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Pneumoconiosis

Sponsored by

肺塵埃沉着病補償基金委員會
PNEUMOCONIOSIS COMPENSATION FUND BOARD

Content

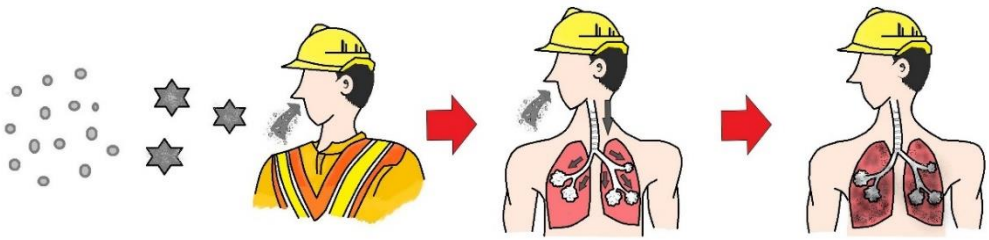
What is Pneumoconiosis ?

Pneumoconiosis is a group of diseases characterized by a diffuse fibrotic reaction in the lungs induced by the inhalation of organic or inorganic particulate matter and chemical fumes and vapors.

Silicosis and asbestosis are the most common types of pneumoconiosis in Hong Kong.

Silica and asbestos

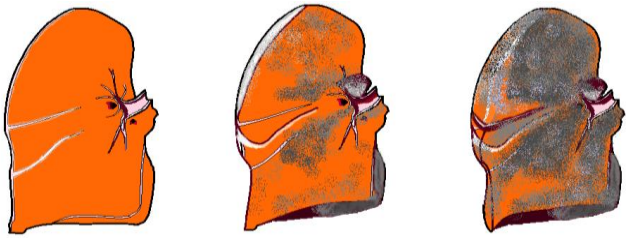
Several years later



Lung diagrams

Normal

Pneumoconiotic



Early stage

Late stage

Silicosis

Silicosis

- Fibrosis of the lungs caused by the inhalation of dust that contains free silica.
- Incubation period of 15–20 years.
- Incurable.

Am I at risk?

- Quartz, sandstone and granite rocks contain 99%, 80%, and 65% silica respectively.
- Workers involved in the following trades or processes may be exposed to silica dust:

Trades

- Quarry
- Construction
- Casting
- Monumental masons
- Glass Industry

Processes

- Drilling
- Trenching
- Cutting
- Mixing
- Metal Grinding

Asbestos-related diseases

Asbestosis

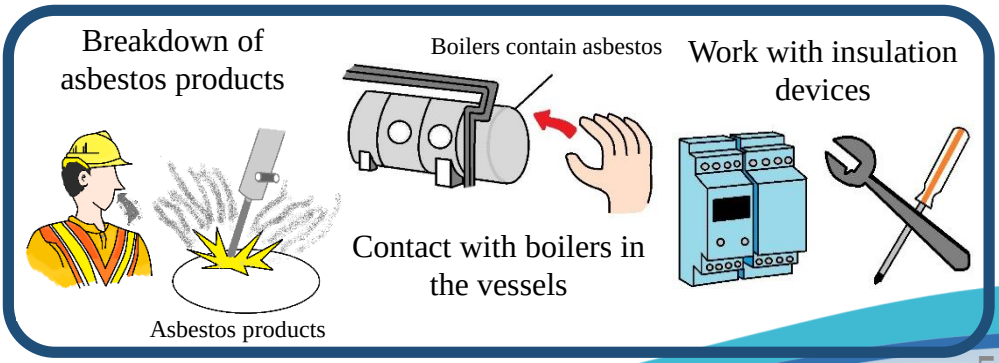
- Fibrosis of the lungs caused by the inhalation of dust that contains asbestos.
- Incubation period of 10–40 years.
- Incurable.

Mesothelioma

- Rare form of cancer of the pleura and peritoneum caused by exposure to asbestos.
- Incubation period of 30–40 years.
- Difficult to diagnose and treat.

Am I at risk?

- Asbestos was widely used in building construction before the 1970s. Asbestos fibers may be released if asbestos-containing structures become dilapidated or are damaged due to engineering work.
- Workers involved in the following processes may inhale asbestos fibers:



Symptoms, diagnosis, and treatment of pneumoconiosis

Symptoms of pneumoconiosis

- Cough
- Chest tightness
- Shortness of breath
- Fatigue

Symptoms may not be easily noticed at the early stage of the disease.

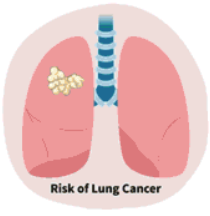
How is pneumoconiosis diagnosed?

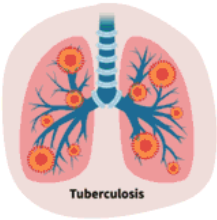
- Occupational and health history
- Physical examination
- Chest X-ray
- Pulmonary function test

How is pneumoconiosis treated?

- No proven curative treatment!!!

How pneumoconiosis affects me?

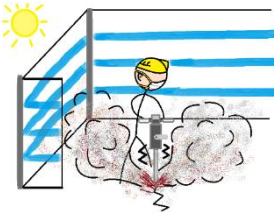




Preventive measures for pneumoconiosis

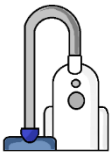
Limitation of work-related exposure to dust

Substitute silica or asbestos with less hazardous materials



Isolation (in space and by time)

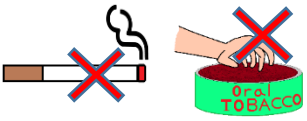
General dilution ventilation and local exhaust ventilation



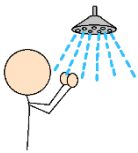
Prevent dust accumulation

Water spraying

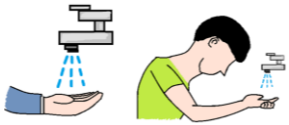
Implementation of personal protective measures



Do not smoke or use oral tobacco



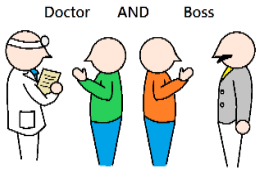
Shower before leaving the worksite



Wash face and hands before eating or drinking

Wash dusty clothing separately

Periodic medical examination



Report if you have any symptoms

Preventive measures for pneumoconiosis

Use of respiratory protective equipment

Air-purifying respirators

- Must not be used in an oxygen-deficient atmosphere or under conditions that are hazardous to life or health.




Respirators should only be used as the last resort!

Atmosphere-supplying respirators

- Should be used when the contaminant has insufficient odor, taste, or other irritating warning properties.


Respirators	Description
N-Series: N95/N99/N100	Filters at least 95%, 99%, 99.97% of airborne particles. Not resistant to oil.
R-Series: R95/R99/R100	Filters at least 95%, 99%, 99.97% of airborne particles. Somewhat resistant to oil.
P-Series: P95/P99/P100	Filters at least 95%, 99%, 99.97% of airborne particles. Strongly resistant to oil.

Preventive measures for pneumoconiosis

Use of respirators

- Assess the work environment to identify the nature and extent of the hazard.
- Select the respirator that is certified/ approved for the specific contaminant.
- Perform a fit test to ensure that the respirator fits tightly over the face.
- Ensure there is no interference between the sealing surface of the facepiece and the face.

Improper use of respirators

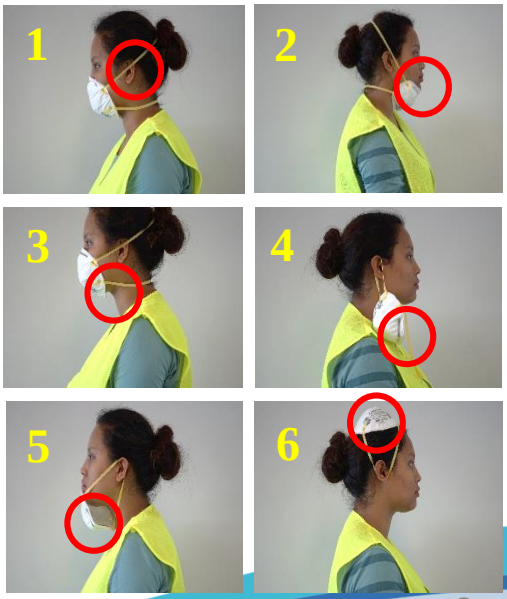
1) The upper band is not placed high over the ears.

2) The respirator does not cover the nose and mouth.

3) The respirator does not firmly cover the chin.

4) The respirator is dangling from the ear.

5-6) The respirator does not cover the appropriate parts of the face.



Steps for wearing a respirator

1) Cup the respirator in your hand with the nosepiece at your fingertips.

2) Place the respirator firmly over your nose, mouth, and chin.

3) Stretch and position the top band high at the back of head.

4) Stretch and position the bottom band under the ears.

5) Gently press the thin metal wire along the upper edge against the bridge of your nose so that the respirator fits snugly against your face.

6) Check fit by inhaling and exhaling. During exhaling, check for air leakage around face.

Medical Surveillance and Compensation Ordinance

Medical surveillance program

- Launched by the Pneumoconiosis Compensation Fund Board.
- Provides free medical examination services (e.g. general body check up, chest X-ray, and pulmonary function test) to workers.
- Workers aged 30 years or above and currently employed in the construction or renovation industry for at least 1 year are eligible.

Pneumoconiosis and mesothelioma compensation

- In accordance with the Pneumoconiosis and Mesothelioma (Compensation) Ordinance, patients with work-related silicosis, asbestosis, and/or mesothelioma will be entitled to compensation.

For application details, please refer to Pneumoconiosis Compensation Fund Board (Tel: 25410032).

Sources of information

Pneumoconiosis Prevention among South Asian Construction Workers

https://www.cuhk.edu.hk/pneumo

Pneumoconiosis Compensation Fund Board

https://www.pcfb.org.hk/?lang=en

Labour Department

http://www.labour.gov.hk/eng/news/content.htm

Construction Industry Council

http://www.cic.hk/eng

Occupational Safety & Health Council

http://www.oshc.org.hk/eng/main/index.html

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