



ASBESTOS RESOURCE CENTER

Asbestos Disease

The most common forms of [asbestos disease](#) are pleural plaques, [asbestosis](#), lung cancer, and [mesothelioma](#). Asbestosis is a chronic, prolonged lung disease that is caused by continuous inhalation of [asbestos](#) particles. However, asbestosis is not cancerous. The second form, mesothelioma is a cancer that attacks mesothelium and is most commonly found in the lung. Mesothelioma is rare or nonexistent in non-asbestos exposed populations but is becoming more common among asbestos-exposed individuals. In the United States, there is no other known proven cause of mesothelioma other than asbestos. Unlike other forms of lung cancer, mesothelioma is a cancer of the lining of the lungs and not a cancer that occurs inside the lung. Mesothelioma causes the cells of the mesothelium to become abnormal and infinitely reproduce.



A normal mesothelium cell (or any cell for that matter) can only reproduce a certain amount of times. This keeps certain cells from invading other cells. Cancer occurs when those cells become mutated and their limits are removed, allowing them to reproduce uncontrollably. These abnormal cells then form a lump that is known as a tumor. In a benign tumor the abnormal cells do not spread into surrounding areas, but malignant tumors do have the ability to spread. If the tumor is left untreated then it may spread and destroy the neighboring tissue. Sometimes cells can even break off the original tumor and spread to other organs and tissue through the bloodstream or the lymphatic system. The lymphatic system is part of the immune system. It is a complex system that includes the bone marrow, the thymus and the spleen, and lymph nodes throughout the body that are connected by a network of lymphatic vessels. When the cancer cells reach a new site they may continue to divide and form a new tumor, which is referred to as a secondary tumor or a metastasis.

Mesothelial cells line the chest cavity, the abdominal cavity, and the cavity around the heart. They also cover the outer surface of most internal organs. The tissue that is formed by these mesothelial cells is called mesothelium. Mesothelium helps protect the organs by producing a lubricating fluid that lets organs move around. This fluid makes it easier for the lungs to expand and move around inside the chest during breathing. The mesothelium in the chest is called the pleura and the mesothelium around the abdomen is known as the peritoneum. The mesothelium around the heart (or the pericardial cavity, a sac like space around the heart) is called the pericardium.

The asbestos disease mesothelioma has a long latency period, where it is present but not evident or active. It can lie dormant for up to ten to sixty years after being exposed to asbestos. Because of this, it is often hard to determine the cause of mesothelioma.

