

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>March 2012</b>
Date of Original Approval: <b>December 2002</b>	Supersedes/Amends Program dated: <b>January 2009</b>
Responsible Executive: <b>Vice-President, Administration</b>	Enquiries: <b>Environmental and Occupational Health Support Services (EOHSS) <a href="mailto:eohts@mcmaster.ca">eohts@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 McMaster University property.

## 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, Industrial Establishment Regulations, R.S.O. 1990
  - 3.2. CSA Standard for Industrial Eye and Face Protectors CAN/CSA-Z94.3-09
  - 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
  - 3.6. Laboratory Safety Handbook by the Chemical Institute of Canada, 4th Edition 2003
  - 3.7. McMaster Laboratory Safety Handbook, Version 3 2008, RMM#309
- RMM #310 – March 2012

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#### **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
- 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
  - RMSG - Risk Management Support Group
  - EOHSs - Environmental & Occupational Health Support Services
  - FHSc safety office – Faculty of Health Science 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; and
- in cooperation with the JHSC and if necessary, an appropriate representative from the RMSG 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 and report damage or breakage to their Supervisor for replacement.

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5.4. **EOHSS and FHSc Safety Office:**

EOHSS and FHSc Safety Office 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 also to assess different types of eyewear for compliance; and
- approve the selection of eye protection that is provided to workers by McMaster University.

**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-Z94.3.1-09

**(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**

Selection of Eye and Face Protection														
<b>Note:</b> 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.  *indicates recommended protection	Spectacles (Class 1)		Goggles (Class 2)			Welding Helmet (Class 3)	Welding Hand Shield (Class 4)	Non-Rigid Hoods (Class 5)				Face Shields (Class 6)		
	A	B	A	B	C			A	B	C	D	A	B	C
<b>Flying Objects</b>														
Chipping, drilling, scaling, grinding, polishing, buffing, riveting, punching, shearing, hammer mills, crushing, heavy sawing, planing, wire and strip handling, hammering, unpacking, nailing, punch press, lathework, etc.	*		*	*				*	*			*		
<b>Flying particles, dust, wind, etc.</b>														
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	*		*	*				*	*			*		
<b>Heat, sparks and splash from molten materials</b>														
Babbiting, casting, pouring molten metal, brazing, soldering, spot welding, stud welding, hot dipping operations		*			*					*	*		*	*
<b>Acid splash, chemical burns</b>														
Acid and alkali handling, degreasing, pickling and plating operations, glass breakage, chemical spray, liquid bitumen handling				*					*			*		
<b>Abrasive blasting materials</b>														
Sand blasting, shot blasting, shotcreting				*					*			*		
<b>Glare, stray light (for reduction of visible radiation)</b>														
Reflecting, bright sun and lights, reflected welding flash, photographic copying	*		*	*				*	*			*		
<b>Injurious optical radiation (moderate reduction of optical radiation)</b>														
Torch cutting, welding, brazing, furnace work, metal pouring, spot welding, photographic copying		*			*					*			*	
<b>Injurious optical radiation (large reduction of optical radiation)</b>														
Electric arc welding, heavy gas cutting, plasma spraying and cutting, inert gas shielded arc welding, atomic hydrogen welding						*	*							

**Examples**

Class 1  
A   
A   
B 

Class 2  
A   
B   
C   
C 

Class 3  
  
  


Class 4  
  


Class 5  


Class 6  


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