

***Proposed Department of Health and Aged Care Submission to the Safe Work Australia Consultation Regulatory Impact Statement - Managing the risks of respirable crystalline silica at work***

**General Comments:**

The Department of Health and Aged Care (the Department) welcomes the release of the *Consultation Regulation Impact Statement on Managing the risks of respirable crystalline silica at work* (the CRIS). It is clear from the work of the National Dust Disease Taskforce (the Taskforce) that further regulatory reform is required to urgently reduce the risks associated with working with respirable crystalline silica (RCS).

Occupational exposure to hazardous airborne contaminants contributes substantially to the burden of lung disease in Australia. The increasing numbers of workers being diagnosed with silicosis following exposures associated with the fabrication, cutting and installation of engineered stone is evidence that businesses, industry and governments need to take action to control and reduce these risks.

While some data is available, an accurate description of the true prevalence and incidence of silicosis in Australia is lacking and as such, the full scale and impact of silicosis in Australia is unknown. The importance of addressing RCS exposure becomes even more critical when the links to other diseases such as lung cancer, kidney disease, renal failure and some autoimmune diseases are considered.

Expenditure on respiratory disease accounted for \$4.460 billion in 2018-19<sup>1</sup> (~3.3% of total health expenditure) with the costs of several diseases (including silicosis) 100% attributable to occupational exposure and hazards. While the existing health funding framework makes it challenging to provide an accurate estimation of public health costs beyond those directly attributable in some hospital settings, the value, in addition to the cost to the individual and their families, is significant.

This broader context was a key consideration for the Taskforce which was established in 2019 to develop a national approach to the prevention, early identification, control and management of occupational dust diseases.

To inform its work, the Taskforce considered more than 120 stakeholder submissions, held forums across the country attended by 146 individuals, and facilitated 11 targeted engagement sessions. The Taskforce heard from researchers, peak bodies, unions, legal firms, occupational hygienists, industry, governments, radiologists and people directly affected by silicosis.

The Taskforce's Final Report, released in 2021, notes that despite occupational silica dust exposure being one of the oldest known causes of lung disease, data and information showing the re-emergence of silicosis raises significant concerns about the level of unaddressed risk associated with working with RCS in Australian workplaces. Given estimates in the CRIS<sup>2</sup> suggest that there are up to 1.45 million Australian workers employed in industries where there is the potential for silica exposure, the potential impact of silica related diseases on individuals, their families and society is likely to be significant.

While state and territory Work Health and Safety (WHS) regulators have taken action to improve education and awareness of the risks and enforce compliance with WHS laws, the Taskforce determined that additional regulatory controls are required to address gaps in both policy and implementation to ensure safe work environments.

---

<sup>1</sup> Source: AIHW Disease Expenditure database – Data tables: Disease expenditure in Australia 2018-19

<sup>2</sup> Safe Work Australia – Consultation Regulatory Impact Statement Managing the risk of respirable crystalline silica at work, p20, Table 5: Australian Bureau of Statistics Labour Force data for selected industries

The Taskforce argued that further regulatory reform should be part of a comprehensive program of work designed to fundamentally address the risks facing workers in industries that generate hazardous dust such as silica.

Since the release of the Taskforce's Final Report, a number of key non-regulatory initiatives are being progressed by the Department of Health and Aged Care:

- The national occupational respiratory disease registry is being developed in consultation with the Registry Build Advisory Group (RBAG). The RBAG comprises representatives from peak medical bodies, health organisations and states and territories. The Registry will allow for mandatory notification of silicosis, non-mandatory notifications of other occupational respiratory diseases (ORDs), and additional information to support research. Draft legislation for the Registry has been prepared.
- The Department is working in partnership with the Lung Foundation Australia and key stakeholders to develop a National Silicosis Prevention Strategy (NSPS). The Strategy will establish a coordinated and national focus on prevention, with the goal of eliminating silicosis and reducing the incidence of other occupational lung diseases in Australia. The associated National Action Plan (NAP) will outline priority activities for key stakeholders, such as governments, unions, industry, and peak bodies to implement. Further consultation on the detail of the NSPS and the NAP is expected to be undertaken soon.
- Progress has been made to develop a monitoring and evaluation framework that will be used to assess the impact of initiatives being delivered in response to the Taskforce's Final Report. Further consultation on this framework is anticipated before the end of 2022 with monitoring and evaluation activities likely to commence in early 2023.

In addition, in the 2022-23 Budget, the Australian Government provided \$11 million for the *Prioritising improved supports for workers affected by dust related diseases* measure, to deliver non-regulatory commitments made in the *All of Governments' Response to the Final Report of the National Dust Disease Taskforce*. The following initiatives are being progressed by the Department of Health and Aged Care:

- An enhanced focus on prevention: Funding for communication and education activities to raise awareness of the risks to lung health in the workplace targeting high risk employees, high risk industries, carers and families of those impacted, and culturally and linguistically diverse (CALD) employees and employers. In addition, a protocol will be developed with experts to enable the early identification of and response to, emerging occupational respiratory risks and associated diseases.
- Better support for affected workers and their families: Funding to support the development of a silicosis care management plan for health professionals to use in consultation with their patients, and to deliver a support service for affected workers and their families to provide information, advice and referrals, and peer-to-peer virtual support groups.
- Building the skills and knowledge of medical professionals: Funding for training to support general practitioners to use the *National Guidance to identify people at risk from RCS exposure*, development of general training for a broad range of health professionals supporting people affected by ORDs, and development of training for those involved in occupational health screening, including radiologists, to improve accuracy in diagnosis of silicosis and other ORDs.
- Strengthening the evidence base and taking a more strategic approach to research including supporting researchers focused on silicosis and other occupational dust diseases to share evidence and information; identify, collaborate and participate in research opportunities; and

develop advice for the Australian Government to ensure available research funding is better coordinated and targeted at critical priority areas.

Silicosis in Australia is an entirely preventable disease which, at present, is not being prevented. It is clear that further regulatory reform is required.

The Department supports the urgent implementation of additional reforms to the work health and safety model framework to reduce worker exposures, improve compliance with regulatory obligations, and deliver a genuine reduction in the incidence of ORDs like silicosis.

## **Additional specific responses to Consultation RIS questions**

### **Statement of the problem**

*2.1 Do you agree with the identified problem? Has the entirety of the problem been identified? Please provide evidence to support your position.*

The evidence is clear that workplace exposure to RCS has led to a substantive increase in the number of cases of silicosis in Australian workers. Silicosis, and other silica related diseases, can be prevented by implementing effective controls to eliminate or minimise the generation of and exposure to RCS at work.

The risks associated with exposure to RCS in the workplace apply to a range of industries including construction, mining and manufacturing. The Department notes that the Taskforce focused on the risks associated with individuals working with engineered stone, given the alarming trends in silicosis being seen in that particular sector. However, the Taskforce recognised that the issues identified through their consultations, relating to a lack of understanding of the risk of RCS exposure, inadequate compliance and mitigation practices, and limitations on the effectiveness of health monitoring activities, extended to a broader range of workplaces.

In the absence of recent evidence, the 2012 *Australian Work Exposure Study: Prevalence of Occupational Exposure to Respirable Crystalline Silica* estimated that 6.6% of Australian workers are exposed to RCS and 3.7% are highly exposed. This data is cause for significant concern<sup>3</sup>. The study indicates that the occupations with the highest proportion of workers exposed to high levels of RCS were miners, construction workers, plumbers, handy persons, and engineers. Acknowledging that the disease latency period creates a gap between exposure and diagnosis, the increase in incidence of silicosis amongst individuals who were not stonemasons remains a concern, e.g. 42% of silicosis cases notified to the NSW dust disease register in 2020-21 were not associated with stonemasonry (see CRIS 2.2.3.1).

It should be noted that the risks of RCS from engineered stone were not recognised at the time of the above study. This also raises concerns about the extent to which emerging RCS risks are being actively considered in relation to changing technologies, products or practices. This issue is magnified by the level of disease currently being observed in stonemasons. As at 31 January 2020, Workcover Queensland screened over 1000 stonemasons, of which 199 had progressive massive fibrosis (26), a respiratory condition that is not silicosis (10), or silicosis (163)<sup>4</sup>.

---

<sup>3</sup> Si S, Carey RN, Reid A, Driscoll T, Glass DC, Peters S, Benke G, Darcey E, Fritschi L. The Australian Work Exposures Study: Prevalence of Occupational Exposure to Respirable Crystalline Silica. *Ann Occup Hyg*. 2016 Jun;60(5):631-7. doi: 10.1093/annhyg/mew007. Epub 2016 Feb 17. PMID: 26888888.

<sup>4</sup> 1000+ stonemasons now screened for silicosis in Queensland. [Worksafe.qld.gov.au](https://www.worksafe.qld.gov.au). 28 Feb 2020.

As noted in the CRIS, current data limitations challenge an accurate attribution of other diseases to RCS exposure. In addition to those referenced in the CRIS, RCS exposure has been associated with a broad range of other respiratory and non-respiratory conditions which warrant consideration such as: Other Pulmonary Conditions – Lymphadenopathy, Chronic Obstructive Pulmonary Disease, Pulmonary Fibrosis, Caplan Syndrome and Mycobacterial Disease – Pulmonary Tuberculosis.

The available statistics are likely to underestimate the scale of the problem and potential impact of RCS exposure.

### **Why is Government action needed?**

*3.1 Do you agree with the case for government intervention? Please provide evidence to support your position.*

The Department strongly supports the case for further intervention.

As noted in the CRIS, there are significant financial and non-financial costs associated with diagnosis of silicosis and other silica related disease, including significant physical and emotional harm, reduced ability to work, reduced quality of life and premature death of workers. The cost of disease also extends to the public health system, including for health screening, diagnosis, treatment and disease management for impacted individuals.

Despite the activities of government and non-government stakeholders to address this issue in recent years, it is clear that further regulatory action is required. While there has been a focus on engineered stone, the CRIS appropriately notes that the breadth of RCS exposure is not limited to a single industry.

The Taskforce's Final Report indicates that additional regulatory controls are required to address gaps in both policy and implementation to ensure safe work environments. The Department agrees that silica related diseases pose an unacceptable health risk to workers.

The Department notes that the CRIS indicates that preventing less than 5 cases of silicosis a year is sufficient to offset the total costs to government and industry of the options with greatest regulatory burden. Additional regulatory action by government and industry to limit RCS exposure in the workplace is both warranted and proportionate.

### **What is the likely impact of each option**

*6.5 Do you have further information regarding the costs to the public health system for silicosis and silica related diseases?*

The Department notes the significant challenges that exist in attributing a population level cost in relation to silicosis or other silica related diseases to public health spending. However, it is important to try to capture these costs, in some form, as part of decision making in relation to the CRIS.

A total cost of \$737,395 is attributed to treatment of individuals with silicosis in the most recent health expenditure data<sup>5</sup> (2018-19), although this likely represents a significant underestimation of the true cost. This estimate was developed based on the treatment of ~180 cases in private hospital and public hospital admitted patient settings. Outpatient costs, costs covered through the Medicare Benefit Schedule for general practitioner, specialist services or imaging and any additional costs covered through the Pharmaceutical Benefits Scheme are not included in this cost.

---

<sup>5</sup> Source: AIHW Disease Expenditure database – Data tables: Disease expenditure in Australia 2018-19

The costs to the individual must also not be overlooked in considering a cost benefit analysis. The *2018 AIHW Burden of Disease Report*<sup>6</sup> linked dust disease causing agents from occupational exposure with silicosis. The total burden of this disease is estimated at 316 disability adjusted life years (DALYs) in 2011, 2015 and 2018 as a result of years lived in absence of healthy life<sup>7</sup>. There is also significant cost to the individual and employer for loss of productivity for instances of absenteeism and redundancy.

In addition to silicosis, there is significant expenditure across health areas each year on other diseases which can be associated with silica exposure, although the extent to which this is directly attributed to RCS is not defined. In 2018-19, occupational exposures and hazards accounted for \$37.9 million in relation to lung cancer cases and \$22.3 million with Chronic Obstructive Pulmonary Disease<sup>8</sup>.

## Discussion of options

*7.1 Which option or combination of the options presented is most likely to address the identified problem? Please provide evidence to support your position.*

The Department supports options that clearly address the problem definition.

The problem definition sets out the limiting factors for reducing RCS exposure in occupational settings as lack of compliance, enforcement, and persons conducting a business or undertaking's (PCBUs) understanding of regulatory obligations under WHS laws. The CRIS does not provide strong evidence to support the proposition that further awareness and behaviour change initiatives (Options 2&3) alone will significantly improve compliance, enforcement and understanding of regulatory obligations.

The Taskforce strongly recommended the urgent introduction of enhanced regulatory requirements in relation to engineered stone to ensure better protection of workers. This position was supported by data showing an alarming increase in the incidence of silicosis as a result of working with engineered stone, and extensive evidence provided by stakeholders about the ineffectiveness of existing mitigation measures. The Taskforce recommended the introduction of a national licensing scheme; regular monitoring and recording of silica dust levels in the workplace and having these validated by an appropriately trained occupational hygienist; increased frequency and robustness of workplace inspections and better promotion of these activities; and strengthening of health monitoring requirements. More broadly, it called for work health and safety measures more broadly (i.e. outside of the engineered stone businesses) to be strengthened to protect workers.

The Department similarly supports the introduction of stronger regulations to better protect workers and reduce the incidence of silicosis. The introduction of a licensing scheme (option 4) including periodic confirmation by a licensing body that PCBUs are adhering to their obligations would address many of the key risks and should be further explored. It would complement the inspection and enforcement activities of WHS regulators.

Further, the Department supports options that include health and air monitoring, noting that it is not reasonable to expect PCBUs to implement effective monitoring systems without expert advice (e.g. from an occupational hygienist). Options 4, 5a and 5b suggest that air monitoring report data such as RCS time weighted averages could be linked with silicosis incidence at a national level – facilitated by the National Occupational Respiratory Disease Registry. Linking occupational exposure with

---

<sup>6</sup> Source : AIHW Australian Burden of Disease Study 2018 – Data tables: ABDS 2018 risk factor estimates

<sup>8</sup> Source: AIHW Disease Expenditure database – Data tables: Disease expenditure in Australia 2018-19

population health statistics will provide vital information that will enable a clear evaluation of how effective the implemented actions are in reducing risks to workers and preventing silicosis.

The Department also supports the implementation of additional regulatory action in other industries where workers are exposed to RCS (option 5b), given the well-established health risks of working with silica.