



**IOHA**

JULY - SEPTEMBER  
2023

# GLOBAL EXPOSURE MANAGER

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# IOHA<sup>2024</sup> Dublin

## Protecting Workers From Health Hazards: Advancing in This Changing World

The Occupational Hygiene Society of Ireland (OHSI) and the British Occupational Hygiene Society (BOHS) are privileged to jointly host the 13th IOHA International Scientific Conference.

The conference aims to promote occupational hygiene and worker health protection by the minimisation of worker exposure to hazardous agents globally through:

- Plenary sessions
- Keynote lectures
- Parallel talks
- Workshops
- Poster presentations
- And many networking opportunities and social functions.

## WHERE?

Aviva Stadium  
Lansdowne Road  
Dublin 4  
Ireland  
D04 K5F9

## WHEN?

09 - 13 June 2024



# BEYOND THE STOP SIGN: TACKLING THE LANGUAGE BARRIER IN INDUSTRY SAFETY

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AIOH Immediate Past President, Chair – AIOH External Affairs Committee

Have you ever wondered what happens when you can't read a stop sign? It's a thought-provoking question, and chances are, you already have a notion of the answer. While road signs may vary, the red octagon with four letters spelling "STOP" remains a universal caution symbol. It's a visual language understood by most, transcending linguistic barriers. But what if we apply the concept of a stop sign to other dangers, particularly those that lack such simplicity in communication?

Consider a scenario where handling a substance could release deadly dust particles. Common sense dictates that there should be a warning label, right? Yet, unlike the unmistakable stop sign, the reality isn't always as straightforward.



Right now, in some Australian states, a staggering one in four workers suffers from silicosis, an incurable lung disease. [1] This is a direct result of inhaling silica dust, a by-product of working with engineered stone through cutting, grinding, or polishing. Some might wonder, "Why didn't they just read the labels?"

## Well, what if they just can't?

"Readability" measures how easily written text can be comprehended. Tools like the Gunning fog index and the Flesch reading ease score assess the level of formal education needed to understand a text.

When the text from labels on engineered stone are entered into these tools, they indicate that the readability level required to comprehend the information on one of the most hazardous products in Australian workplaces ranges from a third-year university student to a college graduate.

The question then arises: Is it reasonable to expect workers handling engineered stone to hold a university degree simply to understand essential safety instructions? Logically, it's an unreasonable expectation. Delving into the matter uncovers the complexity of the problem and is one reason why many workers were unaware of the hazards.

Recent research conducted by Monash University sheds light on this issue. [1] About one-third of stone benchtop industry workers in Victoria were born in Asia. Furthermore, around one-third of stone benchtop workers in NSW have English as a second language, with Mandarin being the most common alternative. This paints a vivid picture of the Culturally and Linguistically Diverse (CaLD) workforce present within the engineered stone industry in Australia.

In an industry at such high risk for work-related diseases, there's an urgent need to improve how hazards and risks are communicated to workers. The solution lies in adopting more inclusive communication strategies that accommodate the diverse backgrounds and languages of the workforce.

And while simplifying labels and making them available in multiple languages is a good start, it's also about crafting safety messages that are universally understandable. Visual cues, symbols, and simplified language can transcend language barriers and ensure that everyone comprehends the potential dangers and necessary precautions. Achieving this demands a collective effort from the industry, regulators, and policymakers to safeguard the health and well-being of all workers.

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Protecting from Silica  
Exposures Courtesy:

Breathe Freely Australia

Occupational hygienists play an important part in this space, as they are the scientists on the front lines. They're measuring the amount of toxic dust in the air and recommending practical ways to keep workers safe. Occupational hygienists have recently worked to improve their communications to reach CaLD workers. [2]

The Breathe Freely Mandarin initiative has built on the successful Breathe Freely Australia program and has not only translated vital information on how to keep workers safe into Mandarin, it's created new bite-sized video content to get across the key messages workers need to know.

In a world where effective communication can be a matter of life and death, it's incumbent on all of us to ensure that safety information is accessible to every worker, regardless of their linguistic or cultural background. Only then can we truly dismantle the barriers that prevent us from understanding the hidden "stop signs" around us.

You can check out these new resources in Mandarin here:

<https://www.breathefreelyaustralia.org.au/stone-cn/>

and the English version here:

<https://www.breathefreelyaustralia.org.au/stone/>

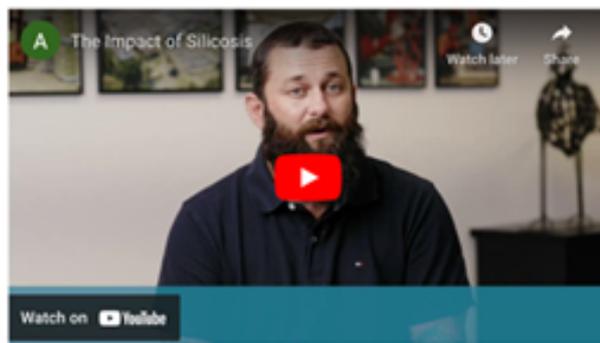
## References

1. Hoy, R.F., et al., Prevalence and risk factors for silicosis among a large cohort of stone benchtop industry workers. Occupational and Environmental Medicine, 2023; p. oemed-2023-108892.
2. AIOH. Breathe Freely Australia | Engineered Stone. 2023; Available from: <https://www.breathefreelyaustralia.org.au/stone/>

### Watch: Respiratory protection - Fit testing



### Watch: The Impact of Silicosis



### 观看：呼吸防护-什么是呼吸防护，如何正确使用？



Examples of bite-sized video content

# AIHA and ACGIH Launch Initiative to Improve Exposure Judgments

By Larry Sloan - [lsloan@aiha.org](mailto:lsloan@aiha.org)

A substantial and growing body of research has demonstrated that the qualitative and quantitative exposure judgments of occupational and environmental health and safety professionals are often wrong and tend to underestimate risks. When exposure judgments are biased low, workers' health could be at risk.

To address these shortcomings, AIHA has partnered with ACGIH to create an Improving Exposure Judgments Advisory Group whose goal is to influence OEHS practitioners to embrace and routinely use tools to aid decision-making. Many of these tools are freely available on the [AIHA website](#).

The good news is that training and practice are effective in countering these weaknesses. The proper use of algorithmic and statistical tools ensures a systematic approach that significantly improves the accuracy of practitioners' exposure judgments.

The Improving Exposure Judgments initiative is expected to run in phases for up to 10 years:

**Phase 1:** Communications will generate heightened global awareness of existing tools and activities that will improve judgments and the need to change OEHS practice to routinely include the use of judgment improvement activities and tools.

**Phase 2:** The effectiveness of existing tools and activities at improving exposure judgment accuracy and interpretation will be evaluated.

**Phase 3:** New and improved tools and activities to fill gaps identified in Phase 2 will be developed.

**Phase 4:** This phase involves communication to drive the use of the improved tools and activities.

AIHA offers unique educational opportunities that improve OEHS practitioners' knowledge of available tools to improve exposure judgment. The free AIHA webinar "[Top 10 Imperatives for the AIHA Exposure Risk Management Process](#)" is an introductory-level explanation of the importance of a well-defined decision statistic, the use of AIHA's exposure risk categories, and ways to improve the accuracy of exposure risk decisions.

A more thorough online course, "[Making Accurate Exposure Risk Decisions](#)," offers nine hours of instruction on the use of statistics to improve exposure judgments, rules of thumb for interpreting exposure monitoring data, Bayesian statistical approaches, and other related topics.

One outcome of completing this free course is readiness to take the exam for the [Exposure Decision Analysis Registry](#). This program distinguishes OEHS professionals who have acquired the skills and knowledge to effectively manage workplace exposure and monitoring data. Those who successfully complete the exam earn the Registered Specialist: Exposure Decision Analysis credential. The credential signifies that a professional has the knowledge and skills to make informed decisions about worker exposure and exposure uncertainty.

These numbers show that the Improving Exposure Judgments initiative is already making an impact on OEHS practice.

Larry Sloan ([lsloan@aiha.org](mailto:lsloan@aiha.org)) is AIHA's CEO.

## References:

Arnold, Susan F., Mark Stenzel, Daniel Drolet, and Gurumurthy Ramachandran: "Using checklists and algorithms to improve qualitative exposure judgment accuracy," *Journal of Occupational and Environmental Hygiene*, Volume 13, Issue 3, March 2016. DOI: [10.1080/15459624.2015.1053892](https://doi.org/10.1080/15459624.2015.1053892).

Arnold, Susan, and Gurumurthy Ramachandran: "Judgment Day: How Accurate Are Industrial Hygienists' Qualitative Exposure Assessments?," *The Synergist*, Volume 25, Issue 1, January 2014, <https://synergist.aiha.org/202111-judgment-day>.

Logan, Perry, Gurumurthy Ramachandran, John Mulhausen, and Paul Hewett: "Occupational Exposure Decisions: Can Limited Data Interpretation Training Help Improve Accuracy?," *The Annals of Occupational Hygiene*, Volume 53, Issue 4, June 2009. DOI: <https://doi.org/10.1093/annhyg/53/4>.

Vadali, Monika, Gurumurthy Ramachandran, John R. Mulhausen, and Sudipto Banerjee: "Effect of Training on Exposure Judgment Accuracy of Industrial Hygienists," *Journal of Occupational and Environmental Hygiene*, Volume 9, Issue 4, April 2012. DOI: [10.1080/15459624.2012.666470](https://doi.org/10.1080/15459624.2012.666470).

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**Since April 2023, 871 people have taken the free online course “Making Accurate Exposure Risk Decisions,” signifying their readiness to become registered EDA specialists, and the number of registered specialists has increased from 40 to 246.**

# IOHA NEWS



IOHA enthusiastically welcomes The Association of Industrial Hygienists, Lagos, Nigeria (AIHN) as the 42nd association of IOHA. In one-year IOHA added 3 global associations from Nigeria, Chile and Mongolia.

IOHA President participated at IOHA member associations conference in Phoenix USA (AIHA), Leeds, UK (BOHS) and Manila, Philippines (ANOH, IH Association of Philippines). A network meeting was held at these conferences with IOHA board members to solicit feedback on how IOHA can strengthen its functioning.



**Meeting with IOHA Board members and IOHA President at regional conferences**



**Proud to support education and training for health and safety professionals across the globe**

IOHA would like to recognize the contribution from Amazon in promoting occupational hygiene education and training. IOHA has signed agreement with Amazon in which Amazon would support IOHA in communication, training and other outreach efforts.

## The Iberoamerican Board of Occupational Hygiene (JIHO)

JIHO was formed to create the first occupational hygiene certification exam in Spanish. JIHO is the newest member of IOHA's National Accreditation and Recognition Committee. The first exam was in May 2023 at the Pan-American Occupational Hygienists Congress. As of September 2023, 13 new Certified Occupational Hygienists are from various Spanish-speaking countries, including Guatemala, Peru, Argentina, Mexico, Colombia, and Spain.



IOHA contributes to ILO's first OSH strategy in 20 years  
Several IOHA members participated in a virtual release of ILO's draft OSH strategy to be published later this year. Following the meeting, IOHA provided a detailed response including background on Occupational Hygiene and IOHA, a review of the Global Strategy on OSH and opportunities for collaboration between IOHA and ILO. Contributors included:

**Andrea Hiddinga**, IOHA Stakeholder Relations Committee (SRC) ILO Contact, Dutch Occupational Hygiene Association (NVVA)

**Ruth Jimenez**, IOHA Board Member (past IOHA Treasurer), Spanish Association for Occupational Hygiene (AEHI)

**Nancy Wilk**, IOHA Governance Committee Chair & Board Member, American Conference of Governmental Industrial Hygienists (ACGIH)

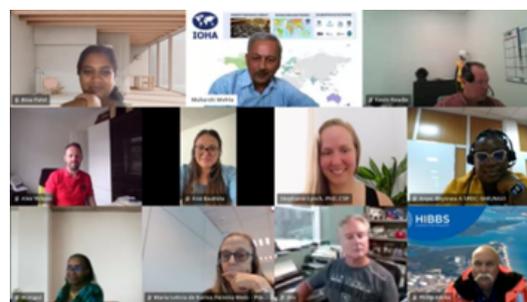
**Andre Winkes**, IOHA Stakeholder Relations Committee Chair & Board Member, Dutch Occupational Hygiene Association (NVVA)

**Kevin Bampton**, Chief Executive Officer, British Occupational Hygiene Society (BOHS)

**Samantha Connell**, IOHA President-Elect & Board Member, Swiss Society for Occupational Hygiene (SGAH).

IOHA offered three webinars in 3rd quarter 2023 on Non-Ionizing Radiation, Emerging Issues in Respiratory Protection and Industrial Hygiene – Digital Journey. About 130 IOHA member association participants who attended these webinars provided rave reviews of the speakers and webinar topics. IOHA has offered 18 webinars which are free for IOHA member associations.

**“IOHA webinars always have high-level speakers discussing very interesting subjects. The webinars are very helpful and bring a lot of first-class information to me and hopefully the community”**



**Coveted IOHA Webinar on Emerging Respiratory Protection Issues**

# MEMBER UPDATES

**The 39th National Congress of Industrial and Environmental Hygiene, organized by the Italian Association of Industrial Hygienists (AIDII) 14 to 16 June 2023 Arenzano (Liguria).**

The conference was a resounding success with more than 80 oral presentations, 25 posters and more than 170 attendants. A very emotional time was the opening ceremony where a moment of silence was given to remember the worldwide victims of work-related accidents and diseases.

AIDII monograph “Chemical risk assessment strategies in the workplace” (in Italian) edited by Giuseppe Nano and Andrea Spinazzè, was presented at the Conference. 15 young professionals participated to the ‘Young Industrial Hygienists’ competition.



**AHRA IV Occupational and Environmental Hygiene Congress 2023, Salta, Argentina, September 6-September 8, 2023**

More than 250 participants attended the congress. The event featured the Occupational Hygiene Technologies Hackathon which was won by a project on ergonomics data collection through Artificial Intelligence.



**ANOH -IHAP Conference Manila – August 28- August 30, 2023**

Kudos to Maria Carmela Capule, Dooyong Park, Philip Hibbs, organizing and scientific committee members for organizing one of the most successful conferences in Manila. Six IOHA board members and affiliates, including Tracey Bence, President of AIOH, Marina Zainal Farid, CPIH, CIH, Norhazlina Mydin, MS\_CIH, CPIH, CSFC, Hirohiko Nakahara, Hashimoto Haruo, Andrea Hiddinga and I spoke at the conference. Several concurrent sessions, PDCs, keynote speeches, and Symposiums provided a fantastic learning opportunity for the participants.



**17th Brazilian Occupational Hygiene Congress from Brazilian Association of Occupational Hygienists (ABHO), São Paulo, August 28- August 30, 2023**

ABHO celebrated 29 years of successful journey in promoting occupational hygiene in Brazil at this Congress. More than 350 participants attended the congress and learn from speakers from Brazil and other countries.



# UPCOMING EVENTS

## 13th IOHA International Scientific Conference

[Home / 13th IOHA International Scientific Conference](#)

IOHA is organizing 13th IOHA International Scientific Conference in Dublin from the 9th to the 13th of June 2024 in association with the Occupational Hygiene Society of Ireland (OHSI) and the British Occupational Hygiene Society (BOHS).

The theme for this conference is 'Protecting workers from health hazards: Advancing in this changing world'.



Register for the 40th AIOH Annual Scientific Conference & Exhibition, to be held at Crown Promenade, Melbourne.

AIOH 2023 - 40th Annual Conference and Exhibition - December 4-6, 2023

[Click here to register](#)



23<sup>rd</sup> World Congress on  
**Safety and  
Health at Work**  
Sydney 2023

23rd World Congress on Safety and Health at Work Sydney November 27-November 30, 2023

First held in 1955, the World Congress on Safety and Health at Work is one of the largest international conferences for work health and safety. In 2023, it's coming to Sydney, Australia.

IOHA will participate at the Congress.

[Click here to register.](#)

# IOHA IN ESPAÑOL

Red Panamericana de Higiene Ocupacional

Ana Rocio Bautista, Chair, RePHO, [rocio.bautista@inaf.com.gt](mailto:rocio.bautista@inaf.com.gt)



América Latina es una región donde la Higiene Ocupacional se practica desde hace mucho tiempo. Los primeros esfuerzos por desarrollar un trabajo colaborativo en Higiene Industrial surgieron a partir de 1998, donde Berenice Goelzer y Paul Olson organizaron el primer encuentro de Asociaciones de Higiene Ocupacional en América Latina. Dicho encuentro se realizó en Sao Paulo Brasil, con la participación de Brasil (ABHO), México (AMHI), Estados Unidos de América (AIHA) y Venezuela (AVHO).

En el año 2004, durante la Décima Semana de Higiene Ocupacional organizada por la Asociación Colombiana de Higiene Ocupacional (ACHO) en Medellín Colombia se llevó a cabo el Segundo Encuentro Regional de Asociaciones de Higiene Ocupacional de América Latina. A esa reunión asistieron Brasil (ABHO), Colombia (ACHO), México (AMHI) y Venezuela (AVHO). Durante esa reunión, en la cual el grupo lo denominó Comité de las Américas de Higiene Ocupacional, todos los participantes acordaron en organizar un Congreso Regional de Higiene Ocupacional para el año 2006 con carácter bianual.

En el año 2018, durante la 7ma Conferencia Panamericana de Higiene Industrial que tuvo como sede AHRA (Argentina) en Buenos Aires, las Asociaciones se reunieron nuevamente y decidieron formalizar una Red colaboradora bajo el nombre de: Red Panamericana de Higiene Ocupacional, con el principal objetivo de fortalecer la práctica de Higiene Ocupacional en América Latina.

Hasta el día de hoy, la Red Panamericana de Higiene Ocupacional reúne a 9 Asociaciones Profesionales de Higiene Ocupacional de América Latina, con la participación de Argentina (AHRA), Brasil (ABHO), Chile (ACHISO), Colombia (ACHO & SCHO), Guatemala (AGSSO), México (AMHI), Perú (APHOA) y Venezuela (AVHO). Esta red también ha realizado 9 Conferencias Panamericanas de Higiene Ocupacional en diferentes países de América Latina. La última Conferencia se celebró en Guatemala con más de 200 asistentes de América Latina y Estados Unidos.

Esta red nos ha permitido alcanzar hitos importantes a lo largo de los años, como la traducción al español del ACGIH TLV & BEI (R) y la creación de la Junta Iberoamericana de Higiene Ocupacional (JIHO), el primer esquema regional de Certificación en idioma local (español), reconocido por el Comité NAR de la IOHA.

Creemos que el trabajo colaborativo entre la región fortalecerá la Práctica de Higiene Ocupacional en América Latina, permitiéndonos enfrentar los desafíos de Higiene Ocupacional en el futuro. Esperamos apoyar y dar la bienvenida a más asociaciones profesionales de OH en América Latina.

