



# Understanding What Mesothelioma Is

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## What is Mesothelioma?

Mesothelioma is a type of cancer that begins in the pleural mesothelium, which is the protective membrane that lines most of the body's internal organs of the chest cavity.

More than two-thirds of the time, mesothelioma is precipitated by exposure to asbestos. Even though many cases start in the chest cavity, this can start in the heart or abdominal cavity. Cancerous cells from the mesothelium will attack nearby tissues, causing damage no matter where they originate. Also, these cells can spread to different parts of the body.

Experts estimate that there are 2,000 new cases of mesothelioma in the United States each year. It's important to seek medical attention if you experience any symptoms of this disease. Below you will find answers about what it is, including causes and symptoms, and the next steps.

## What are the Causes of Mesothelioma?

As mentioned before one of the main causes of mesothelioma is working in or with asbestos. The microscopic fibers in the group of minerals that make up asbestos are dangerous to humans. The fibers can resist chemicals, fire, and heat, and they don't conduct electricity. This dangerous compound of minerals and fibers has been mined and widely used in the industrial business, automotive, and construction.

When the fibers from asbestos are released into the air from manufacturing processes, they can be inhaled or even swallowed, causing excessive health problems. It's been reported that up to 80 percent of mesothelioma cases are linked to work exposure asbestos. Further reports find that many family members of people exposed to asbestos also have an increased risk of contracting mesothelioma or other asbestos-related diseases.

There are cases of mesothelioma where patients haven't been exposed to asbestos at all. Other possible causes of this disease may include:

- **Radiation:** Thorium dioxide (Thorotrast) is a material used by physicians in chest X-rays up to the 1950s. High doses of radiation or injections from thorium dioxide have been reported to cause mesothelioma, according to the American Cancer Society.
  - **Zeolites:** Another substance, zeolite, has been known to be responsible for high rates of mesothelioma. One mineral in zeolites is erionite, which is common in the soils of certain regions in Turkey. The American Cancer Society believes that this element is highly dangerous.
  - **Genetics:** Even though rates of mesothelioma will vary among populations, studies show that it may be a genetic disease in certain people.
  - **SV40 Virus:** The American Cancer Society stated that some of the polio vaccines, which were injected between the years 1955 through 1963, were contaminated with SV40. This virus exposed over 30 million people in the United States alone to this virus. Studies in laboratory animals show that infection with this
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virus may increase the risk of mesothelioma. The good news is that the most extensive studies conducted in humans haven't found an increased risk for mesothelioma or any other cancers among people who received this vaccine as a child.

### **What are the Symptoms of Mesothelioma?**

Mesothelioma symptoms usually do not show up for 30 years or longer after exposure. If you work in an environment where there may be asbestos present, consider a screening test to best facilitate the process of treating it. Symptoms in the peritoneal or abdomen area may include:

- Weight loss.
- Fever.
- Bowel obstruction.
- Swelling/pain in the abdomen.
- Anemia.
- Blood Clots.

Symptoms of mesothelioma of the lungs may include:

- Shortness of breath.
- Chest pain.
- Fluid accumulation in the pleura.
- Swallowing difficulties.
- Swelling of the neck and/or face.

### **The Bottom Line**

Monitoring for any of the symptoms is essential to ensure you can try every option available to increase life expectancy. There are more mesothelioma treatment options available in the earlier stages of this cancer, and the chances of the treatment working are also at an increased rate.

If the mesothelioma is caught early enough, the life expectancy of the patient can increase dramatically. As pleural mesothelioma often presents no symptoms in stage I or II, it is important to keep in contact with your doctor to receive the required chest x-rays and pulmonary scans. These monitoring treatments are likely the best way to catch this fatal cancer in its early stages, which will give the patient to best treatment options.