

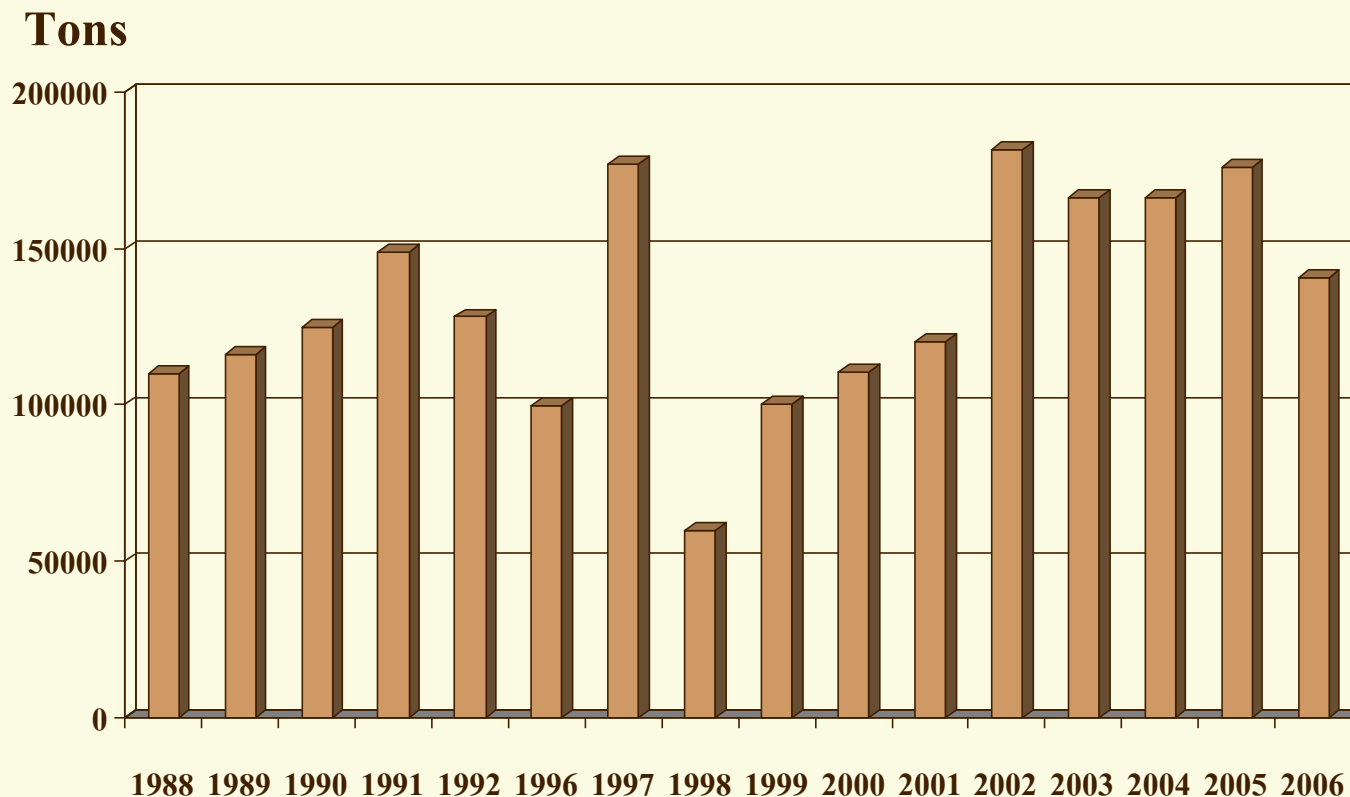


# Mesothelioma in Khon Kaen University Hospital, Thailand

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## Amount of imported asbestos in Thailand (1988-2006)



Siriruttanapruk S, MOPH, Thailand. Current asbestos situation in Thailand  
[www.envoc.org/.../Asbestos%20in%20Thailand%20Dr%20somkiat.ppt](http://www.envoc.org/.../Asbestos%20in%20Thailand%20Dr%20somkiat.ppt)

# Introduction

- 4<sup>th</sup> world largest consumer
- Thai Asbestos Occupational Exposure Limit (OEL) of 5 f/cc\*
- Very few cases of asbestosis or asbestos-related diseases

\*Takahashi K, Karjalainen A.

Int J Occup Environ Health. 2003 Jul-Sep;9(3):244-8.

# AAI-5, Busan, Korea

- Two cases of mesothelioma were presented
  - Road construction
  - Car wheel construction
- These two cases were published
  - Aim to increase physician awareness of asbestosis
- Cases of mesothelioma may be under reported

# Methods

- Mesothelioma was searched in KKU hospital database
- ICD-10 code of C45
- 1993-2012
- Charts were reviewed
  - Clinical
  - Exposure to asbestos

# Results

- C45: 60 cases
- 12 cases of mesothelioma
- 1 excluded: British patient
- Total of 11 mesothelioma patients
- Only 2 patients: exposure history were recorded by physicians

# Clinical features

- Median age of 48 years (range 24-71)
- 9 were male, 2 were female
- Median duration of symptom 2 months
- Sites of mesothelioma
  - Pleural 5
  - Lung and chest wall 2
  - Pericardial 2
  - Peritoneal 1
  - Pelvic 1

# Discussion

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### Results: 3

- [Malignant mesothelioma of the pericardium: a report of two different presentations.](#)
  1. Makarawate P, Chaosuwannakit N, Chindaprasirt J, Ungarreevittaya P, Chaiwiriyakul S, Wirasorn K, Kuptarnond C, Sawanyawisuth K.  
Case Rep Oncol Med. 2013;2013:356901. doi: 10.1155/2013/356901. Epub 2013 Aug 21.  
PMID: 24027648 [PubMed] **Free PMC Article**  
[Related citations](#)
- [Huge peritoneal malignant mesothelioma mimicking primary ovarian carcinoma.](#)
  2. Tangjitgamol S, Warnnissorn M, Attakettaworn K, Puripat N.  
J Med Assoc Thai. 2013 Jan;96(1):107-11.  
PMID: 23720986 [PubMed - indexed for MEDLINE]  
[Related citations](#)
- [Asbestos-related diseases in Thailand and review literature.](#)
  3. Subhannachart P, Dumavibhat N, Siriruttanapruk S.  
J Med Assoc Thai. 2012 Aug;95 Suppl 8:S71-6. Review.  
PMID: 23130478 [PubMed - indexed for MEDLINE]  
[Related citations](#)



# Cases of asbestosis in Thailand

- May be under reported
- Medical record system is not quite valid despite using ICD
  - Chart review of each patient is needed (12/65)
- History of asbestos exposure is needed to emphasize in medical education system in Thailand
  - Only two patients were recorded possible hazard exposure history

# Limitations

- Hospital based
- Not a location for asbestos-used factories
  - Nonthaburi (1), Bangkok (1), Khon Kaen (2)
  - Other sources of asbestos in environment
    - Building renovations
  - Migration of workers



# Limitations

- Asbestos exposure is limited, except 2 reported cases
  - 80% of mesothelioma caused by asbestos
  - Massive exposure may cause early mesothelioma
  - Confirmation of pathological diagnosis may be needed

# Conclusions

- Asbestosis and asbestos-related diseases in Thailand may be under reported
- Patient identification and report: national level
- Medical education on occupational health is needed to be emphasized
- Future trend of ARDs may be higher