

IBAS Report by Laurie Kazan-Allen

ASIAN ASBESTOS CONFERENCE

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The International Ban Asbestos Secretariat (IBAS) was established in 1999; it is an independent non-governmental organization which has two objectives: a worldwide ban on asbestos and justice for all asbestos victims. IBAS monitors, analyzes and disseminates news received from the ever-expanding network of individuals and groups involved in the international movement against asbestos, as well as information from legal, medical and industry sources. IBAS produces written material and organizes conferences to raise the profile of asbestos issues. The work of IBAS is coordinated by Laurie Kazan-Allen; more information is available on the website: <http://www.ibasecretariat.org/>

IBAS Report

Asian Asbestos Conference 2009

Hong Kong

April 26-27, 2009

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ASBESTOS FREE INDONESIA

Preface

Asia has long needed a coordinated approach to the problem of widespread asbestos use. While some countries in the region, such as Japan and Korea, have already instituted asbestos bans, others continue to manufacture and use asbestos products; in particular, India and China remain heavy users.

China's Minister of Health Chen Zhu recently warned decision-makers in Beijing that "Work-related disease has still not been controlled effectively." [1] According to a report in the China Daily on April 25, 2009:

"the Minister revealed that some illnesses, such as pneumoconiosis – the so-called black lung disease that affects many miners – are becoming more prevalent. And he said more respiratory diseases are being diagnosed in younger people than before.

The country's 250 million migrant workers, who mostly work in small- and medium-sized enterprises, often have not signed contracts, move frequently and are at high risk of contracting an occupational disease."

Advising experts and government officials that the incidence of occupational disease may be grossly underreported, Minister Zhu predicted that "the number of new cases of work-related illnesses will keep climbing" [2]. From the article, it appeared that the Minister's comments about pneumoconiosis related to injured miners, nevertheless, the journalist pointed out that "Pneumoconiosis is caused by long exposure to mineral or metallic dust and emergent poisoning at work." Asbestosis, a signature disease contracted by workers who mine, process or handle asbestos, is a form of pneumoconiosis. As China is the world's biggest user of asbestos and second biggest producer, there can be little doubt that the incidence of asbestosis, along with other types of pneumoconiosis, will rise there.

The Minister's statements taken in combination with the fact that the Chinese Government banned the use of asbestos in automotive friction materials (2003) and in building products for the construction of the 2008 Beijing Olympics indicate that not only is there a high level of official concern over asbestos but also that action is being taken to protect the population from hazardous exposures. The timing of Minister Chen Zhu's comments on the eve of the Asian Asbestos Conference 2009 – the first "grass-roots" asbestos conference in China – was indeed serendipitous.

Introduction

The first decade of the twenty-first century has seen a remarkable transition in the public perception of asbestos. Once revered as “the world’s most wonderful mineral” asbestos is now widely regarded as a global curse – “killer dust” [3]. This change of view owes much to the commitment and efforts of asbestos victims, public health campaigners and labor activists who have worked resolutely to expose the silent epidemic of asbestos-related diseases that has blighted so many lives. Although victims’ groups had campaigned on local asbestos problems since the 1980s, the first steps towards coordinated international action were not taken until the mid-1990s. With increasing communication, the opportunities offered by the internet and the establishment of a body to monitor developments – the International Ban Asbestos Secretariat – the virtual ban asbestos citizen’s movement expanded rapidly. The movement came of age with the holding of the world’s first victim-oriented asbestos conference: the Global Asbestos Congress 2000 (GAC 2000). The congress was a concrete demonstration of the latent power of the growing network of individuals and groups that supported a universal asbestos ban and justice for the injured. In many ways, it was the acorn from which so much has grown.

It is interesting to note that amongst the 100 foreign delegates who travelled to Osasco, São Paulo to attend GAC 2000 were four from Japan and one each from Korea, and India [4]. Within four years, Asian ban asbestos mobilization had mushroomed, and as a result the second Global Asbestos Congress, which was held in Tokyo in 2004, attracted 800 delegates from 40 countries [5]. Two years later, the first asbestos conference to focus specifically on the Asian region – the Asian Asbestos Conference 2006 – brought together in Bangkok 300 delegates from Asia, Africa, Europe, Australia and North America [6]. Capitalizing on the momentum achieved by these earlier events, in April this year nearly 200 delegates from 24 countries traveled to Hong Kong to attend the event which is the subject of this report (AAC 2009). The number of people involved in the above conferences and the diversity of sectors and groups they represented clearly indicate that what was once considered a radical fringe movement has most definitely entered the mainstream.

While ban asbestos activists are now invited to take part in Parliamentary panels, consult on research protocols and contribute to government decision making, once all-powerful asbestos industry representatives have been cast adrift by former supporters and beneficiaries who no longer wish to be associated with the tainted products they purvey. The outdated and compromised research that asbestos stakeholders relied on has, time and again, been revealed as biased and inaccurate. Indeed, the consensus on asbestos among all major international agencies is in total dis-

agreement with an industry still maintaining that asbestos can be used safely under “controlled conditions.” The World Health Organization, the International Labor Organization, the International Agency for Research on Cancer, the Collegium Ramazzini, the World Bank, the United Nations, the International Commission on Occupational Health, the International Trade Union Confederation, the World Bank and the World Trade Organization concur that all types of asbestos are dangerous, there is no such thing as safe use and the best way to protect humanity from hazardous exposures is to ban asbestos. The pronouncements of the asbestos lobby are now perceived to be as credible as those from the flat-earth society, another group located at the outer limits of the lunatic fringe.

The concept of AAC 2009 [7] was refined during consultation over a period of nearly two years. Careful consideration was given to the choice of venue and timing of the event. Recognizing that China is the world’s most prolific user of asbestos, and that China had been under-represented at previous meetings, it was decided to hold the conference in Hong Kong. There is little doubt that the proximity of the venue encouraged many key personnel from mainland China to attend, as did large contingents from India, Japan, Korea and Indonesia together with delegates from other Asian countries, global ban asbestos campaigners, medical experts, legal professionals, trade unionists, technicians and academics. There was provision for simultaneous translation into Mandarin, Cantonese, Korean, Japanese and English to facilitate the needs of the different national delegations. To emphasize the ongoing asbestos health risks faced by millions of workers in Asia, the date of the conference was set to coincide with the run-up to International Workers’ Memorial Day, when there was a demonstration of solidarity by conference delegates. Indeed, the activities on that day, which included two well-attended and colorful rallies in central Hong Kong, stand as testament to the growing strength of the ban asbestos movement in Asia.

Asbestos Consumption 2005-2007

Year	China (tonnes)	Asia (tonnes)	Global (tonnes)	Asia % of Global	China % of Global
2007	629,099	1,123,013	2,079,590	54%	30%
2006	531,190	1,283,979	2,214,068	58%	24%
2005	514,614	1,201,625	2,148,162	56%	24%
Total	1,674,903	3,608,617	6,441,820	N/A	N/A

This data has been sourced from the United States Geological Survey; <http://minerals.usgs.gov/minerals/pubs/commodity/asbestos/> Throughout this report, discrepancies in asbestos consumption and production data are common; these differences reflect the continuing vagueness of official sources when it comes to reporting on asbestos.

In its emphasis on grass-roots concerns and broad participation, AAC 2009 was the first international asbestos conference of its kind to be held in China.* The agenda, which was developed through a participatory process, gave priority to key issues as identified by asbestos victims' groups, regional bodies, NGOs and labor federations during numerous meetings, skype conference calls and through the exchange of hundreds of emails. As the aim of the conference organizers – the Asia Monitor Resource Center (AMRC), the International Ban Asbestos Secretariat (IBAS), the Hong Kong Confederation of Trade Unions and the Association for the Rights of Industrial Accident Victims – was to strengthen the grass-roots ban asbestos movement in Asia, discussion time was regarded as a key agenda priority. To encourage interaction and maximize delegates' participation, informal workshops, break-out groups and discussion sessions complimented the more structured plenary sessions. Other “happenings” which took place from April 25-28, including a photographic exhibition, video screenings, trips to examine asbestos contamination of local domestic buildings, media interviews and a press conference, helped realize the organizers' vision of a multidimensional event.

It is highly significant that during the conference, representatives from international agencies tasked with protecting occupational and public health – the International Labor Organization, the World Health Organization and the International Commission on Occupational Health – reiterated calls previously made by their organizations in support of a global asbestos ban; what is more, they expressed willingness to work closely with other groups, including victims' organizations, on the elimination of asbestos-related disease. On a regional level, the establishment of the Asian Ban Asbestos Network (A-BAN) at AAC 2009 was, according to the Hong Kong Declaration (Appendix A), “a landmark in the Asian campaign to obtain justice for the asbestos-injured and to implement a regional asbestos ban.”

The report which follows is an attempt to disseminate the important information presented in Hong Kong and convey something of the atmosphere in which the discussions took place.

* Previous meetings had been selective, open only to invited academics and industry personnel.



On April 25, in advance of the main conference, a three-hour meeting was held for grass-roots delegates. There was a real buzz as the room filled up with veteran campaigners and people new to the ban asbestos network. As individuals gave a brief introduction of their background and expertise, it became clear that despite a lack of asbestos knowledge, most of the newcomers had a wealth of experience in related issues such as occupational health and safety, workers' rights, environmental and community campaigning.

To bring them up to speed, it had been arranged that experienced Asian campaigners would be on hand to review the development of ban asbestos activism in Asia and key issues that would need to be addressed during the conference. The principal speaker was Sugio Furuya from the Ban Asbestos Network, Japan. He described how working nationally, bilaterally, regionally and internationally, the ban asbestos movement in Asia had developed.

National victims' initiatives on asbestos had included the establishment of the Japan Association of Mesothelioma and Asbestos-Related Disease Victims and their Families (2004), Indian asbestos victims' groups (2004), the Korean National Network of Asbestos Victims and their Families (2009) and community support for asbestos victims in the Philippines, Hong Kong and Taiwan.

Making common cause with NGOs such as IBAS, global labor federations, national trade unions and regional cam-

paigning groups like AMRC and ANROAV had resulted in a number of joint initiatives which had raised public awareness of asbestos issues: GAC 2000 (Brazil), GAC 2004 (Japan), AAC 2006 (Thailand), Yokohama International Asbestos Conference 2007 (Japan), Asbestos International Conference and satellite events 2008 (Korea).

High-profile policy papers and resolutions on the asbestos menace issued since 2006 by international agencies – the International Labor Organization, the World Health Organization and the International Social Security Association – had made a major contribution to national asbestos debates and reinforced the positions adopted by grass-roots groups following multilateral workshops and meetings in Bangladesh (2006), Korea (2007), Indonesia (2008) and Taiwan (2009).

Research projects spearheaded by Japanese and Korean victims' groups on contamination posed by asbestos textile and mining operations in Indonesia and Taiwan had identified occupational and public health risks and stimulated outrage amongst local people at the invasion of their communities by such hazardous technology.

Following this presentation, there was a lively exchange of ideas on how best to progress the ban asbestos campaign throughout Asia, and how to maximize the opportunities offered by the conference due to formally commence the next day.

Outline Conference Agenda

April 26

09:00-10:10	Welcome Session	
10:10-11:10	Plenary Session 1	Asia's Asbestos Time Bomb
11:30-13:45	Plenary Session 2	Tackling the Aftermath of Asia's Asbestos Consumption
14:45-16:45	Workshop 1	The Basic Facts about Asbestos
14:45-16:45	Workshop 2	Medical Session
14:45-16:45	Break-out Session 1	Potential Asian Claims on U.S. Asbestos Bankruptcy Trusts
17:00-19:00	Break-out Session 2	Building the Asian Ban Asbestos Network
17:00-19:00	Workshop 3	Practical Considerations for Minimizing the Asbestos Hazard

April 27

09:00-11:15	Plenary Session 3	Country Reports
11:30-13:30	Plenary Session 4	Meeting the Needs of Asbestos Victims
14:30-16:00	Workshop 4	International Transfer of Asbestos Industry to Asian locations
14:30-16:00	Workshop 5	Shipyards, Ship-breaking Industry and Railways
16:00-18:00	Plenary Session 5	Building the Global Ban Asbestos Network
18:00-19:00	Plenary Session 6	Going Forward: Consolidation and Closing Session

Welcome Session

Moderator: Omana George

During this session, representatives of bodies central to the organization of the conference welcomed delegates and signposted key focal points for coming sessions.

Lee Cheuk-yan from the Hong Kong Confederation of Trade Unions emphasized the need for local groups to continue pressure on Hong Kong authorities to prohibit the use of chrysotile asbestos, crocidolite and amosite asbestos having already been banned. Such a ban could prevent Hong Kong from becoming a dumping ground for asbestos unwanted in countries where bans had been enacted. The adoption of a comprehensive asbestos ban in Hong Kong would undoubtedly, he believed, have an impact on Chinese asbestos regulations.



Opening speaker Lee Cheuk-yan

The mobilization of the grass-roots ban asbestos movement in Asia was a prerequisite for progressing the regional campaign according to Sanjiv Pandita from the AMRC. To effectively combat industry propaganda, a partnership with other stakeholders, including asbestos victims groups, trade unions, NGOs and international agencies, and a coordinated strategic approach were needed, Mr. Pandita said.

Chan Kam-hong from the Association for the Rights of Industrial Accident Victims (ARIAV) paid tribute to the commitment and effectiveness of campaigning done in Hong Kong by pneumoconiosis and asbestos victims; pressure from victims had brought about improvements in compensation, medical treatment and rehabilitation services. The



Mrs. Sito (center) with Chan Kam-hong and Elsie Fung of ARIAV

voice of the victims remained an essential component for any campaign to ban asbestos; their views were expressed by Mrs. Sito, the wife of a Hong Kong mechanic and ship-builder who had been incapacitated by his asbestos-related illness. Mrs. Sito called for a total asbestos ban in Hong Kong. A minute of silence was observed to pay tribute to the victims.

Key points raised by speakers from international bodies included the:

- information vacuum in Asian countries about the asbestos hazard and the incidence of asbestos-related diseases;
- need for a proactive approach to Asia's increasing use of asbestos;
- elevated incidence of asbestos-related disease amongst construction workers;
- potential for future collaboration between grass-roots groups and other organizations;
- importance of networking among institutional bodies from different domains;
- need to work together on the development and dissemination of toolkits needed for the implementation of national asbestos action programs;
- need for a regional framework for occupational health and safety which would include work on the Asian asbestos initiative.

Asia's Asbestos Time Bomb

Moderator: Elizabeth Tang

In the presentation *The Global Asbestos Panorama 2009*, IBAS Coordinator Laurie Kazan-Allen described the advances made in recent years; these included national asbestos bans in Asia, Latin America and Africa, increasing input by asbestos victims' groups and campaigners into national asbestos debates, a heightened public awareness of asbestos issues in many countries, the birth of ban asbestos campaigns in India, Indonesia and the Philippines and an increased willingness of campaigners from different sectors of civil society to collaborate in joint initiatives. Central to the success of global efforts was the work of victims and their loved ones. Paying tribute to British campaigner Nancy Tait, "the first person to turn asbestos anger into activism" [8], the speaker commented:

"Born into a typical English family in a London suburb in the 1920s, there was not the slightest chance that Nancy would become a political campaigner – that she did so is entirely due to the asbestos tragedy which befell her family. In 1967, Nancy's husband Bill became ill; a year later he died of the asbestos cancer, mesothelioma."

Nancy's anger at the tragedy which had torn her family apart fueled her pioneering efforts to force negligent corporations and government bodies to acknowledge the damage done by Britain's use of asbestos.

As the global ban asbestos movement had gone from strength to strength, industry stakeholders had capitalized on the seemingly limitless funds at their disposal to corrupt the media, curry favor with governments, pervert the scientific process, attack their opponents, manipulate national asbestos debates and exert immense pressure on international agencies. That the orchestrated global asbestos lobby was showing signs of terminal decline was due largely to the perseverance, creative campaigns and collaborative efforts being made by grass-roots activists.

The next speaker, Professor Ken Takahashi from the University of Occupational and Environmental Health, Japan, addressed the subject: *Asbestos Diseases – A Global Ecological Perspective*. An analysis of asbestos mortality data re-

It should not be necessary for each country to experience an asbestos epidemic before action was taken

vealed that while deaths were increasing in Latin America, the death rate was flattening or decreasing in industrialized nations in Europe and North America. Unfortunately, the fact that the majority of asbestos-consuming countries



Professor Ken Takahashi

lacked mortality data was used by some governments to bolster arguments for the continued use of asbestos. It should not, the speaker said, be necessary for each country to experience an asbestos epidemic before action was taken: "Such a notion represents a failure of the scientific community, along with the international organizations and NGOs, to provide convincing arguments to support the elimination of use."

The situation in Asia was of particular concern due to:

- a dearth of data on disease incidence;
- little government engagement with asbestos-related problems; only two out of 32 (6%) Asian countries had ratified ILO Asbestos Convention 162; only six out of 44 (14%) Asian countries had banned asbestos [9];
- increasing Asian asbestos usage – in 1985, Asia accounted for 19% of global consumption; by 2000, it accounted for 47%.

To counteract the lack of statistical evidence, scientists had developed a "per capita asbestos use indicator," which allowed experts to correlate a country's use/dependence on asbestos with future mortality; this method, when used in conjunction with other measures, could produce reliable estimates of disease levels in most Asian countries [10]. Such estimates could be used to press for the adoption of better national policies on asbestos.

The final speaker in this session was Professor Xiaorong Wang [11] who addressed the topic: *The Current Situation of Asbestos-related Problems in China*. Professor Wang expressed surprise that, as one of the world's top producers, importers and users of asbestos [12], the repor-

ted incidence of asbestos-related diseases in China was so low. More than 100,000 people routinely experienced occupational asbestos exposures [13]. The worst exposures had occurred in small mines and factories in rural areas which were more poorly regulated than larger production facilities in urban areas. The Chinese government had banned the use of amosite and crocidolite and had set standards for maximum asbestos dust concentrations in workplaces. Unfortunately these standards, which were often unenforced, were last updated in 2002. The speaker said that “In the past, dust concentrations in some factories and mines were 100 times higher than the current standard.”

China had in excess of 90 million tons of chrysotile asbestos reserves distributed in 15 provinces many of which



Professor Xiaorong Wang

were in the northwest of the country. Graphs illustrating world asbestos production showed by Professor Wang indicated that by 2001 China had usurped Canada as the world’s second biggest asbestos producer (after Russia) [14].

The speaker discussed research concerning workers at chrysotile-using factories. All the factories had poor working conditions, high levels of exposure and low standards of health and safety; asbestos dust levels far exceeded allowable concentrations. People in the neighboring communities were also exposed to high levels of asbestos

“asbestos workers were more than 3 times more likely to develop cancer as compared to the control group.”

liberated by the manufacturing processes. The cohort consisted of 515 male workers who were followed for 25 years. There was an increased risk of all cancers amongst cohort members; indeed, “asbestos workers were more than 3 times more likely to develop cancer as compared to the control group.” There was a high risk of lung cancer, especially for those people who worked in the textile and raw materials departments; smoking increased the likelihood of contracting lung cancer. This cohort was being followed up and it was hoped that this research would be used as evidence of the need to implement more rigorous controls on the use of asbestos in order to protect workers’ health.

Top Asbestos-Consuming Countries

Country	Tonnes (2006)	Tonnes (2007)	Signatory to ILO Asbestos Convention	Global Ranking (2006/2007)
China	531,190	626,099	No	1/1
Russia	292,541	280,019	Yes	2/3
India	272,856	302,139	No	3/2
Kazakhstan	151,231	108,951	No	4/4
Brazil	143,123	93,780	Yes	5/5
Thailand	140,861	86,525	No	6/6
Ukraine	124,130	85,602	No	7/8
Uzbekistan	63,246	86,488	No	8/7
Vietnam	60,657	64,429	No	9/9
Indonesia	40,542	46,187	No	10/11
Zimbabwe	34,409	57,329	Yes	11/10
Kyrgyzstan	24,056	20,862	No	12/12
Total	1,879,659	1,858,410		

Source: United States Geological Survey.

Tackling the Hazardous Aftermath of Asia's Asbestos Consumption

Moderator: Madhumita Dutta

Introducing the panel of speakers, Madhumita Dutta said that, having defined the problems caused by the use of asbestos worldwide, it was essential that solutions be found for protecting humanity and the environment from contamination. In the presentation *The ILO Campaign to End Asbestos-Related Diseases*, Tsuyoshi Kawakami [15] delineated the asbestos policy of the International Labor Organization (ILO), citing ILO Asbestos Convention 1986 and Asbestos Resolution 2006. The speaker listed five key action areas which made up the ILO's campaign to eliminate asbestos-related disease:

- the promotion of asbestos awareness amongst national populations and governments; research had revealed that government officials often had a low level of knowledge about the asbestos hazard;
- diagnostic training and support for physicians on the front line; the lack of medical expertise in diagnosing asbestos-related diseases fed into government policy when few cases of asbestos-related disease were identified;
- the provision of information, the development of financial programs and the promotion of sustainable technologies to encourage the replacement of asbestos manufacturing by a safer production system;
- technical assistance for small companies to help them make the transition to a safer technology;
- the establishment and implementation of national asbestos programs.



Tsuyoshi Kawakami (center) with Hisashi Ogawa and Madhumita Dutta

Recent ILO activities on asbestos had included: the organization's participation in national asbestos workshops in Vietnam (2008), Thailand (2007 & 2008), medical training courses and dialogue with member states to encourage them to adopt Asbestos Convention 1986 (No. 162) and Oc-

cupational Cancer Convention 1974 (No. 139).

Currently, 125 million people were being exposed to asbestos worldwide, 60% of them in the Asia-Pacific region. More than 90,000 workers died every year from asbestos-related diseases. Asbestos, the world's worst occupational carcinogen, accounted for 54% of all deaths from occupational cancer. In light of these facts and increasing asbestos consumption in Asia, the World Health Organization (WHO) was, said Hisashi Ogawa, seriously concerned [16]. The speaker detailed the collaborative program on asbestos being implemented by the WHO in conjunction with the ILO following agreement reached at the 13th Session of the ILO/WHO Joint Committee on Occupational Health (2003) that special efforts would be taken to eliminate asbestos-related diseases. In his presentation, *Towards the Elimination of Asbestos-related Diseases: WHO Approach*, Ogawa reiterated the WHO's asbestos policy:

- all types of asbestos caused asbestosis, mesothelioma and lung cancer;
- no safe threshold level of exposure had been identified;
- safer substitutes existed;
- exposure of workers and other users of asbestos-containing products was extremely difficult to control;
- asbestos abatement was very costly and hard to be carried out in a completely safe way.

As well as working with ILO colleagues, the WHO had supported initiatives by other stakeholders such as the Asian Asbestos Initiative organized by the University of Occupational and Environmental Health, Japan, a WHO collaborating center, the Asian Asbestos Conference 2006 (Bangkok) and, of course, AAC 2009. A new publication which described recommended procedures for dealing with asbestos in post-disaster emergencies illustrated the sustained and multifaceted approach of the WHO asbestos campaign [17].

As in other parts of the world, in Asia the fight against asbestos is being spearheaded by those most affected: the victims. In his presentation, Sugio Furuya, from the Ban Asbestos Network Japan (BANJAN) and the Japan Occupational Safety and Health Resource Center, addressed the subject of: *Asbestos Victims' Campaigns in Asia*. Although Japanese asbestos consumption decreased following the adoption of a national ban, usage was increasing in China, Thailand, India and other Asian countries. Asian manufacturers exploited national loopholes to transfer asbestos textile operations from Japan to Korea in the 1970s



Sugio Furuya

and afterwards from Korea to Indonesia.

During the next 40 years, mortality from malignant pleural mesothelioma amongst Japanese males could exceed 103,000. These asbestos-related deaths would occur as a result of six different types of exposure.

Type of Exposure	At-Risk Groups
direct occupational	contracted workers and the self-employed
indirect occupational	contracted workers and the self-employed
domestic	relatives of exposed workers
neighborhood	residents living near asbestos plants, mines, etc.
environmental	members of the public occupying or using contaminated buildings
untraceable	everyone

Epidemiologists had not yet begun to calculate the effects of Japanese asbestos consumption when the mobilization of Japanese asbestos victims began; in 1987, BANJAN was formed by a coalition of trade unions, citizens' groups, OSH campaigners and interested individuals. Amongst BANJAN's main objectives were: identifying and empowering asbestos victims and their families and lobbying for changes in government policies.

In 2002, BANJAN began efforts to bring together regional victims groups and in 2004 a nationwide umbrella group – the Japan Association of Asbestos-Related Diseases Victims and their Families – was formed. This national victims' group played a key role in organizing the Global Asbestos Congress 2004 (GAC 2004) which attracted 800 participants, including 120 overseas delegates from 40 countries, to the three-day event in Tokyo.

Within 6 months of GAC 2004, the Japanese public and media were shocked by public disclosures of scores of occupational and neighborhood asbestos deaths; the public impact of this news became known as the “Kubota Shock.” Despite the publicity which surrounded these revelations, it was left to the victims and to BANJAN to continue the campaign to obtain justice for all those affected, including the payment of financial compensation and all medical expenses, and the adoption of preventative measures.

The Japanese experience showed the importance of adopting a precautionary approach to asbestos, rather than waiting for a national epidemic to emerge. Among the lessons learned in Japan were that:

- an asbestos ban was the first step in tackling the wide-ranging aspects of national asbestos legacies.
- the role of asbestos victims and their families was paramount; indeed, asbestos mobilization began with the efforts of concerned individuals – such as the victims.
- coordinating the lobbying and campaigning efforts of civil society was crucial to maximizing effectiveness.
- regional and global cooperation at various levels and across subject disciplines was strongly recommended.
- good relations with journalists helped to keep the asbestos issue on the political agenda; the media was key to getting the message across.

Asian asbestos mobilization continued with efforts made in Korea by victims in Busan, a town which was home to many asbestos textile factories. In 2006, a Busan association of asbestos victims was set up which organized high-profile protests, an international asbestos symposium, a public hearing in the National Diet Library and an ongoing dialogue between Korean and Japanese victims' groups. In 2008, the Korean Network to Ban Asbestos (BANKO) was formed and this year (2009) the Korean National Network of Asbestos Victims was launched.

Since 2006, new asbestos victims' groups had been set up in India, the Philippines, Hong Kong and Taiwan. On a regional level, the Asia Network for the Rights of Occupational Accident Victims and the Asia Monitor Resource Center had increased their campaigning on asbestos. More could be achieved by activists working together on common issues such as: lobbying for a regional ban, registering at-risk individuals, monitoring occupational and public health, pressing for improved medical treatment and financial support, managing asbestos in the environment and preventing the transfer of hazardous technologies to developing countries.

Although international trade unions and properly constituted national unions were, said speaker Fiona Murie of the Building and Woodworkers International (BWI) [18]. “overwhelmingly in favor of a worldwide asbestos ban,”

since 2006 an industry-backed front group – the International Trade Unions’ Alliance for ‘Chrysotile’ – had been aggressively promoting pro-asbestos propaganda, pressurizing international agencies and national governments to delay action on asbestos and attacking ban asbestos campaigners. The Russian-based pro-chrysotile “movement”

since 2006 an industry backed front group ... had been aggressively promoting pro-asbestos propaganda ...

was made up of personnel from asbestos mining and cement manufacturing industries; corporate munificence enabled industry stooges to run the “No Chrysotile Ban” website, produce glossy multilingual literature and send delegates around the world on lobbying junkets.

In her presentation, *Global Mobilization of Trade Union Action on Asbestos*, Ms. Murie contrasted the scams perpetrated by these imitation trade unionists with the BWI campaign to protect human beings from the asbestos hazard. The main BWI arguments for banning all types of asbestos, including chrysotile (white) asbestos, were the following:

- all types of asbestos had been classified by the International Agency for Research into Cancer (IARC) as Group 1 carcinogens;
- safer substitutes were available and had been positively evaluated by the WHO and IARC;
- there was no safe threshold of exposure, industry’s “controlled use” policy was a myth especially in the construction industry in developing countries;
- the ILO policy was clarified by a 2006 Resolution adopted by the 95th Session of the International Labour Conference which called for an end to the use of chrysotile [19]; the BWI, working in collaboration with other union activists, was instrumental in getting this resolution adopted.

The BWI continued to work with its affiliates and stakeholders from other sectors of civil society, such as NGOs, asbestos victims groups, government agencies and international bodies. Concluding her talk, the speaker urged conference delegates to coordinate efforts to push for government action, help identify key players and decision makers in national asbestos debates, develop country and sector specific campaign strategies and make use of regional networks to progress BWI goals.

In recognition of the fact that Australia had the highest incidence of asbestos cancer in the world, the Government agreed to develop a national research strategy under the auspices of a new body: the National Centre for Asbestos-Related Diseases (NCARD) [20]. Professor Bruce Robinson, NCARD’s Director, began his presentation by describing the operations of this virtual organization, hosted in Perth by the University of Western Australia. NCARD pro-



Professor Bruce Robinson

moted a coordinated and collaborative asbestos cancer research program aimed at the development of new treatment protocols and the discovery of cures; it also lobbied the government and other stakeholders for additional funding. NCARD’s results had been impressive with substantial progress in the development of early diagnosis methods, new treatment protocols involving immunotherapy, chemotherapy, gene therapy and new surgical approaches.

The professor used the opportunity of his presentation in Hong Kong to extend NCARD’s remit beyond Australia’s shores when he launched: *A New Australia-Asia Asbestos Research Cooperative*. Such a scheme was urgently needed due to the high levels of asbestos consumption in Asia, the lack of controls and the popularity of cigarette

In the coming decades, Professor Robinson said, between one and two million people would die from asbestos-induced cancer in Asia.

smoking. In the coming decades, Professor Robinson said, between one and two million people could die from asbestos-induced cancer in Asia. It was important to conduct research on Asian asbestos issues for medical reasons, on grounds of compassion and morality, and because it could save a lot of money. Predictions for national asbestos compensation bills were horrific: US\$200 bn in the United States, US\$85 bn in Europe, US\$8.5 bn in Australia. There were no predictions for Asia.

The aims of the new cooperative were to:

- keep researchers updated on current research and treatment developments;
- provide training fellowships in asbestos-related disease research;
- collaborate in science and medicine, i.e. epidemiology and clinical trials;
- support the environmental control of asbestos exposures.

In Asia, a region which was plagued by shortages of medical equipment and training opportunities, participation in the Australian program was an exciting prospect with much to offer: periodic updates on asbestos research and treatment, lectures by asbestos experts, Australian training fellowships for junior doctors or scientists to learn about research into occupational lung diseases (particularly asbestos diseases) and research collaboration to get hard data. Without country specific data, it was extremely difficult to convince policymakers of the need to ban asbestos; with this data and with the support of experts, changing national policy might become a real possibility. Concluding his presentation, the speaker encouraged AAC 2009 delegates to take part in the new initiative and asked them to spread news about the cooperative to their colleagues. In an upcoming trip to Indonesia, the professor hoped to encourage participation from local doctors.

For decades, the producers and processors of asbestos have conducted business on a global scale. Japanese asbestos companies owned plants in Korea and Indonesia and American manufacturers sold asbestos-containing products throughout Asia. Lawyer Steven Kazan's presentation *Transnational Claims: How U.S. Developments Affect Asian Asbestos Victims* explored one consequence of the globalized market: the possibility for Asian asbestos victims to bring successful claims against U.S. defendants [21]. Having dismissed as too uncertain options such as suing the U.S. Government under the Federal Tort Claims Act, 28 U.S.C.A. Section 1346 or U.S. corporations under the Alien Tort Claims Act, 28 U.S.C.A. Section 1350, the speaker focused his remarks on the possibility of obtaining compensation from one of the 25 bankruptcy trusts set up as a result of Chapter 11 reorganizations. Although, the current assets of these trusts was \$25,998,000,000, when the assets of the pending bankruptcies of Asarco, PCC, Quigley, THAN and WR Grace were added to the pot, the

total would exceed \$33 billion [22]. Of the 25 operating trusts, nine acknowledged liabilities from foreign sites with Babcock & Wilcox's 2,285 sites constituting 77% of all the foreign sites listed. Eleven of the trusts acknowledged shipboard exposures with Babcock & Wilcox's 8,022 ships accounting for 61% of the total (13,056) [23]. While the maximum value of a mesothelioma claim between trusts varied from a low of \$40,000 (HK Porter) to a high of \$1 million (Narco), the majority of trusts had similar structures and processes for lodging claims. [It should be pointed out that the trusts generally pay only a proportion of the value of a mesothelioma claim; e.g. under the HK Porter Trust fund only 6.3% of the listed value of a claim would be paid, whereas under the Owens Corning Trust 40% would be paid.]

By and large, the process of submitting a claim was "relatively easy and victim friendly," although all submissions must be supported by certified abstracts or translations into English. The speaker made it clear that the successful submission of a claim could be accomplished by a non-lawyer and recommended that asbestos victims' groups or trade unions undertake this task on behalf of their members. To obtain compensation from a trust, claimants must:

- show exposure to a company's product at one of their worksites;
- state their occupation and the time period during which they worked with the product;
- specify their asbestos-related disease and name their dependents;
- calculate their economic loss (optional).

The speaker invited delegates to attend an afternoon breakout session which would provide a detailed explanation of how to submit claims to the U.S. trusts.

Bankruptcy Trusts: Approved Work Sites

25 Operating Trusts

No Approved Site Lists

Amatex	Celotex
Artra	Manville
UNR	

Approved Site Lists - US and Canada only - 11

Approved Site Lists with foreign sites - 9

ABB Lummus	28 sites
AP Green	277 sites
Babcock & Wilcox	2,285 sites
Halliburton	77 sites
Harbison Walker	3 sites
Eagle-Picher	56 sites
Fibreboard	1 site
Keene	3 sites
Owens Corning	250 sites
Total	2,980 sites

Bankruptcy Trusts: Approved Ships

25 Operating Trusts

No Approved Site Lists - 5

Approved Site Lists with No Approved Ships - 9

Site Lists with Approved Ships - 11

AP Green	82 ships
Armstrong World Industries	85 ships
Babcock & Wilcox	8,022 ships
CE Thurston	33 ships
Combustion Engineering	2,300 ships
Fibreboard	22 ships
Halliburton	290 ships
Harbison-Walker	11 ships
Keene	103 ships
Owens Corning	916 ships
Western	1,192 ships
Total	13,056 ships

The Basic Facts about Asbestos

Moderator: Apolinar Tolentino

While many AAC 2009 delegates had some knowledge of asbestos issues, others were coming to the subject for the first time. To deal with varying levels of knowledge, a glossary of terms and a handout (in Chinese and English) on the basic facts were distributed. In her opening remarks, Fiona Murie concentrated on the issue of asbestos cement. Ninety percent of the asbestos being used today went into the manufacture of asbestos-cement (AC) building products such as pipes, tiles, roofing materials, sheets for partition walls and insulating materials. On building sites and during maintenance, renovation and demolition activities, AC materials were sawed, cut, broken, abraded and perforated throughout the working day; as a consequence, asbestos fibers were liberated and workers were exposed to the hazards of contracting asbestos-related diseases.

There was a consensus that the best way to protect building workers from harmful exposures was to stop the use of asbestos. There were alternative substances which could replace asbestos in the production of fiber cement: cellulose, polyvinyl alcohol, p-aramids and polypropylene. With some minor changes, the same production processes and equipment could be used for the manufacture of the asbestos-free cement as for AC. Although production costs were higher, these costs did not take into account the downstream costs of using asbestos, such as worker protection, medical care, welfare and social security benefits, payment of compensation, the high price of asbestos removal

or disposal of contaminated waste.

Until these contaminated products were eliminated from building sites, measures – such as those specified in ILO Convention 162 – should be put in place to protect workers' safety. International agencies and global trade unions agreed that special provisions should be made for asbestos-exposed workers which included: health surveillance and registers of the exposed to facilitate early diagnosis, access to medical care, advice, treatment, rehabilitation, the provision of legal advice, social security benefits and compensation awards and measures to ensure social justice for victims. Securing these rights could best be achieved by the adoption of a strategic campaign with defined aims and action areas which was supported by a coalition of trade unions, victims' groups and sympathetic professionals; a discussion ensued about how best to further these aims [24].

Continuing the discussion of the risk to construction workers was Katsuyuki Iida from the Tokyo Occupational Safety & Health Centre, whose presentation was: *Dust Prevention for Carpenters: Grass-roots Activity on a Construction Site in Tokyo*. Even though Japan banned the use of asbestos, the potential for hazardous exposures had continued, due to the presence of asbestos in the built environment [25]. In the past, construction workers routinely sprayed, cut and processed asbestos materials without protective equipment. Japanese laws – such as the



Panel of speakers for workshop 1.

From left:

*Apolinar Tolentino,
Fiona Murie,
Sari Sairanen,
Katsuyuki Iida,
Pat Preston and
Kiroyuko Kawamoto*

Pneumoconiosis Law – were inadequate in the face of the increasing number of silicosis and asbestosis cases. At the end of the 1990s, the Japan Federation of Construction Workers' Union (Tokyo branch) in cooperation with the Tokyo Occupational Safety and Health Center and the Kam-eido Himawari Clinic started a grass-roots dust prevention program for construction workers which consisted of radiographic screening, medical documentation screening and precautionary training. Over time, there have been improvements to the program:

- since 1998, periodic X-ray screening for pneumoconiosis and other asbestos-related diseases had been conducted;
- since 2000, the examination of medical documentation had identified cases of occupational respiratory disease such as lung cancer, mesothelioma etc;
- since 2002, the trade union had on 36 occasions carried out precautionary training on construction sites; these participatory action-oriented exercises featured the use of a training kit and action checklist [26].

Drawing on these experiences, the union concluded that the incidence of pneumoconiosis increased with age and that government certifications underestimated the prevalence of the disease; of 159 patients with suspected pneumoconiosis identified by the union from 2000 to 2006, only 17 were officially recognized as suffering from occupational diseases. Elevated levels of pleural plaques were also found in male construction workers from the Tokyo area, indicating that this cohort was exposed to high levels of asbestos. As available resources were limited, only 30% of all the at-risk workers were examined; more surveillance and grass-roots dust prevention activity on construction sites were needed.

Australian construction workers had also experienced high levels of asbestos exposure according to Pat Preston from the Construction Forestry Mining Energy Union of Australia (CFMEU). Over 35 years ago, the CFMEU began an industrial campaign to ban asbestos, during which building workers refused to use asbestos-containing products. Booklets, stickers and posters were distributed throughout

Over 35 years ago, the CFMEU began an industrial campaign to ban asbestos, during which building workers refused to use asbestos-containing products ...

workplaces where these products were being used to raise awareness of the hazard; as a result, many building contractors turned their backs on asbestos to avoid costly work stoppages. At the same time, Australian asbestos manufacturer James Hardie phased out the use of asbestos in construction products for the domestic market. As a consequence of these developments, by the mid-1980s, asbestos-free building material was becoming increasingly

popular.

Even though Australia banned asbestos in 2003, the residual problem of contaminated infrastructure persisted and construction, maintenance and demolition workers remained at risk of occupational exposures. The union began a campaign to address this situation which stipulated that prior to the commencement of refurbishments, an assessment by an environmental consultant was required to determine the amount of asbestos present and the measures required to carry out the work safely. If a building worker was exposed, a letter of exposure was issued which could, if necessary, be used as documentary evidence in the future.

A program for medical monitoring was being planned in order to provide an early warning of symptoms. Current Australian regulations were quite rigid about asbestos auditing of buildings on a regular basis or during planned work [27]. Asbestos removal work was conducted by specialists under a licensed regime; the union ran courses for members of the asbestos removal industry. In light of the risk asbestos posed to members of the public, the CFMEU provided training courses to educate community members on how to manage domestic asbestos so as to prevent the unregulated ripping out and disposal of hazardous products.

Other at-risk groups included workers in the airline, aerospace, automotive, fisheries, health-care, hospitality, manufacturing, mining and smelting, railways, shipbuilding, transportation, retail and wholesale industries, according to Sari Sairanen, National Health and Safety Director of the Canadian Autoworkers Union (CAW) [28]. During

although the government had known that asbestos levels at the foundry far exceeded allowable concentrations, no attempts had been made to enforce the regulations.

her presentation, **CAW Asbestos Action**, the speaker focused on the case of the infamous Holmes Foundry. In 1998, the Occupational Health Clinic for Ontario Workers was informed about a cancer cluster mostly amongst retired workers from the Holmes Foundry. The union became involved and organized an intake clinic, explaining to the workers the possible dangers to which they had been exposed. Following a public meeting which was attended by 200+ members and their families, an investigation to identify the cause of their health problems was begun. Evidence was found which showed that although the government had known that asbestos levels at the foundry far exceeded allowable concentrations, no attempts had been made to enforce the regulations. The injured lobbied for official recognition and compensation for their work-related illnesses; to date, over \$30 million had been obtained for the victims and their families. Other

asbestos scandals uncovered by the CAW were the existence of hazardous asbestos practices at a General Electric factory and an Air Canada call center.

Building on these victories the CAW had developed an asbestos program which included the following components: training, worker health organizers, collaboration with health and safety committee members and occupational physicians, bargain protection in collective agreements, lobbying for legislative changes, and support for the abolition of asbestos use in Canada and overseas. The CAW's 2003 Asbestos Resolution summed up the union's policy as follows:

“the CAW call on the Canadian government to ban the export of asbestos; withdraw its financial and political support from the Asbestos Institute; work with the unions and communities involved to ensure a just transition for workers in the asbestos mines and surrounding communities and lobby for a world wide ban on the use of asbestos...”

It is well known that many people who contract asbestos-related diseases have already retired, due to the long incubation periods of these illnesses. The problems caused by the long delay before the disease manifests itself and the age of the injured were discussed by Hiroyuki Kawamoto, from the Kanagawa Occupational Safety & Health Centre (Japan), in his paper *Challenges of Retired Asbestos Workers*. In December 2007, the Asbestos Union (AU), a

Some companies, however, refused to negotiate and the AU was currently taking action against Honda, Nissan and other big Japanese companies.

branch of the All Japan Shipbuilding and Engineering Workers Union, was established specifically to assist retired asbestos workers and people whose family members had died. Mr. Kawamoto was appointed the General Secretary. The AU demanded information and claimed compensation from former employers of the injured. It brought legal actions before the Labour Relations Commission, a body composed of representatives from trade unions and companies. To avoid protracted negotiations and a struggle with the union, companies usually made an offer. The AU had had cases where the financial sum awarded was US\$200,000. Some companies, however, refused to negotiate and the AU was currently taking action against Honda, Nissan and other big Japanese companies. Profiles of typical AU members included:

- a garage worker employed in a Honda factory for 2 years in the mid-1960s who had one lung removed after he contracted mesothelioma; although the govern-

ment recognized his condition as an occupational disease, Honda did not, and a lawsuit was filed in March 2009;

- a subcontractor for Sumitomo shipbuilding diagnosed with mesothelioma, having been exposed to asbestos at work; he was given no information about asbestos and had no opportunity to protect himself from hazardous occupational exposures; the company denied liability;
- the AU chairperson who had worked for 40 years as a plumber in an oil company; he had been diagnosed with pleural plaques and was angry because he was never given any information about asbestos.

During the question and answer session which followed the presentations, issues raised by conference participants included the following:

- while public awareness had been raised in Korea regarding asbestos contamination of consumer products due to recent media coverage, workers doing refurbishments and maintenance were still being exposed to asbestos despite the existence of laws which mandated workplace protection; a national campaign would be run by the Korea Building and Construction Union to raise workers' awareness, identify victims and begin compensation procedures on their behalf;
- in Canada, the Quebec unions had sided with the asbestos industry to broadcast a message of economic well-being to asbestos communities; the CAW and other like-minded organizations were lobbying for a “just transition” program to move the mine workers to safer jobs; although it was a slow process, more politicians were declaring their support, and while the focus of the upcoming general election would be the economy, there was an opportunity to exploit this event to force politicians to declare their position on asbestos; the Canadian ban asbestos movement was re-energizing itself and was re-engaging with allies in political parties, victims' groups, trade unions and human rights groups to bring pressure on the federal government to change its pro-asbestos policy;
- the occupational threat posed by asbestos remained in post-ban countries; the Asbestos Union (Japan) was a new type of union; publicity surrounding the cases of retired workers raised awareness of the asbestos threat to the current generation of workers.

Having heard many comments from delegates about priorities in Asia regarding asbestos, a consensus was reached that the establishment of an Asian Ban Asbestos Network was crucial.

Medical Session

Moderators: Professors Domyung Paek and Naomi Hisanaga

Due to heavy consumption of asbestos during the twentieth century, the incidence of asbestos-related diseases in Japan is increasing. For victims to obtain financial relief for these diseases, it is essential that they receive an accurate diagnosis of their condition [29]. During the first presentation, *Pathological Diagnosis of Asbestos-related Diseases*, Professor Kouki Inai of Hiroshima University, having touched on the range of recognized diseases, concentrated his remarks on the continuing difficulties in making accurate diagnoses. Despite an array of tools such as clinical findings, laboratory data on serum or effusions and/or radiographic procedures including chest X-ray, CT or MRI scans [30], uncertainties remained. The professor discussed research undertaken by his team into the diagnosis of asbestosis, diffuse pleural thickening and benign asbestos pleurisy using histopathological specimens, and explained the relevance of non-specific pathology and imaging findings. Although progress on diagnosing mesothelioma with techniques such as immunohistochemical analysis had been made, new diagnostic tools should be developed through molecular and genetic research. Judging from the Japanese experience, it was likely that the incidence of asbestos cancer would rise in other Asian countries in the near future.

An attempt to quantify the incidence of disease amongst ex-workers from an Indian asbestos factory, formerly called Hindustan Ferodo and later renamed Hindustan Composites Ltd. (HCL) [31], was the subject of the presentation *Asbestosis among ex-asbestos Workers of a Mumbai Asbestos Factory: A Prevalence Study*, by Dr. Archana Kakade from the Mumbai Occupational Health and Safety Centre. A 2004 study of active HCL workers which found a low incidence of asbestosis in workers led researchers to postulate that the “healthy worker syndrome” had tainted the results [32]. To test out this hypothesis, a new study was undertaken among ex-HCL workers who had resigned, retired or been forced to resign under the government’s Voluntary Retirement Scheme (VRS) [33]. Interviews were conducted, occupational histories were taken and the health of workers was accessed during phase 1 (April-June 2008) and phase 2 (July 2008-January 2009) of this project. The prevalence rate of asbestosis among ex-HCL workers in the recent study was 49%, as opposed to 23% in the 2004 cohort of active HCL workers.

Recognizing the multitude of problems faced by asbestos-injured workers in Mumbai, recommendations made by the speaker included: banning asbestos in India, the mandatory introduction of a national medical surveillance program for workers occupationally exposed to asbestos, occupational health training for doctors, the introduction

of efficient industrial engineering controls, the reduction of allowable asbestos concentrations from 1 fiber/cc to 0.1 fiber/cc, the use of respiratory equipment and personal protective equipment, regular asbestos fiber monitoring, good housekeeping practices, and a program of asbestos education for all personnel.

High incidences of asbestos-related diseases have been found in Korean regions where asbestos fiber was mined, according to the presentation by Dr. Yeon-Soon Ahn of the Department of Occupational Medicine, Dongguk College, Goyang, Korea [34]. The results of an epidemiological survey undertaken by a team of Korean and Japanese researchers were detailed in the paper: *Environmental Fallout from Asbestos Pollution in Korea – Asbestosis Epidemics from Neighborhood Exposure in Chungnam Province, Korea*.

Due to para-occupational domestic and neighborhood exposures and exposure to naturally occurring asbestos, there was no difference in the prevalence rates of asbestosis and pleural plaques between miners and non-miners, i.e. members of the public who lived near the mines. This conclusion was the result of an epidemiological survey of 215 residents from five villages located within two kilometers of three asbestos mining sites. As a result of chest X-rays, 110 of the study subjects (51%) were suspected of having asbestos-related diseases; 95 were submitted for CT scans which established that 55 (64%) had asbestosis and 87 (92%) had pleural plaques [35]. Following up on the results of this work, the Korean Ministry of Environment was conducting an epidemiological survey of 10,000 residents who lived near 15 asbestos mines in Chungnam province. A Center for Asbestosis-related Environmental Disease had been established and a bill to provide assistance for environmental asbestos victims had been introduced.

during 2005-2006 there was a total of 3,365 Japanese workers compensated by the government for mesothelioma and lung cancer ...

Asbestos-related Lung Cancer among Japanese Construction Workers was the title of the talk given by Professor Naomi Hisanaga of the Aichi University of Education, Japan. Pictures shown of working practices during the 1980s backed up data which detailed incredibly high levels of asbestos exposure experienced by construction workers. Airborne asbestos concentrations exceeding 100 fibers/ml during the cutting of asbestos-containing boards using electric circular saws were not unusual. The researchers calculated that during 2005-2006 there was a total of 3,365 Japanese workers compensated by the gov-



Cutting operations resulted in exposures as high as 787 fibers/ml. Here, the level was 131 fibers/ml

ernment for mesothelioma and lung cancer, of which 1,387 (41%) worked in construction [36]; the second highest group affected were workers in shipbuilding who accounted for a total of 444 cases (13%).

Despite the acknowledged high-risk nature of construction work, many of the asbestos-injured from this industry did not qualify for compensation. Out of 34 lung-cancer patients whose details were recorded by the construction workers' health insurance society in Mie prefecture, 12 (35%) did not fulfill the criteria needed to obtain government compensation. Recognizing that construction workers remained on the asbestos front line, as evidenced by photographs showing hazardous working practices during current refurbishment work and demolition, the speaker concluded that current compensation requirements needed altering, so that all construction workers who suffered illness as a result of their occupational asbestos exposures obtained the benefits to which they were entitled. Regarding improved controls of hazardous exposures at current building sites promised by the government, the professor said that research on the carcinogenic potential of low-dose asbestos exposures was needed.

In the last 10-15 years, research on the treatment of mesothelioma had produced chemotherapy protocols for improving the duration and quality of life of mesothelioma patients, said Professor Bruce Robinson in his presentation: *Latest Data on Mesothelioma Diagnosis and Treatment*. Much of this work had been conducted in Australia, the country with the world's worst incidence of mesothelioma. Whereas the U.S., Europe and Japan had incidence rates of 15, 18 and 7 per million respectively, Australia's rate was 40 per million [37]. In Australia, mesothelioma was no longer restricted to occupational cohorts such as asbestos mine workers, boilermakers, insulators, dockers and construction workers, "mesothelioma is now a disease of 'the man in the street' – almost everyone has asbestos in their lungs."

Improvements had been made in diagnostic tools such as

immunocytochemical staining, computed tomography imaging techniques, positron emission tomography (PET scanning) and the use of blood biomarkers (mesothelin) [38] which, in some cases, had helped doctors make earlier diagnoses. Despite the progress, there was no cure for mesothelioma; front-line agents for treatment remained the use of a platinum agent plus an anti-metabolite such as pemetrexed and gemcitabine; new therapies featured the use of 2-drug combination chemotherapies with immunotherapy. Radical surgery was only recommended for selected cases and should be carried out in centers of excellence and in conjunction with adjuvant therapy. Gene therapy was still experimental.

The final presentation of the workshop reprised themes highlighted by speakers from Japan and Korea but placed them within an Australian context. Dr. Greg Deleuil, Medical Advisor to the Asbestos Diseases Society of Australia, spoke about *Asbestosis in the Aftermath of Cyclone Tracy*, a massive storm which struck Darwin, in Australia's Northern Territory, on December 24, 1974. In just 8 hours, winds of 270 km/h demolished most of the built environment leaving behind a city-sized asbestos-contaminated demolition site. The fact that most of the buildings in Darwin had been constructed of asbestos-containing building products meant that there were high levels of airborne asbestos in the aftermath of the cyclone. The speaker and his family who had lived in Darwin relocated to the city of Perth after the storm.

Photographs were shown which evidenced the destructive havoc wreaked by the cyclone; pictures of clean-up personnel wearing leather gloves, floppy hats and work boots showed them shoveling the debris or using heavy machinery to remove wreckage. The responders – personnel from the armed forces, day laborers and volunteers – had

The fact that most of the buildings in Darwin had been constructed of asbestos-containing building products meant that there were high levels of airborne asbestos in the aftermath of the cyclone.

no breathing equipment or protective clothing. There were no health and safety regulations in place to minimize occupational exposures. In the last few months, the speaker had diagnosed two of the clean-up crew with asbestosis; there was no way to predict how many other emergency workers or Darwin residents would contract an asbestos-related disease as a result of encountering Cyclone Tracy.

During the discussion phase of the workshop, the medical experts were asked technical questions about specimen preparation, ethics and techniques for screening patients, immunotherapy and the suitability of patients for radical surgery. There was a consensus that, as of then, no gold standard had been identified for treating mesothelioma patients.

Potential Asian Claims on U.S. Asbestos Bankruptcy Trusts

Moderator: Steven Kazan

This session was a master class on how U.S. asbestos bankruptcy trusts funds can be accessed by foreign claimants [39]. The speaker, who had been intimately involved with the construction of many of these trusts and was extremely knowledgeable about their modus operandi, used a well constructed PowerPoint presentation to take delegates through the claims process [40]. The submission of claims was not unduly complex, was free of any filing charges and did not require the services of a local or U.S. lawyer; however, all supporting documentation must be accompanied by certified abstracts or translations into English. It was more cost efficient for victims' groups or trade unions to bring the claims on behalf of their members than to pay a lawyer 25%+ of the monies obtained. All the trust funds, which collectively held \$33 billion in assets, had websites and information was easily accessible online; forms could be downloaded and claims could be submitted by email.

**Operating Bankruptcy Trusts' Assets
(in millions)**

ABB Lummus Global Inc.	40
ACandS	520
Armstrong World Industries	2,101
Artra	92
Babcock & Wilcox	1,589
Celotex	706
CE Thurston	55
Combustion Engineering	1,114
EJ Bartells	7
DII - Halliburton & Harbison Walker	2,754
Eagle Picher	496
Federal Mogul	635
HK Porter	78
JT Thorpe	187
JT Thorpe Successor Trust	190
Kaiser Aluminum	1,197
Keene	74
Manville	1,778
Narco	2,000
National Gypsum	510
Owens Corning/Fibreboard	4,476
Pilbrico	198
Raytech	89
UNR	17
United State Gypsum	4,089
United States Mineral Products	26
Western Asbestos	980

Total current assets created by confirmed bankruptcies
\$25,998,000,000

Future Trusts assets expected in pending bankruptcies

Asarco	750
PCC	3,000
Quigley	200
THAN	900
WR Grace	2,500

Total - \$7,350,000,000

**Total assets
\$33,348,000,000**

1/ Primary source is Mealey's Litigation Report: Asbestos dated November 3, 2008; and other personal communications

Lists shown by the speaker detailed 2,980 sites and 13,056 ships on which one or more of the trusts acknowledged liability in scores of countries; those countries with the most sites were: Cuba (504), Mexico (387), Brazil (236),

Peru (154), Venezuela (114), Portugal (95), Italy (95), Columbia (82), Chile (79), Japan (79), India (65), Dominican Republic (59), Argentina (58), Spain 55 [41].

As the U.S. boilermaker Babcock & Wilcox (B&W) had the most approved foreign sites (2,285) and ships (8,022), it was the focus of the remarks illustrating how a claim could be pursued. From links on the B&W Asbestos Trust website, you could access information on: how to file a claim, qualifications for payment, popular downloads, B&W approved site lists and significant occupational exposure ratings [42]. Useful website features included: FAQs, a glossary, video training programs, online tools and documents for downloading such as instructions for filing a claim, a claim form, a B&W exposure affidavit, etc. For a B&W claim to succeed, claimants must show: exposure to a B&W product, the name and location of the worksite, their occupation when they worked with the contaminated product, the length of time they worked with the product, their disease, their dependents and their economic loss (optional). If someone was employed at a worksite already on the approved B&W site list, the process was even more straightforward than otherwise.

Many non-U.S. workers might have been exposed to B&W boilers on board ships; the speaker showed how a few minutes on the internet could establish if a ship was constructed with B&W boilers installed. Taking as his example a Korean naval vessel called the ROKS Chung Mu, a few Google searches showed that:

- before 1963, the Chung Mu had been an American naval vessel called the USS Erben; it was launched in 1943 in Maine and was sold to the Korean Navy in 1963;
- the Erben (DD-631) was a Fletcher-class destroyer;
- four B & W boilers were standard for Fletcher-class destroyers.

Throughout the session, questions were asked on a range of procedural issues; such as the value of claims, feasibility of bringing a claim if a victim worked for a subsidiary, difficulties in bringing claims arising from exposures at foreign sites not on the approved list, status of a claim when a victim dies (the claim survives and is processed on behalf of surviving relatives), time frame, evidence required to prove employment and income. The session concluded with an offer of ongoing advice and consultation to NGOs and victims' group representatives at no charge.

NB. The slides from this presentation, which include detailed instructions for submitting claims to US bankruptcy trusts, can be seen on the speaker's website: <http://www.kazanlaw.com/AACWorkshop>

Building the Asian Ban Asbestos Network

Moderator: Yeyong Choi



During this session, delegates debated the way forward. In discussions and in conversations which took place within smaller subregional groups, a consensus emerged on campaign themes and strategies. Available regional resources were compared with those required to achieve specified goals and suggestions were made on how to bridge the gaps identified. While full minutes of these discussions have been made available to the members of the Asian Ban Asbestos Network (A-BAN), only AAC 2009 delegates are privy to the decisions taken during this session.

Subregional group discussions



Asbestosis sufferer Jung Ji-Yul, a leading member of the Korean National Network of Asbestos Victims and Their Families and active participant in BANKO

Practical Considerations for Minimizing the Asbestos Hazard

Moderators: Andy Oberta and Dave Hodgkin

In his capacity as an Environmental Housing and Emergency Shelter Consultant, Dave Hodgkin was ideally placed to address the subject of *Post-disaster Recovery and the Problem of Asbestos*. Unfortunately, the global impact of infrastructural damage from disasters was increasing, especially in Asia which was experiencing a dramatic rise in emergency-caused homelessness and environmental asbestos contamination. The main asbestos challenges during emergency situations such as those caused by the Indian Ocean tsunami (2004) or the Yogyakarta (Indonesia) earthquake (2006) were dealing with asbestos-contaminated rubble and preventing the use of new asbestos during reconstruction efforts [43]. Responding to the high levels of basic human need created by the extensive destruction of domestic and national infrastructures was done in conditions which were far from ideal; previous attempts at asbestos education – such as posters recommending prevention methods had little impact [44].

On the ground, local asbestos industrialists viewed an emer-

gency as “a big sales opportunity” to market their products which, they claimed, were cheaper, stronger, lighter, more waterproof and easier to install than the alternatives. In Yogyakarta, some programs chose “community procurement-based models” which included rules against the purchase of asbestos-containing materials. In some cases these rules were overlooked, whilst in others although the agency specified and purchased asbestos-free roofing when the material was tested they discovered it had been falsely marketed and contained asbestos. This was because it was cheaper for companies to keep using old technology rather than upgrade to the different machines required to produce cellulose-fiber reinforced sheets, and there was little or no control over the use of asbestos in countries like Indonesia.

“Current guidelines,” the speaker said “are complex and ineffective.” What was needed was more broadly agreed and much simpler messaging like “keep it wet,” on posters, leaflets etc. that could be pre-prepared in local lan-

In the aftermath of natural disasters, clean-up operations usually require the removal of large amounts of contaminated debris, as evidenced by this mound of building rubble at Aceh.



Easily identified asbestos debris at Aceh.

guages for the top 20 disaster-prone countries. Such messages needed to be made available in conjunction with simple tools and procedures to minimize hazardous exposures; unless these resources were available immediately, affected communities (who were the primary actors in post-disaster clean-ups) would continue to respond as previously – asbestos-contaminated rubble would be swept up by hand or machine and then dumped haphazardly and broken asbestos products would be used for temporary housing.

Ideally, an international agency with a ring-fenced budget and a mandate to advise on asbestos issues during emergency situations should be enfranchised to develop practical guidelines (and translate them into various languages), send personnel to disaster zones, help coordinate asbestos policy amongst local governments and aid providers, and progress the debate on phasing out the future use of asbestos in the affected country. Having seen the highly graphic photographs which illustrated Hodgkin's talk, there is little doubt that these recommendations should be considered a priority.

The majority of asbestos used globally has been in the production of asbestos-cement building materials. Even when

It is a myth that asbestos fibers are locked firmly in a cement matrix; in fact fibers are readily released from asbestos-cement surfaces.

countries ban the new use of asbestos, the presence of these products constitutes a threat to public and occupational health. In the presentation *A Holistic Approach to Managing Asbestos Hazards*, Environmental Consultant Andy Obera discounted myths propagated by industry about asbestos cement, stating categorically that:

- asbestos-cement roofing and siding could release fibers inside and outside buildings;
- asbestos fibers were readily released from asbestos-cement surfaces;
- asbestos cement could be crumbled to powder by hand pressure;
- paint and encapsulants did not offer permanent protection against asbestos fiber release.

Standards had been developed for the management of asbestos materials, including asbestos-cement building products, by the ASTM, the world's largest producer of voluntary consensus standards [45]:

- ASTM E2356 Standard Practice for Comprehensive Building Asbestos Surveys, which dealt with baseline surveys, sampling, exposure assessments and project design surveys;
- ASTM E1368 Standard Practice for Visual Inspection of Asbestos Abatement Projects, which focused on re-

moval project management;

- ASTM E2394 Asbestos Cement; about work practices for installed materials;
- ASTM Manual on Asbestos Control: Surveys, Removal and Management – Second Edition, which explained the use of the ASTM standards [46].

With the use of a flow chart, the speaker explained how, taken together, these standards provided a scientifically validated framework for managing asbestos materials. Compliance with the ASTM asbestos-cement standards involved the prohibition of cutting with high-speed power saws, burnishing with high-speed wire brushes, cleaning with compressed air, high-pressure water blasting and the re-use and re-cycling of asbestos products. Concluding his presentation, the speaker said that “to use this holistic approach an infrastructure involving the public and private sectors is needed.”

Some of the lessons learned by the Irish Electricity Supply Board (ESB) [47] in dealing with asbestos installed in its 30 power stations from 1927 to 1968 were the subject of the presentation *ESB Experience of Remediating Asbestos Contaminated Land*, by Patrick Colman. After the ESB banned the new use of asbestos in its facilities (1968), codes of practice for managing asbestos, which exceeded requirements laid down in national legislation, were put into place.

After a review of the ESB's asbestos policy (1990), a 6-year plan was drawn up to remove all accessible asbestos from power stations; a budget of 13 million Irish pounds was allocated. While the removal of asbestos insulation was straightforward, the remediation of some former dump sites was problematic. In the 1960s, asbestos waste was disposed of with ordinary power station waste on sites within the grounds. After safety legislation was adopted in Ireland to protect workers (1972), all removed asbestos was bagged and disposed of in separate sites on station grounds [48].

As a result of the pre-1972 regime, locating areas where contaminated debris had been dumped could necessitate a fair amount of detective work: station records were consulted, former staff were interviewed and samples were taken at suspected sites – such as ash ponds. An incident in October 1998 illustrated the costly consequences of exporting soil from an industrial site. A contractor, who had sought in-fill from ESB for a housing development, inadvertently removed soil from the site of a local power station which had been used as an asbestos disposal site. When ESB staff became aware of this they immediately contacted people living in the development and started the process of recovering the contaminated soil. The area in the housing development was cordoned off and over a period of two months the ESB removed a considerable amount of asbestos-contaminated waste [49]. To carry out the decontamination, the company developed a manage-

ment structure to oversee the work and a detailed methodology which specified techniques for surveying, sampling, risk assessment, remediation, inspection and air monitoring [50]. “The ESB has,” concluded the speaker “built up unique experience in managing the remediation and development of asbestos contaminated sites.”

The division in the United States between federal and state powers to regulate occupational health and safety issues creates gaps through which workers can be exploited, Vincent Brennan told delegates during his presentation: *The Art of Applying Science to Asbestos Abatement: A Moral Obligation to Minimize Exposure While Maintaining Costs* [51].

In 1995, as a result of a sting set by the University of Vermont, the use of unskilled and untrained illegal workers to remove asbestos was discovered. Twelve years later, a firm in Massachusetts was convicted on 28 felony counts of conspiracy, false payroll tax returns, counterfeit training records, non-payment of taxes and the use of illegal aliens to carry out asbestos work. Even where states, such as Vermont, had developed criteria to implement a federal accreditation plan, confusion persisted because of a lack of coordination amongst the different state departments tasked with enforcing the regulations.

The University of Vermont had developed a flexible protocol for asbestos removal and management projects which had achieved multiple benefits for business by focusing on performance-based activities, streamlining the procurement process, maintaining competition and contracting job ordering. Web based documentation increased financial transparency and ensured that the abatement process was properly managed; everything was documented consistently and efficiently so that more time and resources could be used to monitor work daily. The responsibilities of the various parties – owners, contractors, supervisors, workers – were clearly stipulated.

This new regime increased the ownership of all the actors, helped foster long-term relationships and increased safety not only relating to asbestos exposures but also for occupational risks such as electrical hazards, slips, falls and heat and cold exposures. Larger institutions had a moral obligation to hold contractors accountable, stipulate their expectations, ensure consistent working practices and train workers and supervisors. There were better workers and supervisors in Vermont and a higher level of protection for asbestos abatement workers as a result of the approach designed by the University of Vermont.

Throughout the world, sprayed-asbestos insulation was used on a massive scale during the twentieth century; even when new this material was highly friable and therefore capable of liberating asbestos fibers when handled. When it was decades old, such as was the case in the situation described by the next speaker, it was even more likely to

cause hazardous airborne concentrations. A project recently completed in Vienna, Austria illustrates how the use of up-to-date technology and management systems can accomplish the safe removal of sprayed-asbestos fireproofing even under difficult circumstances. In the presentation *Asbestos Removal in a Subway Station During Operation*, Engineer Heinz Kropiunik [52] outlined the requirements of this project:

- removal of 2,500 m² of sprayed asbestos from the ceiling of the subway station by 40 workers over a period of eight months; decontamination of all cables;
- workers, positioned on scaffolding [53] above the platform on which the passengers were waiting, had to work in a confined space (less than a meter high);
- 30,000 passengers used the station every day.

Throughout the asbestos removal, air monitoring was carried out on the passenger platforms of the subway station as well as in the working zone above. The use of scores of photographs by the speaker illustrated the difficulties posed by this project and the technical solutions which



Cramped working conditions

were found so that the removal work could continue while the station was open to normal traffic.

Asbestos cement is big business in China, the world’s largest user of asbestos. There are more than 400 factories with 600 production lines annually outputting 300 million m² of asbestos-cement corrugated sheeting, said the next speaker, Lin Zhen [54] in his presentation: *Development of Non-asbestos Fiber Cement Products in China*. Even though the continuing use of asbestos was supported by stakeholders from the mining and construction industries, in light of the asbestos health hazard [55] research had been carried out in the last 20 years into the production of asbestos-free cement:

- autoclaved cellulose-fiber reinforced cement (CCA); CCA flat boards were used for sidings, partitions and ceilings. More than 200,000 m² of CCA boards were used in the Grand Stadium and other constructions for the Beijing 2008 Olympic Games (the use of asbestos was not permitted in the Olympic buildings); other

key construction projects which used CCA boards were the South Station of Shanghai Subway line No. 1 and the Sino-French Centre in Tongji University, Shanghai.

- vinylon-fiber reinforced cement (VRC) corrugated sheets, flat boards and cable protection pipes were mainly being sold to the domestic market with some overseas sales; as the costs of VRC corrugated sheets were relatively high, demand was low.
- glass-fiber reinforced cement (GRC) products were especially suitable for architectural decorative components and landscape decorative art works. Other applications were: lightweight partition panels, roof slabs with pre-stressed concrete ribs for grid structure, exterior wall panels, ventilation ducts and tube-shaped form works.

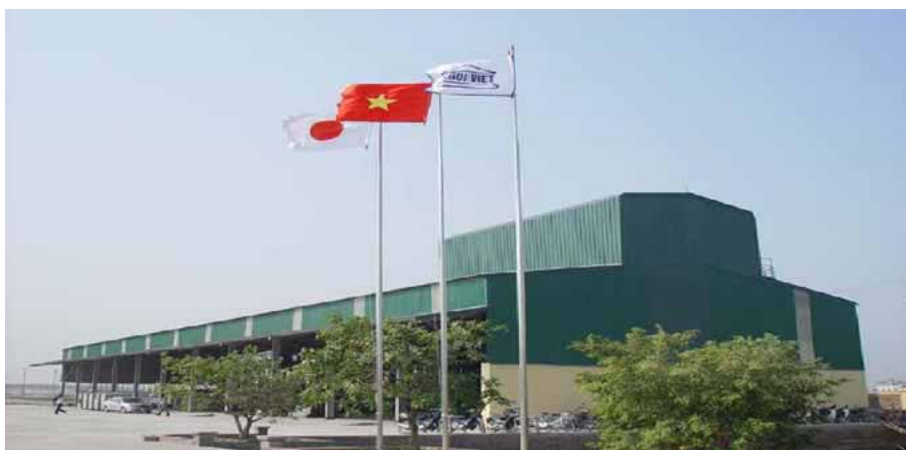
Despite these innovations, in 2005 asbestos-cement corrugated sheets and flat sheets accounted for 92% of all sales of fiber-cement roof and wall materials. Even so, the total dominance of asbestos cement was over and a transitional period had begun, during which asbestos cement and non-asbestos fiber cement would co-exist. The market for autoclaved calcium silicate board had been increasing quickly in recent years. The speaker believed that “non-asbestos fiber cement products represented the future development of the fiber-cement industry in China.”

As in China, asbestos-cement products continued to be popular in Vietnam and 50 factories produced nearly 100 million square meters of asbestos roofing sheets every year. In the presentation given by Nguyen Dinh Kien on the *Technology and Equipment for the Production of Non-asbestos Corrugated Cement Sheets in Vietnam*, the speaker detailed major problems experienced in Vietnam in the industrial conversion of the Hatschek cement production process from asbestos to non-asbestos technology, such as fiber balling, delaminating, low cement yield and cracking [56]. In 1988, personnel at the Research Institute of Technology for Machinery (RMIT) started development work on

the Hatschek process and machinery design for the asbestos-cement industry; twelve years later, they extended their research to the investigation of a production methodology and equipment for non-asbestos technology. In 2007, as a result of collaboration with Kuraray and Dipro International of Japan, RMIT succeeded in developing a highly efficient, low energy consuming, highly automated PVA-cement production line.

Pictures were shown of TTC, Vietnam’s first PVA-cement sheet factory; TTC asbestos-free corrugated cement sheets satisfied stringent tests for mechanical and physical behavior. As these products complied with Korean standards, exports were now being sent to that country. Although non-asbestos technology was, said the speaker: “very different in the equipment and production methods used and requires experienced engineers to solve the many technical changes, the achievement of non-asbestos technology in Vietnam opens the way for the replacement of asbestos in the fiber-cement industry in Vietnam and other countries which continue to use asbestos-cement products.”

During the discussion which followed the presentations, delegates expressed particular interest in the development of asbestos-free technology in China and Vietnam. In China, the availability of local raw materials meant that costly imports could be avoided. If you had needed to import raw materials said Mr. Lin Zhen, production costs would have been up to 30% higher. Even though production costs of asbestos-free materials in Vietnam were about 20% higher, some countries (Indonesia) had expressed interest in the new technology. With regard to mechanical properties, PVA cement was of a better standard than asbestos cement. PVA cement had also proved popular in Brazil which had now developed the ability to produce PVA locally in order to avoid the high costs of imports. The same equipment used for asbestos manufacturing had been adopted for the production of PVA cement. Although energy costs were 10-15% higher, output and new investment in the Brazilian PVA-cement industry were increasing.



*TTC, Vietnam’s first
PVA-cement sheet
factory*

Country Reports

Moderator: Apo Leung

The title of the presentation by Indian activist Madhumita Dutta, *Asbestos Kills! India in Denial!*, was indicative of the content of the first presentation of the morning [57]. The escalation of asbestos use in India – now the world’s largest importer of asbestos [58] – had taken place in circumstances created to maximize corporate profits and with no regard for occupational or public safety. Even as government agencies claimed the situation was under control, citing lack of epidemiological data, politicians reaped the profits from the asbestos factories and mines they owned; the state of Tamil Nadu owned a large asbestos factory. The growth of the asbestos industrial sector had been encouraged by government incentives such as the de-licensing of asbestos, which was nowadays no longer classed as a hazardous import, and the relatively high level of allowable industrial airborne asbestos concentration: 2 f/cc; there was virtually no enforcement of the few regulations which existed for minimizing hazardous exposures.

Even as government agencies claimed the situation was under control, citing lack of epidemiological data, politicians reaped the profits from the asbestos factories and mines they owned.

There was some asbestos mining in India but the output was small and unable to satisfy national demand. There were illegal tremolite asbestos mines [59] in Rajasthan and chrysotile asbestos mines in Cuddapah, Andhra Pradesh. Miners, all of whom were unprotected, worked with their bare hands to extract the fiber. Mining operations had grossly contaminated communities such as the towns near a redundant asbestos mine in Roro, Chaibasa, Jharkhand. Twenty years ago mining operations ceased but there had been no attempt to remediate the area and children played amidst the contamination.

More than 100,000 people worked in India’s asbestos sectors. In addition, there were the thousands employed in the ship-breaking industry who were also routinely exposed to the asbestos hazard, not to mention the members of the public exposed to asbestos waste dumped by the shipyards, and the millions of consumers, especially in rural areas and urban slums, exposed to asbestos-cement roofing materials; over 90% of asbestos used in India went into the production of roofing materials. There were no publicly accessible government data on the number of workers at risk from asbestos, the scale of asbestos dumping, the incidence of asbestos-related disease or the threat to consumers. Independent studies had found a prevalence of asbestos-related diseases, e.g. the Tata Cancer Memorial Hospital admitted to treating 107 cases of mesothelioma

from 1985-2005. Government agencies were largely incompetent.

Organizing the victims was not easy. Most of the at-risk workers were from the unorganized sector: contract workers, day workers, migrant workers, all of whom were difficult to locate and identify. Other problems included difficulties in getting medical diagnoses (asbestos diseases were often misdiagnosed, sometimes as TB), obtaining occupational histories and filing for compensation; because of the complexities of India’s labor laws, it was difficult to hold companies liable for occupational illnesses. Despite these challenges, small victims’ groups were now being formed.

In his capacity as the Director of the National Institute of Occupational Safety and Health of Sri Lanka’s Ministry of Labor, Dr. Hemantha Wickramatillake discussed: *Asbestos Use and Related Health Status in Sri Lanka*. Common asbestos exposures included those which took place in manufacturing plants, during building demolition or roof removals, during tsunami clean-up work, in the use of asbestos brake pads and other consumer products, and via environmental exposure. The regulations which pertained to occupational asbestos exposures at Sri Lanka’s six asbestos manufacturing plants were weak and old, dating back to the 1950s; there was a reluctance by industry stakeholders to engage in discussions on the asbestos hazard. Nevertheless, a new law had been drawn up that would come into force in 2009 and list the asbestos industry as hazardous, mandate the reporting of asbestos-related illness and introduce stringent workplace controls in all sectors.

There was a notable lack of asbestos awareness not only among the public and the workforce but also among professionals and government officials. In the past, a former Director of the National Cancer Institute publicly stated that there was no risk of malignancy from the use of chrysotile asbestos. Propaganda spread by asbestos lobbyists firmly lodged this sentiment in the public consciousness. The lack of mortality and disease data on the incidence of asbestos-related diseases was used to support industry’s false assurances. Compounding these factors was widespread medical ignorance on occupational medicine; there had been only one case of occupational mesothelioma reported during the last few years. Although, the ILO’s adoption (2006) of a policy to phase out the use of asbestos had encouraged the authorities in Sri Lanka to take action, there were multiple challenges to be faced before a national ban could be adopted:

- lack of data and national statistics;

- lack of asbestos awareness among legislators, medical professionals, the public, trade unions and workers;
- lack of information on effective and cost-efficient asbestos-free alternatives.

Having heard from an activist and a civil servant, it was highly appropriate that the next speaker was trade unionist Gerard Seno who is the National Vice President of the Associated Labor Unions – Trade Union Congress of the Philippines (ALU-TUCP) [60].

Although the Philippines Constitution guaranteed the rights of workers to just and humane conditions of work, and provisions of the Occupational Safety and Health

“Only the Department of Health (DOH) sees the need to stop the use of asbestos to eliminate asbestos-related diseases”

Standards aimed to protect workers against injury, sickness or death through safe working conditions, the daily reality of workers in the asbestos industry, on building sites and at former U.S. bases – Subic Bay, Zambales and Clark, in the northern province of Pampagna – was tainted by high levels of hazardous asbestos exposure. According to a graph shown by the speaker, asbestos consumption in the Philippines peaked in 1970 at 4,500 tons, went down to 2,900 tons in 1975, shot up to 3,400 tons in 1980 and since then had continued to rise. As a result of unsafe working conditions, thousands of workers remained at risk as the import, manufacture, processing and use of chrysotile asbestos and asbestos-containing products were allowed in the Philippines [61].

Within the government there was a conflict of opinion about the asbestos hazard; the majority of departments supported a policy of controlled use. Under this regime, the regulated use of chrysotile in certain high-density products continued but the use of other types of asbestos (amosite, crocidolite, etc.) and the spraying of all forms of asbestos remained banned. There was a dichotomy between departments; the Construction Industry Authority of the Philippines, the Environmental Management Bureau and the Bureau of Working Conditions either felt that controlled use remained the way forward or that the case for change had not been made; either way they did not support an outright ban. “Only the Department of Health (DOH) sees the need to stop the use of asbestos to eliminate asbestos-related diseases,” accepting ILO recommendations.

A trade union coalition made up of the ALU, TUCP and the BWI had developed a two-pronged asbestos campaign which lobbied for the passage of a worker-friendly law based on internationally accepted standards and instruments banning asbestos [62] and the expansion of mandatory measures to minimize hazardous exposures. Initiatives to raise awareness of the asbestos hazards which had been

pursued, in conjunction with other social partners were:

- an asbestos roundtable on International Workers’ Memorial Day, 2006;
- a ban asbestos workshop for local union leaders, 2006;
- seminars to raise grass-roots asbestos awareness, 2006;
- meetings with government agencies, 2006-2008;
- an asbestos forum for grass-roots groups, 2007;
- political lobbying (2008) on Asbestos Senate Bill No. 741 and House Bill No. 2079;
- a 2009 bilateral meeting with key political leaders to pave the way for a third bill, incorporating ALU-TUCP proposals, to ban asbestos.

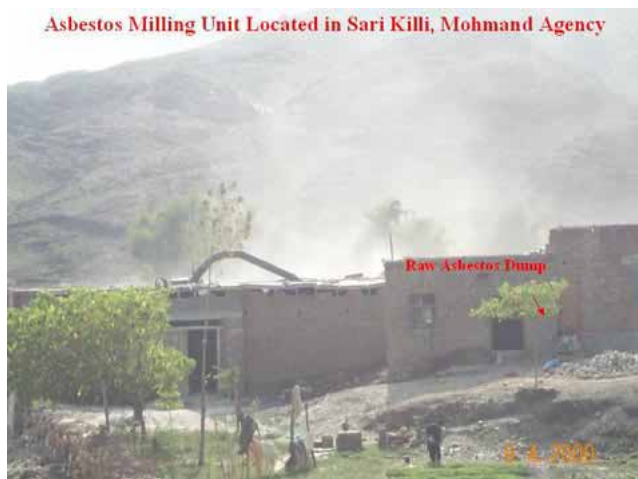
A detailed strategy was discussed for taking the campaign forward in the Philippines which included political lobbying, building relationships with government agencies, an education program and use of new technology to reach a wider audience.

Asbestos Scenario in Pakistan was the title of the presentation by Associate Professor Dr. Noor Jehan from the Department of Environmental Sciences, University of Peshawar, Pakistan. There were no national regulations on the use, import, sale, work with or disposal of asbestos. Asbestos mining operations began in Pakistan in 1958; two years later, asbestos importing began with an initial shipment of 60 tons. Pakistan was currently sourcing 30,000 tons/year of asbestos from abroad and producing more than 30,000 tons/year locally. Seventy percent of mines now producing asbestos in Pakistan became operational between 2000-2007; there were no standards or regulations to protect the miners. Measurements taken by the speaker showed colossal airborne asbestos levels at the mine itself and extensive contamination of miners’ work clothes and groundwater. To meet sustained high levels of demand, raw fiber and asbestos-containing products were imported by multinational and local companies for use in construction materials, furniture [63], insulation products, water pipes, friction materials, etc.

Seventy percent of mines now producing asbestos in Pakistan became operational between 2000-2007 ...

The ubiquity of asbestos use meant that contaminated products were everywhere: in houses, public places such as ministerial buildings, academic institutes, schools, offices, hospitals, playgrounds, and throughout the construction and industrial sectors. Airborne sampling by polarized light microscopy, X-ray diffraction and scanning electron microscopy had shown that industrial workers, students, patients, children, women and even infants were exposed to high levels of airborne asbestos fibers in different parts of Pakistan. Another particularly worrying issue was the asbestos contamination of talc produced in Pakistan which had been documented by the speaker. As a

Asbestos Milling Unit Located in Sari Killi, Mohmand Agency



result of these widespread exposures, there were high incidences of asbestos-related cancers such as mesothelioma [64] and cancers of the lungs, larynx, gastrointestinal tract and ovaries in Pakistan [65]. It was likely that asbestos mortality would rise dramatically in the coming decades. In July 2005, Pakistan ratified the Rotterdam Convention [66]. Since then the government had set up a National Technical Advisory Committee on Chemicals which had its first meeting in 2008. At a subsequent meeting on April 21, 2009, data which the speaker had accumulated since 1990 on asbestos issues in Pakistan were presented; as a result of this the government decided to include all types of asbestos on a list of hazardous materials. The minutes of that meeting noted:

“1/6 – After detailed deliberations on the use, hazards and risks to human health and environment and its alternatives, the Committee decided that Chrysotile Asbestos may be brought under PIC Procedure within six months [67].

2/6 – Complete phasing out mechanism for Chrysotile Asbestos will be developed in next three years.” [68]

This decision marks a sea change in Pakistan’s policy on asbestos.

Community activist Muthamad Darisman from the Sedane Labour Resource Center (LIPS) described a grass-roots initiative in the Bogor District, West Java for: *Setting up a Ban Asbestos Network in Indonesia – Bridging Union-Community Gap*. There were no laws in Indonesia which regulated the use of asbestos, no data on the incidence of asbestos-related diseases, no official attempts to identify asbestos victims and a low level of asbestos awareness amongst government officials and members of the public. Within this context, the use of asbestos and asbestos-containing products was substantial at 58,060 tons/year; Indonesia was the world’s 8th largest importer, producer, and consumer of asbestos and asbestos-containing material [69]. Data from the Manpower Department estimated that in 2004, 7,233 people worked with asbestos-contain-

ing products such as roofing materials, insulation products, brake systems, etc. In an attempt to assess the impact that asbestos operations had on a local community, staff from LIPS began exploratory discussions with personnel from the Public Health District Office, the Manpower Office and Social Security Department, workers from the PT Jeil Fajar asbestos factory and community members who lived nearby. These discussions followed on from work conducted in Cibinong, Bogor (2008) by a Korean–Indonesian research team which found indications that workers and local people living within a 500 meter radius of the factory were suffering from lung disorders of an unknown origin.

Following consultation with public health bodies, an investigation was made of occupational conditions in the Bogor area, which established that asbestos was being used in the manufacture of toys; although health department staff said they would like to take action on the asbestos hazard, they could not do so due to lack of resources. In March 2009, LIPS held a workshop with stakeholders, including local government officials, asbestos workers, community representatives and occupational health and safety specialists. As a result of the recommendations approved by that meeting, LIPS began a program to identify asbestos victims in the Bogor industrial zone. This work would need to overcome obstacles presented by the lack of transparency of government departments and the entrenched bureaucracy which stymied grass-roots mobilization in Indonesia. Efforts were being made to work with trade unions to identify asbestos-using factories in the Bogor area. Training for the PT Jeil Fajar workforce would be undertaken to raise awareness of the asbestos hazard. Building on the outcome of the asbestos work conducted at this factory, the LIPS outreach project would be extended to include other occupational safety and health hazards in Bogor, Krawang and Tangerang. Links would be forged with other social actors such as medical professionals, environmental activists and groups campaigning for OSH rights. The lessons learned and the network created by this grass-roots-led initiative would constitute the foundation of the Indonesian Ban Asbestos Network.

Another community activist, Trevor Sun, Project Manager of the Hong Kong Workers' Health Centre (HKWHC) [70], shared his experiences with conference delegates in the presentation: *Ban Asbestos Campaign in Hong Kong*. Although the use of amosite and crocidolite asbestos was banned in Hong Kong by the Environmental Protective Department under s. 80 of the Air Pollution Control Ordinance (1996), the use of chrysotile remained legal. Nevertheless, recent import levels of raw fiber and chrysotile-containing products had fallen from 121 and 107 tons respectively in 2003 and 2004 to 47 tons in 2007 [71]. Hong Kong sectors where occupational exposure to chrysotile continued included: vehicle servicing (brake and clutch linings), lift servicing (brake pads), building maintenance, boiler repair work, demolition and

ship-breaking. The number of workers being exposed to asbestos was unknown.

The number of mesothelioma cases documented in Hong Kong rose from a total of 30 by 1995, to 60+ by 2004; average mesothelioma mortality between 2001 and 2004 was 10 deaths/year with a peak of 15 in 2002. Construction workers featured prominently amongst the groups of workers at risk of contracting mesothelioma due to high levels of asbestos used in the 1960s-1970s and the long latency period of asbestos cancer. In 2006, HKWHC staff, working with sufferers, family members and trade unionists, began a campaign to add mesothelioma to the list of compensated illnesses included in the Pneumoconiosis Compensation Ordinance. Success was achieved when the Pneumoconiosis Compensation Fund Board and the Labour Advisory Board agreed to extend government coverage to include mesothelioma under the re-titled **Pneumoconiosis and Mesothelioma (Compensation) Ordinance (2008)**. Despite this success, the HKWHC remained concerned about the hidden hazard posed by asbestos in 15,600 privately-owned buildings, many of which were built during the era of high asbestos consump-



tion [72]. Pictures shown by the speaker revealed the ubiquity of such constructions and the presence of deteriorating asbestos-cement materials.

A sample taken from a commercial center in Kowloon on March 19, 2009 tested positive for the presence of chrysotile. At a press conference (March 27, 2009) to announce the findings, the HKWHC's concerns were expressed, and specific recommendations were made as to how the government might address the myriad of problems arising from asbestos in old buildings. In late 2009, the HK government will start a project along these lines.

The title of the presentation by Matdiah Bin Mohammad [73], ***Banning Asbestos in Malaysia***, underlined the fact that the Malaysian Trades Union Congress (MTUC) advocated the prohibition of asbestos [74]. As well as lobbying for a national ban, the MTUC supported the use of safer substitutes, a just transition for workers, enforcement of occupational safety and health laws and a coordinated effort

to raise asbestos awareness throughout the country. On International Workers Memorial Day 2009, the MTUC launched a workers' petition which called for the implementation of these measures. Despite the existence of legislation to minimize hazardous asbestos exposures [75], there were little available data quantifying the health effects of asbestos use in Malaysia; as a result, Malaysian asbestos victims remained invisible [76]. There was no government surveillance program and the reporting of asbestos-related disease by medical practitioners was rare due to widespread ignorance. As part of its campaign, the MTUC was trying to generate greater asbestos awareness through a variety of means including training, publicity, meetings and the distribution of information to union members, employers, government officials and medical professionals. The speaker concluded with an affirmation of his organization's position: "The MTUC will," he said "continue relentlessly with the campaign until the total ban of asbestos comes into full force in Malaysia."

There were many questions asked and comments made during the final segment of this plenary session which revealed:

- the key role NGOs and victims' groups had to play in mobilizing support for asbestos bans;
- the overwhelming lack of the medical expertise, diagnostic skills and equipment needed to diagnose asbestos-related disease;
- the failure of medical specialists and academic researchers to bridge the divide between higher learning and workers' needs; "there's a huge gap between the state-of-the-art research being done and what workers have on the ground level";
- the urgent need to collect core data on the incidence of disease; in the vacuum created by lack of government action, victims' groups should document the injured;
- the need to help government officials, such as some encountered in Indonesia, who were prevented from taking action on the asbestos hazard by bureaucratic obstacles; trade unions and community organizations could play a useful role in helping them overcome these and other challenges;
- that the struggle to ban asbestos had to be fought collectively on many fronts.

A delegate from the New Trade Union Initiative expressed the feelings of many of those present when she said:

"In India, state hospitals and clinics exist in hollow structures without facilities and basic medicine. Workers have to fight to get these centers to work for them... it's a political fight to get your health care; it's a political battle for the workers and victims to get the correct kind of medical expertise into these areas to identify their disease and get compensation... It's a political battle to change the rules of the game."

Meeting the Needs of Asbestos Victims

Moderator: Sugio Furuya

Asbestos victims have many pressing needs caused by their symptoms, their incapacity to work and the marginalization which their illnesses bring them and their families. In most Asian countries, asbestos victims remain invisible and uncompensated; few of the injured have their occupational illness recognized and even fewer receive compensation. The purpose of this session was to provide a platform for victims to voice their experiences and indicate ways in which sufferers could be supported.

One of the most efficient means of delivering compensation to asbestos victims is to be found in New South Wales, Australia where the Dust Diseases Tribunal (DDT) fast-tracks asbestos litigation. Judge John O’Meally, President of the DDT, told delegates:

“The Tribunal sits at any hour on any day at any place to receive evidence from plaintiffs too ill to travel. Bed-side hearings for plaintiffs who are terminally ill are also common. The legal practitioners in the Tribunal are generally skilled and experienced in handling asbestos cases. Sometimes there are cases with less than 4 hours between (the) filing of a statement of a case and a conclusion.”

In order to streamline the legal process, the DDT had adopted some unusual rules:

- while the Tribunal could reconsider any matter, rules of evidence might be dispensed with for matters deemed not to be in genuine dispute or which might cause expense and delay;

- if a party refused or neglected to make an admission on issues such as a diagnosis, when this had been established by evidence, cost penalties applied;
- historical evidence and general medical evidence given in one case might be used for another;
- issues of a general nature once determined, could not be relitigated or reargued without the Tribunal’s leave;
- there was no time limitation for bringing proceedings.

The grief and anger experienced by those who have lost a loved one to asbestos motivates many campaigners now working on behalf of victims. In her comments to the plenary session, Kazumi Yoshizaki [77] eloquently explained the impact her Father’s suffering had on the family; the depth of her loss fueled her determination to see a worldwide asbestos ban and to help others for whom any ban would be too late. In Japan, she said, victims had been at the forefront of a national asbestos campaign, led by the Japan Association of Mesothelioma and Asbestos-related Disease Victims and their Families. This group was founded in February 2004 as a result of the initial contact between two asbestos widows brought together by suffering and loneliness. Reaching out to others in similar situations, they realized the comfort which could be drawn from sharing their experiences and the improvements which could be gained for victims by raising awareness of the national asbestos epidemic. The Association – which now had 11 branches nationwide – was made up of patients suffering from asbestos-related cancers and respiratory diseases and family members who continued to support each other, lobby government for better medical care and financial support and educate the public about



Park Young Gu speaking and, from the left, Kazumi Yoshizaki, Ahn Jong Joo and Sugio Furuya

the reality of the asbestos tsunami which was engulfing the country. The Association had played a leading role in major asbestos events such as:

- the Global Asbestos Congress in Tokyo 2004;
- BANJAN mass meetings and protests in Tokyo 2006 & 2009;
- workshops and conferences with Korean victims in Tokyo, Seoul and Busan 2007 & 2008;
- the International Conference on Mesothelioma in São Paulo, Brazil 2008.

In Japan, the mobilization of the victims had made the asbestos issue front page news and ended the invisibility of the suffering caused by occupational and environmental exposures to asbestos.

Among his co-workers, 33 died before the age of 60, including his wife. Among the living, 27, including Mr. Gu, had contracted asbestos-related illnesses.

The comprehension of the impact asbestos has had in Korea is a recent phenomenon which has been spurred by the work undertaken by asbestos victims. The next two speakers, members of Ban Asbestos Korea (BANKO), described the tragic human consequences and the steps taken to raise public awareness of the hazard.

Park Young Gu worked in the Jeil Asbestos Textile Company from 1970 to 1978; this company was founded in 1970 by Japanese investors who transferred asbestos production to Indonesia in the 1990s. At the Jeil factory in Busan where the speaker worked:

“There was so much dust I could not even see. At first we just got work clothes and simple masks. There was no dining hall, we had to carry our own lunch to the workplace.... During break time or night shift, we even slept on the asbestos sheets that we made.”



Interjection by Japanese victims' representative, Mrs. Kazuko Furukawa



Launch of "baby powder hotline" by KFEM

Among his co-workers, 33 died before the age of 60, including his wife. Among the living, 27, including Mr. Gu, had contracted asbestos-related illnesses. Residents who lived near the Jeil asbestos factory had died from the asbestos cancer, mesothelioma as had others who lived near the sites of renovation projects and asbestos mines. The number of Korea's asbestos victims was increasing.

Sometimes a subject grabs the public imagination and catapults an issue out of obscurity and into the forefront of the national debate. Such were the reverberations of the "Asbestos Baby Powder Shock" in Korea which generated masses of media coverage after a TV program announced that baby powder marketed in Korea was contaminated with asbestos [78]. Describing the explosive effect this discovery had, speaker Ahn Jong Joo detailed the timeline for the unfolding of this scandal:

- March 30, 2009: Consumer Report program titled Shocking! – Asbestos Detection in Baby Powder was aired [79];
- April 1, 2009: The Korean Food and Drug Administration (KFDA) held a press conference and issued a press release confirming the import of contaminated talc from China and ordered an immediate recall and ban of a number of products;
- April 1: Baby Powder Scandal was the top item in the evening news;
- April 2: Baby Powder hotline opened by the Korean Federation of the Environment Movement (KFEM), the most influential NGO in Korea;
- April 2: Baby Powder Scandal was the top item in the morning news;
- April 2: the KFEM demonstrated in front of the KFDA headquarters, demanding an apology from Boryung Medical Company, a seller of the contaminated baby powder;
- April 1-22, the scandal featured on major TV programs and in daily newspapers;
- April 9: the KFDA prohibited the manufacture and sale of 5 cosmetic products containing asbestos talc

and unveiled a list of 1,122 medicines containing talc which were banned [80];

- April 16: the KFDA announced it would prosecute the CEO of Duksan Pure Chemicals.

Summarizing the outcome of the baby powder scandal in Korea, the speaker said that it had awakened consumer awareness of the asbestos risk, publicized the national ban and forced the government to declare a zero asbestos standard in baby powder, cosmetics and pharmaceuticals. The role of the media in disseminating news of this scandal had been crucial.

Panel Discussion

The voice of the victims was clearly heard during the panel discussion moderated by Chan Kam-hong, the Chief Executive of the Association for the Rights of Industrial Accident Victims (ARIAV), which featured contributions from four Hong Kong asbestos victims who spoke of hazardous exposures in the shipyard and construction industries [81]. While Mr. Leung Kam On recalled the provision of “basic and simple protective equipment such as masks,” he still became covered in dust during the workday. Shipyard workers Tang Chun Shing and Chan Tong were never told of the risks of working with asbestos and

never received any protective equipment or training. Describing everyday work tasks, Mr. Chan Tong said: “I always had to fix the pipes by hand... I slipped between the boilers. Of course I could easily inhale asbestos dust.” Mr. Lai Cheong Fook, who had worked in a factory making asbestos-cement products, said:

“I worked in a rural suburban area. We did not have equipment like masks. I worked for two decades from the 1960s to 1980s. We had no protection at all. I'd be facing upwards with an electric drill, of course with lots of dust. Not even gloves. We must have inhaled a lot of dust... We drilled holes, 'eating' the dust falling from the roof every day. All our hands were dusty. We even didn't have a piece of towel.”

The health of each of the participants had been affected by their illnesses; typical symptoms included loss of lung function, prolonged bouts of coughing and difficulty in walking. The perseverance of these sufferers and other Hong Kong workers similarly affected had been the driving force behind the campaigning work of ARIAV. In 1993, a major shift in government pneumoconiosis policy was brought about when one-off lump sum payments were replaced by a monthly compensation payout; in addition, the government now pays the bills for medical treatment and rehabilitation services [82].



Hong Kong asbestos victims with Chan Kam-hong (center)

International Transfer of Asbestos Industry to Asian Locations

Moderator: Barry Castleman

For more than one hundred years, the asbestos industry has been conducted on a global scale. European and American asbestos manufacturers bought asbestos mines in Africa and Canada, operated cartels to fix prices and divided worldwide markets. Research discussed in the *Case Report of the International Trade of the Asbestos Industry in Asia* by Professor Takehiko Murayama indicated that Japanese asbestos companies also took a long-term pan-national strategic approach to asbestos manufacturing which encouraged overseas diversification, increasing contact with major foreign competitors [83] and the transfer of hazardous technology to less developed countries [84]. Japanese investment in companies which were presumed to use asbestos in developing countries rose consistently between 1969 and 2001; even as mobilization of the ban asbestos movement was gathering pace in Japan, there was a record number of overseas asbestos investments [85].

Recent visits by Korean and Japanese researchers to Korean-owned asbestos production units in Indonesia revealed that the dumping of hazardous production was continuing and that the same asbestos technology which had been used first in Japanese and then in Korean factories had been exported to Indonesia; people in Jakarta reported that machinery from Jeil Asbestos was being sent to China. Accompanying the transfer of asbestos production

was the transfer of risks to workers and residents living in proximity to factories which had standards of occupational safety and health approximating Japan's in the 1960s and Korea's in the 1970s. A diagram illustrating the typical national process of going from asbestos use to asbestos ban was exhibited by the speaker, who urged governments to accept the responsibility of intervening in the time-consuming process and prevent the international transfer of the asbestos hazard by banning asbestos.

Dr. Dong-Mug Kang, Dr. Zulmiar Yanri and Yeyong Choi, members of the same research team as the previous speaker, provided more information on the findings. In the presentation *Joint Case Study: Exposure Survey of Nichias [86] Textile Factories in Japan, Korea and Indonesia*, Dr. Kang, from the Korea Research Center for Asbestos-Related Diseases, School of Medicine, Pusan National University, detailed a field study carried out on August 26-28, 2008 in Cibinong, Bogor, Indonesia to assess current occupational exposure levels and environmental exposures outside the premises of an asbestos factory which was consuming 612 kilograms/day of asbestos. Mean airborne asbestos levels associated with production processes were: 8.6 f/cc mixing, 7.3 f/cc carding, 7.5 f/cc spinning, 3.9 f/cc twisting, 3.1 f/cc weaving and 4.3 f/cc winding [87], while average asbestos concentrations for



Joint research team, Indonesia, August 2008

personal and regional air monitoring were 5.7 f/cc and 2.4 f/cc, respectively. Asbestos was identified in soil samples within 100 meters of the factory while 5 meters from the factory the distribution of airborne asbestos varied from 0.154 f/cc to the south, 0.067 f/cc to the west, 0.016 f/cc to the east and 0.001 f/cc to the north [88]. These differences were explained by the prevalence of a northeast wind. As there was no legislation regulating hazardous asbestos exposures in Indonesia, the research findings showing substantial occupational and environmental exposure generated by this factory were grounds for concern.

Dr. Zulmiar Yanri from the National Occupational Safety and Health Center, Indonesia discussed the results of lung function and chest X-rays taken from at-risk individuals in Cibinong [89]. Out of a total of 265 workers, 101 (38%) were tested; of the 50,000 people living within 500 meters of the factory, 95 were examined. The results were as follows:

- high levels of lung abnormalities were detected among the asbestos workers and local residents which might have been caused by asbestos exposure; among these subjects, the levels of diagnosed lung disease were 100 times the national average!
- 43% of workers with more than 11 years of employment had lung abnormalities; workers in the warehouse and mixing department were at highest risk [90];
- the results of spirometric testing showed that 56% of the residents had lung abnormalities; community members had a higher rate than workers!

To clarify these results, further research was needed.

Yeyong Choi of the Citizens' Institute for Environmental Studies and the Ban Asbestos Network Korea discussed the background to the project and its sociological findings in his paper: *Dangerous Trades, Dangerous Neighborhood*. The 21+ members of the project staff came from Indonesia, Japan and Korea and included 10 doctors (some of whom worked for the government), six academics, three journalists and two environmentalists. As well as conducting air monitoring, soil testing and medical examinations, research efforts in 2008 included interviews with key personnel including:

- factory workers who confirmed the hazardous conditions which existed at the worksite and the lack of personal protective equipment, engineering controls and medical check-ups; the abysmal state of the workplace was confirmed by direct observation;
- Takeshi Sugihara, President of P. T. Nichias Rockwool Indonesia who said that since March 2007, Nichias had stopped using asbestos following a decision taken at Nichias headquarters;
- staff at the nearest private hospital to the Cibinong asbestos factory (RS. Bina Husada); they knew nothing



Asbestos textile production at PT Jeil Fajar factory

about the local asbestos textile factories and nothing about asbestos-related diseases;

- staff at the nearest public hospital (Badan Rumahsakit-daerah Cibinong); they also knew nothing about the local asbestos textile factories and nothing about asbestos-related diseases. They agreed that asbestos education was a priority not only for hospital staff but also for local government officials.

Having detailed the extensive efforts that had been made to track the spread of the asbestos industry throughout

Schoolday exposures to Nichias asbestos experienced by Japanese children in the cities of Nara and Korean children in Busan had resulted in high levels of illness ...

Asia, the speaker showed a photograph of an Indonesian worker holding a baby; the worker was wearing a blue work shirt with the PT Jeil Fajar logo. Not only was the child being exposed to his father's contaminated work clothes but he – like 50,000 other people – was being exposed to the high levels of asbestos permeating the neighborhood [91]. Within 500 meters of the PT Jeil Fajar asbestos factory were many schools: 12 kindergartens, 12 elementary schools, 7 middle schools and 7 high schools – a total of 10,000 students. It was not known how many more schools were within 2 kilometers. Schoolday exposures to Nichias asbestos experienced by Japanese children in the cities of Nara and Korean children in Busan had resulted in high levels of illness; in decades to come, Indonesian children in Cibinong would be similarly affected. Although international organizations, regional bodies and national governments had important roles to play in ending Asian asbestos trafficking, the results of this collaborative research project showed what could be achieved when asbestos victims, environmental activists and trade unionists worked together.

Considering the ubiquity of asbestos use throughout Asia and the fact that Brazil is one of the world's biggest producers, there could be little doubt that Brazilian exports would find their way to Asian countries. Data quantifying



Inspecting an illegal asbestos shipment, Brazil

this toxic trade were included in Engineer Fernanda Gian-nasi's presentation *Brazilian Asbestos Exports to Asia* [92]. Brazil was, the speaker confirmed, the world's 4th largest asbestos producer, a major exporter and a big consumer. The multinational companies that owned the asbestos business in Brazil for more than 50 years sold their interests to national businessmen who were engaged in a ruthless and aggressive campaign to silence opponents and protect domestic markets. Despite their best efforts, annual asbestos consumption in Brazil had been declining. In order to compensate for lost domestic sales, the Brazilian asbestos lobby had worked closely with other stakeholders to target markets in developing countries. Following the precedent set by Canada, Brazil was exporting increasing amounts of its annual production; 65-70% (~290,000 tons) of exports were being sold to Asian and Latin American countries, most of which had few, if any, health and safety regulations. According to government data, 74% of raw asbestos fiber exports went to Asia; shipments to Thailand, Brazil's biggest overseas customer, accounted for 25% of all sales, with other exports going to India (23%), Indonesia (17%), Iran (7%), Malaysia and Sri Lanka [93]. The fact that asbestos vested interests had defeated the categorization of chrysotile as a hazardous substance under the Rotterdam Convention meant that these exports were being sent without any prior informed consent notification.

an escort team would be required to see the convoy to the state border as asbestos was classified as a dangerous and prohibited material.

Under Brazilian asbestos labor regulations, manufacturers must notify the government about asbestos use, trade, transport and production. An investigation by the Labor Ministry revealed that a company which had been registered as producing asbestos-cement flowerpots was involved in exporting raw fiber to Asia from a port in São Paulo State. The fact that there was now a statewide asbestos ban in São Paulo meant that the transit of this shipment through the state to the port as well as the export of this cargo were

illegal; the export of this cargo was blocked. Other asbestos shipments awaiting dispatch at the port – one of which was destined for India – were discovered by port authority officials and customs agents; these shipments were also embargoed. A stalemate had been reached; 5,000 tons of asbestos at the docks could not be exported and the supplier – the SAMA chrysotile mine – did not want the asbestos back. The blacklisted shipments were currently taking up valuable space in the customs agents' yards. To return the asbestos to the mine would take 200 trucks 32 hours by road; an escort team would be required to see the convoy to the state border as asbestos was classified as a dangerous and prohibited material. Another option was to dump the embargoed material in landfills for dangerous waste, but these disposal sites were far away and expensive. For the time being, the impasse remained.

As was discussed by other speakers at the conference, multinational corporations have been responsible for negligent asbestos exposures not only in their home countries but also overseas. A recent test case has succeeded on behalf of an Australian resident employed by a New Zealand based company; exposure to asbestos was alleged by the employee during business trips to Europe and Asia. The defendant's application that Victoria was not the appropriate forum for such a claim was rejected. Australian Lawyer Maria McGarvie, said that despite the very unusual facts of the case, it might prove relevant to other non-Australian asbestos victims. In the presentation *Asbestos Claims against an Australian Multinational – The James Hardie Experience*, the speaker explained that the Puttick case would have limited application for Asian asbestos victims who worked for the Australian asbestos giant James Hardie at one of its Asian subsidiaries [94].

Whilst employed by the Fletcher company (1981-1989), Mr. Puttick was sent to visit asbestos factories in Belgium and Malaysia [95]. In 2001, he and his family moved from New Zealand to Victoria, Australia where he later contracted mesothelioma. Upon his death in 2005, the case was continued on behalf of his wife and surviving children. The Supreme Court and the Victorian Court of Appeal found that Victoria was "a clearly inappropriate forum" and stayed the proceedings. On November 12, 2008, the High Court of Australia reversed this finding in a unanimous decision. The High Court decision had allowed the Plaintiff, the widow and children of the late Mr. Puttick, to proceed with their substantive case for damages. This case was now proceeding before the Supreme Court of Victoria and given the procedural and factual peculiarities of the case it might be some time before it reached its final conclusion. Considering the widespread use of asbestos in Asia and the etiology of asbestos-related diseases, there was little doubt that the incidence of these diseases would rise throughout the region. Potential claimants in Australia might now be able to successfully pursue claims in this jurisdiction against defendants responsible for negligent foreign exposures.

Shipyards, Ship-breaking Industry and Railways

Moderator: Paul Bastian

There were, said the first speaker in this session, about 60,000 Indian workers in the ship-breaking yards who lived in abject poverty and suffered all the consequences associated with financial deprivation including poor health, lack of access to clean water and medical care, and exploitation. Having visited a Mumbai ship-breaking yard, a team of the International Metalworkers Federation (IMF) resolved to put into practice a 1997 IMF resolution to organize the unorganized. The IMF's General Secretary Marcello Malentacchi explained the urgent need to:

“gather information on the working conditions of the shipbreaking workers in Mumbai and Alang, regarding wages, working and living conditions, migration and the economic status of workers... the shipbreaking workers have never had any organization or voice to speak up for them and defend their most basic rights. There is no legislation directly covering the industry which means no protection whatsoever for the workers and very little information available about working conditions.”[96]

In the presentation *Organizing Migrant Shipbreaking Workers in India*, by Sudhershnan Rao Sarde, an IMF representative from the South Asia Region, the speaker delineated the phased approach which the IMF team put into place which began with providing water, ambulance services and first-aid boxes. Having gained the workers' trust, the next steps were to conduct a blood donation camp, issue identity cards and offer reduced rate subscription for ship-breaking workers [97]. Mohalla (Neighborhood) Committees, which were formed to help integrate migrant workers into civil society, created a sense of confidence and security for the workers. The news of this pioneering initiative spread to Alang.

The IMF's work was not warmly received by all stakeholders; there was stiff resistance from employers, moneylenders and local mafia. These obstacles were overcome and the Alang Sosiya Ship Recycling and General Workers Association – the only union for ship-breaking workers in India – was registered. This body conducted a survey on the socio-economic conditions of migrant workers which identified linguistic and cultural challenges and established that 96% of the workers were internal migrants from economically backward states of India. Following the submission of this research to the Supreme Court of India, a Monitoring Committee was appointed to study the conditions in the ship-breaking yards. On March 23-24, 2009, 20,000 ship-breaking workers at Alang went on strike; the strike, led by the Alang Sosiya Ship Recycling and General Workers Association, was successful.

Report of Malignant Mesothelioma Caused by Occupational Exposure to Asbestos in Taiwan Shipyards was the subject of the next presentation which was given by a representative of the Taiwan Association for Victims of Occupational Injuries (TAVOI). Between 1967 and 1995, asbestos victim Mr. Lee worked in the Keeulung Shipyard operated by the China Shipbuilding Corporation of Taiwan. He undertook installation work and seam welding of pipelines; these jobs would have brought Mr. Lee into contact with asbestos which the shipyard admitted it had used in insulation materials. In 2007, more than a decade after he retired, Mr. Lee was diagnosed with mesothelioma; he died shortly thereafter. The family was informed by a doctor that the death had probably been caused by work; a case was put to the city government requesting arbitration with the employer on the subject of compensation. TAVOI staff helped the Lees obtain a diagnosis certificate from the Occupational Disease Certification Committee and armed with this they were fighting for compensation. The second case discussed related to Mr. Siu who had worked for 23 years in the Cijin Military Shipyard of Kaohsiung in Taiwan as a ship repairer. After suffering a heart attack in 2006, he was diagnosed with mesothelioma; in 2007, his condition was certified as an occupational illness.

The situation in the Taiwan shipyards was put into perspective by the next presentation, *Shipbuilding and Mesothelioma in Europe and in Asia*, by Dr. Claudio Bianchi from the Center for the Study of Environmental Cancer, Italian League against Cancer, Hospital of Monfalcone, Monfalcone, Italy. The speaker, having detailed the history of the Italian shipyard industry, described the consequences for Italian shipyard workers of their occupational asbestos exposures. Anecdotal evidence, backed up by scientific and epidemiological data, revealed a strong relationship between shipbuilding and mesothelioma. A review of 451 cases of malignant mesothelioma of the pleura, diagnosed in 1968-2008 among shipyard workers in the Trieste-Monfalcone area, northeastern Italy, showed the following:

- the mean and median ages of the patients were 68.9 and 69.0 years, respectively;
- about 75% of the patients had been employed in the shipyards for more than 20 years;
- in 104 cases, asbestos bodies were isolated after chemical digestion of lung tissue; 53% showed more than 10,000 bodies per gram of dry tissue;
- more than 65% of patients received their first shipyard asbestos exposures before 1950, 12% in the 1960s and 3.5% in the 1970s;

- the lag between asbestos exposures and the manifestation of disease ranged from 14-72 years; in the vast majority of cases, latency periods were more than 40 years.

Graphs shown illustrated the concurrent decline in European ship production and the rise in Asian ship produc-

The experience of workers from the Trieste–Monfalcone shipyards suggested that a mesothelioma epidemic would occur due to occupational exposures at the big shipyards in Eastern Asia in the coming decades.

tion between 1955 and 1971; despite fluctuations in demand from 1981 to 1990, Japan and South Korea became world leaders in ship construction. The experience of workers from the Trieste–Monfalcone shipyards suggested that a mesothelioma epidemic would occur due to occupational exposures at the big shipyards in Eastern Asia in the coming decades.

Given the widespread usage of asbestos in transportation infrastructure, the contamination of older European railway vehicles is a common occurrence. How countries which have banned asbestos deal with this contamination highlights the existence of accepted clean-up measures which minimize occupational hazards. In his presentation, Heinz



The contaminated dump is first sealed.



Access tunnel for clearance of contaminated waste.

Kropiunik quantified the problem in Austria, showed photographs of faulty working practices and explained a decontamination program which safely removed huge quantities of asbestos-containing material (ACM) from hundreds of Austrian rail vehicles. According to available estimates, a typical Austrian rail vehicle built during the 1960s-1970s could contain between 40 and 80 kilograms of ACMs; these products were used for acoustic, thermal and electrical insulation and fireproofing. Common ACMs in railway vehicles included sprayed-on asbestos insulation, which was extremely friable and had a high asbestos content, panels, ropes and boards.

According to Austrian law, after rail vehicles reached the end of their working lives they could be scrapped, but only after all ACMs had been professionally removed. About 10 years ago, the Austrian Federal Railways sold 400 rail vehicles to a private company which scrapped them over 3-4 years without taking any notice of the asbestos contamination which was present. The ACMs and other hazardous materials were dumped illegally; the contaminated debris – about 8,500 m³, containing 20+ tons of asbestos – formed two huge mounds. In 2004, local authorities as well as the media became aware of this problem. The private company which did the illegal scrapping of the rail vehicles was obliged to remove the waste dumped on the hillsides. A plan devised by the speaker and his team to remove the debris was approved by the local authorities; work began in March 2009 and was scheduled to take 30 workers 3 months to complete.

Building the Global Ban Asbestos Network

Moderator: Laurie Kazan-Allen

In the presentation *Social Movements in South America: The Role Performed by Social Movements and Activists against the Asbestos Industrial Lobby* which began the penultimate session of the conference, Engineer Fernanda Giannasi put the struggle to ban asbestos within a political as well as a sociological context:

“The boom of asbestos production and use in South America coincided with a time of non-democratic governments. During the 20 years of military dictatorships in Brazil, Peru, Chile and Argentina, the use of asbestos flourished; the restoration of the democratic process marked a turning point for this industry as the use of asbestos is incompatible with democratic goals and human rights.”

In October 2005, the French Senate issued an official report which denounced the Government, the asbestos industry and trade unions for allowing the continued use of asbestos, an acknowledged carcinogen. The Senate, which described the French asbestos epidemic as the worst occupational health catastrophe of the twentieth century, accused the Government of having been anesthetized by the asbestos lobby. “It was,” said the speaker “a perfect social crime as it allowed the maximization of corporate profits and the socialization of cancer despair.”

In recent years, asbestos bans had been achieved in Argentina, Chile, Uruguay, four Brazilian states and several Brazilian municipalities. In many South American countries, victims’ groups such as the Brazilian Association of the Asbestos-Exposed (ABREA) had played a prominent role in formulating national asbestos debates by positioning themselves as counterpowers to the industrial might of asbestos stakeholders [98]. Since it was founded in 1995,



Sunday in the park with ABREA

ABREA had disseminated information on asbestos risks, campaigned for local, regional and national legislation to ban asbestos, engaged in capacity building, lobbied for social protection, medical assistance and compensation for

taking on a politically powerful and well-resourced industry in a country the size of Brazil had necessitated the total commitment and energy of the ABREA community ...

victims as well as the rehabilitation of damaged mining areas. It had uncovered and publicized the asbestos industry’s dirty tricks, exposed false data and lies asbestos stakeholders had used to influence public opinion, denounced noncompliance with environmental regulations and publicized health and safety infringements.

ABREA had organized 10 victims’ groups in 7 states; the membership of these groups are listed below:

- Bahia: former workers from Sama (Poçoões) and Eternit (Simões Filho);
- Rio de Janeiro: former workers from Asberit (Rio de Janeiro);
- São Paulo: former workers from Brasilit and Saint-Gobain (São Caetano do Sul), Eternit (Osasco) and Avibras (Jacareí);
- Paraná: former workers from Multilit (São José dos Pinhais);
- Goiás: former workers from Sama (Minaçu);
- Minas Gerais: former workers from Brasilit and Saint-Gobain (Contagem);
- Pernambuco: former workers from Brasilit.

The logistical and financial challenges which had been overcome were monumental; taking on a politically powerful and well-resourced industry in a country the size of Brazil had necessitated the total commitment and energy of the ABREA community as well as the support of campaigners representing other disadvantaged organized groups such as the landless, the disabled and the homeless. While the success of the Latin America Virtual Citizens’ Ban Asbestos Network could be measured in lives saved, the ineffectiveness of international agencies, the inactivity of governmental bodies and the apathy of some big non-governmental organizations remained a grave disappointment.

Dr. Annie Thébaud-Mony, the Director of Research at the French Institute of Health and Medical Research and a founding member of Ban Asbestos France, has been involved in the ban asbestos campaign for more than twenty

years as both an academic and a concerned citizen. In her paper on *The Mobilization of European Action on Asbestos: the Ban Asbestos Network*, she touched on the origins of the movement in France, early attempts at cross-border collaboration and the efforts required to move the campaign from the radical fringe to mainstream society. The evolution of the Ban Asbestos Network (BAN) was informative as it highlighted key issues such as the difficulties of pre-internet communication, the dispute which took place within the scientific community about the toxicity of asbestos, the political and economic influence of the asbestos industry and the double standards applied by multinationals to excuse dangerous operations in developing countries; it also showed the emerging power of the social forces which coalesced over the need to ban the use of asbestos and obtain justice for the injured.

In the mid-1970s, scientists at a university in Paris discovered that their experiments were being contaminated by a white dust: asbestos. The scientists made common cause with asbestos textile workers and students to protest the hazardous exposures generated by the increasing use of asbestos. French activists and academics met with a handful of other European campaigners in Strasbourg (1991 & 1992) and in Milan (1993); these meetings laid the foundation for the Ban Asbestos Network (BAN). As discussions proceeded, the deadly impact asbestos was having on populations throughout Europe became irrefutable. In 1994, BAN members participated in a seminar in São Paulo, *Asbestos: Controlled Use or Ban*, to share data and experiences; with the new members from Brazil, BAN became a global citizens' network. Since its inception, BAN had been unique; there were no premises, no hierarchy and no official representatives. The thousands of people participating in the worldwide ban asbestos community were victims, campaigners, environmentalists, trade unionists, medical specialists, concerned citizens, civil servants, journalists, lawyers and politicians.

As the campaign became a global phenomenon, it became clear that a permanent body was needed to service the needs of the movement; the International Ban Asbestos Sec-



GAC 2004: the highly effective support team

retariat was set up in 1999. Joint initiatives mounted by this network had had a major impact on the worldwide debate on banning the use of asbestos. They included the:

- Global Asbestos Congress, Osasco, Brazil 2000;
- European Asbestos Seminar, Brussels, Belgium 2001;
- Canadian Asbestos: A Global Concern, Ottawa, Canada 2003;
- Global Asbestos Congress, Tokyo, Japan 2004;
- international protests in France, Egypt and India over sending a French naval flagship, the *Clemenceau*, to India for dismantling 2005-2006.

In its pursuit of justice for the injured, BAN had supported the legal efforts of South African asbestos victims in their action against the UK company Cape Asbestos and Italian asbestos victims in their ongoing case against Swiss Eternit executives who, it is alleged, were responsible for the negligent operations of the asbestos-cement factories in Casale Monferrato and other Italian towns. Concluding her talk, the speaker called for the establishment of an International Criminal Court of Labor to ensure that those responsible for the global asbestos catastrophe were held to account. "Asbestos cases could," she concluded "become a precedent for other cases of criminal negligence arising from occupational and environmental damage done by hazardous exposures."

Speaking about the work of the *Ban Asbestos Network of Korea (BANKO)*, Yeyong Choi, a member of BANKO and the Korean Federation of the Environment Movement, said: "Although BANKO was launched only 10 months ago, it feels like 10 years have already passed. I feel as if I am running in a minefield full of asbestos bombs." His presentation began with the showing of a video shot two weeks previously at a demolition site in downtown Seoul; although the contractors said that they had "safely handled the asbestos," nobody believed them. This was the reality in Korea nowadays; even where regulations to prevent harmful exposures existed, they were not enforced.

A flow chart documenting asbestos problems in Korea indicated that as a result of asbestos mining, manufacturing, consumption and disposal which had polluted mine sites, industrial areas, local communities and the environment, all sectors of the Korean population had been exposed. Photographs shown by the speaker highlighted typical sites where pollution had been found:

- two large quarries and a residential area located near an asbestos mine [99];
- homes near a large-scale housing reconstruction project;
- residential areas in close proximity to asbestos textile factories in Busan [100];
- Samsung's Seoul headquarters, currently being renovated and decontaminated. BANKO air monitoring de-



BANKO members demonstrate with BANJAN outside Nichias premises at Oji, Japan.

tected the presence of crocidolite (blue) asbestos; subsequent measurements taken by the Ministry of Labor verified these findings. Samsung denied the contamination;

- schools and quarries polluted by tremolite asbestos [101];
- subway line 2 in the Seoul underground system which contained sprayed asbestos products.

The results of these and other exposures were predictable. Based on the amount of asbestos used, it had been estimated that as many as 35,000 Koreans could have contracted an asbestos-related cancer, and more than 9000 asbestosis, up to 2003.

BANKO members had pressed the government and public to confront the country's asbestos reality, often employing imaginative and eye-catching techniques to stimulate media interest. Demonstrations had been held in front of government buildings (2007), at the Tokyo headquarters of the Japanese asbestos multinational Nichias (2008), in the Seoul subway (2008), outside an illegal factory in Busan (2008), in downtown Seoul (2008), in Yangsan (2008) and in front of Parliament (2009). Last year BANKO participated in a public seminar in Parliament to consider a new asbestos law and continued its involvement with ongoing research to establish levels of asbestos contamination in Cibinong, Indonesia. This year BANKO members helped establish the presence of asbestos contamination in Taiwan and played a leading role in the publicity surrounding the baby powder scandal in Korea. Paying tribute to BANKO volunteers, the speaker acknowledged that the road ahead was long but that "working together like brothers and sisters can make this hard work easier and help alleviate the suffering of the victims."

Over the last five years, asbestos activism in the United States has been reinvigorated by a body, led and run by volunteers, called the Asbestos Diseases Awareness Organization (ADAO) [102]. ADAO was founded by two families affected by the fatal consequences of asbestos exposure. In

the presentation *Building a Grass-roots Asbestos Victims' Organization in North America*, Linda Reinstein, ADAO's Executive Director and Co-Founder, described the steps taken to create a body representing "the voice of the victims" which could engage constructively in the national asbestos debate; a twenty-first century communication strategy was needed to educate the public and acquaint politicians with the harsh reality faced by injured Americans in a country where the use of this acknowledged carcinogen remained legal:

"There is an art to effective messaging that makes and uses news to generate publicity. This includes press releases, newsletters, eBlasts, interviews and letters to the Editor. What happens if your message falls on deaf ears? For activists, we need to recognize the traditional media has changed. We need to use new media. It is an exciting equal-opportunity forum. Out of the new media, you can choose facebook, twitter and YouTube [103]. And it's really a level playing field. It democratizes activism. All of these outlets are very easy to use. They are dynamic, and most importantly, they are free."

The passion generated by so many personal tragedies motivated the work of thousands of ADAO members and inspired them to share resources, knowledge and experience to help others. To be effective, the work of the volunteers was coordinated as part of an overall plan with a mission

Recognizing that a major change in public policy, such as the banning of asbestos, would not happen overnight required a sustainable level of activity to keep the subject on the national agenda ...

statement, specified goals, consistent messaging, long-term relationships and innovative projects such as the ADAO's consumer product testing, ADAO T.V and National Asbestos Awareness Week [104]. Recognizing that a major change in public policy, such as the banning of asbestos, would not happen overnight required a sustainable level of activity to keep the subject on the national agenda; working with like-minded groups in the U.S. and abroad maximized effectiveness. Concluding her talk, the speaker paid tribute to those whose lives had been lost to asbestos and pledged that they would not be forgotten.

"In order to have a comprehensive ban on asbestos in Asia, grass-roots strengthening is not only essential but critical," the next speaker said at the beginning of the presentation: *Grass-roots Strengthening and Building a Grass-roots Asbestos Movement in Asia*. Director of the Asia Monitor Resource Center (AMRC) Sanjiv Pandita detailed recent asbestos work undertaken by the AMRC including capacity building, training with labor and community groups, the production of basic literature and posters in local Asian languages and subregional and local



Sanjiv Pandita

meetings. Expressing his frustration at the industry myths which continue to protect the image of asbestos in Asia, he said:

“It was easier for Bush to prove to the UN that Iraq had weapons of mass destruction and lead a war that killed thousands than for us – even with so much damning scientific evidence from the ILO, WHO, and other reputable institutions – to get asbestos banned in Asia. I think asbestos is the real weapon of mass destruction.”

There was a disconnect between asbestos bans adopted by dozens of governments to protect human life and the escalating use of asbestos throughout Asia. Workers in the region, which accounted for the majority of annual global asbestos consumption, often experienced high levels of exposure, but because the substance “appeared” to be an innocuous white powder, and not a smelly chemical, they did not perceive it as harmful. When told of the long-term damage it could do, many Asian workers felt that the trade-off between a job today and a premature death in 20+ years, was a good deal. There was a serious lack of communication between the ban asbestos movement and the shop floor.

Where there was no diagnosis of asbestos illness, there could be no compensation. Throughout Asia, it was rare for occupational respiratory illness to be diagnosed and an asbestos-injured patient who succeeded in getting medical care was more often than not misdiagnosed as suffering from tuberculosis or some other condition due to the lack of even basic amenities like X-ray equipment and trained doctors. Just because Asian asbestos victims were not recognized did not mean there were none; their invisibility in national statistics was used by governments to justify the status quo. In 2001, China reported 12,736 fatal accidents to the ILO, which was only 12% of the ILO’s estimate; India, a country of more than one billion people, reported 222 cases, 0.55% of the ILO estimate. These numbers were nonsense, worse than that they were an insult to those who had been injured. We had to build institutions at grass-roots level, create asbestos awareness among workers and identify, empower and mobilize victims; and we

needed to do all this urgently to prevent more lives being lost. “Grass-roots [ban] asbestos organizing is essential not only for its own sake but also because asbestos epitomized bigger problems embedded in Asia,” he said.

That multiple attempts to place chrysotile asbestos on the Prior Informed Consent list of this Convention had been blocked illustrated the ruthless determination of asbestos-exporting countries ...

There was good news and bad news in the presentation **Asbestos at the Rotterdam Convention and World Bank**, by Environmental Consultant Dr. Barry Castleman. Dealing with the bad news first, the speaker said that given all that had been discovered about the asbestos hazard, it would seem logical for its use to be regulated. An international agreement – the Rotterdam Convention – existed which could mandate that exporting nations advise consumer countries of the risks involved with using hazardous substances; while this was not a ban, it would, at least, ensure that potential consumers had the information necessary to make an informed decision. That multiple attempts to place chrysotile asbestos on the Prior Informed Consent list of this Convention had been blocked illustrated the ruthless determination of asbestos-exporting countries, aided by the corruption of some asbestos-consuming countries, to continue the immoral trade in asbestos [105]. By blocking action on chrysotile, vested interests had created anarchy and confusion within the Convention which threatened to compromise its very existence. There might be a chance to change the voting rules so that a 2/3 majority would suffice instead of the current requirement for unanimous agreement.

The good news related to a new World Bank document: **Good Practice Note: Asbestos: Occupational and Community Health Issues** [106] which:

- urged avoidance of asbestos-containing materials (ACM) in new construction and new materials for renovation;
- required asbestos management plans for existing structures with in-place ACM;
- mandated that the repair or removal and disposal of existing ACM should only be performed by specially trained personnel, following host country requirements, or in their absence, internationally recognized procedures.

Although adherence to this guidance note was discretionary, advice provided by the World Bank was usually regarded as a precedent for other development banks, private banks and governments. The 17-page note explained the international consensus on phasing-out asbestos use, provided information on alternative building products and included summaries and references on best practices for asbestos abatement.

Going Forward: Consolidation and Closing Session

Moderator: Sanjiv Pandita

Having been circulated amongst the conference delegates previously, the draft *Hong Kong Declaration Towards a Complete Ban on all forms of Asbestos* (Appendix A) was tabled by Elizabeth Tang [107] who read out the text and incorporated revisions suggested from the floor. The declaration, having highlighted the growing use of asbestos in Asia, industry's aggressive marketing techniques and the threat to occupational and public health, made a series of recommendations amongst which were:

- an immediate and comprehensive ban on all forms of asbestos and processes that involve asbestos including mining, manufacturing or any other activity;
- the implementation of policies which encourage a just transition to safer technologies;
- setting up administrative protocols and diagnostic infrastructures which recognize the injuries sustained by victims and providing financial and medical assistance;
- holding companies involved in the export of asbestos production to newly industrializing countries criminally liable in the country of origin and country of operation;
- the engagement by international agencies, regional bodies and national governments with Asian asbestos victims' groups and the implementation of joint initiatives to tackle harmful asbestos legacies.

Once the text was finalized and adopted by unanimous consent, it fell to Dr. Domyung Paek and Sugio Furuya to announce the launch of the Asian-Ban Asbestos Network (A-BAN). This news was greeted with a standing ovation by conference participants. The next item on the agenda was the announcement of the winning submissions for IBAS 2009 Grass-roots Bursaries; the successful projects were:

- from The People's Training and Research Center, Baroda, Gujarat, India – to locate potential asbestos claimants, file compensation claims, identify medical contacts and local facilities, map polluted worksites and/or environmental contamination.
- from The Mine Labour Protection Campaign, Rajasthan, India – to address asbestos problems in the Udaipur district where a large number of tremolite mines and associated industries have created widespread contamination.
- from the Workers-Community against Asbestos-Related Industry – an outreach initiative proposed by the Occupational

Safety and Health Group of the Sedane Labor Resource Center, Indonesia which will track asbestos usage, raise public awareness of the asbestos hazard and empower affected workers and communities to contribute to the national asbestos debate.

The Henri Pezerat Memorial Award 2009 was presented by Dr. Annie Thébaud-Mony to Dr. Domyung Paek in recognition of his research, leadership and commitment. Like Henri, Domyung was, said Dr. Thébaud-Mony, a "Scientist-Activist" who did not let his training and education get in the way of his humanity. Like Henri, Domyung had responded to the needs of individuals and communities polluted by asbestos and like Henri he had chosen a difficult road to navigate. Dr. Paek accepted the award on behalf of all BANKO members and pledged to redouble his efforts to work with colleagues to end Asia's asbestos plague.

Bringing the Asian Asbestos Conference 2009 to a close, Apo Leong, of the Asia Monitor Resource Centre, reflected on the information which had been shared during the conference; stories from Japan, China, Korea, Brazil and elsewhere illustrated the tragic reality of the asbestos risk, a reality we ignored at our peril. Despite the steep learning curve faced by many AAC 2009 delegates new to the subject of asbestos, there was a real determination amongst them to turn what they had learned in Hong Kong into action to raise asbestos awareness on the mainland. The speaker congratulated the delegates on the safe delivery of the new organization "A-BAN" and reminded colleagues of the significance of April 28. "Tomorrow," he said "there will be demonstrations in downtown Hong Kong which will mark International Workers Memorial Day. All conference delegates are invited to take part in the events planned to visualize the ongoing asbestos hazard faced daily by so many people in China, Asia and around the world. Let us," he concluded "work together for a better tomorrow."



Closing session platform party

From the first moments of AAC 2009, the plight of Asia's asbestos victims took center stage. Where academic initiatives were discussed, attention focused on how the research could be of practical assistance to the injured; where asbestos abatement techniques were considered, the focus was on how they could be used to minimize hazardous expos-

A poignant message from Japanese asbestos victims transmitted during the welcome dinner set the tone for much of what was to follow.

ures. In the participatory atmosphere created by the conference organizers, experienced Japanese and Korean researchers interacted with Indonesian colleagues relatively new to the asbestos issue and grass-roots members from China with no background on asbestos whatsoever. Everyone had something vital to contribute and all opinions and experiences were given the respect they deserved. A poignant message from Japanese asbestos victims transmitted during the welcome dinner (April 25) set the tone for much of what was to follow; expressing sadness at the damage done, they urged AAC 2009 delegates to work together to end decades of asbestos slaughter. The faces of those affected in Japan and the faces of those they left behind were a salient reminder of the humanity which underpins everything the ban asbestos campaign stands for.* The presence in Hong Kong of victims' representatives from so many countries reminded delegates that while the faces change, the heartbreak and deprivation caused by asbestos remains the same.

Since the Asian Asbestos Conference 2006 took place in Bangkok, the regional movement has been reinvigorated by an influx of members from more countries and sectors of civil society. The increasing information exchange and communication across subject disciplines and national borders has led to more joint initiatives. The energy and new skills brought to the movement by younger members has complimented the experience and knowledge of those not quite so young; working side by side towards common goals they have made substantial progress in recent years regarding the banning of asbestos and the empowering of victims in Asia. Some highlights reported to the conference include:

- Japan: victims continue to keep asbestos high on the national agenda through sustained political pressure, medical researchers and trade unionists are working together to delineate a practical approach to assist at-risk groups and new initiatives have been launched to support retired workers with asbestos-related diseases;
- Korea: campaigners have mobilized civil society around multiple asbestos issues, such as occupational

injuries, environmental pollution and contamination of consumer products and forced the government to implement a national ban and take steps to identify victims;

- The Philippines: labor federations are progressing a ban asbestos strategy which relies on political lobbying, building relationships with government agencies and the use of technology to spread awareness of the asbestos hazard;
- India: committed doctors, in cooperation with community activists, have embarked on programs to identify the injured; new outreach programs have been launched in mining and industrial areas to raise asbestos awareness; initial efforts by trade unionists to organize ship-breaking workers are showing positive results;
- Indonesia: community activists, in collaboration with Japanese and Korean colleagues, have documented the transfer of hazardous asbestos technology to Indonesia and are quantifying the asbestos risks to workers and local people in Cibinong;
- Hong Kong: a campaign by asbestos sufferers, family members and trade unionists resulted in the government adding mesothelioma to a list of compensated illnesses; projects to assist victims are providing much needed support; efforts to publicize the potential hazards of asbestos products in Hong Kong public housing continue;
- China: research has revealed that people working in or living near chrysotile-using factories on the mainland are at high risk of contracting cancer; positive results have been reported by a company developing asbestos-free building materials;
- Pakistan: At the second meeting of the National Technical Advisory Committee on Chemicals (April, 2009), a breakthrough was made with the decision to include all types of asbestos on a list of hazardous materials;
- Malaysia: A national trade union center has embarked upon a program of training, publicity and education to progress its goal of a comprehensive ban on asbestos use;
- Sri Lanka: a new law, which will come into force in 2009, will list the asbestos industry as "hazardous," mandate the reporting of asbestos-related illness and introduce stringent workplace controls in all sectors.

The work of AAC 2009 did not end when delegates left Hong Kong. Only weeks after this major event took place, a story which underlined the ubiquity of the region's challenges made headline news in South Korea. The article entitled *The Deadly Air they Breathed* [108] described the

*This message can be viewed in a video on the World Asbestos Report homepage: <http://worldasbestosreport.org>

after-effects of asbestos mining and processing in Gwangcheon and Busan. As elsewhere, it is not just former miners and factory workers who are suffering; people who lived near a train station through which asbestos cargo was transported have also contracted asbestosis. In Busan alone as many as 440,000 people could be affected by asbestos fallout from manufacturing operations

The globalized asbestos industry, which has brought death to diverse populations across Asia, has benefited from the isolation of dying individuals and their inability to turn local anger into action.

which took place within six miles of where they lived. As local governments and national agencies struggle to come to terms with the escalating public health disaster, victims are demanding action. Farmer Jung Ju-yol, a former miner who is now suffering from an asbestos disease, is also a part-time campaigner who spends his own money to bring villagers to meetings. “We need to soon stage our own protest or something... We might even need to get together with the Busan folks at some point,” he told a journalist.

Despite the progress which is being made, Asian asbestos consumption continues to endanger millions of lives. Numerous conference delegates spoke of low levels of occupational, public and professional asbestos awareness, the disenfranchisement of asbestos victims, an almost total lack of medical and diagnostic capacity, control of national agendas by industry stakeholders and the prioritization of economic development over health and safety issues. As was so clearly illustrated during the asbestos victims’ panel, the mobilization of the injured is key to effecting change in national asbestos policy. The globalized asbestos industry, which has brought death to diverse populations across Asia, has benefited from the isolation of dying individuals and their inability to turn local anger into action. The birth of A-BAN means that Asian victims will no longer be alone; as part of a regional campaigning network they will have the information and critical mass to expose the polluters, demand public recognition of their injuries and force governments to provide the medical care and financial support they need. The formation of A-BAN will serve as an enduring legacy of AAC 2009 and will ensure that the movement to ban asbestos will continue to spread throughout Asia.



Postscript

For decades, asbestos stakeholders profited from the global trade in a killer substance; they lied to employees, corrupted civil servants, bribed politicians and perverted the scientific process. When industrialized countries banned asbestos, the hazardous technology was exported to emerging economies; twenty years after asbestos manufacturing was transferred from Japan to Korea, it was sent from Korea to Indonesia; these dangerous processes are now on their way to mainland China. Left in the wake of this toxic chain of production were dead and injured workers, at-risk communities and polluted neighborhoods. As elsewhere, Asian victims found that when it came to the crunch, asbestos polluters never paid the price for their negligence and greed; the final bill for national consumption was measured in broken families and lives lost, items which never appeared on corporate balance sheets. The extension of the man-made global asbestos plague to Asia was initially ignored and then denied by national authorities. When finally forced to engage with this issue, governments demanded the production of national mortality data to “prove” that asbestos use was hazardous; as if, human biology differed in China and France and Thai lungs were better able to expel asbestos fibers than Australian ones.

Since the AAC 2009, there have been several developments which suggest that the reality of the asbestos challenge faced by Asian populations is becoming ever more apparent. The asbestos debate, which has spread to new locations, is being impacted by the voice of the victims and contributions from sectors of civil society new to this issue. In Taipei, the largest city in Taiwan, a meeting took place in May 2009; following the *International Conference on Industrial Risks, Labor and Public Health: An Interdisciplinary Analysis by Social Sciences and Epidemiology*, a declaration was issued which called on countries to “ban the production, manufacture, use and trade of products containing all types of asbestos, including chrysotile immediately.” Weeks later, researchers from Korea and Japan returned to Cibinong, Indonesia to undertake additional monitoring – with Indonesian colleagues – of the fallout from asbestos-consuming factories belonging to PT Trigraha and PT Jeil Farjar. While, in the United Arab Emirates (UAE), an asbestos focus group was convened by a non-profit health and safety organization to produce construction industry guidelines for dealing with asbestos-containing materials. Considering the UAE’s recent building boom and the fact that average annual asbestos consumption between 2005-2007 was 18,673 tons, this initiative is certainly much needed [109]. On August 20, 2009, a medical symposium on asbestos took place at the Shahid Beheshti University of Medical Sciences in Tehran; subjects on the agenda included screening for as-

bestos-related diseases, radiological and pathological findings for asbestosis and mesothelioma, and treatment therapies [110]. In India, plans to reopen asbestos mines in Jaipur attracted criticism from the Mines Labor Protection Campaign, an NGO from Rajasthan, and environmentalists who reiterated the risk of asbestos exposures to workers in the mines and mills [111]. Whereas, once upon a time, trade liberalization of the Indian asbestos industry might have been implemented without opposition, nowadays informed citizens are monitoring all attempts to enhance commercial opportunities for this sector.

Municipal, national and judicial bodies in Asia have also been taking action on the asbestos menace. In the Philippines, a civic resolution ordered that asbestos pollution caused by the operations of the Lepanto Consolidated Mining Corporation in the Sitio Sapid region be cleaned-up under a controlled toxic waste plan. Lepanto officials and the company, which was ordered to remove six truckloads of asbestos-contaminated construction debris it had secretly dumped at Barangay Sapid in 2007, are facing administrative and criminal charges for the improper handling of the toxic waste [112]. At the beginning of July, the Ban Asbestos Act of 2009 was tabled by Representative Raymond C. Mendoza in the Congress of the Philippines. The bill calls for a ban on the import, manufacture, processing, use and distribution of asbestos as well as other measures to safeguard occupational and public health [113]. One month later, the Trade Union Congress of the Philippines called on the Government to assess the risk posed by unsafe working practices at the Manila Thermal Power Plant where hundreds of tons of asbestos-contaminated waste are currently being removed [114]. Korean authorities, who have been under constant pressure after news of asbestos pollution at industrial sites and in consumer products was released in April 2009, have banned asbestos from all products for children and products that come into contact with the skin. As of September 2009, manufactured goods must be less than 0.1% asbestos; manufacturers of paint and wallpaper which use talc will be compelled to obtain a public certificate proving that the talc used contains less than 1% asbestos [115]. On July 21, at a cabinet meeting in Seoul, legislative revisions to improve occupational protection from asbestos during construction and demolition work were under consideration [116]. It seems that a colleague from Seoul hit the nail on the head when he said that anyone who does not know about asbestos has not been in Korea recently.

Verdicts issued in July 2009 by Japanese courts do not bode well for asbestos defendants. On July 6, Judge Haruhiko Sakae of the Yokohama District Court ordered

the Government to pay 76.84 million yen (~US\$810,000) for the mesothelioma death at age 51 of Hitoshi Taima, a worker at the U.S. Navy's Yokosuka base. Taima, who was employed from 1977 to 1995 by the Japanese Government, was exposed to asbestos whilst working as a mechanic [117]. Two days later, the Chubu Electric Power Company was ordered to pay 30 million yen (US \$317,000) for the mesothelioma death of 67-year-old Kenji Fujiwara, a former electrician who had worked for the company from 1958 to 1999. As the ruling highlighted the defendant's obligation to protect workers who do not directly handle asbestos, it is significant for others with similar exposures [118]. These cases not only illustrate the substantial level of damages now being awarded for Japanese asbestos deaths but also the potential for increasing the number of claimants. It seems that in Japan at least some negligent corporations are being held to account for the damage they have done.

While the life and death struggle by civil society to end the asbestos plague is a priority on every continent it is even more so in Asia, the region which accounts for the ma-

jority of worldwide consumption. From China's Sandung Peninsula to the Cambodian capital, people have the right to know that their lives are being endangered by avoidable exposures to asbestos; they have the right to demand that action is taken to protect themselves and their children. After years of preliminary work, progress is now being made; the faces of the victims and their spirit remain the bedrock of the ban asbestos campaign. The existence of the new regional campaigning group A-BAN will serve as a much needed counterweight to industry lobbying; asbestos propaganda will now be challenged at local as well as national levels. The transfer of hazardous technology will be tracked and at-risk groups will be told the truth about the toxic substance poised to invade their communities. In the months to come, important asbestos meetings will take place in Cambodia, India, Japan, the Philippines, Indonesia and Korea. In 2009-2010, new outreach programs and campaigns will raise awareness, identify victims, lobby for improved services and press for the introduction of national bans throughout Asia. There is no way to put the asbestos genie back in the bottle. An asbestos-free future is possible!



Hong Kong Declaration towards a Complete Ban on all forms of Asbestos

April 27, 2009

The Asian Asbestos Congress 2009 (AAC) was organised jointly by the Asia Monitor Resource Centre (AMRC), International Ban Asbestos Secretariat (IBAS), Hong Kong Confederation of Trade Unions (HKCTU) and the Association for the Rights of Industrial Accident Victims (ARIAV) and supported by the Ban Asbestos Network Japan (BANJAN), Ban Asbestos Network Korea (BANKO), Building and Woodworkers International (BWI), International Metalworkers Federation (IMF) and the Asian Network for the Rights of Occupational Accident Victims (ANROAV). Representatives of the International Labour Organization, the World Health Organization and the International Commission on Occupational Health took part in this conference. The conference was attended by more than 200 participants from 24 countries representing the Asia Pacific, Europe, North and South America.

Awareness is growing fast throughout Asia of the need to stop the use of all forms of asbestos and prevent asbestos related diseases. Grassroots action to attain these aims and achieve fair compensation for victims and their families is spreading. In recent years, mobilisation by asbestos victims groups has achieved major successes in Japan and Korea, the only two countries in the region which have banned asbestos. Working with social partners, these groups have highlighted the existence of national epidemics, raised public awareness of asbestos problems and lobbied governments to address a range of social, political and scientific issues.

Despite this progress, asbestos continues to be used in large quantities in the Asian region. Aggressive campaigns by vested interests lead by Canada, Russia and Brazil – asbestos producing countries – have increased industry's profits at the expense of hazardous exposures experienced by workers and community members. Asbestos, the largest contributor to the growing epidemic of occupational cancer, poses a major threat to public health. The majority of asbestos victims do not receive the medical treatment and compensation to which they should be entitled; indeed it is the victims who pay the price for industry's profits. The asbestos industry continues to promote discredited propaganda which alleges that certain forms of asbestos can be used safely under "controlled conditions." The only "safe use of asbestos" is no use. Safer asbestos-free alternatives exist and must be used.

A concerted effort by asbestos victims groups, trade unions, employers' organizations, researchers, lawyers, relevant agencies and grassroots groups is needed to stop the use and export of the asbestos hazard to industrially developing countries from industrialised countries like Japan or Korea where asbestos is banned. It is urgent to disseminate information about the hazards of asbestos to the grassroots, establish proper diagnostic infrastructure and promote the use of safer alternatives throughout the region.

Recognizing the gravity of the situation and the level of threat posed by the continued use of asbestos in Asia, the participants of the AAC urge governments, the World Health Organization, the International Labour Organization, the International Commission on Occupational Health and other international agencies and organizations to:

- 1) Adopt an immediate and complete ban on all forms of asbestos and all processes that involve asbestos including mining, manufacturing or any other activity.
- 2) Give priority to safer alternatives and implement a logical transition to safer technologies. Workers and the community should be protected from exposure to fibres during the transitional period.
- 3) Ensure that appropriate techniques are used when asbestos removal work is carried out; in the interim, implement a labelling protocol for all asbestos contaminated structures in order to alert workmen and the community of the imminent hazard posed by this contamination.
- 4) Establish a diagnostic infrastructure so that victims can be correctly diagnosed and receive timely medical treatment and rehabilitation.
- 5) Make all efforts to develop a 'cure' for asbestos related sicknesses and diseases including mesothelioma.
- 6) Make financial restitution to victims of asbestos related illnesses by paying equitable compensation.
- 7) Hold companies involved in the transfer of asbestos production to newly industrialising countries criminally liable in the country of origin and country of operation.
- 8) Ratify the ILO convention 162 and work towards developing National Programmes for Elimination of Asbestos-Related Diseases (NPEAD) in a timely manner.
- 9) Provide help and support to reinforce the vital work of Asian asbestos victims groups in order to maximize their efforts to generate awareness about the severity of the asbestos problem.

The AAC delegates are appalled by the unconscionable misconduct of the Canadian government in continuing to fund the discredited Asbestos Institute so that it can continue its immoral propaganda and promote the export of asbestos disease to harm people in the developing world.

Recognizing the urgent need for coordinated action in Asia, a new group was launched at the conference: the Asian Ban Asbestos Network (A-BAN). The formation of A-BAN is a landmark in the Asian campaign to obtain justice for the asbestos-injured and to implement a regional asbestos ban. The group which consists mainly of asbestos victims' organizations, labour unions and environmental justice groups from 16 Asian Pacific countries will work towards strengthening the grassroots Ban Asbestos movement in Asia.

1. Zhuoqiong W. *Improving Workplace Illness Cure Sought*. China Daily – Hong Kong edition. April 25-26, 2009. page 3.
http://www.china.org.cn/government/central_government/2009-04/25/content_17670255.htm
 2. There are, according to this article, 640,000 pneumoconiosis patients in China with 10,000 new cases reported every year.
 3. Summers A.L. *Asbestos and the Asbestos Industry*. Pitman & Sons, London. 1919.
 4. A total of 400 delegates attended four days of events in Osasco which included a musical tribute to the victims, plenary sessions, workshops, round-table discussions, poster presentations, video screenings and a photographic exhibition.
Kazan-Allen L. *Osasco Conference Report*. November 10, 2000.
http://ibasecretariat.org/osasco_report.php
 5. Kazan-Allen L. *Global Asbestos Congress 2004 Report*. February 11, 2005. http://ibasecretariat.org/lka_gac_2004_online_report.php
 6. Kazan-Allen L. *Asian Asbestos Conference 2006*. July 2006.
http://ibasecretariat.org/lka_asia_asb_conf_aac_2006.php
 7. For more information on AAC 2009, see:
http://www.anroav.org/images/dossier_aac_sc_2304.pdf and
<http://www.anroav.org/content/blogsection/9/41/>
 8. In 1978, Mrs. Tait set up the Society for the Prevention of Asbestosis and Industrial Diseases, the first asbestos victims' group in the world; she devoted the next 40 years of her life to obtaining justice for victims. Her death in February 2009 was a blow to all the members of the global ban asbestos network.
 9. The six countries included those from the Middle East which have banned asbestos: Kuwait, Oman, Egypt, Saudi Arabia plus Japan and Korea, the only countries in Asia which have done so.
 10. Graphs shown illustrated the correlation between national asbestos use and mortality incidence, and the dramatic impact national bans have on overall consumption.
 11. Prof. Xiaorong Wang is a researcher in the Department of Community and Family Medicine at the Chinese University of Hong Kong.
 12. In 2000, China mined 300,000+ tons; nowadays, annual production is over 400,000 tons, which makes China the world's second biggest asbestos producer. In 2008, China imported 300,000 tons of asbestos, most of which came from Russia. In China, the majority of asbestos is used for the manufacture of asbestos-cement products; other uses include friction, sealing and insulation products. Since 2003, the use of all types of asbestos has been prohibited in the production of friction materials for the automotive industry.
 13. By the end of 2003, a total of 7,907 cases of asbestosis had been officially registered: "The prevalence of asbestosis reported by different studies varied widely, ranging from 5 to 40% but over 10% in most existing studies. In 1978, the first case of lung cancer with asbestosis was reported in China." There are no epidemiological data on the incidence of mesothelioma or asbestos-related lung cancer in China, although in the question and answer session the Professor mentioned that two cases of pleural mesothelioma had been diagnosed in China.
 14. The data source for these figures was given as www.indexmundi.com. The United States Geological Survey estimated China's asbestos production in 2005 at 350,000 tons; the figure (from the China Mine Association) shown by the speaker for the same year was 375,000 tons.
 15. T. Kawakami is the Senior Specialist on Occupational Safety and Health, ILO Subregional office for East Asia, Bangkok.
 16. Hisashi Ogawa is from the WHO Regional Office for the Western Pacific.
 17. *Emergency Preparedness and Response. Asbestos – hazards and safe practice for clear-up after tsunami*.
http://www.searo.who.int/EN/Section1257/Section2263/Section2310/Section2320_12504.htm
- Information on the WHO asbestos initiative is also available online:
World Health Organization – Elimination of Asbestos-Related Diseases.
http://whqlibdoc.who.int/hq/2006/WHO_SDE_OEH_06.03_eng.pdf
Outline for the Development of National Programmes for Elimination of Asbestos Related Diseases.
http://whqlibdoc.who.int/hq/2007/WHO_SDE_PHE_07.02_eng.pdf
Cancer Control - Knowledge into Action.
http://whqlibdoc.who.int/hq/2006/WHO_SDE_OEH_06.03_eng.pdf
18. Fiona Murie is the Director of Health and Safety of the Building and Wood Workers International. For more on the BWI's asbestos activities, see: <http://www.bwint.org>
 19. The resolution stated: "the elimination of the future use of asbestos and the identification and proper management of asbestos currently in place are the most effective means to protect workers from asbestos exposure and to prevent future asbestos-related diseases and deaths..."
 20. See: <http://www.ncard.org.au/aaarc.html>
 21. For more details see: <http://www.kazanlaw.com/AACWorkshop/>
 22. These trusts are: ABB Lummus Global Inc, Amatex, AP Green, Armstrong World Industries, Artra, Babcock & Wilcox, Celotex, CE Thurston, Combustion Engineering, EJ Bartells, Eagle Picher, Fibreboard, Halliburton, Harbison-Walker, HK Porter, JT Thorpe, Kaiser Aluminium, Keene, Manville, National Gypsum, Owens Corning, Plibrico, UNR, United State Gypsum, Western Asbestos.
 23. Although the Babcock & Wilcox trust values mesothelioma claims at \$90,000, the average payment is \$120,000; cases of lung cancer receive about \$35,000-\$45,000.
 24. Vienna Declaration, February 2008. See:
<http://www.bwint.org/pdfs/vienna%20declaration.pdf>
 25. From the 1950s, Japan imported approximately 10 million tons of asbestos, of which more than 90% was used for the manufacture of building materials.
 26. During the training, 10-15 workers visited the construction site to compare actual working conditions with the action checklist. Subsequent discussions identified good points, highlighted needed improvements and made recommendations.
 27. In Australia, there are three national codes of practice for the management of asbestos at workplaces, safe removal of asbestos, analytical asbestos sampling and identification. From 2008, every building worker is required to undertake eight hours of asbestos training provided by a registered trainer.
 28. The Canadian Autoworkers Union is the largest private sector union in Canada; its membership has doubled since 1985 and it has 282 local unions, 1600 bargaining units and 225,000 members. The CAW is in the process of merging with other unions to form a broad-based, general workers' union.
 29. According to Professor Inai, since 1948 Japanese victims with occupational asbestos exposures had been entitled to claim compensation from the government compensation scheme for asbestosis, benign asbestos pleurisy, diffuse pleural thickening, lung cancer and mesothelioma. Victims of non-occupational asbestos exposure who had contracted either lung cancer or mesothelioma had been able to claim compensation from a Japanese Relief System since 2006.
 30. CT: computerized tomography; MRI: magnetic resonance imaging.
 31. At the HCL factory, a range of asbestos products was manufactured including: clutch plates, brake liners, railway brake blocks, ropes, yarn, cloth and sheets. Workers, all of whom were ignorant about the asbestos health hazard, handled the fiber with no regard for the consequences; they used to play with balls of asbestos. The company management did not implement control measures to minimize occupational exposures; mandatory periodic medicals were not carried out.
 32. The "healthy worker syndrome" came about because individuals who were too ill to work either resigned their jobs or died, leaving only the healthy workers to take part in the research.
 33. Under the VRS, companies are able to off-load workers by giving them a package or incentive to take premature retirement, often using coercion to force them to accept the conditions on offer.
 34. There are numerous talc and asbestos ore deposits in Chungnam. Of the 30+ asbestos mines in the Province, the Kwangcheon chrysotile asbestos mine was the biggest in Asia and had 1,000 workers. As a consequence of asbestos operations and the presence of naturally occurring asbestos, the levels of neighborhood exposure to serpentine and amphibole (mainly tremolite) asbestos in this area were elevated.
 35. Of the 95 study subjects, nine cases of asbestosis were impossible to diagnose due to the poor quality of the scans.
 36. According to a survey conducted in the Mie prefecture, the standardized proportional mortality ratio for construction workers for stomach cancer is 2.0 and for lung cancer 1.9.
 37. Predicted cumulative deaths over the next 40 years are: 72,000 in the U.S., 250,000 in Europe, 103,000 in Japan and 30,000 in Australia.
 38. According to the speaker, serum mesothelin (also known as serum-mesothelin-related protein or SMRP) is "the most sensitive and specific

test. SMRP is elevated in over half the patients at diagnosis, and in around 75% of patients at some stage in their illness... elevated mesothelin/SMRP levels in the pleural fluid are also useful in diagnosis.”

39. See the presentation by Steven Kazan during plenary session 2.

40. All the slides are available online:
<http://www.kazanlaw.com/AACWorkshop/>

41. Between them, the trusts list 2,980 approved worksites in foreign countries.

42. <http://www.bwasbestostrust.com/>

43. In Melaboh (Aceh) one of the closest major towns to the epicenter of the tsunami, there were 3-4 million cubic meters of rubble which contained unknown and unknowable quantities of asbestos. This waste was bulldozed and then trucked by government paid contractors to the edge of town and buried. After the Yogyakarta earthquake, there were 10 million cubic meters of rubble which was dealt with by a system called “Gotong Royong” in which local communities did most of the immediate clean-up with little assistance from the aid community.

44. In Aceh an estimated 600,000 survivors were left homeless requiring approximately 130,000 emergency/temporary and then permanent homes. During the Yogyakarta earthquake, approximately 300,000 houses were completely destroyed and another 300,000 very badly damaged. In both cases, asbestos retailers quickly capitalized on the post-disaster demand for new building materials.

45. <http://www.astm.org>

46. E2394, which was intended for use by supervisors, managers, government agencies and NGOs, was applicable to conditions in developing and developed countries; the need for worker training and hands-on experience with asbestos products was indicated as was the hazard of using power tools. The emphasis of the standard was on the protection of those workers most at-risk of exposure to airborne asbestos. No asbestos regulations were cited in the protocol which could therefore be used as a guideline for national asbestos control regulations where needed.

47. The ESB is a government-owned utility which generates, transmits and supplies electricity using fossil fuel, hydro and wind-power.

48. The first Irish legislation pertaining to the environmental asbestos hazard related to the disposal of toxic and dangerous waste and came into force in 1983.

49. ESB personnel estimated that the 198 tons of asbestos-contaminated infill used, necessitated the removal of 3,500+ tons of waste during the clean-up operations.

50. The techniques adopted by the ESM were derived from Irish and EU legislation and best international practices.

51. Vincent Brennan is from the Physical Plant Department, Training & Compliance Office of the University of Vermont, U.S.

52. Mr. Kropiunik is from aetas Ziviltechniker GmbH, Vienna, Austria: <http://www.aetas.at>

53. The scaffolding had to be constructed to allow trains to pass and to leave sufficient space for workers. This was a difficult construction especially given the air dynamics posed by the arrival of trains. The scaffolding was 180 meters long and required emergency exits for the operatives.

54. Mr. Zhen is from Elkem Materials, Beijing, China.

55. Data on the incidence of asbestos-related disease in China is deficient; however, some figures were sourced from the website of China safety zone (<http://www.aqtd.cn/zyjkaq/html/25779.html>) which showed that there were 7,907 cases of asbestos-related disease and 923 deaths in China in 2003 as compared to 4,289 cases of disease and 622 deaths in 1986.

56. Mr. Kien is from the Institute of Mechanics, Vietnamese Academy of Science and Technology, Vietnam.

57. Ms. Dutta is from Corporate Accountability – The Other Media, India.

58. Previously, Canada was the largest supplier of asbestos to India, now it is Russia. Annual import levels are rising. In 2006, India imported 306,000 tons: 152,820 tons from Russia and 63,980 tons from Canada. Ninety per cent of the imported asbestos is used in the manufacture of asbestos-cement building products. There are 17 major asbestos-cement companies operating from 61 production sites. Sales of asbestos-cement products increased in 2007-2008 by 16.5%. The annual turnover of the Indian asbestos-cement industry is Rs 3000 crores [A crore is a unit in the Indian numbering system equal to ten million]; most of the production is for building and roofing materials which are used in housing, schools, railways. Brake linings and textiles are also manufactured.

59. Tremolite mining is banned in India but the mines still operate.

60. The ALU is affiliated with the Building and Woodworkers International (BWI).

61. Substantial amounts are imported each year for use in asbestos-cement products for the building sector. In the last 50 years, the import and consumption of asbestos had been increasing.

62. A third bill to ban asbestos (HB No. 5931) is circulating; this bill provides for a comprehensive ban within two years of enactment and stipulates fines or prison time as punishments for the illegal use of asbestos.

63. Nearly 30% of all hospitals are furnished with asbestos-containing furniture; almost 3,000 tables containing asbestos were distributed to high schools.

64. From 1992-2000, the speaker had identified 1,500 cases of mesothelioma; by 2007, that figure had risen to 6,000.

65. Chrysotile and tremolite fibers have been found during autopsies.

66. Pakistan signed the Rotterdam Convention in 1999 but only ratified it in 2005. <http://www.pic.int/home.php?type=t&id=63&sid=17>

67. PIC: Prior Informed Consent Procedure of the Rotterdam Convention.

68. Minutes of Second Meeting of National Technical Advisory Committee on Chemicals (NTACC), April 21, 2009.

69. Asbestos has been used in Indonesia since 1959; almost 90% of asbestos processed nowadays is for asbestos-cement roofing products.

70. Established in 1984, the HKWHC is a non-profitmaking organization formed by a group of medical doctors, OHS professionals, rehabilitation therapists and social workers that aims to raise standards of occupational safety and health.

71. It is interesting to note that in the years mentioned (2003, 2004 and 2007), 111 tons, 59 tons and 8 tons of the imports were exported which equates to: 92%, 55% and 17%. Deducting exports from imports means that asbestos consumption for those years was 10 tons, 48 tons and 39 tons respectively.

72. The peak years for asbestos consumption in Hong Kong were 1960-1963, when average annual use was around 10 kilograms per capita.

73. Mr. Bin Mohammad is from the Malaysian Trades Union Congress.

74. Although asbestos was never mined in Malaysia, since the 1950s the asbestos sector has been producing roofing, flat sheets, pipes, friction pads and gaskets. In addition to the 2,000 workers receiving direct exposures to asbestos, thousands more are at risk from exposures in shipyards, at construction sites and in the motor vehicle industry.

75. These include the: Factories & Machinery (Asbestos Process) Regulation (1986), Occupational Safety and Health Act (1994), Classification, Packaging & Labeling of Hazardous Chemicals Regulation (1997), Use & Standards of Exposure to Chemicals Hazardous to Health Regulation (2000), Guidelines for the Control of Chemicals Hazardous to Health (2001), Guidelines on Medical Surveillance (2001), Notification of Accident, Dangerous Occurrence, Occupational Poisoning and Occupational Disease Regulations (2004), Environmental Quality (Scheduled Waste Regulations 1989).

76. When the largest asbestos factory in Malaysia ceased operations, former employees who had contracted cancer were left high and dry.

77. Ms. Yoshizaki is a member of the Japan Association of Mesothelioma and Asbestos-Related Disease Victims and Their Families.

78. As of January 1, 2009, the import, sale and use of asbestos products in Korea were banned.

79. The contamination of talc by asbestos has been known for decades and many countries in Western Europe and the U.S. have restricted the use of talc for babies. Talc has other uses including those in the pharmaceutical, cosmetic, paper manufacture and ceramic industries.

80. The number of banned drugs was reduced from 1,122 to 1,080 on April 10, 2009; on April 17, KFDA decreased the number of banned drugs to 215.

81. The victims who spoke were: Mr. Tang Chun Shing – shipyard repairer (aged 86), Mr. Chan Tong – shipyard worker (aged 81) and asbestos grille wall removers Mr. Leung Kam On (62) and Mr. Lai Cheong Fook (67).

82. ARIAV provides regular home visits and facilitates the setting up of local self-help networks and groups. Coping strategies, rehabilitation exercises and counseling services are offered which recognize the psychological and physical needs of victims.

83. A chronology of Japanese trade with western countries shown by the speaker highlighted contact with U.S. companies, Johns Manville and U.S. Gypsum, and UK companies: Turner & Newall, Cape and Sprayed Insulation.
84. Professor Muryama is from Waseda University, Japan.
85. Throughout the twentieth century, Japanese companies were commercially active in Asia with ventures in Korea, Taiwan and China owned by Asano Slate, 20 plants in China, Korea, Taiwan, Singapore, Malaysia, Thailand, the Philippines, Vietnam and Indonesia owned by Nichias and factories in Malaysia run by Nozawa Asbestos. Nowadays, Japanese companies have investments in asbestos businesses in Indonesia, Malaysia, Thailand, Singapore, Taiwan, China, India and the Philippines.
86. In 1970, the Japanese company Nichias Asbestos relocated its asbestos operations from the Tatsuta Nichias plant in Nara, Japan to Jeil Asbestos in Busan, Korea; from 1990 onwards, these operations were exported from Korea to PT Jeil Fajar and PT Trigraha in Indonesia; it has been reported that these manufacturing operations are now being relocated from Indonesia to Sandung Jibo, China.
87. The 2008 exposure levels of Indonesian workers were higher or similar to those which had been found in Korea and Japan.
88. Airborne asbestos concentrations decreased with distance from the factory.
89. There are no data on the incidence of asbestos-related disease or claims made for these diseases in Indonesia.
90. Other research conducted as part of this project established that material produced at this factory contained a high concentration of chrysotile asbestos.
91. Pictures shown of fiber-blocked ventilation outlets and the presence of deteriorating asbestos-cement roofing sheets at the factory were evidence of the pollution.
92. Ms. Giannasi is the Coordinator of the Virtual-Citizens' Network for the Ban of Asbestos in Latin America and a founding member of ABREA, the Brazilian Association of the Asbestos-Exposed.
93. A copy of a bill of lading for an asbestos shipment obtained by the speaker indicated that chrysotile asbestos, from the SAMA mine in Minaçu, was being shipped on February 13, 2009 to BRI Ramco Lanka Limited in Makandura Industrial Park, Makandura, Sri Lanka.
94. From 1888 to the 1960s, James Hardie built up its Australian asbestos-cement operations; during the 1970s, the company expanded its interests and began asbestos operations in Malaysia, Indonesia and other developing countries.
95. *Puttick v Tenon Limited (formerly called Fletcher Challenge Forests Limited)* [2008] HCA 54 (12 November 2008).
96. *Status of Shipbreaking Workers in India – A Survey*. International Metalworkers Federation. 2006. http://www.imfmetal.org/files/06042810465779/Shipbreaking_survey.pdf
97. Membership at the Mumbai and Alang ship-breaking yards is now 1,205 and 4,500 respectively.
98. Prominent asbestos victims' groups include: Associação Brasileira dos Expostos ao Amianto (ABREA), Brazil, Asociación Frente al Asbesto (AFA), Peru, Associação de Vítimas do Amianto de Maipúin, Chile and Asociación Argentina de Expuestos al Amianto (ASAREA), Argentina.
99. Research has established that there is a high incidence of asbestosis amongst workers and residents from five asbestos mining villages.
100. Victims from Busan have been at the forefront of the BANKO movement; they established Korea's first asbestos victims' support group on December 28, 2007; the first court ruling to award compensation for mesothelioma was handed down in December 2007 to the husband of an asbestos victim from Busan.
101. A survey of 100 school buildings undertaken in December 2007 by the Ministry of Education showed that 90% of elementary schools and 94% of high schools contained asbestos materials.
102. See: <http://www.adao.us>
103. Other new media platforms the speaker mentioned were: blogs, message boards, petitions, newsletters, eZines, podcasts, webcasts and teleseminars/webinar.
104. The sixth Annual Asbestos Awareness Day Conference will be on April 9-11, 2010 in Chicago.
105. At the most recent Rotterdam Convention meeting (October 2008), of 126 signatory countries industry bullies from Canada and Russia only managed to get a handful of countries to object to the listing of chrysotile; they were: Kazakhstan, India, Pakistan, Mexico, the Philippines, Vietnam, Kyrgyzstan and Ukraine.
106. This document appeared on the World Bank website in May 2009, a month after the Hong Kong conference. See: <http://siteresources.worldbank.org/EXTPOPS/Resources/AsbestosGuidanceNoteFinal.pdf>
107. Elizabeth Tang is from the Hong Kong Confederation of Trade Unions.
108. Lee J. *The Deadly Air They Breathed*. July 24, 2009. Global Post. <http://www.globalpost.com/dispatch/south-korea/090608/asbestos-mines-respiratory-diseases>
109. The use of asbestos-containing products is legal in the UAE for water supply and sewage. In 2007, 17,000+ tons of asbestos was imported by the UAE. See: Faulkner C. *Asbestos Management in the UAE*. July 26, 2009. http://www.constructionweekonline.com/article-5932-asbestos_management_in_the_uae/
110. Notice of this event was received by email on August 27, 2009. According to data from the United States Geological Services, annual asbestos consumption in Iran from 2005 to 2007 was 34,655 tons.
111. Dey A. *Activists Oppose Government Move on Asbestos*. August 4, 2009. <http://www1.timesofindia.indiatimes.com/articleshow/4854157.cms>
112. Tests of this material showed it contained 10% amosite asbestos. *Cleanup of Philippines Asbestos Dump Ordered*. June 2, 2009. <http://www.asbestos.net/news/cleanup-of-philippines-asbestos-dump-ordered.html>
- According to Alderman Richard Kilaan, charges will be brought against the chief executive officer, the mining firm's board of directors, administrative officials and the resident manager.
- Trade Union Congress of the Philippines. *Town Readies Criminal Case vs Lepanto Execs*. August 5, 2009. <http://www.tucp.org.ph/news/index.php/2009/08/town-readies-criminal-case-vs-lepanto-exec/>
113. Trade Union Congress of the Philippines. *TUCP Party List representative files bill in Congress banning asbestos*. July 16, 2009. <http://www.tucp.org.ph/news/index.php/2009/07/tucp-party-list-representative-files-bill-in-congress-banning-asbestos/>
114. *TUCP Concerned that Asbestos Puts Workers at risk at Manila Thermal Power Plant*. August 4, 2009. <http://www.tucp.org.ph/news/index.php/2009/08/tucp-concerned-that-asbestos-puts-workers-at-risk-at-manila-thermal-power-plant-calls-on-government-to-verify-reports/>
115. *Asbestos Banned in All Manufactured Products*. June 30, 2009. http://english.chosun.com/site/data/html_dir/2009/06/30/2009063000502.html
- Ho-jeong L. *Asbestos Found in 17 products in 6 categories*. JoongAng Daily. July 23, 2009. <http://joongangdaily.joins.com/article/view.asp?aid=2907785>
116. Han J. *Regulations on Asbestos Will Be Tightened*. July 21, 2009. http://www.koreatimes.co.kr/www/news/nation/2009/07/113_48849.html
117. Between 1999 and 2003, forty claimants who contracted asbestos-related diseases through occupational exposures at the base received compensation as a result of judicial rulings and negotiated settlements. *Gov't ordered to pay 76.84 million over U.S. base worker's asbestos-related death*. The Mainichi Daily News. July 6, 2009. <http://mdn.mainichi.jp/mdnnews/national/archive/news/2009/07/06/20090706p2a00m0na017000c.html>
118. *Chubu Electric Power ordered to compensate family over worker's asbestos-related death*. Mainichi Daily News. July 8,

Conference delegates participate in protests and tributes on International Workers' Memorial Day in central Hong Kong, April 28, 2009





Report: Asian Asbestos Conference 2009

Asia has long needed a coordinated approach to the problem of widespread asbestos use. While some countries in the region, such as Japan and Korea, have already instituted bans, others continue to mine, import, process or use asbestos. In recent years, however, an upsurge in ban asbestos activism has begun to impact on the asbestos debate in Asia; the Asian Asbestos Conference 2009 (AAC 2009) was a result of increasing collaboration amongst groups and individuals determined to confront the asbestos scandal.

This publication provides an opportunity to examine the wide range of material presented at the conference and relate discussions which took place on the evolution of the campaign to eliminate asbestos-related diseases in a region which accounts for the majority of global asbestos consumption. At the conclusion of AAC 2009, the formation of a new group – the Asian Ban Asbestos Network – was announced.