

# Global Exposure Manager



The newsletter of the International Occupational Hygiene Association

November 2018 | Issue 10

## In this issue

- IOHA to cast its net wide
- AIOH highlights silicosis 'tragedy'
- Malaysia begins SME industrial hygiene enhancement project
- IOHA hands out two awards in Washington
- Skin health surveillance – why, when and how?
- Collaborative training builds OH capacity to end TB in Southern Africa

[www.ioha.net](http://www.ioha.net)



# IOHA to cast its net wide



The association is working with multiple other industry bodies to advance the occupational health agenda. GEM reports from the latest board meeting



The key theme to emerge from the IOHA board meeting, which took place on 23 September, just ahead of its International Scientific Conference in Washington, DC, was collaboration.

The association has increasingly intensified its work with other trade bodies that have similar interests and the process accelerated that same week. Many of IOHA's partners also addressed the board meeting.

One major development this year, said IOHA president Andrea Hiddinga, has been its work with the International Commission on Occupational Health (ICOH) and the International Ergonomics Association (IEA). Together, they attended the World Health Assembly in Geneva in May for the first time. "We met people from the WHO and they said 'Wow, this is the first time you are here together'," said Andrea Hiddinga, president of IOHA.

The first major steps in working with ICOH and IEA were taken at ICOH's international congress in Dublin in April and May, where the three made a joint statement on tuberculosis (TB). Dr Marilyn Fingerhut, vice-president of ICOH, also spoke about the two associations' ongoing work on TB at the board meeting. The statement, she noted, is now supported by 64 organisations, including the International Society for Respiratory Protection (ISRP), the NGO Workplace Health Without Borders (WHWB), 24 national occupational health (OH) associations and others with expertise in the field. "This is the key to a fantastic moving forward," said Dr Fingerhut.

Immediately after the board meeting, Ms Hiddinga, Dr Fingerhut, Dr Sophie Kisting, executive director of NIOH in South Africa,

Perry Gottesfeld, executive director of OK International, and Gwen Rothman, chair of the ICOH scientific committee on health workers, jointly attended the UN meeting in New York on behalf of IOHA and ICOH. Here they had a meeting with key national missions on the lobby day and, after intensive work, succeeded in having some key statements about exposure to silica in dusty workplaces inserted into the UN Political Declaration on TB, *United to end Tuberculosis: An Urgent Global Response to a Global Epidemic* (see page 4).

As part of this visit, Dr Kisting spoke about the use of OH in workplaces and the difference it can make in reducing the level of TB cases at a side meeting on Africa. On the day after the main meeting, Dr Fingerhut, Mr Gottesfeld and Ms Rothman also attended the UN General Assembly's third high-level meeting on the prevention and control of non-communicable diseases (NCDs) on behalf of both associations.

"We have learned that people who don't think like us don't get it," commented Dr Fingerhut. "We need to work more with outside groups about OH, so it's very difficult. Fortunately it was easy to get the message across with TB, but with NCDs they did not really get it."

The ICOH scientific committee on mining has now formed a sub-committee on silica TB, which Dr Fingerhut and Mr Gottesfeld are co-chairing, and another on healthcare TB, chaired by Ms Rothman. These will work to develop plans to collaborate with others inside and outside ICOH, including the endorsers of the TB statement. IEA and IOHA are already part of this.

Another external speaker was Dr Michelle Robertson, chair of the communication and public relations committee at IEA. She presented an overview of the association, its activities and collaborative efforts with others, and the opportunities to expand these further. IEA is active globally, with over 50 member associations. Industrial hygiene is part of the work of almost all of its technical committees.



*Andrea Hiddinga (right) and Dr Dorothea Koppisch sign the IOHA-ENETOSH MoU*

In particular, Dr Robertson said, IEA is particularly keen to work with others. One of its initiatives with the WHO is working with informal sector and healthcare workers to bring together international examples of case studies and to use these as a way of showing that its scientists are interdisciplinary and work together. “This is something we see as very important. I have been hearing here about respirators that don’t fit children - that’s an ergonomics issue,” she said.

Another area where Dr Robertson could see an opportunity for IEA and IOHA to work together is on the future of the world of work. “How are we going to design the workplace, with all the interest in the 3D printer and all the exposures there? Those emerging new technologies - how are we going to protect those workers and how do we think proactively about those fields?” she asked.

Going forward, Ms Hiddinga said, IOHA intends to work closely with ISRP, because of their common interest in protecting workers against respiratory diseases. Michael Parham of Scott Safety, the newly elected president of Minnesota-based ISRP, was another speaker at the board meeting, presenting its recent interactions with IOHA, its conference in Denver the previous week, membership and other new developments.

Further discussions were ongoing at the time about a combined approach between IOHA and ICOH to a key meeting on air pollution in November and the World Conference on Primary Healthcare, which took place in October in Almaty, Kazakhstan. More generally, the associations are thinking of ideas of how they can go forward, supporting each others’ statements, going to each others’ conferences and discussing common ground in terms of membership, Ms Hiddinga said.

During the board meeting and the International Scientific Conference, IOHA signed two memoranda of understanding with other industry bodies. One was with WHWB to collaborate on projects, the other with the European Network Education and Training in Occupational Safety and Health (ENETOSH) to encourage collaboration in the field of education and training in OSH at a European level and globally.

René Leblanc from the Canadian Registration Board of Occupational Health updated attendees on IOHA’s

communication activities, which will now take place more systematically, under a dedicated communications committee that will meet quarterly. As part of this, he called for more volunteers to come forward to improve the communications effort.

The IOHA website is being updated to be much more dynamic than before and a contract has been provided with a web service provider. As well as providing basic information for member associations, Mr Leblanc said, “we want it to be a communication tool. We want countries to share information with each other and to know what other countries are doing. The new platform has so much more capacity. You can have individual member organisations and members logging in and it will give them access to different tools, such as webinars.”

Members of the Argentinian Hygienists Society (AHRA) presented on their conference and board meeting next year and requested IOHA support for a Latin American network. The newest member association represented at the meeting was the Peruvian Occupational Hygiene Association (APEHO). Other potential members are in the pipeline from Turkey, Tanzania, Guatemala, Nigeria, Thailand and the Philippines. There are considerable variations in their readiness to form associations and then join IOHA, however.

As the next IOHA president, Peter-John (Jakes) Jacobs of the Southern African Institute for Occupational Hygiene (SAIOH) said that he is already being invited to attend major industry events in Africa, at which he will keep building bridges and promoting IOHA. Separately, SAIOH is already working, or planning to, in Zambia, Ghana and Botswana, all of which have seen considerable activity recently, while Mr Leblanc will be promoting IOHA in francophone Senegal. The aim, broadly, is to help professionals in emerging countries to form associations if possible.

The 12th IOHA Scientific Conference will take place in Daegu, South Korea, on 16-20 October 2020, and will be hosted by the Korean Industrial Hygiene Association (KIHA). Kyong Hee Lee introduced herself to board members as the initial contact person for the event and there was a booth in Washington to promote it.

The theme will be ‘Bridging gaps in OH development, opening new horizons’. The organising committee is holding a kick-off meeting during November and the promotional activity will continue during the Asian Network of Occupational Hygiene (ANOH) conference in Taipei, Taiwan, in early November, she said.



*IOHA 2020 booth at IOHA 2018 conference*



## ICOH, IOHA words adopted by UN

Words relating to workers that were suggested by IOHA, the International Commission on Occupational Health (ICOH) and others were included in the UN Political Declaration on TB, *United to end Tuberculosis: An Urgent Global Response to a Global Epidemic*, which was endorsed at the UN in New York on 26 September. This meeting reaffirmed world leaders' commitment to end the TB epidemic worldwide by 2030, in line with the Sustainable Development Goals target.

Paragraph 17 now identifies "health care workers, miners and others exposed to silica" as high-risk, vulnerable groups. Meanwhile, Paragraph 31 speaks of a commitment to "implementing primary prevention in high-risk occupations by reducing silica dust exposures in mining, construction and other dusty workplaces, and worker tuberculosis surveillance and infection prevention and control in healthcare settings".

Next steps, ICOH said, will include the development of work plans to facilitate assistance to countries and organisations to implement workplace practices to reduce silica in workplaces and protect health workers.

### For more information:

[www.ichweb.org](http://www.ichweb.org)

## AIHA offers exclusive deals for the members of AIOH and BOHS

Nowadays we are all aware that it is essential for IHs and OEHs to have an international outlook and think globally. Whether as private consultants or company employees, more and more of them are working directly with multinational organizations with operations in different regions of the world. That's why AIHA and its trilateral partners, Australian Institute of Occupational Hygienists Inc. (AIOH) and the British Occupational Hygiene Society (BOHS) are once again offering exclusive benefits to each other's respective members through schemes such as the General Access Programme (GAP) International E-Membership and the International Partner scheme. Some benefits of these are: monetary savings on various products, services, and continuing education; access to online communities, member directories, eNewsletters and journals. Membership to join these schemes is deeply discounted, so consider it today!

### For more information:

[AIHA scheme](#)

[BOHS scheme](#)

## ACGIH releases guide

The American Conference of Governmental Industrial Hygienists (ACGIH) has released its 2018 TLVs and BEIs Book, *Guide to Occupational Exposure Values and Supplement*. This follows on from the release in July of its 2018 two-tier Under Study list pursuant to changes made to its TLV/BEI Development Process in 2006.

Tier 1 indicates which chemical substances and physical agents may move forward in the upcoming year, based on their status in the development process. Tier 2 consists of those which will not move forward, but will either remain on or be removed from the Under Study list for the next year.

### For more information:

[www.acgih.org](http://www.acgih.org)

## Niosh releases VOC sampling method

The National Institute for Occupational Safety and Health (Niosh) has recently released a new method, NMAM 3900, for the sampling and analysis of volatile organic compounds (VOCs) using evacuated canisters instead of sorbent tubes to collect analytes.

In this method, samples are analysed using a preconcentrator, gas chromatograph and mass spectrometer system. It requires no prior knowledge of air concentrations or battery-operated sampling pumps. Canisters coupled with capillary flow controllers make sampling easier for the field industrial hygienist because the flow controllers require no on-site pre- or post-calibration, Niosh said.

The method has already been validated for 17 VOCs: ethanol, acetone, 2-propanol, dichloromethane, hexane, trichloromethane, 2,3-butanedione, 2,3-pentanedione, 2,3-hexanedione, benzene, methyl methacrylate, toluene, ethylbenzene, m,p-xylene, o-xylene,  $\alpha$ -pinene and d-limonene. It is now available on Niosh's website.

### For more information:

[www.cdc.gov/niosh](http://www.cdc.gov/niosh)

## Osha issues memo on retaliation

The US Occupational Health and Safety Administration (Osha) has issued a memorandum to clarify its position that a rule prohibiting employer retaliation against employees for reporting work-related injuries or illnesses does not prohibit workplace safety incentive programmes or post-incident drug testing.

Osha said that it believes that many employers who implement safety incentive programmes or conduct post-incident drug testing do so to promote workplace safety and health. Action taken under a safety incentive programme or post-incident drug testing policy would only violate the rule "if the employer took the action to penalise an employee for reporting a work-related injury or illness rather than for the legitimate purpose of promoting workplace safety and health".

### For more information:

[www.osha.gov](http://www.osha.gov)

## AIOH issues lithium paper

The AIOH has issued *Lithium and its Hydride and Hydroxide Compounds - Potential for Occupational Health Issues*, a paper giving guidance on the assessment, evaluation and control of occupational exposure to inhalable lithium and its hydride and hydroxide

# News

compounds, with an emphasis on recommending a health-based guidance value. This costs A\$55.

The association said that there is a lot of published data on the effects of lithium compounds administered as medication for psychiatric illnesses, but little on response and risk epidemiology for their occupational effects. However, international studies have shown that systemic adverse effects, as sometimes seen when used therapeutically to treat psychiatric illnesses, are unlikely to occur at the lower exposure levels of these compounds in the workplace.

**For more information:**

[www.aioh.org.au](http://www.aioh.org.au)

## Niosh addresses naloxone

Niosh has published a new fact sheet to help employers and workers decide if they should establish a workplace naloxone availability and use programme. Naloxone, a drug used to reverse opioid overdoses, can temporarily halt some of their life-threatening effects and many in the emergency services carry it for that purpose. The sheet covers issues employers should consider when deciding whether to make the drug available, such as:

- whether the state in which the employer is located allows the administration of naloxone by non-licensed providers in the event of an overdose emergency;
- whether the employer has staff willing to be trained to provide naloxone;
- how quickly professional emergency response personnel can access a workplace to provide assistance; and
- whether a workplace has already experienced an opioid overdose.

**For more information:**

[www.cdc.gov/niosh](http://www.cdc.gov/niosh)

## AIHA offers e-learning

The AIHA has reiterated that it offers e-learning as “a resource where IH and OEHS professionals can find affordable, quality education, when it’s convenient for you”. A variety of different formats are available for both aspiring or current professionals in the field, which “save you time and money, and earn you contact hours toward maintaining your certification”, the AIHA said. For those that missed AIHce EXP 2018 or IOHA 2018, selected sessions are also available at the e-learning corner.

**For more information:**

[www.aiha.org](http://www.aiha.org)

## Osha begins ammonium programme

Osha is in the midst of a three-month education and outreach programme to employers about the hazards of fertiliser-grade ammonium nitrate (FGAN) and agricultural anhydrous ammonium. This is part of a new ‘regional emphasis programme’ targeting the fertiliser storage, mixing/blending, and distribution industry in the states of Arkansas, Kansas, Louisiana, Missouri, Nebraska,

Oklahoma and Texas. Workers in this industry face hazards that include fire, explosions, and exposure to toxic gases and hazardous chemicals, the agency said. Enforcement activities related to FGAN and anhydrous ammonium will continue to 30 September 2019.

**For more information:**

[www.osha.gov](http://www.osha.gov)

## Niosh develops new exposure software

The Niosh Mining Programme has developed new software that is intended to monitor occupational exposure to hazardous respirable crystalline silica (RCS) more effectively. The beta version of the Field Analysis of Silica Tool (FAST) works with commercially available Fourier transform infra-red analysers to determine a worker’s exposure to RCS dust immediately after a shift at work.

Niosh said that the key to controlling RCS at mines is the ability to assess the degree of exposure quickly. Mines that use the FAST software in combination with its monitoring approach, which uses portable FTIR analysers and dust sampling cassettes on site, will be able to address the source of exposure faster by eliminating the waiting time between collecting a sample and receiving the lab results.

**For more information:**

[www.cdc.gov/niosh](http://www.cdc.gov/niosh)

## Book chronicles America’s workers

The AIHA has released a collectible photo book of the famous labour and OH photographer Earl Dotter, entitled *Life’s Work: A 50-Year Photographic Chronicle of Working in the U.S.A.* Often referred to as the ‘American Worker’s Poet Laureate’, Mr Dotter illustrates the conditions of those who have worked in many different dangerous and unhealthy environments over the course of five decades. In particular, its 500 images personalise the ongoing toll taken on workers from environmentally-related exposure to asbestos, the association said.

**For more information:**

[www.aiha.org](http://www.aiha.org)



# Upcoming meetings

## AIOH 2018 Conference and Exhibition

**1-5 December 2018, Crown Conference Centre, Melbourne, Australia**

The 36th Annual Conference and Exhibition of the Australian Institute of Occupational Hygienists (AIOH) will provide opportunities for professional development on a wide range of traditional and trending occupational hygiene (OH) topics through a mixture of continuing education sessions, presentations from national and international speakers, and exhibitors showing products and services. The conference provides an opportunity for industry practitioners to obtain information essential in understanding and responding to key developments in OH.

[www.aioh.org.au/events-public/aioh-2018-conference](http://www.aioh.org.au/events-public/aioh-2018-conference)

## LEV - Extracting the Best Practices

**13 February 2019**

The British Occupational Hygiene Society (BOHS) and the Institute of Local Exhaust Ventilation Engineers (ILEVE) are holding their fourth joint event on local exhaust ventilation (LEV). The conference is aimed at those involved in LEV system design, installation, commissioning, examination and testing, servicing and maintenance work, or who own LEV installations, while also reaching out to those working within the broad field of OH. There will be papers and workshops delivering insight into and generating debate about the topics affecting LEV control and its role in the reduction of industrial disease.

[www.bohs.org](http://www.bohs.org)

## OH2019

**1-4 April 2019, Brighton Hilton Metropole, UK**

This three-day conference will bring together researchers, practitioners, regulators and other experts from around the world to discuss the latest in issues that affect health at work. Following on from the success of OH2018, which brought together a global audience of over 330 delegates, BOHS will once again be delivering an exciting programme which combines inspiring and thought-leading plenary sessions with scientific and technical sessions, as well as a range of interactive workshops and case studies. 'Early bird' rates are available until 28 February 2019.

[www.oh2019.com/registration](http://www.oh2019.com/registration)

## Michael E. Beard Conference: Asbestos & Fibrous Minerals Analysis & Research

**4-5 April 2019**

Sheraton Denver Downtown, Denver, Colorado, US

Sponsored by the American Society for Testing Materials (ASTM) Committee D22 on Air Quality, the conference is a two-day set of presentations on asbestos topics, which will be of interest to those who work in laboratories, use laboratory analytical data and/or need to understand how to interpret asbestos analytical results. The objective is to encourage the presentation of the most recent work in the field and to allow open and frank discussion of new ideas and possible interpretation of the data.

[www.astm.org/D22MBC2019](http://www.astm.org/D22MBC2019)

## AIHce EXP 2019

**20-22 May 2019, Minneapolis, Minnesota, US**

The American Industrial Hygiene Conference and Expo (AIHce EXP) provides access to the cutting-edge education, technologies and training professionals need to protect worker health. It is an excellent way to learn through a variety of engaging education session formats and a unique opportunity to engage with peers and exchange new concepts. And, if everyday challenges are making life difficult, there are hundreds of exhibitors ready to present usable ideas and tools. Early access registration opens on 4 December.

[www.aihce2019.org/Pages/default.aspx](http://www.aihce2019.org/Pages/default.aspx)



*Global Exposure Manager* has been compiled for IOHA by the on-line information service, Chemical Risk Manager.

### Disclaimer

While great care has been taken with the compilation of this newsletter, IOHA, its Directors, the editor and the authors of articles accept no responsibility for opinions, errors and omissions that may be made in this Newsletter. The responsibility for opinions expressed in signed articles rests solely with their authors and does not constitute an endorsement by IOHA.

### International Occupational Hygiene Association (IOHA)

5/6 Melbourne Business Court  
Millennium Way  
Derby  
DE24 8LZ UK  
[www.ioha.net](http://www.ioha.net)

T: +44 (0) 1332 298 101  
F: +44 (0) 1332 298 099  
E: [admin@ioha.net](mailto:admin@ioha.net)  
A Company Limited by Guarantee  
Registered in England No. 06327692

### Chemical Risk Manager

#### Editorial

Andrew Warmington:  
[andrew.warmington@chemicalwatch.com](mailto:andrew.warmington@chemicalwatch.com)

#### Production

Petya Grozeva: [petya.grozeva@chemicalwatch.com](mailto:petya.grozeva@chemicalwatch.com)

#### Sales

Charlotte Spencer: [lotte@chemicalwatch.com](mailto:lotte@chemicalwatch.com)  
Talbot House, Market Street, Shrewsbury SY1 1LG  
[www.chemicalwatch.com/crmhub](http://www.chemicalwatch.com/crmhub)  
© 2018 CW Research Ltd. All right reserved



# AIOH highlights silicosis ‘tragedy’

---

## Action called for after 22 cases emerge in stone benchtop industry

Brian Eva, president of the Australian Institute of Occupational Hygienists (AIOH), has written to Prime Minister Malcolm Turnbull about the multiple recent cases of silicosis in stonemasons working in the manufacture of kitchen tops. In September, it emerged that 22 silicosis claims had been lodged in the space of three weeks, including six from people who were diagnosed as terminally ill, and the Queensland Government issued an urgent warning to the industry. There were two previous terminal cases in the industry, in 2015 and 2017.

“Silicosis is a disease first recognised in the 19th century,” Mr Eva wrote. “It is well understood that it is caused by silica dust from working with stone. It is entirely preventable. Yet, we still see these cases arising in 2018. It should never have happened. It is a tragedy.” The AIOH also commended the actions of the Minister for Health, Greg Hunt, for his intervention through the Council of Australian Governments meeting on 12 October, but added that more work must be done on prevention.

Mr Eva said that exposure to toxic dusts in the workplace is entirely preventable, as dust can be suppressed by the use of simple controls like wet cutting or extraction ventilation and that good respirators are available to provide personal protection, yet workers often use inadequate or inappropriate respirators. The AIOH, he said, is willing to work with the government to raise awareness in small and family businesses, and for trades persons through their vocational training.

Queensland’s state Industrial Relations Minister Grace Grace has encouraged all workers in the engineered stone industry, past and present, to be tested for silicosis. “In most cases the workers had no symptoms, with the disease only being detected through health checks,” she said.

Silicosis is an incurable and often fatal lung disease caused by breathing dust containing fragments of crystalline silica. This dust can be released from concrete, masonry, sandstone, rock, paint and other abrasives by means of cutting, drilling or blasting. The commonest chronic form arises from at least ten years of exposure but there are also accelerated and acute forms, the latter arising from only weeks or months of very high exposure. Whereas natural marble contains only 5% silica, levels of up to 90% can be found in engineered stone.



The revelations emerged from a pilot audit by Workplace Health and Safety Queensland which began at the end of 2018 at ten of about 160 work sites in the state. Officers, said Ms Grace, found “extremely poor” work practices at some, including uncontrolled dry-cutting, inadequate ventilation, and limited masks and protective equipment. The agency is now training 22 more safety inspectors to audit the remaining manufacturers by the end of the year. She has also written to the Federal Government, urging a national response.

This is far from being the only major recent public health issue in Queensland’s traditional industries to involve the AIOH. In the past two years, the association has also been active in writing to the Coal Workers’ Pneumoconiosis (CWP) Select Committee inquiry that was established by the Queensland Parliament to look into occupational respiratory diseases. It gave a long series of recommendations on how mine operators should develop and implement an evidence-based dust management plan to control dust exposure in their mine.

“The AIOH notes that suitable and effective technologies and expertise to control dust exist in the mining industry,” the AIOH said in 2016. “All stakeholders in the industry must continue to work together to anticipate, identify and characterise dust hazards, then assess and control them. That said, the re-identification of CWP is sobering evidence of previous systems failure that present an opportunity to prevent future disease. Given the lag time for the development of CWP, there is now also a need to understand future risk.”

“As current dust exposure predicts future health risk, the AIOH recommends a review of coal industry dust exposure levels and time trends. As part of the review, assessment of the impact of concurrent crystalline silica exposure should also be undertaken. Finally, AIOH is aware that instrument and sensor technology is changing rapidly and a watching brief on new applications is essential.”

# Malaysia begins SME industrial hygiene enhancement project

Ten companies in Selangor province are the first in a new project targeted at a sector vital to the economy

Small and medium-sized enterprises (SMEs) play an important role in the economic development of Malaysia. A survey conducted in 2015 by the Department of Statistics Malaysia (DOSM) indicated that 98.5% of companies in the nation's services, manufacturing, agriculture, construction, mining and quarrying sectors were SMEs. It also found that SMEs accounted for 36.3% of total GDP.

Managing occupational safety and health (OSH) matters in SMEs is a challenge, in view of the current economic and business constraints. Placing the emphasis on industrial hygiene (IH) management in the workplace is even more challenging, especially when the effects are long-term and there is a lack of awareness among the workforce on the subject.

Statistics from the Malaysian Social Security Organisation in 2016 showed that there were a significant number of occupational incidents and illnesses amongst SMEs, mainly from noise-induced

hearing loss, injuries and illnesses due to exposure to hazardous chemicals, and various types of musculoskeletal disorders.

Workplace accidents, including occupational illness, pose a threat for SMEs, as they may cause a loss of production and high compensation costs that may hamper their continued growth.

In view of all this, there is a need to have a unique approach to enhance IH practices among SMEs, whereby more guidance and facilitation should be extended to SMEs to assist them in OSH implementation at the workplace. The Malaysian Industrial Hygiene Association (MIHA) has taken the lead by embarking on a special project aimed at mainstreaming IH among SMEs.

This is being achieved through collaboration between various parties, including the regulator, the Department of Occupational Safety and Health (DOSH), OSH practitioners and SMEs' management, to ensure that effective and sustainable OSH implementation can be achieved. The objectives of the project are to:

- help SMEs to understand the value of OSH in their business;
- raise SME management's awareness of the issues and associated risks of health hazards at workplaces;



*Collaboration with various parties is essential to ensure the effectiveness of the programme*



- identify key health risks and propose quick-fix improvements to manage the health risk within their resources;
- cultivate effective and sustainable IH management among SMEs; and
- reduce the rates and cases of occupational diseases in Malaysia.

As a start, ten identified SMEs in the state of Selangor were selected to participate in the project where each industry will be assigned with a dedicated MIHA volunteer to guide its management and workforce in identifying gaps in managing IH at workplaces and finding feasible solutions to mitigate the health risk.

The first visits to all ten companies have been conducted by a team comprised of dedicated MIHA volunteers and DOSH officers. MIHA will assist and provide mentoring services to SMEs to prepare their journey towards effective OSH implementation and compliance to the OSH Act 1994 at their respective workplaces. More programmes like this are planned in the future to cater for other SMEs in Malaysia.



*Discussion held between a MIHA volunteer, a DOSH officer and SMEs' management*



*Site visit conducted at one of the SMEs' workplaces*





**Sedulitas**  
FORWARD THROUGH INNOVATION

FOLLOW US ON  
f in



## NEED RELIABLE AND TRUSTED OCCUPATIONAL HYGIENE SERVICES FOR YOUR BUSINESS IN AFRICA?

### TALK TO SEDULITAS

<b>RADIATION MANAGEMENT</b> 	<b>RISK ASSESSMENTS</b> 	<b>EXPOSURE ASSESSMENTS</b> 	<b>DASHBOARDS</b> 	<b>DATABASES</b> 
<b>CUSTOM SOFTWARE APPLICATIONS</b> 	<b>DIGITIZE YOUR BUSINESS</b> 	<b>AUDITING</b> 	<b>HAZARD MAPS</b> 	<b>LEGAL APPOINTMENTS</b> 

www.sedulitas.co.za

 +27 82 551 4001 | 
  info@sedulitas.co.za | 
  27 St Andrews Way, Meerensee, 3901

# IOHA hands out two awards in Washington



@AIHA

*Andrea Hiddinga, President of IOHA 2017-18, presents Roger Alesbury with his IOHA Lifetime Achievement Award*

## First IOHA Collaboration Award and a Lifetime Achievement Award handed out

IOHA has announced that the Brick Kiln Committee of Workplace Health Without Borders (WHWB) and the Global Fairness Initiative (GFI) are the first recipients of its Collaboration Award and that Roger Alesbury has been given a Lifetime Achievement Award. Both announcements were made during the 11th IOHA International Scientific Conference, hosted by the American Industrial Hygiene Association (AIHA) in Washington, DC, on 24-26 September.

The IOHA Collaboration Award honours collaboration by an occupational or industrial hygiene (OH/IH) organisation with other countries or organisations to share ideas and technologies to improve the calibre of OH and IH world-wide. It was sponsored by Johnson & Johnson, Shell and the Netherlands Industrial Hygiene Association, NVvA.

The Brick Kiln Committee and GFI were nominated by AIHA, among a total of five nominees submitted by IOHA member associations. They were chosen as the winners by an independent judging panel for “achieving outstanding results through collaboration, leading to better global understanding of brick kiln hazards”. This project received high scores for its:

- alignment with IOHA’s 2016–2020 strategy, especially the ‘strong network’ strategic goal;

- direct impact on working conditions in the country where the project was carried out; and
- level of continuity for the future, in terms of cooperation that will lead to sustainable improvements.

It was particularly noted that the project not only covers traditional OH and IH issues, but also related fields, such as child labour, helping the most vulnerable people in society.

## Project on brick kilns

Research on brick kilns in Nepal was first done under Dr Sanjay Nath Khanal at Kathmandu University (KU). Dr William S. Carter from the University of Findlay, Ohio, was a Fulbright fellow at KU in 2009 and introduced the first course in occupational health there. This effort, Dr Carter says, “encouraged the development of investigation associated with occupational health, providing opportunities for students graduating from the Environmental Engineering and Science programme at KU to pursue careers in Nepal.”

In 2015, Dr Steve Thygerson of Brigham Young University received a Fulbright award and began working with Dr Seshananda Sanjel, assistant professor at KU School of Medical Sciences, on his PhD project to sample for silica in the brick kilns. At this time, Dr Carter also made contact with Homraj Acharya, country director for Nepal at the GFI and founder of the Better Brick Nepal programme. These discussions led to the realisation



that there was a need for a centre to coordinate information and activities.

Dr Carter was also working with WHWB and established its Brick Kiln Committee to interact with other groups and researchers in other countries working in the field, finding them in Pakistan, India, Egypt and Tanzania. “The committee realised the importance of relating the relationship of silica exposure to silicosis and tuberculosis. Efforts to obtain funding for a centre were undertaken in 2016,” he says.

WHWB and the GFI therefore worked together to establish a centre at KU to collect data on sampling, analysis, medical information, and the extent of child labour and hazardous exposures in brick kilns. Through this, researchers will better coordinate information on health and safety issues. The centre will provide insights into working conditions and child labour in brick kilns, effective exposure measurement techniques and ways of controlling exposure and protecting worker health.

“The major achievement to date is to increase communication among researchers in several countries. As a result of the communication, we have developed standard protocols in identifying the specific employment groups and consistent sampling protocols and procedures. This will allow us to compare worker exposure in different countries and under different working conditions,” Dr Carter says.

## Regional variation

For example, in South Asia, work is seasonal because of the monsoons and workers live and work near the kilns. Some sites there have adequate water supply to control the dust; others do not. In Egypt, by contrast, brick kiln activities operate year-round. “We hope to be able to compare work exposure and prevalence of tuberculosis and silicosis among workers under these diverse work environments,” says Dr Carter.

The committee has expanded the number of research and study groups, most recently adding two groups in Bangladesh and identifying the research that has been done in South Africa. It hopes to add other groups in less well developed countries,

particularly in South America and Africa. “Once the centre is fully established we hope to be able to distribute information electronically to fellow researchers,” adds Dr Carter.

“This project started with the efforts in Nepal, but the committee realises health and safety issues associated with brick kilns are similar around the world,” Dr Carter continues. “As well as issues associated with silica dust exposure, heat, noise and ergonomic stress are common wherever they operate. Issues are environmental as well as workplace-based. In Bangladesh, for example, the environmental pollution during the season when brick kilns are in operation is significantly higher.”

“Reports by attendees in Washington indicate there were many opportunities to increase contact and pursue discussion concerning the projects that people are involved with. As a committee we have been spurred to add members to the committee and pursue funding. We are now collaborating with a laboratory in Europe to have silica samples analysed at a reduced rate, so that we are able to collect more samples and ensure we can develop statistically significant exposure results.”

Andrea Hiddinga, president of IOHA for 2017-18, commented: “This new award was created to celebrate collaboration, which is key to everything IOHA stands for. The centre at KU will improve global understanding of brick kiln hazards and encourage further international cooperation.” The award was collected by Dr Sanjel and Mr Acharya.

## Lifetime Achievement Award

The IOHA Lifetime Achievement Award, meanwhile, honours individuals who have made significant contributions to the promotion and development of OH practice that improve workers’ health and welfare. To qualify, nominees must have been active in OH for at least 15 years and still be active, and to have contributed substantially to the field.

In all, there were eight nominees, selected from candidates identified by member associations to an awards committee composed of the last three past presidents. Roger Alesbury was nominated by the AIHA, with support from the Australian



*Steven Thygersen, Brigham Young University, Homraj Acharya, Global Fairness Initiative, Peter-John (Jakes) Jacobs, President of IOHA 2018-19 and Seshananda Sanjel, Workplace Health Without Borders and Kathmandu University School of Medical Sciences, at the presentation of the IOHA Collaboration Award.*



*Roger Alesbury, IOHA Lifetime Achievement Award winner, giving a presentation on 'Capability in occupational hygiene', 25 September 2018*

Institute of Occupational Hygiene (AIOH), the New Zealand Occupational Hygiene Society (NZOHS) and the Occupational Hygiene Training Association (OHTA). All four, AIHA said, "have affirmed his remarkable leadership and tireless commitment to the OH profession across a career of more than 40 years".

In the early 2000s, Mr Alesbury and others combined to develop the OHTA international training scheme and qualifications framework, a non-profit scheme that enables trainees to develop transferable, practical skills in a consistent way using freely available training materials. To date more than 8,000 exams have been taken in 50 countries and the concept is now endorsed by 25 IOHA member associations. Together with Stephen Bailey of GSK, he wrote a key article on the [need](#) for international training and qualifications in OH in 2013.

"The need for OHTA evolved from a series of discussions between senior colleagues from across industry. OHTA evolved as a means of helping to deliver OH capability across the world and encourage professional development," says Mr Alesbury. "I don't think of it in terms of a personal career achievement. It is a product of commitment by many in the OH community and an illustration of what can be achieved by teamwork. It's been about channelling our passion for OH and working together to improve worker health protection."

To be sustainable, he adds, any organisation has to evolve beyond its original founding principles. OHTA has now identified a range of individuals willing to take on the governance and establish a strategy for the next phase of development and growth. Under co-chairs Chris Laszcz-Davis and Nancy McClellan, "new partnerships are being developed and fresh ideas are emerging for OHTA's future direction".

"Memoranda of understanding have been signed with various organisations to help develop, review and strengthen the training packages. The modules are used by many — grassroots OH/IH organizations, companies of all size and professional certification bodies requiring verification of training in occupational health

protection. Plans are also under discussion to review and update the [website](#)," Mr Alesbury says.

Mr Alesbury's career has included 27 years at BP, of which 11 were spent as IH director. He has also at different times been president of the British Occupational Hygiene Society (BOHS), chair of the Chemical Industries Association's Health Advisory Group and a member of the European Commission Advisory Committee on Safety Hygiene and Health Protection at Work.

Ms Hiddinga commented: "Through the creation and development of OHTA, Roger Alesbury has established a remarkable legacy and his accomplishments align very closely with IOHA's objectives. Throughout his career he has dedicated himself to building OH capability and he continues to support the next generation of OH professionals."

Mr Alesbury also delivered a lecture during IOHA 2018. During this, he noted that data from the International Labour Organisation (ILO) and the World Health Organisation (WHO) on global occupational illness and related deaths show a clear need for more OH capability. The challenge is to convert need to demand. Employers have a need to protect their workers and need to be encouraged to create employment and training opportunities in OH.

"The talk illustrated one approach to building capability by engaging with employers and using simple steps to help them build the expertise of existing staff," he says. "By using a step-by-step approach, programmes can evolve to suit need and activities to improve health protection can start immediately. The building blocks provided by OHTA for training have successfully helped to develop skills and programs across the world. It is early days but, already, some participants have progressed to full professional certification."

"One key message is the need to engage with and communicate with employers about the need for quality health protection and the role of OH training. By listening to employer concerns, training and development programmes can be tailor-made to suit local needs."



# Skin health surveillance – why, when and how?

---

## Chris Packham of EnviroDerm Services looks at the key steps in maintaining a healthy skin regime in the workplace

Health surveillance is frequently carried out where there is potential in the workplace for damage to health due to the inhalation of toxic chemicals, noise and often also hand-arm vibration syndrome. Experience indicates that it is often carried out superficially or not at all where there is potential for damage to health due to workplace skin exposure. Yet this remains a significant cause of damage to health.

In 2008, the European Agency for Safety and Health at Work published the European Risk Observatory report: *Occupational skin diseases and dermal exposure in the EU (EU-25)*. This found that “skin diseases are the second most common work-related health problem in Europe”. They represent more than 25% of all occupational illnesses and over 90% of all work-related health problems in the 15-25 age group. Thus, they “are one of the most important emerging risks related to the exposure to chemical, physical and biological risk factors”.

One possible reason for this is that skin exposure is not widely recognised within the occupational health and safety profession. Another, perhaps, is that no clear targets have been set for compliance. Whereas the employer may seek to ensure that airborne exposure and noise levels are below those set in regulations, there is no such ‘standard’ for skin exposure.

Thus there is no way in which those responsible for health and safety in the workplace can indicate whether the employer is compliant or not. On this basis, some might think that it cannot be important. Moreover, how would the health and safety practitioner go about assessing what is needed to ensure that damage to health due to skin exposure does not occur?

While this article refers to UK standards and regulations, the content is generally applicable to any working environment and can easily be adapted to comply with other countries’ regulations.

### Why?

In the UK there is, however, a legal duty to carry out skin health surveillance. In the first instance, regulation 11 of the control of substances hazardous to health (COSHH) regulations states:

- (2) Health surveillance shall be treated as appropriate where:
- (b) The exposure of the employee to a substance hazardous to health is such that:

- (i) an identifiable disease or adverse health effect may be related to the exposure;
- (ii) there is reasonable likelihood that the disease or effect may occur under the particular conditions of his work; and
- (iii) there are valid techniques for detecting indications of the disease or effect, and the technique of investigation is of low risk to the employee.

Further guidance is provided in the sixth edition of the Approved Code of Practice (ACoP) for COSHH. Regulation 11(2)(b) gives examples of where health surveillance is appropriate under the criteria as being where:

- there have been previous cases of work-related ill health in the workforce or workplace;
- there is reliance on personal protective equipment (PPE), such as gloves or respirators, as an exposure control measure; for instance, printers wearing gloves to protect against solvents used during press cleaning, or paint sprayers using two-pack paints wearing respirators to prevent asthma. Even with the closest supervision, there is no guarantee that PPE will be effective at all times; or
- there is evidence of ill health in jobs within the industry; for example, frequent or prolonged contact with water (termed ‘wet working’) causing dermatitis in hairdressers and healthcare workers, or breathing in mists from chrome-plating baths causing chrome ulcers in platers.

Quite obviously the references to ‘gloves’ and ‘dermatitis’ indicate that health surveillance for skin is a regulatory requirement. The ACoP also includes a statement as to the purpose of health surveillance: “check control measures are working effectively by providing feedback on the accuracy of the risk assessment and the effectiveness of control measures to identify where further steps to manage risk are needed”.

In other words, health surveillance is not merely some esoteric exercise that the regulators have included, but a means of ensuring that the risk assessment and exposure measures are actually providing adequate control of exposure, as required by COSHH.

### When?

A question often asked is “When, or how often, do the regulations require skin health surveillance to be carried out?” No such frequency is actually stated. ‘How often’ will therefore depend on factors pertaining to the particular working environment. Factors that affect this will include:

- the results of the risk assessment for skin exposure;
- the confidence of those responsible in the effectiveness and reliability of any exposure management measures;
- the consequences of a failure of one of these measures;
- the severity and reversibility of the damage to health; and
- whether this is acute or chronic.

In many workplaces, an effective skin health system will provide for the frequency of surveillance to be matched to these factors, such that it will vary between different tasks. It may be prudent to start by conducting surveillance frequently, then reviewing the results and progressively extending the intervals for the specific task, depending upon the stability of the skin condition.

## How?

The final question in this article asks how one can carry out skin health surveillance, particularly since there is no current method of measuring skin exposure, nor any exposure limits to comply with. Basically, there are four main elements that may be found in a skin health surveillance system:

- the questionnaire;
- visual skin examination;
- biological (and biological effect) monitoring; and
- skin condition measurement.

There are some who take the view that simply sending out a questionnaire about their skin at appropriate intervals is sufficient for an effective skin health surveillance system. Evidence indicates that this is not. A visual examination requires someone who has been adequately trained and has sufficient experience to be able to consistently visually assess skin condition. It is highly improbable that every worker will have received the necessary level of training.

The primary functions of a questionnaire are to:

- gain background information;
- provide information in a structured manner for analysis;
- ensure that all aspects are covered;
- ensure compliance with the regulations;
- raise awareness;
- help decide if a problem is occupational or not; and
- give time for acclimatisation and relaxation of the test subject

To gain sufficient background information will require a relatively detailed questionnaire to be completed, preferably by an occupational health practitioner. This might contain questions relating to non-occupational factors, such as previous skin problems not associated with their work, hobbies, DIY and so on. A simpler questionnaire would suffice as a record of regular skin checks.

Together with the questionnaire, the visual skin examination forms the elements of a very basic skin check. This will certainly need to be conducted by someone with the appropriate training to ensure consistency. It is also important to ensure that the lighting under which the assessments are made is the same for each check.



It is surprising how even relatively small changes in lighting can affect how the skin condition is assessed.

Where there is a potential for skin penetration by chemicals that could cause damage to internal organs or systems, then biological monitoring should be considered. This is usually conducted by analysing breath, blood or, most commonly, urine to establish the level of the toxic chemical present in the body.

Note that this monitoring determines the total dose which is frequently a combination of the three routes of exposure (inhalation, ingestion and dermal). Since it is the total dose reaching the target organ that is critical, the level measured may then require further investigation to establish the relative significance of each route. Deciding how and when to take samples and what analysis technique to use requires both specialist expertise and, frequently, the appropriate analytical equipment. This is where specialist expertise is advisable.

Whilst there are good reasons why we cannot measure skin exposure, we can measure skin condition. Surprisingly, while it is widely accepted in occupational health that there is a need to measure lung function (spirometry) and possibly hearing loss (audiometry) so as to identify where workplace conditions are having an adverse effect on a worker's health, it is much less common for skin condition measurements to be part of the health surveillance programme.

However, there are simple measurements that can detect asymptomatic damage to the skin from exposure to irritant chemicals (and remember that, in this context, water is a skin-irritant) and thus provide invaluable data on how well the skin exposure management in the workplace is functioning, long before this will become apparent from visual assessment.

Simple skin hydration monitors can identify otherwise undetectable damage, enabling those responsible to identify damage that would otherwise only become apparent once the skin condition is that of a clinically relevant contact dermatitis. Action can then be taken to prevent further damage and the effect monitored by subsequent measurements. The benefit of this technique in preventing occupational skin disease can hardly be overstated.



# Collaborative training builds OH capacity to end TB in Southern Africa

---

Peter-John (Jakes) Jacobs, IOHA president 2018-2019 and Claudina Nogueira, ICOH vice-president for scientific committees 2018-2021, present the result of a recent training course in Zambia

Workplace Health Without Borders ([WHWB](#)), in collaboration with the New Partnership for Africa's Development ([NEPAD](#)) Agency, presented the Occupational Hygiene (OH) Training Association's ([OHTA](#)) 'Basic Principles of OH' (W201) training course at the Sherbourne Hotel in Kitwe, Zambia, from 23 to 27 July 2018. Other partners were the governments of Zambia (Ministries of Health, Mining, and Labour) and South Africa, and the School of Public Health of the University of the Witwatersrand in South Africa.

WHWB is an international non-profit organisation that was founded in 2011 with the main objective of addressing the limited expertise that exists globally for the prevention of workplace disease and injury. Through its established and growing network of professionals who volunteer their time and expertise, WHWB is able to offer capacity building in the broad occupational health field, through collaborations that benefit underserved populations and vulnerable workforces across the globe.

WHWB had a strong presence at the recent ICOH 2018 Congress in Dublin, and contributed to raising the profile of the OH discipline within ICOH. Two of the special sessions on international collaboration there showcased its work, as did the WHWB business meeting, which had the main aim of starting a collaboration process with occupational health professionals across the globe.

NEPAD Agency is the implementing agency of the African Union (AU) that facilitates and coordinates the development of continent-wide programmes and projects, mobilises resources and engages the global community, regional economic communities and AU member states in the implementation of these programmes and projects.

## Background

This training initiative was held under the umbrella of the Southern Africa Tuberculosis (TB) and Health Systems Support (SATBHSS) Project. This was launched in December 2016 as part

of the response to the TB challenge in the region, and is being implemented in four countries - Lesotho, Malawi, Mozambique and Zambia - with spillover benefits across the Southern African Development Community (SADC) region. Very broadly, its aim is to:

- improve the coverage and quality of TB control and occupational lung disease services; and
- strengthen regional capacity to manage the burden of these diseases.

Mining is an important economic contributor in the SADC region but this comes with a heavy burden of high TB incidence rates. This is due to poor working conditions in mining environments, such as prolonged exposure to respirable dust, poor ventilation and inadequate control of hazards. The situation is exacerbated by inadequately skilled OHs, who evaluate occupational exposure to hazards such as silica dust, and recommend appropriate control measures.

The project also aims to advise both the government and private sector of dust exposure control limits and dust management policies and standards. The training is expected to build a cadre of experts who will support the development and implementation of a standardised approach to the OH principles of identification, evaluation, monitoring and control of hazards, thereby ensuring healthier workplaces.

## Objectives and logistics

An introductory course was offered, outlining the broad principles of OH as the basis for the anticipation, recognition, evaluation and control of hazards encountered in the workplace. Course participants were active occupational health and OH professionals, willing to continue their training to become certified occupational hygienists. It was expected that, upon completion of the course, they would be able to motivate and provide support for practitioners in both the public and private sectors in their own countries, so to start the process of establishing their own OH associations.

A total of 19 delegates, as well as a NEPAD staff member from South Africa, participated in the training and sat for the post-course written examination open book. Participants represented the following SADC countries and were mostly employed at inspectorates of the respective Departments or Ministries of Labour, Mining and/or Health: Lesotho (7), Mozambique (2), Malawi (2), Zambia (8), and South Africa (1).



*Participants, facilitators, organisers and coordinators of the WHWB-NEPAD occupational hygiene training course held in Kitwe, Zambia, in July*

The training was funded for free by the World Bank. NEPAD Agency made the required logistical arrangements and covered the travel and accommodation costs of the facilitators and the course participants from the designated countries. The course was presented by WHWB through three voluntary facilitators:

- Peter-John (Jakes) Jacobs (course director and main facilitator; registered occupational hygienist, who is also the current IOHA president);
- Claudina Nogueira (Portuguese-English translator and facilitator; occupational health consultant and ICOH vice-president for scientific committees; and
- Goitsewang Keretsetse (facilitator; registered occupational hygienist and lecturer).

Prior to commencement, all participants were requested to stand for a moment of silence to remember the more than two million people who die each year as a result of workplace diseases and injuries. The facilitators supported one another throughout.

Training duties were equally divided, so that fatigue among them and learners were avoided, they were able to talk to their specific areas of expertise and share their own experiences, and easy translation and personal assistance could be provided for Portuguese speakers.

Arrangements for logistical assistance and technical support (one sound engineer and two technicians for simultaneous translation) were handled very professionally by NEPAD, the two main role-players being:

- Norman Khoza (senior programme officer – occupational health and safety specialist); and
- Nthabiseng Moiloa (project administrator)

## Outcomes

The course covered a large volume of information, focussing on basic principles of OH, and ran for five full days. Attendees received homework at the end of every day for completion and discussion at the start of the following day.

All participants displayed a positive attitude throughout and actively participated in group work and class discussions. There was clearly a 'hunger' for the information provided. Attendees worked late into the evenings in groups, completing homework and preparing for the following day's feedback sessions.

During the training week, participants were afforded the opportunity to visit the Occupational Health and Safety Institute's (OHSI) facilities in Kitwe, within walking distance from the training venue. This is a statutory agency in Zambia, where miners report for mandatory annual medical examinations, as per the requirements of the Workers Compensation Act No.10 of 1999.

More recently, the medical examinations and facilities at the OHSI have been made available to the general public, farmers, self-employed entities, SMEs and companies other than mines, who are concerned about the occupational health and wellbeing of their employees.



Post-course evaluations by participants revealed three critical needs:

- for the training to be spread out over a longer period – most participants deemed one week too short;
- further training, to build on this introductory module, i.e. the intermediate OHTA training modules; and
- more time to be spent on practical sessions for demonstration and use of OH measuring equipment, plus a possible worksite visit.

The training intervention was deemed a resounding success.

Key recommendations included:

- using the current group of course attendees as a 'learner pool' and supporting them through the OHTA intermediate training modules, to the point of international certification via ICertOH;
- using the same group of facilitators to present the intermediate modules to the 'learner pool' for the purpose of continuity; and

- extending the course duration to eight days, with lectures from Monday to Sunday and the examination on the Monday directly afterwards.

In the final wrap-up session prior to the examination, all participants, including facilitators and support staff, were asked to articulate a 'take-home message' of their main learnings and how they would apply their newly-acquired OH knowledge to actively contribute to reducing the global burden of fatal occupational disease and injuries.

The course also proved an ideal platform to share information and raise awareness about global organisations in occupational health and OH, that is WHWB, IOHA, ICOH, and their main objectives, mandates and membership benefits. By chance, it all happened shortly after the publication of the ICOH global statements on TB prevention in healthcare and silica-exposed workers, since when ICOH and IOHA have been active on the issue at UN level (*see page 4*).



*All participants displayed a positive attitude throughout the duration of the course and actively participated in group work and class discussions*

## News from:

# Chemical Risk Manager

---

### Single CMR Directive advocated

---

18 October 2018

The European Chemical Industry Council (Cefic), the IndustriAll European Trade Union, the European Trade Union Confederation (Etuc) and the European Chemical Employers Group (ECEG) have proposed replacing the carcinogens and mutagens Directive (CMD) and the chemical agents Directive (CAD) with a single carcinogen, mutagens and reprotoxicants (CMR) Directive. The four called this a “solid basis” for harmonised minimum requirements.

The European Commission has just completed consultations on the subject and should finalise its report in January. The current CMD applies to carcinogenic or mutagenic category 1A or 1B substances under the classification, labelling and packaging (CLP) Regulation, the CAD to any hazardous chemical present at work, including reprotoxics.

*For more information:*

[www.chemicalwatch.com/crmhub/71151](http://www.chemicalwatch.com/crmhub/71151)

### Firefighters exposed, says Niosh

---

16 October 2018

Firefighters can be exposed to levels of hazardous chemicals above the recommended limits, even when outside a burning building, according to a study by the National Institute for Occupational Safety and Health (Niosh) and the University of Illinois Fire Service Institute. Their work was US government-funded and has been published in the *Journal of Occupational and Environmental Hygiene*.

The study measured hazardous air emissions at various stages of fire response to gain a better understanding of the evolution, transport and dissipation of airborne contaminants in residential fires over time. The results highlight the importance of wearing self-contained breathing apparatus to protect both firefighters and those assigned to post-fire suppression jobs and outdoor duties from airborne chemicals, the scientists said.

*For more information:*

[www.chemicalwatch.com/crmhub/71060](http://www.chemicalwatch.com/crmhub/71060)





## EU-Osha releases infosheets

16 October 2018

The European Agency for Safety and Health at Work (EU-Osha) has released two information sheets designed to bolster its Healthy Workplaces Manage Dangerous Substances campaign. The first, on practical tools and guidance on dangerous substances in workplaces, suggests ways of reducing workers' exposure. The second, on manufactured nanomaterials:

- details relevant EU legislation;
- explores possible health impacts;
- advises employers on how to prevent or minimise worker exposure; and
- describes the main exposure routes.

Cefic joined the campaign as an official partner in August. It said that the chemicals sector is "in a unique position to share good practices and help improve knowledge of how to best handle dangerous substances and maintain safe and healthy workplaces".

*For more information:*

[www.chemicalwatch.com/crmhub/71078/](http://www.chemicalwatch.com/crmhub/71078/)

## Tool for measuring workplace safety

9 October 2018

A team led by scientists from the Harvard TH Chan School of Public Health, has designed an updated version of the workplace integrated safety and health (WISH) assessment tool to measure effective organisational policies, programmes and practices for promoting worker health and safety. They concluded that WISH has potential in informing organisational priority setting.

In the work, which was funded by Niosh, the scientists identified six core factors as central to best practices for protecting worker safety, health and wellbeing. These are:

- leadership commitment;
- participation;
- policies, programmes and practices that foster supportive working conditions;
- comprehensive and collaborative strategies;
- adherence to federal and state regulations and ethical norms; and
- data-driven change.

*For more information:*

[www.chemicalwatch.com/crmhub/70846](http://www.chemicalwatch.com/crmhub/70846)

## Silver nanoparticles review updated

2 October 2018

Niosh has released Current intelligence bulletin on the health effects of occupational exposure to silver nanomaterials, a draft

updated version of its 2016 review of the subject. This proposes a recommended exposure limit (RELs) of 0.9 µg/m<sup>3</sup> as an airborne respirable eight-hour time-weighted average concentration for silver nanoparticles of <100nm primary particle size and maintaining a 10µg/m<sup>3</sup> REL for total silver.

The aim of the first REL is to prevent workers from developing argyria, a blueish-grey pigmentation of the skin and mucus membranes, and argyrosis, a similar colouring of the eyes. To achieve this, the draft recommends the use of:

- workplace exposure assessments;
- engineering controls;
- safe work procedures;
- training and education; and
- established medical surveillance approaches.

*For more information:*

[www.chemicalwatch.com/crmhub/70664](http://www.chemicalwatch.com/crmhub/70664)



## Worker exposure a 'global health crisis'

12 September 2018

Baskut Tuncak, the UN special rapporteur on human rights and toxics, has proposed 15 principles that aim to help governments and businesses to protect workers better from exposure to hazardous chemicals – an issue he calls a "global health crisis".

These broadly cover:

- the responsibilities and duties of businesses and governments;
- worker access to information; and
- 'remedies' to hold those who violate workers rights accountable.

They are to be part of a report which will be presented to the 39<sup>th</sup> session of the UN's Human Rights Council. This says that many companies and governments are not upholding workers' rights to safe and healthy working conditions, as stipulated by the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights.

*For more information:*

[www.chemicalwatch.com/crmhub/70252](http://www.chemicalwatch.com/crmhub/70252)

## Taiwan upholds RCA verdict

30 August 2018

Taiwan's Supreme Court has upheld a ruling ordering RCA and three associated companies to pay damages estimated at more than NT\$560m (\$18m) to 151 ex-RCA workers and 111 spouses and children of deceased workers for extended exposure to 31 toxic chemicals between 1970 and 1992 at two RCA factories in Taiwan. This follows over 200 deaths and hundreds of cases of illness.

Lawyers will continue to work on another 246 cases, mainly where no external symptoms were visible, which were sent back to the high court for further review. The total awarded was just over 20% of what was originally demanded.

*For more information:*

[www.chemicalwatch.com/crmhub/69991](http://www.chemicalwatch.com/crmhub/69991)

## Final profile for two diisocyanates

17 August 2018

The US Agency for Toxic Substances and Disease Registry (ATSDR) has issued a toxicological profile, including a public health statement, for two common diisocyanates. This found limited data on whether methylene diphenyl diisocyanate (MDI) can cause cancer said and that the International Agency for Research on Cancer (Iarc) has found that it to be not classifiable as carcinogenic.



However, it also noted that the Department of Health and Human Services considers toluene diisocyanate (TDI) as "reasonably anticipated to be a human carcinogen" and its classification "as possibly carcinogenic to humans" by Iarc. Exposure to TDI can occur in the air from products such as adhesives, sealants, coatings, paints, craft materials and insulating foam.

*For more information:*

[www.chemicalwatch.com/crmhub/69796](http://www.chemicalwatch.com/crmhub/69796)



## Mexico makes changes to standard

18 July 2018

Mexico has made changes to its proposed new standard on the management and handling of hazardous chemicals and mixtures in the workplace, *Hazardous chemical substances and mixtures management at the workplace: Health and safety measures*. This followed a public consultation process in which the chemical industry participated.

Most notably, the standard would now apply to workplaces where hazardous chemical substances are processed, used, transported, repacked and stored, as well as those where they are handled. The revised draft also sees changes to labelling and precautionary statements, use of safety data sheets and training for employees. The final version should be published by about January.

*For more information:*

[www.chemicalwatch.com/crmhub/68739](http://www.chemicalwatch.com/crmhub/68739)



# **CW+** ChemicalRiskManager

The hub for product safety resources

## Product safety news and resources

Chemical Risk Manager is an **online publication** designed specifically to support **professionals managing the risk of chemicals** in the workplace, through the supply chain, and in products. It delivers **news and resources** to help them with practical challenges in their day-to-day roles.

### Benefits to you

- » A time-efficient, cost-effective way of keeping up with new tools and guidance as well as new products and services
- » Brings together in one place information that is essential to your team



### TOPICS COVERED



#### Hazard

Tox, ecotox, environmental fate, physchem resources



#### Exposure

Resources for modelling, measurement and monitoring



#### Risk

Resources for assessment and characterisation



#### Data Submission

Resources on regulatory data requirements



#### Customers

Resources for managing chemicals in articles



#### Workers

Resources on occupational hygiene



#### Suppliers

Resources for safe use communication

**START YOUR FREE TRIAL**

**www.chemicalwatch.com/crmhub**