



CITY POLICY & PROCEDURE

SECTION: HUMAN RESOURCES

NO: HR – HS - 05

REFERENCE: HEALTH AND SAFETY

Date: March 15, 2017

**Next Review Date:
March, 2019**

TITLE: ERGONOMICS PROGRAM

1.0 POLICY

- 1.1 It is the policy of the City of Dryden to promote health and safety by creating workplaces that support employee well being and eliminate injuries through proper control of the equipment, environment and training.
 - 1.2 The City of Dryden will endeavour to address ergonomic issues in the workplace through a process of evaluation, consultation with workers, and development and implementation of recommendations.
 - 1.3 The City of Dryden is committed to the science of ergonomics, the matching of the job to the employee. The ergonomics program is a systematic approach for anticipating, identifying, analyzing and controlling known risk factors. The program will provide a framework for recognizing Musculoskeletal Disorders (MSD) hazards and implementing appropriate controls across all departments.
 - 1.4 The ergonomics program will provide education on work-related musculoskeletal disorders, related risks, and helpful exercises.
 - 1.5 Employees are encouraged to report ergonomic issues or unresolved problems to their Supervisor at the earliest opportunity. Employees are expected to use the equipment provided in a safe and optimal manner and to implement ergonomic work practices to control risks.
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2.0 SCOPE

- 2.1 This policy and procedure applies to all City of Dryden employees (permanent, casual, students or contract) whose job functions have the potential for work related injuries and disorders relating to ergonomics.

3.0 DEFINITIONS

3.1 As used in this policy, the following terms shall have the meaning as indicated:

Accommodation: change, adapt or adjust to enable an individual to perform essential duties of a job in a healthy and safe manner.

Ergonomics: the study of man and the workplace with respect to optimizing efficiency, safety, health and comfort – matching the work (job) to the worker in order to optimize the well-being and performance of the employee.

Musculoskeletal Disorders (MSD): injuries and disorders of the musculoskeletal system originating from exposure to risk factors in the work environment. MSDs encompass damage to muscles, tendons, tendon sheaths, nerves, bursa, blood vessels, joints and ligaments. Injuries directly resulting from an acute event involving an external force (i.e. a fall, vehicle accident, violence) are not classified as MSDs.

Posture: the position that a worker assumes to do a task. Awkward postures include repeated or prolonged reaching, twisting, bending, kneeling, squatting, working overhead with hands or arms, or holding fixed positions.

Repetitive Motion Injury (RMI): Also known as repetitive stress injuries, an RMI is a type of stress injury that results from repetitive motions such as frequent bending or sustained awkward positioning performed over extended periods of time without allowing for sufficient rest.

Risk Factors: poor workplace or equipment designs can present risk factors. These risk factors may include:

Repetition – the number of motions or movements that are performed per cycle or per shift.

Force – the power of the muscles used to produce motion in order to perform necessary activities such as lifting, grasping, pinching, pushing, etc.

Extreme Postures – when muscles are required to work at a level near or at their maximum capacity.

4.0 RESPONSIBILITIES

4.1 Managers and Supervisors are responsible for:

- (a) Identifying employees who perform essential job functions where ergonomics is a concern;
- (b) Accommodating the worker with appropriate equipment;
- (c) Providing training sessions to workers;
- (d) Supporting workers to adjust their work environment and perform duties in proper working posture and habits;
- (e) Encouraging workers to take scheduled breaks and to change posture or move often;
- (f) Encouraging workers to report ergonomic concerns and physical discomfort as soon as practicable to manager/supervisor;
- (g) Arranging ergonomic assessments in a timely fashion when requested by workers; and,
- (h) Provide resources as required.

4.2 Health & Safety Coordinator is responsible for:

- (a) Providing assistance in conducting an ergonomic assessment;
- (b) Provide educational information to employees;
- (c) Assist in the identification and purchase of ergonomic equipment;
- (d) Evaluate incidents for ergonomic concerns and causes;
- (e) Review JHAs to address hazards associated with job functions and controls implemented to reduce risk of injury;
- (f) Support early intervention and return to work; and,
- (g) Evaluate and monitor the ergonomics program.

4.3 Employees are responsible for:

- (a) Using and adjusting workstation, equipment or tools to accommodate individual capabilities;
- (b) Performing duties in proper working posture and habits;
- (c) Attending/participating in ergonomic training sessions;
- (d) Taking scheduled breaks and change posture or stretch often; and,
- (e) Reporting ergonomic hazards or physical discomfort as soon as practicable to managers/supervisors.

5.0 HAZARD RECOGNITION AND ERGONOMIC ASSESSMENT

5.1 Job Hazard Analysis/Risk Identification

(a) A Job Hazard Analysis (JHA) will be completed for all positions which will identify hazards and risk factors associated with job functions and the controls implemented to reduce risk of injury. All JHAs will be kept on file and will be reviewed by the Health and Safety Coordinator. JHAs will be reviewed when changes occur in the job or ergonomic issues are identified.

(b) Risk Factor Identification:

The purpose of risk factor identification is to identify factors in the workplace that may expose workers to a risk of MSI. Ergonomic risk factors include:

(i) Physical Demands including:

- Force
- Repetition
- Duration
- Work Postures
- Local Contact Stress

(ii) Aspects of layout and condition of workplace/workstation including:

- Working reaches
- Working heights
- Seating/floor surfaces

(iii) Characteristics of objects handled including:

- Size and shape
- Load condition and weight distribution
- Container, tool and equipment handles

(iv) Environmental conditions including:

- Temperature
- Lighting and glare
- Vibration

(v) Characteristics of organization of work including:

- Work recovery cycles
- Task variability
- Work rate

5.2 Office Ergonomic Assessment

- (a) Self-assessment checklists will be made available to employees by the Health & Safety Coordinator. Employees are encouraged to maintain these checklists as a reference to assess their workstation, equipment, tools and tasks and make any necessary changes to accommodate their individual needs.
- (b) Ergonomic assessments can be arranged by a manager/supervisor if a worker has difficulty modifying their work, equipment, tools or workstation to accommodate their needs. An assessment will also be arranged if physical discomfort is experienced by the worker. The worker must notify their manager/supervisor of their request for an ergonomic assessment.
- (c) Managers/supervisors may contact the Health and Safety Coordinator for assistance in conducting an ergonomic assessment. A report will be provided after completion of the assessment outlining the ergonomic hazards present and the recommendations for possible controls.
- (d) In general, the following ergonomic best practices will be applied:
 - (i) The best distance for a computer monitor is as far away as possible while still being able to read it clearly.
 - (ii) The computer mouse should be placed at the same level, as close as possible, to the keyboard.
 - (iii) A footrest should be available for situations where the keyboard height cannot be adjusted and it is necessary to adjust the chair upwards. It is preferable to have the chair and work surface low enough to have the feet rest on the floor to promote frequent changes in leg positions.
 - (iv) Keyboard height should be at elbow height or slightly lower in order to keep the wrist and hand in line with the forearm. This straight neutral posture reduces stress and strain on tendons and muscles.
 - (v) Generally wrist rests should be used during pauses in keyboarding.
 - (vi) Research supports the idea of very short breaks taken very frequently, for example a 30 second break every 10 minutes.
 - (vii) Shared workstations should provide maximum adjustment features to accommodate individual human factors (user size differences and preferences).

- (viii) One product will not fit all. Several different models should be available to employees when choosing replacement items such as ergonomic chairs. When choosing an ergonomic chair, choose a chair with the following features:
- a backrest, which is shaped to support the lower back;
 - a stable base with at least 5 legs of support;
 - controls that can be accessed while seated;
 - a set pan length that allows for clearance between the front edge of the seat and the back of the legs; and,
 - adjustments for seat height, armrest height and width, and backrest height.

5.3 Ergonomic Assessment for Industrial or Operational Setting

- (a) An ergonomic assessment may be required to review workplace features such as work environment, equipment/tools, work organization, method/processes, and manual material handling in an effort to reduce the risk of injury and illness. Consultations may also be required in regards to assessing industrial equipment and vehicles for ergonomic features.
- (b) In general, the following principles should be applied when designing work processes:
- (i) keep everything in easy reach;
 - (ii) ensure work is at proper height;
 - (iii) ensure workers can maintain good posture while working;
 - (iv) reduce excessive forces;
 - (v) minimize fatigue through optimal task design;
 - (vi) reduce excessive repetition;
 - (vii) provide clearance and access;
 - (viii) minimize contact stress;
 - (ix) provide mobility and change of posture; and,
 - (x) maintain a comfortable environment (lighting, temperature).

5.4 Education

- (a) For workstations: an office ergonomics package will be made available to all employees. This package will contain information to assist employees and their supervisors in adjusting their workstation and information to help employees troubleshoot situations when they may be experiencing pain or discomfort. The package includes a self evaluation checklist as well as stretching exercises to perform at your workstation. The package is available from the Health and Safety Coordinator.

- (b) Ergonomics Awareness education will be provided through safety talks, newsletters, monthly safety meetings and related information.
- (c) Education on Musculoskeletal Disorders (MSDs) will also be provided to employees through a variety of communication methods.

5.5 Breaks and Stretches

- (a) **Scheduled Breaks and Lunches:**
All employees are strongly encouraged to take their scheduled breaks and lunches as a means of providing recovery time to muscles held in static or awkward postures while working.
- (b) **Micro-Breaks and Stretches:**
All employees are encouraged to take micro-breaks (2-9 seconds in length) to relieve muscle tension caused by static postures. For an employee who works at a workstation this can be accomplished by simply removing hands from the keyboard or mouse when they are not in use, or walking around the office to loosen back muscles. No matter what the job is, it is recommended that every hour employees readjust their posture and stretch.

5.6 Tools or Equipment Purchasing

When purchasing new tools or equipment, ensure the equipment purchased can be appropriately adjusted to accommodate the worker. Many tools now come with ergonomic options that should be considered. See Appendix A for more information on purchasing office workstations and equipment.

5.7 Renovations

Departments which will be undergoing renovations and/or alterations may pursue an ergonomic consultation prior to finalizing any construction plans. A consultant may be considered for large projects. Consultation with the Health and Safety Coordinator on Ergonomics matters should also be considered.

History			
Approval Date:	January 16, 2012	Approved by:	By-law 3942-2012
Review/Amendment Date:	March 15, 2017	Approved by:	CAO E. Remillard
Review/Amendment Date:		Approved by:	
Review/Amendment Date:			

Appendix A

Ergonomic Considerations for Office Environment

Chair:

When purchasing a chair for a computer workstation the chair should possess at minimum:

- (a) 5-prong swivel base;
- (b) Height and angle adjustable back rest with lumbar support;
- (c) Adjustable, well-padded seat pan with a waterfall edge; and
- (d) Height and width adjustable arm rests.

Comfort and ease of adjustment should be considered when purchasing a chair. Many chairs may possess the required features above but do not fit the worker comfortable or making adjustments to the chair is difficult. If possible, arrange for the user to have a trial period with the chair prior to actual purchase. One specific chair does not fit all users. It is essential that a chair is purchased that is suitable for the user and the tasks they perform.

Workstation/Desk:

When purchasing workstation or desk, it is essential to consider the work being performed in order to determine the appropriate work surface configuration:

- (a) Straight work surface – is a typical desk. It is best suited for work where there is little variation in the work performed and space is not required for writing, organizing or reading documents;
- (b) L-shaped work surface – has two perpendicular desks joined. The computer is usually located on one work surface and the other is available for tasks such as writing, reading or telephone work. This work surface should be considered when a variety of tasks are performed and workers must quickly alternate between the two or privacy of work is an issue;
- (c) Corner work surface – is similar to the L-shaped but has a connecting bridging section between two separate work surfaces. The bridging section accommodates the computer and allows for two work surfaces to be available for other tasks. This work surface should be considered when larger monitors may be required for work since they can fit in the bridging section with ease. The disadvantage of this work surface is the limited options for altering the layout if an environmental factor, such as glare becomes an issue.
- (d) Sit-Stand Desk - a height adjustable work surface is also an option so the user can alternate between sitting and standing. If choosing this option a fatigue mat is recommended.

Keyboard Tray:

When purchasing a keyboard tray for a computer workstation, the tray should possess at minimum:

- (a) Articulating arm;
- (b) Easily adjustable tilt and lock mechanism;

- (c) Large enough to accommodate the keyboard and mouse;
- (d) Provided adequate leg clearance when stored under the desk; and,
- (e) Rounded edges.

Keyboard and Mouse:

When purchasing a keyboard and mouse, consider the following:

- (a) The ability to accommodate a neutral posture and position when using;
- (b) Rounded edges;
- (c) Minimal force required to strike keys/push buttons; and,
- (d) General comfort of the user.

There are a variety of alternative keyboards and mice which may be beneficial for some employees. It is important that when purchasing this type of equipment the worker is comfortable using these devices and is trained on their proper use.

Document Holder:

When documents are frequently accessed for entering data, a document holder should be considered and possess the following:

- (a) Height and distance adjustable;
- (b) Angle adjustable;
- (c) Accommodate the size of material being viewed (letter/legal size paper, books, etc.); and,
- (d) Non-glossy and opaque (prevents light passing through).

When extensive input of data is required in the job, it may be beneficial to consider a document holder that sits between the monitor and the keyboard to avoid repetitive reaching.

Wrist Rests:

Wrist rests are recommended for all users. The following outlines characteristics to consider when purchasing a wrist rest:

- (a) Rounded edges;
- (b) Match the shape and length of the keyboard and/or mouse;
- (c) Should maintain neutral wrist posture when resting (does not cause the wrist to bend up or down); and,
- (d) Rest should be stable/secure when in use.

Footrest:

A footrest is required at a workstation where the chair must be elevated to accommodate a work surface with a fixed height. In many of these situations, the worker's feet are unable to be positioned flat on the floor, thus requiring a footrest.

When purchasing a footrest, consideration should be made to the following:

- (a) Angle adjustable;
- (b) Anti-skid treading; and,
- (c) Accommodates both feet when slightly turned out.

In situations where a worker moves between different workstations frequently, more than one foot rest may be required.

This policy is subject to any specific provisions of the Municipal Act, or other relevant legislation or Union agreement.