

Some paints, laquers, and solvents on metal surfaces can generate toxic fumes and gases when welded, cut or burned. Make sure all dangerous materials have been removed before you start work.

When you are	Your work creates:	and your health problem could be:**
MIG welding using carbon dioxide ( $CO_2$ ) shielding gas	Carbon monoxide (CO)	<b>Deadly:</b> CO gas reaches poisonous concentrations; $CO_2$ gas displaces air to cause suffocation
MIG and TIG Welding	Ozone and nitrogen oxides	Initating: eyes, ears, nose, throat and lungs affected; can damage lungs
Welding through or near solvents with chlorine	Phosgene	Deadly: fluid can fill lungs hours after exposure
Welding on steel	Manganese, nickel, chromium and hexavalent chromium	Serious: long-term nerve damage like Parkinson's disease, asthma, irritation and damage to the nose and throat, and lung cancer
Hot work on galvanized steel or paint with zinc	"Metal-fume fever"	Nonfatal: flu-like symptoms that pass
Welding stainless steel	Nickel and chromium	Serious: asthma and sometimes lung cancer
Cutting or welding metal with paint or coatings	Lead, cadmium, and other toxins	Serious: nerve damage, reproductive damage, kidney disease and cancer
Welding using shielding gases like argon	Hazards in confined space	Serious to Deadly: reduced oxygen, even suffocation from lack of fresh air