National Institutes of Health

Ergonomics Program

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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 NIH employee and contract personnel operating under close federal oversight, ergonomic assessments of workstations, training that identifies ergonomic hazards encountered in NIH workplaces, telework, and medical management for employees who sustain WMSDs.

Other NIH contract personnel are welcome to utilize the NIH self-assessment checklist (https://go.usa.gov/xHgAH) and discuss findings with the parent company safety manager or equivalent.

Following an ergonomic assessment of a workstation, DOHS issues a written evaluation report that identifies potential ergonomic health hazards and recommends 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 (WMSD): An 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).

<u>Technical Assistance Branch-Industrial Hygienist (TAB-IH)</u>: 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.

<u>Safety Operations and Support Branch (SOSB)</u>: SOSB 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 indicated.

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 employees as needed.

VI. Identification of Ergonomic Hazards

Many work-related tasks have some degree of risk for developing an 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 an MSD. Ergonomic hazards are identified by the following methods:

NIH Ergonomics Webpage

The ergonomics 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

The NIH Ergonomics website provides guidance for NIH employees working on site or teleworking interested in evaluating their own workstations. NIH Employees are encouraged to conduct a self-assessment evaluation (https://go.usa.gov/xHgAH):

- 1. Annually to ensure that the ergonomic setup remain the same
- 2. When moving to new office or while teleworking
- 3. While replacing office furniture, e.g., new chair, desk, or computer monitors
- 4. When employees have concerns about MSD symptoms

Employee Request for Evaluation

NIH employees are encouraged to complete the NIH self-assessment checklist (https://go.usa.gov/xHgAH) to make adjustments to their workstation. After completing the ergonomic NIH self-assessment checklist, a copy of the assessment will be forwarded to the employee and to the EPM. Thirty days after or call DOHS directly at 301-496-2960 to request an ergonomic evaluation of their work area.

SOSB Safety Specialists

SOSB 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/Telework Evaluation

The EPM or TAB-IH will conduct an assessment consisting of a walkthrough survey and or an interview with the employee regarding ergonomic issues related to their job. Prior to the assessment a self-evaluation checklist will be sent to the employee for completion. The self-evaluation checklist will aid the EPM or TAB-IH in assessing the workstation for ergonomic hazards.

NIH employees engaged in teleworking are encouraged to conduct an ergonomic self-assessment checklist and perform the suggested actions listed. If the employee needs further ergonomic assistance, then a virtual workstation evaluation will be completed by the EPM or TAB-IH.

Once an ergonomic hazard has been identified, the EPM or TAB-IH 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, video analysis, firsthand observation, and/or evaluation of the self-assessment checklist submitted by the employee.

Ergonomic Hazard Control

The employee's supervisor, with technical assistance from the EPM or a TAB-IH should 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. Information and Training

Ergonomics information and training is available:

Web-based Information

The ergonomics website (https://go.usa.gov/xnt6r) provides information for employees that work

in a variety of settings (e.g. laboratory, office, patient care, and industrial areas). Each section of the website contains information employees can digest at their own pace on proper engineering, administrative, and work-practice controls. New employees are encouraged to use the website to self-educate and evaluate their work area to optimize it from an ergonomic perspective.

Ergonomic Training Classes

Upon request, DOHS can provide 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.

IX. Medical Management

Employees shall be notified by their supervisor that they are to report work related injuries with 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 visits, the employee may continue their medical care outside of the NIH 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. Any changes or trends in the reporting of WMSDs; and
 - d. Consider what can be done to reduce injury and illness rates for 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?