

**MEDICAL UNIVERSITY OF SOUTH CAROLINA**  
**ERGONOMIC PROGRAM**

**Revised: 9/2007**

# **MEDICAL UNIVERSITY OF SOUTH CAROLINA ERGONOMIC PROGRAM**

## **Introduction**

Ergonomics is the discipline or science that focuses on the relationship between an employee and his/her work environment.

Musculoskeletal injuries are defined as any disorders of muscles, tendons, ligaments, nerves, joints, bones and circulatory system. This class of injuries results when the muscles, tendons, ligaments, nerves, joints, bones or circulatory system are damaged by repeated or excessive force. Each year 1.8 million workers in the United States report work-related Musculoskeletal disorder (MSD), such as carpal tunnel, tendonitis and back injuries. About 600,000 MSD's are serious enough to result in workers having to take time off work to recover. The solution to these injuries lies with ergonomics, the science of fitting the job to the worker.

Activities outside of the workplace that involve substantial physical demands may also cause or contribute to MSD's. In addition, development of MSD's may be related to genetic causes, gender, age and other factors.

It is the intent of Occupational Safety and Health Programs to take the necessary steps to produce and maintain an occupational ergonomic program.

## **Components of MUSC Ergonomic Program**

- Training
- Risk Factors
- Reporting MSD's signs, symptoms and injuries
- Worksite evaluation
- Hazard Prevention and Control
- Medical Management
- Recordkeeping

## **Training**

Ergonomic training is available for all MUSC employees. This training is offered at new employee orientation and annual updates. Training will consist of the following:

- Overview of MUSC's Ergonomic Program
- Recognition of Ergonomic Hazards
- Hazard Prevention and Control Measures
- Recognition of Symptoms and Reporting Requirement

Physical Therapy also teaches a 60-minute injury prevention segment to all patient care providers during Clinical Services Orientation.

Physical and Occupational Therapy staff will provide unit specific classes upon request.

Institute of Psychiatry receives an Injury Prevention Class at their new staff orientation.

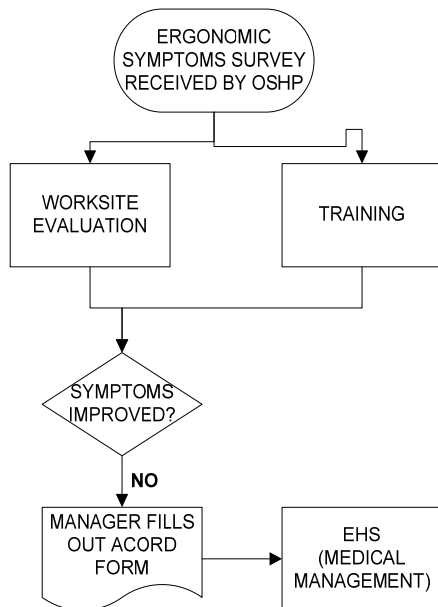
### **Risk Factors**

1. **Repetition:** Repetitive activity greater than two hrs./day  
Keyboarding more than 4 hrs./day.
2. **Force:** Lifting greater than 75 pounds.
3. **Awkward Posture:** Repeatedly raising or working with hands above the head for more than 2 hrs. /day or working with the back, neck or wrist bent for more than 2 hrs./day
4. **Contact Stress:** Using hands or knees as a hammer more than ten minutes per hour or 2 hrs./day.
5. **Vibration:** Using tools or equipment that typically have high vibration levels for more than 2 hrs/day.

### **Reporting MSDS Signs, Symptoms and Injuries**

In the event that an employee develops MSD signs, symptoms or injury, the employee will notify his / her manager and the manager will provide an [Ergonomic Symptoms Survey](#) for the employee to fill out. Fax completed surveys to Occupational Safety and Health Programs (2-0284). The flow chart below will be initiated.

### **ERGONOMICS FLOW CHART**



### **Worksite Evaluation**

Worksite evaluations are conducted by Occupational Safety and Health Programs (2-3604) to identify, evaluate and control potential ergonomic risk factors. The initiation of a worksite evaluation may be triggered by the following:

1. Ergonomic Symptoms Survey
2. Employee or Manager Request
3. Workers Compensation Request
4. Physical or Occupational Therapy Request
5. Proactive Identification of a Potential Ergonomic Risk Factor. Employees who have had a Musculoskeletal Disorder (MSD) will receive a worksite evaluation as part of a physical or occupational treatment plan.

### **Hazard Prevention and Control**

Upon completion of a worksite assessment for ergonomic risk factors, the following types of controls will be evaluated and considered for possible implementation.

1. Engineering Controls – Physical changes to a job that reduces MSD hazards such as changing or redesigning workstations, tool, facilities, equipment, materials or processes.
2. Administrative Controls – Reduces the duration, frequency and severity of exposures to ergonomic hazards. An example would be to take rest pauses or breaks to relieve fatigued muscle-tendon groups. Physical Therapy is promoting a “Stand Up and Stretch Program” for employees who perform repetition motion duties. Posters will be posted reminding employees to take breaks and stretch.

The Lift Team was initiated to reduce the number of work related back injuries and improve the work environment for nursing staff. To request assistance with patient lifts, page beeper number 17196.

### **Medical Management**

All employees should report signs and symptoms of MSD's as soon as they occur. Pain, numbness and tingling in wrist, arms, elbows, neck, shoulders and back are examples of early symptoms of MSD's.

In the event that an employee develops musculoskeletal symptoms, the manager will be responsible for ensuring that the following occurs:

- In the event that an employee reports musculoskeletal symptoms, to their manager, the manager will provide the Ergonomic Symptoms Survey for the employee to fill out. Completed surveys should be faxed to Occupational Safety and Health Programs (2-0284).
- Upon receipt of the Ergonomic Symptoms Survey, Occupational Safety and Health Programs will conduct a worksite evaluation. A written ergonomic evaluation will be

sent to the employee's manager with recommendation to prevent and control ergonomic risk factors.

- If MSD signs/symptoms persist, the manager will fill out a first report of injury form (ACORD) and advise the employee to report to Employee Health Services for a medical evaluation/treatment.
- If the employee returns to work with medical restrictions, the manager will make a reasonable effort to accommodate during the medical restriction time period.
- The Transition Task Force will be available to assist the department and employee as needed.
- Physical Therapy provides functional capacity evaluations. This comprehensive evaluation test employee's physical capability to perform required job duties. Employees with a musculoskeletal injury will receive a one time Physical Therapy courtesy visit.

### **Recordkeeping**

Occupational Safety and Health Programs will maintain the following ergonomic records:

1. Training – documentation of ergonomic training records for each employee shall include: employee name, training date, lesson plan and trainer.
2. Worksite Evaluation – A written ergonomic worksite evaluation will be available for every assessment performed. The following information will be included:
  - Employee and manager name
  - Worksite Location
  - Observed Ergonomic Risk Factors
  - Recommendation to prevent and control ergonomic risk factors
3. Medical Management – Employee Health Services will maintain medical management records. Medical management record will include first report of injury form (ACORD), physician notes and referrals.