

**Suggested policy format and content. RTPA specific policies should be developed in consultation with RTPA Legal Counsel, Board of Directors and appropriate regulatory agencies.**

## **5. Ergonomics**

Ergonomics is the science of arranging the environment to fit the person in it. Applying ergonomic principles can help reduce the risk of injuries in the workplace. The goal of the RTPA Ergonomics Policy is to reduce or eliminate work-related hazards that contribute to the development of musculo-skeletal disorders (MSDs). This policy applies to all persons working at RTPA. RTPA will take a proactive approach in anticipating ergonomic hazards and correcting them.

It is the policy of RTPA to provide all employees with a safe and healthy workplace. A proactive ergonomics program is integrated into the agency's injury and illness prevention program. Records documenting the identification, prevention, and control of employee exposure to ergonomic risk factors will be maintained pursuant to all regulations.

This program is a collaborative effort that includes managers, supervisors, and employees. The Director of Finance and Administrative Services is responsible for the program's implementation, management, and recordkeeping requirements.

### **Ergonomics Program**

The purpose of an ergonomics program is to apply ergonomic principles to the workplace in an effort to reduce the number and severity of injuries, thus decreasing workers' compensation claims and, where possible, increase productivity, quality, and efficiency. An ergonomically sound work environment maximizes employee comfort while minimizing the risk of undue physical stress. Requests for workstation assessments are coordinated by the Director of Finance and Administrative Services.

### **Injuries and Exposures Associated with MSDs**

Musculo-skeletal disorders (MSDs), are injuries and illnesses that affect muscles, nerves, tendons, ligaments, joints, or spinal discs. Some common MSDs are: carpal tunnel syndrome, rotator cuff syndrome, trigger finger, sciatica, tendonitis, low back injury, and tense neck syndrome. Workplace MSDs are caused by exposure to the following risk factors:

**Repetition:** Doing the same motions over and over again places stress on the muscles and tendons. The severity of risk depends upon how often the action is repeated, the speed of the movement, the number of muscles involved, and the required force.

**Forceful Exertions:** Force is the amount of physical effort required to perform a task (such as heavy lifting) or to maintain control of equipment or tools. The amount of force depends upon the type of grip, the weight of an object, body posture, the type of activity, and the duration of the task.

**Awkward Postures:** Posture is the position your body is in and affects muscle groups that are involved in physical activity. Awkward postures include repeated or prolonged reaching, twisting, bending, kneeling, squatting, working overhead with your hands or arms, or holding a fixed position.

**Contact Stress:** Pressing the body against a hard or sharp edge can result in placing too much pressure on nerves, tendons, and blood vessels. For example, using the palm of your hand as a hammer can increase your risk of suffering a MSD.

## Symptoms and Consequences of MSDs

Employees suffering from MSDs may experience less strength for gripping, less range of motion, loss of muscle function, or ability to do everyday tasks. Common symptoms include:

- Painful joints
- Pain, tingling, or numbness in hands or feet
- Shooting or stabbing pains in arms or legs
- Swelling or inflammation
- Burning sensations
- Pain in wrists, shoulders, forearms, or knees
- Back or neck pain
- Stiffness
- Fingers or toes turning white.

## Importance of Reporting MSDs

If MSD signs and symptoms are not reported early, permanent injury may result. It is important that employees report MSD signs and symptoms right away to avoid long-lasting problems. RTPA will respond in a timely manner to those reports. Contact the Director of Finance and Administrative Services to report MSD signs or symptoms, or MSD hazards. You also may talk to your supervisor about your suggestions on how to fix MSD hazards. RTPA will not discriminate against employees for reporting MSD signs or symptoms, or MSD hazards. It is the policy of RTPA to encourage such reporting.

## Methods for Reducing MSDs

If RTPA determines that an employee's MSD signs or symptoms, are connected to that employee's job, RTPA will provide the employee with an opportunity to contact a health care professional or ergonomic specialist and receive guidance regarding possible workstation, furniture, or equipment modifications/adjustments and other preventive strategies, injury treatment and management options, and if more severe, possible work modifications or restrictions. If an MSD sign or symptom is reported to the Director of Finance and Administrative Services, the Director of Finance and Administrative Services will evaluate the job and, if MSD hazards are found, will take steps to reduce those hazards.

Management staff is responsible for:

- Promoting a safe and healthy work environment;
- Maintaining an awareness of MSD risks;

Having the work environment appropriately evaluated for proper ergonomic practices and conditions if an employee reports an MSD symptom; and  
Promptly reporting all employee injuries and/or employee complaints regarding MSD symptoms to the Director of Finance and Administrative Services.

Employees are responsible for:

Adjusting and using their workstation and equipment as outlined in the Ergonomic Guidelines contained in this Ergonomics Policy;  
Following safe work practices;  
Performing simple exercises and stretches as necessary;  
Following ergonomic recommendations from RTPA; and  
Promptly reporting ergonomic problems to a supervisor, or the Director of Finance and Administrative Services.

## **Ergonomic Guidelines**

A proactive approach focuses on making changes when risks have already been identified, as well as incorporating ergonomics into the design phase of a new facility or process, into purchasing new equipment or tools, and into the contemplation of scheduling changes. RTPA has developed a program which includes the following components.

### **a. Set Up of Office Workstations**

Some methods that can be used to minimize discomfort and/or injury are provided below. Additional resources may be obtained from the Human Resources team.

*Chair:* Use a chair that allows you to adjust chair height. Select a chair height that permits your feet to rest flat on the ground with the upper legs parallel to the floor. A footrest may be needed by some people to achieve this position. When seated, your seat pan should not hit the back of your knees.

*Work Surface:* Your work surfaces should be large enough to accommodate all of your computer equipment, including a wrist rest in front of the keyboard and adequate viewing distance between the monitor and your eyes. A keyboard tray can be used to increase depth and to provide proper keying level. There also should be enough room under the work surface to allow free leg movement. The height of the work surface should allow the forearms to be parallel with the floor when working at the computer, while not forcing the shoulders to be elevated. A footrest can assist in supporting the feet as well, allowing you to sit back in your chair. Select an arrangement for your work surfaces that does not require you to hold an awkward posture. Awkward postures include repeated or prolonged reaching, twisting, bending, kneeling, squatting, working overhead with your hands or arms, or holding a fixed position.

*Keyboard/Input Device:* The keyboard and input device (mouse or trackball) should be at the same level and placed in front of you. The height of the keyboard and input device should allow you to position your forearms and hands parallel to the floor. Achieve this by adjusting the height of the chair and/or table, or by using an adjustable tray. A padded wrist rest for the keyboard and input device should be used to prevent your wrists from coming in contact with the work surface when the arms are at rest. Avoid overreaching by keeping the input device close to your body.

*Monitor (Terminal):* Position the monitor directly in front of you with the screen approximately at eye level. You should not have to tilt or bend your neck to comfortably view the screen. Your eyes should be in line with a point on the screen that is about 2 to 3 inches below the top of the monitor casing. You should sit a comfortable distance from the screen for viewing – this is usually about arm's length (sit back in your chair and raise your arm and your fingers should touch the screen). One exception is bifocal wearers who may prefer a slightly lower monitor level. Monitors should have good contrast, sharp focus, and be free from flickering and glare to minimize eye strain.

*Document Holder:* If one is used, position the document holder at eye level, close to the monitor.

*Head Sets and Speakerphones:* Head sets and speakerphones reduce awkward neck and shoulder postures, notably by eliminating the habit of cradling the phone between the shoulder and chin. Head sets and speakerphones are beneficial for people who work on the phone for a substantial portion of the day or who talk on the phone and work on a computer simultaneously for a significant period of time.

*Carpet Mat:* A carpet mat is helpful when you move around often at the workstation so that your chair does not drag on the carpet.

*Lighting:* Excessive overhead lighting can cause glare and eye discomfort. Dimming overhead lights and use of a task lamp can reduce eye fatigue. Monitor shades and glare screens also reduce glare. Adjust your monitor contrast and brightness for maximum personal comfort.

*Posture:* Good posture is the best way to avoid computer-related injury. To ensure good posture, take the following steps: Make sure that you can reach the keyboard keys with your wrists as flat as possible (not bent up or down) and straight (not bent left or right). Make sure that your elbow angle (the angle between the inner surface of the upper arm and the forearm) is at or greater than 90 degrees to avoid nerve compression at the elbow. Make sure that the upper arm and elbow are as close to the body and as relaxed as possible for mouse use - avoid overreaching. Also make sure that the wrist is as straight as possible when the mouse is being used. Make sure you sit back in the chair and that it has good back support. Place your feet flat on the floor or on a footrest. Make sure your head and neck are as straight as possible. Make sure your posture feels relaxed.

#### **b. Safe Lifting and Good Body Mechanics**

Generally, workers are not permitted to move furniture or other objects weighing more than 20 pounds. If an employee needs to move such an object, the employee must request assistance. The employee should make his/her request to the Director of Finance and Administrative Services. A few RTPA employees are required to lift objects weighing over 20 pounds as part of their job duties. These employees should follow these guidelines:

Allow the object you are trying to lift to be handled close to the body.

Use devices such as handles, grips, etc., to provide better control of the object being lifted or moved.

Balance the contents of containers before attempting to lift them.

Use rigid containers for increased control of the object.

Avoid lifting excessively wide objects from floor level.

Use good body mechanics; bend your legs, not your back, when lifting.

Pivot with your feet instead of twisting your back when lifting.