Asbestos is still with us: repeat call for a universal ban

All forms of asbestos cause asbestosis, a progressive debilitating fibrotic disease of the lungs. All forms of asbestos cause malignant mesothelioma, lung and laryngeal cancers and may cause ovarian, gastrointestinal and other cancers [1].

Asbestos was declared a proven human carcinogen by the US Environmental Protection Agency, the International Agency for Research on Cancer of the World Health Organization and the National Toxicology Program 20 years ago [2–4]. The global scientific community is in overwhelming agreement that there is no safe level of exposure to asbestos [5]. Moreover, there is no evidence of a threshold level below which there is no risk of mesothelioma [6].

About 125 million people around the world are exposed to asbestos in their work environments [7], and many million more workers have been exposed to asbestos in years past. About 20–40% of adult men report having worked in occupations that may have entailed asbestos exposures [8]. In the most highly affected age groups, mesothelioma may account for >1% of all deaths [9,10]. In addition to mesothelioma, 5–7% of all lung cancers are potentially attributable to occupational exposures to asbestos [11].

Worldwide, the yearly number of asbestos-related cancer deaths in workers is estimated to be 100 000–140 000. In Western Europe, North America, Japan and Australia, 20 000 new cases of lung cancer and 10 000 cases of mesothelioma result every year from exposures to asbestos [12]. Australia’s high incidence of mesothelioma is expected to reach 18 000 by 2020, with 11 000 cases yet to appear [13].

In the UK, at least 3500 people die from asbestos-related illnesses each year, and this number is expected to increase to 5000 in future years [14]. The British mesothelioma death rate is now the highest in the world, with 1740 deaths in men (1 in 40 of all male cancer deaths below age 80) and 316 in women in 2006. About 1 in 170 of all British men born in the 1940s will die of mesothelioma [10]. The projected lifetime risk of fatal mesothelioma in all British men born in the 1940s is 0.59% or ~1 in 170 of all deaths. By 2050, there will have been ~90 000 deaths from mesothelioma in Great Britain, 65 000 occurring after 2001 [15].

All forms of asbestos are now banned in 52 countries, including all European Union member countries [16]. Nonetheless, these 52 countries make up less than a third of World Health Organization (WHO) member countries. A much larger number of WHO member countries still use, import and export asbestos and asbestos-containing products [17]. These are almost all countries in Asia, Eastern Europe, Latin America and Africa. Most of the world’s people still live in countries where asbestos use continues, usually with few safeguards. Over 85% of the world production of asbestos is used today to manufacture products in Asia and Eastern Europe [18]. In developing countries, where too often there exists little or no protection of workers and communities, the asbestos cancer pandemic may be the most devastating. China is by far the largest consumer of asbestos in the world today, followed by Russia, India, Kazakhstan, Brazil, Indonesia, Thailand, Vietnam and Ukraine [19,20].

Non-occupational environmental exposure to asbestos from the use of asbestos in construction materials is also a serious and often neglected problem throughout the world. In developed countries, large quantities of asbestos remain as a legacy of past construction practices in many thousands of schools, homes and commercial buildings. And in developing countries, where asbestos is used today in large quantities in construction, asbestos-contaminated dust is now accumulating in thousands of communities, with virtually all people burdened with asbestos fibres in their lungs and bodies.

The asbestos cancer pandemic may take as many as 10 million lives before asbestos is banned worldwide and all exposure is brought to an end [21]. In this conservative estimate, it is assumed that asbestos exposures are going to cease and that the epidemic will run itself out. But in fact, the world’s current production of asbestos continues at an alarming rate, and therefore, these figures may be underestimates of the true reality of this pandemic.

An international ban on the mining and use of asbestos is urgently needed. The risks of exposure to asbestos cannot be controlled by technology or by regulation of work practices. ‘Controlled use’ of chrysotile asbestos is not an effective alternative to a ban on all use of asbestos and scientists and responsible authorities in countries allowing the use of asbestos should have no illusion about this [22,23]. Even the best workplace controls cannot prevent occupational and environmental exposures to asbestos products either in use or as waste. Safer substitute products are available and in use in countries all over the world where asbestos is banned.

To protect the health of all people in the world—industrial workers, construction workers, women and children, now and in future generations—the Collegium Ramazzini calls on all countries to join in the international endeavour to ban all forms of asbestos. An international ban on asbestos is urgently needed.
The Collegium Ramazzini is an international academic society that examines and evaluates critical public health issues in occupational and environmental health. The Collegium derives its name from Bernardino Ramazzini, the father of occupational medicine, a professor of medicine of the Universities of Modena and Padua in the early 1700s. One hundred and eighty renowned clinicians and scientists from around the world comprise the Collegium, which is independent of commercial interests. The full text of Asbestos Is Still with Us: Repeat Call for a Universal Ban is available at: collegium@ramazzini.it.

Collegium Ramazzini
International Headquarters, Castello dei Pio, 41012 Carpi, Modena, Italy
e-mail: collegium@ramazzini.it

Conflicts of interest
None declared

References