Beaumont® | HEALTH SYSTEM

Beaumont Laboratory
Royal Oak • Troy • Grosse Pointe

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Related Documents:

Ergonomics

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Introduction

According to NIOSH, “Ergonomics is the scientific study of people at work. The goal of ergonomics is to reduce stress and eliminate injuries and disorders associated with the overuse of muscles, bad posture, and repeated tasks. This is accomplished by designing tasks, work spaces, controls, displays, tools, lighting, and equipment to fit the employee´s physical capabilities and limitations.”

The laboratory will evaluate employees and workspaces through prevention and engineering controls.

Purpose

The purpose of this policy is to:

- Identify some common postures and motions to avoid for training purposes.
- Identify work area considerations when performing an ergonomic assessment.
- Outline a procedure to follow in the event of an ergonomic concern.

Procedure

Supervisors should work with staff to evaluate work station arrangement and function with regard to the above objectives. Consideration should be given to the following concerns and further evaluation sought if a problem is identified. Additional assistance for this evaluation may be obtained through the BH WorkAbility Program, contact phone # 248-655-5740.

Training

Training should include instruction on proper body positions and use of any devices designed to reduce strain. Specific considerations include the following:

Postures to avoid:

- Prolonged or repetitive flexion or extension of the wrist
- Prolonged or repetitive bending at the waist
- Prolonged standing or sitting without shifting position
- Suspending an outstretched arm for extended periods of time
- Holding or turning the head consistently to one side or working with head bent forward
- Any unnatural posture that is held repeatedly or for a prolonged time

Motions to avoid:

- Repeated motion without periods of rest
- Repeated motion with little or no variation
- Repeated motions done with great force
- Resting or compressing a body part on or against a surface
- Lifting heavy objects far away from the body
- Frequent reaching or working above shoulder height
- Holding fingers, hands and arms in unnatural positions
- Using heavy touch on computer or equipment keyboards or touch pads
- Squeezing forceps, bottles, etc. with large amount of force, and or repeatedly without periods of rest

Factors which may contribute to symptoms:

- Furniture or a work area arrangement which produces bad postures
- Physically demanding work the employee is not accustomed to
- Underlying medical conditions

Work Area Considerations

The work area should be large enough to accommodate the employee, allow the full range of motions involved in performing the task(s) and provide adequate room for the equipment and materials that make up the work station. Employee should arrange equipment and supplies so that reaching is kept to a minimum. All of the following should be considered when doing a work station/function assessment.

Desk/computer/lab workstations:

- Chair adjustments
- Design/layout
- Equipment
- Fatigue mats
- Keyboard
- Lighting
- Monitor
- Mouse or other input device
- Work habits

Work functions (Examples):

- Repetitive pipetting
- Microscopy
- Workbenches
- Biosafety cabinets
- Micro-manipulation and fine motor skill activities
- Microtome and cryostat work
- Interacting with equipment
- Overhead lifting

Action

Employee:

To minimize possibility of MSD (musculoskeletal disorder), employee shall be responsible to:

- Maintain work area, equipment and supplies to minimize MSD.
- Avoid unnatural postures and positions, repetition and/or unusual force application.

Upon concern of potential work area or work practice that may possibly be contributing to a MSD, the employee is responsible to report any symptoms and/or concerns to their supervisor or safety officer.

Management:

Upon receiving an ergonomics concern, the supervisor shall investigate and evaluate the situation. Where reasonably feasible, the supervisor shall:

- Change and/or modify employee's work actions, motions and activities, and/or;
- Change and/or modify the work station and/or work practice, and/or;
- Contact BH WorkAbility Program for additional assistance with an evaluation.

References

- NIOSH/CDC http://www.cdc.gov/niosh/topics/ergonomics/
- OSHA Ergonomics Prevention http://www.osha.gov/SLTC/ergonomics/index.html
- OSHA e-tools on Ergonomics http://www.osha.gov/SLTC/etools/hospital/lab/lab.html#Ergonomics
- NIH Laboratory Ergonomics http://www.ors.od.nih.gov/sr/dohs/HealthAndSafety/Ergonomics/atwork/Pages/lab1.aspx
- OSHA Guidebook for Labs. 2nd edition. HcPro. 2006
- Complete Guide to Laboratory Safety. 3rd edition, Terry Jo Gile, HcPro Inc. 2010
- CAP "Laboratory General Checklist"
- OSHA Ergonomics Voluntary Guidelines – 54CFR3904 http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=12909&p_table=FEDERAL_REGISTER

Authorized Reviewers

This procedure is monitored by the Beaumont Laboratory Safety Committee.

Laboratory Safety Officer
Chair, Pathology and Laboratory Medicine
Beaumont Laboratory Medical Directors, Grosse, Pointe, Royal Oak, Troy, W. Bloomfield

Laboratory Ergonomics

Document Control

Location of Master:

Master electronic file stored on the Clinical Pathology server under S:\ClinicalPathology\Safery\Document Control\SafetyManual\MasterDocuments.
Master printed document stored with the Royal Oak CP Safety Officer.

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Document History

Signature	Date		
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