

### HSE Expectations

The HSE have recently been inspecting premises that undertake welding.

Exposure to welding fume, including that from mild steel welding, can cause lung cancer, neurological problems, and possibly kidney cancer.

There is no known safe level of exposure to welding fume.

The HSE will no longer accept any welding that is undertaken without suitable control measures irrespective of duration, frequency, or if done outdoors.

Suitable control measures include the use of engineering controls such as local exhaust ventilation (LEV) on a flexible arm, at extracted tables or booths or on-torch extraction.

All LEV must undergo statutory Thorough Examination and Testing (TEXT) at the correct intervals, with remedial actions implemented.

In some cases, such as with high intensity welding, respiratory protective equipment (RPE) will be required to control residual risk even after engineering controls have been put in place.

### Ensuring Compliance

All duty-holders whose employees undertake welding should ensure effective engineering controls (e.g., on-torch extraction or LEV) are provided, correctly used, suitably maintained, and reviewed regularly.

If using tight-fitting RPE staff will need to be face fit tested, however, powered respirators are recommended if welding for more than one hour per day.

Staff will need to be provided with instruction and training regarding implementing control measures and good practice techniques to reduce fume exposure.

There are many substances of concern that may be present in welding fume that have workplace exposure limits (HSE EH40 WELs) which must be complied with. This includes; manganese, hexavalent chromium, nickel, fluorine, nitrous oxides, ozone, and carbon monoxide.

Exposure/air monitoring surveys, risk assessments and Thorough Examination and Testing (TEXT) by a competent occupational hygienist can help to determine how effective your control measures are, helping you to protect your workforce and remain compliant with relevant legislation.

**An occupational hygienist can help to determine if you are compliant and protecting your staff adequately**