

“ASBESTOS – Dust, Disease and Death”[©]

ASBESTOS - The Dust

Asbestos, the “magic mineral”, is a general name applied to a group of silicate minerals consisting of thin, separable fibers. Asbestos fibers do not have any detectable odor or taste. They do not dissolve in water or evaporate and are resistant to heat, fire, and chemical and biological degradation.”¹ “Asbestos has long been suspected as a health threat to humans, because the fibers can be inhaled and are difficult to remove from the lungs.”² “EPA has classified asbestos as a Group A known human carcinogen.”³

- 1900 Asbestos recognized as a cause of occupational disease (asbestosis) in England.
- 1927 The name asbestosis is applied to lung scarring caused by asbestos.
- 1929 Workers begin suing Johns Manville for damages caused by asbestos.
- 1955 Richard Doll publishes paper linking asbestos to lung cancer.
- 1960 Chris Wagner publishes paper linking asbestos to mesothelioma.
- 1964 Irving Selikoff describes the incidence of asbestos related disease among insulation workers.
- 1971 EPA lists asbestos as a hazardous air pollutant.
- 1972 ACGIH list asbestos as a human carcinogen.
- 1989 EPA promulgates Asbestos Ban and Phase – Out Rule.
- 1990 Much of the Ban & Phase – Out rule is vacated by the U.S. Circuit Court of Appeals.
- 2002 “Ban Asbestos in America Act” is introduced by U.S. Senator Patty Murray.

ASBESTOS – The Diseases

“Asbestos-related diseases are incurable. Treatment involves preventing further complications and treating symptoms.”⁴

Unfortunately, asbestos related diseases are routinely misdiagnosis until the late stages of disease. “The latency period for the onset of asbestos-related disease is typically 10 - 50 years after the initial exposure.”⁵ The treatments depend on the victims overall physical condition and stage of the disease.

1. Lung cancer
2. Asbestosis: A progressive disease involving scarring of lung tissue as a result of exposure to the microscopic fibers of asbestos⁶
3. Malignant Mesothelioma:
 - Pleural mesothelioma develops in the lining of the lung.
 - Pericardial mesothelioma develops in the lining of the heart.
 - Peritoneum mesothelioma develops in the lining of the abdomen.

“When asbestos fibers are inhaled, some fibers become lodged in the lungs and remain there throughout life. Fibers can accumulate and cause scarring and inflammation. Enough scarring and inflammation can affect breathing, leading to disease. Changes in the lining of the lungs

¹ <http://www.atsdr.cdc.gov/naer/denverco/hc.html>

² <http://www.atsdr.cdc.gov/asbestos/index.html>

³ <http://www.epa.gov/ttn/atw/hlthef/asbestos.html>

⁴ http://www.atsdr.cdc.gov/asbestos/asbestos_risks.html

⁵ http://www.atsdr.cdc.gov/asbestos/asbestos_effects.html#mesothelioma

⁶ <http://www.lungusa.org/>

(pleura) such as thickening, plaques, calcification, and fluid around the lungs (pleural effusion) may be early signs of asbestos exposure. These changes can affect breathing more than previously thought. Pleural effusion can be an early warning sign for mesothelioma (cancer of the lining of the lungs).⁷ “People who are exposed to asbestos fibers for just a short period of time (few weeks) or even to a small amount may be at risk. In particular, people working with asbestos and their family members or those who live with them develop mesothelioma.”⁸

Treatment options for patients diagnosed with asbestos-related cancer of the lung or pleura are limited to resection (surgical removal of a part), chemotherapy and radiation.⁹ The most aggressive and radical surgery is an Extra Pleural Pneumectomy (EPP) where the lung, pleura (lining of the chest cavity), pericardium (lining of the heart the diaphragm) and diaphragm may be removed. Most treatment is palliative.

ASBESTOS – The Death

Asbestosis: “The lung tissue scarring makes it hard to breathe and difficult for oxygen and carbon dioxide pass through the lungs. Asbestosis generally progresses slowly. The disease can vary from asymptomatic (no symptoms) to disabling and potentially fatal.”¹⁰

Mesothelioma: “Depending on the person’s health, time of diagnosis, and other factors, the survival rate is about four to 12 months from the onset of symptoms.”¹¹

REFERENCES

American Lung Association, EPA, Center for Disease Control, National Cancer Institute and the ATSDR

BOOKS

- “Asbestos: Medical and Legal Aspects” by Barry I. Castleman and Stephen L. Berger
- “Fatal Deception” by Michael Bowker,
- “Magic Mineral To Killer Dust” by Geoffrey Tweedale
- “Outrageous Misconduct” by Paul Brodeur
- “Deadly Dust” - David Rosner and Gerald Markowitz
- “Libby, Montana: Asbestos and the Deadly Silence of an American Corporation” by Andrea Peacock

The **Asbestos Disease Awareness Organization** (ADAO) does not provide medical diagnosis or treatment. If you have a concern about asbestos exposure or a related illness, consult a physician with expertise in the evaluation and management of asbestos related diseases.

ADAO is a volunteer victim-to-victim organization staffed by victims, their families and friends and funding solely through private donations.

www.AsbestosDiseaseAwarenessOrganization.org

⁷ http://www.atsdr.cdc.gov/asbestos/asbestos_effects.html#mesothelioma

⁸ <http://www.lungusa.org>

⁹ <http://www.lungusa.org>

¹⁰ http://www.atsdr.cdc.gov/asbestos/asbestos_effects.html#asbestosis

¹¹ <http://www.lungusa.org/>