



GP Awareness of Silica-Related Diseases Survey

November 2025

Executive summary

In alignment with the Silica National Strategic Plan, the Asbestos and Silica Safety and Eradication Agency developed a behaviourally-informed survey, using the Knowledge-Attitude-Practices (KAP) model, to examine general practitioners' (GPs) understanding of silica-related diseases (SRDs) and identify opportunities to strengthen early diagnosis and patient support. The KAP model is a widely used public health research framework designed to assess what individuals know about a topic, how they feel about it, and how these beliefs translate into real-world behaviours. Originally developed for health education and disease prevention programs, the KAP approach helps researchers identify gaps between knowledge and practice, misconceptions that may impede effective care, and contextual or systemic barriers influencing behaviour.

The survey was distributed to members of an online research panel in November 2025. A total of 153 GPs across Australia participated in the

survey, which captured self-reported knowledge of SRD risk factors, clinical presentation, diagnostic pathways and management strategies, as well as perceived barriers to providing effective care. The methodology involved structured, closed- and open-ended items designed to assess both factual knowledge and practice behaviours, enabling a detailed assessment of current capability and unmet needs within primary care.

While the survey provides valuable insights into GP knowledge, attitudes and practices, the sample size means the findings should be used to identify patterns and opportunities for further investigation rather than estimate their prevalence across the wider GP workforce.

The survey found that gaps in GPs' understanding of silica-related diseases primarily reflected specific knowledge gaps or areas of uncertainty, as well as low awareness of existing guidance. Although most recognised their role in early detection and were willing to undertake further training, misconceptions remained about disease

latency, asymptomatic presentations, and diagnostic pathways. When taking an occupational history, GPs often relied on job titles rather than specific exposure-generating tasks, increasing the risk that some workers may be overlooked. Most participants were unfamiliar with the national guidance, highlighting opportunities for targeted education, promotion of guidance, and timely clinical prompts.

Overview of findings

Knowledge

Most GPs rated their knowledge as limited: Around three-quarters (73%) said they knew ‘a little’ about SRDs, while only 17% reported knowing a ‘moderate’ amount or ‘a lot.’ However, most were able to list at least some SRDs. Participants were asked to list all diseases they could think of that are associated with silica dust exposure.¹ Silicosis (109), lung cancer (77), and chronic obstructive pulmonary disease (68) were the most frequently cited, across 153 responses. Interestingly, asbestosis and mesothelioma were each mentioned 10 times, suggesting there may be some confusion between asbestos-related diseases and those related to silica. Some responses also referenced ‘coal miners’ disease’ and masonry or stone bench tops. When selecting from a list, a similar pattern emerged – Silicosis, lung cancer and COPD were again the most commonly recognised as SRDs. Rheumatoid arthritis, scleroderma, kidney disease,

and pneumoconiosis were less consistently identified as potentially associated with silica exposure.

GPs generally understood that SRDs can be asymptomatic, that silicosis is irreversible, and that ‘normal’ chest X-ray results do not preclude the possibility of SRDs. Nevertheless, notable uncertainty remained about disease development, presentation, and diagnosis. On the whole, respondents did not get questions wrong so much as they were simply uncertain. Almost half (48%) were not sure if asymptomatic cases of silicosis are mild, while 40% were uncertain if there is a specific test for it, or whether night sweats can be a symptom (37%). Nonetheless, some misconceptions did exist – around one-quarter believed silicosis only develops after decades, with a similar proportion believing it was true that asymptomatic cases are mild. While it is true that chronic silicosis can take ten to thirty years to develop, accelerated or acute silicosis can occur within a much shorter timeframe. These gaps may affect whether silica exposure and SRDs are considered in patients without obvious symptoms or with a more recent history of exposure.

Attitudes and Practice

Attitudes towards GPs’ role were mixed. Although 90% agreed that GPs play an important role in early detection, 56% believed SRDs should be managed *only* by specialists. Reported practices were higher: 86% said they considered occupational silica exposure when assessing respiratory symptoms, and 76% advised patients in high-risk

¹ Throughout this report, the terms ‘silica’ and ‘silica dust’ refer to respirable crystalline silica (RCS).

jobs about silica-related health risks. However, these practices depended on correctly recognising occupations which posed high exposure-risks. In other words, if GPs take the desired action for high-risk jobs, but don't understand *which* jobs are high risk, their behaviour will be less effective and at-risk patients could be missed.

Occupational history-taking focused strongly on *current* occupation or industry, but was less likely to cover previous employment, specific tasks, exposure duration, PPE use, or hobbies. Around one-third 'rarely' or 'never' asked about specific work tasks, and many considered only the patient's current job or the previous five to ten years. In other words, many GPs may be relying on their knowledge of 'at-risk' occupations, rather than which activities put people at risk of SRDs. This is important as many GPs also failed to identify key occupations that put workers at risk of silica dust exposure. This means that those at-risk of silica exposure, outside of some commonly identified occupations, may not be seen as at-risk when taking an occupational history.

Almost all participants (94%) agreed that stonemasons (as an occupational field, not individuals) were either 'likely' or 'very likely' to experience silica dust exposure. Other occupations frequently recognised as at-risk were construction workers (91%), and miners (90%). Fortunately, this aligns with the occupations most commonly reported in the National Occupational Respiratory Disease Registry. Despite this apparent understanding of the connection between 'stone' and 'silica

risk', the figure dropped to 73% for quarriers. Other potential sources of silica dust exposure, such as soil, sand, or tiles, may not be considered and occupations that predominately involve these potential sources may be at risk of being missed. Just 63% thought glaziers were an occupation likely to experience silica dust exposure, while the proportion who correctly identified plumbers (62%) and farmers (43%) was also low.

Barriers

The leading perceived barriers to diagnosis were a lack of clear guidelines and insufficient knowledge or training. At the same time, 76% of GPs were 'not at all' familiar with the *existing national guidance for doctors assessing workers exposed to respirable crystalline silica dust*, and 65% first became aware of it through the survey. In other words, GPs believe there are no clear guidelines while being unaware of the guidelines that do exist. This is a major opportunity for education. Despite these gaps, 89% expressed willingness to undertake SRD training or professional development.

Overall, the findings show strong professional engagement and recognition of the GP's early-detection role, but uneven knowledge, incomplete exposure histories and very low awareness of existing national guidance.

For further information on the methodology, findings, or recommendations arising from this survey, please contact Dr Rick van der Zwan, *Director, Research, Evaluation, and Data* at Rick.vanderZwan@asbestossafety.gov.au