Eye Protection

Training on the use of eye protection in the workplace

Developed by the Division of Occupational Safety & Health (DOSH) for employee training
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The following topics will be covered:

- Workplace eye hazards
- Types of eye protection
- Use and care of eye protection
Your Eyes
What can be more precious than your sight?

What if you could no longer see this?

Types of Eye Hazards

- Flying objects
- Particles and dust
- Chemicals
- Harmful light radiation – ultraviolet, infrared or lasers

Eye Infection Hazards

Infectious agents may enter the body through the eyes, nose and mouth. The use of eye and face protection is required in the healthcare industry during procedures that may generate body fluid splashes or sprays.

Eye protection may also be needed to protect against exposure to infectious agents in sewage treatment, composting activities, and during application of biosolids.
Sources of Eye Hazards

Flying objects or particles in eye

- Grinding
- Sanding
- Sandblasting
- Blowdown
- Woodworking
- Nail gun use

Our Workplace Eye Hazards

We have the following eye hazards at this worksite:

[lists or describes]

Sources of Eye Hazards

Chemical Hazards

The most dangerous chemicals to the eyes are corrosive liquids.
Examples include acids, lye, bleach, ammonia, sodium hydroxide and formaldehyde.

Other chemicals can also be extremely irritating to the eyes.
Some chemicals (pesticides, for example) can be absorbed through the eyes and make you sick.
Sources of Eye Hazards

Harmful light radiation

- Ultraviolet from welding
- Infrared from molten metal
- Laser

Welding Helmet Lenses

For all types of electric arc welding, a welding helmet equipped with the correct shade filter is required.

Many welders are now using auto-darkening welding helmets.

Types of Eye Protection

Three Main Types

- Safety glasses
- Goggles
- Face shields
Laser Eyewear
Laser protective glasses are chosen to match the type of laser used.

Safety Glasses
Side shields or wraparound required
Must meet ANSI Z87.1 Standards for impact resistance
Must be comfortable if worn for long periods

Goggles
Required if handling corrosive liquids.
Also provide protection against irritating gases and vapors.
Must be impact-resistant if used for flying object protection.
Some are vented or coated to prevent fogging.
Face-shields
When are they needed?

Face-shields are necessary when a splash to the face might occur.

Worn over glasses or goggles for extra protection.

Special shields are available for infrared or ultraviolet light.

Eye Protection We Use

Safety glasses are required in the following locations or job tasks:

Goggles are required in the following locations or job tasks:

Face-shields are required in the following locations or job tasks:

Care & Maintenance

Inspect for damage daily.

Clean as needed.

Replace if broken, cracked or if material on the lens or face-shield can't be removed.
Other Protection For Eye Hazards

In addition to personal eye protection, the following can be used:

- Guards, shields or screens on machines,
- Welding curtains or barriers,
- Other barriers during grinding, cutting, sanding,
- Ventilation or hoods for handling chemicals.

Emergency Eyewashes

An eyewash station is required for potential eye exposure to:

- Corrosives – acids, caustics
- Strong irritants – many solvents and other chemicals
- Toxic chemicals – pesticides and other chemicals

Using an Emergency Eyewash

Note where eyewash is located.

If a chemical is splashed in the eye, go immediately to the eyewash. Get help if needed.

Hold or have both your eyelids held open.

Wash your eyes for at least 15 minutes.

Seek medical attention.
Location of Our Eyewashes

Our eyewashes are found at following locations:

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Quiz

Question 1

Prescription glasses can serve as safety glasses?

a) Yes, if the optometrist says so
b) Only if they meet ANSI standards
c) Yes, if they are made of glass
d) No, they never can

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Quiz

Question 2

Which chemical is most likely to cause permanent eye damage if not washed out immediately?

a) pesticides
b) battery acid
c) paint thinner
d) all three
Quiz

Question 3

If you splash acid in your eye, you should:

a) call the doctor
b) scream loudly for help
c) get to an eyewash as quickly as possible
d) leave work and go home