to the EAT.

(b) Ensure supervisors, managers, and employees receive appropriate ergonomics awareness training.

(c) Provide the ergonomics advisory team with information regarding compensation costs associated with musculoskeletal injuries.

(5) Director, Service and Supply Division

(a) Appoint a representative from Contracting and Purchasing to the EAT.

(b) Integrate ergonomic considerations into the purchase of new equipment and tools.

(6) Ergonomics Coordinator

(a) Receive at least 40 hours of formal training in ergonomics and 24 hours in workplace back injury prevention.

(b) Chair the ergonomics team and provide an interface with the OSHA Council.

(c) Serve as focal point for the installation/unit ergonomics program.

(d) Ensure upper management support, recognition of contributions, and availability of resources.

(e) Develop and implement the installation or unit ergonomics plan with the assistance of the ergonomics team and with the approval of the OSH Council.

(f) Ensure accurate record keeping of EAT reports.

(g) Audit the status of the implementation of the ergonomics plan annually to include the work place processes, awareness, and documentation.

(7) Ergonomic Advisory Team

(a) Assist in developing and implementing an ergonomics awareness program.

(b) Conduct work site evaluations to identify existing and potential musculoskeletal risks and implements corrective action plans.

(c) Develop methods to evaluate the effectiveness of the corrective action.

(d) Maintain documentation on annual surveys, team meetings, trend analysis, investigations, ergonomic improvements, and associated costs.

(8) Marine Corps Personnel. When conducting work where musculoskeletal risk can reasonably be expected:

(a) Request supervisory assistance when assessing potential musculoskeletal risk.

(b) Report unsafe work conditions to supervisors.

(c) Provide their knowledge and feedback on any job changes proposed or implemented.

(d) Communicate issues of concern and suggestions through the EAT.

(e) Recognize the symptoms and causes of musculoskeletal disorders and report them early.

(f) Support workplace innovations and changes that reduce the risk of musculoskeletal disorders.

5. Command and Signal

a. Signal. This Order is effective the date signed.

b. Command. This Order is applicable to all Marines and civilians aboard and within MCRD/WRR, San Diego.

T. W. SPENCER
Chief of Staff

DISTRIBUTION: A, G

ERGONOMICS PROGRAM ELEMENTS

1. Workplace Analysis. The purpose of a workplace analysis is to identify existing hazards that may cause musculoskeletal disorders and other injuries. Identification of jobs with musculoskeletal factors will assist in determining where detailed job analysis and intervention priorities are needed.

a. One method of workplace analysis requires a review of mishap logs, federal employee compensation claims, worker complaints and suggestions and safety inspections and industrial hygiene surveys for musculoskeletal disorders. The analysis should include the body part involved, nature of injury/illness, lost work time (workdays and light/restricted duty days) and medical and compensation case costs. Where mishaps and compensation data analysis reveals a prevalence of musculoskeletal disorders, jobs may be prioritized for detailed analysis based on the incidence rate, severity of the risk, and depth of engineering support needed. Detailed analysis characterizes the risk factors; recommends and prioritizes corrective action.

b. Other methods of workplace analysis may include questionnaires, personnel interviews, direct observations, and videotaping the work process to provide information for detailed job analysis. When walk through surveys (safety inspection and/or industrial hygiene survey) reveal potential for musculoskeletal disorders and mishaps and compensation data analysis is inconclusive, a symptoms or body part discomfort survey should be administered to determine if intervention is warranted. This method provides a proactive approach on collecting information prior to actual injury.

2. Hazard Prevention and Control. The goal of hazard prevention and control is to eliminate, reduce or control the presence of musculoskeletal disorders to include: repetitive motion, force/mechanical stress, awkward or static posture, vibration, and work organizational/stress factors. Effective design or redesign of a task or workstation is the preferred method of preventing and controlling exposure. The methods of intervention include engineering controls, administrative controls, and Proper Protective Equipment.

3. Facility Modifications, New Construction or Material Acquisition. Before purchasing any tool or piece of equipment, building a new facility, or modifying an existing one, ergonomic design criteria shall be considered.

4. Medical Program. Cognizant medical commands shall support line activity initiatives to reduce CTD by providing medical replacement examinations, medical monitoring of employees judged to be high risk of CTD, and facilitating rehabilitation of individuals with CTD. Health care providers (occupational medicine physicians, physician assistants, nurse practitioners, physical therapists, and occupational health nurses) shall conduct workplace visits to obtain knowledge of operations, work practices, and light-duty jobs, at activities they support to provide ergonomics assessments.

5. Training. A key to establishing an ergonomics program is the proper training of management, supervisors, professional staff, and employees, as appropriate. Much of the training given as part of an ergonomic program is actually an attempt at behavior modification. In most cases, training is used as an attempt to change the habits of a lifetime. Consequently, techniques need to be devised to enable supervisors and peers to reinforce what was learned in the classroom. This reinforcement is an essential step to success.

ENCLOSURE (1)

a. The awareness training shall be conducted by the ergonomics coordinator or safety manager and shall include:

(1) Ergonomics definition and concepts.

(2) Anatomy and physiology of the musculoskeletal system.

(3) How to recognize and report early warning signs and symptoms associated with various musculoskeletal disorders.

(4) How to prevent musculoskeletal disorders by recognizing musculoskeletal risk factors and identifying the basic elements of an effective design.

(5) Understanding the components for the installation/unit program and their role in it.

(6) Wellness/Semper Fit Programs.

b. Specific training is targeted to the following personnel:

(1) Managers need to understand ergonomic issues so they will support the program with adequate resources.

(2) Supervisors need to recognize hazardous work situations.

(3) Workers need to recognize and report stressful work situations to their supervisors and cooperate with intervention measures.

(4) Ergonomics team members need to interpret safety, health and compensation data to make informed program and management decisions.

(5) Engineers need to recognize hazardous work conditions in order to assist with equipment and workstation design.

c. Training shall be documented and a copy provided to the installation/unit ergonomic coordinator and safety manager.

d. New training will be conducted when personnel are assigned to a new job with different risks, or when risks are newly identified in a job.

6. Program Evaluation and Review. The ergonomics coordinator should assess the implementation progress and the effectiveness of the installation/unit ergonomic plan annually. This audit will reveal gaps in the program and may identify helpful ideas for further program developments.