



ILA-USMX JOINT SAFETY COMMITTEE

OSH Circular 2020-12 (10 December 2020)

Welding Fume Health Hazards



Thinking of all of the maintenance and repair workers in our industry who regularly conduct welding operations, the ILA~USMX Joint Safety Committee (JSC) would like to provide some observation-based advice about health hazards associated with those tasks.

To begin with, all fumes generated during the welding process (irrespective of the metal components being welded) can be hazardous to a person's health. In fact, some fumes have been recently classified as carcinogens.

In order to offset the negative respiratory effects that could reasonably evolve, the JSC recommends the following to workers and managers:

- **Remove any paint or coatings from surfaces before welding. Do not use chlorinated solvents for removal/cleaning;**
- **Choose a welding process and consumables (such as rods) that produce less fume and/or ultraviolet radiation (UV);**
- **If possible, adjust power settings to reduce fumes;**
- **It is preferred that a combination of local exhaust and forced dilution ventilation (engineering controls) should be used first;**
- **Absent special circumstances, do not rely on natural ventilation alone;**
- **If engineering controls prove to be ineffective or are infeasible, welders should wear either air supplied or air purifying respiratory protection. Each should be specially fitted for the needs of the individual worker, consistent with OSHA standards (29 CFR 1910.134).**
- **Use a full-face welding helmet with a UV filtering lens;**
- **Wear long trousers and long-sleeved shirts without cuffs made of flame-resistant material; covering all exposed skin;**
- **Wear welding gloves and safety shoes;**
- **Separate welding activities from other work. Many workers welding in one space can greatly increase the amount of welding fume that's produced;**
- **Use welding screens to protect other workers from the welding arc;**
- **Rotate job tasks between workers. This will help to reduce the level and duration of exposure to fumes, gases and UV radiation.**

Got an OSH-related question? Write to the JSC at: blueoceana@optonline.net

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