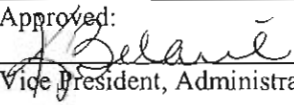
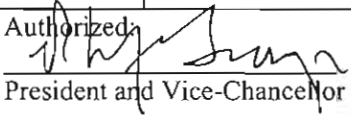
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Submitted: Risk Management Support Group	Approved:  Vice President, Administration	Authorized:  President and Vice-Chancellor

## 1 PURPOSE


- 1.1 To protect the health and safety of faculty, staff, students, visitors and volunteers by ensuring they are protected through use of personal protective equipment (PPE). To ensure compliance with the Occupational Health and Safety Act (OHSA), R.S.O. 1990, Section 25 (1) , Reg. 833 / 90 Control of Exposure to Biological or Chemical Agents, Section 3, 7 and Schedule (1).

## 2 SCOPE

- 2.1 All faculty, staff, students, visitors, and volunteers performing task or entering areas that require specific Personal Protective Equipment (PPE).


## 3 RELATED DOCUMENTS

- 3.1 Ontario Occupational Health and Safety Act R.S.O. 1990
- 3.2 RMM 100 McMaster University Workplace & Environmental Health and Safety Policy
- 3.3 RMM 310 Eye Protection Program
- 3.4 RMM 311 Respirator Protection Program
- 3.5 RMM 312 Foot Protection Program
- 3.6 RMM 313 Head Protection Program
- 3.7 RMM 321 Hand Protection Program
- 3.8 Laboratory Safety Handbook by the Chemical Institute of Canada
- 3.9 McMaster Laboratory Safety Handbook, RMM#309
- 3.10 CAN/CSA Z460-05 Control of Hazardous Energy – Lockout and other Methods
- 3.11 Contracting Work Safety Program / Due Diligence Program, RMM #111
- 3.12 RMM 324 Job Hazard Analysis Program

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## 4 DEFINITIONS

- 4.1 **Eye/Face Protection** – equipment designed to provide protection to the face and eyes during exposure to hazards objects, sparks, liquid chemicals, acids, caustic substances or potentially injurious light (i.e. lasers, welding arc etc.).
  - 4.2 **Protective clothing** - equipment such as lab coat and/or apron, which must be worn when handling hazardous material or as prescribed in the MSDS.
  - 4.3 **Foot Protection** – personal safety devices designed to provide protection to the feet and toes during exposure to situations with the potential for injuries such as: falling or rolling objects, chemical or liquid exposures, piercing objects through the sole or uppers and/or where employee’s feet are exposed to electrical hazards.
  - 4.4 **Hand Protection** – personal safety devices designed to provide protection to the hands during exposure to potential hazards such as: sharps, abrasive surfaces, temperature extremes and chemicals. Hand protection is selected based upon the hazard and performance characteristics of the glove.
  - 4.5 **Hazard Assessment** - the process utilized to identify hazards in the workplace and to select the appropriate Personal Protective Equipment to guard people against potential hazards.
  - 4.6 **Head Protection** - personal safety devices designed to provide protection to the head from hazards such as: falling objects, falling from a height, striking against low hanging objects or electrical hazards.
  - 4.7 **Hearing Protection** - personal safety devices that are worn to reduce the harmful auditory and/or annoying effects of sound. A last resort when other means are not available.
  - 4.8 **Personal Protective Equipment (PPE)** – personal safety devices designed to provide protection to the wearer such as eyes, face, hands, head, feet, ears and extremities from potential hazards.
  - 4.9 **Respiratory Protection Equipment** – personal safety devices designed to provide protection to the wearer from potential inhalation hazards such as vapor, mist, particulates, and gases.
  - 4.10 **Body Protection** – personal safety devices which may be clothing such as lab coats or aprons that prevent chemicals or physical agents from contact with the body or may be equipment such as body harnesses that prevent a fall from heights.
  - 4.11 **Supervisor** – a person who has charge of a workplace or authority over a worker.
  - 4.12 **Worker** – person who performs work or supplies services for monetary compensation.
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#### 4.13 Acronyms:

**EOHSS** – Environmental and Occupational Health Support Services

**FHSc** – Faculty of Health Science Safety Office

**PPE**- Personal Protective Equipment

**MSDS** – Material Safety Data Sheet

**OH&S** – Occupational Health and Safety Act

**JHA** – Job Hazard Analysis

**RMSG** – Risk Management Support Group (EOHSS, Faculty of Health Sciences Safety Office, Employee Health Services, Senior Health Physicist, Parking and Security Services and Director of Workplace Health and Benefits)

## 5 RESPONSIBILITIES

### 5.1 Role of Senior Managers ( Deans, Chairs, Directors):


Senior Managers shall:

- provide the direction and resources necessary to support the PPE Program; and
- ensure that the staff under their direction are aware of and abide by this program.

### 5.2 Role of Supervisors:

Supervisors shall:

- complete a JHA for the activities in his/her area to identify potential hazards and methods for their elimination. Hazard assessments will be conducted initially, when work practices change, at a minimum, they will be reviewed annually, and maintained in the department;
  - preventative and protective measures shall be implemented according to the following priority:
    - eliminate the hazard;
    - substitute if possible;
    - use engineering controls to minimize hazard;
    - use a safer work system that includes awareness of potential hazards; and
    - provide administrative controls such as training and procedures; and
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- provide PPE and include measures to ensure its appropriate use and maintenance.
- determine, based on the JHA, the correct PPE necessary to perform the activities in a safe manner;
- be responsible for ensuring that employees wear the required PPE;
- supply or ensure that appropriate PPE is available for all who must be so equipped;
- post designated PPE areas;
- document all PPE training; and
- train employees under their supervision regarding:
  - when PPE is necessary;
  - what type to use;
  - how to put on, take off, adjust and wear appropriate PPE; and
  - proper maintenance, storage, disposal and useful life of PPE.

### 5.3 **Role of Individuals (Faculty, Staff, Students, and Volunteers):**


Individuals shall:

- participate in any required training in the use and care of PPE;
- wear the PPE prescribed by the supervisor as being appropriate for the involved task;
- follow the prescribed guidelines for the use and care of approved PPE;
- communicate to his/her supervisor any unforeseen hazards requiring additional PPE; and
- report to his/her supervisor any defective PPE or need for replacement.

### 5.4 **EOHSS and FHSc:**

EOHSS and FHSc shall:

- provide advice to supervisors regarding the type of PPE required; and
  - update the PPE Program as required.
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**5.5 Role of Risk Management Support Group:**

The RMSG shall:

- provide advice and direction on the need for and type of PPE required in the workplace; and
- review and make comment on all proposed changes to the PPE Program.

**5.6 Role of Contractors:**

Contractors shall:

- work in compliance with the OH&S Act and McMaster University Risk Management Manual and with particular attention to:
- Contracting Work Safety Program / Due Diligence Program, RMM #111; and
- post designated construction sites as PPE areas.

**5.7 Role of Joint Health and Safety Committees:**

JHSC's shall:

- review the effectiveness of the PPE Program in posted areas and within assigned work groups as part of the workplace inspection process.

**5.8 Role of Central Joint Health and Safety Committee:**

The CJHSC shall:


- review the PPE Program on a scheduled basis.

**6 HAZARD ASSESSMENT**

6.1 The hazard assessment is a formalization of what is done whenever personal protective equipment is selected based on the hazards of the job. When conducting a hazard assessment, a task is investigated and the hazards and the potential hazards associated with the task are determined. This allows selection of personal protective equipment that will protect the worker from the identified hazards.

6.2 A hazard assessment may be conducted for a single worker, or a single task, or a group of employees if all employees perform an identical task. For example, if all employees in a group are exposed to corrosive liquids during one task, potential hazards are skin and eye damage. The recommended PPE are splash goggles, gloves, chemical resistant for the compound, lab coat and/or apron, closed toed shoes. The hazard assessment would include all workers conducting that task and may include any other group that uses similar types of materials.

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- 6.3 During the hazard assessment of each task, inspect the layout of the workplace and look for the following hazard sources:
- High or low temperature that may result in: burns, eye injury, ignition of equipment, heat/cold stress, frostbite, lack of co-ordination, etc.;
  - Chemical exposure, including airborne or skin contact that may injure due to contact or inhalation;
  - Biological hazards e.g. bacteria, animals etc.;
  - Harmful dust or particulates
  - Radiation e.g. welding, arc lamps, heat treating, lasers, growth lights, x-rays, radioisotopes etc.;
  - Sources of falling objects, potential for dropping objects, or rolling objects that could crush or pinch the feet;
  - Sharp objects that may pierce the feet or cut the hands;
  - Observe the layout of the workplace and the location of co-workers for potential collisions with other personnel or objects;
  - Electrical hazards; and
  - Any other identified potential hazard (chemical, physical or biological).

Where these hazards may cause injury to workers, personal protective equipment must be selected to substantially eliminate the injury potential. A Job Hazard Analysis must be completed by the PI/Supervisor to identify potential workplace hazards.

## 7 TRAINING

- 7.1 Prior to conducting work requiring the use of PPE, workers/students shall be trained in the following:
- When PPE is necessary;
  - What type is necessary;
  - How it is to be worn;
  - What its limitation are; and
  - Proper care, maintenance, useful life and disposal.

Supervisor must provide training to ensure the worker/student is able to demonstrate, upon completion of the training, the above mentioned information. Any type of training format can be used as long as a hands-on session is incorporated. The Supervisor must have documentation of this training and proof that the training information was understood.

Worker comfort should be considered when selecting PPE as it should not make tasks more difficult to accomplish.

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