## Heightened cancer risk from welding fume exposure prompts HSE to tighten controls

New scientific evidence from the International Agency for Research on Cancer (IARC), which has found that exposure to even mild steel welding fumes can cause lung cancer and possibly kidney cancer, has prompted the UK Health and Safety Executive (HSE) to raise its control standards.

The Workplace Health Expert Committee (WHEC), which was set up to provide the HSE with independent, authoritative and impartial expertise on workplace health, has endorsed the reclassification of mild steel welding fumes as a human carcinogen and prompted the regulator to issue a Safety Alert STSU1 – 2019, which ramps up the HSE's enforcement expectations.

The HSE has informed employers that regardless of duration, it will no longer accept any welding undertaken without any suitable exposure control measures in place because there is no known level of safe exposure. The stricter enforcement measures come after the IARC evidence showed that general ventilation does not achieve the necessary control.

Control of the cancer risk will require suitable engineering controls for all welding activities that take place indoors, which includes Local Exhaust Ventilation (LEV). The HSE has also called on employers to use extraction as this will also control exposure to manganese, which is present in mild steel welding fume and can cause neurological effects.

The regulator has also warned employers that where LEV alone does not adequately control exposure, they should supplement it with adequate and suitable Respiratory Protective Equipment (RPE) to protect employees from the residual fumes.

Appropriate RPE should be provided for welding outdoors, the HSE adds, and welders should be suitably instructed and trained in the use of these controls.

Businesses have been told that Risk Assessments should reflect the change in the HSE's expected control measures.



