

DEADLY DUST

BACKGROUND BRIEFING DOCUMENT ON SILICA

It is essential that the Federal government act and takes the lead as a matter of urgency to institute measures that lower exposures to respirable crystalline silica (RCS) in all Australian workplaces.

Recent estimates have modelled that without a significant change, 10,000 workers will be diagnosed with lung cancer and 100,000 will be diagnosed with silicosis. Existing safety laws are not enough to protect these workers.

Surveys by the National Dust Disease Taskforce, occupational hygienists, and unions show that employers are currently not doing enough to prevent exposures. For example, more than 70% of occupational hygienists surveyed in 2022 were concerned about over-exposure to silica dust. Hygienists reported the top two barriers to protecting workers were 'management commitment' and 'lack of financial resources'. It is little surprise that these were the same reasons cited for the glacial reform of the asbestos industry over the period from 1940s to 1980s.

Our health and safety systems, at enterprise, state and national level, have failed to prevent the recent exponential increases in these preventable diseases. In many circumstances, the relevant employer have the technology and know how to lower exposures but preventative measures and compliance with those measures has been profoundly lacking.

Preventing risks to workers involves the following steps – identification of the hazards, assessing the risks, controlling the risks and reviewing the effectiveness of those controls. Controlling risks is performed by using what's termed the hierarchy of control i.e. start by using the most effective measures and progressively using less effective controls until the risk has been either eliminated or minimised.

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Currently there are deficiencies at each of these steps and importantly there are few linkages or feedback loops between agencies, jurisdictions or various government departments e.g. health and work health and safety.

For example:

- The hazard of RCS had not been properly identified. This has led to a lack of safety measures being put in place by employers. It's also led to employers not complying with safety legislation. The process of air monitoring to determine levels of dust isn't being done. A survey of AWU members in 2022 heard that 1 in 8 workers reported regular dust monitoring – air monitoring is a legal requirement if the exposure standard is likely to be exceeded.
- The risks [levels of exposure] have been underestimated in particular in demolition, engineered stone use, tunnelling etc.
- There has been an overreliance on the least effective risk controls e.g. respiratory protection (masks).
- There has been a lack of health monitoring by both employers and relevant state health and safety authorities – union surveys report only 12 - 45% of workers are receiving health monitoring. This monitoring is used to assist in determining if the control measures are working effectively.
- Risk controls have not been reviewed either at the enterprise level or by government health and safety inspectorates.

THE ACTIONS REQUIRED INCLUDE:

1. Commence steps to ban the importation¹ and manufacture of high-quartz containing engineered stone into Australia by 2024, as these products are dangerous and controlling the risks is technically very difficult.²

- We know that delaying the decision to ban the importation and use of asbestos containing materials and the decision to prohibit the use of sand in sandblasting for example, had significant social and economic impacts on Australian workers and our society. Similarly, delaying a decision to ban the importation and use of high-quartz engineered stone will have similar devastating impacts.
- Caesarstone has declared that their Australian product liability insurance coverage has involuntarily ceased, and that it cannot provide external insurance for any new silica related claims which relate, in whole or in part, to exposures occurring during the period since their external insurance ceased. Thus, one of the largest manufacturers of engineered stone globally has not been able to obtain insurance for their product based on continuing liability associated with its use.
- A life insurer is now excluding claims for some exposed trades and industries in response to rising costs associated with claims. This reinforces our concern of the recognition of the level of risk by the business sector.

2. Control all current exposures to RCS across all affected industries through:

The solution to control of exposures is in the workplace. Regulatory change and active compliance and enforcement activity by regulators is essential. WHS and Health Ministers must agree to the following as a matter of urgency and adequately resource regulators and departments to ensure compliance with:

- Licencing schemes for engineered stone across all jurisdictions; and
- Regulation for high-risk crystalline silica processes - i.e. Ensure a regulatory approach in each jurisdiction that removes all doubt and provides duty holders with clarity about the risk control measures necessary for "high risk" silica processes
- Provision of lifetime health surveillance for workers exposed to RCS.

The current Regulatory Impact Analysis by SafeWork Australia is flawed as the full economic and health impacts were not assessed; sections of industry not covered by the Model WHS have been ignored - quarrying and general mining industries in NSW, QLD, TAS and WA and active preventative strategies were ruled out of scope.

¹ Many bodies support a ban of engineered stone. They include: The Australian Institute of Occupational Hygienists, The Australian Institute of Health and Safety, The Public Health Association of Australia, The Australian and New Zealand Society of Occupational Medicine, The Thoracic Society of Australia and New Zealand, The Lung Foundation of Australia, The Cancer Council of Australia, The Australian Council of Trade Unions

² Note industry is beginning to respond by lowering the percentage of silica in their products

BACKGROUND: THE HEALTH PROBLEMS OF EXPOSURES TO RCS

Silicosis is a debilitating and sometimes fatal lung disease caused by exposures to respirable silica dust [RCS]. There are numerous types of silicosis depending upon the levels of exposure to RCS with varying speed of onset of symptoms after exposure [week to decades]. People with silicosis suffer from worsening shortness of breath and respiratory failure. RCS also causes lung cancer. Exposure to RCS also causes immune disorders and kidney disease.

The exact number of people with silica dust related disease is unknown as our current information relies on workers compensation data and health surveillance conducted by some states since 2018.

Modelling done by Curtin University predicts that for workers exposed to respirable crystalline dust in the year 2016, between 83,090 and 103,860 cases of silicosis will develop over their lifetime and 10,390 lung cancers.³ The modelling is an underestimate, as it is based on exposures in one year, not over a full working life, uses data from 2016 and underestimates those using engineered stone.

The dangers of silica dust are well documented, at least since the 18th Century. Significant outbreaks have been associated with tunnelling here and overseas.

³ Curtin Report is available here:
<https://research.curtin.edu.au/news/10000-aussie-workers-set-to-develop-lung-cancer-from-silica-dust-study/?type=media>

THE ACTIONS REQUIRED INCLUDE:

3. Urgently establish a new multi-disciplinary independent body.

This is needed as the existing structures enable (by virtue of their complete failure to prevent) continued and high levels of worker exposure to silica dust, resulting in debilitating illnesses and death. The prevention of exposures, the detection of disease, oversight of the effectiveness of interventions and the provision of effective treatments and support for ill workers requires a multidisciplinary and independent approach. Currently no body exists to comprehensively perform such oversight at a Federal or State and Territory level.

Federally, there is no existing structure between Safe Work Australia, the Department of Health, and other agencies such as the Australian Industrial Chemicals Introduction Scheme (AICIS) or the Australian Border Force to enable coordinated action and leadership.

A new National Action Plan is being developed by the National Silicosis Prevention Strategy Expert Steering Committee, for the Department of Health. That action plan deals with prevention activities. Without an independent body to oversee and report on the progress and implementation of actions across the states and territories, the plan will be reduced to just words on a page.

While it is the responsibility of state and territory governments to implement and enforce health and safety laws, there is a real and significant disparity across the country on the level of effectiveness of each regulator. There is no mechanism to evaluate the effectiveness of regulatory compliance or interventions. No one holds the State and Territory Regulators to proper and public account.

The lack of health surveillance of at-risk workers and the shortfalls for workers with chronic illnesses means that illness goes undiagnosed and for those who are diagnosed, income support and vocational services are not comprehensive or sufficient to prevent precarious financial circumstances for many – especially younger people.

If exposure to RCS is kept low, there would be significantly less people affected.

WHERE DOES EXPOSURE OCCUR

Silica is part of the earth's crust, so exposures occur during mining, tunnelling and road construction, for example. Silica is used in products such as bricks, tiles, ceramics and concrete. Many construction and demolition workers are exposed. Silica powder [a fine dust] is milled and used in manufacturing processes. A 2012 survey estimated 6.7% of Australian workers were exposed to RCS.

4. Effective Support for ill workers

Our current workers' compensation regimes leave most workers with silicosis and other chronic illness associated with exposure to RCS with little long-term income support and health surveillance. This is a deliberate design feature of these schemes which force workers to choose to pursue their employers and other tortfeasors for common law damages to provide their families with financial stability or be forced to subsist on inadequate social security payments.

The National Dust Diseases Taskforce reported a lack of lifetime monitoring of workers who leave work due to illness or those who have had exposures to RCS. Continued health surveillance is required as many develop disease decades after exposures and others deteriorate despite cessation of exposures. The Review of the Queensland "Black Lung" program identified many areas for improvement – poorer arrangements exist outside of coal mining.

Engineered stone is a manufactured product that has high levels of silica [higher than naturally occurring stones]. It is imported and its use has dramatically increased in Australia over the last two decades. According to industry sources engineered stone accounted for 45% of all new benchtops in Australian 2016. The recent rise in silicosis has been linked to the work of fashioning and installing engineered stone bench tops.

Engineered stonework produces very fine dust with nanoparticulate characteristics that make controlling the dust levels more difficult. Additionally, there are uncertainties regarding what is in the dust produced.

