National Institutes of Health

Ergonomics Program

2018

Authored by the Division of Occupational Health and Safety (DOHS)
Ergonomics Program Manager (EPM).
CONTENTS

INTRODUCTION .............................................................................................................3
SCOPE .........................................................................................................................3
POLICY ..........................................................................................................................3
DEFINITIONS ...............................................................................................................3
RESPONSIBILITIES .....................................................................................................4
IDENTIFICATION OF ERGONOMIC HAZARDS .........................................................4
EVALUATION & CONTROL OF ERGONOMIC HAZARDS ...........................................5
TRAINING .....................................................................................................................6
MEDICAL MANAGEMENT .............................................................................................7
PROGRAM EVALUATION .............................................................................................7

ACRONYMS

CC Clinical Center
DOHS Division of Occupational Health and Safety
EPM Ergonomics Program Manager
IC Institute or Center
NIH The National Institutes of Health
NIH-CWEH -Computer Workstation Ergonomics Handout
NIH-EP -Ergonomics Program
OEEC Office Ergonomic Evaluation Checklist
OMS Occupational Medical Service
OMS-HCP -Health Care Provider
OMS-PT -Physical Therapist
SOSB Safety Operations Support Branch
SOHSs Safety and Occupational Health Specialists
TAB Technical Assistance Branch
TAB-IH -Industrial Hygienist
WMSDs Work-Related Musculoskeletal Disorders
I. Introduction

The National Institutes of Health’s (NIH) Division of Occupational Health and Safety (DOHS) strives to provide safe workplaces for the NIH community. From administrative personnel to research personnel, ergonomics plays an important role in preventing injury and illness. The NIH-Ergonomics Program (NIH-EP) is an integral part of the NIH Occupational Safety and Health Program that uses a comprehensive approach to inform employees of the possible ergonomic hazards in their workplaces. The NIH-EP establishes procedures for ergonomic hazard identification, evaluation and control, training, medical support, program management, and program evaluation.

II. Scope

The Division of Occupational Health and Safety (DOHS) develops and administers the NIH-EP for all NIH employees at risk for developing work-related musculoskeletal disorders (WMSDs).

This program focuses on employees whose primary work-related tasks require repetitive motions, awkward postures, high repetition, and forceful exertions. At NIH, these types of job tasks are normally performed by personnel spending a large proportion of their day at computer workstations; personnel involved with pipetting and microscopy; personnel involved with animal care and use; personnel assisting patients; and personnel involved with repetitive or heavy lifting.

III. Policy

DOHS provides, at no cost to the employee, ergonomic assessments of workstations, training that identifies ergonomic hazards encountered in NIH workplaces, and medical management for employees who sustain WMSDs.

Following an ergonomic assessment of a workstation, DOHS issues a written evaluation that identifies potential ergonomic health hazards and suggests changes in practices, procedures, and equipment that may further reduce the risk of WMSDs. Supervisors are responsible for determining what equipment purchases are feasible. Individuals with existing disabilities or medical conditions should follow their Institute or Center’s (IC’s) procedures for requesting a reasonable accommodation in accordance with the NIH Policy Manual Chapter 2204 – Reasonable Accommodations.

IV. Definitions

Ergonomics: The science of fitting jobs to people. Ergonomics encompasses the body of knowledge about physical abilities and limitations as well as other human characteristics that are relevant to job design.

Musculoskeletal Disorder ( MSD): Any injury or illness related to the musculoskeletal system which involves the nerves, tendons, muscles, and supporting structures such as the intervertebral disc. The injury or illness is usually caused by repetitive motions, awkward postures, high
repetition, and/or forceful exertions.

Work-Related MSD: A MSD is considered work-related when work activities or workplace conditions likely caused or contributed to a reported MSD.

V. Responsibilities

Ergonomics Program Manager (EPM): The EPM develops and administers the NIH-EP, coordinates and schedules ergonomic evaluations, coordinates ergonomic training sessions, regularly updates the NIH ergonomic website, maintains a database on employees who have completed ergonomic training, and remains abreast of technical issues related to ergonomics. The EPM periodically reviews and evaluates the effectiveness of the NIH-EP (Section X: Program Evaluation).

Technical Assistance Branch-Industrial Hygienist (TAB-IH): The TAB-IH’s responsibilities include performing ergonomic evaluations and conducting related training sessions. The TAB-IH completes an Office Ergonomic Evaluation Checklist (OEEC) for each evaluation performed for an NIH employee and sends the evaluation to the EPM. In addition, the TAB-IH compiles a list of all employees who participate in an ergonomics training session and submits the list to the EPM.

Safety and Occupational Health Specialist (SOHSs): IC SOHSs conduct routine walk-through surveys in their areas of responsibility and notify the EPM of any workplace conditions or work activities that cause or are reasonably likely to cause or contribute to a WMSD. They also remind employees of their duty to report all work-related injuries and suspected illnesses to OMS.

Occupational Medical Service - Health Care Provider (OMS-HCP): OMS-HCPs record all employee reports of work-related injuries and illnesses, including WMSDs, in an electronic database. OMS-HCPs offer medical evaluation and treatment for WSMDs. The care consists of clinical evaluations, limited diagnostic tests, and medical care, including onsite physical therapy and acupuncture, as clinically warranted.

OMS - Physical Therapist (OMS-PT): In addition to providing clinical care for employees with WMSDs, the OMS-PT provides consultative support for Clinical Center (CC) management, ergonomic assessments for injuries that occur in the CC, and relevant training for CC personnel.

VI. Identification of Ergonomic Hazards

Many work-related tasks have some degree of risk for developing a MSD. The NIH-Ergonomics Program is designed to assist DOHS staff in identifying work-related workstation designs and tasks that may place NIH employees at risk for developing a MSD. Ergonomic hazards are identified by the following methods:
**NIH Ergonomic Health Website**

The NIH Ergonomic Health website provides guidance for NIH employees interested in evaluating their own workstations and report their concerns with MSD symptoms. The website guides the employee through the proper steps for evaluating their workstation and job tasks and provides contact information to request an ergonomic evaluation or report an ergonomic hazard. The request, whether via e-mail or phone call, is forwarded to the EPM or a TAB-IH. The website can be accessed at the following address: [https://go.usa.gov/xnt6r](https://go.usa.gov/xnt6r)

**Employee Request for Evaluation**

NIH employees can call DOHS directly at 301-496-2960 to request an ergonomic evaluation of their work area. These calls are forwarded to the EPM or TAB-IH.

**Safety and Occupational Health Specialists (SOHSs)**

IC SOHSs periodically conduct laboratory safety surveys in their areas of responsibility and notify the EPM of any workplace conditions or physical work activities that cause or are reasonably likely to cause or contribute to a WMSD.

**Occupational Medical Service (OMS)**

OMS records employee reports of occupational injuries and illnesses (including WMSDs) in an electronic database. The DOHS Safety Operations Support Branch (SOSB) Chief regularly reviews the reports and assigns reports of WMSDs to the EPM or the OMS-PT (for reports from the CC) for further evaluation and assistance. In addition, OMS-HCPs alert the EPM directly, if the circumstances of the injury warrant immediate notification.

**Injury/Illness Reports**

Injury/Illness Reports shall be evaluated by the EPM or a TAB-IH to determine whether a WMSD has occurred in work areas that have not been previously identified by the DOHS.

**VII. Evaluation & Control of Ergonomic Hazards**

**Work Area Evaluation**

The EPM or TAB-IH will conduct an assessment consisting of at least a walkthrough survey and an interview with the employee regarding ergonomic issues related to their job. Prior to the assessment a PowerPoint training and self-evaluation checklist will be sent to the employee for completion. The PowerPoint training will assist in educating the employee on ergonomic hazards and best practices to avoid WMSDS’s. In addition, the self-evaluation checklist will aid the EPM or TAB-IH in assessing the workstation for ergonomic hazards.

Once an ergonomic hazard has been identified, the EPM or TAB-IH with the assistance of the
SOHS will analyze the job task and make recommendations to improve the ergonomic design of the work area and/or the job task. Work area evaluation may include an employee interview, videotape analysis, first hand observation, and/or a symptom survey.

**Ergonomic Hazard Control**

The supervisor, with the technical assistance of the EPM and the SOHS, shall implement all engineering, administrative, and work practice controls recommended during the ergonomic assessment. The EPM shall follow-up to determine whether the changes were successful and if the employee is experiencing improvement of MSD symptoms.

**VIII. Training**

Ergonomic training shall be performed by the DOHS staff. Training formats consist of the following:

**Web-based Training**

The ergonomics website provides training information for employees that work in a variety of settings (e.g. laboratory, office, patient care, and industrial areas). Each section of the website will train employees on proper engineering, administrative, and work-practice controls. New employees shall be instructed by their supervisor to use the website to self-evaluate their work area.

**Ergonomic Training Classes**

Periodically, the DOHS provides training classes on office ergonomics, laboratory ergonomics, patient care ergonomics, and industrial ergonomics. Patient care ergonomic training is conducted with the assistance of the OMS-PT. All training classes will be conducted on-site or in a NIH auditorium/conference room.

**Video-based Training**

The DOHS has produced training videos on office and laboratory ergonomics. Each video is approximately 25 minutes in length. The videos are loaned to ICs for employee training, and may be used by the EPM, TAB-IHs, and SOHSs during training classes or presentations. An industrial ergonomic training video, which is available from the EPM, may be used to assist in instructional classroom and on-site training.

**One-On-One Training**

One-on-one ergonomic training is provided to employees during ergonomic evaluations. During an office ergonomic evaluation, the employee is provided a copy of the NIH Computer Workstation Ergonomics Handout (NIH-CWEH, Appendix I) and the NIH Office Ergonomic Evaluation Checklist (NIH-OEEC, Appendix II). The NIH-CWEH provides information on
services the DOHS can provide concerning ergonomics, proper workstation adjustments, and suggested office stretching exercises. The NIH-OEEC is used whenever an office ergonomic evaluation is performed by the EPM or TAB-IH. If a question is answered with a NO response, the resulting recommendations shall be recorded on the NIH-OEEC.

The EPM maintains a database of employees who have completed instructional ergonomic training. The employee shall remain in the database for as long as the employee is employed by the NIH.

IX. Medical Management

Employees shall be notified by their supervisor that they are to report all signs and symptoms of a WMSD to the Occupational Medical Service (OMS). OMS, located in the CC (Bldg.10, Room 6C306), provides employees a mechanism for reporting signs and symptoms of WMSDs, and provides evaluation, treatment, follow-up, and recommended work restrictions. The OMS-PT provides continuing medical management to NIH employees who have been diagnosed with a WMSD. After six weeks of medical management, the OMS-PT will refer the NIH employee to medical care outside of the NIH under workman’s compensation. In some instances where the OMS-PT has a high patient load, the employee will be referred directly to their outside physician under workman’s compensation. The employee’s supervisor shall ensure that all work restrictions are followed by the employee.

X. Program Evaluation

The NIH-EP shall be evaluated annually by the EPM to ensure program effectiveness.

Evaluation checklist:

1. The EPM will analyze injury/illness reports with reported WMSDs to determine:
   a. The total number of reported WMSDs for the year;
   b. The type of work these employees perform;
   c. Whether these employees received ergonomic training prior to their WMSD; and
   d. Any changes or trends in the reporting of WMSDs.

2. DOHS Ergonomics webpage:
   a. Does the information provided on the DOHS ergonomics webpage reflect the current body of knowledge on ergonomics in the workplace?
   b. Are all resources provided current?
   c. Are all hyperlinks working?
   d. Has the most recent version of the NIH-EP been uploaded?

3. NIH-EP policy review:
   a. Has OMS had an opportunity to review and provide input?
   b. Are all hyperlinks working?
   c. Has the evaluation checklist been updated?