

## EXECUTIVE SUMMARY

This inquiry arose out of the exposure of workers to crystalline silica in the sandblasting industry. One worker, Mr Richard White, unsuccessfully sought compensation for lung disease allegedly as a result of exposure in the 1970s during employment as a sandblaster. Mr White then contacted others who knew or suspected that they had acquired lung or other disease through sandblasting, eventually obtaining over 900 names. It appeared that very few had received or sought compensation for their disability.

The harmful effects of toxic dust have been known for many years. The health impacts vary with the type of dust to which a worker is exposed. For crystalline silica, diseases range from silicosis, to chronic obstructive pulmonary disease and lung cancer. Beryllium dust exposure leads to damage of the lungs, liver and spleen while exposure to timber dust is associated with cancer of the nasal sinuses.

Many Australian workers have suffered potentially harmful exposure to toxic dust because of poor work practices and slow response by regulators. Identifying the extent of illness related to toxic dust is difficult because the datasets are not compatible and most rely on workers' compensation data. Workers' compensation data is limited in scope as it does not record work-related illness that is of less than five days duration and does not record unsuccessful claims.

Added to the limitations of the datasets is the impact of the long lag time for some dust related diseases to be diagnosed. This often means that disease is blamed on lifestyle factors such as smoking rather than workplace exposure to toxic dust. It is for this reason that the importance of regular health surveillance of employees, including lung function tests and X-rays, was emphasised in evidence.

The national occupational health and safety framework comprises Commonwealth and State and Territory legislation. While the regulatory system has been developed to ensure worker safety, some problems were identified including the timeliness of implementation of changes to the regulatory regime, the enforcement of regulations, particularly in small industries, and ensuring that all workers are aware of the dangers of exposure to toxic dust. There is also considerable debate about the national exposure standards for crystalline silica and beryllium with calls for the crystalline silica standard to be reduced by half and the beryllium standard to match that published in the USA.

Compensation issues for those affected by exposure to toxic dust are complex: the long latency of disease makes it difficult to link work exposure to disease; compensation systems vary in the States and Territories; various limitations exist to prevent access to compensation; and a number of models for financial support exist.

While concern exists to ensure that workers who have already been exposed to toxic dust receive adequate medical assistance and compensation, the emerging field of

nanotechnology presents new occupational health and safety challenges. Research already indicates that nanoparticles may have serious health outcomes but there are significant gaps in knowledge about how nanoparticles act, their toxicity and how to measure and monitor nanoparticle exposure. These issues must be addressed to ensure that adequate regulations are introduced to overcome occupational health and safety concerns.