



# OH&S Bulletin

## Welders, Ever Wondered About that Funny Taste in Your Mouth?

# METAL FUME FEVER

Recent problems in the demolition industry reminded the Environmental & Occupational Health & Safety Unit of the dangers of exposure to metal fumes. The most sinister aspect of exposure to metal fumes is that even the "immediate" effects may not appear straight away. The long term, or chronic affect is known as "Metal Fume Fever". The syndrome begins four to twelve hours after exposure and is first noticed by dryness and irritation of the throat. This is followed by coughing, weakness, fatigue, muscular pain and nausea, followed by fever and chills. Because of the delayed reaction, it is not uncommon that people become very ill without realising that it is from the fumes. Zinc, copper, magnesium, aluminium, antimony, iron, manganese, nickel (and their compounds) in welding, galvanising, or smelting operations all cause metal fume fever.

The most common way that people are exposed to fumes is from inhalation, although eating contaminated food can cause

constipation, nausea, fever and stomach cramps and the fumes can be irritating to the eyes and skin.

For work conducted outdoors and in open work spaces (more than 300 cubic metres), the use of mechanical (general exhaust or plenum) ventilation is required as a minimum.

For indoor work in smaller work spaces, mechanical ventilation by local exhaust systems must be used. They must be designed to provide a minimum capture velocity at the fume source, away from the worker, of 0.5

metre/second.

Always use a welding helmet or hand shield with a suitable filter. If a hand shield is being used, safety glasses with side shields or chemical goggles are needed. Contact lenses cause a special problem - soft lenses may absorb irritants and all lenses concentrate them. When handling hot material wear barrier cream and leather gloves or gloves with leather facing.



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