

WELDING and CUTTING HAZARDS

When welding or cutting operations need to take place it is important to take safety precautions. From fire hazards to inhalation hazards, you need to know the safe steps to follow and the hazards to avoid.

Hazards

Chemical agents are released from welding or cutting operations. They include: zinc, cadmium, beryllium, iron oxide, mercury, lead, and fluorides. Other hazards include: burns, ultraviolet radiation and potential fires.

Cylinder Hazards: Compressed gases are stores of potential energy.

Effects

Chemical agent effects: Headaches, dizziness, nausea, cramps, change in skin color, irritation to respiratory tract.

Effects include but are not limited to: asphyxiating properties, flammable characteristics, and some compressed gases can augment or compound fire hazards (oxygen).

How can I protect myself?

- ✓ Use adequate ventilation.
- ✓ Wear PPE designed for welding and cutting (welding-hood, gloves, leathers, etc.).
- ✓ Handle cylinders with care. Always secure them. Check for damaged hoses, valves and gauges.
- ✓ Check out your area before you weld or cut. Make sure all flammable materials are removed from the area.
- ✓ Have a suitable fire extinguisher nearby.
- ✓ Store full oxygen and acetylene (fuel) cylinders separately. Uniform Fire Code requires fuel and oxygen cylinders to be separated by a minimum of 20 feet or a 5-foot high wall with a ½ hour fire rating.

Ask yourself?

Do I know where the nearest fire extinguisher is located?



Reference:

CFR 1926.350, 1910.250 Subpart Q
Uniform Fire Code

