

# Promote welding safety in your workplace.



Insisting on proper eye and face protection is essential to any safety program that involves welding.

Whether it takes place in a small auto repair garage or a large manufacturing company, the craft of welding is the most common method used to join metals. However, there are hazards associated with this longstanding trade that can harm your employees, damage your building, and take away from your bottom line.

## What's the risk to your business?

Without proper precautions in place, welding can be a very dangerous activity. Because many common welding procedures involve an open electric arc, flame and/or sparks, the risk of burns and fire is significant. Nationwide Loss Control Services can assist your business in making sure your welding practices are as safe as they can be with:

- On-site inspections
- Customized training programs
- Assistance in developing a personal protective equipment (PPE) program for your staff
- Hazard analysis of your business and operations
- Technical support, including video presentations

## Some practical advice to help workers stay safe.

To reduce the risk of potential losses and improve productivity, here are some tips for improving welding safety in your operations:

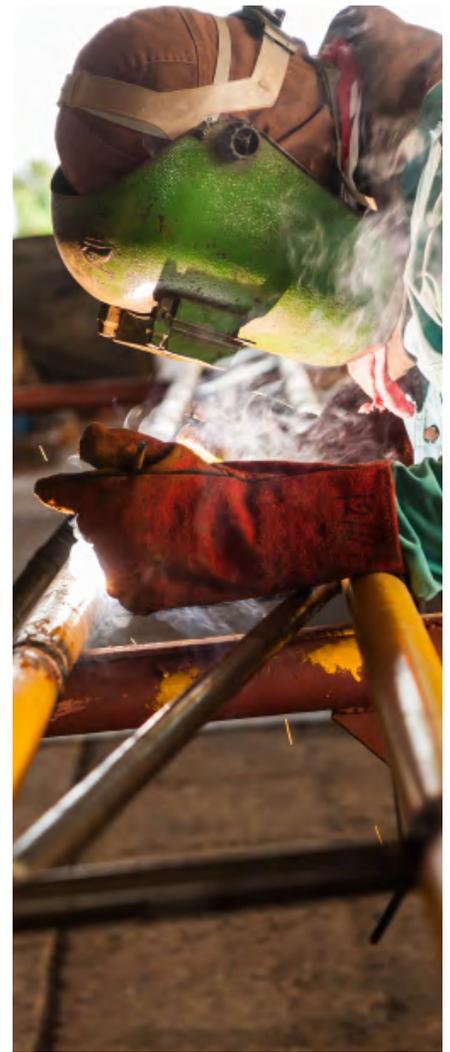
- **Read the book.** A welder's operating manual contains important safety information, as well as procedures to maximize the machine's potential. Make sure everyone who operates the machine is familiar with the manual's contents.
- **Protect the eyes and face.** It takes only a moment of exposure to a welding arc for unprotected eyes to experience "arc flash" — a painful and potentially permanent injury that may not appear until hours after exposure. Welding helmets should be fitted with a proper lens filter shade to protect the face and eyes of those either welding or watching. Appropriate eye and face protection, meeting ANSI Z87.1 standards, is required for all types of welding and brazing operations.
- **Avoid repetitive stress injuries.** When compared to a traditional fixed-shade helmet, an auto-darkening helmet reduces neck fatigue because the helmet's design is usually lighter and there is no need for the operator to snap his or her head to drop the hood down.

- **Lose the clutter.** The welding area should contain only the tools and equipment an operator uses — nothing more, nothing less. Welding areas should be free of combustibles and may require a fire watch to comply with OSHA 1910.252 standards.
- **Use boom-mounted wire feeders.** These devices add flexibility, efficiency and operator comfort to high-production welding stations.
- **Wear the proper gear.** Choose only flame-resistant clothing, like denim pants and a shirt made from tightly woven materials or a welding jacket. Welding gloves also have progressed beyond the “one-size-fits-all” type and are available with ergonomically curved fingers and special designs for specific welding processes.
- **Button up.** Any exposed skin is susceptible to the painful and damaging effects of ultraviolet and infrared rays, while sparks can catch in open pockets, pant cuffs or down a shirt not completely buttoned. All exposed skin should be covered. Welders also need to be instructed to remove matches or butane lighters from their pockets during welding operations.
- **Use hot work permits.** Complete one every time a job requires welding, cutting or similar operations.

## Breathe freely.

Fumes and smoke emitted during welding may pose a health hazard, but the use of an exhaust hood will remove contaminants from the area. *Some materials specifically require respirators when welding.* Evaluate work areas and research materials to ensure safe practices.

- **Consult the manufacturer’s welding electrode or base metal data sheets,** your welding engineer, or an industrial safety specialist for proper ventilation and respiratory protection procedures.
- **When welding is conducted in confined spaces,** toxic contaminants may accumulate or shielding gases might replace breathable air. Work should be conducted in full compliance with standards specified in OSHA 1910.146, Permit-Required Confined Spaces.
- **Know your materials.** Be aware of the composition of the welding rod (electrode), the type of filler and base metals being used, and the paints and other coatings on the metals.



General ventilation such as fans, roof vents, or open doors and windows will move air through the work area.

Providing solutions to help our members manage risk.<sup>SM</sup>



For your risk management and safety needs, contact Nationwide Loss Control Services: 1-866-808-2101 or [LCS@nationwide.com](mailto:LCS@nationwide.com).