



Ergonomics Standard

1.0 PURPOSE

This standard specifies the requirements for the control of ergonomic hazards and reducing the risk of musculoskeletal (MSI) injuries.

2.0 DEFINITIONS

2.1 Ergonomics

Ergonomics is the science of fitting the design of the working environment to the individual. Ergonomics considers an individual's abilities and limitations for the work.

2.2 Musculoskeletal injury (MSI)

An injury or disorder of the muscles, tendons, ligaments, nerves, joints, bones or supporting vasculature that may be caused or aggravated by any of the following:

- Repetitive motions
- Forceful exertions
- Vibration
- Mechanical compression
- Sustained or awkward postures
- Limitations on motion or action
- Other ergonomic stressors

2.3 Ergonomic hazard

The presence of risk factors in the job that occur at a magnitude, duration, or frequency that is reasonably likely to cause ergonomic injury that result in work restrictions or medical treatment beyond first aid.

2.4 Ergonomic incident

An ergonomic injury that is work-related and requires medical treatment beyond first aid, or signs / symptoms that last for 7 or more consecutive days after employee reports them.

2.5 Personal protective equipment (PPE)

Measures taken to minimize the effect of hazards that are not completely controlled by engineering and administration controls.

2.6 Lifting Task

Lifting task is any task which involves manually changing the location of an object without external mechanical assistance and applies a force and / or torque to the vertebral column.

2.7 Illumination

Illumination (also called illuminance) is the amount of light falling on to a surface. The light may come from the sun, lamps in a room or any other light source.

2.8 Lux (lx)

A lux is a metric unit of illuminance equal to one lumen per square meter. One foot-candle is equal to 10.76 lux.



2.9 Sitting

Pertaining to a posture in which the torso is approximately vertical, the hips are flexed about 90 degrees, and the knees are flexed between approximately 45 degrees and maximum flexion.

3.0 METHOD / PRACTICE

3.1 Identify Ergonomic Risk(s).

All tasks, assignments and circumstances where ergonomic hazards exist shall be identified via hazard identification and risk assessment.

3.2 Control Methods

Where practicable, ergonomic hazards shall be removed. Where ergonomic hazards cannot be removed controls shall be used to reduce risk factors. It is preferable to establish layers of protection by combining the three control types.

- Engineering Controls are the preferred controls where practicable and include:
 - Equipment that is designed, constructed, positioned and maintained to reduce the harmful effects of an activity.
 - Lighting anywhere employees are present or may pass through that has a minimum illumination of 5 decalux. (50 Lux)
 - Emergency lighting where required shall be a minimum of 5 decalux. (50 Lux)
 - Light fixtures, windows and skylights shall be kept clean and free from obstruction.
 - Artificial light sources and reflective surfaces shall be positioned, screened or provided a shade to prevent glare.
 - Provide suitable equipment for handling heavy and awkward loads.
 - Provide adequate ant-fatigue mats, footrests or other suitable devices where employees are required to stand for long periods.
 - For wet processes provide reasonable drainage and dry, clean standing places.
 - Provide appropriate seating that is designed, constructed, dimensioned and supported for employees that sit for substantial portions of their work and provide a footrest where required.
 - Provide and maintain thermal conditions – air temperature, radiant temperature, humidity, air movement – that is appropriate for the work performed.
- Administrative Controls include:
 - Implementing appropriate work practices and procedures to reduce the harmful effects of an activity.
 - Implementing work schedules that incorporate rest and recovery periods, changes in workload or other arrangements for alternating work to reduce the harmful effects of an activity.
- Applicable PPE shall be used where engineering and administration controls do not effectively reduce the ergonomic hazard.

3.3 Training

Each Registration Unit shall identify and provide training and / or awareness on ergonomic injury prevention that may include:

- Ergonomic hazards associated with an employee's activities.
- Signs and common ergonomic symptoms associated with a musculoskeletal injury (MSI) injury.
- Work practices and procedures.



- Equipment and personal protective equipment.

3.4 Reporting and Monitoring

Employees that are experiencing symptoms of ergonomic injury:

- Shall report the symptoms to their supervisor in accordance with the SaskPower Incident Reporting and Investigation Policy and supporting processes.
- May consult a physician or a health care professional.
- Shall cooperate in the implementation of corrective measures to eliminate or reduce ergonomic risk or injury.

3.5 Investigation

- Where employees report symptoms, supervisors shall review the activities of that worker and of other workers doing similar tasks to identify any cause of the symptoms and to take corrective measures to avoid further injuries.
- Ergonomic incidents are to be investigated, in conjunction with a health care provider if necessary.

3.6 Ergonomic Injury Prevention Review

- Ergonomic hazard activities shall be reviewed regularly, in consultation with Corporate safety Department and the Occupational Health committee (OHC).
- Each registration unit shall identify the frequency of the review cycle.

4.0 REFERENCE

The legal requirements for ergonomic injury prevention are outlined in the statutes / regulations of the jurisdiction having authority:

- Saskatchewan
 - *The Saskatchewan Occupational Health and Safety Regulations, 1996, Sections 69, 70, 78-83*
- SaskPower (located on SafetyNet)
 - Occupational and Industrial Hygiene Policy
 - Safety Briefing # 11: Ergonomics Standard
 - Ergonomic Training Content
 - Office and Industrial Ergonomic PowerPoint Presentations
 - Ergonomic Assessment Tools