



## GOALS

This safety session teaches employees to:

- Understand the risks of sustaining welder's flash injury.
- Identify symptoms of injury.
- Take effective precautions to prevent welder's flash.

**Applicable Regulations: 29 CFR 1910.252-.255**



### 1. What is welder's flash?

- Welder's flash is an injury that primarily affects the cornea of the eye.
- Ultraviolet (UV), infrared, and visible spectrum radiation from welding can cause a burn, similar to sunburn, to the cornea of the unprotected eye.
- Even short unprotected exposures to a welding arc can cause welder's flash.
- Welder's flash injuries usually do not cause permanent damage, although irreversible injury is possible in some cases.
  - Most injured workers are able to return to work within a few days.
- Long-term unprotected exposure to UV, infrared, or visible spectrum light can cause permanent eye damage, including retinal damage and cataracts.

### 2. What are the risks?

- Most types of welding produce harmful radiant energy that can damage eyes.
- Welder's flash injuries are the result of not wearing proper eye protection or using the wrong kind of eye protection while welding.
- Welders are not the only ones at risk; other employees working nearby welding operations are also at risk of injuries.
  - A significant percentage of flash burns are sustained by workers who are not involved in welding and are not wearing adequate eye protection.
  - Hazards for nearby workers include the welding arc itself and also light from the arc reflected off shiny surfaces, such as metal, in the area.

### 3. What are the symptoms?

- Symptoms of welder's flash usually develop several hours after exposure.
- Common symptoms include:
  - Pain
  - Burning
  - Blurred vision
  - Feeling of grit in the eye
  - Tearing



- Swelling of the eyelid
- Headache
- Redness in and around the eye.

#### 4. How is welder's flash treated?

- Prompt treatment of welder's flash can prevent infection and permanent eye damage.
- Report any symptoms immediately to your supervisor, and seek medical attention.
- Treatment might include wearing an eye patch or sunglasses while symptoms persist.
- Your doctor might give you eyedrops and prescribe an antibiotic to prevent corneal infection.
- The doctor might also prescribe a pain relief medication if needed.
- Properly treated, welder's flash injuries heal within a few of days to a week without complications.

#### 5. How can you prevent welder's flash?

- Screen or curtain off welding operations to protect employees working nearby.
- Cover highly reflective surfaces in the area to prevent the reflection of light from welding.
- Employees who work near welding operations and who could be exposed to harmful radiant energy should wear safety glasses approved for welding.
- Welders should wear a welding helmet with the appropriate filter lens shade on the face shield or safety glasses approved for the particular welding operation.
- Protect your eyes with filter lenses conforming to certain specifications. See your supervisor for the proper filter lens to use for the welding job you're doing.
- Make sure you wear the appropriate eye protection for the type of welding you are doing.
  - If you're not sure which filter lens is required, check with your supervisor before welding.



#### DISCUSSION POINTS:

Review filter lens selection for different types of welding performed by participants. Also discuss proper eye protection for employees working nearby welding operations.



#### CONCLUSION:

- Wear proper eye protection to prevent welder's flash.
- If you perform welding or work near welding operations where you could be exposed to harmful radiant energy, always wear proper eye protection to prevent welder's flash injuries.



#### TEST YOUR KNOWLEDGE:

Have your employees take the Preventing Welder's Flash Injuries quiz. By testing their knowledge, you can judge their ability to take proper precautions to prevent welder's flash injuries and whether they need to review this important topic again soon.