Important dates

- 1860
- 1922
- 1947
- 1996
- 1998
- 1999
Important dates

1860
1922
1947
1996
1998
1999
Nova/stara izpostavljeność
Important dates

1860
1922
1947
1996
1998
1999
National directives for asbestos

Aims

1. Legislation

2. Collect the data about:
   – asbestos consumption,
   – production of asbestos and asbestos-cement products,
   – use of asbestos products

3. Collect the data about exposed workers

4. Collect the information about asbestos caused morbidity and mortality
National directives for asbestos

Aims

4. Collect available air measurements

5. Collect the information about the location of asbestos dump sides and assess the quantities of asbestos waste material
National directives for asbestos
Getting information

“Snow ball” princip

• Companies:
  » Salonit Anhovo
  » Donit Tesniti
  » Donit Filter
  » Donit Laminati
  » Fenolit
  » Fragmat
  » Izolirka
  » TIT Velika Loka
  » TVT Maribor
  » TMT Velika Loka
  » Slovenske železnice
National directives for asbestos

Getting information

Slovenian customs:

• permit for import of asbestos in 1997

Ministry of Health:

• Information about companies that demanded import-export permit for asbestos products in 1998

Slovenian Cancer Registry:

• Cluster analysis of mesotheliomas from 1959-1994
National directives for asbestos
Getting information

Questionnaire:

• Production
  • Quantities of asbestos use
  • Quantities of products made
  • Quantities of products sold at home market and abroad
  • Quantities and locations of products built in different buildings (objects)
  • “Lifetime” of produced products
National directives for asbestos

Getting information

Questionnaire:

• Workers
  • Quantity of yearly employed workers in asbestos factory
  • Quantity of yearly exposed workers
  • Names of exposed workers, birth dates, gender…
  • Asbestos related diseases
  • Exposure limits for different time periods
  • Health and safety education
  • Asbestos air measurements, methods used, locations, plans of plants…
  • Asbestos waste material (quantities, location: legal-illegal..)
  • Do they want to educate workers
National directives for asbestos
Getting information

Information about asb buildings:

- Schools (451+136) and kindergartens
- Cement-asbestos roofing and water pipes
National directives for asbestos

Results

Yearly consumption of asbestos from 1965 to 1997

Slovenia

Salonit Anhovo

asbestos in tons


Quantities of Amphiboles and Chrysotile (in tons) Used in the Manufacture of Asbestos-cement Sheets, 1963 to 1994
The diagnosis

State Board for the Recognition of Occupational Asbestos Diseases:

• occupational physician
• pulmonologist
• radiologist
PLEURAL DISEASES

- plevrnalni plaki
- difuzne zadebelitve plevre
- plevrnalni izliv
AZBESTOSIS

- brazgotinjenje pljučnega tkiva
- bolezen napreduje tudi po prenehanju izpostavljenosti
- povečano tveganje za razvoj pljučnega raka
LUNG CANCER
Date of hire, date of diagnosis and quantity of asbestos used by fibre type and by year

![Graph showing date of hire, date of diagnosis, and quantity of asbestos by fibre type and year.]
MESOTHELIOMA MLG.

- The most aggressive mlg. disease
- Avr. survival time: 17 months
- Latency period: up to 65 years
- Also at low exposure
Expected number of new cases of mesothelioma

\[ y = 2.3766x^2 - 6.8662x + 9.0714 \]

\[ R^2 = 0.9704 \]
Primeri smrti zaradi mezotelioma

Obdobje
- 1995-2002
- 1964-1994

Gostota
- Zelo Nizka
- Nizka
- Srednja
- Visoka
- Zelo Visoka
OTHER CANCERS

- Laryngeal ca
- Ovarian ca
  - Buccal mucus ca
  - Esophageal ca
  - Kidney ca
  - Intestinal ca

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Number Salonit</th>
<th>Number SI</th>
<th>Difference</th>
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### Results, disease/no disease

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<tr>
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Compensation

- Pleural diseases
- Asbestosis
- Mesothelima
- Lung cancer
- Environmental mesothelioma
- Others: gastrointestinal, laringeal (court)
# ASBESTOS RELATED DISEASES, COMPENSATION – 2014

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<thead>
<tr>
<th>DISEASE</th>
<th>MAX. COMPENSATION, EURO</th>
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<tr>
<td>PLEURAL DISEASES</td>
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<td>MESOTHELIOMA, LUNG CANCER…</td>
<td>46,991,55</td>
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- **60% RS – 40% EMPLOYER**
- **100% RS**
- EMPLOYER DOES NOT EXIST + ENVIRONMENTAL MESOTHELIOMA
THE STORM 2008
“Cleaning actions”

i.e Clean Slovenia in one day
Vinaz
Ministry of health

2nd National directives for asbestos
Thank you for your attention

Univerztetni klinični center ljubljana
Klinični inštitut za medicino dela, prometa in športa