Welding Fumes Stats and Facts

FACTS

1. Welders have the highest-risk occupation in all of the construction industry, an industry already known for its hazards and high fatality rate. Welders face hazards like electrical shock, full-thickness burns, loss of vision, and brain damage.
2. Welding fumes can cause serious health problems for workers if inhaled, according to OSHA. Short-term exposure can result in nausea, dizziness, or eye, nose, and throat irritation. Prolonged exposure to welding fumes can lead to cancer of the lung, larynx, and urinary tract, as well as nervous system and kidney damage.
3. Excess risks of lung cancer and mesothelioma may be partly attributable to factors including smoking and asbestos. Welding-specific exposures may increase bladder and kidney cancer risks.
4. NIOSH has ascertained from published studies that welders are undoubtedly at risk of neurobehavioral and neurological health effects when exposed not only to manganese, but also to iron and lead. The heat, stress and carbon monoxide they are exposed to also plays a role.
5. There are numerous health hazards associated with exposure to fumes, gases and ionizing radiation formed or released during welding, cutting, and brazing, including heavy metal poisoning, lung cancer, metal fume fever, and flash burns.

STATS

- The cancer burden study data shows that there are approximately 152 deaths per year from lung cancer. The numbers of workers exposed to welding fume is more than 75,000.
- An estimated 562,000 employees are at risk for exposure to

chemical and physical hazards of welding, cutting, and brazing.

- Fifty-eight deaths from welding and cutting incidents, including explosions, electrocutions, asphyxiation, falls and crushing injuries. This risk of fatal injury is more than four per thousand workers over a working lifetime.
- For the construction industry, welders flash (burn to the eyes) accounts for 5.6% of all construction eye injuries (2).
- In Alberta Canada, 21% of workers compensation claims for eye injuries were to welders.
- Industrial Safety & Hygiene News, using figures from OSHA studies, reports that 1 in 250 construction workers will die from a welding injury. With over half a million American welders working today, expect 2,000 welding fatalities.
- Welding fumes and UV radiation are Group 1 carcinogens – the highest designation possible for agents that can cause cancer in humans.
- Former welders are 44 percent more likely to contract lung cancer compared to people who have never worked in the field – based on medical findings.