

## Korea

In January 2007, test results confirmed the presence of asbestos fibers in 14 stations<sup>50</sup> on three lines of Seoul's subway system. The fibers were liberated from products used in the 1970s and 1980s for noise and heat insulation; whilst the use of asbestos-containing materials by the Seoul Metro company ceased in 2001, hazardous products already in situ, such as ceiling tiles, were not removed. Even though a spokesperson for the testing company, ETS Consulting, downplayed the risks saying that airborne asbestos in the stations was "below the permissible level," Seoul Metro promised to decontaminate the stations and remove contaminated materials.

The asbestos in the subway is a legacy of nearly fifty years of asbestos use in Korea. The life cycle of the asbestos industry in Korea has had three distinct phases:

**Expansion (1960-1982)** The industry's expansion was fuelled by overseas investment, principally from Japan and Germany, with foreign companies transferring hazardous technologies abroad in light of increasing restrictions at home. Concurrently, Korean policies to stimulate the construction and manufacturing sectors boosted asbestos demand; the lack of any health and safety regulations meant companies were spared the expense of installing control measures or providing personal protective equipment for workers. As the asbestos industrial sector matured, the production of asbestos textiles increased; these products required a higher quality of fiber and import patterns reflected this shift in consumption.

**Plateau (1983-1995)** Although consumption was adversely affected by the introduction of the (Korean) Industrial Safety and Health Act (1981), asbestos had not yet become a social issue.

**Decline (1996-Present)** As active regulation of hazardous working conditions began, Korean producers of asbestos textiles and brake linings relocated to China and other countries in Southeast Asia. The diagnosis of the first case of mesothelioma in Korea (1994) brought the compensation issue to the fore and the removal of asbestos from old buildings and demolition sites became a social issue. As of August 2006, compensation had only been paid to 35 mesothelioma and asbestos-related lung cancer claimants most of whom were end-users such as construction and maintenance workers and welders. Korea is 15-20 years behind Japan in its national epidemic of asbestos-related disease. The situation in the subway,<sup>51</sup> and similar incidents will contribute to the increase in asbestos mortality. Ironically, within weeks of the media coverage of the sub-

way contamination, the Labor Ministry announced that an asbestos ban in Korea will take effect in 2009.<sup>52</sup> This decision marks the beginning of the country's attempt to tackle its asbestos legacy; however, work is needed to address the following gaps:

- There is no company in Korea certified by the Government to remove asbestos safely as stipulated in 2003 by the Ministry of Labor; companies undertaking such work only hold licenses for the removal of ordinary construction materials.
- There are no asbestos removal training programs in South Korea; as a consequence, there are no workers with the skills or experience to tackle this work.
- There are only a handful of institutions in South Korea with the facilities for carrying out bulk analysis and sampling of materials suspected to contain asbestos.

## Japan

Widespread public awareness of Japan's lethal asbestos legacy began on June 29, 2005, the day the Kubota Corporation disclosed that scores of workers at its former Kanzaki asbestos-cement pipe plant had contracted mesothelioma, an aggressive type of cancer. The company was responding to requests from local mesothelioma victims for data on the amount and types of asbestos used at the factory and the number of workers affected. From 1954-1975, crocidolite and chrysotile were used at this site in the production of asbestos-cement pipes; from 1971-1997, only chrysotile was used for the manufacture of construction materials, mainly roofing products. The first occupational asbestos death caused by the Kanzaki plant was an asbestosis fatality which occurred in 1979; seven years later, the first Kubota worker died of mesothelioma. By March 2005, there had been 75 asbestos-related deaths amongst the Kanzaki workforce; by March 2006, this figure had risen to 105. As the factory had employed a total of 1,015 workers for more than one year, this means that more than 10% of all the workers have died of asbestos-related diseases.

Hazardous exposure to Kubota asbestos was not confined to



the workplace, however, and cases of mesothelioma contracted from neighborhood exposure were reported.<sup>53</sup> Research undertaken by Drs. N. Kurumatani and S. Kumagai charted mesotheliomas amongst people in Amagasaki City living within 1,500 meters of the former Kubota Kanzaki plant. By the end of March 2006, 99 cases of mesothelioma had been confirmed amongst local people whose only exposure to asbestos was environmental. In 1975, more than 20% of townspeople (120,000 out of 540,000) lived in areas where asbestos fiber concentration levels were estimated to have exceeded 10 f/liter. Although no large-scale epidemiological survey has been conducted on the impact of environmental asbestos exposure in Japan, anecdotal evidence has been accumulating which demonstrates the effect that Japanese asbestos consumption has had on residents living in proximity to asbestos-using factories.<sup>54</sup> Unfortunately, Amagasaki City is not the only locale where mesothelioma has been found amongst residents; researchers are locating increasing numbers of victims in diverse areas:<sup>55</sup>

- 1 female victim from Tosu City, the location of the former Japan Eternit Tosu factory;
- 3 victims in Ikaruga Town, the site of the Tatsuta plant, a subcontractor of the Nichias Oji factory;
- 2 victims in Oji Town, the location of the Nichias Oji factory;
- 2 victims in Hashima City, the home of the Nichias Hashima plant;
- 1 female victim in Amagasaki City due to exposure generated by the former Kansai Slate factory;
- 1 male victim in Kawachi Nagano City from exposure generated by the Toyo company.

The Kubota announcement seemed to open a floodgate to admissions by other well-known and respected national corporations that created an asbestos storm throughout the Japanese media. On July 1, 2005 the Taiheiyo Cement Corporation announced that six of its workers had also died from mesothelioma. Five days later, the Nichias Corporation, formerly called the Japan Asbestos Corporation, admitted that 86 former workers had died of asbestos-related diseases. By July 5, 2005, in response to Government enquiries, 20 manufacturers had declared a total of 277 occupational asbestos deaths.<sup>56</sup> The media attention these announcements attracted was enormous; the "Kubota Shock," as this sequence of events came to be called, had a great impact on the national government and the public.

Although the Kubota Shock was the impetus which finally forced the Japanese Government to address the national asbestos scandal,<sup>57</sup> the first asbestos panic had, in fact, taken place nearly 20 years earlier:



- in April 1986, a retrospective study of asbestos textile workers showed a six-fold increased risk of lung cancer;
- in June 1986, the first judgment by the Nagano district court on an asbestos case was handed down; it ordered the defendant company to pay compensation to asbestos claimants;
- in February 1987, the first case of mesothelioma due to neighborhood exposure was reported in Japan;
- in February 1987, the disturbance of sprayed asbestos in a university building was reported;
- in July 1987, baby powder used in Japan was found to be contaminated with asbestos;
- by the end of 1987, 3 workers in the Kanzaki asbestos plant had been diagnosed with pleural mesothelioma;
- during the late 1980s, concern about asbestos contained in school buildings escalated amongst parents and schoolteachers.

Unfortunately, the Japanese Government did not react to any of these developments and the asbestos business continued unabated for another two decades. Long after other industrialized countries had imposed regulations on using or importing asbestos, Japan continued to utilize crocidolite, amosite and chrysotile. Epidemiological data from Europe, North America and Australia show the correlation between the level of national asbestos consumption and the incidence of mesothelioma mortality. Based on Japan's high levels of consumption – up to 10 million tonnes of asbestos





were imported – and the lack of regulations to protect workers and the public from hazardous asbestos exposures, Japanese epidemiologists are predicting more than 100,000 deaths from malignant pleural mesothelioma in the next 40 years. Had Japan acted on the precautionary principle and banned asbestos sooner, many of these deaths could have been avoided.

The Japanese Government's first response to the Kubota Shock was to set up an inter-ministerial team at section chief level (July 1, 2005); the bureaucratic response was soon upgraded to department director level (July 21) and subsequently to minister level (July 28) in light of public outrage at the Government's decades of collusion with the asbestos industry. Responding to the Kubota revelations, in July 2005 Health, Labor and Welfare Minister Hidehisa Otsuji announced that the partial asbestos ban adopted in 2004 would be supplanted within three years by a total ban;<sup>58</sup> Prime Minister Junichiro Koizumi pledged that the prevention of further asbestos-related disease was a high priority. On August 11, 2005, Japan ratified the ILO Asbestos Convention Number 162, nearly 20 years after it had been adopted.

After six months of high-level meetings, it was resolved that:

- a Law Concerning the Relief of Health Hazards Caused by Asbestos, to provide compensation for individuals and families affected by mesothelioma and lung cancer whose exposure was domestic or environmental, would be passed; it came into force on March 27, 2006. Benefits which can be claimed under this act include: relief benefits, special condolence money for bereaved families, medical compensation and medical treatment pensions;<sup>59</sup>
- legislation would be revised to curtail hazardous exposures: changes were made to the Air Pollution Control Law, the Building Standards Law, the Waste Management and Public Cleaning Law.

Victims' organizations criticized the relief scheme as inadequate. Compensation for Japanese asbestos victims remains compartmentalized with occupational and non-occupational exposure claimants being eligible under some laws and not under others:

- Pneumoconiosis Law (1960 to present) available for workers with asbestosis and lung cancer;
- Workmen's Accident Compensation Insurance Law (1947 to present) available for workers with lung cancer, mesothelioma, benign effusion or diffuse thickening;

■ Pleural plaques are not compensated in Japan.

The changes which have improved the medical treatment and legal position of asbestos victims were the result of coordinated efforts by campaigning trade unions and NGOs such as BANJAN and JOSHR<sup>60</sup> which, in cooperation with the Japan Association of Mesothelioma and Asbestos-Related Disease Victims and their Families, now represent the "voice of the people" in the national asbestos debate. Sugio Furuya, BANJAN Secretary General, believes that the asbestos experience in Japan has lessons for other Asian countries:

**Lesson 1:** Adopt the precautionary approach based on the experience of industrialized countries without awaiting the appearance of a national asbestos epidemic.

**Lesson 2:** Introduce national asbestos bans as soon as possible; a ban on asbestos marks the first step in tackling a wide range of issues which make up national asbestos legacies.

**Lesson 3:** Coordinate the efforts of social partners to maximize effectiveness; the empowerment of asbestos victims and their families should be at the heart of an asbestos campaign.

**Lesson 4:** Facilitate global cooperation at various levels and across subject disciplines.

To mark the one year anniversary of the Asbestos Victims' Relief Law, on March 25 and 26, 2007 hundreds of Japanese demonstrators expressed their outrage at the inadequacy of government compensation for asbestos-related injuries during a demonstration at the National Diet, a mass rally and a Symposium on the Asbestos Relief Law held in Tokyo. Calling for "fair and equal compensation for all asbestos victims," the protestors highlighted the cumbersome red-tape, unfairness of screening criteria which bars people with asbestosis from claiming, shoddy treatment of victims whose exposure was non-occupational and injustice meted out to bereaved families who receive no compensation if ailing relatives die before qualifying for benefits. Representatives from seven areas in Japan affected by environmental asbestos contamination participated in these events.