# The Long Journey to a Total Ban on Asbestos in Hong Kong

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### **OUTLINE**

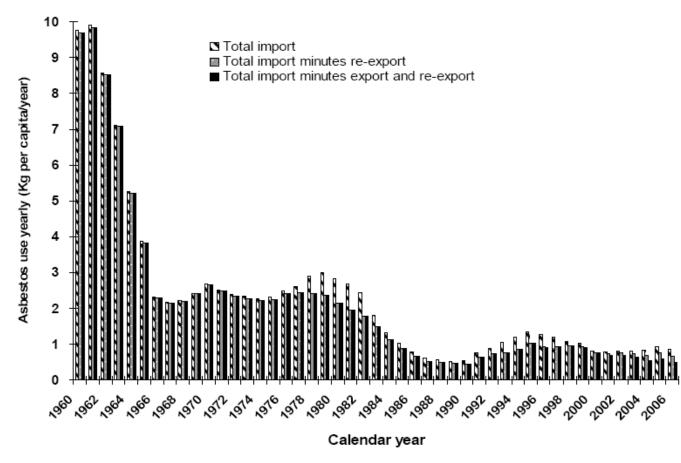
- 30 years to achieve asbestos ban in Hong Kong
- Remaining issues to be tackled
- Other issues

# Once Upon a Time .....

- Being a seaport, Hong Kong has a very long history of using asbestos in ship building and maintenance.
- The massive public housing development projects that started in the mid-1950s sparked off the explosive increase use of asbestos in building materials and somewhat laid the time bomb.
- The peak local consumption of asbestos was in the early 1960s, with an average annual amount of over 30 million Kg or around 10 Kg per capita.

# **Asbestos Use in Hong Kong**

- Large amounts of asbestos were consumed in Hong Kong during 1960-80s
- The highest level of asbestos consumption in Hong Kong was during 1960-63, with an average annual amount of over 30 million Kg.



Annual per capita asbestos use (kg/capita/year) in Hong Kong during 1960-2006 [total import; total import minus re-export; total import minus export and re-export], using centered moving average method by a 5-year interval

Tse LA, et al. EHP 2009

# First report of asbestos-related diseases in Hong Kong - 1983

Trop Geogr Med. 1983 Sep;35(3):225-9.

First report of asbestos-related diseases in Hong Kong.

Lam WK, Kung TM, Ma PL, So SY, Mok CK.

#### Abstract

There has been no report of malignant mesothelioma or asbestosis in Hong Kong despite the rapid growth of industry in the past few decades. Three patients with malignant pleural mesothelioma and one patient with asbestosis and small cell carcinoma of the lung are reported. All four patients were Chinese in Hong Kong and had a history of occupational exposure of asbestos. Although there is no mining of asbestos in Hong Kong, her rapid industrialization in the past few decades has led to a large population of asbestos-exposed workers in industry. The average annual consumption of crude asbestos (import minus re-export) has grown ten-fold in the past decade to 1.090 tonnes in 1978-79, and the number of workers handling asbestos products was estimated to be 20.000 in 1979. The problem of asbestos related diseases has however been little considered and further epidemiologic studies are warranted.

NGO, Academia	Advocacies and Action
Association for the Promotion of Occupational Health (APOH, predecessor of Hong Kong Workers' Health Center)	<ul> <li>Published a special issue of "Occupation and Health" focusing on asbestos being a hidden killer(1984)</li> <li>Jointly organized a public forum with HKWHC — Asbestos and You</li> <li>Published comments on the proposed asbestos control legislation (03-1986)</li> </ul>
Hong Kong Workers Health Center (HKWHC)	•Published an Editorial commenting on the implementation of the new asbestos control legislation (12-1986)

### **1984 – 1989**

### **Legislative and Administrative Changes**

- The first piece of legislation related to asbestos was introduced in 1986
- Factories and Industrial Undertakings (Asbestos) Special Regulation [1986]
- Defining asbestos work and stipulated the related actions to be taken, including workplace assessment, personal protection and medical examinations.
- The 'Action Level' was defined by cumulative exposures to asbestos over a continuous 12-week period and set differently for chrysotile and other forms of asbestos, with the former being double that of the latter (96 fibre-hours vs. 48 fibre-hours per millilitre of air).
- Prohibitions (spraying, insulation, amphibole)

### **Legislative and Administrative Changes**

- Unfortunately, the legislation enacted in 1986 did not protect workers dealing with asbestos, as a result of the cumbersome definitions adopted.
- An employer could simply defend by saying s/he had no knowledge of the presence of asbestos in the workplace and took no actions at all!
- It was also extremely difficult, if not impossible, for the law enforcers to prove that the regulatory exposures levels were exceeded due to the long cumulative exposure period defined in the law.

NGO, Academia	Advocacies and Action
Medical doctors from United Christian Hospital	Journal of the Hong Kong Medical Association Vol. 39, No. 1, 1987
	Asbestosis Confirmed on Transbronchial Biopsy T.S. Yu, C.Y. Tse & M.T.P. Simon
Construction Industry Employees General Union (HKCIEGU)	•Jointly organized with <b>HKWHC</b> a public forum on Asbestos Hazards, urging the Government to amend the asbestos control legislation (12-1989)
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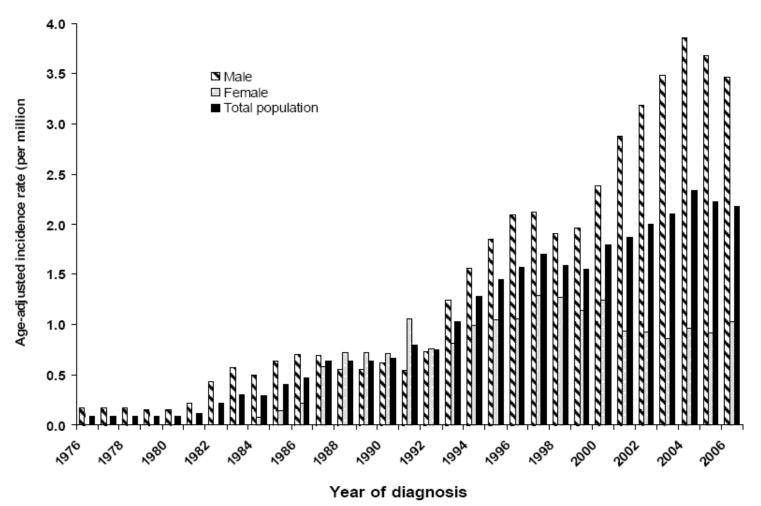
- The NGOs and unions continued their advocacies for better legislation and law enforcement.
- By mid 1990s, the harmful effects of exposures to asbestos were already quite widely known in Hong Kong and overall consumption had decreased substantially, thanks to the unceasing efforts of NGOs and unions.

### **Legislative and Administrative Changes**

- The second piece of legislation related to asbestos was introduced in 1996 under the Air Pollution Control Ordinance (Control of Environmental Asbestos)
- Ban on import and sale of amosite and crocidolite
- Chrysotile could continue to be imported and used!
- Factories and Industrial Undertakings (Asbestos) Regulation [1997]

- Understanding that all forms of asbestos were harmful and carcinogenic, NGOs and unions continued to advocate for a total ban of all forms of asbestos in the late 1990s and 2000s.
- More and more cases of mesothelioma were reported in the late 1990s and 2000s.
- HKWHC partnered with Pneumoconiosis Mutual Aid Association (PMAA) in pressuring the Government to provide compensation for workers with mesothelioma.

# Mesothelioma



Age standardized incidence rate of mesothelioma among Hong Kong general population during 1976-2006, using centered moving average method by a 5-year interval (note: no female case was reported before 1986)

Tse LA, et al. EHP 2009

NGO, Academia	Advocacies and Action
Hong Kong Workers Health Center (HKWHC)	•Published an Editorial in Occupational and Health advocating a total ban on asbestos, including import, transshipment, use and sale of all forms of asbestos and asbestos containing materials (12-2007)
Hong Kong Workers Health Center (HKWHC)	•Press conference on asbestos hazards associated with maintenance of old buildings — requesting the Government to do proper assessments before maintenance work, and prepare a list of all old buildings containing asbestos in Hong Kong for the Urban Renewal Plan (03-2009)

NGO, Academia	Advocacies and Action
Asia Monitor Research Center (AMRC), HKCTU, ARIAV and IBAS	<ul> <li>The second Asian Asbestos Conference held in Hong Kong provided additional pressure on the Government to act towards a total ban (04-2009)</li> <li>Hong Kong Declaration towards a Complete Ban on All forms of Asbestos</li> <li>The Asian Ban Asbestos Network (A-BAN) was formed</li> </ul>

 Academics in the Chinese University of Hong Kong have been doing research and publishing high quality papers that documented the important impact of the use of asbestos on mesothelioma in the population, as well as confirmed the carcinogenic property of Chrysotile.

#### Research

# Are Current or Future Mesothelioma Epidemics in Hong Kong the Tragic Legacy of Uncontrolled Use of Asbestos in the Past?

Lap Ah Tse,<sup>1</sup> Ignatius Tak-sun Yu,<sup>1</sup> William Goggins,<sup>1</sup> Mark Clements,<sup>2</sup> Xiao Rong Wang,<sup>1</sup> Joseph Siu-kie Au,<sup>3</sup> and Kai Shing Yu<sup>1</sup>

<sup>1</sup>School of Public Health and Primary Care, Chinese University of Hong Kong, Hong Kong, China; <sup>2</sup>National Centre for Epidemiology and Population Health, Australian National University, Canberra, Australia; <sup>3</sup>Department of Clinical Oncology, Queen Elizabeth Hospital, Kowloon, Hong Kong SAR, China

**EHP 2010** 

#### A 37-Year Cohort Study on Mortality of Chrysotile Asbestos Workers in China

Xiaorong Wang<sup>1</sup>, Hong Qiu<sup>1</sup>, Ignatius Yu<sup>1</sup>, LA Tse<sup>1</sup>, Eiji Yano<sup>2</sup>

<sup>1</sup>Division of Occupational and Environmental Health, School of Public Health and Primary Care, The Chinese University of Hong Kong, Hong Kong; <sup>2</sup>Department of Hygiene and Public Health, Teikyo University School of Medicine, Tokyo, Japan

**Thorax 2012** 

NGO, Academia	Advocacies and Action	
Pneumoconiosis Compensation Fund Board (PCFB), HKWHC	<ul> <li>Published a series of educational kits on asbestos hazards in different industries (2010)</li> </ul>	
Hong Kong Workers Health Center (HKWHC)	•Press conferences – asbestos hazards associated with maintenance and demolition of old buildings in Hong Kong (2010 – 2011)	
No More Asbestos in Hong Kong Alliance, ARIAV	•Demonstration requesting the Government to have a total ban of asbestos (05-2011)	

NGO, Academia	Advocacies and Action
HKCIEGU	•Press conference – advocating the set up of a special funding to support asbestos removal and demolition works (03-2012)
HKWHC	•Provided comments to legislators on the proposed legislation on banning asbestos and brought into attention the dumping of asbestos wastes in the rural areas (07-2012 – 02-2013)
No More Asbestos in Hong Kong Alliance, ARIAV	•Organized a protest in a village advocating earlier implementation of total asbestos ban and compilation of list of buildings containing asbestos (08-2013)

NGO, Academia	Advocacies and Action
HKWHC	•Raised concern over the proposed exemption of registered proprietary Chinese Medicine from asbestos ban (2013 - 2014)
PCFB	<ul> <li>Organized Conference on Joining Hands to Eliminate Asbestos Hazards</li> <li>Invited relevant Government Bureaus, employers, unions, NGOs and professional organizations to sign the Asbestos Risk Abatement Charter (11-2013)</li> </ul>

主辦機構 Organizer



肺塵埃沉着病補償基金委員會

PNEUMOCONIOSIS COMPENSATION FUND BOARD

### 攜手杜絕石棉危害研討會

Conference on Joining Hands to Eliminate Asbestos Hazards

地址 : 九龍尖沙咀梳士巴利道 41號北座 4樓

香港基督教青年會禮堂 (港鐵尖沙咀站L4或L6出口)

Address: Assembly Hall, 4/F., North Tower, YMCA, 41 Salisbury Road, Tsimshatsui, Kowloon,

Hong Kong

(MTR Tsimshatsui Station Exit L4 or L6)

日期:2013.11.07

Date: 2013.11.07 Time: 9:00 a.m. - 5:00 p.m. (Registration begins at 8:30 a.m.)

時間:上午九時至下午五時 (上午8:30開始登記)

支持機構 Supporting Organizations











#### 消滅石棉危害約章

#### **承数宣言**

**我們理解故同意一** 直以來石卷的使用,也對環境,連動第二次於公眾健康養改重大影響。

學止使用石構建創物料,應從有關法例及工作中則的無定所認及業置含 石構的建創物料,有助量與健康的工作及生活環境。 並減少石模反響與於國皮瘤的發生。

我們可以確應學家,清潔在標準書的行動。

執行

為 消滅石 被的危 害,我 們承 錯 致 力一 全面产业石 機應 单数移动使用,全支持看港全面使用石槽。

與社會上各時份會屬于命令,身體力行,推動到表 機能會的關注 並向國際要從集員,管理時間和中國大東國沙宣傳報的關急。

#### ASBESTOS RISK ABATEMENT CHARTER

STATEMENT OF COMMITMENT

We understand and agree that —
The origing use of absetce has caused substatial impacts on the environment,
the health of the continuation workers and the general public.

A barr on asbertoe containing construction materials and compliance with the network legislation and codes of practice in removing and deposing of labertoe containing contraction materials will be conducted to materialning a heality working and living environment, and reducing the incidence of salestimate and measure-failures.

We can play an active role in working to abate the hazards of asbestos.

#### IMPLEMENTATION

To abate the hazards of asbestos, we are committed to — Discontinuing completely the use of satestos containing construction materials and supporting a total ban on statestos in Forg Kong.

Removing and disposing of subsetos containing continuation materials according to the relevant legislative tequirements and codes of practice, and in particular, adopting effective protective measures to create a healthy working and bitting and arrangers, thereby reducing cases of assessmine and measurements.

Working in partnership with stakeholders in the contraunity and witting an example in promoting the severance of authorities fields, and widely publiciting preventive measures to previously in the construction inclusiny, the management, and the general public.



### **Legislative and Administrative Changes**

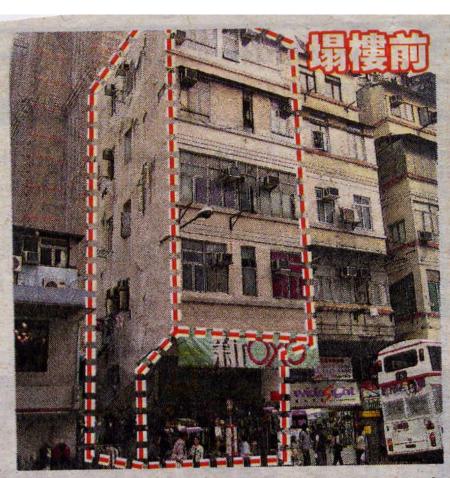
- Amendment of the Air Pollution Control Ordinance
- Banning all forms of asbestos and asbestos containing materials
- Corresponding changes to be made in the Factories and Industrial Undertakings (asbestos) Regulations

# But the story does not end here .....

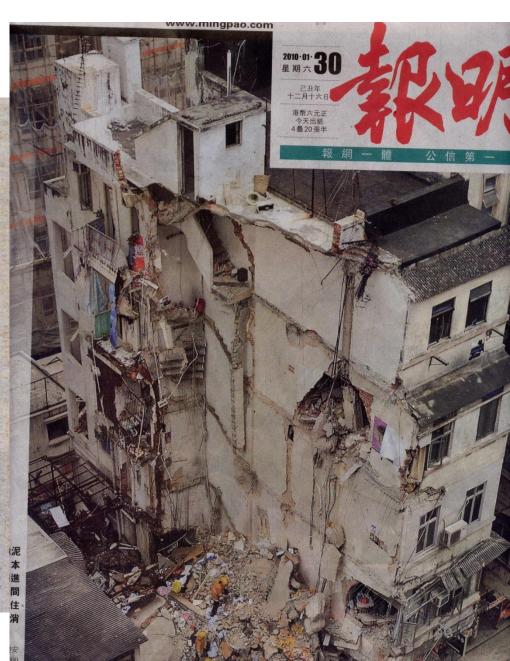
- The huge amounts of asbestos used (and locked) in the older buildings have laid time bombs for the present and future.
- Buildings in Hong Kong have relatively short life spans and the Government have a very aggressive urban renewal plan in order to provide more housing units to the residents by pulling down old buildings and replacing them by taller ones.
- According to the Hong Kong Urban Renewal Authority, most buildings aged 30 years or more were in unsatisfactory conditions, with 8,500 buildings aged 30 years or above in the Metro Area in 1998.

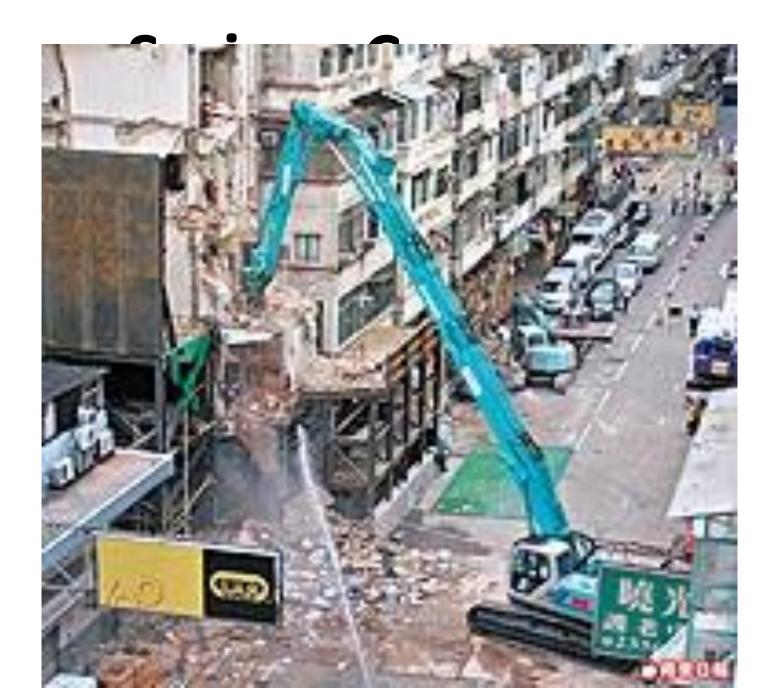
# But the story does not end here .....

- Many buildings will require substantial maintenance and renovation works, some will be demolished.
- According to the Environmental Protection
  Department, there are 15,600 buildings over
  20 years old in Hong Kong and 60% of such
  buildings likely contain asbestos.
- How can the workers and public be properly protected?



馬頭圍道45號J的唐樓倒塌,觸發公眾 關注本港舊樓維修的逼切性。





## Other issues

 The current asbestos ban provides two exemptions: 1) goods in transit; 2) the use of Actinolite in registered proprietary Chinese Medicine!





Composition: Tail Of Fur-Seal Semen Allii Tuberosi Deer Tail Bone Cervus Sika Temn Panax Ginseng Gekko Gecko Cinnamomom Cassia P. Epimedia Actinolite Morinda Officinalis How Rublis	3%(13.5mg) 3%(13.5mg) 5%(22.5mg) 5%(22.5mg) 5%(22.5mg)	Stegodonorien Talis Owen Polygonum Multi Florum Thunk Bombyx Mori L A. Henryl Oliv Achyranthes Bidenalata BI Paratendfra Sinensis Raw Et. Dry Glutinosa Libosch Discorea Batalus Desue Capsicum
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# Direction And Dosage: For general health:

Take 1 capsules each time, 2 times daily or as directed by physic

# Reflections

- Unions, NGOs and academics all contributed to the successful total legislative ban of asbestos in Hong Kong.
- Future problems associated with the secondary release of asbestos during building maintenance and demolition, and the exemptions provided by the current legislative will required further collaborations among all the stakeholders.

Hope you have enough food for thought ...



Thank you for your kind attention!