



RACP
Specialists. Together
EDUCATE ADVOCATE INNOVATE



Australasian Faculty of
Occupational and Environmental Medicine
Specialists caring for workers' health



The Thoracic Society
of Australia & New Zealand
LEADERS IN LUNG HEALTH

**Submission to Lung Foundation Australia -
National Silicosis Prevention Strategy
2023-2028 and accompanying National
Action Plan**

RACP, AFOEM, TSANZ, ANZSOM
March 2023

The Royal Australasian College of Physicians (RACP)

The RACP trains, educates and advocates on behalf of almost 30,000 physicians and trainees, across Australia and Aotearoa New Zealand. The RACP represents a broad range of medical specialties including general medicine, paediatrics and child health, cardiology, respiratory medicine, neurology, oncology, public health medicine, infectious diseases medicine, occupational and environmental medicine, palliative medicine, sexual health medicine, rehabilitation medicine, geriatric medicine, and addiction medicine. Beyond the drive for medical excellence, the RACP is committed to developing health and social policies which bring vital improvements to the wellbeing of patients and the community.

The Australasian Faculty of Occupational and Environmental Medicine (AFOEM)

The AFOEM is a Faculty of the RACP that represents and connects occupational and environmental medicine Fellows and trainees in Australia and Aotearoa New Zealand through its Council and committees. AFOEM are committed to establishing and maintaining a high standard of training and practice in Occupational and Environmental Medicine in Australia and Aotearoa New Zealand through the training and continuing professional development of members and advocating on their behalf to shape the future of healthcare.

The Thoracic Society of Australia and New Zealand (TSANZ)

TSANZ is a health promotion charity whose mission is to lead, support and enable all health workers and researchers who aim to prevent, cure, and relieve disability caused by lung disease. TSANZ is the only Peak Body in Australia that represents all health professionals working in all fields of respiratory health. The TSANZ has a membership base of over 1800 individual members from a wide range of health and research disciplines. The TSANZ is a leading advocate and provider of evidence-based policy for the prevention and management of respiratory disease in Australia and New Zealand, undertakes professional education and training, is responsible for significant research administration, and coordinates an accredited respiratory laboratory program.

The Australian and New Zealand Society of Occupational Medicine (ANZSOM)

ANZSOM is a professional society, of predominantly doctors and nurses, who practise or have an interest in the fields of occupational medicine, occupational nursing and workplace health. The society seeks to advance the knowledge, practice and standing of occupational health. ANZSOM commits to support and engage with other professionals, governments and relevant organisations to promote good work, safe workplaces and healthy workers.



We acknowledge and pay respect to the Traditional Custodians and Elders – past, present and emerging – of the lands and waters on which RACP members and staff live, learn and work. The RACP acknowledges Māori as tangata whenua and Te Tiriti o Waitangi partners in Aotearoa New Zealand.

Executive Summary

The Royal Australasian College of Physicians (RACP), the Australasian Faculty of Occupational and Environmental Medicine (AFOEM), the Thoracic Society of Australia and New Zealand (TSANZ) and the Australian and New Zealand Society of Occupational Medicine (ANZSOM) welcome the opportunity to provide feedback on the draft *National Silicosis Prevention Strategy 2023-2028* and accompanying *National Action Plan*.

The Strategy and Plan are pillar components to the National Dust Diseases Taskforce recommended actions which were supported by all Governments. We agree that a comprehensive approach is needed. Workers and their health must be protected, and workplaces must be guided and compelled to improve so they are not causing irreversible diseases for their employees.

Overall, we support the structure of the Plan, and the five priority areas identified. However, the RACP-AFOEM, the TSANZ and ANZSOM jointly agree that the Strategy and Plan's effectiveness can be increased. The feedback contained here has been developed with this aim because we are agreed on the ultimate outcome.

Key points/recommendations

We make the following recommendations regarding the Strategy and Plan.

- 1) **Be more targeted.** Suggest put silicosis together with other occupational respiratory diseases. The message must be clear that all dusts are potentially dangerous when it comes to occupational health and workplace safety.
- 2) **Strengthen reference to the hierarchy of controls.** Suggest incorporating throughout the Plan the application of the hierarchy of controls to a greater extent as a key strategy for reducing the risk to workers.
- 3) **Strengthen clinical information.** Suggest including statements that strengthen the clinical content of the document regarding the response to silicosis and other occupational respiratory diseases. These areas include the regulatory aspect and involvement of medical specialists in governance, policy development and program management.
- 4) **Highlight the need for investment.** Specify the need for increased investment in Australia's toxicology and an increased risk assessor workforce, and facilities, to examine these products as they emerge; like the approach to nano products and new drugs (see page 8 of this submission for more detail).
- 5) **Underline the need to develop Australian based resources.** This includes equipment, devices, exposure tools etc for sampling, analysing and risk assessing. We should rely less on technology from North America and Europe, which is expensive in terms of purchasing, maintaining, and repairing.
- 6) **State the need for increased research funding in the Strategy.** This should be inclusive of occupational health and hygiene, epidemiological and toxicological studies. Medical experts have difficulty in securing funding needed for critical research on this topic.
- 7) **Strengthen evaluation components.** Suggest further developing the content on evaluation to make more robust. As a Strategy and a Plan, reporting requirements and timeframes should be set out for each Priority Area, and relate to specific activities.

We note that the Action Plan is does not include strategies to address the large burden of disease due to lung/dust diseases in Australia. We suggest considering including the activity "research and innovation in diagnosis and treatment of silicosis and other lung/dust diseases".

The following feedback addresses each of the priority areas to strengthen and make more effective. We have also included a table of specific text changes for the Lung Foundation's consideration.

General feedback

There are many Australians exposed to silica dust respirable crystalline silica (RCS) at work. The use of high-silica content engineered stone products, and the increased exposures in other industries, has led to an epidemic of people diagnosed with silicosis and other occupational respiratory diseases due to exposure.

These diseases can and should be eradicated from our Australian workplaces for workers and their families and there is a need to apply our own standards for workplace health and safety as a nation. The implementation of the National Dust Diseases Taskforce recommendations should reduce the rate of the increasing costs to health expenditure in the decades ahead and must be commenced without additional delay. The proposed Strategy and Plan are integral to the objectives of all stakeholders but must be effective.

Two relevant factors important to the context in which the Strategy and Plan must operate include:

1) The latency period for these diseases

Silicosis is often not diagnosed until it is in its advanced stages. We draw attention to the fact that this may mean case numbers continue to rise before they fall because of the implementation of the Plan.

Whilst the Introduction and Priority Area 2 sections refer to the extended latency period for these diseases, we note this here from a clinical perspective as symptoms may be non-specific, and shadows on roentgenogram are non-recognisable in the early phase of the disease, so silicosis may not be initially identified.¹

2) Constraining workplace situations that impact choices for workers

This is best illustrated by an actual case example²:

A physician saw a stonemason recently with a history of 20 years in the stone bench-top industry. During fifteen or more years of work the worker was involved with dry cutting, and in the last ten years, more than 90% of their work has been with engineered stone.

Diagnosis: HR CT scans in 2019, 2021 and just before the physician review in February 2023, showed progression of pulmonary silicosis and development of progressive massive fibrosis (PMF). The worker was informed in 2019, 2021 and again in 2023, that they have a silica related illness, it is progressing, and the worker must stop doing dust generating tasks. The physician advised the worker that wet cutting and personal protective equipment would not eliminate the hazard.

Outcome: The worker responded that they needed the money and would not stop working.

In terms of workplace context, this same physician has stated they see such cases every week. The physician also reported that most patients have dust on their shoes and pants when they attend appointments.

The Strategy and Plan must contain clear requirements for reporting against each activity according to meaningful identified measures at set intervals. Accountability and reportable data will allow for responsive decision making and the development of national policy.

¹ Danila E, Sileikiene V, Nargela R, Zurauskas E, Loskutoviene G. Different course of silicosis in four brothers of one family. Int J Occup Med Environ Health. 2009 Jan 1;22(1):51-7.

² Provided by an occupational physician who sees stonemasons each week as part of a Worksafe program of health surveillance for workers in the stone bench-top industry.

The “governance mechanism” discussed in Priority Area 4 will have responsibility for the Strategy and the Plan. It is also anticipated that a new Monitoring and Evaluation Framework will be in place (as per the National Dust Diseases Taskforce recommendations). So clear next steps to put these pieces in place would assist in establishing confidence and leadership in relation to commencing the final Strategy and Plan.

We would like to emphasise that, as for any preventable epidemic, this needs both risk mitigation and health care management and intervention; therefore, direct advisory and leadership positions should be earmarked for medical experts.

For the complete address of silicosis and other occupational respiratory diseases, tertiary prevention (or long-term management) is an important element. However, we realise it may be out of scope for this National Strategy. Nonetheless, we urge that this be clearly listed on the agenda of the governance mechanism under which this Plan will sit.

Priority Area 1: Workplace Risk Reduction

- The Work Health and Safety Act 2011, Division 2 - Primary duty of care, Para 19 (3) (g) states: “*that the health of workers and the conditions at the workplace are monitored for the purpose of preventing illness or injury of workers arising from the conduct of the business or undertaking*”. We suggest the establishment of a Schedule in the WHS Regulations, on the implementation of this requirement as this would help in identifying at risk workplaces and workers and facilitate mandatory reporting (page 23).
- The Plan does not have a strong emphasis on the hierarchy of controls. A hierarchy of control approach is described on page 19, however, a strong hierarchy of control approach throughout the Plan would be useful and relevant. More emphasis needs to be given to explaining the value and impact of how the hierarchy of controls operate if it is applied. The hierarchy of controls can also work to prevent a range of silica-related diseases besides silicosis. The value of the hierarchy of controls is not only in relation to prevention but in the minimisation of levels of exposure to silica dust.
- An important control in factory-based operations is the collection and treatment of contaminated water from dust suppression that contains high silica content, and then handling and removal of this waste before it dries out and potentially become re-aerosolised. This is a concern of workers who are worried about aerosolisation around facilities.
- Priority Area 1 could be strengthened by adding the development of a government-based consultancy program to the activities. This would be separate to the regulatory branch and could be similar to the role of the Occupational Safety and Health Administration (OSHA) program in the USA.
- Naturally occurring substances need to be addressed in the Strategy. Exposure to particles in both engineered and non-engineered stone is a risk factor for occupational dust diseases.
- In addition to the resin and plastics found in engineered stone, there is also considerable recycled component in some products, with components such as glass, mirrors, and fillers used and consideration of the impact of these products also needs to be considered.
- Though we strongly support effective prevention we endorse the recommendation of the National Dust Diseases Taskforce with respect to implementing a full ban on the importation of some or all engineered stone products.
- We have experience with small business owners (also fabricators of stone benchtops) who, though they may be in favour of a ban and using alternative materials, feel they have no choice but to continue cutting engineered stone to avoid a negative impact on their business. Perverse incentives to maintain the status quo must be considered.
- Suggest sharing collected regulator data on a national level. This would improve transparency and the data would be able to be used in a variety of situations, such as

education and training of businesses and workers, and public awareness. Currently, some jurisdictions can provide this information, but it is limited in content (page 23).

- Note that once silica levels get below $0.02\text{mg}/\text{m}^3$ new methods to increase sample capture may be required, as well as a possible review of AS2985 (Australian Standard) to look for higher flow rate devices for respirable dust sampling. The current XRD method is pushed to its limit for silica detection at levels of $<0.02\text{mg}/\text{m}^3$ over the typical 8-hour workday (page 24).
- Regarding Workplace Exposure Levels (page 24): in any prevention approach, ideally workers should not be exposed to unsafe levels, and the safest level is zero. We suggest the Strategy include the recording and reporting of exposure to silica, adopting the approach like that of the Ontario Mining Exposure Database (OMED) to describe historical silica exposure.³ This has helped identify important variations among workers and has been more useful when accompanied by contextual information.
- Regarding Safety Data Sheets (SDS) (page 24): we support a review into the quality and consistency of SDS produced by manufacturers. Inaccurate or missing data produced by manufacturers impacts the usefulness of this data when it comes to health and safety. This data is often not challenged regarding its accuracy in constituents, control measures and toxicology data.

Priority Area 2: Education and Awareness

- Suggest a wording addition under Objectives (second dot point): *'Increase knowledge of safe work practices and compliance with WHS duties'* - ADD "including for the requirement to provide health monitoring where significant risk' exists despite controls".
- Note the risks of overestimating the outcomes of increased education and awareness, for these, along with the impact of media activity, all tend to wane over time. For that reason, we appreciate the Strategy taking an extra step and adding the development and implementation of a national accreditation system for silicosis prevention and silica management education and training, and an accompanying competency and learning framework, as a pivotal component of this priority area.
- Alternative materials may not be safe. We refer to the development of alternative low-silica content materials to substitute those currently in use, including materials currently available and new products under development (page 50). In our view, using a percentage base of silica is not an appropriate way to delineate the risk from silica containing products. While there is a high silica content in engineered stone, even in engineered stone with lower silica contents (such as 30-40%), there may be finer dust particles that are even more biologically active. This means there is a higher risk of silicosis in comparison to the dust generated by cutting natural rocks like granite.^{4, 5}
- Education and training have not been effective to date for culturally and linguistically diverse (CALD) workers. We note the allocation of recent funding for this group and stress that this is an area that needs to be monitored for effectiveness.

Priority Area 3: Health Monitoring, Screening and Surveillance

- It is important that follow up and lifetime monitoring is included because of the long latency of this disease, as well as the inflow and outflow of workers in the stonemasonry industry. This alleviates concern that initial monitoring may have missed those workers that have left the industry (healthy worker effect) and it is essential we reach this population.

³ Blagrove-Hall N, Berriault C, Jardine KJ, Demers PA, Arrandale VH. Estimating historical exposure to respirable crystalline silica in the mining industry in Ontario, Canada using a newly developed exposure database. *Annals of Work Exposures and Health*. 2021 Nov;65(9):1040-9.

⁴ Ramkissoon C, Gaskin S, Thredgold L, Hall T, Rowett S, Gun R. Characterisation of dust emissions from machined engineered stones to understand the hazard for accelerated silicosis. *Scientific Reports*. 2022 Mar 14;12(1):1-0.

⁵ Thompson D and Qi C. Characterization of the Emissions and Crystalline Silica Content of Airborne Dust Generated from Grinding Natural and Engineered Stones, *Ann Work Expo Health*. 2023 Feb 13;67(2):266-280

- The terms ‘*surveillance*’ and ‘*monitoring*’ should not be used interchangeably. These are distinct terms involving different activities. We suggest revising this section.
- Our expert advice is that employers do not have the expertise to make the judgements as described in this section. In terms of effective prevention and workplace address of these diseases, seeking Occupational and Environmental Medicine physician determinations are the most effective risk mitigation approach needed here.
- Note that though there is a focus on rural and remote workers, which is important, there is also the need to act to ensure equitable and timely access to services, which is critical.
- Suggest including the agricultural workforce in those workers considered to be at risk.
- Add a further point to activity 3.7 (page 44): ‘*Further development of the National Guidance for doctors assessing workers exposed to respirable crystalline silica dust with specific reference to engineered stone related silicosis*’. This activity should also include the associated education of relevant professionals (radiologists, occupational physicians, general practitioners, and regulators) to ensure that the guidelines are well understood. Further, if the guidelines are to be effective there needs to be a level of compliance required.

Priority Area 4: Governance

- Strengthen this priority by recognising the need to be more proactive regarding identifying and responding to emerging hazards and avoid switching one product and set of health hazards with another of equal or worse risk. Composite products incorporating recycled waste are continuously being developed and introduced into markets, including building and interior design, and any potential hazards from their installation and use should be documented.
- We commend the inclusion of the asbestos safety and radiation agency, as this could help with issues of tackling the life cycle of the product, as well as issues that may be encountered during its removal and disposal. Workers at the recycling/crushing yards should not be placed at a risk due to ineffective control of dust from high silica content stone.
- Suggest a reduced reliance on international research and responses, and instead to advocate for increased investment in Australia’s toxicology and risk assessor workforce and facilities to look at emergent products. Such an approach would reflect that given to nano products and pharmaceuticals. The Australasian College of Toxicology and Risk Assessment (ACTRA) could be included.
- Add that there is also a need to develop Australian based resources (equipment, devices, exposure tools) for sampling, analysing and risk assessing rather than the current situation where we rely on technology from North America and Europe. This has considerable costs attached, such as in the purchasing, maintaining, and repairing of equipment and tools. In addition, hygiene/exposure assessments are a sizable cost because this involves the purchasing, calibrating, and maintaining equipment, and laboratory analysis costs where Australia uses foreign products.
- Include under the factors associated with Gaps in Silicosis Knowledge (page 49) “evaluation.” For successful governance, there must be accountability and regular reporting on all priority areas.

Priority Area 5: Research and Development

- Note that we lack detailed, up-to-date knowledge regarding the specific occupational respiratory diseases that are occurring, causative exposures, and the industries where cases are occurring.⁶ Without this detailed information, the response is limited and less than what is needed.

⁶ Hoy RF, Brims FJ. The National Occupational Respiratory Disease Registry (NORDR): it is time to learn from failure. *semiconductors*. 2022 Apr 18;15:16.

- We support reporting against all 16 data items recommended by the joint ILO/WHO Global Programme for the Elimination of Silicosis Profile data (Box 7, page 52).
- Suggest the dot point “*Verification of the WES for RCS of less than 0.05mg/m³, and its evidence-based impact on workers’ risk exposure*” (page 52) needs clarification as it is unclear what this means. Evidence points to adverse health effects occurring at levels less than 0.05mg/m³.⁷ The current WES of 0.05mg/m³ is not a health-based standard. From a policy and prevention perspective it is important this Strategy address issues relating to reasons for not lowering the WES to 0.02mg/m³ which are measurement related. We include here evidence that an exposure limit of 0.02mg/m³ can be measured with minimum detectable concentrations ranging from 0.005 to 0.01mg/m³ over an 8-hour period:
 - HSE (Health and Safety Executive) MDHS101/2 2015, *Measurement of Quartz in Respirable Airborne Dust by Infrared Spectroscopy and X-Ray Diffractometry*. Available from <http://www.hse.gov.uk/pubns/mdhs/pdfs/mdhs101.pdf>
 - Stacey P, Thorpe A, Echt A. Performance of High Flow Rate Personal Respirable Samplers When Challenged with Mineral Aerosols of Different Particle Size Distributions. *The Annals of Occupational Hygiene*, 2016;60(4):479-92.
 - NIOSH (National Institute for Occupational Safety and Health) (2003) *Manual of Analytical Methods (NMAM). Silica, Crystalline, by XRD (filter redeposition) Method 7500*. Issue 4. Available from <https://www.cdc.gov/niosh/docs/2003-154/pdfs/7500.pdf>

Where this priority is summarised in the Executive Summary (page 6) two amendments are suggested:

1. Where it states “*To be successful in achieving this goal, the NSPS and NAP must be a coordinated, national approach to silicosis prevention that engages government, national employers’ and workers’ organisations, as well as...*” - ADD reference to the integral importance of occupational and environmental physicians, respiratory physicians, and other qualified medical practitioners in managing health monitoring programs.

2. For the paragraph (end page 6) “*The Action Plan recommendations must be delivered in parallel or in conjunction with a number of Australian, State or Territory occupational health and safety frameworks and activities under way however the inconsistency of approaches and lack of harmonisation is a serious risk to the successful implementation of this Plan. It is important to recognise that with the transient nature of the workforces involved, many do not experience symptoms until they have left the industry or many years later during their retirement.*”

Suggest this reword: “The Action Plan recommendations must be delivered in parallel or in conjunction with several Australian, State or Territory occupational health and safety frameworks and activities under way. The Plan requires a comprehensive governance framework, and an evaluation and monitoring framework is proposed to ensure the Plan remains front of mind for all stakeholders. It remains a concern that the inconsistency of approaches and lack of harmonisation is a serious risk to the successful implementation of this Plan. It is important to recognise that with the transient nature of the workforces involved, many do not experience symptoms until they have left the industry or many years later during their retirement.”

Part 3: Monitoring and reporting

We suggest that the Strategy would be stronger if there is more detail on evaluation or how the Strategy and Plan will be measured.

⁷ Lenander-Ramirez A, Bryngelsson L, Vihlborg P, Westberg H, Andersson L. Respirable Dust and Silica: Respiratory Diseases Among Swedish Iron Foundry Workers. *Journal of Occupational and Environmental Medicine*. 2022 Jul;64(7):593.

Agencies

This section sought opinion on the ranking of agencies according to which should hold accountability for the monitoring and reporting of the Strategy and Plan. We would like to emphasise that our call for the establishment of the National Dust Diseases Taskforce arose from our concerns that there was no agency with overall responsibility for monitoring the health of workers or conditions at the workplace as required by Work Health and Safety Act 2011. The current organisations lack health expertise which we regard as essential to address the health aspects of workplace health and safety. With this caveat, our recommendations are as follows (from most accountable to least accountable):

- 1. Australian Government Department of Employment and Workplace Relations**
- 2. Australian Government Department of Health and Aged Care**

The Australian Government Department of Health and Aged Care spans public health and reporting, as well as the Communicable Diseases Network Australia (CDNA) Series of National Guidelines (SoNGs). In addition to Work Health Safety, the Office of Health Protection and the Environmental Health Standing Committee (enHealth) should also be considered to play a role in this area.
- 3. Proposed Centre for Disease Control**

A proposed Centre for Disease Control would make sense here, however, more information is required.
- 4. Proposed Centre for Research Excellence (CRE) in Silicosis Prevention**

We envision the proposed Centre for Research Excellence in Silicosis Prevention to be more along the lines of an independent 'brains trust' for best practice and providing the research and development to drive activities.
- 5. Safe Work Australia**

Safe Work Australia can provide support with their expertise in WHS and updates to model legislation and codes.
- 6. Industry**

Industry needs to undertake their role and responsibility in providing protection for workers, ensuring development, implementation and review of risk management programs, including worker consultation, health surveillance and the collection of "quality" exposure data (not the cheapest quote) is undertaken.
- 7. Unions**

Given their role in the collection and reporting of information from members, unions do play an important part in this issue.
- 8. Comcare (Other)**

Comcare should be held accountable due to its role in issues relating to the administration of the Commonwealth's work health and safety and workers' compensation frameworks.

Note Comcare could be an appropriate addition, ranked the 6th most accountable agency for the monitoring and reporting of the Strategy.

Table of editorial suggestions

There are several areas in the document where we would suggest changes or additional wording. These are compiled in the table below for your consideration.

Page, section	Sentence begins	Amendment
Throughout	Licensing/ licensing	We suggest consistent use of <i>licensing</i> . In some places <i>licencing</i> is used.
P3, Foreword 3 rd paragraph	A comprehensive approach is needed...	Clarify if health surveillance and health monitoring or environmental

		monitoring is meant here. This should be clear. Where improved health screening is stated, clarify if this is 'for cause or as part of a health monitoring program' [KP - <i>not sure what this comment means</i>]
P3, Foreword 5th paragraph	Silicosis is not new .	It should be acknowledged that the risk associated with accelerated silicosis and exposure to engineered stone benchtops is new, and the risk is much higher than the other exposures for accelerated silicosis.
P3, Foreword 6th paragraph	However the large number of silicosis cases that have been identified in the last five years clearly demonstrate that silicosis, and occupational lung disease more broadly, must be regarded as a national emergency.	Add <i>particularly increasing cases of accelerated silicosis</i>
P3, Foreword 7th paragraph	A lack of targeted, coordinated action and commitment to protect workers [insert] from silica dust has failed to keep	Insert higher level controls
P6, Executive summary Priority area 5	The Action Plan is built on	Edit so there is not the use of <i>built</i> and <i>building</i> in same sentence
P10 Introduction, Consultation and development	The NSPS and NAP are aligned with the joint International Labour Organization (ILO)/World Health Organization (WHO) Global Programme for the Elimination of Silicosis (GPES)(8), which calls for the elimination of silicosis worldwide by 2030	We suggest a plainer statement be made such as whether it was the case that the GPES informed the development of the Strategy and Action Plan.
P11 Introduction 1.4 Levels of exposure	A recent Australian study suggests a sharp rise in levels of exposure ...	Distinguish between levels of exposure or those occupationally exposed.
P13 Introduction Silicosis causes permanent disability and can be fatal	There is no cure for silicosis. However, there is good progress being made in the treatment of occupational lung diseases and early detection offers the best chance of long term survival.	This could be reframed to read: <i>Whilst progress is being made in the treatment of occupational lung diseases, early detection and prevention of ongoing hazardous exposure offers the best chance of long term quality of life and survival.</i>
P14 Introduction	Box 2	There is an error regarding the definition for respirable particulates. The upper cut point is 18µm (as opposed to 10µm) under AS2985, the current method in Australia for monitoring respirable particulates.

P14 Introduction	Generally workers are at risk...	We suggest at risk occupations should include agriculture and forestry. There is evidence that workers in these fields can potentially have high exposures depending on a range of factors including crop, activity, soil and soil preparation, contamination of goods, and harvesting techniques.
P20 Priority area 1	Box 3	In addition to failure to do monitoring, the benchtop sector may also engage unqualified and/or cheapest options that do not properly characterise exposure and put workers at greater risk if they underestimate the hazards.
P21	The timeline for the ban	We recommend stronger wording regarding the timeline for the ban. Our suggested wording is <i>"a ban should occur as soon as is practicably possible, but certainly no later than July 2024"</i> .
P21	After "While an express ban..."	Add: <i>Despite this, significant dry cutting still occurs demonstrating that current regulations are either insufficient or insufficiently implemented.</i>
P22	First paragraph	Soil and compost products could also be included here, which depending on origin can contain high crystalline silica content. Its presence can be found in grain dust, crop residues, and where activities like mulching and processing of plant fibres exposed to the elements (bales etc.) take place.
P31 Priority Area 2	Box 4	Include here the waste/recycling industry, as well as the Department of Health and Aged Care's Office of Health Protection and enHealth. There are several key professional groups that can assist here including health promotion, environmental health, and toxicology and risk assessment (Australasian College of Toxicology & Risk Assessment - ACTRA).
P32 Priority Area 2	In the series of dot points	Consider adding ongoing education or refresher education
P36 Priority Area 3	<i>Health monitoring is a statutory requirement under WHS laws.</i>	ADD when there is significant risk
P49 Priority Area 4	Dot point <i>Verification of the WES for RCS of less than 0.05mg/m³, and its evidence-</i>	The meaning of this point is unclear and needs to be made plainer. We note here that the current WES of 0.05mg/m ³ is not a health-based

	<i>based impact on workers' risk exposure</i>	standard. An exposure standard of 0.025mg/m ³ has been identified as reducing the risk of lung cancer to an acceptably low level. Implementing this health-based standard will provide better protection for workers than the current WES.
P52 Priority Area 5	Box 7	The TSANZ suggest an addition in Box 7. Given the damp and open working environment there is a risk of non-tuberculosis mycobacterium (NTM), a type of opportunistic pathogen. With the use of water sprays and waste water recycling, the risk of premise plumbing pathogens that may colonise in biofilms, and potential exposures to microbial constituents such as endotoxin and peptidoglycans should also be considered.

Final remarks

We acknowledge the considerable work of the Lung Foundation Australia and the Department of Health and Aged Care in addressing this tragic issue.. We support the forward planning and allocation of resources based on this Strategy and Plan, and trust that all components, nationally and in jurisdictions, will be working consistently to eradicate all risks of occupational respiratory diseases for workers.

A comprehensive prevention approach involves minimising the risks to eliminate or reduce the risks of the range of diseases workers may contract. This includes minimising levels of exposure to silica dust and adoption of a similar approach to that of the *National Strategic Plan for Asbestos Awareness and Management* (NSP). This Asbestos Plan did not focus its strategies on one disease but rather on worker exposures to risks. Therefore, the proposed Strategy and Plan might consider encompassing all dust diseases and not be limited to silica-related diseases.

We would appreciate future direct communications regarding involvement in the governance mechanism, thank you.

For further information, please contact AFOEM via AFOEM@racp.edu.au.