

Welding Safely Stats and Facts



FACTS

1. **Inexperienced Welders.** Welding is a hazardous manual task. Improper training is a common issue within the sheet metal fabrication industry.
2. **Ensure the sheet metal is ready for welding.** Before you weld your materials, it is important to visually inspect the surface for any potential problems. A thorough inspection of the metal beforehand and investigation of the properties of the materials and surface coating of the metal could prevent serious mistakes.
3. **Noise reduction.** Welding, particularly plasma arc welding, can generate varying levels and frequencies of noise that exceed the safe exposure standard. It has been shown that surpassing the exposure standard can cause gradual hearing loss or be loud enough to cause immediate hearing loss.
4. **Gases.** Precautions need to be taken to prevent gas leakage, asphyxiation, or fire risks.
5. **Ventilation.** Ventilation also prevents the risk of asphyxiation from leaking gases and welding fumes and prevents the risk of the welder overheating.
6. **Fires and explosions.** Welding and grinding generate heat and sparks which pose a risk of fire and explosions.
7. **Burns.** Burns are one of the most common injuries of welding, with a welding arc capable of reaching 6000 °C. This can cause burns to exposed skin (similar to sunburn) or heat stress/heat stroke due to the symptoms of fatigue, lethargy and confusion going undetected by the worker.
8. **Electric shocks.** When welding, prevent direct contact with electrodes or welding wire and ensure that the working area does not have any live components or wet surfaces.

STATS

- Welding accidents comprise roughly 25 percent of fatal occupational accidents. They also include about one-third of all non-fatal amputations.
- More than 560,000 workers are injured each year from welding accidents, according to the Bureau of Labor Statistics. For every 100 million work hours, approximately 1,000 workers suffer a welding-related injury. That's 100 times worse than the average injury rate for all other workers, making welding safety all that more important.
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- Eye injuries are the most common. "Welder's flash," or burns to the eyes due to ultraviolet light emitted from certain welding operations, account for nearly 6% of all workplace-related eye injuries for all construction trades. In Canada,

more than 20% of all workers compensation claims for eye injuries were filed by those in the welding profession.

- New statistics have been released by the Health & Safety Executive (HSE) report out of the 190,000 workers who carry out welding activities each year, 150 of them die from cancer caused by welding.