October 2018

Protecting your workers’ eyes

This quick guide is for businesses or undertakings whose work activities may create a risk of injury to people’s eyes.

Any work activity involving airborne particles or objects, hazardous substances, or optical radiation (eg from welding or solar radiation) can put a person’s eyes at risk. Even eye injuries that seem minor can cause permanent damage, including blindness.

The Health and Safety at Work Act 2015 (HSWA) requires PCBUs (persons conducting a business or undertaking) to take all reasonably practicable actions to eliminate or minimise risks to the health and safety of workers (and others that may be at risk from the work being done). This includes protecting people’s eyes.

Preventing eye injuries

The first action in preventing eye injuries at work is to identify any hazards associated with the work, then eliminate the risk those hazards create. If the risk cannot be eliminated you must minimise the risk by substitution, isolation, or adding engineering or administrative controls. For example:

- replace high-risk equipment and toxic substances with safer alternatives wherever possible
- move high-risk equipment or substances to an isolated area
- install safety barriers and screens
- maintain equipment and make sure all safety devices, including guards or shields, are in good working order
- use water to dampen dusty environments
- manage fumes or dust with exhaust hoods, extractor fans, or similar.

If a risk still remains, you must make sure your workers wear personal protective equipment (PPE) appropriate to the work activity and specific hazards.

For more detailed information on controlling health and safety risks, see WorkSafe’s quick guide: Identifying, assessing and managing work risks.
Choose the right level of eye protection

Wearing the right eye protection for the hazard is important. Always choose eye protection that complies with AS/NZS standards. Your safety equipment supplier can help you choose the right protection.

**Note:** This table lists protection recommendations specifically for eyes. Your workers may need other face and body PPE as well.

<table>
<thead>
<tr>
<th>HAZARD</th>
<th>WORK EXAMPLE</th>
<th>RECOMMENDED EYE PROTECTION</th>
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</thead>
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<tr>
<td>Flying fragments and objects with low speed or low mass</td>
<td>Manual chipping, riveting, spiralling, hammering, handling wire, brick cutting</td>
<td>Face shields, goggles, or glasses with side shields with low impact protection (marked with an ‘S’)</td>
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<tr>
<td>Small flying particles with medium speed or medium mass</td>
<td>Machine disc cutting, scaling, grinding, and machining metals, certain wood working operations, stone dressing</td>
<td>Face shields, goggles, or glasses with side shields with medium impact protection (marked with an ‘I’ or ‘F’)</td>
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<tr>
<td>Low mass, high speed particles</td>
<td>Horticulture and gardening including lawn mowing and using weed eaters/line trimmers</td>
<td>Face shields, goggles, or glasses with side shields with medium impact protection (marked with an ‘I’ or ‘F’). If working outdoors, they should also include UV protection – either tinted or outdoor untinted (marked with an ‘O’)</td>
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<tr>
<td>High speed particles</td>
<td>Using explosive power tools</td>
<td>Face shields, goggles, or glasses with side shields with high impact protection (marked with a ‘V’ or ‘B’) or extra high impact protection (marked with an ‘A’)</td>
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<tr>
<td>Airborne dust</td>
<td>Roadwork, handling coal, sanding</td>
<td>Dust resistant goggles (marked with a ‘D’ or ‘4’)</td>
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<tr>
<td>Liquid splash, harmful liquids, corrosives</td>
<td>Working with hot bitumen, metal cleaning, plating, handling corrosives</td>
<td>Splash resistant goggles and masks (marked with a ‘C’ or ‘3’)</td>
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<tr>
<td>Gases, vapours</td>
<td>Working with harmful chemicals, spray painting, using aerosols</td>
<td>Gas resistant goggles and masks (marked with a ‘G’ or ‘5’).</td>
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<tr>
<td>Splashing metals</td>
<td>Metal casting, working with molten slag, molten metal, hot solids, galvanising baths, lead joining</td>
<td>Molten metal resistant goggles and masks (marked with an ‘M’ or ‘9’).</td>
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<tr>
<td>Non-ionizing radiation</td>
<td>Welding, cutting, furnace work, forging, gas welding</td>
<td>Welding goggles and welding helmets complying with AS/NZS 1338.1. For gas welding, helmets should include rear facing indirect ventilation</td>
</tr>
<tr>
<td>Sun glare, ultraviolet radiation</td>
<td>Any work outdoors</td>
<td>Goggles or glasses with low impact protection (marked with an ‘S’) and either tinted or outdoor untinted (marked with an ‘O’)</td>
</tr>
<tr>
<td>Biological liquid splashes, droplet infection, direct contamination</td>
<td>Medical, veterinary, laboratory work</td>
<td>Goggles and masks (marked with a ‘C’) with splash proof ventilation</td>
</tr>
</tbody>
</table>

**TABLE 1:** Choosing the right level of eye protection

**Who can provide eye protection**

You, the PCBU must provide all necessary PPE (including eye protection) for your workers. You cannot pass the cost of providing eye protection to your workers, or make them provide their own. Workers may choose to provide their own but you must make sure it offers suitable protection.

**Wearing and maintaining eye protection**

Eye protection must be practical, fit properly, and be reasonably comfortable to wear. You must give your workers information and training on how to:
- correctly wear their eye protection
- correctly store their eye protection
- maintain their eye protection – including how to keep it clean and hygienic
- identify when it needs to be replaced.
Workers have a duty under HSWA to take reasonable care of their own health and safety and comply with reasonable instructions of their PCBU. This includes looking after and wearing their PPE as instructed by you.

**Worker engagement**

You must engage with your workers before you make decisions or propose changes that may affect their health or safety. This includes consulting with them about what types of eye protection to provide.

**Case study: making sure your workers have the right eye protection**

The PCBU of a welding workshop gave its welders safety glasses to wear under their welding helmets. However, even after being instructed to always wear the safety glasses while welding, one worker regularly removed them.

The PCBU talked to the worker to find out why they removed their safety glasses. The worker told them that it was because wearing the safety glasses over their prescription glasses was uncomfortable. The PCBU then worked with the worker to find safety glasses that the worker could wear without discomfort.

If the PCBU had discussed the eye PPE requirements with this particular worker beforehand, they may have been able to provide the correct eye protection in the first instance.

**Prescription glasses, sunglasses and contact lenses**

In most cases, ordinary eyewear such as prescription glasses, sunglasses, and contact lenses will not offer enough protection against eye injury.

Workers will still have to wear appropriate eye protection over their prescription glasses, sunglasses, or contact lenses.

You may need to provide prescription eye protection for workers who usually wear glasses but cannot comfortably wear them under standard eye protection.

**First aid for eye injuries**

In all cases of eye injury, get medical help immediately. Injuries that seem minor can sometimes cause permanent damage, including blindness.

If your work activities create particular risks for eyes, make sure your first aid supplies include equipment specifically for treating eye injuries (such as an eye wash station).

First aid treatment for eyes differs slightly depending on the type of injury:

**Cuts, punctures, or embedded objects**
- Do not rub, wash, or flush the eye.
- Do not try to remove an embedded object.
- Gently cover the injured eye with an eye pad or shield secured with tape.

**Dust or loose particles in an eye**
- Do not rub the eye.
- Flush the dust or loose particles with clean water.
- You may need to hold the eye open with clean fingers.

**Chemical splash**
- Do not rub the eye.
- Flush with clean running water for at least 15 minutes.
- You may need to hold the eye open with clean fingers.
- Alkaline chemicals are especially dangerous for eyes, so take particular care that these chemicals, especially powders, are flushed from the area thoroughly.

**Note**: These first aid suggestions are not a substitute for first aid training or seeking immediate professional medical help.

**Further information**

WorkSafe quick guide: [Identifying, assessing and managing work risks](#)

WorkSafe interpretive guidelines: [General Risk and Workplace Management](#)

Australian/New Zealand Standard: [Eye and face protection (AS/NZS 1336:2014)](#)

Australian/New Zealand Standard: [Filters for eye protectors (AS/NZS 1338.1:2012)](#)