



21 April 2023

Parliamentary Officer
Parliamentary Committee on Occupational Safety, Rehabilitation and Compensation Committee
Parliament of South Australia

Via email only: OccHealthCommittee@parliament.sa.gov.au

Dear Parliamentary Officer

Work Health and Safety (Crystalline Silica Dust) Amendment Bill

Lung Foundation Australia (LFA) and Cancer Council SA support the proposed amendment and are pleased to provide our response to the Work Health and Safety (Crystalline Silica Dust) Amendment Bill.

Please find attached our joint submission and recommendations to protect South Australian workers from exposure to silica dust.

We commend the South Australian Government for wanting to act to protect workers. Cancer Council SA supports the amendment to include crystalline silica dust.

If you would like to discuss this further or arrange a meeting to discuss this submission, please contact either Paige or Bronte below:

Ms Paige Preston
Senior Manager, Advocacy and Policy
Lung Foundation Australia
paigep@lungfoundation.com.au

Mr Bronte McQueen Advocacy Lead Cancer Council SA

bmcqueen@cancersa.org.au

y LMs

Yours sincerely

Mark Brooke

Chief Executive Officer Lung Foundation Australia **Kerry Rowlands**Chief Executive

Cancer Council SA

Executive Summary

Existing regulatory controls have been ineffective in protecting workers from silica exposure and reform is urgently required. We note that some reform has occurred in South Australia in recent years, but it appears to have stagnated. On 1 July 2020, the occupational *Respirable Crystalline Silica* (RCS) exposure limit was reduced to 0.05 mg/m3 in South Australia. The Silicosis database was also developed, and a compliance program introduced, with 102 compliance breaches identified in 2020-21ⁱ.

We note the national meeting of Commonwealth, State and Territory work health and safety Ministers endorsed significant national action in 2023ⁱⁱ. We acknowledge and commend the South Australian Government's commitment to banning engineered stone if there is no national action by the end of 2023ⁱⁱⁱ.

We believe that the only way to truly protect workers exposed to engineered stone is to utilise the hierarchy of control measures^{iv}. Additionally, we note that SafeWork SA does not report an acceptable level of silica content^v.

We recommend:

- 1. a ban on engineered stone as all Australians should be able to work in an environment free from harm;
- 2. an <u>awareness and behaviour change campaign</u> across all relevant industries, not just the stonemason industry;
- 3. a licensing scheme for naturally containing crystalline silica products; and
- 4. <u>regular screening of impacted workers</u> using low-dose, high-resolution, computerised tomography (HRCT).

It is recommended that work done in South Australia considers a national approach to ensure consistency and to protect workers during implementation. It is important to recognise that due to the transient nature of the workforces involved, many people do not experience symptoms until they have left the industry or many years later during their retirement.

Furthermore, the response must consider the work that the Department of Health and Aged Care are doing in terms of the *National Occupation Respiratory Disease Registry* (NORDR) which closed for consultation in December 2022. The NORDR aims to provide essential information about occupational respiratory diseases in Australia that will enhance prevention, early detection, and support efforts. The *National Silicosis Prevention Strategy* (NSPS) and accompanying *National Action Plan* (NAP), which Lung Foundation Australia have been commissioned to develop on behalf of the Department of Health and Aged Care, will be handed to the department by 30 June 2023.

We encourage the South Australian Government to engage in the Department's processes following this handover to ensure implementation and coordination on a national level.

About Lung Foundation Australia

Lung Foundation Australia (LFA) is the only national charity and leading peak body dedicated to supporting anyone with a lung disease including lung cancer. For over 31 years we have been the trusted national point-of-call for patients, their families, carers, health professionals and the general community on lung health. There are over 30 different types of lung disease currently impacting 1 in 3 Australians.

Our mission is to improve lung health and reduce the impact of lung disease for all Australians. We will continue working to ensure lung health is a priority for all, from promoting lung health and early diagnosis, advocating for policy change and research investment, raising awareness about the symptoms and prevalence of lung disease, and championing equitable access to treatment and care.

As a patient representative charity, we have partnered with patients, health professionals, researchers, medical organisations, and the Australian community to drive reform in the delivery of health services in Australia to benefit more than 7 million Australians impacted by lung disease and lung cancer.

LFA's work in occupational lung disease

The prevention of occupational lung diseases, as well as supporting those diagnosed with these conditions, is a core component of LFA's work. The *National Strategic Action Plan for Lung Conditions* (NSAPLC) highlights occupational lung disease as one of eight priority lung conditions and furthermore, identifies workers currently and previously exposed to occupational dusts, gases, fumes, and vapours as one of several priority population groups. Through the NSAPLC, we have:

- developed a digital *Occupational Lung Disease National Directory* (OLDR) of relevant resources and support programs and services for employers, workers and people living with an occupational lung disease;
- developed a "Healthy Lungs at Work" online lung health questionnaire for workers who may be exposed to hazardous agents in the workplace, helping them to identify risks, reflect on their current lung health, and makes recommendations on where to find more information or what steps can be taken;
- various fact sheets, booklets, and digital resources for those at risk of and living with occupational lung diseases; and
- delivered a national awareness campaign during National Safe Work Month to raise awareness amongst both employers and workers of the risks to lung health in the workplace.

Further to this work, LFA have been appointed to facilitate the development of the *National Silicosis Prevention Strategy* (NSPS) and accompanying *National Action Plan* (NAP), as per Recommendation 3a of the Final Report to Minister for Health and Aged Care. Within the NSPS, we have highlighted that the *National Occupational Respiratory Disease Registry* (NORDR) is critical to understanding the prevalence and incidence of silicosis and other occupationally caused respiratory diseases in Australia. We reiterate that a well-resourced and functioning NORDR will support the elimination of these preventable diseases by facilitating earlier detection, intervention, and prevention.

About Cancer Council SA

Established in 1928, Cancer Council SA has a long and proud history of evidence-based policy and programs.

Cancer Council SA is South Australia's leading independent, non-government cancer organisation. We have 100 passionate staff, assisted by 125 ongoing volunteers, 103 dedicated Ambassadors and thousands of community fundraising volunteers. As South Australia's leading cancer charity, working across every aspect of every cancer, we support families affected by cancer when they need it most, speak out on behalf of the community on cancer issues, empower people to reduce their cancer risk, and find new ways to better detect and treat cancer - all made possible by our fundraisers, volunteers and community supporters.

As an organisation we fund and implement cancer prevention programs, invest in cancer research, provide information and support for people affected by cancer, and advocate for policy change to reduce the rate and impact of cancer in our community.

Cancer Council SA's work in occupational lung disease

Cancer Council is at the forefront of efforts to protect Australian workers through research, education and workplace policy change.

Cancer Council has a national Occupational and Environmental Cancer Committee, which includes members with national standing in relevant disciplines including epidemiology, molecular biology, occupational health, occupational hygiene, clinical oncology, and public health. It also includes Lung Foundation Australia and works to reduce the incidence of cancers attributed to occupational and environmental carcinogens in the Australian working population.

Cancer Council SA has advocated at the state level for the ban on the use of engineered stone, nationally consistent silica regulation and increased enforcement activity.

Feedback on the Work Health and Safety (Crystalline Silica Dust) Amendment Bill 2022

Lung Foundation Australia (LFA) and Cancer Council SA (CCSA) are pleased to provide the following feedback on the Work Health and Safety (Crystalline Silica Dust) Amendment Bill 2022 (The Bill) and the proposed amendment.

We do note that a complete ban on exposure to silica is not a feasible proposition, however we welcome moves to reduce workers exposure to silica dust.

Health impact of silica dust exposure

Silicosis is a serious, irreversible occupational lung disease that causes permanent disability. There is no effective treatment for it, and it is often fatal. Silica dust particles when inhaled can travel deep into the lungs and lead to a range of respiratory diseases, including:

- Silicosis—acute, accelerated, and chronic (progressive massive fibrosis).
- Chronic Obstructive Pulmonary Disease (COPD), including chronic bronchitis.
- Lung cancer.

Silica dust also increases the risk of developing chronic kidney disease, autoimmune disorders, and other adverse health effects, including an increased risk of activating latent tuberculosis, fungal infections, eye irritation and eye damage. Silicosis and silica-related diseases can have a long latency (the lag between the first exposure to the hazard and when the disease is diagnosed clinically), and damage to the lungs from silica dust may not appear for many years. Silica-related lung cancer is often fatal Livia. Australians living with silicosis and their carers report physically and psychologically debilitating symptoms and significant unmet needs Livia, ix & x.

[At the] "end of every day I am buggered. My chest is sore, it hurts to breathe, my feet and hands hurt...that's my daily life."

Former geologist, 48 years, living with chronic silicosis and sarcoidosis—NSPS

"It's like a black cloud over your head every day." Former tiler, 61 years, living with silicosis—NSPS

There is no cure for silicosis. However, good progress is being made in the management of occupational lung diseases and early detection offers the best chance of long-term survival.

Occupational exposure is the predominant source of RCS. Occupational exposure to RCS and other hazardous airborne contaminants contributes substantially to the burden of lung disease in Australia and internationally xi & xii.

A 2012 survey of the Australian working population found that 6.6% of the Australian workforce (329,000 workers) were exposed to RCS and 3.7% were exposed to high levels when carrying out tasks at work. This exposure was particularly common among miners and quarry workers (91.7% exposed) and construction workers (80% exposed)^{xiii}. Since this time and over the past 10 years, government investment into infrastructure has increased dramatically, leading to an increased number of workplaces with RCS exposures^{xiv}.

In addition, the use of engineered stone has increased considerably^{xv}.

Health screening conducted by some jurisdictions in recent years indicates that nearly one in four engineered stone workers who have been in the industry since before 2018 are suffering from silicosis or other silica dust related diseases^{xvi}.

We note the following from a recent submission (not publicly available) that the Australian Institute of Occupational Hygienists (AIOH) made to SafeWork Australia:

We consider that there is insufficient evidence to arrive at a discrete percentage of crystalline silica in engineered stone to underpin a specific cut-off for prohibition purposes. The figure of 40% crystalline silica used in Victorian regulation is an operational value, inter alia acknowledging the likely percentage of crystalline silica in granite. Based on the available literature and information, a percentage that is protective of worker health, or "safe" cannot be determined.

There are engineered stone products on the market with 10% or less crystalline silica, and there is evidence that the emissions from processing low silica products have correspondingly low respirable crystalline silica (RCS) concentrations. A value of 10% crystalline silica is evidently manageable by industry and incorporates a commonly accepted toxicological margin of safety for non-cancer endpoints. A cut-off of 10% crystalline silica (by weight) can be expected to keep average exposures to RCS below the Workplace Exposure Standard (WES) based on the weight of evidence from real world and academic studies. On the basis of existing product development activities, observed high emissions, and the hierarchy of hazard control, we recommend that processing engineered stone containing more than 10% crystalline silica be prohibited.

However, engineered stone containing up to 10% crystalline silica is not without risk. Accepting a value of 10% crystalline silica in engineered stone commits jurisdictional regulators and workplaces to a high degree of regulation and necessitates a high degree of compliance by employers and workers. It will also likely result in a high degree of reliance on the effective use of respiratory protection, something that has not been demonstrated to be successful in the engineered stone sector to date.

We support these comments.

Recommendations

We continue our call for a ban on engineered stone to protect workers. Existing regulatory controls have been ineffective in protecting workers and reform is urgently required.

To be effective we need:

- a whole of Government, industry, community, and business response;
- the most up to date research that uses health and WHS evidence;
- independent monitoring which is transparently and frequently reported; and
- prevention of death and disability as a core principle.

We recommend increasing enforcement activity in high-risk silica processing sectors to ensure compliance with any implemented bans or restrictions. Furthermore, we commend the South Australian Government for their intent to progress but stress the importance of harmonisation of action across jurisdictions to protect all Australians.

We support the development and implementation of a **national licensing framework** to support the introduction of jurisdictional licensing schemes for businesses working with engineered stone, which should effectively achieve many prevention goals across government, industry, community and business^{xvii}. Licensing would restrict access to the product to those businesses that can demonstrate the ability to effectively manage the risks associated with engineered stone, by implementing necessary controls and educating their employees.

Page 4 of 8

Licensing would need to span all of the supply chain to be effective and be enforced by WHS regulators, with a publicly available database of licence holders WHS afe Victoria introduced an engineered stone licence requirement in 2021 which allows businesses (either an employer or self-employed person) to work with engineered stone if they meet the necessary safety requirements WHE believe that this would be able to be duplicated in South Australia but note our concerns as previously raised by AIOH.

Licensing will also assist with occupational health monitoring of at-risk workers. The purpose of occupational health monitoring and screening is to detect an adverse effect from workplace exposure at an early, pre-clinical stage which allows interventions to protect the health of the worker. The identification of any worker with an adverse health effect is also an indicator of failure to control the exposure at the workplace, thereby putting other workers at risk. The aim is to have zero adverse health effects, and even one affected worker requires thorough review of preventive measures to protect other workers at the workplace.

Screening has been extremely important, in particular as a means of identifying workers with silicosis (who are often asymptomatic) and providing appropriate management and support.

Our organisations frequently hear stories from workers with adverse health impacts from silica exposure.

"I got my lungs checked in a SafeWork program back in 2019 after close to two decades of being exposed to silica at work. No-one I worked for ever talked to me about getting my lungs checked. And the very first time I had them looked at I found out I had silicosis."

Former labourer, 46 years, living with silicosis—NSPS

The health monitoring programs have also provided further knowledge about the benchtop industry in Australia and engineered stone silicosis and this aligns with Recommendation 2 in the All-of-Government Response. However, we would like to see a replacement of chest x-rays with low-dose, high-resolution CT scans. For workers who have chronic illnesses, such as silicosis, Safe Work Australia needs to recognise and consider the inadequacies of current workers compensation systems. The South Australian Government must also investigate how to better support affected workers who are no longer in the workforce.

Conclusion

We commend the South Australian Government and thank the Parliamentary Committee on Occupational Safety, Rehabilitation and Compensation for putting silicosis on the agenda and managing the risks of respirable crystalline silica. Ministers have agreed to:

- National awareness and behaviour change initiatives.
- Regulation of high-risk crystalline silica processes for all materials (including engineered stone).
- Further analysis and consultation on the impacts of a prohibition on the use of engineered stone, and consideration of a national licensing system for products that are not subject to a ban, or legacy products.

We commend the South Australian Government for wanting to act to protect workers. Cancer Council SA supports and commends the to the amendment to include crystalline silica dust.

References

¹ Global Road Technology. 2022. *Silicosis in Australia*. Available from https://globalroadtechnology.com/silicosis-in-australia/

- South Australia. 2023. Decisive national action on silicosis. Available from https://www.premier.sa.gov.au/media-releases/news-items/decisive-national-action-on-silicosis
- South Australia. 2023. Decisive national action on silicosis. Available from https://www.premier.sa.gov.au/media-releases/news-items/decisive-national-action-on-silicosis
- ^{iv} Perret J, Miles S, Brims F, Newbigin K, Davidson M, Jersmann H, et al. 2020. Respiratory surveillance for coal mine dust and artificial stone exposed workers in Australia and New Zealand: A position statement from the Thoracic Society of Australia and New Zealand. *Respirology*. 25:1193-202.
- ^v SafeWork Australia. 2022. Respirable crystalline silica. Available from https://www.safework.sa.gov.au/workplaces/chemicals-substances-and-explosives/silica
- vi Safe Work Australia. 2022. Working with silica and silica containing products. Canberra: Safe Work Australia.
- vii The National Institute for Occupational Safety and Health. 2022. Health Effects of Occupational Exposure to Respirable Crystalline Silica: NIOSH. Available from https://www.cdc.gov/niosh/docs/2002-129/default.html.
- ^{viii} Australian Government. 2021. *The National Dust Disease Taskforce's Final Report*. Canberra: National Dust Disease Taskforce, Department of Health.
- ix Quantum Market Research. 2019. Dust Disease Research Final Report. Prepared for Department of Health, National Dust Disease Taskforce. South Yarra, Victoria: Australian Government Department of Health.
- × Quantum Market Research. 2021. Dust Disease Research Update Final report. Prepared for Department of Health, National Dust Disease Taskforce. South Yarra, Victoria: Australian Government Department of Health.
- xi Australian Government. 2021. The National Dust Disease Taskforce's Final Report. Canberra: National Dust Disease Taskforce, Department of Health.
- ^{xii} Hoy RF, Jeebhay MF, Cavalin C, Chen W, Cohen RA, Fireman E, et al. n.a. Current global perspectives on silicosis—Convergence of old and newly emergent hazards. *Respirology*.
- xiii Si S, Carey RN, Reid A, Driscoll T, Glass DC, Peters S, et al. 2016. The Australian Work Exposures Study: prevalence of occupational exposure to respirable crystalline silica. *Ann Occup Hyg.* 60(5):631-7.
- xiv Infrastructure Partnerships Australia. 2022. Australian Infrastructure Budget Monitor 2021-2022. Sydney: Infrastructure Partnerships Australia.
- xv Hoy RF, Baird T, Hammerschlag G, Hart D, Johnson AR, King P, et al. 2018. Artificial stone-associated silicosis: a rapidly emerging occupational lung disease. Occupational and Environmental Medicine. 75(1):3-5
- xvi Australian Government. 2021. The National Dust Disease Taskforce's Final Report.

Canberra: National Dust Disease Taskforce, Department of Health.

- xvii Australian Government. 2021. The National Dust Disease Taskforce's Final Report. Canberra: National Dust Disease Taskforce, Department of Health.
- xviii Australian Government. 2021. The National Dust Disease Taskforce's Final Report. Canberra: National Dust Disease Taskforce, Department of Health.
- www.WorkSafe Victoria. 2022. Engineered stone licence. Available from https://www.worksafe.vic.gov.au/engineeredstone-licence