

>> TOOLBOX TALK – Welder’s Flash (Part 1)

How Does Welder’s Flash Happen?

Photokeratitis (a.k.a. welder’s flash or arc flash), is a painful eye condition and one of the many hazards associated with welding. It’s caused by ultraviolet (UV) light produced by the welding arc which causes a very painful inflammation of the mucous membrane in the front of the eye. It’s a lot like getting a sunburn, only in your eye.

Since it’s caused by UV light, it’s not just a welding problem. The sun, very bright lights/lamps, lightning, a cutting torch or plasma cutter, or any bright source of light that has an ultraviolet component can cause welding flash. This is true for direct exposure to UV radiation as well as radiation that is reflected from metal surfaces, walls, and ceilings.

Symptoms of Welder’s Flash Include:

- Pain ranging from a mild feeling of eye pressure to intense pain in severe instances;
- Tearing/reddening of the eye and membranes around the eye;
- Sensation of "sand in the eye" making it painful to blink;
- Inability to look at light sources, extreme sensitivity to light;
- Blurred vision and excessive tearing; and
- Temporary blindness.

The amount of time required to cause these symptoms depends on several factors: intensity of the radiation; distance from the welding arc; angle at which the radiation enters the eye; and type of eye protection that the worker or bystander was using. Exposure to just a few seconds of intense UV light can cause arc flash and symptoms may not be felt until several hours after exposure.

Newfoundland & Labrador OHS Regulations, Section 452 addresses protection of workers that are exposed to welding operations in the workplace.



Protecting Yourself from Welder’s Flash

Welders: When welding, always wear an approved welding helmet with the correct shade of lens for the welding or cutting process that you are performing.

Others who are working around people that are welding: Flash burn is not always caused by looking directly at the light source. It is very common that UV light will enter the eye from the side or be reflected while looking away from the source. People in the vicinity of welding operations can be protected from exposure to welding arcs by the use of screens, curtains, etc. They should also wear safety glasses, which provide some extra protection against welding flash.

For ways to treat welder’s flash, see Toolbox Talk - Welder’s Flash (Part 2)

TOOLBOX MEETING FORM

Date: _____ Project: _____

Supervisor: _____ No. in Crew: _____ No. Attending: _____

Review Last Meeting:

	Names of Attendees (Signature Required)
Topics Discussed (policies, practices, procedures, hazard assessment):	
Suggestions Offered:	
Action(s) to be Taken:	
Injuries/Accidents Reviewed:	

Supervisor's Remarks: _____

Signature: _____