ReturnToWorkSA (RTWSA) would like to provide SA doctors with an update on silicosis and a new resource available for medical practitioners on health monitoring.

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Silicosis is a preventable occupational lung disease resulting from the inhalation of very fine crystalline silica dust. Silica is found in many materials common on construction sites, including concrete, masonry, rock, granite and certain landscaping materials.

Whilst it can occur in various industries, there has been an emerging trend of new cases occurring in workers who fabricate and install artificial stone bench tops, particularly in Queensland. Composite stone products can contain up to 97 per cent silica¹. The high amount of silica means that there is a high risk of workers developing breathing problems and silicosis if they breathe in the dust when using machinery on these products. Accelerated silicosis can develop within two to five years with intense exposure of crystalline silica dust.

Evidence suggests that crystalline silica interacts with other respiratory hazards, like tobacco smoke, to cause airway diseases. Smokers are more susceptible to the long term effects of being exposed to silica dust and therefore, the smoking history of the worker should be considered.

As there is no known treatment for silicosis, early detection, diagnosis and management is essential.

If your patient works in an environment where they are exposed to silica dust, encourage them to speak to their employer about how they can reduce their exposure. A comprehensive list of ways to reduce exposure to silica dust is available on the SafeWork SA website (www.safework.sa.gov.au) and Safe Work Australia has developed "Working with silica and silica containing products" detailing what employers must do to keep workers safe (www.safeworkaustralia.gov.au).

From a national perspective, the Australian Government has established a National Dust Disease Taskforce focusing on the prevention, early identification, control and management of dust diseases in Australia. The Australian Government has committed \$5 million to support the taskforce, including discussion on the need to establish a National Dust Diseases Register, and a focus on new research into preventable occupational lung diseases.

What about health screening/monitoring for patients?

If your patient is concerned that they may have been exposed to silica dust, they should undergo health screening/monitoring and seek referral to a respiratory specialist/Thoracic Clinic, with access to full pulmonary function testing. In the current COVID-19 pandemic era, it is important to inform the respiratory specialist/Thoracic Clinic whether the patient currently has symptoms, or the purpose of the referral is simply asymptomatic screening.

¹ Safe Work Australia. "Health Monitoring. Guide for Crystalline Silica" (Feb, 2020).

This is required due to the temporary cessation of routine non-urgent pulmonary function tests.

Safe Work Australia has developed guidelines, "Health Monitoring. Guide for crystalline silica", that are intended to be read by a registered medical practitioner with experience in health monitoring for crystalline silica. It provides detailed guidelines about the type of medical examination, respiratory function tests, chest x-rays and high resolution computed tomography required for workers who are exposed, suspected of being exposed or are concerned about exposure to silica.

In addition, the Australasian Faculty of Occupational and Environmental Medicine (AFOEM) and the Thoracic Society of Australia and New Zealand (TSANZ) have created public resources on accelerated silicosis, including Frequently Asked Questions.

If one of your patients is diagnosed with silicosis and wishes to make a worker's compensation claim, ReturnToWorkSA has a specialist team to assist with the claims process. They can be contacted by email at silicosis@rtwsa.com or telephone (08) 8233 2545.

For further information in relation to this article, on this topic and/or support with referrals to appropriate services, please email providers@rtwsa.com or telephone (08) 8238 5757.

References:

Safe Work Australia. "Health Monitoring. Guide for Crystalline Silica" (Feb, 2020). https://www.safeworkaustralia.gov.au/media-centre/news/health-monitoring-guide-crystalline-silica

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The Department of Health, "National Dust Disease Taskforce" (last updated 23rd Jan 2020) https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-nat-dust-disease-taskforce.htm