



**INDONESIA  
& KOREA  
ASBESTOS  
WORKSHOP**

HOTEL BUMI WIYATA | NOVEMBER  
DEPOK - INDONESIA | 20 / 2013

**ASBESTOS WORKSHOP**

**DANGEROUS**  
**ASBESTOS**   
**TRADE IN ASIA**

**DATE**

November 20, 2013

**PLACE**

Hotel Bumi Wiyata, Depok - Indonesia

**ORGANISERS**

INDONESIA : INA-BAN, Local Initiative for OSH Network - Indonesia  
KOREA : BANKO, ACCEH, SEOUL National University, Bussan Committe

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# ASBESTOS WORKSHOP : DANGEROUS ASBESTOS TRADE IN ASIA

## DEPOK, NOVEMBER 20, 2013

### BACKGROUND

In 2008-2011, Seoul National University and BANKO (Ban Asbestos Network Korea) together with BANJAN (Ban Asbestos Network Japan) conducted a research regarding working conditions and environment around a Korea and Indonesia joint asbestos textile factory in Indonesia. In 2013, the results of these studies were published at the American Journal of Industrial Medicine. Results of these studies mention that three workers were diagnosed as early asbestosis which is a typical asbestos related disease.

The result is a big step, because until now there is no official announcement from the government regarding diseases caused by asbestos. but when viewed from the potential of a person exposed to the diseases caused by asbestos is very high, when viewed from a few things, first; asbestos imports of raw materials in Indonesia continues to increase every year and according to the U.S. Geological Survey Minerals Yearbook, in 2012 Indonesia has imported about 162,418 metric ton. The second, the number of workers who working in asbestos factories in Indonesia, according to data from the minister in 2004 to 7000 people with less decent working conditions. Third, Indonesia produces materials made of asbestos has been quite a while since the year 1959 and the fourth, asbestos materials that are easily found in public spaces. And besides that Indonesia as a disaster area that allows asbestos roofing material is easily damaged and detached so that asbestos dust can be easily inhaled by humans.

Publishing the results of research in medical journals in America should be promoted and encouraged a policy advocacy on the use of asbestos in Indonesia.

### OBJECTIVE

Disseminating the results of research on asbestos in Indonesia to the community of experts and policy makers so that they care about and are involved in policy advocacy related to asbestos in Indonesia.

### OBJECTIVES:

1. Share results of Korean doctors' research study.
2. Educate experts (doctors, academics and environmentalist health professionals) and students about the use of asbestos in Indonesia and its health effects.
3. Encourage further research on asbestos in Indonesia, so the public can become aware and concerned about the dangers of asbestos
4. Encourage experts (doctors, academics and environmental health professionals) and students to be more involved in policy concerning asbestos in Indonesia.

### PROPOSED TIME AND PLACE OF ACTIVITIES

The activities conducted on Wednesday, November 20, 2013 at the Hotel Bumi Wiyata, Depok, Indonesia.

### METHOD OF ACTIVITIES

Presentation and Discussion

### PARTICIPANT

This workshop attended by 30 people from :

1. OSH Academic and Medical Communities
2. Medical and Public Health Lecturers
3. Environment and Public Health Professionals
4. Student
5. NGO
7. Asbestos workers

# TIME SCHEDULE

TIME	ACTIVITIES	DESCRIPTION	PIC
08.00 - 09.00	Registration and Opening		LION
09.00 - 10.30	Session 1	<ul style="list-style-type: none"> <li>- Background and result of the survey of PT JEIL FARJAR and PT TRIGRAHA, a joint venture, Korea and Indonesia, of asbestos textile in Cibinong, Bogor, Indonesia. – Yeyong CHOI (Ph.D. and director of Asian Citizen's Center for Environment and Health)</li> <li>- Three asbestosis cases and Radiological decision process of the PT TRIGRAHA – Domyung PAEK (Professor of Seoul National University, School of Public Health, Ph.D. and MD)</li> </ul>	LION, BANKO
10.30 - 10.45	Coffe Break		
10.45 - 12.00	Discussion and Sharing		LION, BANKO
12.00 - 13.00	Break-Lunch		
13.00 - 14.00	Session 2	Asbestos exposure and health problems; disease and diagnosis - Presented by Domyung PAEK (Professor of Seoul National University, School of Public Health, Ph.D. and MD)	
14.00 - 15.00	Testimony	Asbestos Patient's Voice <ul style="list-style-type: none"> <li>- Youngku PARK; occupational asbestosis, former JEIL E&amp;S asbestos textile worker</li> <li>- Jiyol JUNG; occupational and environmental asbestosis, former miner and resident around asbestos mines</li> </ul>	BANKO
15.00 - 16.00	Discussion and Sharing		LION
16.00	Closing and Coffe Break		



## SUMMARY MINUTES

# ASBESTOS WORKSHOP FEATURING KOREAN RESEARCHERS REPORTS OF EARLY ASBESTOSIS CASES IN INDONESIA

### Attendees

**Muchamad Darisman** – Local Initiative for OSH Network, Bandung

**Dimu Pratama** - Local Initiative for OSH Network, Bandung

**Ajat Sudrajat** - Local Initiative for OSH Network, Bandung

**Nurhayati (Noor)** - Local Initiative for OSH Network, Bandung

**Aldion**- Local Initiative for OSH Network, Bandung - Asian

**Dr. Domyung Paek** - Citizen's Center for Environmental and Health, Seoul National University, School of Public Health, Occupational and Environmental Health

**Yeyong Choi, PhD** - Asian Citizen's Center for Environmental and Health, Seoul National University, School of Public Health, Occupational and Environmental Health

**Kim**, Asian Citizen's Center for Environmental and Health, Seoul National University, School of Public Health, Occupational and Environmental Health

**Suk-keon Lee** – Korea Institute of Labor Safety and Health, Busan Joint Action Committee against Asbestos

**Youngku Park** - Asbestosis Victim, Former JEIL E&S Asbestos Textile Worker from Korean

**Jiyol Jung** - Asbestosis Victim, Former miner and resident near Asbestos mines in Busan, Korea

**Rubby Emir** - Humanitarian Benchmark Consulting

**Karen Gunderson** - Developing World Outreach Initiative, American Industrial Hygiene Association

**Ike Pujiriani** - University of Indonesia, School of Public Health, OSH Department

**Mila Tejemaya, PhD**, - University of Indonesia, School of Public Health, Occupational Safety & Health

**Ike Pratiwi** - University of Indonesia, School of Public Health, Occupational Safety & Health

**Lassie Fitria** - University of Indonesia, School of Public Health, Occupational Safety & Health

**Rio Syidel Mursyid** - MPH University of Indonesia, works at Oil and Gas Company

**Dr. Riska Marini** - Occupational Public Health Service Center, Bogor, Indonesia

**Dr. Harumiti Ramli**- Occupational Public Health Service Center, Bogor, Indonesia

**Nurdin** -, Public Health Legal Aid

**Amri** – National Worker's Union

**Gerardus Gegen**– Advocacy Lawyer Public Health Legal Aid

**Dadang** - Workers' Union, PT Siam Indo Asbestos Cement Roofing

**Soebono** - Workers' Union, PT Siam Indo Asbestos Cement Roofing

**Arif** - Workers' Union, PT Siam Indo Asbestos Cement Roofing

**Nana S** – Worker, PT Trigraha Asbestos Textile Factory, Bogor, Indonesia

**Siti** – Worker, PT Trigraha Asbestos Textile Factory, Bogor, Indonesia

**Tunyah**- Worker, PT Trigraha Asbestos Textile Factory, Bogor, Indonesia

**Khamid Istakhori** - Union Leader

**Anggita Dwi Prasanty**, Local Initiative for OSH Network, Translator

**Jhon Dean**, Local Initiative for OSH Network, Translator

## PRESENTATIONS:

### BACKGROUND AND RESEARCH, “TRADES OF DANGERS, A STUDY OF ASBESTOS INDUSTRY TRANSFER CASES IN ASIA” (AM JINDMED, 2013 MAR; 56(3):335-4).

*Presented by Yeyong Choi,  
Director of Asian Citizen's Center for  
Environment and Health.*



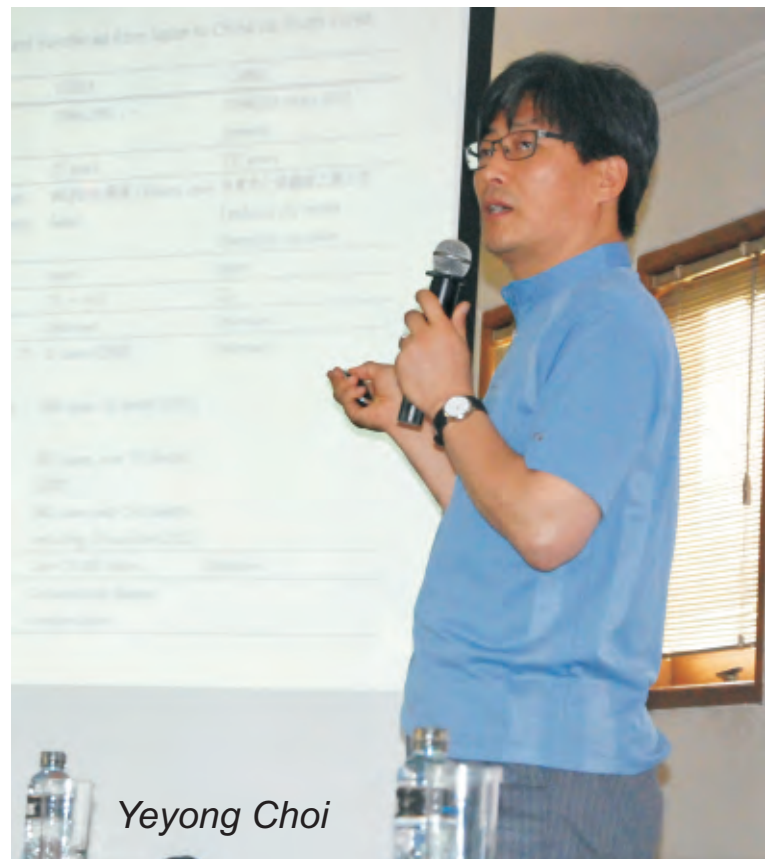
Dr. Choi explained that asbestos has been mined since the early 1900's and worldwide production increased steadily until the mid 1970's. The peak was reached in 1975 when 5 million tons were produced and consumed worldwide. Production then steadily dropped until the mid 1990's and has stayed level due to increasing consumption by Indonesia, India and China. Indonesia's consumption of asbestos increased greatly from 2005 to 2011, making it the third largest consumer in the world: 124,049 tons were used in 2011.

The asbestos processing industry was transferred from more developed countries (Germany, Japan) to Korea and then to countries with less developed economies, such as Indonesia, Phillipines and Malaysia. Korean banned the use of all forms of asbestos in 2009. The factories featured in the study, PT Jeil Fajar and PT Trigrha are joint Korean-Indonesian ventures. Workers typically only wear surgical masks which provide no protection. Their study showed that asbestos

residuals were found in neighborhoods within a 500 meter radius of these factories. Since Canada banned the export of asbestos in 2012, most asbestos imported into Indonesia now comes from Russia. Unfortunately, hazard warnings on the bags are in Russian or English and are not well understood by workers.

At the World Health Organization Asbestos conference last September, no asbestos related illnesses were reported, despite the fact that the “Trades of Danger” paper identified three early asbestosis cases. He explained that even after asbestos is banned and exposures from mining and manufacturing cease, exposures continue as the products are used, disposed of, and reside for years in the environment.

Dr. Choi finished by sharing his slide with the “Things to Do in Indonesia” regarding the use of asbestos.



## PRESENTATIONS: A STUDY OF ASBESTOSIS IN INDONESIAN ASBESTOS TEXTILE FACTORY.

*Presented by Domyung Paek, MD, Msc,  
ScD, Professor,  
Former Dean Seoul National University,  
School of Public Health*



Dr. Paek stated that while asbestos manufacturing technology has been transferred to developing nations, the health and safety technology has not. For example, Pak Youngku, one of the Korean victims present at the workshop, remembered during his time at PT Jeil Textiles (1971-78), the workers were provided increasingly effective respiratory protection. First they were given a paper mask, then a plastic mask, and finally a filter cartridge mask to wear. In comparison, Ibu Siti, the Indonesian asbestosis victim present

at the workshop who is a 22 year employee of the Korean-Indonesian PT Trigraha textile factory has only been provided a fabric mask when handling asbestos. She never was given a filter mask over all those years and a fabric mask does not provide protection from asbestos fibers. The airborne levels of the textile factory PT Jeil Fajar in Indonesia have been measured at 6-7 fibers/cc, while the exposure limit in Korea is less than 0.1 fiber/cc.

Korean asbestosis victims are currently suing their former employers, Korean asbestos companies. They are also trying to sue the Japanese parent company. He stated that it is possible for Indonesian victims of joint Indonesian-Korean companies to consider suing Korean companies as well.

He reviewed the process used to identify the three Indonesian asbestosis victims. He explained that in 2008, health exams were given to the employees at PT Jeil Fajar and PT Trigraha. The health reviews started out as a joint process between Indonesian Hiperkas (now known at Pusat K3) and Korean and Japan health officials. They took x-rays of over 100 people and the Indonesian government brought the x-rays to Korea. Two Korean x-ray readers and one Japanese x-ray reader reviewed the x-rays and found some suspicious cases. After the first x-rays were read, the Indonesian government stopped participating. Since a simple x-ray cannot conclusively diagnose asbestosis, Darisman from LION took CT scans of the most suspicious 5-10 cases. From that group, the most suspicious five cases were examined via HRCT scans.

The HRCT results were read by 3 independent readers with a criteria requiring positive identification of asbestosis by 2 of 3 readers to confirm the diagnosis. Three individuals from PT Trigraha were found to have early asbestosis from these tests. Dr Paek then showed slides of the HRCT scans showing the abnormal thickening and dotted features along the pleural wall of the three affected



employees. Dr. Paek shared a graph that shows that with more years of exposure, the greater the frequency of asbestosis cases.

There was some discussion with the audience about how some factories, such as DJAsbesmen, have been monitored by a University of Indonesia researcher and all exposures were below the Indonesian TLV (0.2 -2.0 fibers/cc, depending on type) since 1980. This could be possible if the process is done in a wet condition and with local exhaust. It was suggested that these kind of controls were likely not in place at PT Trigraha.

Dr Paek stated that if you track long term chest/lung function and x-rays of workers exposed to asbestos, you will find evidence of asbestos related disease. He said “If you do not suspect, you may not see”. He suggested having a mindset of trying to find it.



Suk-koun Lee

## PRESENTATIONS:

### ASBESTOS LITIGATION IN BUSAN, KOREAN.

*Presented by Suk-koun Lee,  
Korea Institute of Labor Safety & Health,  
Busan Joint Action Committee Against  
Asbestos*

Mrs. Lee explained that there were a total of 77 factories permitted to use asbestos in their manufacturing processes between 1991 and 2006. Two areas had the highest concentrations of factories: Seoul/Kyeong-gi (25) and Busan/Kyeong-nam (28). There were also many asbestos mines in the Busan area. For example, the PT Jeil E&S Factory started operation in 1969 in Busan and was the first and largest asbestos factory in the Korea, resulting in decades of exposure for its workers.

Asbestos related disease cases and deaths have been recorded from both workers (21 workers sick, 46 dead) and people who lived in the vicinity of the mines and factories in Busan (16 residents sick, 8 dead). Class action lawsuits were organized for living and deceased victims; these were the first environmental damage lawsuits ever heard Korea. JEIL E&S, NICHIAS (Japan parent company), and the Korean government were named as defendants, but only the local company JEIL E&S was found guilty in 2012. The company has been ordered to pay damages for 90% of the occupational cases and 60% of the environmental resident cases. The decision was appealed to also blame the Japanese company and the government, but a higher court dismissed it in 2013. At present, the lawsuit is being heard in the Korean Supreme Court and lawyers are targeting the Japanese company NICHIAS to pay compensation to victims since they also benefitted.

The Korean court rulings have the following significance:

- a. Acknowledgement that the company was responsible for asbestos-related disease in workers.
- b. Recognition that the company was also responsible for environmental victims, not just workers.
- c. Acknowledgement that environmental exposure as far as 2 km from the plant impacted residents and that wind direction affected exposure.

Mrs. Lee suggested that Korea and Indonesia increase their collaboration to find more victims, support awareness campaigns, have more workshops, and learn from each other how to advocate for victims.

## PRESENTATIONS: DIAGNOSIS AND MANAGEMENT FRAMEWORK OF ASBESTOSIS.

*Presented by Domyung Paek, MD, Msc, ScD, Professor,  
Former Dean Seoul National University,  
School of Public Health*

Dr. Paek started his presentation by reviewing the history and purpose of the Chrysotile Institute. This organization is a non-profit organization started in Canada when it still mined and exported asbestos. It is funded by businesses that mine and sell asbestos (mainly Russian at present). Originally it was named the Asbestos Institute, but the name was changed to the Chrysotile Institute because of the negative connections with the word asbestos. The Chrysotile Institute attests that there are three main reasons why chrysotile is safe:

1. Controlled use (ventilation, enclosures, etc.) will prevent exposure.
2. It has a shorter duration in the body than the more toxic forms of asbestos (lower biopersistence).
3. Any ill effects from chrysotile come from contamination of it with more hazardous asbestos forms (tremolite, crocidolite, etc).



He then showed the group why the last two arguments are false. He reviewed the anatomy of the lung to show that as the airway tubes in the lung branch off about 17 times into smaller and smaller breathing passageways until they form small lobules with alveoli where air exchange occurs. The alveoli is where the asbestos fibers end up when they are inhaled and are attacked by macrophages. They are either removed through phlegm (spit) or get stuck. The Chrysotile Institute claims they are removed, but Dr. Paek explained that asbestos fibers can cause damage to the lungs and set up the inflammation/fibrosis process prior to removal. He compared it to disinfectant contaminants in vaporizers in Korea. In those cases the damaging disinfectant is only in the lung a short time (less than a day), but it is long enough to cause damage. It is similar with chrysotile. Whether it takes 18 days, a month, or a year.. it doesn't matter. The chrysotile starts the inflammatory process in the deep part of the lung and asbestos related disease can occur. Many international studies with chrysotile only exposures have shown that asbestos related disease can result.



*Domyung Paek*



Dr Paek reviewed the basics of diagnosing asbestosis, showing the unique fibrotic patterns in the lungs (honeycomb, dots, and lines). He explained how the initial lesions progress over time, even after the exposure has stopped. He discussed the process the government in Korea uses to determine if an asbestos related disease is compensable. He then discussed Indonesia's Jamsostek compensation system. He said it is a good system, especially for acute conditions and accidents, but needs to expand to cover long term disease. He asked Indonesians to think about the prevention of illness by evaluating hazards and identifying potential victims through screening and surveillance. He stated that "People do not pay attention to prevention unless compensation is expected". With compensation mandated for victims, there is an economic incentive for preventing disease.

He reviewed the recent history of asbestos use in Korea, stating how after the first asbestosis cases were identified in Korea, many industries moved to China and Indonesia. Some businesses stayed and switched to other technologies. Dr Paek asked this question... If we know there are alternatives to satisfy needs, why not use the alternative? Why not yet?

## TESTIMONY FROM YOUNG KU PARK

*Former Employee of PT Jeil E&S, Korea*

Youngku told the group how he worked at PT Jeil E&S Textiles from 1971 to 1978 and now suffers from asbestosis. He said most workers at that time did not know the hazards of the asbestos. He tearfully told the group how his wife, who also worked at the factory, died of asbestosis-like symptoms at only 35 years of age.

Later after her death, he was diagnosed with asbestosis. His first symptoms were getting colds more often, then difficulty climbing stairs.

Now he has breathing trouble even when walking on level ground and a severe cough. Talking sometimes leads to cough attacks and prevents him from leading a normal life. He is worried because he has seen friends at the end of their lives continuously short of breath and using oxygen supply to stay alive.

He and other victims formed the Busan Asbestos Victims and Families Network in 2007. They meet every other month. Their goal is to find other co-workers with the asbestos related conditions and get legal help for them all. Currently their group has 180 members, including family members. Every year, one or two members die. In Korea, average life expectancy is over 80 years old, but in their group it is about 57 years due to asbestosis related disease. Many have died in their late 30's and 40's.

It makes him very sad.



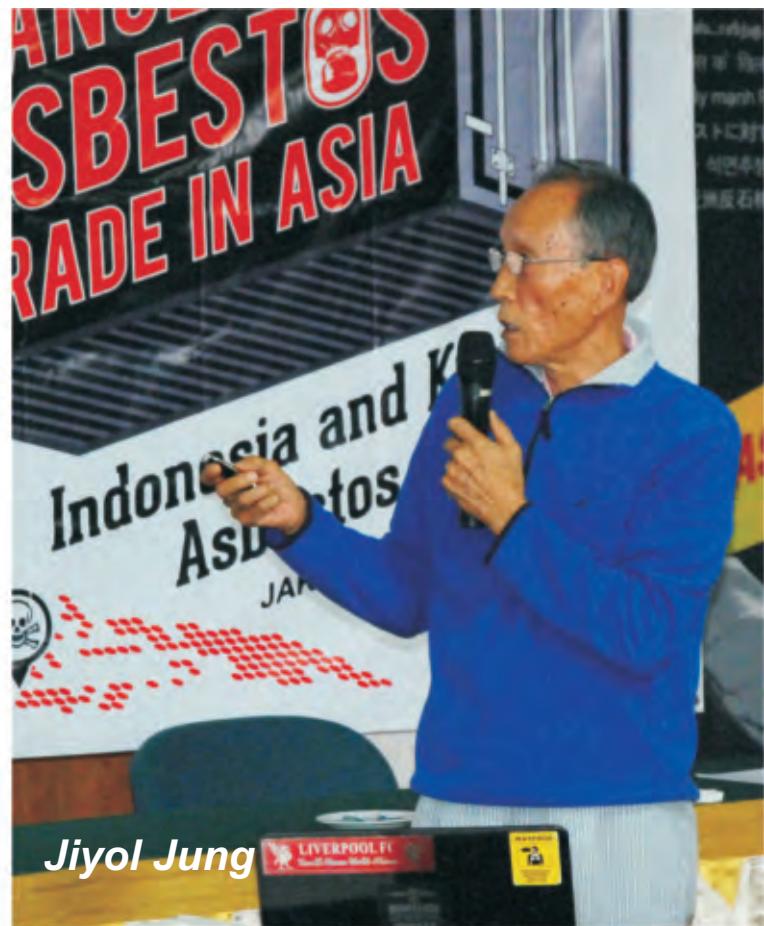
*Young ku Park*

## TESTIMONY FROM JIYOL JUNG

*Former Miner and Resident Near Busan Asbestos Mines*

Jiyol is of Korean-Japanese descent. He lives in Busan, Korea, in an area of many asbestos mines. He showed photos of the old mining days in the 1930's when 140,000 tons of chrysotile was mined near his hometown. The mining continued for many years and he himself was a miner in the asbestos mines. He showed slides of his family tree, showing that eight of his family members have been affected by asbestos related disease, including himself. Two of them have lung disease and six have already died. One of the eight family members never worked in the mine. He was affected by environmental exposures only.

He explained that the relief/compensation was only equal to two years of salary, which is inadequate for the disease's long duration and its disabling effects. He feels that those who benefitted from asbestos workers' labor should pay compensation to the sick workers.. the automobile, construction, electronics and cement companies.



## TESTIMONY FROM SITI

*Employee of PT Trigraha Asbestos Textile Factory, Cibinong, Indonesia.*

Siti is has been working at PT Trigraha since 1991. She is one of the early asbestosis cases diagnosed in the "Trades of Danger" research paper with the HRCT scan. She said after 20 years of work, she noticed that she had a cough. She said the local doctors noticed a fleck on her lungs and prescribed her medicine to take for 6 months (similar to TB treatment). She recently went back to the clinic and the doctor told her she was okay now. She has been told by LION that she has asbestosis, but she still continues to work at the factory. She needs the money for her family.





# PHOTO GALLERY

