

Title:

What Are The Risk Factors For Malignant Mesothelioma?

Word Count:

702

Summary:

A risk factor is anything that increases your chance of getting a disease such as cancer. Different cancers have different risk factors. For example, exposing skin to strong sunlight is a risk factor for skin cancer. Smoking is a risk factor for cancers of the lung, mouth, larynx, bladder, kidney, and several other organs. Individuals exposed to asbestos should be encouraged to avoid tobacco exposure because together the risk for lung cancer is significantly higher than from ...

Keywords:

Article Body:

A risk factor is anything that increases your chance of getting a disease such as cancer. Different cancers have different risk factors. For example, exposing skin to strong sunlight is a risk factor for skin cancer. Smoking is a risk factor for cancers of the lung, mouth, larynx, bladder, kidney, and several other organs. Individuals exposed to asbestos should be encouraged to avoid tobacco exposure because together the risk for lung cancer is significantly higher than from smoking without a history of asbestos exposure. But having a risk factor, or even several, does not mean that you will get the disease.

Asbestos

The main risk factor for developing mesothelioma is exposure to asbestos. Asbestos refers to a family of fibrous minerals made of silicate. Asbestos was once used in many products such as insulation, floor tiles, door gaskets, soundproofing, roofing, patching compounds, fireproof gloves and ironing board covers, and even brake pads. As the link between asbestos and mesothelioma has become well known, the use of this material has almost stopped. Most use stopped after 1989, but it is still used in some products. Experts have linked this drop in asbestos use to the fact that the rate of development of mesothelioma is no longer increasing.

Still, up to 8 million Americans may already have been exposed to asbestos.

Exposure to asbestos particles suspended in air and building materials is much less hazardous except when they are being removed.

Since asbestos is a naturally occurring mineral, it can also be found in dust and rocks in certain parts of the United States as well as the world.

According to the U. S. Environmental Protection Agency, as many as 733,000 schools and public buildings in the country today contain asbestos insulation. As many as 10% to 15% of schools in the United States may contain asbestos insulation. People who may be at risk for occupational asbestos exposure include some miners, factory workers, insulation manufacturers, railroad workers, ship builders, gas mask manufacturers, and construction workers, particularly those involved with installing insulation. Several studies have shown that family members of people exposed to asbestos at work have an increased risk of developing mesothelioma, because asbestos fibers are carried home on the clothes of the workers.

There are 2 main forms of asbestos - serpentine and amphiboles.

Serpentine fibers are curly and pliable. Chrysotile is the only type of serpentine fiber and it is the most widely used form of asbestos.

Amphiboles are thin, rod-like fibers. There are 5 main types - crocidolite, amosite, anthrophyllite, tremolite, and actinolite. Amphiboles (particularly crocidolite) are considered to be the most carcinogenic (cancer-causing).

However, even the more commonly used chrysotile fibers are associated with malignant (cancerous) mesotheliomas and should be considered dangerous as well.

When asbestos fibers are inhaled, most are cleared in the nose, throat, trachea (windpipe), or bronchi (large breathing tubes of the lungs). Fibers are cleared by sticking to mucus inside the air passages and being coughed up or swallowed. The long, thin, fibers are less readily cleared, and they may reach the ends of the small airways and penetrate into the pleural lining of the lung and chest wall. These fibers may then directly injure mesothelial cells of the pleura, and eventually cause mesothelioma.

Asbestos fibers can also damage cells of the lung and result in asbestosis (formation of scar tissue in the lung), and/or lung cancer. The risk of lung cancer among people exposed to asbestos is increased by 7 times, compared with the general population. Indeed, asbestosis, mesothelioma, and lung cancer are the 3 most frequent causes of death and disease among people with heavy asbestos exposure. Peritoneal mesothelioma, which forms in the abdomen, may result from

coughing up and swallowing inhaled asbestos fibers. Cancers of the larynx, pancreas, esophagus, colon, and kidney may also come from asbestos exposure, but the increased risk is small.

The risk of developing a mesothelioma is related to how much asbestos a person was exposed to and how long this exposure lasted. People exposed at an early age, for a long period of time, and at higher levels are most likely to develop this cancer. Mesotheliomas take a long time to develop. The time between first exposure to asbestos and diagnosis of mesothelioma is usually between 20 and 50 years.