Fiberglass

This factsheet provides answers to questions about fiberglass. It will explain what fiberglass is, where it can be found, how it can affect your health and what you can do to prevent or reduce your exposure to it.

What is fiberglass and where is it found?

Fiberglass is the trade name for a man-made fiber that also may be called fibrous glass or glass wool. A fiber is a particle that is at least three times as long as it is wide. The main fiber-forming substance in fiberglass is glass. Fiberglass was first used in the 1930s for home furnace filters and insulation. Fiberglass also is used to insulate pipes and appliances, for sound control in aircrafts and automobiles, and in curtains, roofing material and some plastics.

How can I be exposed to fiberglass?

Dust is produced when fiberglass is trimmed, chopped, cut, sanded or sawed. Exposure to the fibers present in the dust can occur by skin contact, by breathing the dust or by swallowing the fibers. This usually occurs in indoor environments when a person is working with fiberglass. Once fiberglass is installed, exposure to fibers will not take place unless it is moved, such as during remodeling.

How can fiberglass affect my health?

Health effects from exposure to fiberglass can be different depending on the fiber size and type of exposure. Larger fibers have been found to cause skin, eye and upper respiratory tract irritation. There are other possible health effects:

- A rash can appear when the fibers become embedded in the outer layer of the skin. No long-term health effects should occur from touching fiberglass.
- Eyes may become red and irritated after exposure to fiberglass.
- Soreness in the nose and throat can result when fibers are inhaled. Asthma and bronchitis can be aggravated by exposure to fiberglass.
- Temporary stomach irritation may occur if fibers are swallowed.

Little information is known about the health effects caused by small fibers. Smaller fibers have the ability to reach the lower part of the lungs increasing the chance of adverse health effects.

People who work with fiberglass or who have worn-out duct work lined with fiberglass in their homes or workplace may have long-term exposure to fiberglass. There is no evidence
that fiberglass causes cancer in people. Animal studies have shown an increased risk of cancer when fiberglass fibers were implanted in the lung tissue of rats, but these studies are controversial because of how the fibers were implanted. Based on these animal studies, the International Agency for Research on Cancer has classified some fibers used in fiberglass as possible human carcinogens (cancer causing agents).

**How can I reduce my exposure to fiberglass?**

You can take steps to reduce your exposure to fibers when working with materials that contain fiberglass:

- Wear loose fitting, long-sleeved clothing and gloves. This will reduce skin contact and irritation.
- Wear a mask over the nose and mouth to prevent breathing in the fibers.
- Wear goggles or safety glasses with side shields to protect the eyes.
- Open a window or a door to increase ventilation and reduce dust levels.
- Use a shop vacuum after wetting the dust and fibers.

Measures can be taken to reduce exposure after a person has come in contact with fiberglass. Eyes should be flushed with water and any area of exposed skin should be washed with soap and warm water to remove fibers. Clothing worn while working with fiberglass should be removed and washed separately from other clothing. The washing machine should be rinsed thoroughly after the exposed clothing has been washed.

**Where can I get more information?**

Illinois Department of Public Health
Division of Environmental Health
525 W. Jefferson St.
Springfield , IL 62761
217-782-5830
TTY (hearing impaired use only) 800-547-0466
<http://www.idph.state.il.us>

U.S. Consumer Product Safety Commission
Washington , DC 20207-001
800-638-2772
TTY (hearing impaired use only) 800-638-8270
<http://www cpsc.gov>

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