

The Chartered Society for Worker Health Protection

British Occupational Hygiene Society

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Here to protect everyone's right to a healthy working environment



The Chartered Society for Worker Health Protection

"Introducing the Occupational Hygienist: Where LEV Fits into Health Risk Management"

LEV 2025 Healthy Air in the Workplace, Birmingham, 7th October 2025

Dr Dave Rogers, FOH Registrar, BOHS

Overview

- Introduction to BOHS
- What is Occupational Hygiene?
- Scope of Occupational Hygienist
- Finding and Choosing an Occupational Hygienist
- LEV and Occupational Hygiene
- LEV and Health Risk Management
- Future Challenges
- Conclusions



Quick Introduction

Dr Dave Rogers DipOH CFFOH CIH

- Faculty of Occupational Hygiene (FOH) Registrar since June 2025, and previously numerous other voluntary roles for the British Occupational Hygiene Society (BOHS)
- PhD in Chemistry; MBA (Open University); Diploma of Occupational Health Practice (DipOHP, University of Otago), Diploma of Professional Competence in Occupational Hygiene (DipOH), Certified Industrial Hygienist (CIH) with the American Board of Industrial Hygiene (since 1992)
- Full member of the BOHS since 1990 and is a chartered occupational hygienist and Fellow of the Faculty of Occupational Hygiene (CFFOH)
- Occupational hygienist since 1986 and occupational hygiene consultant since 1990

What is BOHS?

- The leading authority in Worker Health Protection
- Science-based, charitable body that provides information, expertise and guidance in the recognition, control and management of workplace health risks.
- The only professional society representing qualified occupational hygienists in the UK, with over 1,500 members in 53 countries.
- The only occupational hygiene organisation to be awarded a Royal Charter in April 2013 in recognition of BOHS' unique and pre-eminent role in worker health protection.

















What is Occupational Hygiene?

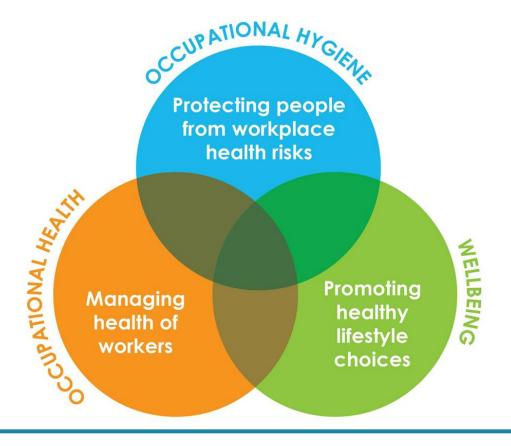
Workplace Health Triangle



 Occupational Hygiene is the science of worker health protection. It focuses on prevention and aims to protect people and keeping them healthy and safe at work.

What is Occupational Hygiene? (cont.)

Workplace Health Triangle



 Through science and engineering, occupational hygienists identify,
 assess and control the risk from any health hazards that are in, or arise from, the workplace which lead to serious health diseases.

 These hazards include chemicals, dust, fumes, noise, vibration and extreme temperatures.

Scope of Occupational Hygienist

- Occupational hygienists aim to increase understanding of health risks in the working environment and advise on appropriate and practical control strategies to protect workers from serious illnesses like cancer, asthma, skin diseases and hearing loss.
- Often the risk from health hazards present in the workplace is not readily apparent, recognised or understood. They can cause serious ill-health over the longer term from repeated relatively low levels of exposure if appropriate controls have not been applied.
- Clear communication to motivate workers and managers alike to take action is a critical skill in successfully managing the risks.

Scope of Occupational Hygienist (cont.)

- Proactive and preventive approach rather than reactive approach to control workplace health hazards
- The occupational hygienist must ensure that at all times their primary responsibility is to workers whose health may be at risk
- We inter-relate with Duty holders, CEOs and MDs, managers, supervisors and workers in workplaces
- We collaborate with other Occupational Health professionals, regulators and LEV professionals

Finding a Professional Hygienist

Associate: AFOH

Licentiate: LFOH

Chartered: CMFOH and CFFOH

Specialist FOH Licentiate: LFOH (S)

Specialist FOH Member: MFOH (S)

Specialist FOH Fellow: FFOH (S)

[Specialist category is designed for specialists in specific subjects (e.g. LEV, Asbestos, Legionella) and have specific qualification criteria for each subject



Membership of the Faculty of Occupational Hygiene (FOH)



Register of Occupational Hygiene Professionals

- The Register of Occupational Hygiene Professionals is the UK's professional register of individuals competent to practise Occupational Hygiene and provide the necessary advice and expertise to help protect the health of workers.
- It is administered by the Faculty of Occupational Hygiene, the Professional Standards Body for the British Occupational Hygiene Profession.
- The Register enables you to check an individual's level of expertise and to see whether they have been independently verified as meeting the requirements outlined in Regulation 7 of the Management of Health and Safety at Work Regulations 1999.

More information about the Register can be found here:

Register of Occupational Hygiene Professionals - British Occupational Hygiene Society (BOHS)



Accreditation by the Professional Standards Authority

- The Register of Occupational Hygiene Professionals was accredited by the Professional Standards Authority for Health and Social Care in December 2023.
- The accreditation recognises the Society's commitment to the highest standards in professional practice in the field of Occupational Hygiene.
- Occupational Hygiene is the first of the occupational health professions to have obtained statutory accreditation.

Accreditation by the Professional Standards Authority (cont.)

- The accreditation contributes to fostering consistent standards of practice within associated professions and trades and provides assurance to users and duty holders that professionals on the register meet high standards of competence and conduct.
- This is a statutory register maintained in the public interest to provide clear, objective and impartial information about individuals who are professionally competent to provide Occupational Hygiene Services

Choosing an Occupational Hygienist

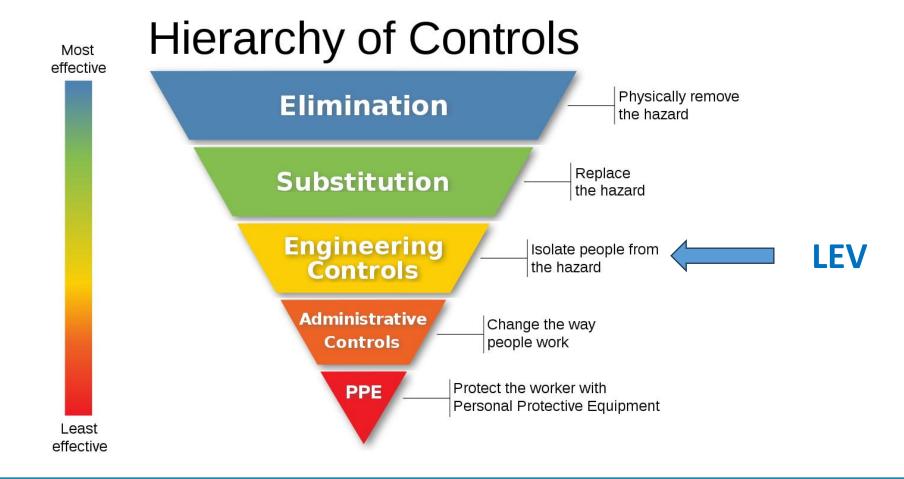
Duty holders, service users, and employers, should choose an Occupational Hygiene Professional from the Register of Occupational Hygiene Professionals, assured by the Faculty of Occupational Hygiene and the Professional Standards Authority, the UK's regulator of registered health professionals.



LEV and Occupational Hygiene

 LEV and Occupational Hygiene interaction can be viewed through the application of the Hierarchy of Controls in the workplace

Hierarchy of Controls



Hierarchy of Controls (cont.)

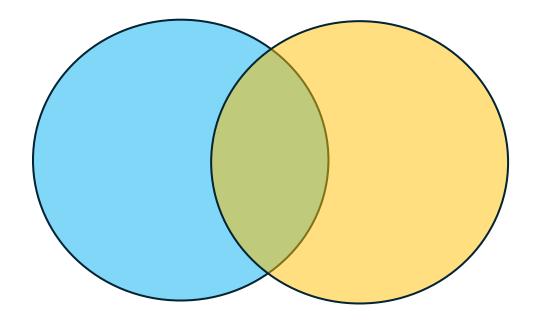
- LEV is an 'Engineering Control' measure
- LEV is a crucial control option in the management of occupational hygiene risks in the workplace
- Other Engineering Control measures include: containment of hazardous substances, noise enclosures, machine guarding and shielding, general dilution ventilation
- Occupational hygienists work through all the hierarchy of controls measures, to ensure that effective health risk control measures are implemented and maintained for a given workplace

Hierarchy of Controls (cont.)

- However, the 'application' of effective and fit-for-purpose LEV to control workplace health hazards, requires cognisance of:
 - Elimination and Substitution e.g. production modifications and process changes
 - Other Engineering control measures e.g. provision of containment, effect of general dilution ventilation
 - Administration controls e.g. workforce training, organisational procedures, work flow and production pressures, maintenance requirements
 - PPE e.g. does PPE/RPE need to be worn during normal use, in addition to LEV?; What PPE/RPE is required for LEV maintenance activities, including filter changes?



Occupational Hygiene – Protecting people from workplace health risks



LEV – Effectively controlling hazards to health in the workplace

- Occupational Hygienists are not LEV professionals per se
- The Occupational Hygienist is focused on the worker and supports workplace health aspects
- Most Occupational Hygienists do not have engineering competencies
- Occupational Hygienists are trained in the fundamentals of LEV aspects (through M505 and the P600 series)
- Some Occupational Hygienists carry out TExT examinations (often on 'simpler' systems), as part of their broader Occupational Hygiene activities

- Rarely, if ever, do Occupational Hygienists get involved with the detailed design of LEV systems; but they do advise Duty holders on the selection of appropriate LEV providers and assist organisations/clients in the choice of the provider to ensure competent design and commissioning of fit-for-purpose LEV systems are achieved, as well as the selection of TExT examination and LEV maintenance providers
- Occupational Hygienists often carry out routine checks of air flows (e.g. smoke checks, Face Velocity and Capture Velocity measurements), implement administrative processes for maintenance and filter changes, carry out worker training and liaise with management to ensure effective Management of Change processes which may impact LEV systems

- LEV professionals carry out the full range of TExT examinations (both 'simple' and 'complex' systems) and have competencies for the maintenance of LEV systems
- LEV professionals often come from engineering backgrounds
- LEV professionals are focussed on effectively controlling health hazards in the workplace through the use of fit-for-purpose LEV systems
- Some LEV professionals have the range of competencies and experience to carry out the detailed design and selection of LEV control measures which are effective and fit-for-purpose for particular workplaces.

- LEV professionals may have the BOHS qualification *Certificate of Competence* in Control of the Working Environment (COC Control), obtained by successful completion of the appropriate Proficiency Modules or Occupational Hygiene module, appropriate experience, completion of a portfolio of evidence or report, submission of a curriculum vitae and then a professional discussion.
- LEV Specialist faculty members have been included on the PSA Registrar as occupational hygiene professionals this is not a determination of their competence as LEV engineers or the overall safety of systems, but is an assessment of training, experience and other qualities with regard to controls such as LEV in the context of occupational hygiene.
- Since the launch of the PSA Register: LEV professionals seeking the COC Control awards have trebled and duty holders have reported that it is useful to have the facility to identify LEV providers who are also competent to provide limited occupational hygiene services.

LEV and Health Risk Management

- LEV is an important workplace health risk management control measure
- LEV needs to be effective and fit-for-purpose
- Important to make sure LEV is designed properly, actually works in use by the workers and site maintenance, and not just 'on the day of the TExT examination'
- Fit-for-purpose LEV systems should be installed, tested and maintained with a clear consideration of all relevant aspects of the processes and personnel within the workplace, to achieve effective control of workplace health hazards.
- No LEV provider should be deemed competent unless there is an independent assessment of their understanding of the risks to human health and how their practice impacts on it.

LEV and Health Risk Management (cont.)

- BOHS's Faculty of Occupational Hygiene is responsible for the Occupational Hygiene profession but is not a professional body for the LEV sector - we are not engineering specialists
- We are here to support and collaborate with LEV specialists
- The purpose of LEV (to effectively control hazards to health in the workplace) should be clearly embedded in the learning and development of LEV professionals
- BOHS is reinstating their Directory of LEV qualification holders, with a clearer outline of what holding these qualifications does and does not mean

 this is a reaction to the high amounts of compliance work that BOHS has had to do in recent times, and also to enable duty-holders to determine whether they are meeting their duties under the Management Regulations in respect of competence to provide effective and suitable controls.

An "urban" myth in workplaces:



- If you have LEV in place, then you have effective engineering controls.
- **No**, aside from the requirement for regular Thorough Examination and Testing by a competent provider, it needs to be effective in design, used well and properly maintained.

Controls should be Fit-for-Purpose

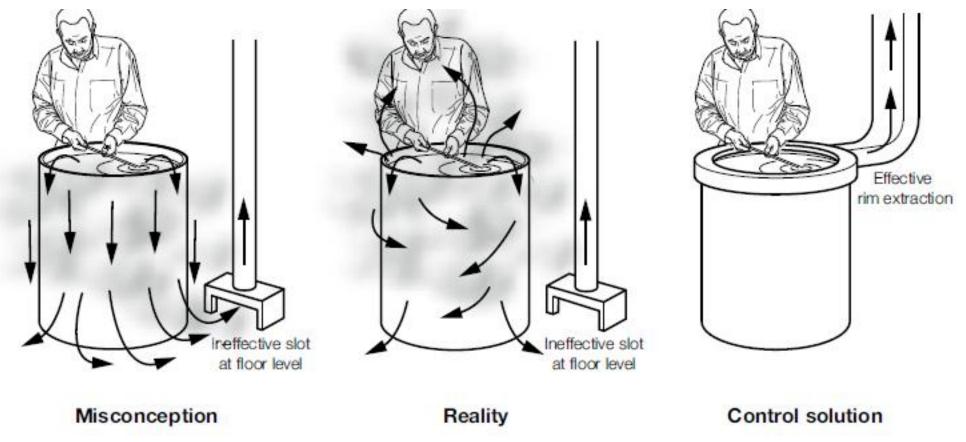


Figure 3 in HSG 258

A TEXT Report is not just for Christmas

For example, consider the following scenario:

 LEV system is assessed as effective at controlling the workplace hazards on the day of the TExT report

Subsequently, the following may occur:

- 2. Routine housekeeping and maintenance is not carried out by the site
- 3. Filters are not changed regularly
- 4. Operatives do not use the LEV system in the correct way and have not had appropriate training
- 5. Routine air flow measurements are not carried out and/or recorded by the site

A TEXT Report is not just for Christmas (cont.)

- 6. Process changes and/or modifications to the LEV system are made
- 7. Site carries out a 'deep clean' of the LEV system and area and changes out the filters, the week before the next TExT visit
- 8. LEV system is assessed as effective at controlling the workplace hazards on the day of the next TExT report
- Such a scenario puts operatives at risk from exposures to workplace hazards
- How typical are the various elements of this type of scenario?
- How do we all ensure that such scenarios are not the norm?



A TEXT Report is not just for Christmas (cont.)

- Occupational hygienists often carry out the necessary interventions between TExT reports (e.g. LEV management processes, operative training, workplace checks) – but only for a small percentage of duty holders (there are less than 1,000 occupational hygienists in the UK)
- Occupational hygienists can support the workplace health aspects, but need to work together with LEV professionals and industry sector bodies
- LEV professionals, Occupational Hygienists, regulators, industry sector bodies and other stakeholders should collaborate to help Duty holders to ensure that LEV control measures remain effective between TExT reports, to ensure that site personnel are not put at increased risk to workplace health hazards

Duty Holder Responsibilities

Together, LEV professionals and occupational hygienists should help Duty holders to ensure:

- Risk assessments are 'suitable and sufficient'
- LEV systems have TExT examinations carried out by a competent person at least every 14 months (or more frequently for processes specified in Schedule 4 of the COSHH regulations)
- LEV systems are fit-for-purpose
- LEV systems are maintained to ensure that they are effective whenever in use
- Operatives using LEV systems have appropriate training in their correct use
- Process changes or modifications include the revision of risk assessments and the adequacy of existing control measures (e.g. existing LEV systems may need to be modified, upgraded or changed)



Future Challenges

- The BOHS's Faculty of Occupational Hygiene has a Strategic Working Group (SWG1) whose key aim is "Horizon Scanning" and looking at what the future may hold for the profession
- SWG1 has initiated considerations of how Artificial Intelligence will impact occupational hygiene and also how the profession will need to consider in detail how the value of what we do in relation to workplace health ("Workplace Health Value") is quantified and communicated to our stakeholders.
- Both Artificial Intelligence and Workplace Health Value will also impact LEV professions – see next two slides

Future Challenges (cont.)

Impacts of Artificial Intelligence

- In simple terms data acquisition, interpretation and report writing; realtime monitoring and reporting of LEV performance
- On the macro scale change of the whole nature of the workplace with more automation, less worker interventions during processes meaning reduced health risk to workers from hazardous substances (but more psychosocial factors to consider)
- Probable increased containment of processes perhaps less LEV required?
- But still significant maintenance required, which may lead to higher exposures to maintenance personnel if maintenance is not done by nonhuman means

Future Challenges (cont.)

Workplace Health Value Impacts

- More focus on the value of workplace health control measures
- Clear quantification of cost/benefit aspects relating to workplace health control measures
- But also quantification of social and environmental costs/benefits related to these workplace health control measures
- Greater use of professionals who demonstrate that they provide workplace health value to organisations and businesses

Conclusions

- Fit-for-purpose LEV systems should be installed, tested and maintained with a clear consideration of all relevant aspects of the processes and personnel within the workplace, to achieve effective control of workplace health hazards.
- No LEV provider should be deemed competent unless there is an independent assessment of their understanding of the risks to human health and how their practice impacts on it.
- Occupational hygienists, the BOHS, LEV professionals, the relevant professional bodies for the LEV industry, and the HSE, should collaborate to ensure a coherent approach to the above two points and to meet the future challenges to our professions.

Get in Touch



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Thank you