



National Dust Disease Progress Report April 2022–December 2023

Addressing recommendations of the All of Governments' Response to the National Dust Disease Taskforce Final Report

December 2024

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Glossary

TERM	DESCRIPTION
ACT	Australian Capital Territory
All of Governments' Response	All of Governments' Response to the National Dust Disease Taskforce Final Report.
ASSEA	Asbestos and Silica Safety and Eradication Agency (formerly the Asbestos Safety and Eradication Agency).
CRIS	Consultation Regulation Impact Statement. The first stage of the regulatory impact analysis, which canvasses feedback from stakeholders on regulatory options under consideration.
Crystalline silica	The crystalline form of the abundant naturally occurring mineral silica or silicon dioxide (SiO ₂). It is present in almost all types of rocks, sand, clays, shales and gravel and in construction materials such as concrete, tiles and bricks.
DALY	Disability adjusted life years (DALYs) are measure of disease burden, where one DALY is one year of healthy life lost to disease and injury.
Decision Regulation Impact Statement	The final stage of the regulatory impact analysis, which provides recommendations on regulatory options to inform the deliberations of the decision-making body.
Duty holder	Any person who owes a work health and safety (WHS) duty under the model WHS laws including: a person conducting a business or undertaking (PCBU), a designer, manufacturer, importer, supplier, installer of plant, substances or structures used at work (upstream duty holder), officer or a worker.
Engineered stone	 Engineered stone is defined in the <i>model WHS Regulations</i> as: a) an artificial product that: i. contains 1% or more crystalline silica, determined as a weight/weight concentration; and ii. is created by combining natural stone materials with other chemical constituents such as water, resins or pigments; and iii. becomes hardened, but b) does not include concrete and cement products; bricks, pavers and other similar blocks; ceramic wall and floor tiles; roof tiles; grout, mortar and render; plasterboard; porcelain products; and sintered stone.

TERM	DESCRIPTION
Final Report	National Dust Disease Taskforce – Final Report
Health monitoring	Monitoring of an individual to identify changes in their health status where there is a significant risk of exposure to certain substances. This can include a worker carrying out work involving using, handling or storing hazardous chemicals. Providing health monitoring is a statutory requirement under the model work health and safety (WHS) laws. Health monitoring is referred to as health surveillance in Western Australia.
	In this report, health monitoring refers to the monitoring of a worker by doctors to identify changes in the person's health status because of exposure to certain substances – including a worker who is carrying out ongoing work involving using, handling, storing etc hazardous chemicals where there is a significant risk of exposure to hazardous chemicals. Providing health monitoring is a statutory requirement under model work health and safety (WHS) laws. Health monitoring is referred to as health surveillance in Western Australia.
Hierarchy of control	An approach to controlling health and safety risks ranked from the highest level of protection and reliability to the lowest.
measures	Control measures, from most to least effective include:
	elimination
	 substitution isolation
	engineering controls
	administrative controls and personal protective equipment
Incidence	The number of new cases (of an illness or event) occurring during a given period.
Model WHS law	WHS laws are largely harmonised across jurisdictions through a set of uniform laws, known as the model WHS laws.
	The model WHS Act forms the basis of the WHS Acts implemented in all jurisdictions across Australia with the exception of Victoria which maintains an equivalent Occupational Health and Safety Act.
Model WHS Regulations	The <i>Model Work Health and Safety (WHS) Regulations</i> set out detailed requirements to support the duties in the model WHS Act.
NORDR	National Occupational Respiratory Disease Registry (National Registry)
NSW	New South Wales
Person conducting a	The term is an umbrella concept used in the model WHS laws to capture all types of working arrangements or structures. A PCBU can be a: company;



TERM	DESCRIPTION
business or undertaking (PCBU)	unincorporated body or association; sole trader or self-employed person. Individuals who are in a partnership that is conducting a business will individually and collectively be a PCBU.
Personal protective equipment (PPE)	Items used or worn by a person to minimise risk to the person's health and safety.
Prevalence	The number or proportion of cases in a population at a given time.
Prevention	Measures to keep people healthy and well and to avoid the onset of illness, disease or injury.
Public health	Activities aimed at benefiting a population, with an emphasis on prevention, protection and health promotion as distinct from acute treatment tailored to individuals with symptoms.
Respirable crystalline silica (RCS)	Particles of silica dust that are less than and equal to 10 micrometres (μ m) in diameter that can penetrate deep into the lungs.
	RCS is a hazardous chemical for the purposes of the model WHS laws and has a workplace exposure standard.
Respiratory protective equipment	A type of PPE designed to protect a person from inhaling an airborne hazardous substance. A common type of RPE is a respirator.
Regulatory Impact Analysis	A tool used by governments, when introducing or abolishing regulation, to assess the likely impact of viable options against the default position of no change in a way that is transparent and accountable.
Risk	The possibility that harm may occur when exposed to a hazard
RSHQ	Resources Safety and Health Queensland
SA	South Australia
Taskforce	National Dust Disease Taskforce
WA	Western Australia
WHS	Work health and safety
Worker	Under the model WHS laws, a worker is any person who carries out work for a PCBU, including work as an employee, contractor, subcontractor, self- employed person, outworker, apprentice or trainee, work experience



TERM	DESCRIPTION
	student, employee of a labour hire company placed with a 'host employer' and volunteers.
Workplace	Any place where work is carried out for a business or undertaking and includes any place where a worker goes, or is likely to be, while at work. This may include offices, factories, shops, construction sites, vehicles, ships, aircraft or other mobile structures on land or water.



Executive Summary

In April 2022, the *All of Governments' Response to the National Dust Disease Taskforce Final Report* (All of Governments' Response) was released. The All of Governments' response outlined the commitment of Commonwealth, state and territory governments to reduce the incidence of silicosis and other dust diseases among workers.

The National Dust Disease Progress Report April 2022–December 2023 (Progress Report) has been developed by the Department of Health and Aged Care, with feedback from the Department of Employment and Workplace Relations, Safe Work Australia and state and territory work health and safety (WHS) agencies.

The report aims to encompass actions taken by all Australian governments to support recommendations made by the National Dust Disease Taskforce since the release of the All of Governments' Response in April 2022 up to 31 December 2023. Activities undertaken prior to this period can be found in the All of Governments' Response.

Part A of this report summarises national initiatives and programs undertaken by Commonwealth agencies, including Safe Work Australia. As the national policy body relating to WHS and workers' compensation, Safe Work Australia has undertaken significant work to address the increase in silicosis in workers, particularly in the engineered stone industry. The work of Safe Work Australia includes developing and evaluating national policy to improve WHS and workers' compensation arrangements across Australia, including the model WHS laws.

State and territory governments are responsible for regulating and enforcing WHS laws in their jurisdictions and each have their own regulator to monitor and ensure compliance. It is a matter for individual jurisdictions on whether to implement the model WHS laws.

WHS regulators in each jurisdiction have done significant work toward implementing Taskforce recommendations including monitoring, compliance and enforcement activities working with businesses on the risks of exposure to respirable crystalline silica to ensure they are meeting their WHS duties. WHS regulators have also developed education and awareness campaigns, codes of practice, legislative changes and invested in research. Broad promotion of the issues of hazardous dusts and silicosis have enhanced health awareness of the risks associated with working in industries at risk of silica dust exposure.

State and territory governments have provided the Department of Health and Aged Care with summaries of activities they have undertaken. These can be found in Part B of this report.

Introduction

Silicosis

Occupational respiratory diseases are work-related conditions of the respiratory system that can be caused by exposure to dust, fumes, vapours, gasses, and microorganisms. Examples of occupational respiratory diseases include work-related asthma, work-related chronic obstructive pulmonary disease (including chronic bronchitis) and a subgroup of pneumoconiosis which include coal worker's pneumoconiosis ('black lung' disease), asbestosis and silicosis.

Silicosis is an incurable fibrotic lung disease caused by breathing in tiny particles of silica, called respirable crystalline silica (RCS). Silica is a naturally occurring and abundant mineral found in most rocks and soil. It is commonly used in industrial processes and materials due to its chemical properties and low cost. RCS is formed when products containing silica are crushed, drilled, ground, sawed or polished, forming tiny particles that can penetrate deep into the lungs. As well as silicosis, exposure to RCS is associated with autoimmune disease, renal disease and other lung diseases such as lung cancer.¹

There is currently no consistent data on the prevalence or incidence of silicosis in Australia. Information is largely sourced from workers' compensation claims, cause of death statistics or state-based silicosis registries. Data from these sources is incomplete and is likely to underestimate the true number of silicosis cases in Australia. However, it is estimated silicosis contributed to 183 disability adjusted life years (DALYs) per 1,000 people in 2022.² It is expected the number of silicosis cases will continue to rise. Modelling conducted by Curtin University estimates between 83,090 and 103,860 cases of silicosis will occur in the future as a result of current exposure to RCS.³

Silicosis is preventable through the adoption of safe workplace practices, including applying a hierarchy of control measures. Regular health monitoring can also help to detect early signs of disease. Health monitoring for silicosis can involve a lung function test, chest x-ray, high-resolution computed tomography scan, questionnaires to assess



¹ Lung Foundation Australia. NSPS Scientific and Evidence Report – Silicosis in Australia. n.d. Available from: <u>https://lungfoundation.com.au/resources/nsps-scientific-and-evidence-report-silicosis-in-australia/</u>.
² Australian Institute of Health and Welfare (AIHW). Australian Burden of Disease Study 2022. 2022. Available from: <u>https://www.aihw.gov.au/reports/burden-of-disease/australian-burden-of-disease-study-2022/contents/interactive-data-on-disease-burden/comparisons-over-time</u>.

³ Carey R, Fritschi L. The future burden of lung cancer and silicosis from occupational exposure in Australia: A preliminary analysis. 2022. Available from <u>https://www.curtin.edu.au/about/wp-content/uploads/sites/5/2022/07/FEFreport_formatted.pdf</u>.

respiratory symptoms and collecting demographic information, medical, occupational and exposure history.⁴

Engineered stone

In recent years, there has been a major re-emergence of silicosis in Australia associated with the engineered stone benchtop industry. It grew in popularity over the last two decades to become the dominant product in the kitchen and bathroom benchtop market, with an estimated 2-3 million Australian homes containing engineered stone.

Engineered stone has a very high silica containing material made by mixing crushed rock with resin and pigments. The silica content of engineered stone slabs is typically up to 97% (by weight), compared to 2% in marble or 25%-40% in granite.

Engineered stone workers are over-represented amongst people diagnosed with silicosis. This is due to a number of factors including high consumer demand for engineered stone benchtops, the presence of resins and pigments which may pose additional health risks or exacerbate the effects of exposure to RCS and engineered stone being easier to process than natural stone.⁵ Silicosis caused by engineered stone is characterised by a shorter latency and more rapid loss of lung function.

National Dust Disease Taskforce

The rapid re-emergence of silicosis raised concerns about the adequacy of, and compliance with, existing WHS arrangements for people working in dust generating industries. This prompted a whole of government response to prevent, identify and manage occupational dust diseases in Australia.

On 26 July 2019, the Commonwealth Government announced the establishment of a National Dust Disease Taskforce (Taskforce). The Taskforce informed a national approach to the prevention, early identification, control and management of occupational dust diseases in Australia. In considering this issue, the Taskforce was asked to include advice on:

- 1. action that has been taken to date to address occupational dust disease across all Australian jurisdictions.
- 2. existing policy and regulatory arrangements in Australia to protect those at risk from occupational dust disease, more specifically reviewing what controls are in place; and how these are applied and monitored by the system.



⁴ Safe Work Australia (SWA). Managing the risks of respirable crystalline silica from engineered stone in the workplace. 2021. Available from <u>https://www.safeworkaustralia.gov.au/doc/model-code-practice-managing-risks-respirable-crystalline-silica-engineered-stone-workplace</u>.

⁵ Safe Work Australia (SWA). Decision Regulatory Impact Statement: Prohibition on the use of engineered stone. 2023. Available from: <u>https://www.safeworkaustralia.gov.au/doc/decision-regulation-impact-statement-prohibition-use-engineered-stone</u>.

- 3. opportunities for improvement across the system to ensure protection of those atrisk populations.
- 4. options for sustainable approaches for the future prevention, detection and management of occupational dust diseases, including considering establishment of a national dust disease registry, including its scope and outcomes to be achieved.
- 5. options for potential new research required to support the understanding, prevention and treatment of preventable occupational respiratory disease.

The Taskforce presented its findings and advice to government in the National Dust Disease Taskforce – Final Report (Final Report) in June 2021.⁶ The final set of recommendations provided a comprehensive program of reform requiring action by governments, industry and unions.

All of Governments' Response to the National Dust Disease Taskforce Final Report

The *All of Governments' Response to the National Dust Disease Taskforce Final Report*,⁷ published in April 2022, outlines the commitment of Commonwealth, state and territory governments to reducing the incidence of silicosis and other dust diseases.

The All of Governments' Response acknowledged joint deliberate action was required from all levels of government, industries, unions, and workers to drive the required change. The shared objective was the elimination of silicosis amongst workers and increased quality of life for those already impacted, and their families. All Australian governments supported the view expressed by the Taskforce that further decisive action was required to better protect workers in dust generating industries and to support affected workers and their families.

In the All of Governments' Response Australian governments have agreed to support all recommendations except recommendation 1d and 5a.

- Recommendation 1d, Australian governments noted the challenges of commencing the importation ban of engineered stone products by July 2024, and noted the need to assess the effectiveness of measures to protect workers.
- Recommendation 5a, instead of funding multidisciplinary teams of medical professionals, Australian governments recommended medical practitioners use existing multidisciplinary care conference items available on the Medical Benefits

⁶ Department of Health and Aged Care. National Dust Disease Taskforce Final Report to Minister for Health and Aged Care. 2021. Available from: <u>https://www.health.gov.au/resources/publications/national-dust-disease-taskforce-final-report?language=en</u>.

⁷ Department of Health and Aged Care. All of Governments' Response to the Final Report of the National Dust Disease Taskforce. 2022. Available from: <u>https://www.health.gov.au/resources/publications/all-of-governments-response-to-the-national-dust-disease-taskforce-final-report?language=en/</u>.

Schedule and pledged to review and make appropriate changes to the Medical Benefits Schedule if needed.

In response to Recommendation 7b made by the Taskforce, the Commonwealth Government agreed to support the coordination and development of an annual report for submission to Health and WHS Ministers.

National Dust Disease Progress Report April 2022–December 2023

Since release of the All of Governments' Response, WHS regulators in each jurisdiction have worked to implement the Taskforce recommendations by implementing a broad range of measures to address the increase in silicosis cases, particularly amongst those working with engineered stone.

The National Dust Disease Progress Report April 2022–December 2023 (Progress Report) has been developed by the Department of Health and Aged care, with feedback from the Department of Employment and Workplace Relations, Safe Work Australia and state and territory WHS agencies.

Part A of this report summarises national initiatives and programs undertaken by Commonwealth agencies and Safe Work Australia. Safe Work Australia is the national WHS and workers' compensation policy body. The work of Safe Work Australia includes developing and evaluating national policy to improve WHS and workers' compensation arrangements across Australia, including the model WHS laws.

Jurisdictions are responsible for regulating and enforcing WHS laws and each have their own regulator to monitor and ensure compliance. Regulators in each jurisdiction have completed significant work toward implementing Taskforce recommendations and have provided the Department of Health and Aged Care with summaries of activities they have undertaken. These can be found in Part B of this report.



Part A: National Initiatives and Programs

Recommendation 1: Work health and safety measures

Strengthen work health and safety measures to ensure workers are protected from exposure to respirable crystalline silica and its devastating consequences. Maintaining the status quo is not acceptable.

1a. Take immediate action to ensure that businesses working with engineered stone demonstrate that they:

- effectively and continuously manage the risks for workers associated with working with engineered stone;
- regularly monitor and record silica dust levels in the workplace, and have these results validated by an appropriately trained occupational hygienist; and
- conduct regular health monitoring of all workers exposed to respirable crystalline silica.

1b. Greater priority be given to work health and safety monitoring and compliance activities where workers are at risk of exposure to respirable crystalline silica. Specific consideration should be given to:

- development and introduction of an industry funding model to support ongoing regulatory activities; and
- increased frequency and robustness of workplace inspections and better promotion of actions taken by WHS regulators.

As the national policy body relating to WHS and workers' compensation, Safe Work Australia has undertaken significant work to address the increase in silicosis in workers, particularly in the engineered stone industry.

On 23 February 2023 Safe Work Australia published the *Australian Work Health and Safety Strategy 2023–2033*. Occupational lung diseases, including silicosis, remain a key priority with related targets to reduce the frequency rate of work-related respiratory disease by 20% and no new cases of accelerated silicosis by 2033.

On 23 March 2023 Safe Work Australia Members agreed to further reduce the 8-hour time-weighted average workplace exposure standard for RCS from 0.05 mg/m³ to a health-based limit of 0.025 mg/m³.

On 26 May 2023, Safe Work Australia announced the *Model Work Health and Safety Regulations (Engineered Stone) Amendment 2023*. This amendment introduced an express prohibition on the uncontrolled processing of engineered stone. Under this legislation the processing of engineered stone will be considered controlled if:

- (a) at least one of the following systems is used:
 - a water delivery system that supplies a continuous feed of water over the area being cut to suppress the generation of dust,
 - an on-tool extraction system, or
 - a local exhaust ventilation system; and
- (b) each worker who is processing engineered stone is provided with respiratory protective equipment.

The amendment has been implemented in the WHS regulations of South Australia and the Commonwealth. New South Wales, the Australian Capital Territory, Western Australia and Victoria already had similar regulations in place. The Northern Territory, Queensland and Tasmania introduced these amendments after 31 December 2023.

Safe Work Australia has also undertaken significant communications activity to raise awareness of the need to reduce exposure to silica dust and prevent silicosis and silicarelated diseases. Many of these actions have included developing resources and materials as part of Safe Work Australia's education and communication function including:

- publishing the <u>Working with Silica and Silica Containing Products Guide</u> and translating this into 6 other languages
- publishing the <u>Model Code of Practice: Managing the Risks of Respirable</u> <u>Crystalline Silica from Engineered Stone in the Workplace</u>
- delivering the '<u>Clean Air. Clear Lungs</u>.' national education and awareness campaign focusing on all occupational lung diseases in 2021 and silica in 2023.

1c. Urgently conduct a regulatory impact analysis (RIA) to identify and decide implementation of measures that provide the highest level of protection to workers from the risks associated with respirable crystalline silica generating activities in the engineered stone industry. The RIA must consider:

- a licensing scheme or equivalent to restrict access to the product to those businesses that can demonstrate the ability to effectively manage the risks; and
- strengthening the health monitoring requirements include contemporary methodologies such as low dose high resolution computerised tomography (HRCT) scans, and to cover all workers at risk of exposure to respirable crystalline silica.

1d. Commence the processes required to implement a full ban on the importation of some or all engineered stone products if, by July 2024:

- there is no measurable and acceptable improvement in regulatory compliance rates for the engineered stone sector as reported by jurisdictions; and
- evidence indicates preventative measures are not effectively protecting those working with engineered stone from silicosis and silica-associated diseases.

Although outside the reporting period, this section includes recent WHS regulatory reforms which address silicosis and silica-related diseases as these provide important context for future work to regulate and manage workplace risk.

Regulatory measures to manage workplace risk

In mid-2022, Safe Work Australia published a *Consultation Regulatory Impact Statement* (CRIS). The CRIS presented five regulatory and non-regulatory options to manage the risks of RCS in the workplace. Following publication, Safe Work Australia engaged in a 6-week consultation period to seek public and stakeholder feedback on the proposed options and impact analysis. Submissions were received from governments, peak bodies, unions, employer or industry representatives, commercial enterprises, lawyers, insurance groups, academics, and individuals.

Safe Work Australia then published the *Decision Regulatory Impact Statement* – *Managing the Risks of Respirable Crystalline Silica at Work* in February 2023. The original options were refined in response to the consultation including a new option exploring the prohibition on the use of engineered stone.

On 28 February 2023, Commonwealth, state and territory WHS Ministers agreed to a range of regulatory and non-regulatory measures to better protect workers from exposure to RCS in the workplace. The agreed reforms were informed by Safe Work Australia's Decision Regulation Impact Statement: <u>Managing the Risks of Respirable Crystalline</u> <u>Silica at Work</u>.

The agreed actions included:

- delivery of national awareness and behaviour change initiatives
- regulation of high-risk crystalline silica processes for all materials (including engineered stone), including additional training requirements; requirements to conduct air monitoring and to report workplace exposure standard exceedances to the relevant regulator; and scoping new and updated model Codes of Practice for at-risk industries.

Ministers also requested Safe Work Australia undertake further analysis and consultation on a prohibition of the use of engineered stone under the model WHS laws within 6 months.

Workplace exposure standard for respirable crystalline silica

In March 2023, Safe Work Australia members considered a proposal to reduce the 8-hour time-weighted average workplace exposure standard for RCS from 0.05 mg/m³ to 0.025 mg/m³.

Prohibition on the use of engineered stone

On 27 October 2023, WHS Ministers considered and agreed to publish a Safe Work Australia report outlining a range of regulatory options including a licensing scheme. Safe Work Australia's findings were set out in the *Decision Regulation Impact Statement:* <u>Prohibition on the use of engineered stone</u> which recommended a ban on engineered stone as the most effective means to protect workers.

On 13 December 2023, Commonwealth, state and territory WHS Ministers agreed to the prohibition on the supply, processing and manufacture of engineered stone benchtops, panels and slabs, with the ban to commence in all states and territories on 1 July 2024.

On 22 March 2024, Commonwealth, state and territory WHS Ministers agreed to several implementation measures associated with a prohibition on the use of engineered stone. Key outcomes of the meeting were:

- ministers agreed draft amendments to the model WHS laws to give effect to the prohibition on the use of engineered stone from 1 July 2024
- ministers agreed jurisdictions may adopt a transition period for contracts entered into prior to the announcement of the prohibition.

South Australia, Western Australia, Northern Territory, Tasmania and New South Wales have adopted a transitional period for the prohibition on the use of engineered stone until 31 December 2024. The Commonwealth adopted arrangements to mirror individual state and territory transitional arrangements and to apply depending on the jurisdiction where work is performed.

WHS Ministers agreed on Safe Work Australia reviewing the operation of the prohibition to ensure it is operating effectively. As part of this process, Safe Work Australia has been

asked to review the health risks to workers associated with processing slabs, panels and benchtops made from alternative materials. This review is to be finalised by 31 July 2025.

Safe Work Australia has published detailed guidance and information on the prohibition, which is available at: <u>https://www.safeworkaustralia.gov.au/esban</u>.

Prohibition on the importation of engineered stone

To complement the domestic prohibition on the use of engineered stone under Commonwealth, state and territory WHS laws, the Australian Government announced its intention to ban the importation of engineered stone into Australia. As part of the 2024–25 Budget, funding of \$32.1 million over 2 years was provided to support the Australian Border Force to enforce this importation ban.

Australian Work Health and Safety Strategy 2023–2030

The *Australian Work Health and Safety Strategy 2023–2030* outlines a national vision for WHS outcomes in Australia to respond to key WHS challenges over the next 10 years. To address the recent rise of accelerated silicosis, this strategy sets out targets which include to reducing the frequency of work-related respiratory disease by 20% and for no new cases of accelerated silicosis by 2033. This strategy was developed by Safe Work Australia and published in February 2023.

Recommendation 2: Health screening

Building on the early recommendation from the Interim Advice to develop national guidance to identify people at risk from respirable crystalline silica exposure, improve the quality, frequency and coverage of health screening assessments for current and former workers.

Under the model WHS laws, persons conducting a business or undertaking (PCBU) are required to provide health monitoring for their workers if the workers are carrying out ongoing work at a workplace using, handling, generating or storing RCS and there is a significant risk to the worker's health because of exposure to silica dust.

Health monitoring under the model WHS laws is distinct from health screening or health surveillance, in that requirements only apply to current workers. Health monitoring is intended to ensure PCBUs can identify changes in the health status of workers as a result of exposure to hazardous situations and review measures implemented to control the risks of exposure to hazardous situations.

The Taskforce noted there was a lack of consistent and frequent health screening and surveillance of workers who currently have, or previously had, exposure to RCS. The Taskforce stressed the importance of screening workers to supplement the model WHS laws.

As part of the All of Governments' Response to recommendation 2, the Department of Health and Aged Care developed the *National Guidance for Doctors Assessing Workers*

<u>Exposed to Respirable Crystalline Silica Dust</u> (National Guidance) with specific reference to engineered stone related silicosis on 28 February 2022. The National Guidance provides a framework to identify workers exposed to RCS dust and supports medical practitioners to carry out health surveillance within their specific training and experience.

The Commonwealth government has provided \$3.03 million for training to health professionals to better support workers affected by silicosis and other occupational dust diseases. Part of this grant is to review and update the National Guidance in consultation with experts and medical colleagues and develop and deliver a series of online training to support General Practitioners and other medical practitioners to use the National Guidance.

Recommendation 3: Prevention

In addition to implementing the early recommendations from the Interim Advice that aim to prevent the risk of exposure to respirable crystalline silica and other hazardous dusts, prioritise investment in prevention activities.

3a. Finalise and implement the *National Silicosis Prevention Strategy and associated National Action Plan.*

The Department of Health and Aged Care engaged Lung Foundation Australia to develop a draft *National Silicosis Prevention Strategy and National Action Plan* to underpin a coordinated, whole of government approach to the prevention of silicosis.

The development of the draft plan was overseen by a multidisciplinary and multi-sector expert steering committee and the Lung Foundation Australia draft was published online in February 2023. The draft plan included a range of proposed activities including workplace risk reduction, education and awareness, health monitoring, screening and surveillance, governance, regulation and legislation, and research and development.

To support this recommendation, in December 2023, the Asbestos Safety and Eradication Agency's functions were expanded to include silica through the *Fair Work Legislation Amendment (Closing Loopholes) Act 2023*. The Agency was subsequently renamed as the Asbestos and Silica Safety and Eradication Agency (ASSEA).

The amendments provide for a Silica National Strategic Plan, administered by ASSEA, aimed at eliminating silica-related diseases in Australia and supporting workers and others affected by these diseases. A key function of the Agency is to coordinate, monitor and report on implementation of a Silica National Strategic Plan.

Work on the National Silicosis Prevention Strategy has been transitioned to ASSEA. The Department of Health and Aged Care has been working closely with ASSEA and will continue to support their work to finalise the Silica National Strategic Plan. This plan remains in draft until agreed by at least 6 out of 9 Commonwealth and state and territory governments.

3b. Implement a national, targeted education and communication campaign, using lessons learned from jurisdictions and key stakeholders, by end 2021.

The Commonwealth Government provided funding for specific education and awareness campaigns to prevent the risk of exposures which can lead to occupational lung diseases. The Department of Health and Aged Care awarded \$1.839 million to Lung Foundation Australia from 2020–21 to 2024–25 financial years to improve awareness and understanding of lung conditions for population groups considered to be at an increased risk of experiencing poor lung health in Australia.

The activities are intended to ensure that:

- workers in relevant industries, including culturally and linguistically diverse employees and their families, have increased knowledge and understanding about the risks of working with products containing silica.
- workers in relevant industries change their behaviour to better protect themselves from the risks of working with products containing silica, and work with their employers to ensure appropriate controls are implemented in workplaces.
- workplaces in dust generating industries introduce new, or improve existing, practices to better protect and support workers affected by silicosis and their families.
- workers affected by silicosis, and their families, have better social, physical, and mental health outcomes because they are better supported to access the services and seek the support they need.
- Commonwealth, state, and territory governments are informed about the best approach to identify and respond to emerging occupational respiratory risks and associated diseases.

Lung Foundation Australia developed the National Silicosis Prevention and Awareness campaign, which was launched on 1 October 2023. They have also made numerous resources available on their website for community members and patients. These include information pages with facts about silicosis, education video, scientific and evidence report, brochures, research forum and webinar presented by experts.

In November 2023, Safe Work Australia launched a new phase of the Clean Air, Clear Lungs campaign to improve understanding of the hazards of silica dust and duties under WHS laws. The Clean Air, Clear Lungs campaign was first promoted in 2021 to raise awareness of occupational lung diseases. The new phase of the campaign raises awareness of the WHS risks and duties of RCS, as well as where to go for more information about RCS in each state and territory.

The Clean Air, Clear Lungs website has been translated into 5 priority languages – Chinese (simplified), Arabic, Vietnamese, Korean and Hazaragi to ensure culturally and linguistically diverse audiences have access to information they need on silica dust.

In the 2023–24 Budget, the Commonwealth announced funding of \$1.2 million over 2 years for Safe Work Australia, union and employer organisations to develop and deliver silica awareness and behaviour change initiatives. These initiatives are underway and are aimed at educating and raising awareness with businesses and workers on the exposure risks of RCS.

3c. Design and implement an Early Detection and Rapid Response Protocol to identify emerging workplace risks using data from the National Occupational Respiratory Disease Registry when it becomes operational, and other relevant sources.

Development of a draft Early Detection and Rapid Response Protocol is included in a grant provided to Lung Foundation Australia. The Department of Health and Aged Care will work with experts to design the protocol using the best available data, supplemented by disease information notified to the National Occupational Respiratory Disease Registry (NORDR).

Recommendation 4: Support workers and families

Better support workers affected by dust diseases and their families through individually tailored programs of psychological, financial and return-to-work support.

4a. Develop an occupational dust disease management plan for use by health professionals and affected workers, to provide information about the diagnosed disease and what to expect, and the agreed management pathway including referrals for psychological and return-to-work support.

In December 2022, the Commonwealth Government awarded \$1.968 million to Lung Foundation Australia to develop a *Silicosis Care Management Plan for health professionals* to use in consultation with their patients, and a single centralised hub to provide affected workers and their families with the information, support and expert advice they need.

In financial year 2022–2023, Lung Foundation Australia delivered the following services:

- Work focusing on occupational lung diseases, including:
 - o development of an occupational lung disease national directory.
 - research, design and implementation of a series of digital fact sheets with disease information, causal factors, preventative measures for conditions such as silicosis and mining-related disease.
 - development of an occupational lung disease online education training module targeting general practitioners and other health professionals.
- An online support network that allows patients to connect with others from across the country who have a similar experience with lung disease.

- Free confidential telephone-based support networks for people living with silicosis, their family, and carers. These include:
 - a silicosis support nurse telephone-based service to provide information on diagnosis and management, including symptom management, in addition to guidance about relevant support services, launched in August 2023.
 - a silicosis social worker to provide information and support to people with silicosis, their families and carers, launched in August 2023.

To better support for impacted workers and their families, Safe Work Australia is considering further national policy work to improve compensation arrangements for workers diagnosed with silicosis. The Heads of Workers Compensation Authorities, comprised of Commonwealth, state and territory bodies responsible for workers' compensation regulation, is developing best practice principles for workers with silicosis and related diseases.

Recommendation 5: Improve diagnosis and management

Better support medical, health and other related professionals to improve the diagnosis and management of workers affected by silicosis.

5a. Fund multidisciplinary teams of medical professionals, to improve education of doctors and better manage the care of patients, including people with potential but yet to be accepted diagnoses of silicosis or other occupational respiratory diseases.

5b. Develop, implement and maintain Australian-based education and upskilling for medical professionals involved in occupational health screening including radiologists, to ensure that they are able to maintain and build expertise to report chest imaging for occupational health screening programs.

5c. Develop and disseminate information and education materials to health professionals and service providers who assess, and support workers affected by dust diseases, as well as those who regulate businesses working with engineered stone.

On 1 August 2023, the Australian government announced the provision of \$3.03 million to fund the *Prioritising Improved Care for People with Dust-Related Diseases – Education and Training for Medical Professionals* grant program. Grants were awarded to the Thoracic Society of Australia and New Zealand and the Royal Australian and New Zealand College of Radiologists to undertake activities which will build the capability of doctors, radiologists, and multi-disciplinary teams to identify, diagnose and treat silicosis. The grant recipients will:

- develop and deliver a series of online training to support medical practitioners to use the National Guidance.
- develop and disseminate information and education training materials to health professionals to improve knowledge and expertise in the diagnosis and management of patients with silicosis.

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- develop and deliver a training package to support radiologists and other health professionals to continue to build their skills and expertise in chest imaging to improve accuracy in diagnosis. This includes the curation of an image library to support the training.
- develop and deliver an education module targeting multi-disciplinary teams to build their skills and expertise in supporting the diagnosis and treatment of patients with silicosis and other occupational respiratory diseases.
- develop a national community spirometry program.
- review and update the National Guidance.

As a result of the activities under the *Prioritising Improved Care for People with Dust-Related Diseases – Education and Training for Medical Professionals* grant program is intended that:

- general practitioners and medical practitioners are better able to identify people at risk from RCS exposure.
- medical, health and other related professionals are better able to accurately diagnose incidents of silicosis and other occupational respiratory diseases.
- expertise, knowledge and understanding improves for a wide range of health professionals who diagnose and treat affected workers.
- imaging and image reporting skills (including the curation of relevant images) improve amongst radiologists to support the diagnosis of silicosis.
- the quality of health screening assessments and health monitoring for current and former workers is further enhanced.

The grants also support targeted research into occupational respiratory diseases and the revision of National Guidance for physicians assessing workers exposed to RCS dust, which are additional actions outlined in the All of Governments' Response.

Recommendation 6: Strategic approach to research

Building on the early recommendations from the Interim Advice for a strategic national approach to research and the development of a national dust disease registry, and following initial investments, prioritise:

6a. Enhancing silica and occupational respiratory disease research expertise in Australia and the evidence base, by identifying additional priority areas for further research funding, supporting collaboration and information sharing, and funding fellowships and scholarships.

In May 2021, the Commonwealth government allocated \$6 million through the Medical Research Future Fund and the National Health and Medical Research Council for silicosis research to be carried out over 4 years. These funds were distributed across five grants:

- The University of Queensland was awarded \$2.217 million to conduct the Silicosis

 Harnessing New Ideas to Conquer the Re-emergence of an Ancient Lung
 Disease (SHIELD) study.
- The University of Sydney was awarded \$1.482 million to establish novel teaching tools to enhance silicosis diagnosis.
- Monash University was awarded \$645,764 to identify new areas of silicosis risk, as well as anti-inflammatory drugs that can improve the treatment of silicosis.
- The University of Tasmania was awarded \$665,843 to identify the types of engineered stones that are most hazardous to lung health and why the dust generated causes such severe disease.
- Monash University was awarded \$994,642 to investigate emerging techniques for the earlier diagnosis and assessment of the severity and progression of artificial stone silicosis.

In January 2023, the Commonwealth government awarded a grant of \$150,000 to Lung Foundation Australia to establish a research forum to support researchers focused on silicosis and other occupational dust diseases to share evidence and information. The aim of this activity is to strengthen the dust disease evidence base and build research capability. Lung Foundation Australia have held two forums:

- 9 October 2023 an Occupational Lung Disease Research Forum for multidisciplinary professionals interested in silicosis
- 13 November 2023 an Occupational Lung Disease Research Forum (online) for people living with or at risk of silicosis.

6b. Operationalising the National Occupational Respiratory Disease Registry as soon as possible, with an initial focus on mandatory reporting of silicosis, and voluntary reporting of other occupational respiratory diseases.

The number of workers who have or who have died from silicosis in Australia is currently unknown in the absence of nationally coordinated data collection. The National Occupational Respiratory Disease Registry (National Registry) captures and shares data on the incidence of respiratory diseases (including silicosis) thought to be occupationally caused or exacerbated, their causative agents, exposures and respiratory health data. The objectives of the National Registry include:

- understanding the nature and extent of occupational respiratory diseases in Australia and their longitudinal trends.
- supporting the identification of industries, occupations, job tasks and workplaces associated with the risk of developing occupational respiratory diseases, or where a cluster of diseases are being reported.
- enabling the application of more timely and targeted interventions and prevention activities to help reduce further exposures and disease.
- promoting healthcare and associated services for occupational respiratory diseases.
- supporting research into current and emerging occupational respiratory diseases to understand their causes, incidence, nature, extent, and trends.

In line with the recommendation made by the Taskforce, the National Registry requires respiratory and occupational physicians to notify diagnoses of occupationally caused silicosis and allows for the voluntary notification of other respiratory diseases where the patient provides consent.

Changes to the number of occupational respiratory diseases that require mandatory notification and the kinds of prescribed medical practitioners who must notify can only be made after the Minister for Health and Aged Care consults with the Commonwealth Chief Medical Officer and state and territory governments.

The scope, design, content and operation of the National Registry and its enabling legislation were determined with representatives from the peak medical professional bodies, respiratory researchers, state and territory governments and the Department of Health and Aged Care.

The National Occupational Respiratory Disease Registry Bill 2023 was introduced to Parliament and passed through both houses on 13 November 2023. The Bill received Royal ascent on 22 November 2024. The registry commenced on 22 May 2024. Physicians were able to register their details on the registry portal one month prior to commencement.

Recommendation 7: Governance mechanism

Establish a cross-jurisdictional governance mechanism to improve communication and information sharing, coordinate responses, and report on progress.

7a. By the end of 2021, the Commonwealth Government, in consultation with jurisdictions, will outline a clear plan for implementation of the Taskforce's recommendations with specific milestones, responsibilities of parties, and outcome measures identified.

In the 2023–24 Budget, funding of \$4.2 million over 4 years was provided to expand the Asbestos Safety and Eradication Agency's functions to include matters relating to silica and silica safety. To give effect to this, the *Asbestos Safety and Eradication Agency Act 2013* was amended in December 2023. The Agency is now known as the Asbestos and Silica Safety and Eradication Agency (ASSEA).

As part of its expanded role, ASSEA took over responsibility for developing and administering the Silica National Strategic Plan aimed at eliminating silica-related diseases in Australia and supporting workers and others affected by these diseases.

The Silica National Strategic Plan must be agreed by at least 6 of 9 jurisdictions for the Plan to be considered endorsed. Once endorsed, the Silica National Strategic Plan will supersede the All of Governments' Response as the framework for national action to address silica related disease.

7b. Annual reports should be provided to Health and WHS Ministers in all jurisdictions on the implementation of the recommendations and the effectiveness of measures in improving compliance to prevent dust disease in workers, with the first report due in July 2022.

The All of Governments' Response published in April 2022, was the first annual report produced by the Commonwealth government. The current report (*National Dust Disease Progress Report April 2022–December 2023*) produced by the Department of Health and Aged Care, encompasses action taken by governments since release of the All of Government's Response.

A key function of ASSEA is to report annually on jurisdictional implementation and progress towards the aims of the Silica National Strategic Plan. These reports will be provided to Commonwealth, state and territory Ministers responsible for health and WHS.

Part B: Jurisdictional Regulator Activities

Commonwealth, state and territory governments have made significant progress in implementing the recommendations of the National Dust Disease Taskforce. Summaries of action undertaken are included in the following section.

Commonwealth

WHS amendments

The independent Commonwealth WHS regulator, Comcare, has implemented model WHS law amendments to strengthen protections for workers at risk of exposure to RCS into the *Work Health and Safety Act 2011* and *Work Health and Safety Regulations 2011*. These include adopting the express prohibition of uncontrolled processing of engineered stone products, which will be superseded by new stronger regulations in relation to high-risk crystalline silica processing, set out in the *Model Work Health and Safety Regulations (Crystalline Silica Substances) Amendment 2024*.

To support the prohibition of engineered stone within the Commonwealth jurisdiction, on 29 January 2024, the Commonwealth restricted the installation of engineered stone in new procurements and contracts for building or refurbishment projects funded or controlled by the Commonwealth.

Commonwealth WHS regulator activities

During the reporting period, Comcare identified exposure to RCS as a regulatory priority and undertook monitoring and compliance activities for duty holders where workers are known to face a high risk of exposure to RCS. Inspectors undertaking these inspections received specialist training in occupational hygiene through the Australian Institute of Occupational Hygienists.

Comcare has developed an inspection tool for construction including tunnelling. The tool requires a review of air monitoring records, dust management and extraction systems, personal protective equipment (PPE) fit testing records and health monitoring records. This builds on work by the New Zealand WHS regulator and Safe Work NSW.

To assist duty holders to understand their duties, Comcare published information in relation to silica, including the workplace exposure standard for respirable crystalline silica, and the use of the hierarchy of controls to manage the risk of exposure.

Australian Capital Territory

Australian Capital Territory Silica Dust Action Plan

The Australian Capital Territory (ACT) released a *Silica Dust Action Plan 2022* in April 2022 that outlined priority WHS reforms in the ACT to address the risks of exposure to silica dust at work. The action plan sets out the ACT Government's commitment to reforms in two stages to:

- strengthen work safety rules addressing effective controls when cutting engineered stone and other crystalline silica materials, and introduce mandatory awareness training requirements in the ACT – these reforms were completed in 2022 (refer below)
- strengthen work safety rules for air monitoring and health monitoring this stage of reforms outlined in the action plan has been delayed due to national reforms being developed to amend the model WHS laws.

Work Health and Safety Regulation 2011

In 2022, amendments were made to the ACT's *Work Health and Safety Regulation 2011* to implement a suite of silica safety rules in the ACT. These reforms included:

- a prohibition on the dry cutting of engineered stone from July 2022 and minimum standards for effective controls when mechanically cutting engineered stone.
- a prohibition on the uncontrolled cutting of other crystalline silica products, including new minimum standards for effective safety controls when mechanically cutting other crystalline silica materials (concrete, cement, bricks, mortar, masonry and natural stone containing silica) from November 2022.
- the deeming of mechanically cutting crystalline silica materials to be high risk construction work, requiring a safe work method statement from January 2023.
- mandatory silica awareness training requirements for at risk workers, including workers in declared occupations from October 2023.

Code of practice for managing the risks of silica dust

The approved *Managing the Risks of Airborne Crystalline Silica (Silica Dust) in the Workplace Code of Practice* commenced in the ACT on 15 November 2023.

The code of practice applies to all industries working with crystalline silica materials, including engineered stone, and provides practical guidance for businesses on how to meet their work safety duties in carrying out work with crystalline silica materials.

Northern Territory

Amendments to the Work Health and Safety Regulations 2011

From 22 December 2023, amendments to the *Work Health and Safety (National Uniform Legislation) Regulations 2011* took effect. The principal amendment is the introduction of Regulation 184A which establishes a new duty to prevent the uncontrolled processing of engineered stone.

The amendment makes it an offence to not have controls in place for working with engineered stone and provides guidance on what controls would look like to further protect workers from exposure to silica dust.

Queensland

Queensland Notifiable Dust Lung Disease Register

The Queensland Government established the Notifiable Dust Lung Disease Register under the *Public Health Act 2005 and supporting regulations*, on 1 July 2019.

The Notifiable Dust Lung Disease Register records silicosis and other pneumoconiosis, chronic obstructive pulmonary disease and cancers where they are caused by occupational exposure to inorganic dust. Doctors who are specialists in occupational and environmental medicine or respiratory and sleep medicine are required to notify cases of these occupational dust lung diseases to the register.

In response to recent Commonwealth legislation to establish a National Occupational Respiratory Disease Registry (NORDR), the Queensland Parliament has passed amendments to the *Public Health Act 2005* (s279AF (4)(d)) to remove duplicative reporting obligations to both the Queensland Notifiable Dust Lung Disease Register and the NORDR. The amendments provide that if a specialist has reported Silicosis or another mandatory occupational respiratory disease to the NORDR, they will not need to separately notify the Queensland Notifiable Dust Lung Disease Register.

Each year, the Queensland government publishes a report summarising new confirmed cases of notifiable dust lung diseases received and recorded in the Notifiable Dust Lung Disease Register.

Medical research grant

The Queensland Government is providing a \$5 million medical research grant over four years from 2021 to 2023.

On 28 July 2022, the Queensland Government announced the awarding of more than \$3 million of research grants to fund 3 projects.

The University of Queensland will receive \$1.5 million to collaborate with the Chicago School of Public Health at the University of Illinois to research early detection, prevention and the progression of mineral dust-related lung diseases.

A total of \$782,000 will go to i-Med Queensland for an investigation to compare the effectiveness of screening methods.

A total of \$827,000 has also been awarded to the University of Queensland to collaborate with the University of New South Wales to identify factors critical to the development, severity, and progression of coal workers pneumoconiosis and silicosis.

Code of practice

WorkSafe Queensland published the *Managing Respirable Crystalline Silica Dust Exposure in Construction and Manufacturing of Construction Elements Code of Practice* 2022. The code of practice sets out:

- enforceable standards that must be met to minimise the risk of worker exposure to RCS dust in construction work and the manufacturing of construction elements.
- information about the risks and impacts of exposure to RCS dust in construction work and the manufacturing of construction elements.

From 1 May 2023, this code of practice applied to workers in the construction industry, or manufacturing businesses that produce construction materials such as bricks, blocks, tiles, mortar and concrete.

The code of practice outlines how duty holders can meet the requirements of Queensland's WHS legislation, including eliminating or minimising exposure to RCS at work, by:

- using tried and tested dust control methods that prevent silica dust from being generated or being released into the air, including water suppression and on-tool dust extraction
- using appropriate respirable protective equipment to safeguard at-risk workers
- using exposure data from air monitoring to check dust controls are effective
- providing health monitoring to at-risk workers, with clearly defined triggers for testing based on the level of risk
- consulting with workers, as well as the training, education, instruction and supervision of workers.

Compliance and awareness campaign

Workplace Health and Safety Queensland undertook an awareness and enforcement campaign to support the introduction of the *Managing Respirable Crystalline Silica Dust Exposure in Construction and Manufacturing of Construction Elements Code of Practice 2022* between May and August 2023. Inspectors audited 95 manufacturing workplaces for construction elements and 166 construction sites. There was a high level of awareness of the code of practice with 84% of workplaces aware of resources available to assist them with implementation. Inspectors issued 27 enforcement notices on construction sites and 74 notices to manufacturers of construction elements.

Resources Safety and Health Queensland continues to undertake a program of inspections and audits of dust control in mines and quarries. Resources Safety and

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Health Queensland has undertaken additional targeted activities based on these inspection results, including the release of *Guidance Note: Managing Dust Ingress into Electrical Enclosures and Equipment* to prevent dust from entering and depositing in electrical enclosures, and cleaning enclosures.

An on-going compliance and quality improvement program is in place for respiratory health surveillance. For example, spirometry audits are being undertaken to ensure the quality of spirometry testing. These include undertaking on-site audits and sharing audit learnings with medical providers.

Resources Safety and Health Queensland continues to receive reports of dust sampling results from mines and quarries and has begun receiving reports of sampling results for other airborne contaminants, such as diesel particulate and welding fumes, at Queensland's coal mines to better understand exposure risks for workers.

Resources Safety and Health Queensland facilitates workshops with operators and occupational hygiene providers across the mining and quarrying sectors to share information and ideas on dust management and monitoring, as well as mine dust lung disease trends.

New website on work related respiratory diseases

Workplace Health and Safety Queensland has published a website which provides information and fact sheets about work related respiratory diseases. This is in addition to information already available for the resources industry about mine dust lung diseases on the Miners' Health Matters website.

Queensland's engineered stone campaign

Queensland put concerns about the dangers of working with engineered stone on the national agenda in 2018 and was the first jurisdiction to introduce a code of practice for working with stone benchtops in 2019.

Work in the national space continues with the development of model regulations for highrisk crystalline silica processes. Queensland will implement these regulations once complete.

Improved dust monitoring

Resources Safety and Health Queensland (RSHQ) is undertaking a project to improve the monitoring and analysis of silica dust at low level concentrations, to improve the accuracy of worker's measured personal exposure. This will enhance sampling and auditing activities consistent with the recently revised workplace exposure standard for RCS.

Enhanced health surveillance

The transition to mandatory respiratory health surveillance for Queensland's mine and quarry workers is now complete. Since September 2022, all mineral miners and quarry workers must have undergone health surveillance testing at least every five years. This is

in addition to the mandatory respiratory health surveillance already in place for Queensland's coal miners.

Resources Safety and Health Queensland has partnered with Heart of Australia to deliver the HEART5 mobile health unit to deliver state-of-the-art respiratory health screening to regional locations across Queensland. Since January 2022, HEART5 has completed 50 visits to regional towns and cities to screen former mine and quarry workers. These are free assessments paid for by RSHQ.

Resources Safety and Health Queensland updated the Mine Dust Lung Disease Clinical Pathways Guideline in 2023. The guideline recommends the process for follow-up investigation of mine and quarry workers with abnormal screening results on respiratory examinations. The updates help to facilitate early detection of mine dust lung disease and assist doctors and medical providers to apply the guideline effectively. The guideline introduces a requirement for high resolution computed tomography images to be read by two National Institute for Occupational Safety and Health certified B-reader radiologists registered with RSHQ, with appropriate knowledge and experience.

Health surveillance reporting

Since 2022, RSHQ publishes biannual health surveillance reports. These reports provide updates on mine dust lung disease cases reported to RSHQ along with analyses on health trends. These health surveillance reports assist industry to understand the effectiveness of their risk controls and protections for Queensland's resource sector workers.

South Australia

Guidance on minimising the risk of silica dust

In June 2022, in collaboration with stakeholders, industry and union partners, SafeWork South Australia (SA) published new guidance on managing the risks of silica dust across the construction industry.

To assist the construction industry in minimising the risk of occupational exposure, SafeWork SA is supporting the South Australian Construction Safety Alliance RCS initiative.

Work Health and Safety Regulations 2012 amendment

In line with recent changes made by Safe Work Australia to the model WHS laws, the uncontrolled processing of engineered stone products was banned in SA on 1 September 2023.

Under the amendment to the *Work Health and Safety Regulations 2012* it is an offence for a person conducting a business or undertaking to direct or allow a worker to process engineered stone without specific control measures in place to reduce the risk of RCS inhalation. All workers involved in cutting, grinding, trimming, sanding or drilling

engineered stone products must be provided with respiratory protective equipment and use a dust control system such as a water suppressant or exhaust ventilation.

The regulations carry penalties of up to \$6,000 for an individual or \$30,000 for a body corporate, in addition to existing criminal offences under the *WHS Act*, which provide for up to five years' imprisonment and fines of up to \$3 million for reckless conduct which exposes a person to the risk of death or serious injury or illness. The new regulations came into effect on 1 September 2023.

Compliance and awareness campaign

SafeWork SA ran a six-month compliance campaign from July to December 2023, inspecting workplaces that fabricate engineered stone to ensure silica dust exposure was being managed appropriately.

Inspectors issued notices in workplaces that were non-compliant, and provided advice, information and education to minimise the risks of RCS exposure to workers. Workplaces that were previously issued with statutory notices were revisited to ensure that they had maintained safe systems of work.

South Australian Silicosis Strategy Working Group

SafeWork SA chairs the South Australian Silicosis Strategy Working group. This group brings together several state government agencies to discuss initiatives and activities being undertaken to address RCS and silicosis.

Respirator partnership between SafeWork South Australia and the Australian Institute of Occupational Hygienists

A partnership has been established between SafeWork SA and the Australian Institute of Occupational Hygienists to help businesses ensure employees who wear respirators in the workplace are receiving maximum protection. Under the partnership, SafeWork SA promoted the proper use of respirators through the use of respiratory protection programs and fit testing by a competent RESP-FIT accredited fit tester. Fit testing detects for air leaks around the seal between the respirator's facepiece and the face of the worker.

Tasmania

Legislative reform

Through Safe Work Australia, WorkSafe Tasmania is actively participating in the initiatives recommended in the National Dust Disease Taskforce – Final Report, including developing and implementing codes of practice, amending regulations, and improving guidance material.

The workplace exposure limit for RCS has been reduced to an 8-hour time-weighted average of 0.05 mg/m³. This change took effect in Tasmania on 22 December 2021.

Tasmania has adopted the new *Model Code of Practice: Managing the Risk of Respirable Silica from Engineered Stone in the Workplace*. The new code took effect in Tasmania on 19 January 2022.

Education and awareness

WorkSafe Tasmania launched a media campaign on 1 November 2019 targeting tradespeople and others with tag lines: 'don't breathe dust' and 'be silica safe'. The campaign ended on 31 January 2020.

A second occupational lung diseases awareness campaign developed by Safe Work Australia known as 'Clean Air. Clean Lungs' commenced in June 2021 and ran until December 2021. WorkSafe Tasmania delivered this campaign through various media platforms (such as WorkSafe Tasmania's website, Facebook, and a Workplace Issues magazine).

A further silica awareness campaign is being developed and will be aired in late 2024 building on these successful campaigns. This campaign is supported by an updated website, guidance material and training modules.

Silica education sessions have been regularly held with affected industries and at the WorkSafe Month Conference.

Compliance

Compliance inspections are undertaken in both the mining and quarrying and engineered stone benchtop industries.

The management of dust within mining and quarrying workplaces sector has been the focus of attention for many years. Inspections are ongoing with increased focus on air quality and health monitoring.

A comprehensive compliance inspection program was undertaken in the engineered stone benchtop industry in 2019.

Due to additional inspectorate resources being provided by Government for coronavirus disease 2019 (COVID-19) compliance monitoring, the inspection program was commenced again in 2022 and has been extended to the construction and manufacturing industries.

Information and education are provided to businesses through their industry bodies with presentations provided in the quarrying and construction sectors in 2022.

Enforcement

WorkSafe Tasmania has inspected workplaces where injury or illness has been reported and taken action to enforce compliance. Investigations are ongoing for these incidents. On 23 February 2022, Heritage Stone Pty Ltd was convicted and fined \$500,000 for an offence under section 32 of the *WHS Act 2012* for failing to comply with a health and safety duty that exposes a worker to the risk of death or serious injury or illness. This charge was brought when workers contracted silicosis due to exposure to RCS dust in the workplace.

On 3 March 2022, Lazenby Sand Pty Ltd was fined \$230,000 with a conviction recorded under section 32 of the *WHS Act 2012* after a worker contracted silicosis from exposure to RCS dust.

Victoria

Occupational Health and Safety Regulations 2017 amendment

In November 2021, the *Occupational Health and Safety Regulations 2017* were amended to better protect workers from exposure to RCS. The amendment, *Crystalline Silica Regulations* came into effect on 15 November 2021. The new regulations included the following:

- requirements for employers or self-employed persons undertaking an engineered stone process to hold an engineered stone licence
- specific information, instruction and training requirements for employees
- expanded duties for manufacturers and suppliers
- requirements for *Engineered Stone Control Plans*, health monitoring and atmospheric monitoring
- a requirement to hold an engineered stone licence for people processing engineered stone.

High risk crystalline silica work – identification and management

High risk crystalline silica and supplier duties came into effect on 15 May 2022.

These requirements mandate that where crystalline silica work has been identified as high risk, a crystalline silica hazard control statement must be prepared for the work before the work commences, and the work must be performed in accordance with that statement.

Provision of information for high-risk crystalline silica work

There is also a specific duty for employers to provide information, instruction and training to employees who are likely to be exposed to risks associated with high-risk crystalline silica work and to provide information to job applicants who apply for employment that involves high risk crystalline silica work. Additionally, if a quarrying or tunnelling process involves high risk crystalline silica work, an employer or a self-employed person is required, before the work commences, to collect samples of materials to be used in the quarrying or tunnelling process and arrange for these samples to be analysed to identify the proportion of crystalline silica contained in each sample.

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Obligations for crystalline silica work

Under the changes, duty holders working with silica must now identify and document high-risk crystalline silica work and the risk control measures they have in place. The changes were introduced in November 2021 as part of the *Occupational Health and Safety Amendment (Crystalline Silica) Regulations 2021*. The new duties took effect from 15 May 2022 and affect businesses in a range of industries including quarrying, construction and tunnelling.

Employers are now also required to provide safety training and instruction to any employees and information to any job applicants who may engage in high-risk crystalline silica work.

Suppliers of crystalline silica substances

Manufacturers and suppliers must provide information about:

- the proportion of crystalline silica in the substance, expressed as a percentage.
- the name, address and telephone number of the manufacturer (in Australia) or the importing supplier (in Australia).
- any exposure controls, exposure standards, engineering controls and personal protection information about the crystalline silica substance.
- information about the handling and storage of the crystalline silica substance, including how it may be safely used.

This information should be reviewed and revised as often as needed and at least every five years.

Atmospheric monitoring

Employers are required to undertake atmospheric monitoring where there is uncertainty as to whether the exposure standard may be exceeded, or to determine if there is a risk to health.

For employers who hold an engineered stone licence there is an additional duty that atmospheric monitoring reports are to be provided to WorkSafe Victoria within 30 days of receipt of the report. WorkSafe Victoria has received 29 atmospheric monitoring reports from engineered stone workplaces since 28 November 2022.

Health monitoring

Employers must ensure that health monitoring is carried out for employees exposed to crystalline silica where the conditions at the workplace are reasonably likely to result in adverse health effects for the employee.

For employers who hold an engineered stone licence, health monitoring must be conducted with the oversight of a specialist occupational and environmental physician, or specialist respiratory and sleep medicine physician. Employers who hold engineered stone licences must also provide copies of any health monitoring reports to WorkSafe Victoria within 30 days of receiving the reports.

Compliance code

In November 2022, WorkSafe Victoria published an update to the 2020 Compliance Code for Managing Exposure to Crystalline Silica: Engineered Stone Edition 2. The updates included:

- specific controls that must be used by employers and self-employed persons when undertaking a process involving engineered stone at a workplace that generates crystalline silica dust, including cutting, grinding or abrasive polishing of engineered stone.
- duties on manufacturers and suppliers to provide information to persons to whom crystalline silica substances are supplied.
- duties applying to engineered stone licence holders.
- duties on suppliers.

The code also contains revised information about risk controls.

Silica Field Team

Victoria has had a dedicated Silica Field Team in place since 2019 to support compliance activities. The Silica Field Team will continue post the 1 July 2024 prohibition to support implementation of the ban and ongoing compliance and enforcement activities. The Silica Field Team has conducted 1,236 visits, issued 793 Improvement Notices and two Prohibition Notices.

High risk crystalline silica work compliance

The construction Priority Harms Program focuses on hazards that are predominantly causing injury and illnesses in the construction industry. Silica is a hazard within this project with a key focus being the compliance with the regulations addressing high-risk crystalline silica work.

Cross border compliance activity

Two cross-border activities were held during the reporting period in collaboration with SafeWork NSW. Both had a focus on crystalline silica in construction.

In March 2023, 59 visits and 6 TAFE education events were held in Albury/Wodonga. There were 165 TAFE students who attended the education events. The presentations focused on crystalline silica in construction and were supported by an Occupational Hygiene Inspector.

In August 2023, 22 visits and a TAFE education event were held in Yarrawonga/Mulwala. There were 90 TAFE students at the education events. The presentation focused on crystalline silica in construction and was supported by an Occupational Hygiene Inspector.

Build Aware

The Build Aware is an awareness raising partnership between WorkSafe Victoria, the Victorian Building Authority, Energy Safety Victoria and the Victorian Environmental Protection Agency. The program is takes place three times a year with the four regulators delivering joint activities across five days in regional areas including inspections, breakfasts and presentations at TAFEs.

For financial year 2022–2023 the three programs reached >110 groups via trade breakfasts, over 140 apprentices enrolled at TAFEs, and over 100 inspections were conducted with a focus on a number of construction hazards, including silica dust producing processes.

Licencing

Victoria introduced an engineered stone licencing scheme in November 2021, which became fully operational in November 2022. WorkSafe Victoria has issued 347 engineered stone licences.

Alfred Occupational Respiratory Clinic

WorkSafe Victoria has delivered a free health assessment program for eligible stonemasons that provides a comprehensive and multidisciplinary approach to health monitoring and treatment including psychological support. The clinic was funded for an additional three years in August 2023. A total of 704 workers have been screened through the program.

Prohibition of engineered stone

Victoria joined other states and territories prohibiting engineered stone with the ban coming into place on 1 July 2024. WorkSafe Victoria has committed resources to implement and support the prohibition including revising legislation, guidance, revoking licences, marketing, communications, stakeholder engagement and enforcement activities.

Enforcement

In June 2022, a Dandenong stonemasonry company was convicted and fined a total of \$25,000 after failing to control deadly risks associated with exposure to silica dust. The company was fined \$12,500 for failing to provide proper controls to reduce the risk of exposure to silica dust and a further \$12,500 for failing to have required guarding on a power saw. The company was also ordered to pay costs of \$6,157.

In July 2022, a Clayton South company was fined \$6,000 without conviction after failing to control the risk associated with exposure to RCS. The company was also ordered to pay costs of \$3,325.

In September 2022, a Sunshine North company was fined \$5,000 without conviction after failing to control the risk associated with exposure to RCS. The company was also ordered to pay costs of \$5,044.

In September 2022, a Tottenham company was fined \$10,000 without conviction after failing to control the risk associated with exposure to RCS. The company was also ordered to pay costs of \$3,000.

In November 2023, a Knoxfield company was fined \$7,000 without conviction after failing to control the risk associated with exposure to RCS. Following an appeal, the company was convicted and the fine quadrupled to \$28,000 with the company also directed to pay court costs of \$3750.

In May 2023, a quarry was fined \$180,000 for failing to control the risk of exposing workers to respirable silica.

In July 2023, a Craigieburn company was fined \$5,000 without conviction after failing to control the risk associated with exposure to RCS. The company was also ordered to pay costs of \$3,906.

Marketing and communication

Campaigns related to silica occurred during May 2022, July 2022, May 2023 and September 2023.

Western Australia

Amendments of Code of Practice – Managing the risks of Respirable Crystalline Silica from Engineered Stone in the Workplace

The Western Australian (WA) government introduced amendments to the Western Australian Code of Practice – Managing the risks of Respirable Crystalline Silica from Engineered Stone in the Workplace, explicitly stating the requirements of regulation 184A(1)(2) of the Work Health and Safety Regulations 2022. This Code is intended to be used by a range of duty holders to assist them to comply with the WHS Act and WHS Regulations. Duty holders include PCBU, workers and their health and safety representatives, manufacturers, importers, and suppliers. The code provides practical guidance on how to effectively manage the risks associated with working with engineered stone and, subsequently, minimise the incidence of RCS related diseases, such as silicosis.

Safe work month events

Safe Work Month 2022 included a podcast with an occupational physician and an occupational hygienist discussing silicosis risks and dust management in the benchtop fabrication sector.

The 'Breathe Easy' occupational health and hygiene forum was held during Safe Work Month 2023. This forum brought together a range of industry experts to discuss topics

around air quality, silica, asbestos, radiation, and inhalable toxins that can affect workplace health and safety.

WorkCover Western Australia Conference 2023

The WorkCover Western Australia Conference 2023 on 13 October 2023 was fully subscribed. There have been no new worker's compensation claims for silica since June 2023. There are currently 33 claimants.

Expert review of WorkSafe's data set for silica monitoring samples

The WorkSafe Commissioner engaged a specialist epidemiologist to review WorkSafe's data set for silica monitoring samples.

WA has the world's largest dataset of silica dust exposure results with over 130,000 results dating back to the 1980's.

Working with the WorkSafe occupational physicians and the mine safety inspectorate, the review confirmed approximately 96 per cent compliance to standards. A final report is expected in December 2024.

Health Monitoring – Silica (Respirable Crystalline) a guide for Registered Medical Practitioners

The publication *Health Monitoring – Silica (Respirable Crystalline) a guide for Registered Medical Practitioners* was updated to educate and assist medical practitioners working with people exposed to engineered stone.

Campaigns supported by WorkSafe Western Australia

WorkSafe WA supported two campaigns within WA. These were:

- Another One Fights the Dust Lung foundation Australia
- Clean Air, Clean Lungs SafeWork Australia.

WorkSafe Western Australia Dust Strategy 2023–2024

WorkSafe WA released its dust strategy for 2023–2024. It covers WorkSafe WA's further actions to improve the management of hazardous dusts to protect workers from harm. The dust strategy sets out objectives and compliance activities for each of the three focus areas of asbestos, silica and other dusts.

All mine sites must have a health management plan for dust hazards as part of its Mines Safety Management System. The mine must conduct an air sampling program to measure the effectiveness of controls.

The findings from 18,132 samples collected in the breathing included:

- 97.6% compliance rate
- 459 (2.5% of) samples exceeded the exposure standard
- 27% of these exceedances were using the correct personal protective equipment (PPE) and no further action was needed.

Drive improvements in the workplace management of hazardous dusts and protect workers from harm

WorkSafe WA has conducted several community and industry outreach opportunities, including the following:

- presentations to the Western Australian Chapter of the Australian Institute of Occupational Hygienists.
- forums for Class A asbestos removalists, licensed asbestos assessors, and environmental health officers.
- discussions on regulatory crossover and inspection plans with other Government departments, including the Government Occupational Hygienists Reference Group.

Foundry workplace targeted inspections

Inspectors identified issues with the use of crystalline silica-containing sands for mouldmaking. The major concern was lead exposure. Action was taken to address ventilation issues, health monitoring, containment of lead-to-lead process areas, and provision and use of respiratory protection, including clean shave policies and fit test.

In August 2023, a fire assay company, was fined a total of \$30,000 plus costs across four charges relating to the failure to provide health surveillance, counselling, and biological monitoring for workers in a lead-risk job.

WorkSafe inspector training

WorkSafe WA inspectors undertook specialist training on asbestos and silica, and occupational hygiene.

Mine safety management and enforcement activities in relation to WorkSafe dust strategy

Proactive inspection of mining activities, prompted by sample exceedance data or medical health surveillance data, resulted in the identification of 180 defects and 49 notices issued specifically relating to dusts on mine sites.

Silica verification projects

WorkSafe WA conducted 29 inspections related to engineered stone processing resulting in:

- 119 improvement notices and one prohibition notice
- nine notices issued where power tools were used on engineered stone without controls

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• 16 notices issued for failing to provide health monitoring.

The project found a continuing level of non-compliance by a significant proportion of businesses in the engineered stone industry.

Presentations on Western Australia mining industry (Occupational Hygienists Conference)

WorkSafe WA conducted over 20 presentations on dust hazards and dust management to industry. In addition, there was:

- 15 presentations on dust or fibre management to mining air quality officers, health and safety managers, occupational hygienists, and mine operator executives
- a technical paper on silica in WA mining presented at the Australian Institute of Occupational Hygienists conference.

Update on silicosis claims in workers' compensation system

Early detection is a result of the WA requirement for the sensitive diagnostic technique low dose computed tomography rather than chest X-ray.

New South Wales

Dust Strategy 2020–2022

The *NSW Dust Strategy 2020–2022* aimed to prevent occupational diseases by providing workers and businesses with a coordinated approach for the safe handling of hazardous dusts including asbestos, silica and wood.

This strategy provided a coordinated approach for SafeWork NSW and industry to:

- respond to current and emerging dust-related harms by following three key principles that apply to all dust:
 - \circ identify the hazard
 - handle it safely, and
 - o dispose of it responsibly.
- prevent dust exposure through compliance, regulation, awareness and education.
- educate workers about dust exposure with consistent communication of bestpractice safety controls for different dust types and work activities.

Model code of practice

NSW adopted the *Model Code of Practice: Managing the Risks of RCS from Engineered Stone in the Workplace* in February 2022. This code of practice was developed by Safe Work Australia in 2021 and provides practical information on how to manage health and safety risks associated with RCS from engineered stone in the workplace.

Dust Disease Register

The NSW Dust Diseases Register commenced on 27 October 2020. This register contains all notifications of diagnosed cases of dust diseases silicosis (caused by breathing in silica dust), asbestosis and mesothelioma (both caused by breathing in asbestos dust) in NSW.

Safe Work NSW published the *NSW Dust Disease Register Annual Report* on the register on 30 September 2023.

Online Silica Dashboard

The NSW state government has implemented an online Silica Dashboard, which provides information on the status of current silica projects, including adoption of legislation, intensive construction and workplace visits, research, video safety alerts and communication campaigns including fact sheets, translated resources and reports.

SafeWork NSW activities

During the reporting period, SafeWork NSW has undertaken a range of activities promoting silica awareness and safety, including:

Silica Safety Mask Basic video

SafeWork NSW launched the Silica Safety Mask Basic video in English, Arabic, Mandarin, and Vietnamese. The video explains how to properly wear and look after masks.

Respiratory protective equipment and requirements for fit testing worker's page

SafeWork NSW launched the Respiratory protective equipment and requirements for fit testing workers' page. The page focuses on respiratory protective equipment, including fit testing and fit checking requirements. Fit testing and fit checking are essential for workers exposed to silica dust.

• Silica Awareness and Safety online course

Launching the Silica Awareness and Safety online course. The 1.5-hour course provides an overview of key risks of silica exposure, health effects and control measures.

Silica test tracker poster

The silica test tracker poster was distributed to businesses to remind them of their yearly testing obligations, including fit testing for respiratory protective equipment and health monitoring.

Community Voices program

Ongoing engagement with three major linguistic groups through the Community Voices program. The program targets the engineered stone industry, delivering inlanguage safety messaging.

• Internal knowledge sharing within SafeWork New South Wales

Internal knowledge sharing within SafeWork NSW, focusing on cross-cultural engagements in the engineered stone industry to apply to other relevant strategies.

• Silica safety in construction compliance program

The silica safety in construction compliance program which started in September 2023. This is a state-wide visits program by led by construction team inspectors, with a focus on education and awareness raising. Inspectors conducted a verification program to reduce exposure to harmful silica dust in workers and others in NSW construction workplaces. A social media campaign and interactive webinar was used to raise awareness on the dangers of exposure to silica and control measures.

