



BOHS

EXPOSURE

Issue 3 | 2024

Contents

01

President
Update

03

CEO Update

06

Registrar
Update

08

Food Safety and
Worker Health

10

Getting Up To
Date With
Metalworking
Fluids

13

The Skill
Shortage in
Occupational
Hygiene

15

Astronautical
Hygiene

16

Membership
Update

17

OH2025 Now
Open For
Abstracts and
Registration

18

Victorian
Asbestos
Eradication: A
Pathway to Best
Practice

26

A Book on “AI in
Occupational
Safety and
Health”

27

Applying Non-UK
Health-Based
Occupational
Exposure Limits

29

Asbestos 2025 -
Early Bird
Prices Available
Now

30

Examining The
Team Effort
Required for
Worker Health
Protection

34

Asbestos 2024
Digital Delegate
Pass - Find Out
More

35

BOHS Awards
Night Review

36

Read This Year's
Early Career
Occupational
Hygienist Award
Essays

39

LEVA Update

42

Upcoming Free
BOHS Regional
Meeting

Parmjit Gahir

PRESIDENT UPDATE



With summer well and truly over and the end of 2024 rapidly approaching I'm sat here reflecting on the last six months of my term as President. What an amazing 6 months it has been!!

With barely enough time to turn myself around returning from the American Industrial Hygiene Association conference we were straight into the Occupational Hygiene Society of Ireland / British Occupational Hygiene Society jointly hosted 13th International Occupational Hygiene Association conference in the wonderful city of Dublin. Fantastic to be welcoming friends both old and new from around the world who passionately shared their work and research on a wide array of informative topics associated with worker health protection. Thank you to the delegates, organisers, exhibitors and most of all the volunteers that made this memorable event happen.

BOHS being a collaborative, progressive and forward-thinking organisation it was fantastic to be invited to the LEV / CoC Control day. What a great turn out of delegates with equally great presentations to encourage LEV practitioners to take the next steps and gain the necessary qualification to be recognised for the very important work they do. I was utterly impressed by the work being done and the range of highly technical questions being asked. Exciting times lay ahead.

Next up was an opportunity to speak with Unite the Union at a regional event in Bristol. I'm always amazed at the work the Unions do, often behind the scenes and without too much fuss, progressing for change and improvements in worker health protection amongst other things. While what we do as Occupational Hygienists is important it was brilliant to learn about mental Health, not a topic that I know a great deal about. It was inspiring to listen to two presenters whom both outlined the mental health conditions they live with on a daily basis and learn how they, along with their employers have overcome these challenges to allow both to work and have successful careers in their respective trades. Occupational hygienists solve problems, this was another example of how to solve problems, problems that are not always immediately visible or apparent.

For the first time, this year the BOHS hosted our awards dinner at Brandon Hall in Coventry. It's always great to see members of our occupational hygiene community rewarded for their hard work, dedication and commitment in this very niche discipline we work in.

But it was even greater to see the rising stars within our community who will be flying the flag for worker health protection in years to come. It's encouraging to see that there is a strong pipeline of

professionals in the making that will take both the BOHS and the work we do as individuals from strength to strength, building upon the 70 years of the society's existence.

In a first for the BOHS I was privileged to be invited to the Malaysian Industrial Hygiene Association and Asian Network of Occupational Hygiene joint conference in Kuala Lumpur. Well, I've been to many conferences in my time but have never experienced anything like the Malaysians put on. The welcome, the hospitality, the full VIP treatment and then the technical presentations were nothing short of superb, but the standout memory for me was the opening of the conference by the Malaysian Minister with Industrial Hygiene in his portfolio. It was amazing to see how policy makers were embedded with and understood what we do as worker health protection specialists. The Western world could learn from this approach!!

Over the last 6 months of my presidency it has been simply amazing to see the dedication, commitment, resolve and problem solving our members, head office staff, volunteers and fellow occupational hygienists from around the globe all have in the pursuit of a common goal of worker health protection. It's also been interesting to see that there is no magic bullet that solves all problems, we all work in a similar way to find solutions for the problems we are presented with, by examining situations, asking questions, taking samples and applying our expertise and knowledge to make informed decisions that will advance worker health protection. So with that folks, let's continue with the basics of what we all know how to do and embrace the future to continue advancing worker health protection.

LEV Certificate of Competence, Control of the Work Environment preparation day



Kevin Bampton

CEO UPDATE



This quarter marked 50 years since the coming into force of the Health and Safety at Work Act and in many ways has seen the realization of the truth that what we have achieved in safer working has not yet been matched in health. In Parliament, the event was celebrated at a reception hosted by the All-Party Parliamentary Group for Health and Safety, sponsored by the TUC and a leading industrial injuries law firm, Leigh Day. While celebratory, the tone was very much around unfinished business in the health space, particularly around asbestos.

Workplace health is probably getting more attention than it has for many years. The range of newspapers covering both the sort of silicosis amongst engineered stone workers and asbestos has widened.

Unfortunately, this is a symptom of our failure over recent years to pay attention across the board to even the most obvious of hazards to health. It continues to be a significant challenge for the Society promote and maintain the importance of workplace health protection.

However, BOHS is very active in this space, thanks to its volunteers members and staff. We are developing the capability to bring together the intelligence of our members to inform research in areas such as respiratory crystalline silica exposure and exposure to isocyanates.

In coming months, we will have completed the work needed to govern and deliver a research function, drawing data from our members to inform areas where our knowledge gaps are apparent. FAAM is moving forward with investigations into areas which should better inform our practice in asbestos analysis and management.

Alongside research, we continue to develop guidance, having recently released significant guidance, aimed at occupational hygiene practitioners, on metal working fluids. We are embarking on inter-disciplinary work, aiming to ensure that those involved in health surveillance are better informed about exposure and feed back more effectively on their findings. Our work with sectors and large projects is promising to deliver step changes in the approach to health risk management, and we continue to be an independent voice drawing the attention of policy makers to significant workplace health challenges.

Significant effort has gone into reviewing our LEV qualification systems and engaging more widely with the LEV industry. In the next few weeks, we aim to launch a directory of qualified LEV practitioners to help duty-holders undertake better due diligence when securing expertise. CoC Control days, delivered with the support of one of our

training partners, Oxyl8, have stimulated interest in that qualification and made a significant impact on the pass rate of candidates.

We have also nearly completed our revision of the guidance and support for candidates looking towards the Diploma, leading towards the Charter. This also sets out a blueprint for how we address other professional qualifications. We are also in the first steps of developing the concept of Specialist Chartered Membership.

Behind the scenes, we have also been making input into the ongoing COVID-19 Inquiry, which has laid bare the challenges that employers face when they have no real concept of occupational hygiene science. We have also continued to work with the All Party Parliamentary Groups on Respiratory Health and on Health and Safety, most recently providing suggested amendments to the Product Safety and Metrology Bill which is before Parliament.

Last, but by no means least, we continue to work closely with HSE and will be represented at their Health Summit this November. HSE's focus on health is visible and valued.

All of this work is being undertaken in furtherance of BOHS's strategy ([Strategy - British Occupational Hygiene Society \(BOHS\)](#)). Earlier this year, the Board confirmed that the strategic developments set out to be achieved by 2025 had been delivered. We will commencing work on a strategy to take us to the end of the decade. In order to ensure that the Society maintains and develops its unique role as the UK's Chartered Society for Worker Health Protection, we will be issuing a survey to all members to feed back on how you would like to see us prioritise our work in the future and your views on the Society as it is as we come to the end of 2024. I look forward to getting your help in shaping the coming years.

To see in detail what BOHS has done since 2021 to implement our current strategy, please check out our strategy mini-site.

[Read the
strategy review](#)





BOHS Strategy Review Survey

We're proud to reflect on the achievements of our 2021–2026 strategy and prepare for an exciting new chapter. As we shape our strategic vision for 2026 and beyond, **your insights are invaluable.**

This survey provides an opportunity to share your perspectives on how we've performed over the past four years and **guide our future direction.** We encourage you to provide feedback—it should take only a few minutes.

For a deeper understanding, you may wish to explore the detailed materials available on our [strategy mini-site](#).

Your input will help us continue to protect worker health and advance occupational hygiene in meaningful ways.

Take the survey

Sarah Leeson

REGISTRAR UPDATE



A lot seems to have happened since the last article I wrote at the start of June. Summer has been and gone and it is somewhat scary to think it is now the 4Q of the year.

On a personal note, I was delighted and honoured to be awarded the Trevor Ogden Medal at the BOHS Annual Awards ceremony at the Brandon Hall Hotel in Coventry in September. I always enjoy these medal ceremonies as they are an opportunity to get dressed up, but more importantly they are an opportunity to recognize those who have achieved advancement in their professional development. I am always pleased to be asked to hand out the Certificates to those achieving Chartered Member Status and Chartered Fellow Status. To be on the receiving end of an award I this year was a new experience and I once again thank all of the Head Office staff who nominated me for this Award. I have known Trevor for many years and spent a very enjoyable breakfast with him in Dublin at the IOHA conference, as well as purchasing a signed copy of his excellent book '300 years of protecting worker health'. Therefore receiving this award named after Trevor was very special.

Yesterday I was pleased to once again to participate in the panel session for the Manchester University Occupational Health MSc Induction Event. The panel consisted of myself representing BOHS and FOH, Nick Pahl for SOM, Robin Cordell for FOH and Andrew Curran for HSE.

Over the coming week I have a few other speaking opportunities. Speaking opportunities seem to come around a bit like buses!

By the time you are reading this, I hope all FOH and FAAM members will have attended the Safeguarding Webinar being held on October 11th. This is the first time, and I hope not the last time, that FOH and FAAM have collaborated on a webinar. A couple of weeks later on October 23rd I will be presenting at the IIRSM London virtual branch meeting to provide an overview of Occupational Hygiene. Then finally for this year I have been invited to attend the OHSI event in Sligo on November 15th to provide an update on the Register of Occupational Hygiene Professionals.

One of the key items the FOH committee has been working on over the past few months has been the Faculty Risk Matrix. Which matrix I can hear you asking? The Faculty Risk Matrix was developed in 2022 as preparation for our application to the Professional Standards Authority for Health and Social Care (PSA) for the accreditation of the Register of Occupational Hygiene Professionals. The Risk Matrix aims to consider the key issue of Risk to the Public which could arise from poor Occupational Hygiene practice. The risk matrix applies to all practitioners on the Register of Occupational Hygiene professionals, including Associated Professionals. As such, the predicted likelihood may be higher than if the matrix only applied to members of the Faculty of Occupational Hygiene. The matrix will be undergoing final review at the 4Q FOH Committee meeting and will then be communicated to all FOH members and practitioners on the Register.

Next year will be one of change for myself, as I will be stepping down from the Registrar role after completing my 2nd term in this role. I will reflect about the past 6 years in a later article. For the time being, I would ask all Fellows of the Faculty to think about whether you are interested in put yourself forward to be the next FOH Registrar. As I think you will have gained from these articles the role is extremely rewarding and varied and provides the opportunity to influence the development of our profession and improve the standards and competency of practice. Experience of being or having been on the FOH committee within the previous 5 years is preferable but not essential. If you would like more information about the Registrar role then please contact me and I'd be delighted to have a chat with you.

Mid October will see the 4Q FOH Committee meeting and I look forward to meeting up with all the committee members. The day prior to the meeting I will be in Derby representing the Faculty at a joint BOHS / HSE workshop to explore how BOHS can support the HSE with an exciting to collate personal exposure monitoring data and control measures to better understand exposures by industry sector and trends over time. More to come on this in due course I am sure.

Away from Registrar duties, I am still volunteering once a week at my local goat sanctuary and have recently been asked to help them understand the required actions arising from a H&S consultant visit. Maybe the first question I should ask is "was the consultant competent?".



Dr. Rachael Jones

FOOD SAFETY AND WORKER HEALTH



Recently I was able to attend a day of the International Association for Food Protection annual meeting in Long Beach, California, USA. I went to see a colleague speak and learn if there were any new microbial risk assessment applications, but was intrigued by how worker health and safety was presented. While not a primary theme of the conference, worker health and safety emerged related to: worker training and practices for safe food handling and preparation; chemical and physical hazards of cleaning, sanitation and disinfection processes; and management of work-related infectious disease risks (e.g., vaccination, exclusion of sick workers, take-home exposures, body fluids exposures), among other aspects. *Annals* hasn't published a lot of articles in recent years about health and safety in food processing and preparation, but workers in this industry encounter a wide variety of hazards, including emerging zoonotic diseases.

Two articles have been published in *Annals* volume 68 related to food manufacturing, and these are highlighted below with two other recent articles:

[“Q fever infection is a preventable risk associated with pet food manufacturing” by Uren et al.](#)

This paper highlights Q fever as a preventable occupational health exposure which is high risk in some settings, including pet food manufacturing.

Through reporting these cases, the work emphasizes the need for improved risk assessment and mitigation through vaccination and screening.

[“SARS-CoV-2 antibody prevalence by industry, workplace characteristics, and workplace infection prevention and control measures, North Carolina, USA, 2021-2022.” by Gigot et al.](#)

This study observed high salivary SARS-CoV-2 infection-induced IgG prevalence in animal slaughtering and processing industry workers (71%) between February 2021 and August 2022 in North Carolina, USA. Higher odds of SARS-CoV-2 infection among participants were observed at worksites with larger compared to smaller numbers of employees. This study adds to the evidence of high SARS-CoV-2 transmission among livestock industry workers in the United States.

[“Worker perspectives on improving occupational health and safety using wearable sensors: a cross-sectional survey” by Mueller et al.](#)

There is interest in the use of wearable sensors to help occupational health and safety professionals conduct continuous monitoring to understand patterns of exposure and improve exposure management practices. However, to increase the acceptability and use of these sensors, it is important that concerns from occupational health and safety

professionals, employers and employees are acknowledged and inform the development of wearable sensors and related systems. This study provides perspectives on what data is relevant and useful to the target audience, which may be used to provide guidance on how this technology can be used in a helpful and safe manner.

“Validation of a sampling method and liquid chromatography mass spectrometry analysis method for measurement of fentanyl and five other illicit drugs” by Jeronimo et al.

This study developed a validated sampling and analysis method for six illicit drugs. This method will facilitate research to describe the magnitude and frequency of secondhand exposure levels to these drugs associated with various jobs and tasks, so as to address community concerns and better protect harm reduction workers, healthcare workers, and others who work with people who use illicit drugs.



Adrian Hirst

GETTING UP TO DATE WITH METALWORKING FLUIDS

There is a pattern which happens with hazardous substances. They start to be used, and as they are used, more becomes known about how they affect us. This leads to higher expectations for control. Exposure limits of one form or another are introduced, then they get lowered and/or removed entirely. There is normally a time lag between the discovery of information and changes in expected levels of control. During this time period organisations and individuals go through the five stages of grief; denial, anger, bargaining, depression and finally acceptance.

We have seen this pattern with the likes of asbestos, smoking, silica etc. Other substances such as flour dust are still stuck in the middle stages of grief. Metalworking Fluids (MWF) are hopefully reaching the end of the grief cycle.

A long time ago, when I was a fresh faced young Occupational Hygienist, I was tasked with measuring exposures to metalworking fluids.

The facility was a large open plan factory which machined castings. Mills, lathes, grinders, and honers were nosily removing metal. There were around fifty machines, each of them with one person. They were either manually operated or Numerically Controlled (NC). Computer Numerically Controlled (CNC) machines were rare at that time.

The place had a noise level you could feel in the pit of your stomach. There was a pervasive smell, reminiscent of the back stairwell in a multi-story car park. A haze of mist hung in the air obscuring the lights and condensing on everything and everyone, giving them a greasy sheen.

The HSE had an interest in the place. They could see things weren't good but as MWF didn't have an exposure limit and their own guidance was particularly committal, they were not in a strong position. I spoke to them and received a very long scroll of a fax which was typed but significantly augmented with handwritten notes.

It described a method which would later go on to become MDHS 95. The laboratory I used considered the method overcomplicated, I agreed. We tried it and got non-sensical results. In the end the results I reported were a simple gravimetric analysis; even then they were high.

After spending two days at the site, I wrote a report and bravely suggested that, in the absence of an exposure limit, we should set an in-house limit. I naively considered that 2.5 mg.m⁻³ would be an appropriate target, as it was half the value of what was then, the Occupational Exposure Standard for oil mist. The client and my boss didn't like this idea as most of the results were above this level.

The newly published guidance at the time (EH62 Nov 1991) didn't provide much ammunition for either me or HSE. My report and its meagre recommendations for controls were ignored and stuffed in a cupboard along with the company's unused refractometer. Despite the high levels, the lack of any appropriate guidance meant that they did not have the power or the knowledge to tackle the problem.

This was not the most productive point in my career. I was frustrated by knowing something wasn't right but lacking the skills, experience and resources to change it.

A lot has happened since that time. I'm 30+ years older and a little wiser.

- HSE refined and published MDHS 95 and Occupational Hygienists have had mixed experiences with it. Then the composition of MWF changed and it was rendered unworkable.
- HSE also stuck a finger in the air and came up with a Guidance Value that was not too different to my own suggestion. They later withdrew this when it became clear that ill health could occur at much lower levels and we started to.
- HSE survived David Cameron's bonfire of the Qangos but in the process they went from being the main provider of guidance to just one of many. Trade associations and professional bodies now have to play their part.
- The occupational physicians confirmed that MWF can cause Occupational Asthma and went onto diagnose more and more cases of it.
- We learnt enough about the aetiology to know that we don't know enough. MWF represents physical, chemical and organic health hazards. We don't know enough about these to be setting exposure limits, but we do know they cause ill health.
- CNC machines have become the norm, bringing with them unventilated enclosures, higher processing speeds and the ability to generate finer mists in larger quantities.

The point of my little history lesson is that times change, and we need to change with them. That's why BOHS has published new guidance on assessing and controlling exposures to Metalworking Fluids. It is aimed specifically at Occupational Hygienists and is intended to complement the existing guidance provided by HSE COSHH Essentials and the United Kingdom Lubricants Association (UKLA). It is essential reading for anyone who has to deal with Metalworking Fluids.

The purpose of my article is to motivate you to read the guidance, not to summarize it for you. With that in mind here are a few teasers:

- The old school approach of measuring exposures and comparing them to a limit never really worked for MWF. Occupational hygienists need to accept this. The new guidance presents a better approach which involves a qualitative risk assessment.
- A qualitative approach may take some occupational hygienists out of their comfort zone. However, those who embrace the change will be able to focus on controlling exposures unencumbered by numbers which get in the way of their recommendations.
- Consultants need to leave the pumps behind. This means up-skilling their staff and up-selling to their clients.
- There's fun to be had with smoke and Direct Reading Aerosol Monitors (DRAMs) which can be used to verify control measures.

The guidance is available free on the Technical Guidance page of the BOHS website <https://www.bohs.org/information-guidance/technical-guidance/>, alongside a webinar which ran on 13th November and can be viewed [by clicking here](#).

David Flower

THE LOOMING CRISIS: THE SKILL SHORTAGE IN OCCUPATIONAL HYGIENE



Post-COVID-19 and there's no doubt: we've all become much more focused on workplace safety and employee wellbeing. In this new environment, our role as occupational hygienists - health professionals assessing, mitigating, and managing workplace risks - has never been more crucial.

However, there's a growing concern that I too share: the significant skill shortage in our field. The demand for experienced occupational hygienists is fast outpacing its supply.

BOHS statistics (2023) paint a clear picture of this looming crisis:

207 Licentiate Members
101 Chartered Members
39 Fellows

That's only **347** qualified individuals available to practice for the entirety of the UK.

In my first Workplace Watch column, I want to delve into the challenges this shortage poses and explore steps we can take to address it.

What's causing this demand-supply imbalance?

Advanced ways of working, emerging technologies, and increased workforce awareness of occupational health hazards

are all driving the demand for occupational hygienists. Companies (especially those in advanced manufacturing), nanotechnology, and biotechnology, face more pressure than ever to ensure safe working conditions.

Yet, the supply of qualified occupational hygienists is dwindling. Many colleges and universities are cutting back or simply shutting down their occupational hygiene programs, leading to fewer graduates in the field and an overall lack of awareness about the profession among young people considering their future career paths. This issue is further aggravated by the retirement of experienced colleagues.

What's the impact of this shortage?

The implications are significant and dangerous.

Without enough skilled occupational hygienists, businesses may fail to meet safety regulations, risking fines and reputational damage. More importantly, employees face exposure to harmful substances and hazardous conditions, which can impact their long-term health, increase absenteeism, and decrease productivity.

How can we address this crisis?

We need to raise awareness and educate others about the profession, starting with

outreach efforts in high schools and colleges. It is important to highlight how rewarding a career in occupational hygiene can be, and the real difference it makes to people's lives is crucial.

Personally, I'm passionate about this field because of the impact it had on my own family: my uncle's premature death from asbestos exposure deeply affected me. Equally important is ensuring that businesses are fully equipped with the latest knowledge and skills related to workplace health and safety. This can be achieved through in-house training, continuous professional development, and certification programs.

I also endorse hiring people with transferable skills from various careers and industries, supporting them with structured on-the-job learning, professional study, assessment, leadership development, and mentoring them on occupational hygiene. This approach was invaluable to me when I transitioned from a career in technical ceramics.

Equally, there are people with a military background who often have the perfect skillset for our industry. My close friend and colleague, Matt Williams, is one such example. Coming from the RAF, he's got a fantastic way of solving problems using his fail-first, solution-focused approach. He considers all possible pathways to reach your desired outcome; if one doesn't work, he quickly moves onto the next. Plus, he knows how to lead – considered, no-nonsense, and decisive. It's effective, and the team respect him for it.

house training and apprenticeship schemes, we can tackle this challenge head-on and safeguard the future of occupational hygiene.

To quote Kelvin Williams, "*The world needs occupational hygienists.*"

An experienced occupational hygienist, David Flower has been practicing for over 20 years. He has an in-depth working knowledge of industrial issues and has led from the forefront in matters of health & safety. Working with many sectors in the UK, from small companies to national organisations, David aims to ensure all employees go home safe, not taking with them anything that may impact their health later in life.

Part of IOM's Workplace Protection team, he uses occupational hygiene techniques alongside expert training to keep staff protected from workplace hazards.

Conclusion

The shortage of skilled occupational hygienists is a pressing issue that demands immediate attention. By promoting the profession, expanding educational opportunities, encouraging in-

ASTRONAUTICAL HYGIENE TO PROTECT THE HEALTH OF ASTRONAUTS

John Cain

Astronautical hygiene (AH) is a new science to protect the health of astronauts from exposure to hazards whilst working in space such as chemicals, microbes, radiation, microgravity and noise. The principles of AH are applied to:



Characterise a hazard e.g. vapours generated from machinery on a space station, setting of exposure limits for example, to lunar dust



Assess the exposure health risks e.g. from exposure to high levels of airborne microbes whilst working in microgravity conditions, and



Determine the measures to mitigate exposure e.g. type of space suit to wear whilst working outside a spacecraft, design of LEV to remove dust.

The measures used in space to protect astronauts are similar to those used in terrestrial occupational hygiene.

In the United Kingdom and other countries such as the USA, China and Russia, the principles of AH are used by scientists, academics, researchers and businessmen in the development of measures to mitigate exposure now and in the future especially as manned spaceflight is expanding and there is competition amongst the larger countries. Furthermore, the UK Space Agency is increasing its commitment to manned spaceflight, with the need to apply the principles of AH.

Relevant references relating to the application of AH are given below to obtain an overview of the discipline.

J R Cain, "Lunar dust the hazard and astronaut exposure risk". Earth, Moon, Planets. pp. 107 – 125, 2010.

J R Cain, "Astronaut health – planetary exploration and limitation on freedom." In: The Meaning of liberty beyond Earth, C S Cockell (Ed), New York, Springer, 2014.

J R Cain, "Martian dust: the formation, composition, toxicology, astronaut exposure and health risks and measures to mitigate exposure." JBIS, 72, pp. 161 – 171, 2019.

J R Cain, "Astronaut eye exposure to microgravity, to radiation and to light etc." JBIS, 73, pp. 390 – 396, 2020.

(For interest, the UK is the world leader in developing measures to mitigate astronaut lunar dust exposure)

Dr John R Cain

(Space Consultant – Astronaut Health)

PhD MSc MBA DipOccHyg

johncain6@hotmail.com



Claire Creed

MEMBERSHIP UPDATE



Update on the GAL Assessment

From the 1st January 2022, every Faculty member using the Group Authority Licence has been required to complete the GAL Assessment.

Earlier this year, it was agreed that those ordering sampling media, or leading on-site surveys, must have passed the GAL Assessment within the previous three years to confirm adequate knowledge of the SOP. As the assessment was introduced in 2022, you may need to re-take it from the 1 January 2025.

To help you plan for when you do need to retake, the date you originally took the GAL assessment you will be able to see this in your BOHS account under the section My Profile, My GAL.

To access the assessment please visit our [training site](#) and also read through the [Help Sheet to Creating an Account and Accessing the Assessment before accessing the assessment](#).

If you require any help with the above please contact membership@bohs.org or telephone 01332 298101 and select the membership option.

CPD

Faculty Members - If you haven't already started adding information for 2024 then now is a good time to start thinking about adding data to your CPD record. It needs to be added by the **28 February 2025**. We know it can be hard to find the time to keep your records up to date and sometimes CPD gets put to the bottom of the list, but if you start now, you may find it can be of great help to **you**, with your professional development, as it gives you the time to reflect on your personal plans and needs.

A few simple steps that can help you plan for CPD

- Make space in your diary. Put aside at least 30-45 minutes.
- Log on to the CPD section of your My BOHS account.
- Update your record with your latest activities and developments
- Reflect on the details you have just added and plan your CPD activities for the next three months.
- Add another date in your diary for three months' time to repeat the process. It is probably a good idea to repeat this process at least three/four times a year.

If, at any time, you have any questions about CPD or anything membership please contact the membership team. We always like to hear from our members. You can contact us at membership@bohs.org or by telephone 01332 298101 and select the membership option.



Contributions are now open!

OH2025 is the premier national forum where science meets professional practice and where the different disciplines concerned with preventing workplace ill-health are showcased.

This year's key themes are:

- How can we build competence, capacity and capability in managing workplace health risks?
- How do we deliver the green revolution and manage climate change without workplace health casualties?
- How will artificial intelligence and technological innovation impact the management of health risks in the workplace?
- Can we continue with a one-size-fits-all approach to different health impacts for our diverse workforces?
- What are substances of concern where we need better awareness, understanding and control?
- Are there connections between our approach to physical health risk management and the growing challenge of stress and mental illness in the workplace?

The conference committee invites contributions from:

- **Practitioners** wanting to share or get feedback on workplace health innovations;
- **Researchers** and scientists seeking a pathway to impact;
- **Technical experts** willing to share and update on new developments and insights;
- **Professionals and experts** from beyond occupational hygiene and health with insights into workplace health protection;
- **Policy-makers and policy influencers** wishing to engage in and stimulate debate.

[Find out more about the conference](#)

[Submit an idea](#)

VICTORIAN ASBESTOS ERADICATION AGENCY PRIORITISED ASBESTOS REMOVAL: **A Pathway to Best Practice**

By Jonathan Grant



Introduction

Asbestos, once heralded as a 'wonder material,' now casts a lethal shadow over Australia's built environment. The Victorian Asbestos Eradication Agency (VAEA) has taken the lead in tackling this challenge by prioritising the safe removal of asbestos-containing materials (ACMs) from government-owned buildings. Established in 2016 by an Order in Council, the VAEA has been tasked with the critical mission of planning and executing the eradication of asbestos from government-owned buildings.

I was lucky enough to be able to travel to Australia earlier this year, and this article, based on insights shared at the FAMANZ-ASSEA Asbestos Conference held in Melbourne in March 2024, highlights the Agency's achievements and innovative tools that set a benchmark for best practice in asbestos removal.

There is a notable contrast between the State of Victoria's approach to the management of asbestos and that taken by the UK. Whereas the VAEA has established a centralised asbestos register for all publicly-owned buildings and embarked on a prioritised asbestos removal plan, the recommendations by the House of Commons Work and Pensions Committee for a national asbestos register and a prioritised strategic national asbestos removal plan in the UK were both rejected.

The DWP report can be found here:

<https://committees.parliament.uk/publications/21884/documents/162937/default/>

And the HSE's response here:

<https://publications.parliament.uk/pa/cm5803/cmselect/cmworpen/633/report.html>

The Asbestos Legacy in Australia

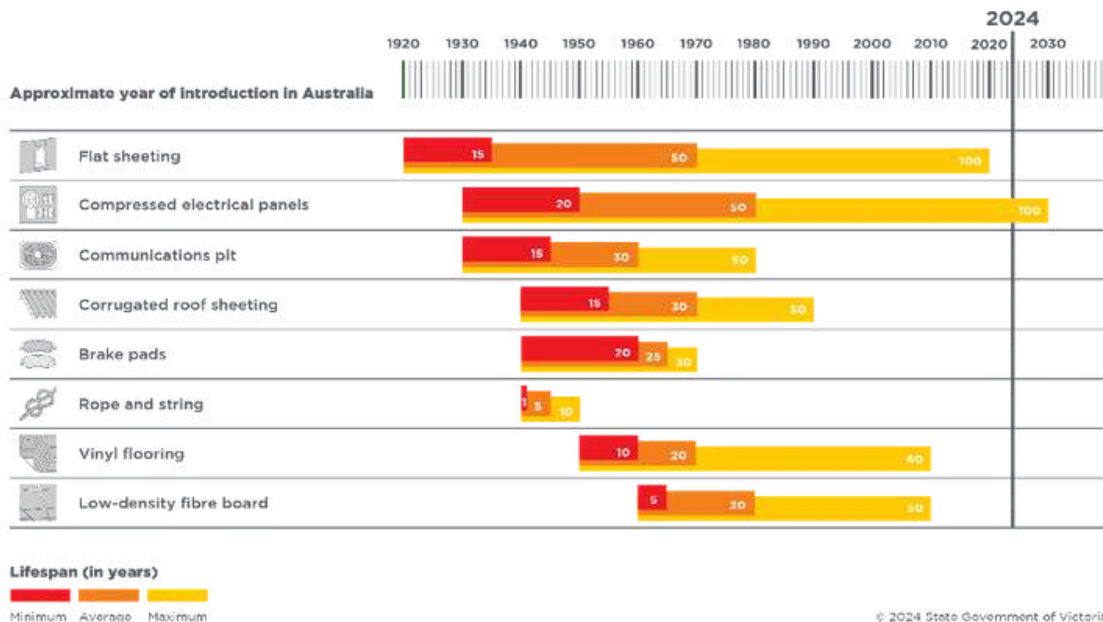
Australia's asbestos legacy is substantial, with an estimated 6.4 million tonnes of ACMs embedded in the built environment. The ACMs, all of which were installed decades ago, are now reaching the end of their product lifespans, increasing the risk of asbestos fibre release.

The VAEA's work is focused on removing this material (over 22,000 tonnes of ACMs found in Victorian government-owned buildings) in a strategic and prioritised manner. At the current removal rate, without prioritised removal, asbestos would remain in these buildings until 2088, well beyond the expected lifespan of these hazardous materials, further increasing the risk of fibre release.

Australia has one of the worst asbestos-related death rates in the world; close to that of the UK.

Asbestos product lifespan estimates

This infograph shows 8 of the most common asbestos products found in the VAEA's Asbestos Identification and Rating System (AIRSystem), a live database of asbestos-containing materials (ACMs) in buildings owned by the Victorian Government. The products listed below have exceeded their average estimated product life.



VAEA's Prioritised Removal Strategy

The VAEA's strategy for asbestos removal is underpinned by a risk-based approach, which ensures that the most hazardous ACMs are removed first. The prioritisation process categorises ACMs into five phases based on their condition, friability, and potential for disturbance.

This granular approach allows the VAEA to systematically address the removal of ACMs, ensuring that public health and safety are safeguarded effectively and efficiently. One of the standout elements of the VAEA's approach is the Asbestos Identification and Rating System (AIRSystem), a pioneering digital tool that consolidates data on ACMs across government-owned buildings. AIRSystem is a live, secure and centralised database that provides a comprehensive view of the condition, location and risk factors associated with ACMs. It also supports the creation of a risk-based removal schedule, which is vital for the successful implementation of the VAEA's strategy.

REMOVAL PHASE	RISK CATEGORY	ACM DESCRIPTION
Phase 1	MOST HAZARDOUS ACMs	Friable, poor condition, moderate to high disturbance potential, high-use buildings
Phase 2	MOST HAZARDOUS ACMs	Friable, unknown or fair condition, low to moderate disturbance potential, high-use buildings
Phase 3	ACMs THAT MAY BECOME MORE HAZARDOUS	Non-friable, fair to good condition, low to moderate disturbance potential, high use buildings
Phase 4	LESS HAZARDOUS ACMs	Non-friable, well bonded, good condition, low to moderate disturbance potential, high use buildings
Phase 5	LESS HAZARDOUS ACMs	Non-friable, well bonded, good condition, low disturbance potential, low use buildings

Innovations in Asbestos Management

The VAEA has not only focused on removing asbestos but has also developed a suite of innovative tools that enhance the efficiency and effectiveness of its operations. These include:

1. **AIRTracker:** A mobile application that integrates with AIRSystem, allowing for real-time data capture and updates in the field. This tool is particularly valuable for building managers, contractors, and occupational hygienists who need immediate access to asbestos data while on-site.
2. **ACM Risk Calculator:** A user-friendly tool that automates the risk assessment of ACMs by applying the VAEA's risk algorithm. The calculator provides consistent and objective risk ratings, which are crucial for prioritising large numbers of ACMs for removal.
3. **ACM Dictionary:** To ensure consistency in the identification and classification of ACMs, the VAEA developed a comprehensive dictionary that standardizes the terminology used across the industry. This resource is integrated into AIRSystem and is essential for maintaining objectivity in risk assessments.
4. **Digital Clearance Certificate:** This tool allows for the digital submission and review of clearance certificates following asbestos removal. It ensures that all relevant data is captured and stored in AIRSystem, providing a complete history of each ACM's lifecycle, from identification to removal.

The VAEA's risk assessment model is worthy of an article of its own. It is simple to apply, with four parameter scores relating to condition, likelihood of disturbance, friability, and a building rating. These combine to give an easy-to-understand percentage risk score.

In a future article I will explore the VAEA's risk assessment methodology in more detail, but for now the risk calculator can be found here:

<https://www.vaea.vic.gov.au/acm-risk-calculator>

In the UK the ACM risk assessment method dates back twenty-four years (before the advent of smartphones and before the upcoming workforce were born). It is split into two parts, the Materials Assessment (it is worth noting that, on its own, the materials assessment is not a risk assessment, but a hazard assessment), originally detailed in MDHS 100, and the Priority Assessment from HGS227. The materials assessment is based on four parameters: 'product type', 'extent of damage', 'surface treatment', 'asbestos type'. It can result in a score between 2 and 12.

The priority assessment is also based on four parameters: 'normal occupant activity', 'likelihood of disturbance', 'human exposure potential' and 'maintenance activity'. However, the 'likelihood of disturbance' parameter is split into three sub-parameters, which are averaged, as is the 'human exposure potential' parameter, whereas the 'maintenance activity' is split into two sub-parameters. The priority assessment score can range from 0 to 12. This means that the overall risk score of the combined materials and priority assessment can range from 2 to 24. Are you confused? I am, and I wrote this.

Is it time we revisited our asbestos risk assessment methodology in the UK, or are we too entrenched because of the length of time we have been using our existing processes?

Condition

15%

Stable
• Firmly bonded
• Painted or sealed



Fair
• Unpainted or unsealed
• Friable and encapsulated



Unknown
• Material inaccessible



Poor
• Unbonded
• Unstable
• Dust

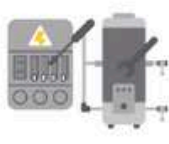


ACM disturbance potential

25%



Level 1 | Low



Level 2 | Moderate



Level 3 | Unknown



Level 4 | High

Building rating

25%

Public access



Yes No

Frequency of use



Annually → Daily

Daily duration



<4 hours → 24 hours

Level of activity



Very low → Very high

Mobile plant



Yes No

Friability

35%



Level 1 • Resins • Plastics	Level 2 • Adhesives • Vinyl products	Level 3 • Bitumen products	Level 4 • Cement-based products	Level 5 • Geotextiles • Cement-product debris	Level 6 • Corrugated roof sheeting • CAF gaskets • Woven products	Level 7 • Millboard • Fire-door core	Level 8 • Pipe lagging • Woven-product debris	Level 9 • Sprayed insulation • Vermiculite insulation	Level 10 • Loose-fill insulation • Dust and debris • Sprayed asbestos
--	---	--------------------------------------	---	--	---	---	--	--	---



The Broader Impact

The VAEA's work extends beyond the immediate task of asbestos removal. By setting a high standard for best practices, the agency is influencing how asbestos is managed not just in Victoria but across Australia. The tools and methodologies developed by the VAEA are being shared with other government agencies and the broader asbestos industry, promoting a unified approach to asbestos eradication.

The introduction of new prequalification categories on the Victorian Government's Construction Supplier Register for Asbestos Inspection and Hygiene Services and Licensed Asbestos Removal Contractors further ensures that only qualified professionals undertake this critical work. This initiative adds another layer of accountability, ensuring that asbestos removal is conducted safely and effectively.

Prioritised Asbestos Removal in the UK

The VAEA has established a centralised asbestos register for government-owned buildings and embarked on a prioritised asbestos removal plan. Why hasn't the UK done the same?

The Health and Safety Executive (HSE) rejected the proposal for a prioritised asbestos removal strategy primarily for the following reasons, as summarised from their response to the House of Commons Work and Pensions Committee report:

ONE

Lack of Compelling Evidence for a Fixed Deadline: The HSE argued that there isn't enough compelling evidence to support a proactive, fixed deadline for asbestos removal. The current approach of managing asbestos in situ (keeping it safely managed where it is) until it can be removed during planned refurbishment or demolition works is seen as sufficient. The HSE expressed concerns that setting a fixed deadline could actually increase the risk of asbestos exposure. This is because premature or poorly planned removal efforts could lead to unnecessary exposure of workers to asbestos, which is currently well-contained in many instances.

TWO

Potential for Increased Asbestos Exposure: The HSE highlighted the risk that a fixed deadline might lead to an increase in exposure incidents. If asbestos removal is rushed or done prematurely without proper planning, it could expose more workers to asbestos fibres, which would counteract the very goal of reducing asbestos-related risks. They stressed that any increase in exposure risk must be justified by a corresponding reduction in overall risk, which they believe is not the case under a fixed deadline scenario.

THREE

Disruption to Public Estates: The proposal was also seen as potentially disruptive to public estates, such as schools and hospitals, if a deadline for asbestos removal were imposed. The HSE raised concerns that introducing a removal deadline outside of existing estate strategies could lead to significant operational disruptions. For example, many public buildings might have to be vacated or undergo extensive renovations sooner than planned, creating logistical and financial challenges.

FOUR

Risk of Poor Removal Practices: Another concern was that a fixed deadline might encourage poor removal and disposal practices. In their view, a rushed removal could lead to improper handling and disposal of asbestos, further increasing health risks rather than mitigating them.

FIVE

Current Regulations Are Effective: The HSE defended the current regulatory framework, which includes the Control of Asbestos Regulations 2012 (CAR). These regulations are designed to manage asbestos risk effectively without the need for a fixed removal deadline. The HSE's stance is that the existing system, which emphasizes safe management and eventual removal as part of planned refurbishments, is sufficient to gradually eliminate asbestos from buildings over time.

SIX

Lack of Evidence Supporting Health Benefits of Early Removal: The HSE did not find strong evidence suggesting that early removal of asbestos (before planned refurbishments) would lead to significant health benefits. They noted that in many cases, asbestos that is managed properly in place does not pose a significant risk and that the increase in risk associated with removal might outweigh potential benefits.

The VAEA's approach follows the familiar hierarchy of controls, prioritising elimination, with asbestos removal as the primary focus in minimising asbestos exposure risks. In contrast, the UK policy tends to favour lower-tier methods in this hierarchy, such as containment (engineering controls) and management (administrative controls), rather than removal. While this approach reduces

the immediate risk of exposure during removal, it leaves behind the ongoing risks associated with retaining and managing asbestos through less reliable means. Eventually, there will come a time when the cumulative risk of keeping asbestos outweighs that of removal, at which point removal will become necessary, reintroducing the same removal risks. The only valid justification for deferring removal would be if the risk of removal decreases over time. However, in most cases, the condition and deterioration of asbestos will lead to an increased removal risk over time.

If advancements in removal technology, workforce expertise, disposal capacity, and funding improve, this risk could be mitigated or even reduced. However, the UK's current policy of managing asbestos in situ increases overall exposure risks and costs because it neither reduces the removal risk through improved infrastructure nor enhances the effectiveness of containment or management strategies. This approach may lower short-term risk, but at the expense of long-term cumulative risk. It is difficult not to view this as a "save now, pay later" policy, which could result in more individuals leaving the workforce early, relying on benefits, putting pressure on the NHS, and suffering from entirely preventable diseases and premature death. Managing asbestos in situ does not reduce costs or risks in the long run. It is time we had a prioritised asbestos removal strategy in the UK.

A Centralised Asbestos Register

The HSE also rejected the proposal for a central register of asbestos for several reasons related to practicality, effectiveness, and resource allocation, as summarised from their response to the House of Commons Work and Pensions Committee report:

Duplication of Existing Requirements:

The HSE argued that a central register would duplicate the existing legal requirements under the Control of Asbestos Regulations 2012 (CAR 12). These regulations already mandate duty holders to identify, locate, and manage asbestos in their premises. The information that would be collected in a central register is already required to be shared with anyone who might be at risk of exposure, meaning a new register would not provide new or additional safety benefits.

Resource Intensity: Establishing and maintaining a central register would require significant resources from both the government and duty holders. HSE emphasized that this additional burden may not be justified given the existing legal framework already places the responsibility for asbestos management directly on those who control the premises.

Impact on Duty Holder Responsibility:

HSE expressed concern that a central register could undermine the active requirement for duty holders to manage asbestos risks on an ongoing basis. By potentially shifting focus to the maintenance of a central database, there is a risk that the direct responsibility and vigilance required of duty holders could be diluted.

Questionable Impact on Risk Reduction:

HSE also questioned the assumption that increased public availability of asbestos information through a central register would lead to improved health and safety outcomes. Their past experience with similar registers, such as the public register for tower cranes, indicated that such registers might not lead to significant improvements in risk management but would still impose a substantial administrative burden.

Proportionality and Regulatory Burden:

The HSE highlighted the need to ensure that any new regulatory requirements are proportionate to the health benefits they would bring. Given the existing comprehensive regulations under CAR 12, the HSE did not find sufficient evidence that a central register would significantly improve asbestos risk management, thus failing to justify the additional regulatory burden.

In summary, the HSE rejected the proposal for a central register of asbestos primarily due to concerns about redundancy, resource demands, potential dilution of duty holder responsibility, and a lack of clear evidence that such a register would enhance health and safety outcomes. Instead, the HSE suggested focusing on improving current practices under the existing regulatory framework.

By contrast the VAEA decided to create a central register of asbestos for several key reasons:

Comprehensive Data Management: The central register consolidates information on the location, condition, and risk assessment of asbestos-containing materials (ACMs) across Victorian government-owned buildings. This consolidation allows for a comprehensive view of the asbestos legacy, enabling better planning and decision-making regarding asbestos removal and management.

Improved Risk Assessment and

Prioritisation: The AIRSystem incorporates a custom risk assessment model that evaluates ACMs based on factors like friability, condition, disturbance potential, and building use. This model allows for the prioritisation of asbestos removal based on the highest risk, ensuring that the most dangerous ACMs are addressed first. The centralisation of this data ensures

consistency in risk assessment across all buildings.

Efficiency in Asbestos Management:

Traditional asbestos registers were often inconsistent, outdated, and difficult to navigate. By centralising and standardising the data, the AIRSystem enhances the efficiency of asbestos management. It provides a live, accessible database that can be continuously updated, ensuring that the information remains current and relevant.

Enhanced Safety and Compliance: The AIRSystem improves the safety of workers and the public by providing easy access to detailed information about ACMs, which is crucial for preventing accidental disturbances of asbestos. The system also helps ensure compliance with regulatory requirements by maintaining up-to-date records of asbestos surveys, removals, and other relevant documentation.

Strategic Planning and Policy

Development: With a centralised asbestos register, the Victorian government can better understand the extent of the asbestos problem in its buildings, allowing for more informed and strategic planning. This data supports long-term policy development aimed at eradicating asbestos from the built environment, ultimately reducing the incidence of asbestos-related diseases.

Potential for Broader Application: The AIRSystem serves as a model that could be adapted for use in other jurisdictions, potentially leading to the development of a national asbestos register. This broader application could enhance asbestos management and safety across Australia.

Overall, the VAEA recognised that a central register of asbestos would provide significant benefits in terms of safety, efficiency, and strategic planning, making it a highly valuable tool in the fight against the lethal legacy of asbestos.

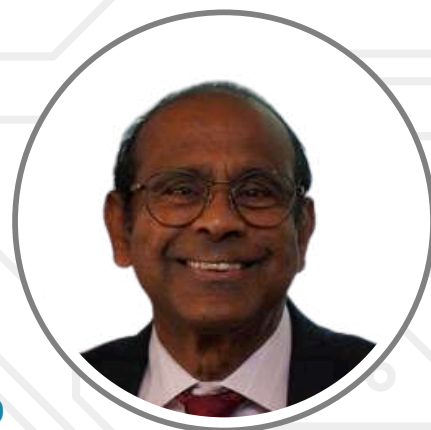
Conclusion

The VAEA's commitment to innovation and best practice has positioned it as a leader in asbestos management. Its prioritised removal strategy, supported by cutting-edge digital tools like AIRSystem and AIRTracker, is a model for other jurisdictions grappling with the challenge of asbestos eradication. As the VAEA continues to refine its processes and share its knowledge, it is paving the way for a future where the lethal legacy of asbestos is no longer a threat to public health.

The question the UK must confront is whether its current asbestos management practices are sufficient to safeguard public health in the long term. The rejection of a national register and prioritised removal strategy may reflect an adherence to current regulatory frameworks, but this could prove to be a 'save now, pay later' approach. If the UK is to avoid falling behind other nations, such as Australia, in asbestos management, a shift toward a more proactive, elimination-focused strategy may be necessary. Without such a move, the cumulative risks posed by aging asbestos materials and the financial strain of deferred removal could burden future generations.

A book on “AI in Occupational Safety and Health”

Bob Rajan
OBE JP PhD



Today, many of us use artificial intelligence (AI) systems—in simple terms, digitally enabled computer/engineering technological systems that simulate human learning and comprehension for problem solving, decision-making, creativity, and autonomy—to perform some or all our daily work routines.

On the other hand, AI-based systems can harm people, organisations, and society if developed and implemented without the necessary governance processes for safe and ethical implementation. The governance processes will include the use of quality and validated data, which is the fuel for AI systems. In fact, an AI system is another tool in our toolbox, and it must be used judiciously.

As occupational health professionals, we are not expected to be experts in AI systems development, but we should have sufficient familiarisation of the technology so that we can:

- Adopt and support the implementation of AI-related occupational hygiene (OH) technologies at work to support balanced business outcomes.
- Discuss AI in OH projects with data collectors, data scientists, computer scientists, AI technologists, engineers, and other associates such as system vendors.
- Prepare for chartered examinations.

My practical book on “AI in Occupational Safety and Health” simply and gently explains, with examples and illustrations, several pertinent issues associated with digitally enabled technologies (DETs) and artificial intelligence (AI) systems and their application in OH and safety.

I invite you to read this book and benefit from it to look after the health, safety, and wellbeing of fellow workers and support the productivity and return on investment (RoI) of your organisations and the UK economy.

The book is available in two formats: (i) a free-to use open-access PDF version and (ii) a paperback version. For more information, please contact the author (sumidale@gmail.com) or the BOHS HQ.

APPLYING NON-UK HEALTH-BASED OCCUPATIONAL EXPOSURE LIMITS

by Mary Cameron and Kelvin Williams



British workers' exposures to hazardous substances must be kept below the UK's workplace exposure limits (WELs) in accordance with the Control of Substances Hazardous to Health (COSHH) Regulations 2002 (as amended). A WEL is established from the scientific data (toxicology and/or epidemiology studies) available at the time but may also account for other factors such as socioeconomic impacts and technical feasibility (e.g. measurement and control considerations). If a UK WEL is not solely health-based, we might argue that compliance with that WEL is not sufficiently protective of health.

Under COSHH regulation 6(1)(a), an employer shall not carry out work which is liable to expose any employees to any substance hazardous to health unless he has made a suitable and sufficient assessment of the risk created by that work to the health of those employees and of the steps that need to be taken to meet the requirements of the Regulations. From the requirement for an "*assessment of the risk created by that work to the health of those employees*", we read that the risk assessment's focus must be on the employee's health. Therefore, referring to a non-UK health-based OEL can aid in compliance with UK law.

COSHH regulation 7(b) requires that "*any workplace exposure limit approved for that substance is not exceeded*". The term WEL is UK-specific as occupational exposure limits are named differently in other

countries. However, COSHH regulation 6 ACOP states that the risk assessment should consider "*a comparison between the estimate of exposure and any existing, valid standards which help to assess the adequacy of control*". Therefore, again, referring to a non-UK health-based OEL can aid in compliance with UK law.

Although the UK WEL must be complied with, it is evident that not all UK WELs are solely health-based and may be insufficiently protective of health. We therefore suggest it is appropriate, and arguably necessary, to review non-UK OELs which are health-based and align recommendations accordingly. WELs tend to go down not up. Referring to lower health-based non-UK OELs may help duty holders prepare for future WEL developments.

Although the UK WEL must be complied with, it is evident that not all UK WELs are solely health-based and may be insufficiently protective of health.

Taking styrene as an example. The UK WEL of 100ppm 8-hr TWA is significantly higher than the health-based ACGIH TLV (an American OEL) of 10ppm 8-hr TWA. In this case, the application of the UK WEL alone would not suffice in a health-based risk assessment. Other notable UK WELs that are not health-based include

formaldehyde, flour dust and resin acids (solder fume).

Why are some OELs health-based and others not?

The governance systems for OEL development vary around the world. Non-legally binding OELs are typically derived as health-based guidelines. When an OEL is legally binding it will generally take into consideration additional factors such as technical feasibility and socio-economic factors. These factors represent real-world challenges. Industries can be significantly impacted if these factors are not carefully considered. Should a stricter health-based OEL be applied in a workplace and it is found that meeting this lower OEL presents unreasonable economical, logistical or technical challenges then a higher OEL to account for these factors might be a reasonable option.

When an OEL is legally binding it will generally take into consideration additional factors such as technical feasibility and socio-economic factors.

Higher limits in the UK do not necessarily mean higher risk to UK workers. There is still the overriding requirement to apply good occupational hygiene practice and to reduce exposure to as low a level as is reasonably practicable (where the hazardous substance meets COSHH regulation 7(c) definition). There are many UK WELs which are the same or similar to other health-based OELs. Hygiene Partners will consider both the UK WEL and non-UK health-based OEL for a substance where there are marked and important differences.

In the event of civil legal proceedings, we are mindful that a court could be persuaded that a readily available health-based non-UK limit should have been

considered to inform the steps and precautions that a reasonable and prudent employer should have taken to protect staff.

We suggest it is in the interest of worker health protection and employers that a health-based limit is observed in cases where this does not present unreasonable economical, logistical or technical challenges.



ASBESTOS 2025

14th - 15th May



2025 sees our eighth annual asbestos conference with an in-person event in **Birmingham**.

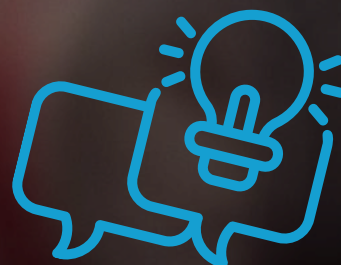


Bringing together a wide variety of asbestos professionals

- ◆ Researchers
- ◆ Academics
- ◆ Practitioners
- ◆ Regulators

Covering key areas regarding the assessment, control & management of asbestos, via:

- ◆ Talks
- ◆ Technical Sessions
- ◆ Interactive Workshops



Limited Super Early Bird Tickets

Book now to secure a **limited availability** 2-day ticket for **£360** including VAT!

Did you know you can also get a further 20% off if you're a **FAAM Platinum Member**?

Your opportunity to shine!

Submissions are now open to present at the conference, if you're interested in presenting a paper, talk or workshop, get in touch at **conferences@bohs.org**.



Find out more: www.bohs.link/asbestos-2025

REPORT ON THE FINDINGS OF A WORKSHOP HELD AT THE IOHA CONFERENCE IN JUNE 2024 EXAMINING THE TEAM EFFORT REQUIRED FOR WORKER HEALTH PROTECTION.

Leila Kirk CMFOH

Introduction

To tell the truth, as an occupational hygienist I was uneasy when the British Occupational Hygiene Society wanted to rename itself as the Royal Society for Worker Health Protection.

It seems obvious that to protect workers' health all an occupational hygienist should do is identify the hazards, make sure there are controls, assess exposure and ensure that the controls continue to work. As a consultant occupational hygienist, as opposed to an in-house one, I have lost countless hours chasing up safety data sheets, LEV examination reports, health surveillance feedback, only to find my client is using something different, the LEV doesn't work, and there is no information on deterioration of lung function except to say my silica workers don't have asthma.

The aim of the workshop was to bring together delegates at the IOHA conference to find the best way to combine the contributions of key complementary professions to achieve worker health protection.

The workshop process

As a quick warmup, delegates were asked to come up with people who contributed to road safety in a game of Road Safety Bingo.

Divided into four groups, delegates were asked to come up with people who contribute to worker health protection. Each contributing person identified by the group was assigned two playing cards: a positive contribution, and the result of a failed contribution.

Based on the idea that an occupational hygienist must find the hazards, and the continued effectiveness of controls, the jeopardy of omissions when performing a survey was translated into a game of snakes and ladders. Each group played a swift game followed by a more targeted game.

The swift game was based on chance. The written playing cards were shuffled and placed face down next to the snakes and ladders board. Each member of the group took a playing counter. Each time they threw the dice they moved along the board. If they landed on a ladder they would take a card. They could go up the ladder only if they had a positive contribution card. If they landed on a snake, a positive contribution card would save them from going down the snake.

The targeted game developed the idea of using positive contributions from stakeholders. The board squares were annotated with information required to complete an inhalation exposure survey for metalworking fluid, or for respirable crystalline silica. The 'positive contribution' cards were dealt out between the players. If the player did not have the required contributor card, they could argue the case for another a different professional providing that information to progress up the ladder/ resist retracing their steps down the snake.

The groups then discussed how multiple contributions could be combined effectively for worker health protection.

Results

25 stakeholders were identified as contributing to worker health protection (copied from the cards collected in at the end).

Table of internal stakeholders

Stakeholder	Contribution
Employer top level/ Directors/ MD/ CEO	Balance of priority of production vs. health. Poor balance related to work-related illness absence, low job retention, employee stress, failure to provide controls, failure to train employees, failure to consult with employees. Company and directors fined.
Company Chemist, research and development dept.	Identification of substances used, reaction products, byproducts, emissions.
Process Engineer	Shares knowledge of what is used, where, when, by whom, under what physical conditions, key emission points. Changes to process.
Production Manager	As above, important to make sure key processes run for emission and exposure survey.
Maintenance Engineer	Good maintenance means fewer leaks, less down time, less cleaning up.
Health and Safety Manager	Good SHE manager results in trust, respect, fewer ill health days off, fewer accidents, good working environment, low staff turnover.
Human Resources Manager (HR)	Communicates between employee, occupational health, and health and safety. Escalates complaints about the workplace. Data protection. Can be a barrier to communication.
Purchasing manager	Responsible for budget for plant repairs, controls, PPE. Can buy cheaper unfit alternatives.
Trainers	(No comments were given.)
Managers/ Line Managers	Should provide and supervise controls. Accountability of supervisors rests on line managers.
Supervisors	Good understanding of process, risks and controls. Maintain controls, have workers' trust, good productivity. Poor supervisors risk greater downtime, distrust, regulator fines, worker injury.
Workers	If they have a good understanding of the process and risk, have controls and know how to use them they feel looked after and fulfilled and do their work well. If they have a poor understanding, little care for themselves, fail to follow working practices, fail to use controls, fail to report issues, they become ill.

Table of external service providers (some may be internal for large companies)

Service provider	Contribution
Union	Raise and/ or address concerns making a healthier working environment and happier workers, increased productivity.
Safety data sheet writer for materials supplier	Provide correct information and recommend suitable controls.
Occupational health provider	Good provider is highly visible, gives well conducted, coordinated provision with H&S manager and solution designer. Aware of pre-existing health conditions and work with employees to find solutions. Aware of/ familiar with/ understands research into exposure and health conditions. Recognise health complaints and investigate possible link with work exposure. Fitness to work is targeted and effective. Reduced sickness absence, increased worker trust.
Employee's GP	May flag signs and symptoms.
LEV examiner	(No comments)
Occupational hygienist	Identify and control emissions and exposures – healthy working environment, increased productivity, legal compliance. Will follow sampling methodology. Reliable results and report. Employees feel looked after.
Occupational hygiene sample analysis laboratory	(No comments)
Psychologist	Fewer mental health issues if workers feel happy and looked after. Needed when others fail to look after employee wellbeing.

Table of external stakeholders with influence

Stakeholder	Contribution
Inspectorate	Provides guidance, resources to make inspections and follow-up. Poor contributions are poor policies, vague guidance, over-enforcement, no follow-up, reliance on 'reasonably practicable'.
Universities' research	Identify patterns of ill health in specific industries.
Insurance	Workers should have financial support if things go wrong. Business should be cushioned to reduce impact.
PPE Manufacturers	Provide affordable compliant PPE that is wearable. Poor PPE is not wearable, not used, not compliant, penalised.
Politicians	Should prioritise worker health.

Take-away

Summaries of group 2-minute presentations on effective collaboration to promote worker health protection.

Group 1

Empower workers to manage their health by giving them knowledge and rights. The company should be committed to worker health. Employees should not face penalties for working safely, or for raising health issues.

Group 2

There should be a formal management system in place that gives ownership of elements of the health issues of exposures, emissions, control, training and overall ownership.

Group 3

The company should work with real-time apps that alert them to conditions, such as dust levels, LEV pressures, and will schedule management of the controls. The app results should be available to everyone involved, from employees to directors.

Group 4

The business should share out the responsibilities for worker health and have in place layers of accountability to link up the management of it, from employee up to director.

The role of the occupational hygienist in each scenario was as a connector, linking contributors and helping the business manage its own worker health protection.

**M I S S E D O U R
A B S E S T O S 2 0 2 4
C O N F E R E N C E ?**



ASBESTOS 2024
8th - 9th October

If you were unable to attend the BOHS and FAAM Asbestos 2024 conference, there's no need to worry—you can still catch up on everything you missed! We're offering a digital delegate pass, which grants you access to the full range of recorded presentations from the event. Whether you're interested in the latest research, expert panel discussions, or key updates in asbestos management, the recordings cover all aspects of the conference.

With the digital delegate pass, you can watch the sessions at your convenience, allowing you to stay informed and up to date with the industry's most important developments. Don't miss out on the valuable insights shared during the conference—secure your access today!

**E M A I L
C O N F E R E N C E S @ B O H S . O R G
F O R M O R E I N F O R M A T I O N**

BOHS AWARDS NIGHT: A PLEASANT SURPRISE

Jans Babkevics



This was the second time I attended the BOHS Awards Night, the first being in 2021 when I received the Ted King Award. I was sceptical at first when I heard that this time it would be a stand-alone event.

I imagined a low turnout with just a few people in the room who would receive the awards. To my surprise, this was not the case.

The evening was very lively, and the crowd was buzzing. It could easily have been mistaken for an annual conference of a small society. It was great to see the award recipients arriving with their supporters, as well as members who came just to be there for this important moment.

“It could easily have been mistaken for an annual conference of a small society.”

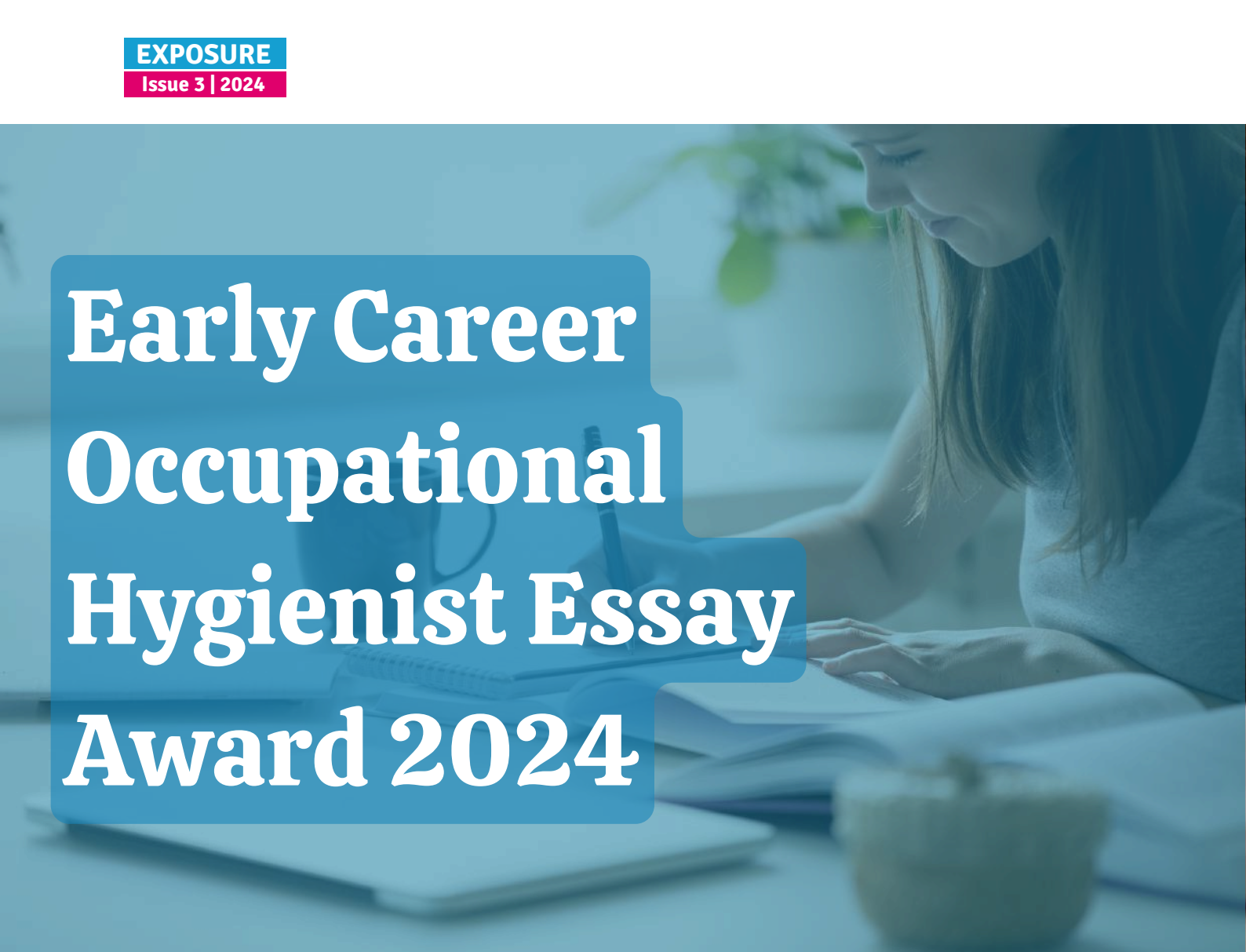
When awards were announced, it was clear that the room deeply appreciated all the hard work that recipients had put in to achieve this recognition.

From celebrating the best certificate and diploma results to recognizing significant contributions to the advancement of the profession across the globe, the awards covered a wide range.

The accolades spanned from the best LEV practitioner award to the announcement of the first fellow member of the FAAM.

The evening was packed with **recognition, appreciation, and encouragement**. When you looked around the room, you knew that our profession was in safe hands and had a bright future.





Early Career Occupational Hygienist Essay Award 2024

The Early Career Occupational Hygienist Essay Award aims to recognise talent and stimulate ongoing professional development in occupational hygiene.

Every year, as part of the annual BOHS awards, we ask those who are early in their careers to submit a themed essay, this year exploring the topic:

"How can good occupational hygiene support positive mental health in the workplace?"

In 2024, we received 8 incredible submissions! Yet, as always, there can only be one winner.

Below you can find links to all of the submissions, and a special interview with Alice Bindon, who ultimately took home the prize, and was kind enough to share with us her advice for anyone looking to submit an essay in the future.

**Read all of
this year's
entries on the
next page**

Early Career Occupational Hygienist Essay Award 2024

“How can good occupational hygiene support positive mental health in the workplace?”

[Read Alice Bindon's Winning Essay.](#)

[Read Christopher Mirzaian's Essay.](#)

[Read Alice Cumming's Essay.](#)

[Read Heather Campbell's Essay.](#)

[Read Bharath Jeyaraman's Essay.](#)

[Read Thomas Hawking's Essay.](#)

[Read Sean Batter's Essay.](#)

[Read Clare France's Essay.](#)

Early Career Occupational Hygienist Essay Award 2024

“
It was really exciting to be shortlisted...



...I felt like that was a win in itself!

WATCH THE VIDEO HERE

<https://youtu.be/xtE4WXhYGpA>

”



OCTOBER UPDATE 2024

Who are the LEV Association?

Following the decision by CIBSE to discontinue the Institute of LEV Engineers (ILEVE), former members invited interested parties, LEV industry stakeholders including duty holders, to discuss the future of the LEV industry, asking what they would like from a new association, to raise awareness of LEV and, how we go about delivering this.

Following an initial meeting it was decided there was sufficient interest to set up a new independent association as a charity - with the aim of developing: awareness, guidance, standards and training that focuses on duty holders as well as LEV professionals. The association will help its members demonstrate competency and encourage duty holders to become "intelligent buyers".

What is the LEV Association?

From the beginning, the group felt it was important to start afresh with new ideas, engagement from a wide range of interested parties and a culture of collaboration. What we have established is an association of businesses and individuals who include designers, testers, manufacturers and, most importantly, duty holders, all of whom have the common desire to improve the LEV industry. It is a collaborative group of dedicated volunteers, with an open-door policy.

Our strapline 'are you LEV Aware?' starts the conversation to advance and promote the use of effective LEV systems, and in particular educate:

- the providers of LEV services and equipment,
- workers working with hazardous substances and their employers how the correct application of effective LEV can reduce exposure to hazardous substances in the workplace and reduce the incidence and severity of worker ill-health in the UK.

Why the need for the LEV Association?

The below statement may resonate with those involved in the LEV industry...

"incompetence, but in some cases dishonesty and greed."

These are not our words but the words of Sir Martin Moore-Bick as he describes the construction industry in The Grenfell Tower Inquiry report.

Following discussions with many in the industry, we continue to be disappointed by the lack of awareness of LEV and modest improvements in the LEV industry over the last 16 years since the launch of HSG258.

We know that many LEV professionals take pride in the quality of the work they deliver and love to point out successful projects to our families and friends. Yet our work is often undervalued, downgraded or cheapened through a 'cheapest quote' or 'value engineering' process designed to deliver a return on an investment or to meet a budget, often ignoring the real purpose i.e. worker health protection. When we look at other industries aimed at keeping people safe (Gas, Electrics, Non-destruction testing) it begs the question, why isn't LEV seen that way?

In LEVA, we are campaigning to get our sector the recognition it needs and deserves, to influence how LEV systems are designed and purchased ensuring innocent end users are provided with the level of protection they need.

For the duty holder, the consequences of failure are significant both financially and legally. It is therefore imperative they are able to make informed decisions and have access to competent LEV professional businesses and individuals who can deliver projects that protect people. Competence must be evidenced at both company and individual level. Crucially, duty holders must also be able to assess and prove competence within their supply chain.

LEVA aim to do this.

Whilst we recognise and support the BOHS process for acceptance onto the Professional Standards Authority register, it is widely acknowledged within the LEV industry, the register only considers a fraction of the skill sets and knowledge that the LEV professional requires – particularly when designing and installing LEV.

LEVA are in the process of developing a Competency Assessment scheme for both the LEV provider and the individuals working within the business, along the lines of the BESA Competence Assessment Standard (CAS) scheme, complimenting the PSA register.

It provides duty holders with the opportunity to answer the question "why did you select this contractor?" Using a LEVA member will go a long way in demonstrating duty holders have met their "duty of care" in the process.

What is the relationship with BOHS and the LEV Association?

The LEV Association is looking to work with ALL industry partners and looks forward to collaborating further with BOHS to continue to improve standards.

When we look at the LEV industry there are several organisations who have key roles to play. We see The LEV Association at the centre of this, bringing together all parties including duty holders. LEVA recognises the popular and successful P-series of LEV qualifications and will work with BOHS to support updates and improvements, adding to the content with our own courses and seminars to help fill any identified gaps.

Both organisations share the same goal of improving worker health protection and it is only by working together, collaboratively, that this will be achieved, providing the duty holder with access to the right solutions to enable this to happen.



How will LEVA achieve its aims?

Members, depending on their membership type, will be asked to sign up to a series of Charters. This will allow them to promote their business profile on our website (so they can be found by duty holders).

Members can then have their competency assessed (for the business and individuals working within the business) for certain areas of expertise such as LEV Design or TExT and engage with the LEVA CPD program. Once they have this accreditation a digital badge will be displayed on their profile.

When will LEVA be up and running?

Our website is in production, and a launch event is planned provisionally for Q1 2025.

Our LinkedIn group is up and running and is proving very popular. For updates on progress please join our group on LinkedIn.

So, are you LEV Aware?

Upcoming free meeting

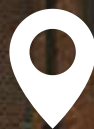
A History of Ergonomic Successes!

Join us at Derby's Museum of Making for a tour of the "*Think Human*" exhibit followed by presentations from ergonomists covering:

- What makes the Quick Exposure Check (QEC) so robust.
- Measuring exposure to musculoskeletal disorder risk factors – considering all the risk factors.
- How to administer the QEC assessment tool.
- Using the tool to create a case for workplace changes.



4 DECEMBER 2024



DERBY



13:00 - 14:30

Secure your place!