



Concrete dust big threat to rebuild workers

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Workers in the Christchurch rebuild are breathing in quantities of toxic concrete dust which could be a "bigger issue than asbestos," experts say.

Much of the dust created crushing concrete may contain silica fibres - which when inhaled can cause lung disease and cancer.

"Until three or four years ago, we really didn't know the importance of concrete dust in causing lung-based cancers, but it's becoming more and more important by the second," University of Canterbury toxicology professor Ian Shaw said.

He said the effects of concrete dust "are very similar really to the effects of asbestos", but it was treated with complacency and barely regulated.

"This is probably a bigger issue in Canterbury than asbestos . . . because everybody's really scared of asbestos, everybody knows that it's there."

Like asbestos, prolonged exposure to silica dust can result in lost lung capacity, lung disease and cancer.

Unlike asbestos, however, there are no specific regulations for workers dealing with concrete dust - only "best practice" guidelines, which recommend use of a face mask in high concentrations.

The risks associated with the dust were "well known now in scientific circles, but not so well known in the application of health and safety in the industry," Shaw said.

More severe effects, including development of cancer, may not emerge for 10 to 15 years.

Massey Centre for Public Health researcher Andrea 't Mannetje said silica was now widely recognised as being associated with increased risk of cancer and silicosis, and the substance was "really very common in concrete and brick".

She pointed to one study of workers, exposed to a high level of silica dust (0.5 milligrams per cubic metre) over 45-year period, which recorded mortality from lung cancer for 653 workers of every thousand - a 65 per cent mortality rate.

In a study of workers exposed at 0.25 milligrams per cubic metre over a lifetime - just above the New Zealand permissible exposure level - expected lung cancer mortality was 250 for every thousand workers, 25 per cent.

Mannetje said: "In reality, most people are not exposed for such an extended number of years, but the exposure standard has to be able to protect workers who work in these industries their whole working life."

New Zealand's "safe" exposure standard of 0.2 milligrams per cubic metre was four times the United States permissible exposure limit, which was recently lowered from 0.1 to 0.05 mg per cubic metre.

Council of Trade Unions Canterbury Rebuild coordinator Paul Watson said given the unprecedented scale of demolition and exposure in Canterbury there was "absolutely a need for tighter regulation."

"The sheer scale of [the rebuild] lends itself to risk of exposure, and that requires higher vigilance."

He said the impact of silica and concrete dust on workers' health "needs to be under close scrutiny".

Mannetje said a spike in respiratory illness down the track would be "hard to predict, given that we don't know the levels of exposure - an important step to take now is to know what the levels of exposure for workers are."

Shaw said while passersby and residents could get small doses of exposure, any major health consequence "will be for the construction workers, because they get exposed at a high level every day".

A spokesperson for ACC said claims resulting from workplace exposure to dust in Christchurch "are not likely to have been captured as yet".

Worksafe Canterbury Rebuild Health and Safety director Kathryn Heiler said best-practice guidelines for the control of dust included use of water, dust masks, and air conditioning in machinery.

She said inspectors could "ascertain whether the hazard of dust has been considered and what controls have been implemented on site," and take action if hazards were not being properly managed.

- The Press