

# *Asbestos in the Home*

*MISAWA AB, JAPAN*

## *Asbestos Awareness*



### OCCUPANT ACKNOWLEDGEMENT OF INFORMATION

\_\_\_\_\_  
**SIGNATURE**

\_\_\_\_\_  
**UNIT NUMBER**

\_\_\_\_\_  
**DATE**

**Prepared by: 35 CES/CEV**

If you have further question about location of asbestos in your home, please contact the Housing Flight, 35 CES/CEHF, DSN 226-9533.

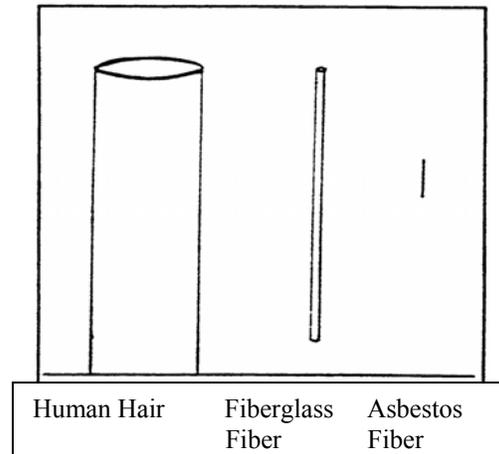
If you have further question about Asbestos Health Risk, please contact the Bioenvironmental Flight, 35 AMDS/SGPB, DSN 226-6107.

If you have further question about Asbestos Program, please contact the Environmental Flight, 35 CES/CEV, DSN 226-3724.

# What is Asbestos?

Asbestos is a generic term applied to naturally occurring fibrous hydrated mineral silicates. These minerals are regarded as hydrated because they are formed by their affinity for water. Asbestos is primarily mined in Canada and South Africa. The forms that are specifically covered by new regulations are:

- Amosite
- Chrysotile (most common type)**
- Crocidolite
- Tremolite
- Anthophyllite
- Actinolite



Asbestos has been used widely in building materials and in products. Asbestos was and is used because:

- Asbestos is both **heat** and **chemical resistant**.
- Asbestos is an excellent **thermal insulator**.
- Asbestos is a very good **noise insulator**.
- Asbestos is **resistant** of the effects of **friction**.

These same characteristics make asbestos the **environmental problem** it is today.

## Which characteristics of asbestos materials pose a health hazard?

Asbestos containing material (ACM) is generally categorized as friable or nonfriable. **Friable** material can be easily crumbled by hand pressure. **Nonfriable** asbestos is more durable and will not easily break down unless some force is applied to the material. Any product which contains one percent (1%) asbestos requires the use of safe handling practices.

It is important to remember that the small asbestos fibers that are the most harmful are not visible to the eye. In addition, once fibers are released into the air they can take many hours to settle onto horizontal surfaces. If air movement is present fibers may never settle out and remain airborne almost indefinitely, posing a constant and invisible health hazard.



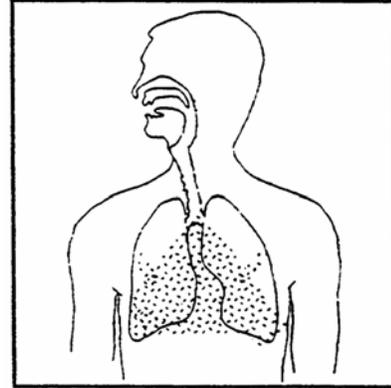
**Friable Asbestos**

# What kinds of health hazards, does damaged asbestos present?

Because it is so hard to destroy asbestos fibers, the body cannot break them down or remove them once they are lodged in lung or body tissues. They remain in place where they can cause disease. There are three primary diseases associated with asbestos exposure as below:

## Asbestosis

Asbestosis is a serious, chronic, non-cancerous respiratory disease. Inhaled asbestos fibers aggravate lung tissues, which causes them to scar. Symptoms of asbestosis include shortness of breath and a dry crackling sound in the lungs while inhaling. In its advanced stages, the disease may cause cardiac failure.



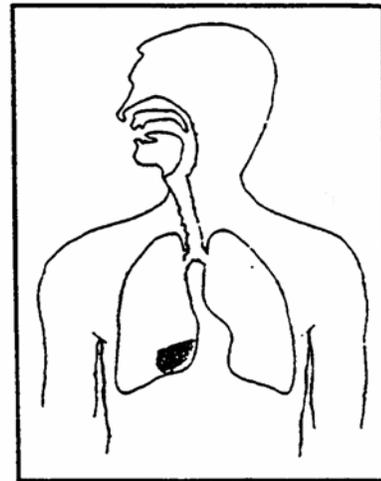
Asbestosis

There is no effective treatment for asbestosis; the disease is usually disabling or fatal. The risk of asbestosis is minimal for those who do not work with asbestos; the disease is rarely caused by neighborhood or family exposure. Those who renovate or demolish buildings that contain asbestos may be at significant risk, depending on the nature of the exposure and precautions taken.

## Lung Cancer

Lung cancer causes the largest number of deaths related to asbestos exposure. The incidence of lung cancer in people who are directly involved in the mining, milling, manufacturing and use of asbestos and its products is much higher than in the general population. The most common symptoms of lung cancer are coughing and a change in breathing. Other symptoms include shortness of breath, persistent chest pains, hoarseness, and anemia.

People who have been exposed to asbestos and are also exposed to some other carcinogen -- such as cigarette smoke -- have a significantly greater risk of developing lung cancer than people who have only been exposed to asbestos. One study found that asbestos workers who smoke are about 90 times more likely to develop lung cancer than people who neither smoke nor have been exposed to asbestos.



Lung Cancer

## **Mesothelioma**

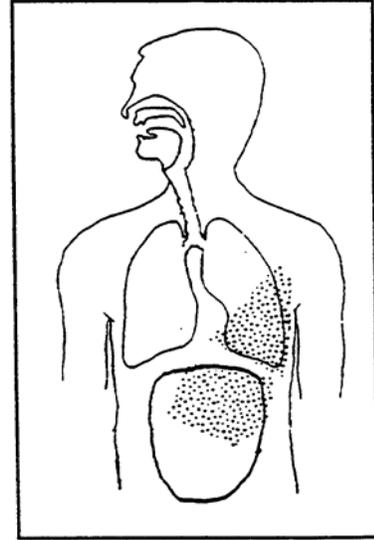
Mesothelioma is a rare form of cancer which most often occurs in the thin membrane lining of the lungs, chest, abdomen, and (rarely) heart. About 200 cases are diagnosed each year in the United States. Virtually all cases of mesothelioma are linked with asbestos exposure.

Approximately 2 percent of all miners and textile workers who work with asbestos, and 10 percent of all workers who were involved in the manufacture of asbestos-containing gas masks, contract mesothelioma.

People who work in asbestos mines, asbestos mills and factories, and shipyards that use asbestos, as well as people who manufacture and install asbestos insulation, have an increased risk of mesothelioma. So do people who live with asbestos workers, near asbestos mining areas, near asbestos product factories or near shipyards where use of asbestos has produced large quantities of airborne asbestos fibers.

## **Other Cancers**

Evidence suggests that cancers in the esophagus, larynx, oral cavity, stomach, colon and kidney may be caused by ingesting asbestos. For more information on asbestos-related cancers, contact your local chapter of the American Cancer Society.



**Mesothelioma**

# When is Asbestos Dangerous?

Asbestos can hurt you when it is in the air and you breathe it. When asbestos gets in the air, you can breathe it. It is easy to get asbestos in the air. If you handle asbestos at all, it can get in the air. If you

- Saw
- Drill
- Nail
- Cut
- Bump
- or Tear.



Avoid **disturbing** asbestos materials on walls, ceilings, pipes or boilers.



- **Do not** drill holes in asbestos materials.
- **Do not** hang plants or anything else from ceilings covered with asbestos materials.



- **Do not** pin or hang pictures on walls covered with asbestos materials.



- **Do not** sand asbestos floor tiles or backing material.

Asbestos fibers can be released when the material is disturbed.



- **Do not** damage asbestos material while moving furniture, etc.

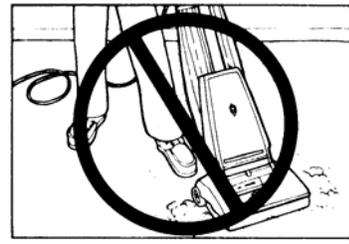


- **Do not** disturb asbestos material when replacing light bulbs, etc.



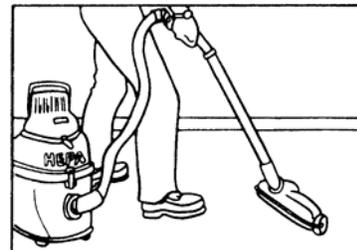
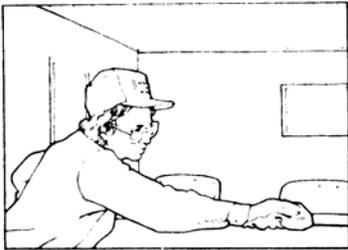
- **Do not** allow curtains, drapes or dividers to damage asbestos materials.

Improper **cleaning** can stir up asbestos fibers.

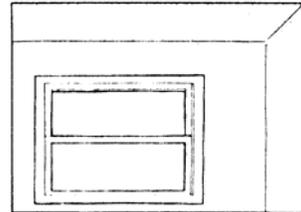


- **Do not** dust with a brush.
- **Do not** dry sweep floors.
- **Do not** use an ordinary vacuum to clean up asbestos debris.

Take care when **cleaning rooms** that contain asbestos material.



- **Dust** with a damp cloth.
- **Wet mop** floors.
- Use only a special **HEPA vacuum** to clean up asbestos debris.



- **Do not** brush or sweep ceilings and walls covered with asbestos materials.
- **Avoid** touching or disturbing ceilings and walls covered with asbestos materials.