OFFICE ERGONOMIC PROGRAM

CITY OF CERES
2720 Second Street
Ceres, CA 95307

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OFFICE ERGONOMICS PROGRAM

PURPOSE

This Office Ergonomics Program has been developed by the City of Ceres (the "City") to supplement the City's Injury and Illness Prevention Program (IIPP). Ergonomic issues are to be considered as separate from those examined as part of the overall IIPP. The goal of this program is to work in conjunction with the IIPP to prevent or minimize repetitive motion injuries (RMIs) in the workplace. This program is intended to serve as a guide for City employees and designated Office Ergonomics Program Administrators at each City office location.

SCOPE

The contents of this Office Ergonomics Program apply to City employees who are, or may be, exposed to ergonomic risk factors that may lead to musculoskeletal disorders. Examples of job categories that may be covered in this program include, but are not necessarily limited to:

- ✓ computer keyboarding;
- ✓ computer programming;
- ✓ data entry;
- ✓ graphics; and
- ✓ xerographic reproduction.

In addition, this program is applicable to employees who conduct work activities from home that would otherwise be covered in the office environment.

This program focuses on the office environment but does not exclude repetitive motion activities that may occur outside of the office. Non-office ergonomic issues will be addressed on an as needed basis and during job-specific training.

OFFICE ERGONOMICS PROGRAM RESPONSIBILITIES

Overall responsibilities for the City's health and safety efforts are presented in the IIPP. Responsibilities of key City employees as they pertain to this program are as follows.

City Manager/Administrator

The City Manager/Administrator is responsible for ensuring that this program is effectively implemented in accordance with the IIPP.

The following person has been designated as the Office Ergonomics Program Administrator:

Keith Howes
Human Resources Manager

The designated Administrator is responsible for developing and updating this program as necessary, providing affected City employees with information and guidance for implementation and maintenance of this program, and will also assist with specific requests and resolve ergonomic issues as they arise.

Implementation may include the following activities: working with employees and supervisors to determine which employee(s), or class(es) of employees, are the focus of this program, evaluating employee workstations and work activities, making recommendations for minimizing ergonomic risk factors, and providing training and information to employees.

Maintenance of this program may include conducting periodic or special evaluations of employee work areas, disseminating new or useful information to employees, communicating with the City Manager/Administrator and employee supervisors on the status of the program, and responding to employee questions and requests.

Managers and Supervisors

Managers and supervisors are responsible for the implementation of this program in their working area and for working with their staff to evaluate the applicability of this program. In addition, managers and supervisors are responsible for communicating with the Office Ergonomics Program Administrator when an ergonomic risk factor is detected or if an employee believes he or she is experiencing symptoms of a repetitive motion injury (RMI).

Employees

Employees are responsible for notifying their supervisor or the Office Ergonomics Program Administrator as soon as a sign or symptom of a RMI is detected or if an ergonomic risk factor is identified. Employees are expected to follow the guidelines and recommendations provided by the Office Ergonomics Program Administrator or other designated person including healthcare providers to prevent and control RMIs.

WORKSTATION EVALUATIONS

The workstations of employees that may be covered by this program will be evaluated by the Office Ergonomics Program Administrator, or other qualified person, to determine if ergonomic risk factors are present that may contribute to

RMIs. The purpose of the evaluations is to determine which employee(s), or class(es) of employees, should be included in this program. The results of the evaluations will be used to determine what control measures, if any, are appropriate to minimize ergonomic risk factors. An Office Ergonomics Evaluation form is provided in Appendix A.

The Office Ergonomics Program Administrator may elect to conduct evaluations individually for each employee included in this program or may evaluate a representative number of employees in a particular job class.

Evaluations and corrective actions, where appropriate, will be prioritized in the following order:

1. Employees/job categories that have experienced RMIs.
2. Employees/job categories that are determined by the Office Ergonomics Program Administrator or by employee supervisors to have a relatively high potential for RMIs.
3. Employees/job categories that are determined by the Office Ergonomics Program Administrator or by the employee supervisors to have a relatively low potential for RMIs.

Workstations will be reevaluated within two months of the initial assessment and annually to verify that identified ergonomic risk factors have been addressed and to determine if new ones have been introduced.

Records of workstation evaluations will be retained by the Office Ergonomics Program Administrator.

Employees should routinely evaluate their own workstations and work practices in order to maintain a safe and healthy working environment.

Assessment of Home Work Stations

Employees who conduct work activities at home are required to conduct an assessment of their home workstations and follow guidelines presented in the program. Documentation of the assessment will be forwarded to the Office Ergonomics Program Administrator for review and consultation.

METHODS TO CONTROL ERGONOMICS RISK FACTORS

RMIs can often be prevented or controlled by simple changes in the work environment. Adjusting work surfaces and equipment, varying tasks, and taking short breaks can help reduce ergonomic risk factors.

Workstation Adjustment

Often the simplest and most efficient method to minimize ergonomic risk factors is to properly adjust the workstation. Guidelines for workstation adjustment are presented in Appendix A.

Varying Tasks and Taking Breaks

Tasks breaks allow for different postures, force, and motions to help the body recover from repetitive activities. Whenever possible, employees should vary their job routine to limit the amount of time they spend performing a repetitive task. For example, filing, copying, attending meetings, or reading reports are task breaks from computer-related activities.

Employees should also take periodic micro-breaks. The micro-breaks are brief, 30 to 60 second breaks that may be used to simply relax or perform relaxation or stretching exercises. The appropriate number and duration of task breaks depends upon the type(s) of activities conducted and the amount of time continuously performing a repetitive task.

Relaxation/Stretching Exercises

In some instances, it may be necessary to issue ergonomic control devices to mitigate an ergonomic risk factor. Results of workspace evaluations will determine when and what type of ergonomic equipment is appropriate for an individual or job category.

This equipment may include:

- keyboard and/or mouse wrist rest
- document holder
- hands-free telephone headsets
- foot rest
- monitor or keyboard height adjustment devices
- alternate pointing device (in lieu of a mouse)
- additional lumbar support
- properly designed chair
- properly designed tools

Wrist splints and back support devices should only be worn by employees under the direction and supervision of a physician.

Telecommuting

Employees who perform work activities away from the office are expected to employ the same procedures at remote workstations as they do in the office environment.

COMMUNICATION AND TRAINING

Employees who are covered by this program may receive information and training through a variety of means including formal and informal training sessions, written materials, and video presentations.

Exposures Associated With Repetitive Motion Injuries

Using worker's compensation insurance and injury and illness reporting data, the primary cause of RMIs in municipal office operations appears to be related to the use of keyboards and other input devices at computer work stations for extended periods of time.

Reporting Repetitive Motion Injury Symptoms

Employees are encouraged to immediately inform their supervisors or the Office Ergonomics Program Administrator of they experience RMI symptoms or identify a potential ergonomic risk factor. Early detection is the key to preventing long-term and sometimes irreversible damage.

Medical Management

If an employee develops a RMI, a medical evaluation will be conducted by the City's occupational physician. Results of the examination will determine the course of action to be taken on a case-by-case basis.

NOTE: *The following information is for reference only. Only a qualified physician can determine the cause or causes of health-related matters.*

Symptoms and Consequences of Repetitive Motion Injuries

A variety of symptoms may indicate that an employee is experiencing the onset of a RMI. Common symptoms may include:

- numbness, tingling, stiffness, weakness, or discomfort of the affected area, especially the forearms, hands, neck and back;
- affected portions of the body often "go to sleep"; and
- muscle tension or fatigue.

It is important that employees are aware of the symptoms of RMIs so that they can be reported and corrected as soon as possible.

Long-term exposure to ergonomic risk factors may lead to cumulative trauma disorders. A brief description of several types of cumulative trauma disorders are presented below.

Carpal Tunnel Syndrome. Carpal tunnel syndrome is caused by the compression and entrapment of the median nerve where it passes through the wrist into the hand via the "carpal tunnel." The median nerve is the main nerve that extends down the arm to the hand and provides the sense of touch in the thumb, index finger, middle finger, and half of the fourth (ring) finger. When irritated, tendons housed inside the narrow carpal tunnel swell and press against the nearby median nerve. Carpal tunnel syndrome develops in the hands and wrists from repetitive and/or forceful manual tasks performed over a period of time.

De Quervain's Disease. De Quervain's Disease is caused by excessive friction between two thumb tendons and their common sheath which cause the sheath to become inflamed. Constant twisting and gripping motions can cause sufficient stress on the tendons to cause this condition.

Tendonitis. Tendonitis is a form of tendon inflammation that occurs when a muscle or tendon is repeatedly tensed from overuse or accustomed usage of the wrist or shoulder. The tendon becomes thickened, bumpy, and irregular in certain areas of the body, and the injured area may calcify, sometimes causing permanent weakening.

Tenosynovitis. Tenosynovitis is an inflammation of the synovial sheath surrounding the tendon. These sheaths secrete synovial fluid which acts as a lubricant to reduce friction during movement. Repetitive motion using the hands and wrists may promote an excessive secretion of synovial fluid causing the sheath to become swollen and painful.

Trigger Finger. Trigger finger is attributed to the creation of a groove in the flexing tendon of the finger. If the tendon becomes locked in the sheath, attempts to move that finger will cause snapping and jerking movements. This is often associated with using tools that have handles with sharp or hard edges.

APPENDIX A

OFFICE ERGONOMICS EVALUATION

WORKSTATION ADJUSTMENT GUIDELINES

Workstations should be arranged and adjusted properly so that the employees are comfortable and excessive force is not required to perform their job tasks. The objective is to set up the workstation so that a comfortable, neutral position is achieved. Unnatural postures or body position can lead to discomfort or, if not corrected, repetitive motion injuries (RMIs). The following guidelines are presented to assist employees in arranging and adjusting their workstations.

Chair

The chair is generally the most adjustable piece of office equipment and is the starting point for setting up an office workstation.

- Adjust your chair height so that your forearms are parallel to the floor when your fingers are resting on the keyboard's home keys (asdf jkl;). In some cases, it may be necessary to use a keyboard tray, or other device, to lower the keyboard to a comfortable level.
- Your feet should rest flat and comfortably on the floor while working at your desk. This will promote circulation to the lower legs and will help reduce fatigue. If your feet do not reach the floor, a footrest should be used. Items such as a 3-ring binder, telephone book, or other object may be used as a simple footrest.
- The seat back and pan should be adjusted so that you are sitting in a comfortable upright position. Your back should be snug against the back of the chair to fit the contour of your spine. A lumbar support may be used if the chair does not provide adequate support for the lower back. A rolled up towel serves as an excellent lumbar support. If you have questions about how to adjust your chair, consult the manufacturer's literature or contact your local Office Ergonomics Program Administrator.

Monitor

The correct placement of the computer monitor can help reduce eyestrain and muscle tension in your neck, shoulders, and upper back.

- Position the monitor so that it is directly in front of you and the top line of the display is at, or slightly below, eye level when the chair is properly adjusted. This will allow you to keep your head in a neutral, upright position. It may be necessary to relocate the computer or use an object to elevate the monitor to the proper height.
- Locate the monitor so that it is approximately at arms length (18 to 30 inches) at a comfortable viewing distance.

- A document holder should be used to position materials at the same height, distance, and in the same plane as the monitor screen. Avoid looking continually from the desktop to the monitor. This will help reduce eyestrain and tension in the shoulders, upper back, and neck.
- Keep the glass surface of the monitor clean.

Keyboard and Mouse

Proper placement if the keyboard will help keep the wrists in line with the forearms and limit bending of the wrists while keying. This will improve the comfort of your hands, wrists, and forearms.

- The keyboarding should be located directly in front of you, in line with the monitor.
- Adjust placing your wrists or forearms against hard objects such as the sharp edge of the desk. A keyboard wrist rest may be necessary to help keep the hands straight and off of hard surfaces.
- Use only the amount of force necessary when keying or clicking mouse buttons. Excessive force will increase discomfort and may promote a RMI.
- Most keyboards have a height adjustment feature. Fine tune your keyboard height to suit your needs.
- The mouse should e located so that it is in a comfortable position during use, and you so not have to reach (extend the arm) in an unnatural or uncomfortable fashion.
- An alternate input device, such as a trackball or touch pad, may be necessary for employees who experience discomfort while using a traditional mouse.

Work Surfaces

The workstation should be arranged so that there is adequate space to perform job tasks and properly position equipment.

- Often used items and equipment, such as the telephone, calculator, or binders, should be located within easy reach.
- Position heavy articles on a stand to reduce effort necessary to access them.
- Consider using a telephone headset if you use the phone often. Try not to cradle the telephone receiver between your head and shoulder.

Posture

Care should be taken to maintain proper posture and body position while sitting at your workstation. Do not sit in an awkward position for extended periods of time. Sitting in an unnatural position may be an indicator that your workstation is not adjusted properly. If you notice that you are displaying poor posture, try adjusting your workstation so that you are positioning your body properly.

Lighting

Proper room lighting and monitor adjustments can help reduce eyestrain and improve viewing comfort.

- Adjust lighting sources to minimize the amount of glare on the monitor screen. If glare is from the outside light, adjust the window coverings until glare is removed. If window coverings cannot be adjusted, reposition the monitor so that it is perpendicular to the window.
- Adjust the contrast and brightness of the monitor to a comfortable level.

APPENDIX B

GUIDELINES FOR THE USE OF TOOLS AND LIFTING TECHNIQUES

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Tools and Equipment

It is important to use the proper tool for the job at hand. When using tools and equipment, it is important to keep the basic concepts discussed above in mind as well as the following:

- select tools that have textured grips that do not dig into the palm of the hand;
- do not use excessive force;
- use power tools rather than manual tools;
- use two hand rather than one for a task;
- use a smooth, steady force rather than quick, jerky movements;
- do not place fingers, hands, or arms in awkward positions;
- engage triggers with tow or more fingers; and
- wear sturdy, comfortable gloves to protect hands against abrasion or vibration.

Lifting/Back Safety

OSHA has called back injuries "the nation's number one workplace safety problem." Spinal injuries can be very painful, long-lasting, and costly. Fortunately, many back injuries are preventable and may be avoided by following a few simple guidelines.

Prepare for the Lift

- before starting to lift or carry anything, check your entire walkway to make sure that your footing will be solid (your shoes should have good balance support and traction);
- clear any movable obstacles out of your way and make sure you know where the stationary ones are; and
- check the object you will be moving to determine its center of gravity and weight.

Find An Alternative To Lifting

For difficult lifting tasks, keep the following options in mind:

- ask someone for assistance; and
- use a pushcart or dolly to move heavy objects.

Remember that it is easier on the back to push an object than it is to pull it. If you must pull something:

- face the object squarely with one foot at least 12 inches in front of the other;
- keep your back straight and your knees slightly bent; and'
- pull with one smooth motion.

The act of lifting is what causes most on-the-job back injuries. These guidelines can help prevent most back injuries and make lifting safe and easy:

- face the object squarely and get as close to it as you can;
- balance yourself solidly with one foot slightly in front of the other;
- squat down, bending at the knees, and keeping your back straight and as nearly upright as possible;
- grip the object firmly;
- tighten your abdomen;
- while keeping your back straight, use your legs to bring you to a standing position; and
- make the lift smoothly and under control.

Carrying and Lowering

- when carrying an object, grasp it firmly and hold it as close to your body as possible;
- lower the object in the reverse of way you picked it up, keeping your back straight, tightening your abdomen, and bending at the knees; and
- whenever possible, store heavy loads off the floor.

Shoveling and Twisting Actions

The same guidelines apply to other lifting/twisting tasks as well (such as hand materials handling and shoveling). For shoveling:

- make sure your grip and stance are solid;
- tighten your abdomen as you lift;
- keep the shovel close to your body;
- bend your knees, not your back;
- use the strength of your thigh muscles to bring yourself to an upright position;
- increase your leverage by keeping your bottom hand low and towards the shove blade (this allows you to use the strength of your arms and shoulders to take the load); and
- use your feet to turn your whole body because the biggest danger to your back is in twisting.

Be Aware of Special Lifting Dangers

- Do not lift objects over your head.
- Do not twist your body when lifting or setting an object down.
- Do not reach over an obstacle to lift a load. Move whatever is in your way or go around it.
- Pace yourself to avoid fatigue when doing heavy work for a long period of time.
- Follow the safety guidelines of your workplace.