Eye Injury Prevention
April 2010
Introduction

Eye injuries are 100% preventable and yet in recent years they have accounted for over 3% of all work-related injuries\(^1\) in Saskatchewan.

The purpose of this guide is to outline an employer’s duties in preventing eye injuries and to explain:

- the risk factors,
- when eye and face protection and other control measures are required,
- how to choose “suitable” and “approved” eye and face protection, when required, and
- how to recognize and treat eye injuries.

Where workers’ eyes may become irritated or injured from flying particles, splashes, ultraviolet (UV) or infrared radiation (IR), the Occupational Health and Safety Regulations (regulations) require an employer to supply approved eye and/or face protectors and ensure workers use them. See Appendix 1 for a listing of regulations that are relevant to preventing eye injuries.

\(^1\)All cited injury statistics refer to WCB accepted time-loss claims.
Risk Factors

Who is at risk?

In Saskatchewan, welders account for the greatest proportion of eye injuries. Workers who perform tasks that generate flying particles (e.g. grinding, sanding, cutting, chiselling, hammering, sawing, smelting, etc.) are also at high risk of sustaining an eye injury.

The highest proportion of eye injuries occurs in the manufacturing and agriculture sectors. Across all sectors, high-risk activities include drilling, spraying or mixing.

How do they occur?

Most eye injuries in the province are caused by physical contact with objects or particles (e.g. metal chips, splinters, fragments, sparks, dust, other debris). Other common causes include exposure to chemicals (acids or alkalis) or ultraviolet (UV) or infrared (IR) radiation from lasers or other high energy sources. The injury that can result from a laser is related to its power and wavelength. For example, depending on the type of laser, the beam may have a wavelength in the visible, IR or UV range.

Eye injuries can occur when control measures are lacking or are not appropriate for the type of work. For example, some eye protection is only designed to protect workers from frontal exposure to particles, but not from particles that approach from the sides or behind. Injury may occur for example, if safety glasses are used when goggles or a face shield were needed to prevent lateral exposures to particles.
Eye and face protection are not the most effective control measure to prevent eye injuries. Section 86(1) of the regulations requires that eye and face protection and other personal protective equipment be used only when more effective controls are not reasonably practicable. More effective controls include:

- engineering controls, and
- administrative controls.

**Engineering Controls**

Look at ways to eliminate or stop the exposure to the hazard at the source. For example, consider substituting an open lathe with an enclosed lathe. This eliminates an eye hazard by containing mists and metal shards at their source. Controls such as enclosures, curtains and other safeguards that isolate the hazard are called engineering controls.

Engineering controls involve changing the design of a workplace or work process. This is a preferred method of control because it does not depend as much on worker training or acceptance of the use of personal protective equipment.

**Administrative Controls**

Administrative controls, such as the following, also need to be considered:

- Removing a substance from the workplace (e.g. chemical) or substituting it with something less hazardous.
- Good preventive maintenance procedures of certain tools (e.g., chisels, hammers) to lessen the potential of metal fragments being dislodged.
- Keeping workers at a distance from an eye hazard such as radiation.

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2 According to the Occupational Health and Safety Regulation the more effective controls are not reasonably practicable when there is a gross disproportion between the protection they provide and the associated cost, in time, trouble or money. Cost refers to an objective cost and is not related to the ability of a particular employer to cover costs. This is to ensure that all workers are entitled to the same standard of protection.
Personal Protective Equipment – Eye and Face Protection

Eye and face protection can be used to:

• supplement more effective controls, or
• used when more effective controls are not reasonably practicable. For example, constructing an expensive enclosure on a dust-generating procedure may not be reasonably practicable if it is only done once a year during a shutdown.

Safe Work Procedures

All control measures must be integrated into well-developed and implemented safe work procedures and training. This is critical to preventing eye injuries.

Additional Control Measures for Radiation Hazards

*The Radiation Health and Safety Regulations, 2005* [see excerpt in Appendix 2] set out the requirements with respect to radiation hazards, including requirements for a laser to have a label indicating its classification and the corresponding hazard. These regulations also set out the qualifications required to operate lasers. More information on lasers can be found at http://www.labour.gov.sk.ca/ohs-publications.
Choosing Suitable and Adequate Eye and Face Protection

1. Identify Hazards:

Survey the workplace to see what eye hazards exist. Ask questions such as:

- Does the operation have the potential to generate dusts, flying particles, molten metal, or chemical splashes?
- Is UV and/or IR radiation exposure a concern?

Check labels, material safety data sheets and other information sources to determine if a substance or radiation source presents a hazard to the eyes. For example:

- Can it have toxic, corrosive or irritative effects on the eyes?
- Does it produce easily recognized acute effects or hard to recognize cumulative or chronic effects that develop over time?
- Can it penetrate or be absorbed into the eyes?

2. Assess the risks

Assess the likelihood of workers coming into contact with the hazard and the nature and extent of the consequences, considering how the work is done. For example:

- Are any particles, gases, vapours or radiation hazards likely to reach workers’ eyes?
- Is the risk restricted to the eyes or does the rest of the face or do the respiratory passages also need protection?
- Can workers in the vicinity of a radiation or other hazard be exposed to a harmful extent?

Where the assessment indicates a need for eye or face protection to supplement the use of other controls, or where used alone, the employer needs to select appropriate and adequate approved protection. Where eye protection is being relied upon it must be “suitable” and “approved” eye protection. This is required by Section 93 of the regulations.

3 “Approved” is defined as follows in Section 2(1)(e) of the OHS Regulations:
   (a) Approved by an agency acceptable to the Director for use under the conditions prescribed by the agency; or
   (b) Approved conditionally or otherwise by a certificate of the director.
Safety eyewear that a supplier indicates as meeting the Canadian Standards Association (CSA) standard, Eye and Face Protector Z94.3, is considered approved.

The safety eyewear used should meet the specifications in the most recent edition of this standard, CSA Z94.3-07. However as noted in the footnote, and in the example on the next page, the Director may in certain circumstances conditionally “approve” eyewear that does not meet the most current CSA standard.

The most recent (2007) edition, CSA Z94.3-07, includes changes in lens materials and their minimum thickness and now only recognizes safety eyewear with permanently-affixed or integrated side shields. This usually means that when safety eyewear is required by OHS Regulations it must have permanently-affixed or integrated side shields.

However, in some cases prescription safety eyewear with permanently affixed side shields may present an additional hazard in a workplace. For example, in some chemical environments side shield materials become etched more readily than do the prescription safety lenses that are typically made from more resistant materials. The continuing use of etched side shields means reduced peripheral vision for the wearer – an additional hazard. It is not reasonably practicable to discard costly prescription safety eyewear each time the side shields become etched. One alternative is the use of a safety frame with fully integrated side shields. The material of this frame would be more resistant to etching or damage. Another is the use of a shield type of frame in conjunction with a removable lens insert. If this type of frame became etched or damaged the insert could be transferred to a new supporting frame.

Where permanently affixed side shields pose an additional hazard the Director also recognizes safety eyewear with removable side shields as approved, provided:

- they otherwise meet the CSA standard Z94.3-07,
- there is a sufficient supply of readily-available side shields at the worksite, and
- adequate supervision is in place to ensure the side shields are affixed onto the safety eyewear whenever use of safety eyewear is required by the regulations.
3. Selecting Eye and Face Protection Based on the Hazard

The following information indicates what is suitable and approved eye protection based on the type of hazard. See Appendix 3 for illustrations of the various types of eye and face protective equipment. There are six classes of approved eye protection. **When Classes 3, 4, 5 & 6 are recommended Class 1 & Class 2 protectors must be used in conjunction with them.**

**Under no circumstances are regular eyeglasses to be considered a substitute for approved eye protection. In most cases contact lenses may be used provided that additional, appropriate eye protection is worn. See the following National Institute for Occupational Safety and Health bulletin on contact lens use in a chemical environment: [http://www.cdc.gov/niosh/docs/2005-139/](http://www.cdc.gov/niosh/docs/2005-139/).**

- **If the hazard includes one or more of:** flying objects, particles, dust or wind (e.g. hammering, sanding, grinding, drilling, nailing, etc.), use: Class 1A spectacles, Class 2A,B goggles, Class 6A face shield or Class 5A, B non-rigid hoods.

- **If the hazard includes one or more of the following:** heat and splash from molten materials (e.g. casting, soldering, pouring molten metal, etc.), use: Class 1B spectacles, Class 2C goggles, Class 6B, C face shields, or Class 5C,D non-rigid hoods. Class 6 protectors must only be used in conjunction with Class 1 or Class 2 protectors.

- **If the hazard includes one or more of the following:** chemical burns (e.g. acid and alkali handling, chemical spray, pickling, plating, etc.), use: Class 2B goggles, Class 6A face shields, or Class 5B non-rigid hoods. 

- **If the hazard includes one or more of the following:** abrasive-blasting materials (e.g. sandblasting, shot blasting, etc.), use: Class 2B goggles, Class 6A face shields, or Class 5B non-rigid hoods.

- **If the hazard includes one or more of the following:** stray light, glare, where slight reduction of visible radiation is required (e.g. bright sun, reflected welding flash, photographic copying), use: Class 1A spectacles, Class 2A,B goggles, Class 6A face shield, or Class 5A,B non-rigid hood.

- **If the hazard includes one or more of the following:** injurious optical radiation where moderate reduction of optical radiation is required (e.g. torch cutting, metal pouring, spot welding, etc.), use: Class 1B spectacles, Class 2C goggles, Class 6B face shields, or Class 5C non-rigid hoods.

- **If the hazard includes one or more of the following:** injurious optical radiation where large reduction of optical radiation is required (e.g. arc welding, heavy gacutting, MIG welding), use: Class 3 welding helmet or Class 4 welding hand shield. Class 3 and 4 must be used only in conjunction with Class 2C protectors. Class 1B is not suitable for this type of hazard.
Shade Selection for Welding Helmets

Occupational Health and Safety conducted a survey of welding shops throughout the province to assess the adequacy of the eye protection being used. Exposure to UV radiation from flux cored arc and metal inert gas (MIG) welding of stainless steel, aluminum and mild steel was measured. Shielding effectiveness was compared between different shade numbers and types (e.g. glass 9,10, 11, 12 vs. gold 9,10, 11, 12).

Results indicated that:

- the UV radiation intensity is sufficient to cause damage to exposed eyes and skin, highlighting the need to also cover the hands and neck.
- the supplied welding shades provided sufficient UV barrier protection and met the requirements of section 20 to 22 of The Radiation Health and Safety Regulations, 2005 [Appendix 2].
- the selection of shades was most often based on personal preference rather than specific welding conditions or applications. Any knowledge of shade appropriateness was learned on the job or loosely at vocational training programs.

Although personal preference should be taken into account, shade selections need to meet the following CSA standard.

**Recommended Shade Numbers for Arc Welding and Allied Process**

<table>
<thead>
<tr>
<th>Operation</th>
<th>Current in amperes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>SMAW (covered electrodes)</td>
<td>7</td>
</tr>
<tr>
<td>GMAW (MIG)</td>
<td>7</td>
</tr>
<tr>
<td>GTAW (TIG)</td>
<td>8</td>
</tr>
<tr>
<td>Air carbon arc cutting</td>
<td>10</td>
</tr>
<tr>
<td>Plasma arc cutting</td>
<td>8</td>
</tr>
<tr>
<td>Plasma arc welding</td>
<td>6</td>
</tr>
</tbody>
</table>

**Notes:**

(1) For other welding processes (eg, laser, electron beam welding), consult the manufacturer for eye protection recommendations.

(2) For pulsed GMAW (MIG), use peak current for selecting the appropriate shade number.

(3) For underwater welding, the minimum shade number shown may not necessarily apply.
Maintenance of Eye and Face Protective Equipment

To help prevent injuries, employers need to ensure eye and face protective equipment is maintained and stored in a way that limits scratching and dirt build-up. Dirty or scratched protectors will inhibit the field of view and this may result in workers not using them or removing them.

It is especially important that gold welding shades be frequently inspected, as they are prone to scratching. Small scratches on the surface of these shades allow for UV radiation to penetrate, exposing the worker to harmful radiation. Scratched gold shades must be replaced immediately.

Recognizing and Treating Eye Injuries

Employers need to inform workers of the nature and degree of eye hazards and how to recognize symptoms. For products some of this information can usually be found on the material safety and data sheets.

Additionally, employers need to ensure written emergency response procedures are in place and that emergency supplies and equipment, and first aid personnel and supplies are provided and readily available. Workers must be trained on what to do in the event of an eye injury and their role in responding to eye injuries of co-workers.

Immediate attention to an eye injury is crucial and can prevent serious and permanent damage.

Chemical Splashes

Eyes exposed to chemical splashes must be immediately flushed at an eye wash station with large volumes of lukewarm water for at least 15-20 minutes. In Saskatchewan workplaces employers are required to provide, at readily accessible locations, approved equipment to flush the eyes where they may be risk of eye injury from corrosive or other substances. Approved eye wash equipment means it meets the requirements set out by the American National Standards Institute (ANSI) Standard for Emergency Eyewash and Shower Equipment. See Occupational Health and Safety’s Guidelines for Emergency Showers and Eyewashes in the Workplace for more detailed information: www.lrws.gov.sk.ca/ohs-publications-forms.

Longer flushing times (60 minutes) may be required with severe alkali or acid burns. Medical attention should be sought as soon as possible. A portable eye wash bottle should be used to continuously flush the worker’s eyes while on the way to a hospital or other medical facility. These bottles are also useful when distributed throughout the workplace to use on the way to an eyewash station.
Flying Particles

If a particle is small and loose it may be removed by gently flushing the eye with large volumes of water as described on the previous page. In some rare cases, a particle may be flushed out by tears. If the object cannot be removed through flushing or is embedded in the eye, make sure that nothing touches the eye. Cover the eye appropriately and take the worker to a hospital.

Radiation

Welder’s flash is the most common eye injury resulting from exposure to radiation produced during welding operations. It can also result when workers’ eyes are exposed to direct sunlight (or reflection off of water or snow) or radiation from certain types of lamps (e.g. tanning lamps, photographer’s flood lamps). The onset of symptoms is usually seen within six to eight hours after exposure and may include light sensitivity, a grainy feeling over the eyes, watering, blurred vision and pain. Medical treatment should be sought at the hospital and includes the use of anaesthetic drops and eye dressings.

Exposure to IR radiation from high heat sources (e.g., molten metal) may cause severe, irreversible burns to the eye. In the event of this type of injury, apply ice and take the worker directly to the hospital. Exposure to UV and IR radiation, can over the long term, result in cataract formation.

Lasers that emit visible or near infrared light can damage the retina. If the wavelength of the laser’s beam is in the far infrared or ultraviolet regions of the spectrum, the damage affects the cornea and lens.
Respiratory Protective Devices and Eye Protection

Certain tasks or substances that are hazardous to the eyes can also be hazardous to the respiratory tract or skin. For example, some of these tasks may also result in workers inhaling gases, vapours, mists, fumes or other particles that can cause injury to the lungs.

Certain types of respiratory protective devices with full-face protection can also meet the standard of “approved” eye protection. See CSA standard Z94.3-02 to see which respirators meet this standard based on the type of hazard. The Material Safety Data Sheet (MSDS) should also be referred to for guidance on selecting appropriate respiratory protective devices that also protect the eyes.

Protecting Workers in the Vicinity

When assessing the hazard and risk to workers it is important to assess the risk of exposure to workers in adjacent areas as well. If there is a reasonable likelihood of exposure to chemicals, particles, UV and IR radiation or lasers, the employer must also ensure the protection of these workers.

Other Considerations

Workers exposed to harmful radiation should consult their physician and receive regular eye examinations.
Appendix 1. *The Occupational Health and Safety Regulations, 1996 for Eye Protection*

**General responsibilities**

**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).

**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.

**Eye flushing equipment**

313 Where there may be a risk to the eyes of a worker from corrosive or other harmful substances, an employer or contractor shall provide, at readily accessible locations, approved equipment to flush the eyes of the worker with lukewarm water or another appropriate liquid.
PART III

Non-ionizing Radiation

DIVISION 1

Ultraviolet Radiation

**Exposure limits to ultraviolet radiation - general**

20(1) In any place of employment where an occupational worker may be exposed to ultraviolet radiation from ultraviolet radiation equipment or industrial processes, the owner of the equipment or process must ensure that exposure from the equipment or industrial processes is limited to levels listed under “Ultraviolet Radiation” of the *Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices (2003)*, published by the American Conference of Governmental Industrial Hygienists (ACGIH).

(2) If the spectral composition of the radiation is not known, the owner of the equipment must ensure that the total radiant exposure of an occupational worker’s unprotected eyes or skin in any period of eight hours does not exceed 30 joules per square metre.

(3) For the purposes of subsection (2), an exposure for eight hours to a maximum continuous irradiance of one milliwatt per square metre is deemed to be equal to a total radiant exposure of 30 joules per square metre.

(4) In any place where a member of the public may be exposed to ultraviolet radiation from ultraviolet radiation equipment, the owner of the equipment must ensure that the total radiant exposure of a member of the public does not exceed the exposure limits for occupational workers established by this section.

(5) Subsection (4) does not apply with respect to persons who:

(a) voluntarily undergo exposure to ultraviolet radiation in a commercial tanning salon; or

(b) receive exposure to ultraviolet radiation in the course of diagnosis or treatment carried out by or under the direction of a duly qualified medical practitioner.
Exposure limits to ultraviolet radiation – photosensitivity

21(1) If the conditions at a place of employment may lead to chemically-induced photosensitivity in an occupational worker, the owner of ultraviolet radiation equipment must ensure that the exposure to ultraviolet radiation of the occupational worker’s eyes or skin, in any period of eight hours, does not exceed the values that are recommended by the chief occupational medical officer.

(2) Values recommended by the chief occupational medical officer for the purposes of subsection (1) must not exceed the values mentioned in section 20.

(3) If an owner of ultraviolet radiation equipment knows or ought to know that an occupational worker shows inherited photosensitivity to ultraviolet radiation or is under treatment with a photosensitizing drug, the owner must ensure that:

(a) the worker’s exposure to ultraviolet radiation is limited in accordance with the advice of a duly qualified medical practitioner; or

(b) the worker is issued with any eye and skin protection that is specified by:

(1) a duly qualified medical practitioner; or

(ii) an officer.

Protection where exposure limits cannot be complied with

22 If the exposure limits set out in section 20 and subsection 21(1) cannot be complied with, an owner of ultraviolet radiation equipment must issue to each occupational worker whose exposure to ultraviolet radiation may exceed those limits:

(a) any eye and skin protection that is specified by:

(i) a duly qualified medical practitioner; or

(ii) an officer; and

(b) if required by an officer, a personal monitoring device to evaluate the exposure of the worker to ultraviolet radiation.
DIVISION 2
Laser Radiation

Laser classification
25 The owner of a laser or laser device must ensure that the laser or laser device is installed, operated, labelled and maintained in accordance with American National Standards Institute (ANSI) Z136.1-2000, Safe Use of Lasers; and

(a) if the laser or laser device is a medical laser in a health care facility, the laser or laser device is installed, operated, and maintained in accordance with American National Standards Institute (ANSI) Z136.3-2004, Safe Use of Lasers in Health Care Facilities; or

(b) if the laser or laser device is part of an optical fiber communication system utilizing laser diode and LED sources, the laser or laser device is installed, operated, and maintained in accordance with American National Standards Institute (ANSI) Z136.2-1997, Safe Use of Optical Fiber Communication Systems Utilizing Laser Diode and LED Sources.

Duty to inform
26 An owner of a laser or a laser device must:

(a) fully inform all occupational workers who may be exposed to radiation from a laser or laser device of class 2, 3a, 3b or 4 as to the hazards of this radiation under the conditions of use; and

(b) without limiting the generality of clause (a), draw the attention of the occupational workers to the viewing restrictions that are indicated on the laser classification label.

Exposure to class 3 or 4 lasers
27 The owner of a class 3 or class 4 laser or laser device must ensure that no part of the body of any person is deliberately exposed to the direct beam of the laser except under the direction of:

(a) a duly qualified medical practitioner;

(b) a dentist who is licensed pursuant to The Dental Disciplines Act;

(c) a chiropractor who is registered pursuant to The Chiropractic Act, 1994;

(d) a physical therapist who is registered pursuant to The Physical Therapists Act, 1998;

(e) a certified athletic therapist who is registered with the Saskatchewan Athletic Therapists Association; or
(f) in the case of a non-medical laser procedure, a person who:

(i) has been formally trained to carry out the procedure for which the laser or laser device is to be used; and

(ii) can demonstrate to the satisfaction of an officer his or her knowledge of the equipment, the biological effects associated with its use and the necessary safety procedures.

Qualifications of operators
28 The owner of a class 3b or class 4 laser or laser device must ensure that each operator of the laser or laser device:

(a) is:

(i) a duly qualified medical practitioner;

(ii) a dentist who is licensed pursuant to The Dental Disciplines Act;

(iii) a veterinarian who is registered pursuant to The Veterinarians Act, 1987;

(iv) a physical therapist who is registered pursuant to The Physical Therapists Act, 1998;

(v) a chiropractor who is registered pursuant to The Chiropractic Act, 1994; or

(vi) a certified athletic therapist who is registered with the Saskatchewan Athletic Therapists Association;

(b) works under the direct supervision of a person described in clause (a); or

(c) is, in the case of a non-medical laser, a person who:

(i) has been formally trained to carry out the procedures for which that laser or laser device is to be used; and

(ii) can demonstrate to the satisfaction of an officer his or her knowledge of the equipment, the biological effects associated with its use and the necessary safety procedures.
Appendix 3. Suitable and Adequate Eye and Face Protection

Class 1A
Spectacles with side protection

Class 1B
Spectacles with side and radiation protection

Class 2A
Direct ventilated goggles

Class 2B
Non-ventilated goggles

Class 2C
Direct/non-ventilated with radiation protection

Class 3
Welding Helmets

Class 4
Welding Hand Shields

Class 5A
Non-rigid helmet (hood) with impact-resistant window
Class 5B
Non-rigid helmet (hood) for dust, splash, and abrasive materials protection
Class 5C
Non-rigid helmet (hood) with radiation protection
Class 5D
Non-rigid helmet (hood) for high-heat applications

Class 6A
Face shield for impact and splash protection
Class 6B
Face shield for radiation protection
Class 6C
Face shield for high-heat application
Regina
1870 Albert Street
S4P 4W1
Inquiry: (306) 787-4496
Toll Free: 1-800-567-7233

Saskatoon
Eighth Floor, 122 - 3rd Avenue North
S7K 2H6
Inquiry: (306) 933-5052
Toll Free: 1-800-667-5023

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