

British Occupational Hygiene Society. COSHH Guidance: *Surgical Smoke*. 2006

LINK – <http://www.hse.gov.uk/healthservices/diathermy-emissions.htm>

Diathermy and surgical smoke

Diathermy is a surgical technique which uses heat from an electric current to cut tissue or seal bleeding vessels. Diathermy emissions can contain numerous toxic gases, particles and vapours and are usually invisible to the naked eye. Their inhalation can adversely affect surgeons' and theatre staff's respiratory system. The risks vary according to individual circumstances, such as the procedure, equipment, environment, technique and patient.

The Control of Substances Hazardous to Health Regulations (COSHH) require employers to carry out an assessment of the risks from hazardous substances and to always try to prevent exposure at source. If exposure to diathermy emissions can't be prevented then it should be adequately controlled. This is usually achieved by effective local exhaust ventilation (LEV). Typically this takes the form of extraction incorporated into the electrosurgery system to remove emissions at source, known as 'on-tip' extraction.