

Managing Exposure to RCS across Australian Workplaces

This is a talk on a survey of Australian COH concerning how well was silica dust exposure in construction, tunnelling, and mining being measured, mitigated, and enforced. You can listen to the you tube talk, and below are the main slides shown during the talk.

<https://youtu.be/ZjLUzHAFSCE>



Experiences of Occupational Hygienists in Silicosis Prevention

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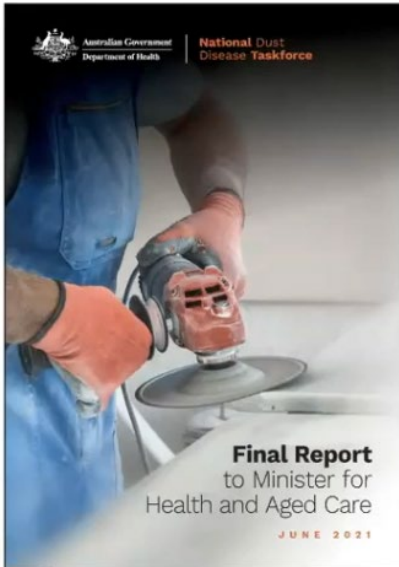
AIOH President

On behalf of the AIOH External Affairs Committee

3 June 2022



Background



2



Materials and methods

- Questions developed by the AIOH External Affairs Committee
- Hosted on menti.com
- Accessible to all members via the member's only area
- Anonymous in nature
- Open for 4 weeks from March 18 – to April 14, 2022
- All information aggregated to ensure anonymity

A graphic announcement for a survey. At the top is the AIOH logo and '40 YEARS' anniversary text. The main heading is 'Closing Soon - Survey of occupational hygienists to support the Regulatory Impact Analysis for Respirable Crystalline Silica'. Below this is a paragraph of text explaining the survey's purpose and details. At the bottom is a blue button labeled 'AIOH WEBSITE'.

AIOH AUSTRALIAN INSTITUTE OF OCCUPATIONAL HYGIENISTS **40** YEARS
CELEBRATING OVER 40 YEARS OF PROTECTING AUSTRALIAN WORKERS' HEALTH

Closing Soon - Survey of occupational hygienists to support the Regulatory Impact Analysis for Respirable Crystalline Silica

Safe Work Australia and IY are undertaking economic analysis and stakeholder consultation to support the Regulatory Impact Analysis (RIA) of regulatory and non-regulatory options to manage risks associated with respirable crystalline silica (RCS) exposure in Australian workplaces. The AIOH plan to make a submission on this important work. To support this, we are gauging the expertise of our wider membership on the management of exposure to RCS. This survey will take 5-10 minutes depending on the breadth of your experience. All data entered is completely anonymous with the data being aggregated across all participating AIOH members. We encourage all members who have experience in managing RCS exposure to participate in this survey. The survey can be accessed by members in **My AIOH** and appears on the first page - **My Dashboard** - under **Latest News & Updates**. The survey closes at 5pm 14th April 2022.

[AIOH WEBSITE](#)

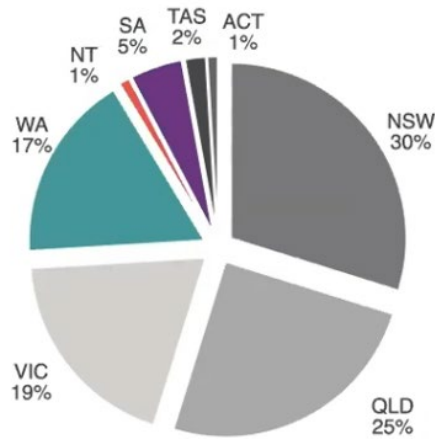
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3



Demographics

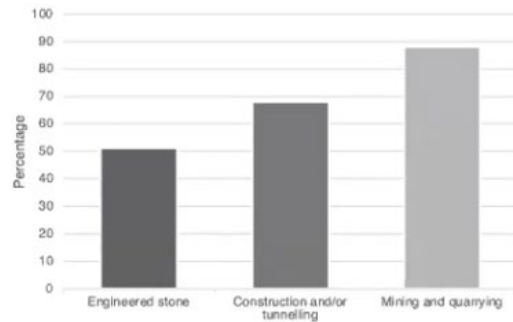
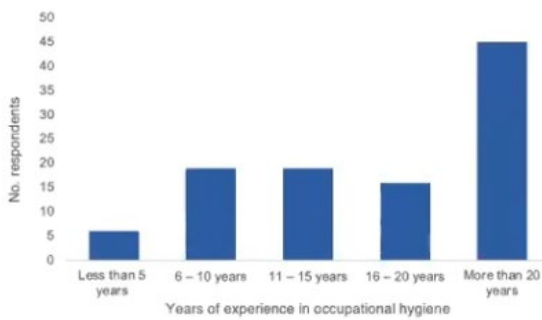
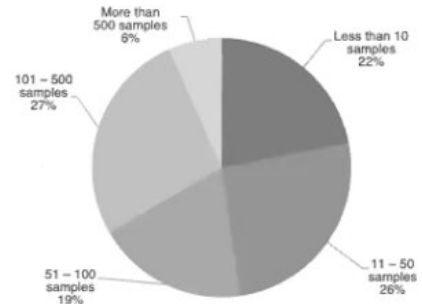
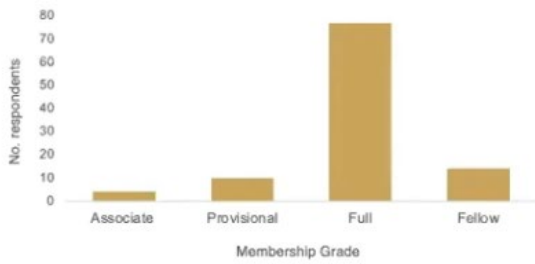
- 105 participants
- 96% professional members
- Largest responses from NSW, QLD, VIC



4



Demographics

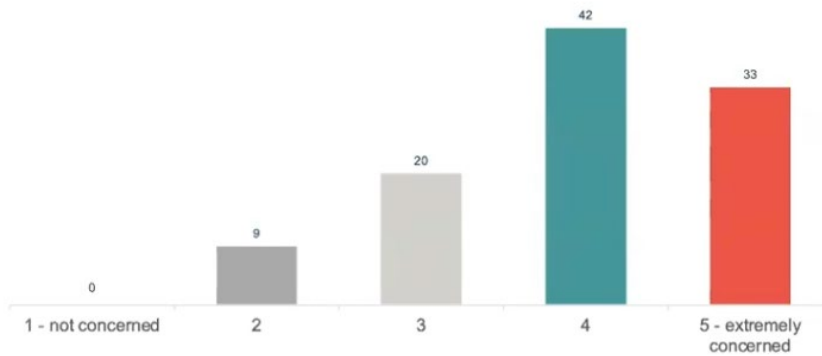


5



Concern and awareness

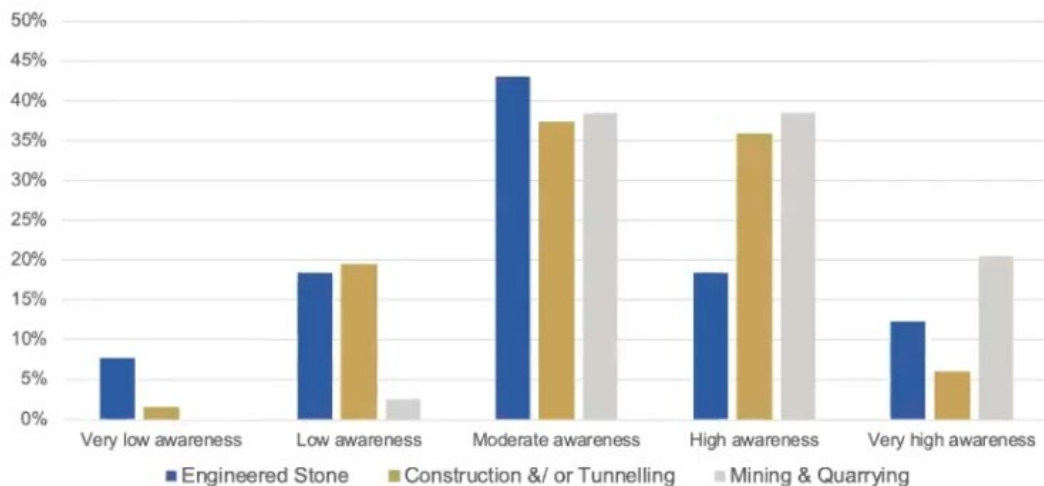
Level of concern regarding over-exposure to respirable crystalline silica (RCS)



6

Concern and awareness

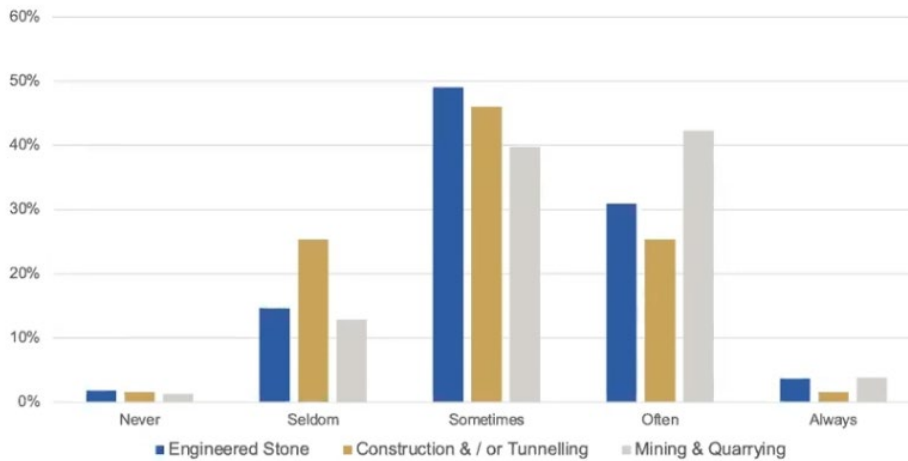
Reported level of employer awareness of the risks of exposure to RCS by industry group



7

Concern and awareness

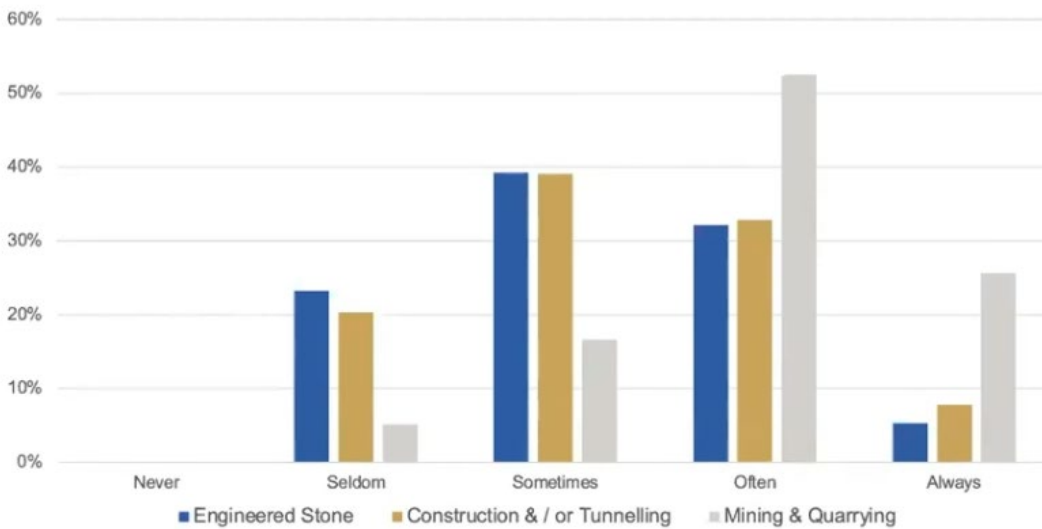
Effectiveness of behaviour change initiatives at reducing exposure to below the Workplace Exposure Standard per Industry Sector



8

Air monitoring

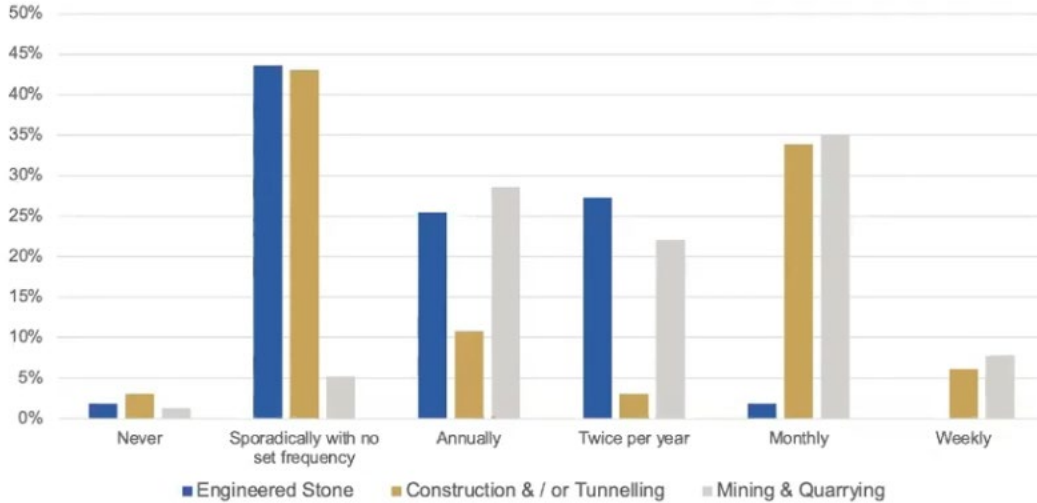
Is personal air monitoring for RCS being undertaken appropriately to assess exposure?



9

Air monitoring

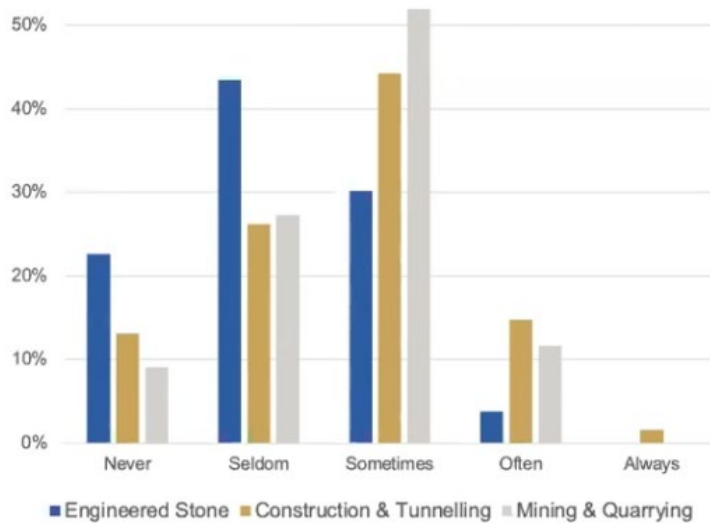
The frequency that personal air monitoring is being undertaken across each industry



10

Air monitoring

How often is real-time dust monitoring to support risk assessment / control in industry?



11

Measurability of RCS



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EXHIBIT 10/2014

Australia, the more countries, is grappling with the health implications of lung diseases associated with exposure to respirable crystalline silica (RCS) and the need for appropriate action, including effective workplace monitoring, for the protection of workers.

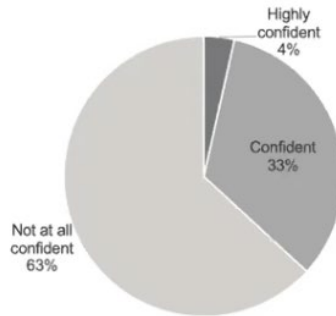
Legislated Workplace Exposure Standards (WES) are fundamental to these efforts. Under the current Australian model, health and safety (H&S) legislation, the WES establishes a statutory maximum upper limit of exposure to workers for hazardous chemicals such as RCS.

It is important to note that the WES for RCS is measured as an 8-hour TWA. This means that the WES is based on exposure that occurs in an 8-hour working day, 5-day working week. In circumstances where a longer working day or working week occurs, the WES is adjusted to compensate for the greater exposure during the longer work shift and the decreased recovery time between shifts (Safe Work Australia, 2013).

It is understood that further lowering of the legislated limit is a priority for consideration by policymakers. However, for regulation of this nature to be effective, it is essential that reliable measurement at the levels specified is actually possible.

With this in mind, AIOH and NATA have agreed to collaborate in doing assessment of the issues and to facilitate efforts towards outcomes that are both effective and aligned with the public interest.

[Download the Report](#)

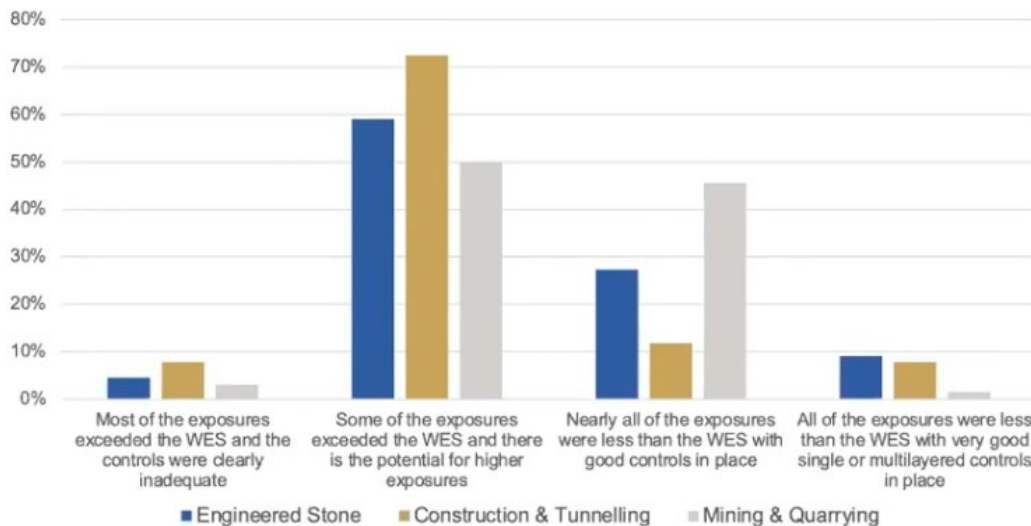


12



Air monitoring

Non-compliance with the Workplace Exposure Standard (WES)

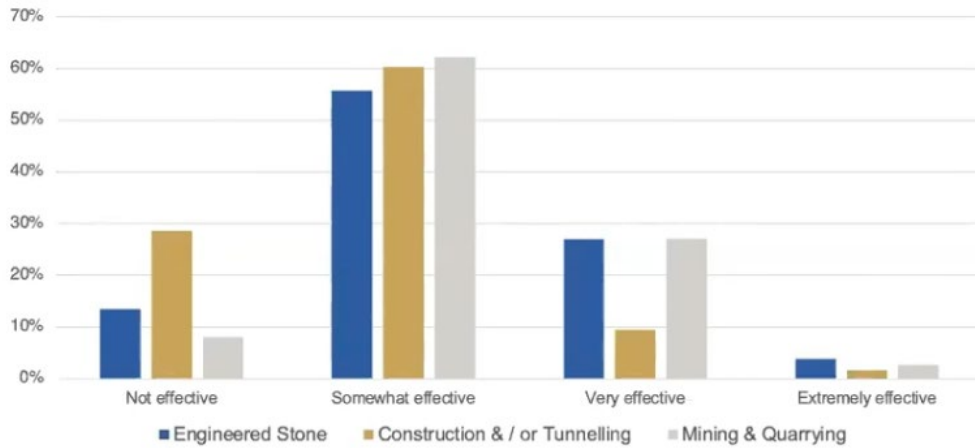


13



Effectiveness of Regulatory Intervention

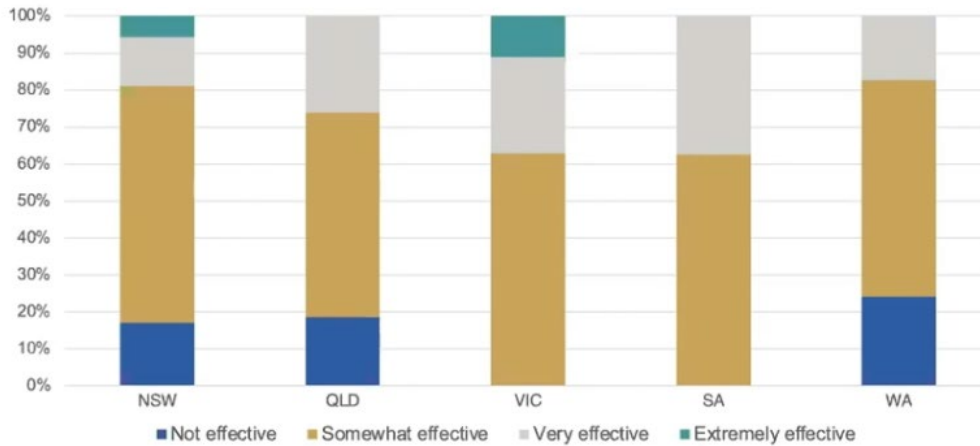
Effectiveness of compliance activities by the respective jurisdictional Regulator in reducing exposures to RCS per industry



14

Effectiveness of Regulatory Intervention

Effectiveness of compliance activities by the respective jurisdictional Regulator in reducing exposures to RCS per state



15

Barriers to the prevention of silica-related disease

Top 3:

1. A lack of management commitment
2. A lack of financial resources for employers to bring in controls
3. Low compliance with existing regulations

Other:

- Lack of training
- Lack of awareness
- Lack of RCS-specific regulations
- Lack of competence of persons undertaking air monitoring and providing advice

16

Summary

(i) keeping the status quo

(ii) implementing awareness and behaviour change initiatives

(iii) implementing a national licensing framework

(iv) the regulation of defined high risk crystalline silica processes, for all silica-containing materials

- The majority of occupational hygienists are concerned about the over-exposure of workers to RCS
- Air-monitoring not being performed appropriately the majority of the time
- Concerns for exposures exceeding and having the potential for higher exposures
- Employers awareness was the highest in the mining sector
- Disparity in effectiveness of behaviour change initiatives, air monitoring, use of real-time monitoring
- Regulatory intervention only 'somewhat effective'
- Reporting of over-exposures should be mandatory

19

Conclusion

- Occupational hygienists report that Australian workers are being over-exposed to Respirable Crystalline Silica and that this is cause for concern
- We need to move away from the *status quo* towards a strategy with an increased focus on controlling exposure, measuring control effectiveness, reporting of overexposures and increased enforcement to ensure compliance with the Workplace Exposure Standard & to protect workers
- A nationally consistent approach to RCS exposure control across all industrial sectors is recommended
- The experiences of occupational hygienists support the need for a regulatory strategy with an increased focus on controlling and measuring exposure
- Silicosis is an irreversible lung disease but can be prevented, but there needs to be a greater focus on exposure control through regulatory and educational interventions