

CITY AND COUNTY OF DENVER

Ergonomics Policy		
Occupational Safety and Health Management System 65.6.5 This policy has been developed and shall be implemented under the authority of Executive Order No. 65 and the Risk Management Office.	January 1, 2008	Prepared / Revised By: Risk Management – Safety Unit

1.0 **Introduction**

This procedure has been developed to ensure that employees are provided a work environment that is ergonomically correct and minimizes the risk of developing work-related musculoskeletal disorders. On-the-job injuries and illnesses associated with poor ergonomics can result in both acute and long-term medical conditions that can be debilitating for employees and costly for employers. As it is the goal of the City & County of Denver to provide a workplace that is free from recognized hazards that could cause injury or illness, this procedure incorporates many of the guidelines established by industrial best practices to address ergonomic concerns.

2.0 **Definitions:**

Administrative Controls - Procedural initiatives that are implemented to control ergonomic exposures without making physical changes to the workstation, worksite, or process; examples include: taking frequent breaks and rotating assignments. In general, engineering controls are preferred as their goal is to reduce the presence of the hazard.

Engineering Controls - The incorporation of technological principles into designing and making changes to workstations, tools, and/or machinery so that they are ergonomically correct. Engineering controls may include the use of ergonomically designed keyboard trays, properly fitted chairs, and the proper positioning of a computer mouse.

Ergonomics - The science and practice of designing jobs or workplaces to match the capabilities of the human body. Ergonomics helps adapt the job to fit the person, rather than forcing the person to fit the job. This is accomplished by designing and properly adjusting tasks, workstations, tools, and equipment so that they are within the worker's physical capabilities and limitations.

Certified Ergonomic Evaluation Specialist (CEES) – City and County of Denver employee who is properly trained and certified by Roy Matheson and Associates, Inc., a nationally recognized certification organization to conduct ergonomic evaluations.

Musculoskeletal Disorders (MSDs) - Disorders that involve the soft tissues such as muscles, tendons, ligaments, joints, blood vessels, and nerves. They are caused or made worse by forceful or repetitive exertions, particularly when in combination with an awkward posture or position. This term is used to refer to a variety of injuries and illness including: muscle strains and back injuries that occur from repeated use or overexertion, tendonitis, carpal tunnel syndrome, rotator cuff injuries, epicondylitis, and trigger finger that occurs from the repeated use of a single finger.

3.0 Ergonomic Evaluations

In order to determine ergonomic risk factors that are associated with the wide variety of functions performed by City employees, it is necessary to evaluate workstations, worksites, body mechanics, and the equipment used in work assignments. To accomplish this each department/agency will determine the job functions at high risk for ergonomic illnesses. Some examples include office work, removing a manhole cover, throwing trash, etc. When conducting evaluations, particular attention shall be paid to the following risk factors:

- Force - the amount of physical effort required to perform a task (such as heavy lifting, pushing, or pulling), or maintain control of equipment or tools
- Repetition - performing the same motion or series of motions continually or frequently for an extended period of time
- Awkward and static postures - assuming positions that place stress on the body, such as prolonged or repetitive reaching above shoulder height, kneeling, squatting, or standing on a hard surface for an extended period
- Contact stress - pressing the body or part of the body (such as the hand) against hard or sharp edges, or using the hand as a hammer

Evaluations may be requested by management and shall be conducted under a variety of circumstances as described by the following subsections:

- 3.a. New Employee Worksite Evaluations: Because of the importance of identifying and correcting worksite configurations and activities that could potentially be problematic, ergonomic evaluations must be conducted for new employees within the first six months. These evaluations shall be performed to identify and correct awkward body movements that could lead to the development of work-related musculoskeletal disorders and to identify equipment concerns. Each department and agency shall be responsible for providing the necessary equipment to ensure that proper ergonomic configurations are provided.
- 3.b. Existing Employee Worksite Evaluation Requests: When an employee requests that an ergonomics evaluation be conducted on their workstation or job assignment the evaluation shall be conducted and documented. If ergonomic concerns are identified, recommended improvements shall be included in the report.
- 3.c. Regularly Scheduled Worksite Evaluations: To ensure the integrity of ergonomics-related equipment such as keyboard trays, chairs, lifting equipment, etc. regularly scheduled equipment inspections shall be performed. These inspections may be

conducted in association with general safety inspections or may be conducted independently. The focus of these inspections shall be to evaluate the condition of equipment and maintenance practices. Equipment found to be damaged or broken shall be replaced or repaired as soon as practical.

Note: Evaluations for new employee worksite, existing employee worksite and regularly scheduled worksites may be requested by management and will be conducted by a Certified Ergonomic Evaluation Specialist within their respective departments or a Certified Ergonomic Evaluation Specialist requested from another department /agency. The Ergonomic Evaluation Specialist shall complete a written evaluation report along with recommended corrective actions and submit the report to the employee evaluated and the employee's supervisor who shall place a copy into the employee's personnel file for documentation.

- 3.d. Evaluations Associated with a Workers' Compensation Claim that are Ordered by a Medical Provider: When an ergonomics evaluation is ordered by a medical provider the evaluation shall be conducted by a certified or licensed independent ergonomics consultant. The consultant shall complete a written evaluation report along with recommended corrective actions and submit the report to the physician ordering the evaluation, the claimants supervisor, and the Risk Management Office.

4.0 Responsibilities

Department and Agency Heads shall:

- Ensure that ergonomic issues are addressed and that worksite evaluation reports are reviewed and corrections implemented where appropriate
- Ensure that ergonomic initiatives are supported throughout the department
- Whenever feasible, ensure that a staff member within their department is properly trained and certified by Roy Matheson and Associates, Inc. a nationally recognized certification organization to conduct ergonomic evaluations. This employee shall be known as the Certified Ergonomic Evaluation Specialist (CEES)
- Ensure the Ergonomic Evaluation Specialist completes the requirements from the Roy Matheson and Associates, Inc. for subsequent fieldwork and submission of an application packet including a sample of the fieldwork with two years of the classroom training course to achieve certification.
- Ensure the employee maintains the CEES certification.

Certified Ergonomic Evaluation Specialist (CEES) shall:

- Complete the 4 day training class through Roy Matheson and Associates, Inc. classroom training course or equivalent training
- Following the CEES process provide worksite evaluations within their department / agency with a follow up report for improvement / corrections.
- When requested by Risk Management and approved by department/agency management, follow the CEES process to provide worksite evaluations to other departments / agencies with follow up report for improvement / corrections

Supervisors shall:

- Participate in the Ergonomic Awareness for Supervisors Training (see Table 1.1)
- Actively observe employees for ergonomic issues, make adjustment to the worksites and request an ergonomic evaluation when appropriate
- Ensure that each employee under their direction is qualified and properly trained to safely perform the type and level of work to which they are assigned
- Carefully review job assignments and tasks under their direction to ensure that the proper engineering and administrative controls regarding ergonomics are in place prior to beginning a work assignment
- Not allow an employee to work at a workstation or perform a task that will knowingly cause or is likely to cause a musculoskeletal disorder

Employees shall:

- Participate in Ergonomic Awareness for Employees Training (see Table 1.1)
- Properly utilize engineering controls that are in-place and comply with administrative controls that have been implemented to minimize exposure to conditions that could cause a musculoskeletal disorder
- Report conditions that are ergonomically incorrect

Safety Representatives shall:

- Ensure that ergonomic considerations are given during the development and implementation of Job Hazard Analysis' and Safe Operating Procedures
- Assist department heads and supervisors with the development and implementation of an effective ergonomics program
- Appropriately use checklists and other tools to analyze tasks performed by employees in their department
- Identify the benefits of specific workplace changes

Risk Management Office shall:

- Provide injury and illness statistics on musculoskeletal disorders to department and agency managers and safety personnel so that they can make informed decisions concerning prevention strategies
- Bring a level of consistency by providing the resource for assigned department / agency personnel to attend a nationally recognized certification training program for Certified Ergonomic Evaluation Specialist

5.0 Training

Employee training is an important part of a successful ergonomics program. Each department and agency shall be responsible for coordinating employee training activities. At a minimum the training shall provide:

- Knowledge of the work tasks that may lead to pain or injury
- Understanding of the proper tools and work practices for tasks that employees will be performing
- The ability to recognize musculoskeletal disorders and their early indications
- The advantages of addressing early indications of musculoskeletal disorders before serious injury has developed
- Awareness of the City's procedures for reporting work-related injuries and illnesses

6.0 Program Evaluation

Once a departmental ergonomics program has been established, it is recommended that the program's effectiveness be periodically evaluated by the department / agency program manager. Evaluation and follow-up help sustain continuous improvement in reducing injuries and illnesses and show areas where further attention is needed.

Table 1.1 Training Information:

Classes	Presented By	Location	Time	Cost
Ergonomic Awareness for Supervisors	Risk Management	Webb Building or on site	2 Hours	0
Ergonomic Awareness for Employees	Risk Management	Webb Building or on site	1 Hour	0
Certified Ergonomic Evaluation Specialist	Ray Matheson	Various Cities	40 Hours	\$1,200/Person
Ergonomics: A Practical Approach for the Office	Colorado Safety Association	Denver	8 Hours	\$165/Person