

# **Asbestos Exposure** and Your Health

www.atsdr.cdc.gov

1.800.CDC.INFO

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# Environmental Health

#### Introduction

#### Who should read this

Read this fact sheet if you or someone you know may have been exposed to asbestos:

### In the workplace

- By living with a worker exposed to asbestos
- In the natural environment
- By living, working, playing or attending school
- Living in Libby, Montana when its vermiculite mine was operating
- near a plant when it was processing Libby vermiculite
- In consumer products that contain asbestos

#### **Asbestos**

#### **Asbestos defined**

Asbestos is the name of a group of similar minerals that can separate into long and thin fibers. The fibers are so small that you cannot see them.

### Health effects of asbestos exposure

Asbestos can cause health problems when it is breathed into the lungs. Continued exposure increases the amount of fibers that remain in the lungs. Fibers embedded in lung tissue over time may result in lung diseases such as pleural disease (the lining of the chest wall), asbestosis, lung cancer, or mesothelioma.

#### **Important!**

Being exposed to asbestos does not mean you will develop health problems! Asbestos has been used widely in the United States; nearly everyone has been exposed to very low levels of asbestos at some time in their life. However, most people do not become ill from such exposures.

Many things need to be considered when evaluating whether you are at risk for health problems from asbestos exposure. A doctor can help you find out if you have health problems from asbestos exposure.

#### Where Asbestos can be found

#### In the workplace

Asbestos can be found in the workplace, particularly if you work or have worked as a(n):

- Brake repair mechanic
- Carpenter
- Demolition worker
- Dry wall finisher
- Electrician
- Roofer

- Vermiculite processing plant worker
- Welder
- Insulation installer
- Miner
- Pipe or steam fitter
- Plumber
- Shipyard worker

Outdoor workers, such as construction workers, landscapers, and excavators might be exposed to naturally occurring asbestos found above the ground through activities that crush asbestos-containing rock or stir up dust in soils that contain asbestos.

#### In the homes of workers

Workers who were exposed to asbestos in the workplace may have brought asbestos fibers home on their clothes, shoes, and bodies. Therefore, people who lived in their households could have been exposed to asbestos, too. Even handling and washing a worker's clothes could have exposed someone to asbestos.

#### In the natural environment

Asbestos can be found in the natural environment:

- Under the ground. Deposits were mined in the United States and are still mined in Australia, Canada, South Africa, and the former Soviet Union. Asbestos is usually found mixed into other minerals.
- Above the ground. Naturally occurring asbestos refers to those fibrous minerals that are found in the rocks or soil in an area and released into the air by:
- routine human activities or
- weathering processes

People might be exposed to naturally occurring asbestos above the ground through leisure and work activities that crush asbestos-containing rock or stir up dust in soils that contain asbestos fibers.

### In Libby, Montana

Vermiculite mining occurred in the town of Libby, Montana from the 1920s until 1990. The vermiculite ore mined in Libby was contaminated with amphibole asbestos and other similar fibers. People who lived, worked, attended school, or participated in activities near a vermiculite mine in Libby, Montana before December 31, 1990 may have also been exposed to asbestos.

### Near a vermiculite processing plant

People who lived near a processing plant that received vermiculite from a mine in Libby, Montana could have been exposed to asbestos. Sometimes when the plant or mine was operating, dust and asbestos fibers were released into the air.

Also, some people may have taken waste rock from the plant or mining area to their homes for gardens, children's play areas, and for fill or paving material. People who came in contact with this waste rock probably breathed in air that contained asbestos fibers.

#### In consumer products

Asbestos can be found in consumer products, mostly in:

- building materials
- friction products
- heat-resistant fabrics

The majority of all vermiculite insulation produced before 1990 used contaminated vermiculite from Libby. That means older homes and buildings may have asbestos-containing products such as attic insulation, fireproofing materials, gypsum wallboard, and lightweight aggregate construction materials (such as concrete blocks). Asbestos fibers may be released into the air when asbestos-containing material is disturbed during product use, demolition work, building or home maintenance, repair, and remodeling. In general, exposure occurs only when the asbestos-containing material is disturbed in some way that releases particles and fibers into the air. Asbestos-containing material will not harm you if it is left undisturbed and the fibers are not released into the air.

Since asbestos fibers may cause harmful health effects in people who are exposed, all new uses of asbestos have been banned in the United States by the U.S. Environmental Protection Agency.

Detecting asbestos releated health problems

# **Identify**

Asbestos-related conditions can be difficult to identify. Healthcare providers usually identify the possibility of asbestos exposure and related health conditions, like lung and pleural disease, by taking a thorough medical history. This includes looking at the person's medical, work, cultural, and environmental history.

## Diagnose

After a doctor suspects an asbestos-related health condition, he or she can use a number of tools to help make the actual diagnosis. Some of these tools are physical examination, chest x-ray and pulmonary function tests. Your doctor may also refer you to a specialist who treats diseases caused by asbestos.

# Treatment for asbestos-related health problems

#### Nonmalignant

Nonmalignant illnesses are those other than cancer. Treatment for nonmalignant illnesses such as asbestosis and pleural disease involves preventing further complications and treating symptoms. Once established, these diseases can remain stable or become more severe, even without further exposure. The diseases rarely become less severe.

### **Malignant**

Malignant illnesses are those that are cancerous. Treatment options for patients diagnosed with asbestos-related cancer of the lung or pleura (lining of the chest wall) may include surgery, chemotherapy, radiation or a combination of these. Information about cancer treatment is available from the National Cancer Institute-Supported Cancer Information Service at 1-800-4-CANCER (1-800-422-6237).

# What to do if you have been exposed to asbestos

#### **Take Action**

**Tell your doctor.** Even if you don't feel sick, tell your doctor that you might have been exposed to asbestos. Most people don't show any signs or symptoms of asbestos-related disease for 10 to 20 years or more after exposure. Only a doctor can tell if you have any health problems due to asbestos exposure. Your doctor may refer you to a specialist who treats diseases caused by asbestos.

**Show this fact sheet to your doctor.** The information might be helpful in evaluating your health risk.

**Quit smoking**. If you are a smoker, quit smoking. Smoking combined with asbestos exposure greatly increases the risk of getting lung cancer.

Get regular influenza (flu) and pneumonia shots. Regular shots help reduce the chance of lung infections.

# Where you can get more information

#### **Contact ATSDR**

For more information on asbestos exposure and your health, please call 1-800-CDC-INFO (1-800-232-4676) or visit our Web site at www.atsdr.cdc. gov/asbestos .

The Agency for Toxic Substances and Disease Registry (ATSDR) is a federal public health agency of the U.S. Department of Health and Human Services. It was created by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also known as the Superfund legislation). ATSDR's mission is to serve the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related to toxic substances.