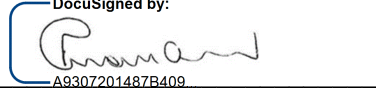





## Risk Management Manual Program

Complete Program Title: <b>Eye Protection Program</b>	Risk Management Manual (RMM) Number: <b>310</b>
Approved by:   <b>Vice-President, Administration</b>   <b>President and Vice-Chancellor</b>	Date of Most Recent Approval: <b>October 2020</b>
Date of Original Approval: <b>December 2002</b>	Supersedes/Amends Program dated: <b>March 2012</b>
Responsible Executive: <b>Vice-President, Administration</b>	Enquiries: <b>Environmental and Occupational Health Support Services (EOHSS) <a href="mailto:ehss@mcmaster.ca">ehss@mcmaster.ca</a></b>
<b>DISCLAIMER:</b> <i>If there is a discrepancy between this electronic program and the written copy held by the program owner, the written copy prevails.</i>	

### 1. PURPOSE

- 1.1. To reduce the potential for eye injury and to ensure compliance with the Occupational Health and Safety Act and Regulations and adhere to codes and standards regarding the wearing of protective eyewear.
- 1.2. This program provides guidance, based on the risk of a task, for the selection of protective eyewear to be worn. The program is in effect for all staff, faculty, students, volunteers and visitors who may be at risk from any procedure performed on behalf of McMaster University .

### 2. SCOPE

- 2.1. All persons in danger of eye injury while performing a task associated with work, research or study.

### 3. RELATED DOCUMENTS

- 3.1. The Occupational Safety Act of Ontario , R.S.O. 1990
- 3.2. CSA Standard for Industrial Eye and Face Protectors CAN/CSA-Z94.3-20
- 3.3. McMaster University RMM# 100 Workplace Environmental Health and Safety Policy
- 3.4. McMaster University RMM# 703 Laser Safety Program
- 3.5. Safety in Academic Chemistry Laboratories by the American Chemical Society

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3.6. McMaster University Laboratory Manual, 2019

#### 4. DEFINITIONS

4.1. Chemical splash (listed in Group D of the Selection of eye and face protection chart from Appendix A)-Physical splashing of any hazardous chemical including solvents, acids, bases, irritants and toxic liquids.

4.2. Non-routine eye hazards - Hazards that do not fall under the general guidelines of this document. e.g. lasers.

#### 4.3. Acronyms:

- CSA- Canadian Standards Association
- OHSA- Occupational Health and Safety Act of Ontario
- SOP- Standard Operation Procedures
- JHSC- Joint Health and Safety Committees
- EOHSS – Environmental & Occupational Health Support Services
- FHSSO – Faculty of Health Sciences Safety Office

#### 5. RESPONSIBILITIES

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

Senior Managers shall:

- provide the direction and resources necessary to support the Eye Protection Program;

##### 5.2. Role of Supervisors (Academic & Administrative):

Supervisors shall:

- identify hazards and/or hazardous material and instruct employees on appropriate eye protection;
- determine which eyewear should be worn by workers, students, volunteers, and visitors while performing a task under their supervision;
- ensure the proper eyewear is being worn as required while hazardous tasks are being performed;
- in cooperation with the JHSC and if necessary, an appropriate representative from the subject matter expert group prepare SOP's as required for non-routine eye hazards.;
- review and approve Standard Operating Procedures as required for non – routine eye hazards.

##### 5.3. Individuals (Faculty, Staff, Students, Volunteers, and Visitors):

Individuals shall:

- wear the appropriate protective eyewear as prescribed by the Supervisor and
- maintain their protective eyewear as per manufacturer's recommendations and report damage or breakage to their Supervisor for replacement.

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**5.4 EOHSS and FHSSO:**

EOHSS and FHSSO shall:

- when requested, review and advise on all SOP's for non-routine eye hazards;
- provide advice on interpretation of the program and standards and assess different types of safety eyewear for compliance as required.

**6. EYEWEAR PROTECTION PROCEDURAL GUIDELINES**

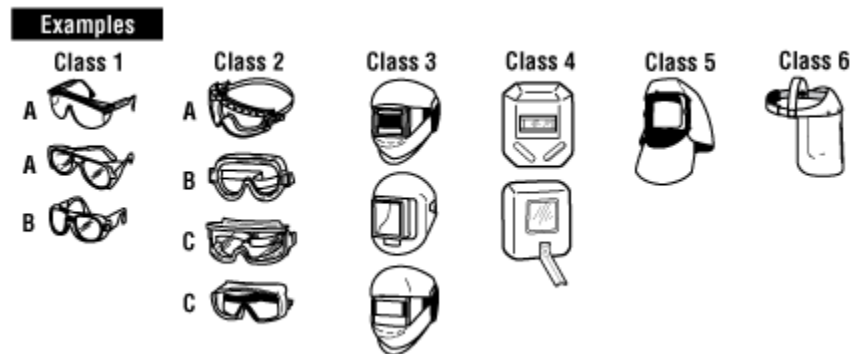
6.1. Eye protection is required to protect the user from the hazards associated with flying objects, dust, heat, glare, acid splash, chemical burns, biohazardous materials and optical radiation. The type of eyewear required is based on the CSA standard for Industrial Eye and Face Protectors CAN/CSA-Z94.3-20.

**(A summary of this guide is found in Appendix A).**

- 6.2. Non-prescription eye protection e.g. goggles, safety glasses, face shields will be provided by the responsible supervisor.
- 6.3. Where applicable, the cost of required prescription safety eyewear lens and frames shall be subsidized at the rate defined in the collective agreement between McMaster University and the appropriate bargaining group.
- 6.4. All visitors to areas requiring eye protection must wear the proper protective eyewear.

**Appendix A**

**Note:** This table cannot cover all possible hazards and combinations that may occur. Examine each situation carefully and select the appropriate protector or combination of protectors.



Nature of Hazard	Hazardous Activities involving but not limited to	Recommended Protectors
Flying Objects	Chipping, scaling, stonework, drilling, grinding, buffing, polishing, hammer mills, crushing, heavy sawing, planing, wire and strip handling, hammering, unpacking, nailing, punch press, lathework	Class 1A - Spectacles Class 2A, 2B - Goggles Class 5A, 5B - Hoods Class 6A, 6D - Face shields
Flying particles, dust, wind, etc.	Woodworking, sanding, light metal working and machining, exposure to dust and wind, resistance welding (no radiation exposure), sand, cement, aggregate handling, painting, concrete work, plastering, material batching and mixing	Class 1A - Spectacles Class 2A, 2B - Goggles Class 5A, 5B - Hoods Class 6A, 6D - Face shields
Heat, sparks, and splash from molten materials	Babbiting, casting, pouring, molten metal, brazing, soldering, spot welding, stud welding, hot dipping operations	Class 1B - Spectacles Class 2C - Goggles Class 5C, 5D - Hoods Class 6B, 6C, 6D - Face Shields
Acid splash, chemical burns	Acid and alkali handling, degreasing, pickling and plating operations, glass breakage, chemical spray, liquid bitumen handling	Class 2B - Goggles Class 5B - Hoods Class 6A - Face Shields

Abrasive blasting materials	Sand blasting, shot blasting, shotcreting	Class 2B - Goggles Class 5B - Non-Rigid Hoods Class 6A - Face Shields
Glare, stray light (where slight reduction of visible radiation is required)	Reflection, bright sun and lights, reflected welding flash, photographic copying	Class 1A - Spectacles Class 2A, 2B - Goggles Class 5A, 5B - Hoods Class 6A - Face Shields
Injurious optical radiation (where moderate reduction of optical radiation is required)	Torch cutting, welding, brazing, furnace work, metal pouring, spot welding, photographic copying	Class 1B - Spectacles Class 2C - Goggles Class 5C - Hoods Class 6B - Face Shields
Injurious optical radiation (where large reduction of optical radiation is required)	Babbiting, casting, pouring, molten metal; brazing, soldering, spot welding, stud welding, hot-dipping operations	Class 3 - Helmet Class 4 - Handshield
Laser radiation	Laser cutting, laser surgery, laser etching	Class 2D - Goggles
Electric arc flash	Electrical installation, electrical maintenance, troubleshooting of electrical systems, disconnecting live electrical systems	Class 2E - Goggles Class 5E - Hoods Class 6D - Face shields

From: CSA Standard Z94.3.1-16 Guideline for selection, use and care of eye and face protectors, 2016