Personal Protective Equipment Procedures

Purpose

This procedure will provide basic information on personal protective equipment (PPE) and will assist in the decisions regarding provision of appropriate PPE when required. Personal protective equipment is not a substitute for effective engineering, administrative controls, safe work practices, or other control measures and should be utilized as a last resort when other controls are not sufficient to create a safe work area.

Legislation

The Occupational Health and Safety Regulations outline requirements for PPE. Along with the general requirements listed in this section there are regulations regarding specific protection provided with the applicable section below.

Use of equipment required

86(1) Where it is not reasonably practicable to protect the health and safety of workers by design of the plant and work processes, suitable work practices or administrative controls, an employer or contractor shall ensure that every worker wears or uses suitable and adequate personal protective equipment.

(2) Where personal protective equipment will not effectively protect a worker, an employer or contractor shall, where reasonably practicable, provide alternative work arrangements for that worker.

General responsibilities

87(1) Where an employer or contractor is required by these regulations or any other regulations made pursuant to the Act to provide personal protective equipment, the employer or contractor shall:

(a) supply approved personal protective equipment to the workers at no cost to the workers;

(b) ensure that the personal protective equipment is used by the workers;

(c) ensure that the personal protective equipment is at the worksite before work begins;

(d) ensure that the personal protective equipment is stored in a clean, secure location that is readily accessible to workers;

(e) ensure that each worker is aware of the location of the personal protective equipment and trained in its use;

(f) inform the workers of the reasons why the personal protective equipment is required to be used and of the limitations of its protection; and

(g) ensure that personal protective equipment provided to a worker:

(i) is suitable and adequate and a proper fit for that worker;

(ii) is maintained and kept in a sanitary condition; and

(iii) is removed from use or service when damaged.

(2) Where an employer or contractor requires a worker to clean and maintain personal protective equipment, the employer shall ensure that the worker has adequate time during normal working hours without loss of pay or other benefits for this purpose.

(3) Where reasonably practicable, an employer or contractor shall make appropriate adjustments to the work procedures and the rate of work to eliminate or reduce the danger or discomfort to the worker that may arise from the worker's use of personal protective equipment.
(4) A worker who is provided with personal protective equipment by an employer or contractor shall:
   (a) use the personal protective equipment; and
   (b) take reasonable steps to prevent damage to the personal protective equipment.

(5) Where personal protective equipment provided to a worker becomes defective or otherwise fails to provide the protection it was intended for, the worker shall:
   (a) return the personal protective equipment to the employer or contractor; and
   (b) inform the employer or contractor of the defect or other reason why the personal protective equipment does not provide the protection that it was intended to provide.

(6) An employer or contractor shall immediately repair or replace any personal protective equipment returned to the employer or contractor pursuant to clause (5)(a).

Responsibilities

1. Vice-President (Administration) will:
   1.1 ensure the management support and leadership necessary to provide a safe and healthy working environment for employees and students, in compliance with the Health and Safety Policy (20.105).
   1.2 ensure that adequate resources are available to implement appropriate measures.

2. Associate Vice-Presidents, Deans, Directors, Department and Unit Heads will:
   2.1 ensure that the Procedures are communicated to the employees.
   2.2 require compliance with the Procedures.
   2.3 ensure the identification of areas or work processes where hazardous conditions warrant the need for PPE.
   2.4 ensure that where PPE is required, the users are adequately trained in proper testing, maintenance, use and cleaning of the device, and that records are maintained.

3. Supervisors will:
   3.1 provide approved PPE that protects against the identified hazards.
   3.2 ensure that where PPE is required, the users are adequately trained in, and able to demonstrate, the proper testing, maintenance, use and cleaning of the respiratory device.
   3.3 require compliance with these procedures and PPE specific manufacturer instructions.
   3.4 maintain all applicable records.
   3.5 consult with HSE if there are any concerns regarding any specific PPE.

4. PPE Users will:
   4.1 comply with the procedures regarding PPE use.
   4.2 use the PPE in accordance with their training and instruction.
   4.3 clean, disinfect and store the PPE appropriately.
   4.4 report any PPE malfunction to their supervisor.

5. Occupational Health & Safety Committee will:
   5.1 support and promote implementation of the procedures and related education and training.
   5.2 monitor the adequacy and effectiveness of the procedures.
6. Health, Safety & Environment (HSE) will:
   6.1 provide expertise and advice to all levels of management, employees and students on matters pertaining to PPE requirements and general training information.
   6.2 receive, review and investigate all incidents related to PPE and provide recommendations for corrective action.
   6.3 ensure the procedures are kept current.

**Selection of PPE**

A job/task hazard identification and risk assessment is the first step in determining the need for PPE. Once it has been identified that PPE is required to protect the safety of the person performing the job/task there are several factors to consider. The protection required and the environment that the PPE will be used in will affect the selection of appropriate equipment. Some of the questions to consider are:

- Does the PPE:
  - protect the body part that requires protection
  - maintain its structural integrity and protective qualities within the environment it is to be used
  - resist punctures, tears, and abrasions
  - provide the user with mobility and protection from extreme temperatures as required

- Is the PPE:
  - flexible to provide the user appropriate dexterity to perform any required tasks safely
  - easily cleaned and maintained
  - durable

- Will the PPE:
  - be comfortable
  - provide protection for the length of time it is required

**Requirements for PPE**

**Head Protection**

*Occupational Health and Safety Regulations*

Protective headwear

91(1) Where there is a risk of injury to the head of a worker, an employer or contractor shall provide approved industrial protective headwear and require a worker to use it.

(2) The following places are deemed to be places where a worker is exposed to a risk described in subsection (1):

(a) a mine, mill or smelter;
(b) a forestry or sawmilling operation;
(c) a construction site;
(d) a drilling operation;
(e) an oil or gas servicing operation.

(3) Where a worker may contact an exposed energized electrical conductor, an employer or contractor shall provide, and require the worker to use, approved industrial protective headwear that is of adequate dielectric strength to protect the worker.

(4) Where a worker is required by these regulations to use industrial protective headwear, an employer or contractor shall provide to the worker:

(a) a suitable liner where it is necessary to protect the worker from cold conditions; and
(b) a retention system to secure the industrial protective headwear firmly to the worker’s head where the worker is likely to work in conditions that may cause the headwear to dislodge.

(5) An employer or contractor shall ensure that any industrial protective headwear provided to a worker pursuant to these regulations is fluorescent orange or other high visibility colour where:
(a) the worker is working in a forestry or sawmilling operation; or
(b) visibility of the worker is necessary to protect the health and safety of the worker.

(6) An employer or contractor shall not require or permit a worker to use any industrial protective headwear that:
(a) is damaged or structurally modified;
(b) has been subjected to severe impact; or
(c) has been painted or has been cleaned with solvents.

Canadian Standards Association (CSA) or American National Standards Institute (ANSI) approved head protection shall be worn in areas where there is a potential for injury to the head from impact, flying or falling objects (e.g., working below other workers who are using tools and materials which could fall through grates), or electrical shock and burns.

**Eye/Face Protection**
*Occupational Health and Safety Regulations*

Eye and face protectors

93(1) Where there is a risk of irritation or injury to the face or eyes of a worker from flying objects or particles, splashing liquids, molten metal or ultraviolet, visible or infrared radiation, an employer or contractor shall provide industrial eye or face protectors and require the worker to use them.

(2) Where an industrial eye or face protector is required by these regulations to be provided or used, the industrial eye or face protector must be approved.

(3) An employer or contractor shall take all reasonable steps to ensure that a worker does not perform electric arc welding if another worker may be exposed to radiation from the arc, unless the other worker is using a suitable industrial eye protector or is protected from the radiation by a suitable screen.

(4) A worker shall not perform electric arc welding if another worker may be exposed to radiation from the arc, unless the other worker is using a suitable industrial eye protector or is protected from the radiation by a suitable screen.

CSA or ANSI approved eye protection shall be durable, comfortable and easy to clean. Persons whose vision requires the use of corrective lenses and who by nature of their job duties require eye protection shall wear goggles or a full face shield that can be worn over prescription lenses.

There are four general classes of eye and face protection: safety glasses, face shields, goggles and welding helmets. The type of protection required shall be determined by the type and degree of the hazard.
Footwear

Occupational Health and Safety Regulations

96(1) Subject to subsection (4), an employer or contractor shall ensure that:
   (a) a worker uses footwear that is appropriate to the risks associated with the worker’s place of employment and occupation; and
   (b) a worker who may be at risk from a heavy or falling object or who may tread on a sharp object uses approved protective footwear.

(2) The following places are deemed to be places where a worker is exposed to a risk described in clause (1)(b):
   (a) a mine, mill or smelter;
   (b) a forestry or sawmilling operation;
   (c) a construction site;
   (d) a drilling operation;
   (e) an oil or gas servicing operation.

(3) An employer or contractor shall:
   (a) provide outer foot guards if there is substantial risk of a crushing injury to the foot of a worker; and
   (b) provide approved protective footwear if the feet of a worker may be endangered by hot, corrosive or toxic substances.

(4) After consultation with the committee, the representative or, where there is no committee or representative, the workers, an employer or contractor may:
   (a) permit the following to use approved soft-soled footwear without puncture proof plates in the soles:
      (i) workers who are competent steel erectors engaged in the connection of structural components of a skeletal structure;
      (ii) competent workers who are engaged in the installation of a roof; and
   (b) impose any conditions that the employer or contractor considers appropriate on the use of footwear described in clause (a).

CSA approved foot protection shall be worn when there is potential for injury to the feet from falling or rolling objects, objects piercing the sole of the foot, electrical hazards, hot surfaces and slippery surfaces.

Hand Protection

Occupational Health and Safety Regulations

Hand and arm protection

97(1) An employer or contractor shall provide, and require a worker to use, suitable and properly fitted hand or arm protection to protect the worker from injury to the hand or arm, including:
   (a) injury arising from contact with chemical or biological substances;
   (b) injury arising from exposure to work processes that result in extreme temperatures;
   (c) injury arising from prolonged exposure to water; and
   (d) puncture, abrasion or irritation of the skin.

(2) Where a worker may contact an exposed energized high voltage electrical conductor, an employer or contractor shall provide, and require the worker to use, approved rubber insulating gloves and mitts and approved rubber insulating sleeves.
Hand protection shall be worn when there is a risk of absorption of harmful materials, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns and harmful temperature extremes.

The right type of glove provides much-needed hand protection. It is recommended that appropriate gloves be used when handling hazardous chemicals, toxins and materials of unknown toxicity, corrosives, and hot/cold objects. Particular attention should be given to chemicals which have a “skin” notation on the MSDS.

When choosing a glove, consider the circumstances under which the glove will be used. The degree of protection required will depend on the hazards identified, the type and scale of work being performed, and individual work habits.

For routine work with small amounts of chemicals, disposable gloves of a suitable material are generally acceptable. The gloves should be removed and replaced when they become contaminated. When gloves are required for immersion in cleaning baths or handling corrosive materials, reusable gloves of suitable material should be used. Reusable gloves should be inspected before each use, and decontaminated or replaced as necessary.

Wearing the wrong type of glove when handling chemicals can be more hazardous than wearing none at all. If a chemical permeates the glove, it can be held in prolonged contact with the wearer’s hand and potentially cause serious damage. A selection guide should be used to choose the type of glove required, and under some high risk circumstances double gloves may be used. Please refer to the University of Regina Chemical and Laboratory Safety Program for more information on chemical specific glove requirements.

When handling hot or cold items, insulated gloves made of Kevlar or a similar heat-insulating should be worn.

**Body Protection**

*Occupational Health and Safety Regulations*

Skin protection

94(1) Where there is a risk of injury to the skin of a worker from sparks, molten metal or radiation, an employer or contractor shall provide, and require the worker to use, approved protective clothing or covers or any other safeguard that provides equivalent protection for the worker.

(2) Where there is a risk of injury to the skin of a worker from fire or explosion, an employer or contractor shall provide the worker with, and require the worker to use, outer fire resistant clothing that:

(a) meets an approved industry standard; and

(b) is appropriate to the risk.

(3) Where there is a risk of injury to the skin of an electrical worker from arc flash, an employer or contractor shall provide the electrical worker with, and require the electrical worker to use, arc flash protection that meets an approved standard.

Lower body protection

95(1) Where a worker is at risk of a cut, puncture, irritation or abrasion to the worker’s lower body, an employer or contractor shall ensure that the worker uses safety pants or chaps that are appropriate for the work being performed by the worker.
(2) A worker operating a chain saw is deemed to be exposed to the risk described in subsection (1).

Full body protection shall be worn when there is potential for contamination or exposure to parts of the body (e.g., legs, arms, back, chest) from heat, splashes from hot metals and liquids, impacts, cuts, chemicals and radiation. Body protection can include the following:
- Lab coats;
- Boot covers;
- Aprons;
- Bouffant caps;
- Tyvek suits; and
- Coveralls.

**Protection against falling from height**

Inspection, use and maintenance of all fall protection components (lifelines, lanyards, full-body harnesses, snaps and hooks) required by employees at risk of falling from height shall be performed in accordance with manufacturers specifications.

Use of fall protection shall be done in accordance with the University of Regina Fall Protection Procedures.

**Respirators**

Use of respirators shall be done in accordance with the University of Regina Respiratory Protection Procedures.

**Hearing Protection**

Use of hearing protection shall be done in accordance with the University of Regina Hearing Conservation Procedure.

**Maintenance Schedules**

PPE shall be inspected and maintained by employees at regular intervals to ensure that it is in safe working order.

All PPE shall be inspected, cleaned, maintained, discarded and/or changed according to the PPE specific manufacturer’s instructions.

*Note:* Inspect PPE before each use for tears, punctures, holes, cuts, cracks, embedded foreign objects and texture changes (e.g., swelling, softening, hardening, becoming sticky or inelastic).

**Training**

Training shall be provided by HSE or the supervisor for each employee who is required to use PPE. Training will consist of:
- When PPE is needed.
- What PPE is required.
- How to properly don, doff, adjust, and wear PPE.
- The limitations of the PPE.
- The proper care, maintenance, useful life and disposal of the PPE.

Each affected employee shall demonstrate an understanding of the aforementioned training and the ability to use PPE properly before being allowed to perform work requiring the use of PPE.