

# Update from the Australian Institute of Occupational Hygienists (AIOH)

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The Australian Institute of Occupational Hygienists (AIOH) ended 2019 with a highly successful conference in Perth, Australia. The conference committee, ably chaired by Candace Absalom, delivered another high-quality event. In so doing, they provided a perfect illustration of the conference theme, *The Power of Many*.

The AIOH had an unusual start to the year, mainly due to the extreme weather conditions which IOHA members in other countries will have seen in the news. In response to the bushfires, the AIOH published a media release, highlighting the risks to the health of firefighters and first responders from smoke hazards. The AIOH president, Andrew Orfanos, gave a studio interview for Australia's main broadcaster, the ABC (<https://www.youtube.com/watch?v=P9A2TY5upo&feature=youtu.be>).

Also related to the bushfires, the AIOH would like to draw attention to a tremendous gesture from the American Industrial Hygiene Association (AIHA), which very generously donated 5 000 AUD to the Red Cross. The AIOH thanks the AIHA president, Kathleen Murphy, and chief executive officer (CEO), Larry Sloan, for their very thoughtful support for Australians in need.

Members of IOHA may also be aware of the emergence of accelerated silicosis in individuals working on engineered stone.<sup>1,2</sup> In Australia, there has been an alarmingly high number of young men diagnosed with severe progressive silicosis from cutting artificial stone benchtops. In response, government occupational hygienists, particularly in the state of Queensland, have been active in visiting workplaces where engineered stone is fabricated.<sup>3</sup> The Queensland government has produced an excellent code of practice, 'Managing respirable crystalline silica dust exposure in the stone benchtop industry (2019)', which the AIOH recommends to IOHA members.<sup>4</sup>

As a member of a consortium of concerned bodies, the AIOH lobbied the Australian federal government to look into the epidemic of silicosis. The Commonwealth health minister responded, in July 2019, by allocating 5 million AUD to the establishment of the National Dust Diseases Taskforce. The AIOH has been active in providing evidence to the taskforce. The AIOH is also meeting with the federal minister for vocational training and apprentices, as we consider that one of the main contributory factors is a lack of awareness in stonemasons and other workers in the construction industry. We hope that improved training material delivered to apprentices and construction workers will correct this.

With regard to training material, the British Occupational Hygiene Society (BOHS) has kindly allowed the AIOH to use its 'Breathe Freely' material in Australia. The AIOH has adapted the BOHS material to suit Australian workplaces, and rebadged it as 'Breathe Freely Australia' (<https://www.breathefreelyaustralia.org.au/>). Several road-shows have been delivered around the country to >1 000 tradespeople from



the construction sector. Through Breathe Freely Australia, the AIOH has also entered into partnerships with state governments, industry associations, and unions.

If IOHA members google images associated with silicosis in Australia, they will notice one striking feature: stonemasons are often shown wearing totally inadequate respirators – such as surgeon's masks – or they are bearded or have some facial hair. In response, the AIOH is developing a national respirator fit testing and accreditation scheme (RESP-FIT) to promote best practice respirator fit testing in Australia through:

- A standardised training syllabus to improve respirator fit tester knowledge, and
- Demonstration of competence through the accreditation assessment.

The RESP-FIT programme will also provide information and tools for workplaces to make informed decisions on respiratory protection equipment (RPE) fit testing that is appropriate and suitable for the work environment.

## LAUNCH OF A NEW RESOURCE TO HELP PROTECT WORKER HEALTH

Australia has experienced an increase in demand for disposable respiratory protection driven, initially, by the extensive bushfires and, more immediately, by SARS-CoV-2. This has resulted in non-compliant disposable respiratory protection entering our supply chain, which has been highlighted by several regulatory bodies, including SafeWork NSW (<https://www.safework.nsw.gov.au/safety-alerts/safety-alerts/supply-of-fake-face-masks>) and WorkSafe New Zealand (<https://worksafe.govt.nz/about-us/news-and-media/non-compliant-respiratory-protective-equipment-on-the-market/>).

Identifying non-compliant products presents challenges for local businesses purchasing respirators for their workers, as the processes and checkpoints that provide compliance in our existing framework are complex. To address this, the AIOH collaborated with the Australian Institute of Health and Safety, the Indoor Air Quality Association, and the New Zealand Occupational Hygiene Society, to deliver a much-needed guide on this topic.

The final product, *A Guide to Buying P2, or Equivalent, Respiratory Protection for Use in the Australian & New Zealand Work Environment* is targeted towards those who buy disposable respiratory protection, and will help them make sure that it meets

suitable standards. The *Guide* takes readers through a series of processes to help potential purchasers understand relevant national and international standards, what to look for, information about the different products available, and resources to help identify non-compliant products.

The *Guide* has received immense support, including from the Australian Council of Trade Unions, the Health and Safety Association of New Zealand, and four Australian state and territory health and safety regulators. Hopefully, it is also of

use to a wider international audience that is likely experiencing similar issues.

#### FUTURE AIOH CONFERENCES

Finally, due to the COVID-19 pandemic, the AIOH will not be delivering its flagship annual conference. Instead, it will be celebrating its 40<sup>th</sup> anniversary with a special virtual symposium from 30 November to 3 December 2020. Find more information and a calendar of events at <https://www.aioh.org.au/virtual-symposium>.

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## Nurturing future IH leaders with iGROW

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In an effort to nurture future industrial hygiene leaders, the Malaysian Industrial Hygiene Association (MIHA) has initiated iGROW, our mentoring programme. The programme was successfully launched during the 18<sup>th</sup> MIHA annual general meeting on 5 June 2020. An introductory video about the programme can be seen at <https://www.facebook.com/watch/?v=255028758926867>.

We believe that nurturing talent within an organisation will have a positive impact on culture, growth and commercial successes. Hence, this programme aims to provide guidance in personal development, through a structured process, for experienced MIHA members (mentors) to share skills, knowledge and experience, while MIHA new members (mentees) explore the skills they need to succeed at their current jobs, as well as for career advancement.

To support the professional development of both parties, the MIHA has selected 10 mentors and 20 privileged mentees from various industry backgrounds to be part of this one-year partnership



programme. During the kick-off session on 27 June 2020, two of our mentors, who were the founding members and past presidents of the MIHA, shared their industrial hygiene journey. Zainal Mubarak Zainuddin, our first president, shared his almost 40 years' experience, and Sabrina Wan Mohamad, our second president, shared her close to 30 years' experience. We are grateful to all 10 coaches for their continuous support, passion and commitment to shape industrial hygiene in the country and the region. We look forward to the success of iGROW!

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## COVID-19 – The first new occupational disease of the 21st Century

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The COVID-19 pandemic is forcing civil society to recognise the importance of expanding legal requirements to prevent and address occupational exposure to infectious diseases. Healthcare workers exposed to HIV, for example, may have a recognised occupational exposure to infectious disease upon direct contact with a sick AIDS patient's blood. If the worker contracts the virus and succumbs to AIDS, both the exposure and the resulting illness may be considered to be work-related. Yet, healthcare worker exposures to other bloodborne pathogens, such as hepatitis, often go unnoticed or unreported. Consequently, many illnesses, and even deaths, are not correlated to past workplace exposures, especially when the illness

manifests years after exposure. Additionally, many infectious agents that exist in the workplace also exist in the community, and it is often difficult to determine that the exposure occurred at work and not elsewhere. Therefore, it is often hotly debated whether illness or fatality from an infectious agent found in the workplace is necessarily an occupational exposure.

Typical of pandemics, but unusual compared to workplace infectious disease exposures, COVID-19 has been addressed by a wide range of emergency orders, requiring non-essential workers to stay home. As Kevin Bampton (CEO of the BOHS) noted, during lockdown, non-essential workers are home but essential

workers are implicitly exposed to SARS-CoV-2 when they perform their work. While more than a billion people were mandated or recommended to stay home under lockdown, essential workers were exposed to the infectious coronavirus in order to perform their jobs that save lives, and to maintain medical and social systems. Without heroes on the frontlines, there would be even more disease and death. Someone must do those jobs to protect the greater society. During the early months of the USA pandemic in 2020, approximately 20% of the deaths due to COVID-19 were of healthcare workers.<sup>5</sup> Similar statistics were reported for healthcare providers in other countries. This suggests that COVID-19 should be considered an occupational illness or occupational fatality among frontline essential workers.

In addition to healthcare personnel, exposure to the SARS-CoV-2 virus is inherent in other frontline occupations such as first responders, law enforcement officers, prison guards, and public health workers. In the United Kingdom, the determination of whether COVID-19 is an occupational disease is based on the exposure context, following a reportable incident involving a biological emergency.<sup>6</sup>

Guidelines also describe what constitutes a work-related COVID-19 diagnosis and/or death. This approach is realistic; essential tasks must be performed by someone for the greater good of society. Thus, any question of individual choice or right to refuse hazardous work is removed from risk equations. Equity therefore dictates protection of people whose work requires exposure to SARS-CoV-2, including worker compensation and medical services.

Examining the context of occupational exposures spotlights how a narrow view of protecting the right to health, expressed in legislative line drawing, outlining occupational disease protections and compensation in the 20th century, has been systematically drawn too tightly. One consequence of inaccurate narrow line drawing is that occupational health and safety are undervalued in the long term. It is not possible to quantify any reduced costs due to improved workplace safety and health protection when key costs are hidden and uncounted from the start.

Workers' compensation for occupational exposure to SARS-CoV-2 as an occupational disease varies by jurisdiction. In any nation with a unified national health system, the distinction between occupational disease and falling ill with a lethal disease may be of little practical consequence, beyond keeping tidy records for contact tracing and accurate workplace health statistics. In some nations, however, workers' health insurance is the sole source of health insurance for entire dependent families. In those places where a person might lose his or her job if unable to perform work due to COVID-19, workers' compensation fills an important void that pays the worker's health bills and also provides health insurance for his or her dependents while the worker remains employed.

In the USA, one theory erroneously claims that exposure to coronavirus in the workplace ought not to be considered an occupational disease for reporting and workers' compensation. It is based on a deceptively simple workers' compensation text in law from the Commonwealth of Virginia, which precludes workers' compensation for 'ordinary disease of life'. However, the reality that COVID-19 is plentiful everywhere does not mean it is an 'ordinary disease of life' under law. Historically, so-called ordinary diseases of life were interpreted as fitting well-established concepts of non-occupational illness such as pregnancy or genetic conditions. Nothing about the COVID-19 pandemic is ordinary. The situation presented by this pandemic is extraordinary in that emergency laws have grounded airlines, stopped the Olympic Games, and delayed elections. The legal term of art is not 'ordinary' but 'force majeure'. Therefore, it would be unjust to use external exposure to SARS-CoV-2 as a benchmark to rule out causation from exposure in the workplace.

## CONCLUSION

In conclusion, functional analysis of how and why healthcare workers and frontline workers who, by their job descriptions, are compelled to confront SARS-CoV-2 as a global threat to health everywhere, suggests that the definition of occupational disease should embrace workplace exposure to the coronavirus.

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