

University of Texas Medical Branch	Effective Date:	July 04
Pulmonary Function Clinic	Revised Date:	Oct 05
Policy 05-03 Laboratory Ergonomics Program	Review Date:	Aug 23

## Laboratory Ergonomics Program

**Audience** All personnel in the Pulmonary Laboratories: Pulmonary Function Clinics, Bronchoscopy Service and Center for Pulmonary Rehabilitation.

**Purpose** Pulmonary Function Clinics will strive to maintain a safe and healthy workplace for all laboratory employees. Workplace ergonomics is of increasing importance to employee health and safety. Human Resources' Employee Injury/Illness Management Office is available to assist divisions and employees with evaluation of work stations to ensure work space is suitable and appropriate to prevent injuries.

**Policy** Ergonomics is the science of fitting the job to the worker. It focuses on how tools, equipment, layout and overall organization of job tasks affects the employee's well-being and ability to perform the job. Implementation of this policy is a shared responsibility of all leadership and staff. 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, lifting, and equipment to fit the employee's physical capabilities and limitations

**A. Ergonomics is important because of:**

- Safety – you are less likely to obtain injury in an ergonomically appropriate environment.
- Quality- The quality of your work will be better if you are comfortable.
- Efficiency- You will be able to perform your work more efficiently, with less wasted energy if you are comfortable.

**B. Ergonomic Risk Factors Include:**

- Awkward postures
- Static postures (holding muscles in the same position for long periods)
- Force (physical effort to perform a task)
- Repetition
- Contact stress (body part has repeated contact with hard or sharp object)
- Vibration
- Environmental conditions (lighting, temperature, humidity, noise)

**C. Cumulative Trauma Disorders (CTDs)- also called Musculoskeletal Disorders (MSDs)**

CTDs are injuries that develop gradually over periods of weeks, months, or even years, as a result of repeated stress on a particular body part as a result of mechanical stresses.

Examples include:

- Carpal tunnel syndrome
- Tendinitis
- Rotator cuff injuries (affects the shoulder)
- Trigger finger

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- Muscle strains and lower back injuries

How to prevent CTS:

- Lift from the knees, not the back
- Push, don't pull
- Use carts and dollies to move objects
- Maintain a neutral posture
- Use foot rests/anti-fatigue mats

#### **D. Training**

Ergonomic training is incorporated into the annual online laboratory safety training. The training will ensure that workers are aware of ergonomics and its benefits, become informed about ergonomics related concerns in the workplace, and understand the importance of reporting early symptoms of CTDs. Early reporting can accelerate the job assessment and improvement process, helping to prevent or reduce the progression of symptoms, the development of serious injuries, and subsequent lost-time claims.

#### **E. Work Station Design**

Incorporation of ergonomics principles in work site construction or renovation planning should be considered and addressed with Facilities Operation and Management (FOAM) during planning meetings. For purposes of this policy, the work station is considered to include furniture, electronics, instruments, tools, lighting, and other environmental features. Managers and supervisors are responsible for upkeep of individual work stations, once established/ installed. Each job site should provide an appropriate fit between the work, the technology, and the working environment. Employees should be empowered to share in the responsibility for the safety of their workplace with their supervisor or appropriate others.

#### **F. Job Design**

Managers and supervisors, in collaboration with Medical Directors, are responsible for ensuring appropriate work methods. When considering an employee's regular job assignment, both place of work and job flow should be reviewed to avoid excessively repetitive work for any one employee and his/her specific position. Employees who suspect that ergonomic issues are having an adverse effect on the workplace are encouraged to ask the Manager for workplace ergonomics assessment.

Immediately after hiring a new employee or making significant changes in assigned responsibilities of an employee, the manager/division safety officer should determine the adequacy of the employee's familiarity with ergonomic principles and practices applicable to the new job responsibilities and locale. When employees are provided unfamiliar or significantly changed tools, equipment, or work stations, the training in the use of the tool, equipment, or work station should address ergonomics issues.

#### **G. Medical Management**

Employees suffering from job-related CTSs have access to medical treatment and rehabilitative processes through Employee Health Services and Worker's Compensation Insurance. In these cases, ergonomic accommodations or

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improvements may be coordinated by Worker's Compensation. However, work station modifications and equipment cost decisions are lab leadership responsibilities, both financially and administratively. The Institutional ADA (American's with Disabilities Act) Office will provide an ergonomic worksite evaluation at the request of lab leadership. The Request for Job Site Evaluation Form must be completed by lab leadership and submitted to the Institutional ADA Officer in the HR Employee Injury/Illness Management Office.

If an employee complains of a CTD or other work-related injury or illness, the Manager/Division Safety Officer should direct the employee to the appropriate medical facility and complete the employee Injury Report Form in accordance with IHOP03.07.05 Workers' Compensation Insurance. Refer to policy IV.1.03.01 – Reporting of Laboratory Accidents and Unusual Events for more information on reporting job related injuries.

Questions regarding Worker's Compensation Insurance (WCI) procedures may be directed to the Employee Injury/Illness Management Office.

#### **H. Individual Compliance and Involvement**

Employees are responsible for following ergonomic policies and work practices directed or recommended for preventing injuries. Employees are encouraged to identify and provide important information about hazards in their workplace and assist in the ergonomic process by voicing their concerns and suggestions for reducing exposure to risk factors and by evaluating the changes made as a result of an ergonomic assessment.

#### **I. Corrective Action**

All ergonomic injuries and workplace ergonomic assessments requiring corrective action will be documented. Documentation will be provided to Quality Management and the Safety Committee for regulatory and process improvement purposes.

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**Definitions**    **Ergonomics:** Referred to as human factors, or human engineering, ergonomics is concerned with understanding the basic physical and psychological attributes of people as these relate to the things that people use (tools, machines, environments).  
**Repetitive Tasks:** Activities involving sustained or repetitive musculoskeletal exertion with no opportunity for rest or recovery. Examples of repetitive tasks are, chopping by hand various food items, working with tools in a twisting motion, bending, lifting, data entry work.

**Cumulative Trauma Disorders (CTD):** Injuries developed gradually over periods of weeks, months, or even years as a result of repeated stresses on a particular body part as a result of mechanical stresses.

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#### **References**

- National Institute of Environmental Health Sciences (NIEHS) Health and Safety Guide to Laboratory Ergonomics
- Occupational Safety and Health Administration (OSHA) Ergonomic Recommendations
- National Institute for Occupational Safety and Health (NIOSH) – Ergonomics and Musculoskeletal Disorders
- Employee Injury/Illness Management Office

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- Institutional ADA Office
- Request for Job Site Evaluation form
- IHOP 03.07.05 Worker's Compensation Insurance

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## Medical Management

If an employee complains of a CTD or other work-related injury or illness, supervisors should direct the employee to the appropriate medical facility and complete the appropriate forms in accordance with Workers' Compensation Insurance policy, IHOP 3.11.01.

Questions regarding WCI procedures may be directed to the Employee Injury Management Office (formerly WCI Office), including questions on Job Accommodation/Modification (IHOP 3.8.5).

**This form documents the approval and history of the policies and procedures for the Pulmonary Function Laboratory. The Medical Director signs all policies verifying initial approval. Annually thereafter, the Director and/or designee may approve reviews and revisions.**

Date	Approved by:	Signature
11/07	V. Cardenas, MD Medical Director Pulmonary Laboratory	
6/09	V. Cardenas, MD No changes to the policy	
7/10	V. Cardenas, MD No changes to the policy	
5/14	A. Duarte, MD Medical Director Pulmonary Laboratory No changes to the policy	
8/16	A. Duarte, MD Medical Director Pulmonary Laboratory No changes to the policy	
11/17	A. Duarte, MD Medical Director Pulmonary Laboratory No changes to the policy	
8/19	A. Duarte, MD Medical Director Pulmonary Laboratory No changes to the policy	
8/21	A. Duarte, MD Medical Director Pulmonary Laboratory No changes to the policy	
8/23	A. Duarte, MD Medical Director Pulmonary Laboratory No changes to policy	