

Warning Welding May be Hazardous to your Health Stats and Facts

FACTS

1. Hazards of Welding include:

- Respiratory illnesses
- Hand-arm vibration
- Noise
- Musculoskeletal disorder (MSD)
- Optical radiation
- Burns and mechanical hazards.

1. Factors that affect worker exposure to welding fumes include:

- Type of welding process.
- Composition of welding rod.
- Filler and base metal used.
- Type of coatings present.
- Location.
- Type of ventilation controls.
- Work practices of welder (e.g. remove coatings, clean surfaces, proper positioning to avoid breathing fumes and gases, such as staying upwind when welding in open or outdoor areas).

1. hazards from welding gases include:

- asphyxiation
- fire or explosion
- toxicity

STATS

- According to the U.S. Occupational Safety and Health Administration (OSHA), over half a million U.S. workers are at risk of welding-related injuries. In fact, the risks associated with workplace operations that include welding, cutting, and brazing result in the deaths of approximately 60 workers each year in the United States alone. This number translates to a risk of greater than four fatal injuries in every thousand workers over their careers.
- 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.
- Welding accidents account for around a quarter of all fatal workplace injuries. According to the Bureau of Labor Statistics, there are 21 welding accidents for every 100,000 workers in the US. Roughly 1,000 workers are injured while welding per 100 million hours worked. That’s 100x more than the national average for all other workers.
- Welding involves working with high-voltage electricity, which can easily lead to fires and explosions. According to the BLS, fires or explosions cause around 40% of machine or equipment-related injuries.