

## Asbestos still poses a threat to global health: now is the time for action

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### *Australia should support international bans on asbestos trade*

The adverse health effects of asbestos are well known, with all forms of asbestos recognised as human carcinogens, causing malignant mesothelioma, lung, laryngeal and ovarian cancers<sup>1</sup> as well as the debilitating non-malignant diffuse lung disease, asbestosis, and pleural plaques. Although use, import and export of asbestos and asbestos-containing materials is banned in Australia and 51 other countries,<sup>2</sup> an estimated 125 million people around the world are still exposed to asbestos in their home and work environments.<sup>3</sup> Crocidolite (blue asbestos) and amosite (brown asbestos), two forms of asbestos that were heavily used in the past, are no longer in use. Chrysotile (white asbestos) accounts for 95% of the asbestos produced and used globally since 1990. There is no safe level of exposure to asbestos<sup>4</sup> and no discernible threshold below which there is no risk of mesothelioma.<sup>5</sup>

Given the clear dangers, why are workers and their families in many parts of the world still being exposed to asbestos? Exposure comes from two main sources: residual asbestos-containing materials remaining in buildings constructed before the mid-1980s (when asbestos-containing cement sheet was removed from the market); and continuing mining and use of asbestos in some parts of the world. In Australia, the legacy of asbestos remains a problem. In most cases, asbestos is in a non-respirable form, and is not a hazard to human health if undisturbed. However, if damaged, it can become friable and change to a respirable form.

The issues central to this global problem are education and research. Education about when asbestos exposure may occur, and how to avoid it, remains important. In this respect, the recent survey by Safe Work Australia<sup>6</sup> is reassuring, with most tradespeople reporting awareness of asbestos-related health risks and demonstrating an understanding of how exposures occur. However, there was a general lack of understanding about which materials may contain asbestos, and there are no data on the level of awareness among people doing their own renovations. Asbestos will be with us for decades, so targeted and contextually appropriate

education programs for at-risk populations are required. The effects of such programs should be monitored for their impact on risk, mortality and morbidity. As most of the people who will die from asbestos-related cancers in Australia already have asbestos in their lungs, research aimed at preventing or curing these cancers is also vital.

Globally, the major problem is with continued mining and use of asbestos, with over 2 million tonnes produced in 2008.<sup>7</sup> Developing countries, especially in Asia and Eastern Europe, are mining or importing asbestos for domestic use, and now account for the majority of the world's exposure to asbestos. Thousands, if not millions, of people are likely to die in these countries as a result of continued asbestos exposure.<sup>8</sup> Chrysotile is the only form of asbestos that is being traded in the 21st century; it is mostly used in the manufacture of asbestos cement sheets and pipes. There is a mistaken belief that this form of asbestos is less harmful than other forms, but overwhelming scientific evidence refutes this assertion.<sup>9</sup> All forms of asbestos are classed as human carcinogens by the United States Environmental Protection Agency, and cancer is seen in workers who have only been exposed to chrysotile asbestos.<sup>9</sup> There is also a mistaken view that chrysotile can be handled safely. Reports from the National Public Health Institute of Quebec show a failure to achieve "controlled use", even in Quebec. In many developing countries, exposure is uncontrolled, and education of workers is, at best, minimal, and often non-existent. Tobacco smoking is also widespread in Asia, and is synergistic with chrysotile in increasing the risk of lung cancer.

International organisations such as the World Health Organization and the International Labour Organization have called for a global ban of all forms of asbestos, with the goal of eliminating asbestos-related diseases.<sup>10</sup> The Collegium Ramazzini, an international academic society independent of commercial interests that examines critical issues in occupational and environmental health, has just renewed its call for such a ban. This could, in part, be

achieved via the Rotterdam Convention (<http://www.pic.int>), an international treaty intended to regulate global trade in chemicals that have been banned or severely restricted because of the hazards they pose to human health or the environment. The Convention was enacted in 2004, and 131 nations, including Australia, are current partners. The goal of the Convention is to protect the world's most vulnerable countries from importing hazardous pesticides or regulated chemicals without prior knowledge or consent. Repeated efforts to include chrysotile asbestos under the Rotterdam Convention have failed, due to opposition from countries which mine and manufacture asbestos, including Canada. The Canadian Medical Association, Canadian Cancer Society and Canadian Public Health Association oppose exporting asbestos to developing countries, yet their government officially condones this activity.

We, personally and on behalf of our respective professional affiliations, call for Australia and Australians to strongly support the latest international effort to ban the mining and manufacture of all forms of asbestos; to increase efforts, at home and abroad, in effective education of the dangers of asbestos both in the workplace and in the environment; and urge our legislators to redouble their efforts to rid the world of asbestos-related diseases.

### Competing interests

None identified.

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