

# Asbestosis

Asbestosis is a form of **interstitial fibrosis** of the lung. It is an asbestos exposure related disease. Asbestosis is a type of pneumoconiosis.

## Asbestosis:



## Pathology

After asbestos fibers are inhaled into the alveoli, the fibers provoke the immune cells in lungs and cause an inflammatory reaction. A part of this reaction is fibrogenesis in the interstitial space.

It seems to be histologically similar to the other interstitial pulmonary fibrosis, but it also contains ferruginous bodies.

## Clinical notes

### Patient history

Asbestosis development and presentation depends on the exposure time. The disease is chronic and progressive. It can manifest 20 years after exposure, when the symptoms become clear. It is very important to find out how the patient was exposed:

### Occupational exposure

- workers involved in the manufacturing of asbestos products
- asbestos miners and millers
- power plant workers
- boilermakers
- shipyard workers
- firefighters.<sup>[1]</sup>

### Non-occupational exposure

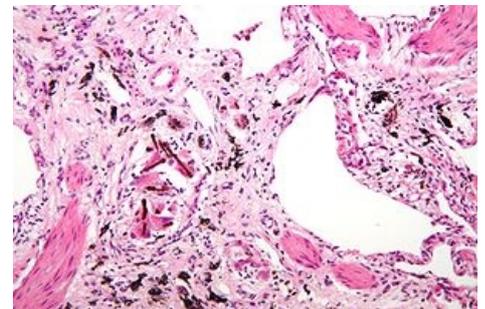
Asbestos was used in the construction of the walls of many buildings including schools: teachers who work in these buildings are exposed to asbestos and therefore their lives could be endangered as well.<sup>[2]</sup>

## Symptoms

- **shortness of breath** – first when walking, climbing stairs, than at rest (asbestosis is a progressive disease)
- **cough**<sup>[2]</sup>
- low blood oxygen level<sup>[3]</sup>

The most common **complication is COPD**<sup>[2]</sup>, respiratory insufficiency, pulmonary hypertension, cor pulmonale.

## Diagnosis



Lung biopsy, H&E stain, ferruginous bodies and interstitial fibrosis.

- physical examination, lung function tests
- X-ray imaging
- CT or MRI
- lung biopsy
- definitive diagnosis is based on a microscopic examination of a lung biopsy by a pathologist!

## Therapy

Unfortunately, therapy is mostly supportive and is focused on treating the progressive respiratory failure:

- Treatment of COPD (bronchodilators, corticosteroids...);
- Oxygen therapy;
- Lung transplantation.<sup>[2]</sup>

## Notes

Other asbestos exposure related diseases are:

- mesothelioma
- lung cancer

## Links

### Related articles

- Asbestos

### References

1. The Asbestos Disease Awareness Organization (ADAO). *What are High Risk Occupations?* [online]. The last revision 2010, [cit. 2011-07-30]. <<http://www.asbestosdiseaseawareness.org/educational-resources/exposed-to-asbestos/>>.
2. KASPER, Dennis L – FAUCI, Anthony S – LONGO, Dan L, et al. *Harrison's principles of Internal Medicine*. 16th edition. New York : McGraw-Hill Companies, Inc, 2005. 2607 pp. pp. 1522. ISBN 0-07-139140-1.
3. American Lung Association. *Asbestosis* [online]. ©2011. The last revision 2011, [cit. 2011-08-06]. <<http://www.lungusa.org/lung-disease/asbestosis/>>.

4. What is Asbestosis and how to claim for it? (<http://www.tylers-solicitors.co.uk/industrial-disease-claims/asbestosis-compensation-claims/>)