

# Global Exposure Manager



The newsletter of the International Occupational Hygiene Association

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## In this issue

- Momentum building on OH, says new president
- 23<sup>rd</sup> Occupational Health Week takes place in Colombia
- Women and PPE: Still a major failing
- SAIOH annual conference 2017 takes place
- The 'Generally' Harmonised System: Preparing SDSs and labels for use around the world
- News from: Chemical Risk Manager

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

# Momentum building on OH, says new president

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**Andrea Hiddinga, president of IOHA, believes these are interesting times in occupational hygiene. Judith Chamberlain reports.**

Exciting times are ahead for occupational hygiene (OH), with many new initiatives on the way and lots of global activity boosting interest in better workplace health, according to the new president of IOHA, Andrea Hiddinga.

Ms Hiddinga, a Dutch national who took over the presidency from Dr Doo Yong Park on 30 October at the board meeting held in Medellín, Colombia, says: "I've been on the board of IOHA for ten years and I have never seen so much going on in the world in relation to OH. It's a really exciting time."

One example of this, she says, is the fact that it was the first time an IOHA board meeting has been held in Latin America for 30 years. This is partly a reflection of the big changes happening in that region but also because the difficulties with the language barrier have now been solved.

Ms Hiddinga says: "We tried for several years to hold a meeting there and it didn't work out, but now we have two board members who speak both Spanish and English so that has made it much easier to communicate effectively. In addition, all the English articles from *Global Exposure Manager* are now being translated into Spanish by a Colombian organisation, which is a really great improvement."

Being there for the first time, Ms Hiddinga commented on how fantastic it was to see how much OH work is going on in that region. "The Colombian association, Asociación Colombiana De Higiene Ocupacional (ACHO), showed us during the meeting the ways in which they are working to connect with the rest of the region."

ACHO has been a member of IOHA since 2008. It has organised and participated in many conferences, including a pan-American OH conference, which was hosted by Colombia in 2013, and an international summit on human vibrations in 2014, which resulted in the drafting of government guidelines.

Being in Colombia was "really great", says Ms Hiddinga. "I think IOHA was in a good place with so much happening in Latin America and there were lots of observers from other associations

in countries such as Chile and Venezuela. I was really happy to see how they are trying to get the others involved and it was good to give the region some attention."

Ms Hiddinga, who works as an occupational hygienist herself (see box), has been a board member since 2008, when she was asked if she would join as a volunteer. In 2015 she offered to write the new strategy for IOHA. "I decided if I want things to change, I have to take this opportunity to have some influence and I have to do it now. It was a great possibility to think about the vision/mission and the future of IOHA and translate them into new ideas. Together with Dr Jimmy Perkins from ACGIH we collated the information from the associations and wrote the new strategy.

"Because I had already made the strategy document, I thought it would be great to be able to be the president for this period, to carry out my own strategy and see it come to fruition. And we have already done a few things, for example the new newsletter."

**I decided if I want to have some influence I have to do it now, and it was a great opportunity to think about new possibilities and a vision**

**Andrea Hiddinga**

So what are Ms Hiddinga's key priorities for the year ahead? First and foremost, she believes, is the need to focus on the relationships that IOHA has, both internally and externally, to meet the strategic goal of the promotion of OH.

To improve communication internally, IOHA needs to explain what has been achieved and how work for this year is progressing so that member associations can see the benefits of helping the society to achieve its goals.

"We have to show member associations that actually we are doing a lot of things but sometimes the spin-off isn't that clear," she says. "I would really like to focus on that because we need the associations to help us achieve our goals by 2020. There is so much work to be done so we need to attract those societies and get more volunteers who can help us on specific topics."



For example, as IOHA is an NGO of the International Labour Organisation (ILO), it has begun to receive invitations to attend meetings – such as one in January on shipbuilding and ship repair – to adopt various codes of practice. IOHA would like to get involved at an earlier stage by identifying experts to help draft the codes.

“This is a great opportunity for us but if we want to have some influence we need people who are experts in these areas. These are not always people from the board but there are a lot of experts in the associations so we would love to involve them as volunteers”, Ms Hiddinga says.

IOHA would also like to share its successes so that the associations can see the added value of being a member. Ms Hiddinga has therefore done a report to be sent to the presidents and executive boards to give them an update of what has been done based on the work plan for 2016-2020, including where the organisation is now and what it wants to achieve in the next year.

“It’s also a good opportunity to ask if they want to help us on different topics. I decided I would do that at the beginning of my presidency so I can monitor progress. It’s the best way to get the message across clearly, so the presidents feel a little bit more involved,” she comments.

There are also a lot of initiatives at the moment to try and get more people involved with IOHA. Countries including Thailand, Tanzania, Guatemala, India and Turkey are in the process of setting up associations and IOHA is keen to support them, particularly through mentoring.

There is a lot of information out there so we need to look at how we get our message across. We’ve also asked our member organisations for their input so they feel involved

**Andrea Hiddinga**

“Many people are trying to set up their own organisations but sometimes they are starting off really small so if another country in the region can mentor them, it can be really beneficial.”

For example, South Africa is the only country whose national association is a member of IOHA at the moment in Africa but, as it is more aware of the cultural and political complexities of the region, it can help other countries such as Tanzania to get started.

As part of improving communications and building relationships, one of the biggest challenges this year is to build a new website as

that is where many new organisations first come across IOHA. So it is currently investigating how the website should look and how to make it easy for someone new in the field to find information or use it as a place to exchange ideas.

“There is a lot of information out there so we need to look at how we get our message across. We’ve also asked our member organisations for their input so they feel involved.”

External relationships are also a key focus for Ms Hiddinga. One example is the ILO. Two years ago, IOHA did not have any contact with it, but now the two organisations are starting to look at how they can work together.



### About the new president

Andrea Hiddinga studied environmental hygiene in Groningen, Netherlands, at the Professor van Hall Institute. After graduating in 1991, she studied OH at Wageningen University until 1994 and is now a registered occupational hygienist.

The first seven years of her career were spent with the state research institute, TNO, where she worked on large field studies to investigate inhalation and dermal exposure to pesticides and biocides. She also worked on the EU project Risk of Derm, one of whose results was a tool to estimate dermal exposure that is now used in REACH risk assessment.

In 2001, she moved to Arbo Unie, an occupational health services provider and has worked as an external consultant in different sectors. Since January 2015, she has been coordinator of the company’s Expert Centre for Chemical Risk Management. She has been on the IOHA board since 2008 as a representative of the Dutch OH association, NVvA, and as treasurer for IOHA from 2011 to 2015.

## IOHA Member Associations

Member organisations are highlighted in dark blue



Although all this is still at a very early stage, IOHA is looking at whether it can join a global coalition on occupational safety and health (OSH), which the ILO has just set up.

“ILO asked if organisations could join a coalition and we would like to be a part of that as it absolutely adds value. We’ve got a lot of experts in our association who could help with specific topics to give that coalition more support.”

IOHA also has a memorandum of understanding (MoU) with the International Commission on Occupational Health (ICOH) which finishes in May 2018. Ms Hiddinga is really keen to investigate how the MoU can be given more content because “it should be more than the presidents seeing each other once in a while – we should try and work together more on projects”.

IOHA’s next board meeting at the end of April is taking place in Dublin, because it coincides with the ICOH conference and provides a good opportunity to see how to work more together and improve collaboration.

“This is an important goal for us. For example, sometimes you have to make statements on specific topics for organisations such as WHO but it’s much more powerful if we can do joint statements.”

Other external relationships include the UN and Ms Hiddinga sees lots of potential from connecting with the UN Sustainable Development Goals (SDGs). For example, SDG 8 on decent work and economic growth is an area where IOHA can demonstrate the added value of what it is doing – and many occupational hygienists are unaware of the SDGs.

“It’s a great way to spread the OH message globally. If we improve working conditions (SDG 8) it means there is less poverty (SDG1) and less hunger (SDG 2). With decent working conditions we can also have influence on people’s health (SDG 3). If we can create more awareness of the effect of our work on health and income we could show the added value of OH.”

Ms Hiddinga was surprised that so many people do not seem to know about SDGs so that is the personal message that she wants to get across. At IOHA’s board meeting in Dublin, she will do a presentation on SDGs in a special session together with WHO, CDC/Niosh and INAIL.

As well as the Dublin meeting, organising and planning for the next IOHA conference in September in Washington, DC, is now in full swing. Ms Hiddinga wants to ensure there is plenty of discussion on how to help IOHA achieve its strategy and maximise networking opportunities.

As she points out, there is more than enough to do. The latest figures from ICOH and ILO suggest that the number of people dying from work-related injuries and illnesses has gone up from 2.34 million to 2.78 million. Although this may partly be due to better reporting, it points to the fact that OH standards are not necessarily getting better.

“At IOHA, we have a vital role to play in bringing these figures down and I am really looking forward to doing what I can to make us a really effective organisation. Our plans are ambitious but achievable and I have lots of support from the past president and the president-elect Peter-John Jacobs from South Africa – you can’t do it alone.”

## New 'Purple Book' published

The United Nations has published the seventh revised edition of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS), widely known as the 'Purple Book'. This provides additional guidance to extend the coverage of section 14 of safety data sheets, which covers transport information, "to all bulk cargoes transported under instruments of the International Maritime Organisation, regardless of their physical state".

Other additions include revised and further rationalised precautionary statements in Annex 3, which, among other items, addresses the codification and use of precautionary statements. Annex 7, which provides examples of arrangements of the GHS label elements, includes a new example addressing the labelling of small packages with fold-out labels.

**For more information:** [www.unece.org/trans/danger/publi/ghs/ghs\\_rev07/07files\\_e0.html#c61353](http://www.unece.org/trans/danger/publi/ghs/ghs_rev07/07files_e0.html#c61353)

## OH 2018 bookings open

Early bird bookings are now open until 28 February 2018 for OH2018, the premier occupational hygiene conference in the UK. This is organised by the British Occupational Hygiene Society (BOHS) and takes place at the Crowne Plaza in Stratford-upon-Avon, UK, on 16-18 April.

The three-day conference will bring together researchers, practitioners, regulators and other experts from around the world to discuss the very latest in issues that affect health at work. Professional development courses will take place on Monday 16 April.

The Warner lecture at OH2018 will be delivered by Simon Harmer, who joined the army as a combat medic in 1997 where they taught him to soldier and how to save life. He discovered his true passions in the army: sport and adventurous training. He enjoyed triathlon and loved competing in cross-country skiing.

In 2009 Simon's life changed forever after he received injuries from an explosion. With help, he rebuilt his life and threw himself into different challenges. Later, he became a volunteer ambassador for several service charities. He will talk about his experiences and what he has learned from them.

**For more information:** [www.oh-2018.com](http://www.oh-2018.com)

## BOHS hosts X2018

BOHS is also hosting X2018, the 9<sup>th</sup> international conference on the science of exposure assessment in Manchester on 24-26 September 2018. This three day international conference will bring together the leading experts to exchange knowledge in exposure assessment sciences for human health studies.

X2018 will contribute to the development of state-of-the-art methodologies and practices, and thereby improve our knowledge to effectively assess and control exposure to hazardous agents in

the work environment, at home and elsewhere in the general environment.

The call for papers is now open. BOHS is seeking abstracts on all aspects of exposure science. These can be submitted via the dedicated website, which also has all necessary information about the event itself.

**For more information:** [www.x2018.org](http://www.x2018.org)

## Diesel exhaust exposure linked to lung cancer

A Swedish study by Anna Ilar and others, which was published in the *European Journal of Epidemiology* in June, has confirmed that occupational exposure to diesel engine exhaust emissions (DEEEs) are a major cause of lung cancers. The study found a 65% higher rate in workers exposed to elemental carbon, one of the components of DEEEs, at levels above 33µg/m<sup>3</sup>.

Exposure to DEEEs appears to be associated with a particularly high risk of specific types of lung cancer, such as squamous cell carcinomas, which originate in the pulmonary mucosa, and large cell undifferentiated carcinomas. Trade unions recently campaigned for the ongoing revision of the EU's carcinogens or mutagens Directive to include more measures to protect workers from DEEEs, but without success.

**For more information:** [www.ncbi.nlm.nih.gov/pubmed/28585123](http://www.ncbi.nlm.nih.gov/pubmed/28585123)

## Niosh honours three mining firms

The National Institute for Occupational Safety and Health (Niosh), the federal agency that researches and makes recommendations to prevent work-related injuries, illnesses and deaths, has recognised the efforts of three firms in developing new equipment or tools, or using existing technology in new ways.

All three were given 2017 Niosh Mine Safety and Health Technology Innovations Awards in Washington, DC, on 6 November. They were:

- Peabody Energy, in the coal category, for the redesign of seat belt restraints in its haul trucks by adding three points and electronic controls, thus helping to prevent injuries during sudden jolts or rollover events;
- Kinross Gold, in the metal category, for its redesigned strike hammer, which reduces workers' exposure to airborne contaminants being kicked up when slag is fractured and from pieces of hot slag ejecting from moulds and causing burns; and
- Freeport-McMoRan, also in the metal category, for technologies including a novel use of drones rather than electrical workers to view power lines, thus reducing the risk of falls, electrocutions and other injuries.

Separately, Niosh has launched its Centre for Occupational Robotics Research, which will assess the potential benefits and risks of robot workers and develop guidance for safe interactions



between humans and robots. Niosh researchers have identified 61 robot-related workplace deaths between 1992 and 2015.

The centre will continue to monitor trends in injuries associated with both traditional and emerging robotics technologies, while Niosh will work with partners in academia, industry and government to establish risk profiles of robotic workplaces.

The centre's first formal partnership was established on 5 October, with the Occupational Safety and Health Administration (Osha) and the Robotics Industry Association.

**For more information:** [www.cdc.gov/niosh/](http://www.cdc.gov/niosh/)

### 'White Book' now out

A revised two-volume third edition of the AIHA publication 'The occupational environment: Its evaluation, control and management', also known as the 'White Book' is now available.

This includes comprehensive information on hazard recognition and evaluation, physical agents, the human environment, controlling the occupational environment and programme management. More than half of the chapters have been completely rewritten, while others have been updated to include the most current tools, methodologies and knowledge available.

**For more information:** [www.online-ams.aiha.org/](http://www.online-ams.aiha.org/)

### Too few asthma risk workers get vaccine

According to a new study by the Center for Disease Control (CDC), only 54% of adults with work-related asthma in the US have been vaccinated against pneumococcal disease, including pneumonia, despite being at elevated risk. CDC recommends that all adults aged from 19 to 64 with asthma should have the pneumococcal polysaccharide vaccine.

The survey, which was carried out by Niosh, also found that pneumococcal vaccine coverage was lowest among Hispanics (36%), those without health insurance (39%) and those aged 18 to 44 (42%). An estimated 900,000 Americans contract pneumococcal pneumonia each year; 5-7% die from it. Adults with asthma who get the disease are at risk of further complications, including asthma exacerbation and invasive pneumococcal disease.

**For more information:** [www.ajpmonline.org/article/S0749-3797\(17\)30429-4/fulltext](http://www.ajpmonline.org/article/S0749-3797(17)30429-4/fulltext)

### AIHCe recordings available

The American Industrial Hygiene Association (AIHA) has announced that recordings of sessions from the AIHCe Congress are now available for purchase. Discounts of 15% are available for themed 'bundles' of papers:

- confined spaces;
- data management and interpretation;
- emergency response;

- ergonomics;
- exposure assessment;
- global standard of care;
- hazard and control banding;
- nanotechnology and nanomaterials;
- noise;
- operational and strategic planning in laboratories;
- real-time detection and sensors;
- respiratory protection;
- risk assessment;
- sampling and analysis; and
- silica

Individual papers and sessions are also available.

**For more information:** [www.aiha.org/education/eLearning](http://www.aiha.org/education/eLearning)

### BOHS appoints new CEO, begins asbestos roadshow

BOHS has appointed Simon Festing as its new CEO. Mr Festing, who took up the role on 27 November, had previously held similar roles at both the Chartered Institution of Water and Environmental Management and the Society for General Microbiology.

Shortly before this, the BOHS held its official launch of the new Faculty of Asbestos Assessment and Management (FAAM), an association for professionals in the asbestos industry, in London. Membership is now open via the BOHS website. BOHS has been a pioneer in protection from asbestos since the 1960s.

FAAM registrar Martin Stear said: "FAAM's vision is to establish, develop and maintain standards of competence in asbestos assessment and management practice for its members, and act as the guardian of professional standards and ethics in the profession of asbestos assessment and management."

**For more information:** [www.bohs.org](http://www.bohs.org)

### IOHA 2018 proposals sought

The AIHA has announced that it is seeking proposals for the IOHA 2018 conference in the following areas:

- hazard recognition, evaluation and controls;
- industries;
- physical hazards;
- IH programme management; and
- emerging issues



The deadline for proposals is 29 January 2018. The conference itself takes place in Washington, DC, on 24-26 September 2018.

**For more information:** [www.aiha.org/events/IOHA2018/Proposals/Pages/default.aspx](http://www.aiha.org/events/IOHA2018/Proposals/Pages/default.aspx)

# 23<sup>rd</sup> Occupational Health Week takes place in Colombia

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*The 23<sup>rd</sup> Occupational Health Week took place in Medellín, Colombia*

## Colombia hosted the IOHA board meeting alongside its main domestic event in November.

The IOHA board meeting kicked off the annual gathering in Medellín this autumn. The 23<sup>rd</sup> Occupational Health Week, entitled 'The human being in the future world of work', took place in Medellín, Colombia, from 31 October to 3 November.

This is an annual, international event bringing together those involved in health and safety at work in Colombia, including government bodies, private and public sector companies, academia, representatives of professional bodies, world-ranking scientists and workers, among others.

They come together at this event to showcase their advances and experiences, exchange knowledge and to work for the improvement of the health and well-being of, and environmental conditions for, the working population, as well as strengthening their activities for a culture of promotion and prevention.

This year, activities began on Monday 30 October with the IOHA board meeting. Nine member countries were present and one more was linked in by teleconference. At the end of the full day meeting, those taking part were invited to view the Fernando Botero galleries in the Museum of Antiquities, followed by dinner and Andean music.

The academic proceedings of the week began on 31 October with the plenary session on 'Integrated management of carcinogens: The challenge to business sustainability'. Experts from the fields of occupational hygiene, health at work and related disciplines, plus invited guests from government, industry and academia made presentations on and discussed this theme.

On Wednesday 1 November, academic seminars took place on the following themes related to the key focus areas of the event:

- Regulatory upgrade: Legislative advances in health and safety;
- Humans as agents of change and transformation through emotional intelligence;

- Errors and rule-breaking in accidents: The human and organisational factors in safety;
- Management of safety processes as a tool for preventing accidents;
- Tools for implementing a preventative culture and a return to work;
- Statistics in the assessment of occupational exposure;
- The new generations in the organisations of the 21st century;
- Managing the present for the future of health and safety; and
- Assessment of occupational exposure to carcinogens.

On the morning of Thursday, 2 November, the first sessions took place of the XXXVII congress of ergonomics, hygiene, medicine and occupational security and the 16th Colombian congress on ergonomics 'More human working environments and daily lives'. It began with a welcome from the government authorities and the labour unions from the field of health and safety at work.

The opening discussion was led by Dr Italo Cardona, principal specialist in labour law at the Office of Information Technology's (OIT) Office of Work Administration for the Andean countries. This discussion had as its theme 'Life, reality and work: Challenges for the future'. Participants also included:

- the philosopher and theologian Edward Posada;
- Alejandro Franco, director of 'Track N', a body that works to bring about innovation in Medellín through partnerships with science and technology innovators to improve competitiveness; and,
- Jesus Villena, a specialist in human and organisation factors in industrial safety.

In the afternoon, the academic conference included presentations by domestic and international guests, as well as those attendees who had sent proposals for evaluation by the organising committee on the thematic tracks of the meeting. In addition, the special four-nation session took place. This was organised by the OIT and had participative ergonomics as its focus.

The aim of this session was to understand the advances and changes taking place in the world of work, as well as to share reflections and suggestions about the future we want. It was



chaired by Professor Juan Carlos Hiba, a former OIT official, with panellists from all the relevant fields.

Julio Fernando Castro Alfonso from the social security department of the Central Union of Workers represented workers, while Dr Gabriel Alvaro Zapata of Fenalco Solidario, a Medellín-based company that promotes social responsibility and sustainability in business, represented employers. Dr Emilio Cadavid Guzmán, president of the Colombian Society of Ergonomists and Dr Victorio Martínez Castro, adviser to the Mexican Society of Ergonomists, likewise represented that field.

Friday 3 November saw further sessions on the various thematic tracks of the conference in the morning and afternoon. During the event, it was also possible to visit the poster exhibition showcasing experiences and applied projects, the ninth photographic competition and the commercial showcase, featuring companies offering products and services in the field of health and safety at work.

The *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 the IOHA.

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# Upcoming meetings

## Indoor Air Quality Association (IAQA) Annual Meeting 2018: Clearing the Air on Indoor Air Quality

**2-24 January, Chicago Hilton, Illinois, US**

The meeting includes a technical programme featuring over 40 sessions of IAQ technology and education, plus in-depth pre-conference workshops that provide fundamental study and career development. Delegates also have access to the parallel International Air Conditioning, Heating, Refrigerating Exposition (AHR Expo), the world's largest marketplace in the field, taking place at the McCormick Place Exhibition Centre.

[www.iaqa.org/annual-meeting/](http://www.iaqa.org/annual-meeting/)

## 14<sup>th</sup> European Seminar on Personal Protective Equipment (PPE)

**23-25 January 2018, Hotel Riekonlinna, Saariselkä, Finland**

The aim of the seminar is to bring together European PPE experts dealing with legislation, standardisation, selection and use of PPE, testing, certification, research, manufacturing, market surveillance and workplace inspections. The topics dealt with in presentations, workshops, posters and demonstrations are: new PPE regulation and its implementation; PPE innovations and new research results; trends in PPE standardisation; use of PPE; and the influence of other legislation on PPE.

[www.ttl.fi/en/ppe2018/](http://www.ttl.fi/en/ppe2018/)

## Korean Industrial Hygiene Association (KIHA) 2018 Winter Conference

**31 January – 2 February 2018, The Ocean Resort, Yeosu, Korea.**

The main theme of the conference is to 'Explore a new paradigm of industrial hygiene'. It includes keynote speeches and various other programmes, such as continuous career development training, concurrent sessions, a round table and a lunch talk and panel discussion for IH policy. There is also an international session with simultaneous interpretations for international participants.

[www.kiha.kr](http://www.kiha.kr)

## Health and Wellbeing at Work 2018

**6-7 March 2018, NEC, Birmingham**

Now in its 12th year, Health and Wellbeing at Work is a conference and exhibition organised by Sterling Events. It is all about improving the health and well-being of work-aged people by profiling national developments, service innovations, examples of best practice and the latest research in the field. Attendees and exhibitors come from the worlds of healthcare and rehabilitation, occupational psychology, behaviour and well-being, HR and health and safety generally, as well as OH.

[www.healthwellbeingwork.co.uk](http://www.healthwellbeingwork.co.uk)

## Occupational Hygiene (OH) 2018,

**16-18 April 2018, Crowne Plaza, Hotel, Stratford-upon-Avon, UK**

Organised by the British Occupational Health Society (BOHS)

OH 2018 is the UK's main conference in the field of worker health, protection, focusing on OH and the prevention of occupational ill-health and disease. It will include three days of keynote speakers, oral presentations, themed sessions and workshops, bring together researchers, practitioners, regulators and other experts from around the world to discuss issues that affect health at work. Professional development courses also take place on 16 April.

[www.oh-2018.com](http://www.oh-2018.com)

## 32<sup>nd</sup> International Congress on Occupational Health (ICOH)

**29 April-4 May 2018, Convention Centre Dublin, Ireland.**

Organised by the International Commission on Occupational Health (ICOH) and the Faculty of Occupational Medicine of the Royal College of Physicians of Ireland, this congress seeks to: cover a wide range of occupational safety and health topics, demonstrating how research translates into excellence in practice; advance research and evidence-based approaches in OSH by promoting local, regional and global examples; and offer a blend of sessions that will demonstrate the scope of OSH practice and how that can effectively protect and promote the health of all workers.

[www.icoh2018.org/wp/](http://www.icoh2018.org/wp/)

Visit our website for an up to date list of events:

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



# Women and PPE: Still a major failing

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Personal protective equipment is still not always designed around the needs of women workers. Dan Lee reports.

Many of the numerous businesses dealing with dangerous chemicals and other hazardous substances are failing to give women personal protective equipment (PPE) as effective as the protection given to male counterparts. This is increasing risks and causing workplace resentment, campaigners and researchers say.

Frequently, women are offered protective clothing designed for men. It is often too big or just ill-suited to women. The issue has been a concern for women for decades, according to Hannah Curtis, research coordinator at the University of Washington School of Public Health (UWSPH) and co-author of a recent report on the subject covering multiple hazards.

“Lack of women-specific PPE was a prominent theme in our focus groups,” she says. Women are significantly more likely than men (31% to 9%, respectively) to report PPE not fitting them properly, particularly older women and those new to the trade. Many have reported buying their own equipment as a result.”

PPE items that conform to the body (such as coveralls, gloves and fall harnesses) were the least likely to fit women properly, the report shows. Some companies even think they simply need to provide PPE in a different colour to make it appropriate for women, according to other campaigners.

“Most PPE is designed for men’s bodies and is too large for women. Ill-fitting PPE can pose real threats to women’s well-being: too large gloves can be caught in machinery; large boots can cause tripping; and fall harnesses that are not secure can fail to protect workers during falls,” Ms Curtis adds.

Women’s minority status — only 3% of skilled trades workers in the USA are women, a percentage that has barely changed in 40 years — creates a disincentive for employers and manufacturers to purchase clothing and tools in a variety of sizes.

## Pregnancy concerns

Exposure of women who are planning pregnancies or are pregnant is a key area of concern for the chemicals industry. “There are particular chemicals which present gender-specific risks,” says Adrian Hirst, a chartered occupational hygienist and past president of the British Occupational Hygiene Society (BOHS).

“There are also chemicals that affect the endocrine system and in particular the reproductive organs. Some affect the unborn child in women and some affect male fertility. However, PPE is low down in the hierarchy of control and employers are required to use controls other than PPE.”

Mr Hirst’s research is backed up by a study from researchers at the University of Rome and Italy’s National Institute of Health, published in 2008. It found that greenhouse workers — who are mostly temporary and female — are often excluded from training programmes and face risks from various compounds, such as pesticide sprays and cultures.

The study found that even less attention has been paid to the safety of pregnant greenhouse workers, “who might have a higher risk than the rest of the population for adverse pregnancy outcomes and reduction in fertility”.

Increased risk of adverse pregnancy outcomes — in particular spontaneous abortion — was observed among greenhouse floriculture workers in Colombia, Finland and Ontario.

Meanwhile, female greenhouse workers in the Danish gardeners trade union who were handling cultures and spraying pesticides without protection experienced a significant reduction in fertility. Mr Hirst says: “Generally, employers don’t put the time and effort into selection and consulting with employees. For PPE to work correctly, it’s important that the wearer understands what it does and how it protects them and has faith in its performance.

“If a worker doesn’t believe that the PPE will protect them, then they will generally not wear it correctly. PPE not being gender-specific may be just one of the reasons why workers don’t have faith in it. It is important for employers to address these issues.”

## Size of the problem

The UK’s Trades Union Congress (TUC) has recently published a report entitled ‘*One size does not fit all*’ and a guide focusing on the issue. The problem, says Hugh Robertson, the TUC’s senior

policy officer for health and safety, stretches across all sectors from manufacturing and construction to the police, rail and coastguard services.

“It is certainly not a new problem, but has become more of an issue as a growing number of women are now working in areas such as engineering and construction. The traditional job segregation is breaking down, which has highlighted the issue,” he says.

One woman, who did not want to be identified, told the authors of the report: “They gave me a welding leather jacket that was a foot longer than my hand. They gave me gloves so humongous, I couldn’t even pick anything up.”

Another woman similarly said: “You can be hurt. If you happen to have a pair of gloves on, and they’re too big, and, say, you’re doing some work, that glove could get wrapped up in a fan belt or anything with moving parts - you can get hurt if your clothing is not fitted right.”

A US study by researchers at the Donald and Barbara Zucker School of Medicine at Hofstra/Northwell University in New York in 2016 found that a majority of women reported fit problems for many types of PPE, including gloves, harnesses, safety vests, work boots, outerwear. Key complaints included:

- the equipment provided by contractors was too large;
- female workers purchasing their own PPE;
- exposure to various safety hazards from poorly fitted PPE; and
- a perceived indifferent safety culture.

Businesses’ reluctance to spend extra money for more equipment or clothing seems to be one of the most significant roots of the problem. “The challenge,” Mr Curtis says, “is having employers who are willing to buy and stock different sizes of equipment. And sometimes equipment designed for women focuses more on fashion than safety.”

## Purchasing power

Mr Robertson at the TUC offers a possible solution. “In terms of cost, manufacturers say that their stock ranges and pricing policies are determined by demand. Often employers are simply not making the correct demands. This could be rectified by the trade bodies negotiating with suppliers,” he suggests.

Andrzej Palka, European marketing manager at a chemicals giant that recently merged with Dow and DuPont, which is also a PPE manufacturer, agrees. “It is important for employees to work with their purchasing department to ensure the right size garments are available for their use. While we offer a wide range of sizes, employers might stock a more limited range, which can lead to fit issues,” he says.

“Workers should be fit tested and provided with the proper-sized PPE to ensure that they are able to perform their role safely. We will continue to get market feedback and evaluate modifications

needed in our product portfolio to make sure all workers’ needs for protection are met.”

There is legislation and regulation covering PPE in most countries. In the UK, for example, the Management of Health and Safety at Work Regulations 1999 set out specific requirements for new and expectant mothers.

Within this, Regulation 16 states: “Risk assessment in respect of new and expectant mothers’ requires that where women of a childbearing age are working, the general risk assessment ... shall include an assessment of the risks which are caused by reason of her condition (i.e. pregnancy or recent birth) to the health and safety of a new or expectant mother or to that of her baby from any processes or working conditions, or physical, biological or chemical agents.”

## Having to ask

Campaigners blame a later passage in the regulation for potentially adding to the problem. It says: “Where the other precautions ... would not avoid these risks, the employer shall, if it is reasonable to do so, alter her working conditions or hours of work, or if it is not reasonable to do so, suspend the employee from work for so long as is necessary to avoid such risk.”

As a result, they say, women can feel pressured to conceal the fact that they are pregnant or struggling for fear of losing work and income. This point is supported by the University of Washington research, which reveals a major focus group theme to be a fear of reporting safety concerns.

“Women say that they do not report ill-fitting PPE to their supervisors because they are worried about being laid off. Some say that supervisors do not take their concerns seriously and others do not complain because they are afraid of falling into sexist stereotypes about women not being capable of hard work,” it says.

Nearly 25% of the women surveyed did not feel comfortable asking for better PPE, according to the university’s research. One third of these women listed “fear of being labelled as a complainer by co-workers” as the primary reason and 20% listed “fear of layoff”.

Beating these types of fear is a big part of the battle and the UWSPH is piloting a mentoring programme based on its research. It is designed to reduce health and safety risks for women apprentices. Experienced workers support apprentices as they learn to find their way round male-dominated culture and ask for what they need on the job.

A key part of the programme concentrates on problem solving and speaking up about inadequate PPE. The researchers hope that “by providing new women workers with leadership skills, and training mentors to understand how the masculine trades culture can negatively impact tradeswomen’s well-being, we can improve women’s safety.”



# SAIOH annual conference 2017 takes place

**Claudina Nogueira, a council member of the Southern African Institute for Occupational Hygiene, looks back at this year's key event**

Without a doubt, the highlight of the year for the Southern African Institute for Occupational Hygiene (SAIOH) was its annual conference. This was held from 25 to 27 October at Misty Hills Country Hotel and Conference Venue, nestled in the foothills of the Swartkop mountains in the Cradle of Humankind, on the threshold of the beautiful Kromdraai Valley in Muldersdrift, Gauteng province.

The Cradle of Humankind World Heritage Site, one of eight in the country, boasts a rich fossil history - 40% of all hominid fossils worldwide - thanks to the rare preservation conditions of the area's dolomitic limestone ridges. There are 15 fossil sites in the core area which is also home to a diversity of birds, animals and plants, some of which are rare or endangered.

## Scientific programme

The conference was hosted by the SAIOH Gauteng branch and was attended by approximately 150 delegates, including presenters, exhibitors and SAIOH support staff. As well as South Africa, they included visitors from the US, Canada, Zambia, Malawi and Mozambique.

In keeping with the conference theme 'Occupational hygiene (OH): Building bridges beyond borders', the scientific programme, which ran from 26 to 27 October, comprised rich and varied offerings, including three international and two regional or national keynote addresses from:

- **Marianne Levitsky**, immediate past president of Workplace Health Without Borders, occupational hygienist and senior associate at ECOH Management of Canada – 'Workplace health and the global hygiene community';
- **Eric Esswein** – senior occupational hygienist, National Institute for Occupational Safety and Health (NIOSH) in the US – 'Decision-making in the midst of uncertainty: An occupational hygienist responding to bioterrorism, SARS and ebola';
- **Professor Jérôme Lavoué**, associate professor, Department of Environmental and Occupational Health at the University of Montreal in Canada – 'Exposure Statistics';



*Delegates came from far and wide to the SAIOH conference*

- **Ryno Botha** - CEO and co-founder of CareTac, and an R&D scientist and lecturer – 'A critical review of radon-associated risks in South Africa: Global OH perspectives'; and
- **Norman Khoza**, representing Chimwemwe Chamdimba, principal policy specialist at the New Partnership for Africa's Development (NEPAD) agency – 'The Southern Africa tuberculosis and health systems project and identifying opportunities for contributions from OH'.

Six presentations from SAIOH stakeholder and sister organisations took place in a special session dedicated to their respective opinions and views on challenges in OH and occupational health. The organisations taking part were:

- Department of Labour, Gauteng Health Department;
- Department of Mineral Resources, Gauteng Health Department;
- South African Society of Occupational Medicine (SASOM);
- South African Society of OH Nursing Practitioners (SASOHN); and
- OH Approved Inspection Authority (OH-AIA) association;

In addition, there was a special interactive session dedicated to the SAIOH certification process presented by three members of the SAIOH professional certification committee. Finally in the

scientific programme, there were 20 oral and poster presentations spanning various sub-themes:

- partnerships and collaborations in OH;
- research and innovation;
- management and quality systems;
- OH stressors; and
- an opinion piece on unethical behaviour and practices in the field of OH.

## Other events

The SAIOH annual general meeting (AGM) was held on the evening of Thursday 26 October. It was attended by 82 participants, both members and non-members. On Wednesday 25 October, four half-day pre-conference professional development courses (PDCs) were offered and a record number of around 65 delegates signed up. The presenters and subjects were:

- PDC 1: Eric Esswein – ‘Determining worker exposure risks in modern oil and gas extraction: Implications for the Karoo?’;
- PDC2: Ryno Botha – ‘Occupational radon exposure management systems and mitigation challenges – for the construction sector and beyond’;
- PDC 3: Marianne Levitsky – ‘Global health, community and culture’; and
- PDC 4: Johan Snyman, lead mechanical engineer at BBE Consulting, South Africa – ‘Evaluating the effectiveness of an industrial ventilation system to ensure airborne pollutant exposure compliance’.

At the conference’s gala dinner and SAIOH awards function for the year 2016, which was also held on the evening of Thursday 26, SAIOH members were acknowledged and congratulated for their contributions to the OH profession. The following awards were bestowed:

- Top author – OH article of the year: Dr Leon Harmse (Tshwane University of Technology), who completed his PhD degree recently, for his publication, with JC Engelbrecht and JL Bekker, ‘The impact of physical and ergonomic hazards on poultry abattoir processing workers: A review’ in the *International Journal of Environmental Research and Public Health* 2016 13(2):197 (doi:10.3390/ijerph13020197);
- Personality of the year: Celia Keet (OH Monitoring Services and chair of the SAIOH Cape West branch);
- Occupational hygienist of the year: Keneilwe Matjola (Orapa mine, Debswana, Botswana);
- Vocational education and training student of the year: Christa van Dyk (Namdeb Diamond Corporation, Namibia);
- Tertiary student of the year (two awards bestowed): Marelé Keyter and Yolandi Jordaan (both of North-West University and Gijima Holdings);
- Top achiever award – ‘OH assistant’ assessment: Liezille Schoonbee (Tenneco Ride Control);
- Top achiever award – ‘OH technologist’ assessment: Anton Coetzer (South African Nuclear Energy Corporation);



*Peter-John 'Jakes' Jacobs (centre), SAIOH council member and president elect of IOHA at the AGM, with (left) Julie Hills, SAIOH vice-president and a treasurer for 2017, and Martin Schoonhoven (right), chair of the Gauteng branch, which hosted the conference*

- Top achiever award – ‘Occupational hygienist’ assessment: Muriel Mogane (Engen Oil and chair of the SAIOH KwaZulu-Natal branch)

SAIOH extends hearty congratulations to all the deserving winners and wishes them well in future endeavours as they continue developing their careers in OH.

## Another feather in SAIOH’s cap

The SAIOH president and council members take pleasure in announcing that Peter-John 'Jakes' Jacobs, registered occupational hygienist, SAIOH council member (co-opted) and past president (2014), as well as the official SAIOH representative to IOHA has been named as the president-elect of the association. The announcement was made at the IOHA board meeting in Medellín, Colombia, at the end of October 2017.

Mr Jacobs’ term of office will be for one year, from September 2018 to September 2019. SAIOH congratulates him on this prestigious appointment, which also raises the profile of SAIOH internationally, and wishes him well for the action-filled year that awaits him.

Hard on the heels of being formally awarded accreditation to act as an examiner for the ‘W201 Basic Principles of OH’ foundation module of the OH Training Association (OHTA), SAIOH looks forward to going from strength to strength, particularly in terms of forging new regional and international collaborations in OH specifically and occupational health more broadly, and strengthening the existing linkages already in place. SAIOH aims to continue to build bridges beyond borders.

# The ‘Generally’ Harmonised System: Preparing SDSs and labels for use around the world

**Kay Bechtold, assistant editor of The Synergist, looks at the continuing pitfalls of implementing the GHS**

Approximately five years have passed since the US Occupational Safety and Health Administration (Osha) released its revised Hazard Communication Standard, aligning it with the United Nations’ Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

The phase-in period for the standard ended on 1 June 2016, the date by which employers were required to revise their written hazard communication programme, internal labelling and signage, and to train workers on any new hazards resulting from the change in the classification of chemicals.

Osha’s standard only requires safety data sheets (SDSs) and labels to be available in English, making language requirements straightforward for companies operating exclusively in the US. Companies seeking to sell routinely in other markets need to provide customers with SDSs that are not only compliant with other countries’ regulations, but are translated into the official languages of products’ destinations.

## ‘Global in name only’

GHS, an international approach to hazard communication, is intended to provide a standardised approach to label elements and SDSs. Countries across the globe continue to implement GHS, many by adopting its recommendations into existing regulations.

This method of implementation means that, although GHS proposes harmonised hazard communication, requirements for labels and SDSs still vary by country.

Many people think that GHS means they can create one SDS that will work anywhere in the world, explains Atanu Das, president and project manager at MSDSWriter. “I always tell them, ‘It’s global in name only,’” Mr Das says. “Or I say it’s the ‘Generally Harmonised System’—that’s what the ‘G’ stands for.”

Denese Deeds, director of chemical regulatory services at Industrial Health & Safety Consultants, has often had to explain that companies must label their products in the languages of each country where they intend to place them on the market. “There’s

some idea that GHS made the entire world speak English and accept the Osha HazCom Standard, and it just isn’t that way,” she says.

For example, the EU alone is home to more than 20 official languages. The EU’s Regulation on classification, labelling and packaging (CLP) of substances and mixtures requires that labels be written in the official languages of the member states where they are placed on the market. The best-fit solution for creating compliant SDSs and labels depends on a company’s resources - chiefly time and money - and how many documents are needed.

Some companies use software to create and translate SDSs, while others turn to human translators or translation firms. Others find a balance by outsourcing some or all of their SDS management to a third party. “It behooves you as the purchaser to vet your vendors and make sure you’re confident in what your output is, no matter where it’s coming from,” Mr Das says.

## The software side

In general, SDS authoring and translation software works by allowing users to construct the documents either by manually selecting phrases or allowing a computer to add phrases based on certain hazard information and chemical properties. Software can help users organise this information into the appropriate SDS format.





Multi-language SDS authoring software tools often come with a certain number of languages or allow users to purchase languages as needed. For companies with specialised needs, some software is flexible in allowing users to add necessary phrases in different languages to supplement a standard package. In many cases, companies can send the phrases they need to a translator and import the translations once they come back.

Some software includes access to chemical databases, which can cut down on the time users spend manually searching for hazard information on their products. Users may be able to translate and make changes to an SDS based on country-specific requirements more quickly using this type of software.

For companies that need many SDSs in a handful of languages or that need a few SDSs in many different languages, software can be a cost-effective solution, according to Ms Deeds. But the software can be expensive.

“Companies have to weigh the costs of the software and all of the necessary maintenance that comes with it,” she says. “How many translated documents do you actually need? You have to have a need that exceeds the cost of producing them in this way.”

Employees must also be trained on how to use the software. If individuals trained in using the software leave the company, additional resources will be required to train new staff, Mr Das says.

Dr Ghislain Rompre, who is responsible for generating SDSs at Scotts Miracle-Gro, uses software provided by a third party to help do his job. As senior scientist for product safety, he agrees that good software is pricey, even prohibitive for smaller companies, but notes its many benefits.

Dr Rompre often has to create SDSs and labels for product samples produced in the UK then shipped to France for testing. These must comply with the requirements for both countries, including being in English and French. He tells the system which country and language he needs, then the software does the rest.

I always tell them, ‘It’s global in name only’. Or I say it’s the ‘Generally Harmonised System’

**Atanu Das,**  
**MSDS Writer**

An added benefit is access to a large chemicals database, which the system can use to generate classifications for new raw materials. Individuals who do not have access to this type of database have to manually search databases, such as the European Chemicals Agency’s (Echa) REACH database, which

can take a while. They may also have to lean more heavily on their professional judgment to ‘make the call’ about hazard information.

“Let’s say you have a raw material that 40% of research papers say is an eye irritant but 50% say is not,” Dr Rompre explains. “What do you do? Most issues like this are taken care of thanks to our software, so there’s good payback, although it’s expensive.”

While it is a helpful resource, users cannot rely completely on software for a chemical classification, he cautions. A qualified individual must make the final determination. They should also realise the importance of updating SDS software regularly to account for rapidly changing hazard communication requirements and avoid using software or databases that might be out of date.

## A human touch

Translation is more than turning words into another language; in many cases, a literal translation may completely change the technical concepts a company is trying to communicate on an SDS or label. Both Mr Das and Ms Deeds agree that companies opting for a human touch should use translators with good technical skills.

Anyone can claim to translate, Mr Das adds, but companies should find a reputable company or individual translator. “Because you’re conveying hazards on a document, you’re on the line for how you use the colloquial or idioms in the language of communicating them,” he explains. “Like anything else you put on an SDS, you as the manufacturer are going to be ultimately liable for it.”

Over the years, Ms Deeds has received a lot of feedback from the translators she works with. Sometimes the terminology or concepts she is trying to communicate are so technical that she has to go back and forth with translators to make sure they understand the critical hazard information. For this reason, companies should plan on approximately ten to 15 working days to turn around a translation. Faster service is usually available for additional fees.

Ms Deeds cautions companies against sending SDSs or labels to just any translator, particularly with section 2 of an SDS, which identifies the hazards of the chemical and the appropriate warning information. A non-technical translator would probably not be aware that many countries have official translations of required elements like signal words and hazard statements.

“Your classification under the GHS drives specific labelling related to the hazard classification,” Ms Deeds explains. “For the most part, as countries adopt the GHS into their own regulations, they decide on official translations of hazard phrases and precautionary statements that would appear on the label.” These official translations are readily available online in many places, she notes, but the best way to find them is to look on countries’ hazard communication websites.

The HazCom Resources Committee of the Society for Chemical Hazard Communication (SCHC), has published a [list](#) of translation resources to help individuals select firms to meet their translation needs. These have all been vetted by chemical companies that have used them for technical translations. Mr Das notes that another way to help the vetting process is to determine whether translators are accredited by professional bodies like the American Translators Association or the ProZ.com Certified PRO Network.

## Quality check

Companies have several options for validating the quality of translated SDSs and labels. Some larger companies have experts on staff like Dr Rompre. He speaks French, English, and Spanish, reviews the company's SDSs and labels for all of North America and is familiar with the different translation issues to look for so as to ensure that words and expressions are used properly in each language.

For example, even SDSs for France and Canada, which both use French, might differ because certain words mean different things in each country. If an SDS or label is headed for a European country other than France, a team of regulators working on registering the product in that country will take over to help Dr Rompre with any translation issues.

If the product is fairly innocuous, like a water-based cleaner, some companies may just have their sales representatives review the translation, Mr Deeds says. Dr Rompre confirms that occasionally salespeople at Scotts Miracle Gro jump in to look at translations. Other companies receive a translation and send it to their technical staff in that particular country, who check that it is communicating the information correctly.

Firms that employ human translators often run SDSs and labels through a process for quality assurance and control. Some use editors to check translators' work. Other technical translators partner with scientists who are native speakers in other countries and can proofread and answer questions that may arise during translation.

Most agree that translations and review are best left to technical language translators and hazard communication professionals. "It's easy to say, 'I've got somebody in the office who is fluent in whatever language', but they may not really understand the content of the SDS to do a good job," Ms Deeds says. "We want to make sure that the words impart the correct meaning within the context of the language and the culture."

## Keeping up with the GHS

Industrial hygienists (IHs) and EHS professionals have varying degrees of involvement with SDS and label translation and conversion within their companies. Ms Deeds recommends that



they educate themselves about the ever-changing requirements and regulations for hazard communication worldwide.

The SCHC can help professionals understand the way the rules change around the world and offer guidance on navigating translation and related work for their customers, she adds. In addition to its list of translation resources, the society has other hazard communication resource [materials and information](#) for the development of SDSs, labels, and related documents.

"I had most of my GHS training through SCHC, and I even took the CLP training for Europe," says Dr Rompre, who regularly attends SCHC meetings to keep abreast of changes in hazard communications regulations. "They provide a lot of toxicology training as well."

Many other organisations around the world also hold conferences and provide education to help hazard communication professionals understand international compliance challenges.

To help track the implementation of GHS in countries around the world, the United Nations Economic Commission for Europe (UNECE) maintains a [web page](#) where it collects publicly available information from various sources. To date, it compiled and summarised information about GHS implementation for 72 countries.

Perhaps the best hazard communication resource for SDSs and labels is the official text of the GHS itself, widely known as the 'Purple Book'. The United Nations published the [seventh revised edition](#) of the Purple Book earlier this year.

*\* - This article originally appeared in the October 2017 issue of [The Synergist](#), the magazine of the American Industrial Hygiene Association.*





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## News from:

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### OECD recommends three-tiered assessment for nanomaterials in air

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4 December 2017

The OECD's working party on manufactured nanomaterials (WPMN) has issued a report stating that risk assessors should take a three-tiered approach when determining quantities of nanomaterials in the air, citing similar conclusions from work by the US National Institute for Occupational Safety and Health (Niosh) and the German NanoGem project. These should be, in order:

1. A 'standard' occupational hygiene (OH) survey of the process area, mainly capturing qualitative information to identify likely points of particle emission;
2. Determination of particle number and mass concentration, identification of emission sources, characterisation of breathing zone exposure of process operators, identification of incidental and background particles, and determination of the effectiveness of any particle emission controls; and
3. Repeating the tier two measurements but with simultaneous capture of particles for analysis of mass or fibre concentration, particle morphology and chemical composition.

For more information:

[www.chemicalwatch.com/crmhub/62152](http://www.chemicalwatch.com/crmhub/62152)

### Consultation on further CMD amendments

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28 November 2017

The European Commission's Directorate-General for Employment, Social Affairs and Inclusion (DGES) has launched an inception impact assessment of a new batch of occupational

exposure limits (OELs) as an amendment to the carcinogens and mutagens Directive (CMD). This will consider the costs and benefits of all options. Consultation with industry representatives and experts is running to 25 December.

The substances affected are: formaldehyde; 4,4'-methylene-bis(2-chloroaniline) (Moca); cadmium and its inorganic compounds; beryllium and its inorganic compounds; and arsenic acid and its salts. These find various applications in polyurethane production, solar panels, alloying and wood preservatives, among others.

For more information:

[www.chemicalwatch.com/crmhub/62061](http://www.chemicalwatch.com/crmhub/62061)

### UK has 13,000 deaths from past exposure

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20 November 2017

Some 13,000 deaths each year in the UK are linked to past exposure to chemicals or dust at work, the Health and Safety Executive (HSE) has estimated. Its latest report found that mesothelioma deaths totalled 2,542 in 2015 and a similar number of lung cancer deaths were linked to past exposures to asbestos. About 200-300 new cases of occupational asthma are seen each year.

For all occupational ill health, the report shows 609,000 workplace injuries/year, with 1.3 million workers suffering from work-related ill health in 2016-17. Workplace injury and new cases of ill health cost the UK £14.9bn. with 31.2 million working days lost. Fatal injuries in workplaces fell from 144 in 2015-16 to 137, injuries from 72,702 to 70,116. There were 554 cases prosecuted, with fines from convictions totalling £69.9m.

For more information:

[www.chemicalwatch.com/crmhub/61148](http://www.chemicalwatch.com/crmhub/61148)

## Workplace exposure linked to cancer

17 November 2017

Workplace exposure to crystalline silica is one of four major causes of work-related cancer in Canada's Ontario province, alongside diesel-engine exhaust, asbestos and solar radiation, according to a 60-page report from the Occupational Cancer Research Centre in Toronto.

About 142,000 Ontarians are exposed to crystalline silica each year, leading to nearly 200 cases/year of occupational lung cancer; there are still about four times as many cases linked to asbestos, despite far lower levels of exposure. The authors recommended strengthening OELs, establishing exposure registries and surveillance and reducing the use of toxic substances.

*For more information:*

[www.chemicalwatch.com/crmhub/61143](http://www.chemicalwatch.com/crmhub/61143)



## EU overhauls carcinogen and mutagen rules

14 November 2017

The European Parliament has voted overwhelmingly to amend the CMD. Once this has been endorsed by the European Council, the new rules will be published in the Official Journal and enter into force 20 days later. EU member states will then have two years to make the necessary legal and regulatory changes.

OELs will be revised for numerous chemicals, including refractory ceramic fibres, respirable crystalline silica dust, acrylamide and benzene. There are also transitional measures for chromium (VI) and hardwood dusts. It is claimed that 100,000 lives could be saved over the next 50 years as a result.

Earlier, the European Chemicals Agency (Echa) proposed new binding OELs for nickel, benzene and acrylonitrile, which are all carcinogens, as part of the ongoing revision of European occupational safety and health legislation. These will be reviewed by the agency's Risk Assessment Committee by 26 March 2018.

*For more information:*

[www.chemicalwatch.com/crmhub/61019](http://www.chemicalwatch.com/crmhub/61019)

[www.chemicalwatch.com/crmhub/59545](http://www.chemicalwatch.com/crmhub/59545)

## New Zealand prepares for reforms

14 November 2017

New Zealand's health and safety regulator, WorkSafe, unveiled a website on occupational safety issues relating to hazardous substances shortly before the new Health and Safety at Work (Hazardous Substances) Regulations 2017 came into effect on 1 December.

WorkSafe is taking over responsibility for workplace safety and the disposal of hazardous chemicals from the New Zealand Environmental Protection Agency (EPA), which will continue to regulate classifications and applications for the manufacturing and import of substances, and hazardous chemicals outside the workplace. It will also produce 'safe work instruments' on chemical safety in the workplace, including codes of practice and substance-specific requirements.

*For more information:*

[www.chemicalwatch.com/crmhub/61045](http://www.chemicalwatch.com/crmhub/61045)

## New US silicon enforcement guidance

14 November 2017

The US Occupational Safety and Health Administration (Osha) has issued an interim memorandum for compliance, safety and health officers on the enforcement of the silica in construction standard. The standard establishes a new eight-hour time-weighted average permissible exposure limit of 50µg/m<sup>3</sup> and an action level of 25µg/m<sup>3</sup>.

The rule, which has been in effect since 23 June 2016, includes two standards: one for construction (29 CFR 1926.1153), which has applied since 23 September, and one for general industry and the maritime sector (29 CFR 1910.1053), which will apply from 23 June 2018.



## EU carcinogen safety guide out

14 November 2017

The EU Osha has made available a first batch of good practice guides on how to work safely with carcinogens. This is the result of work done since May 2016 with five other European bodies, including the European Commission, the European Trade Union

Confederation and BusinessEurope, to develop a voluntary action scheme to raise awareness about the risks arising from exposure to carcinogens in the workplace called the Roadmap to Carcinogens. According to EU Osha, over 100,000 people die each year in the EU due to work-related cancer. It is asking people to contribute their experience and knowledge to help build the guides.

*For more information:*

[www.chemicalwatch.com/crmhub/61030](http://www.chemicalwatch.com/crmhub/61030)



## RCA workers compensated

*6 November 2017*

Taiwan's High Court has granted nearly \$24m in compensation to 484 ex-Radio Corporation of America (RCA) workers and surviving relatives who had been exposed to 31 toxic chemicals between 1970 and 1992 at RCA factories in Taoyuan and Chupei. The award came after 19 years of effort to gain compensation for more than 200 deaths and hundreds of cases of illness.

The decision reinforced a ruling by a lower court that a finding of liability for injury can be based on "reasonable medical certainty" rather than direct evidence linking cause and effect. Kao Yung-cheng, an attorney in the case, said that one of the main implications is that a high probability of occupational harm from toxic chemical exposure is sufficient for findings of injury.

*For more information:*

[www.chemicalwatch.com/crmhub/60747](http://www.chemicalwatch.com/crmhub/60747)

## Canada proposes CBI exemptions

*26 October 2017*

The Canadian government has proposed industry-supported changes to the disclosure of ingredient concentrations under the updated Workplace Hazardous Materials Information System. Consultation took place during November.

The proposed amendments would allow manufacturers to report a broad range, instead of a specific concentration, of an ingredient on commercial product labelling if this can be defended as confidential business information (CBI) under the new Hazardous Products Regulations. Health Canada has

estimated that not enacting the changes could cost manufacturers and importers C\$18m.

*For more information:*

[www.chemicalwatch.com/crmhub/60565](http://www.chemicalwatch.com/crmhub/60565)



## Taiwan proposes stricter standards

*19 October 2017*

Taiwan's Ministry of Labour has proposed tighter air exposure limits in the workplace for certain hazardous substances. The document, on which consultation concluded on 27 November, particularly emphasised the introduction of a limit for 1-bromopropane, which was the subject of a major incident in 2013, plus tighter limits for acetone, hydrogen chloride and vinyl chloride monomer.

These four main changes are expected to be enforced by 1 July 2018. Changes to exposure limits are also proposed for nearly 500 additional substances, which will come into force once the ministry has promulgated the final version of its proposals.

*For more information:*

[www.chemicalwatch.com/crmhub/60177](http://www.chemicalwatch.com/crmhub/60177)

## Niosh finds phthalate VOCs

*28 September 2017*

Niosh has found the plasticiser diethyl phthalate in volatile organic compound (VOC) screening air samples taken on a heat sealer at an unnamed plastic film assembly facility. Several other aldehyde VOCs were also found at the same time.

Although the concentrations were well below OELs, Niosh said, in combination they could cause irritant symptoms, such as the headaches and asthma-like symptoms reported by some employees. It has recommended equipment changes to reduce exposures, such as removing hazard from the process and improving personal protection equipment and machinery, and setting up an employee-management health and safety group to improve monitoring and alter working practices.

*For more information:*

[www.chemicalwatch.com/crmhub/59598](http://www.chemicalwatch.com/crmhub/59598)



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