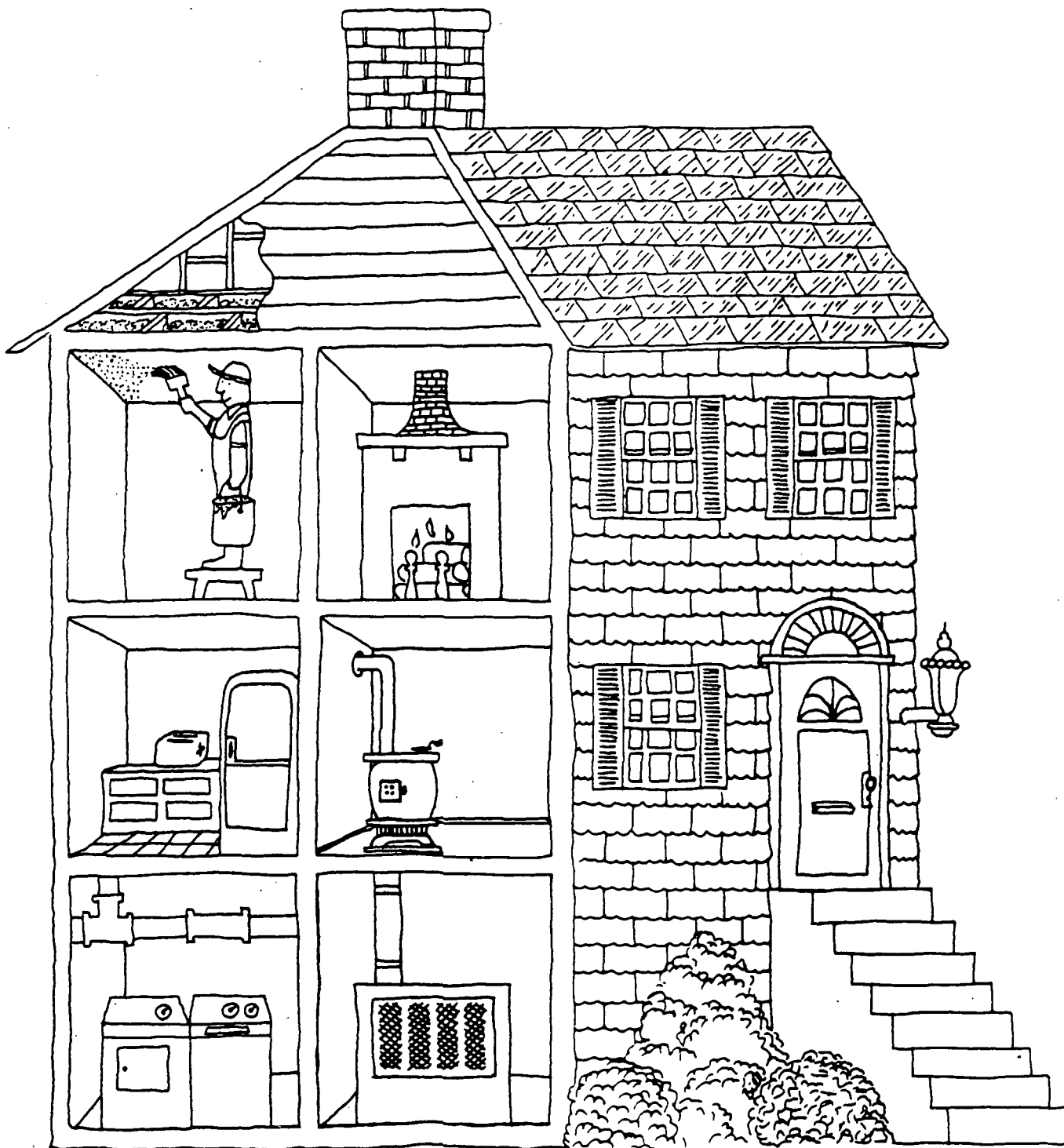
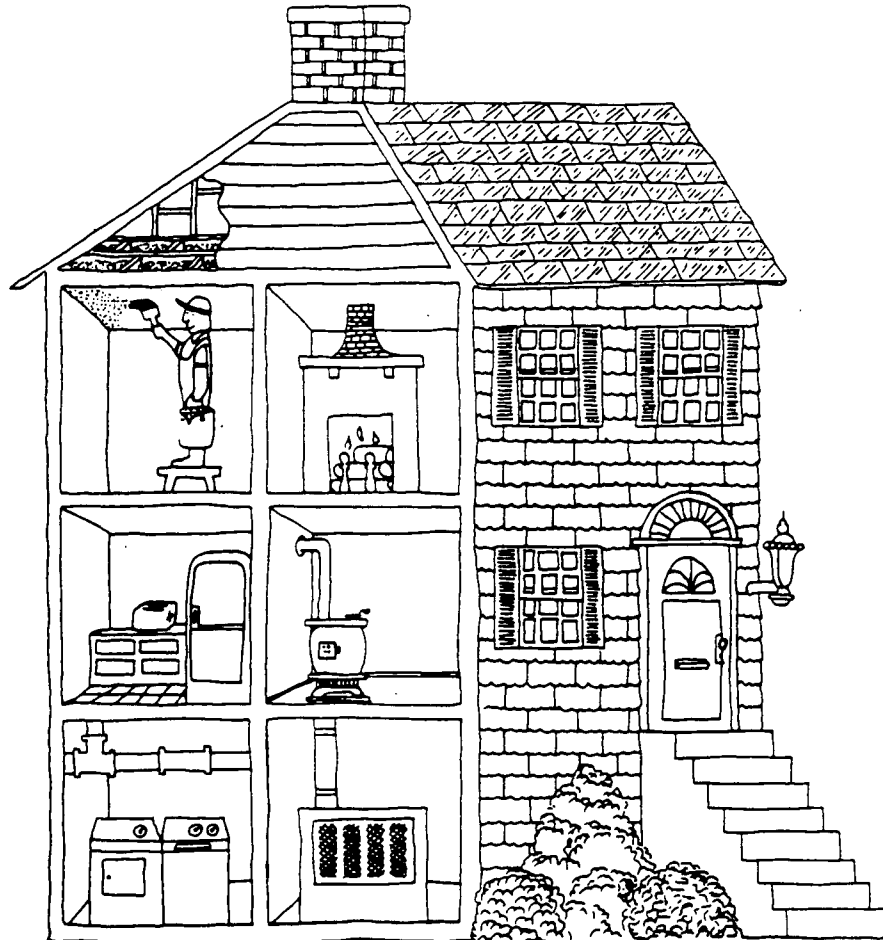


Asbestos in the Home



Asbestos in the Home



August 1982

**U.S. Consumer Product Safety Commission
U.S. Environmental Protection Agency**

Introduction

This booklet was prepared by the U.S. Consumer Product Safety Commission (CPSC) and the Environmental Protection Agency (EPA). Its goal is to help consumers understand the possible hazards of exposure to asbestos and materials containing asbestos in the home. The booklet describes asbestos, where it may be found in the home, and the possible dangers of exposure to asbestos. The Table of Contents lists the questions answered in this booklet. If you have additional questions, you may call the toll-free number listed at the back of the booklet.

The Federal government is concerned about asbestos-containing products in the home because sometimes asbestos fibers can be released from these products. If asbestos fibers are inhaled, certain types of cancer may later develop. Asbestos in homes poses several problems. Household members have little or no protection from exposure to asbestos fibers. Once released, the asbestos fibers may stay suspended in the air for many hours. After they settle, fibers can be stirred up again by a household activity, such as sweeping. During this time, asbestos fibers can be inhaled. This continued presence could cause an ongoing risk in the home.

EPA and CPSC have already taken several steps to reduce your exposure to asbestos:

- In 1973, EPA prohibited the spraying of asbestos-containing materials for insulation, fire protection, and soundproofing.
- In 1975, EPA prohibited the use of asbestos for pipe covering if the material is easily crumbled after it dries.
- In 1977, CPSC banned two asbestos-containing products: patching compounds and artificial fireplace emberizing materials (ash and embers) containing respirable asbestos.

The CPSC is investigating the risk from asbestos in other products. Information on other products will be made available as investigations are completed. This continuing research activity should produce the most effective program possible for reducing unnecessary human exposure to asbestos.

If asbestos building materials must be removed from a home, this work must only be done by a qualified asbestos removal contractor. Many states now require asbestos contractors to be trained and certified. All repair of asbestos materials must be done with extreme caution.

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Q&A

Q: *What is asbestos?*

A: Asbestos is a mineral fiber found in rocks. There are several kinds of asbestos fibers, all of which are fire resistant and not easily destroyed or degraded by natural processes.

Q: *Is asbestos dangerous?*

A: Asbestos has been shown to cause cancer of the lung and stomach according to studies of workers and others exposed to asbestos. There is no level of exposure to asbestos fibers that experts can assure is completely safe.

Some asbestos materials can break into small fibers which can float in the air, and these fibers can be inhaled. You cannot see these tiny fibers, and they are so small that they pass through the filters of normal vacuum cleaners and get back into the air. Once inhaled, asbestos fibers can become lodged in tissue for a long time. After many years, cancer or mesothelioma can develop.

In order to be a health risk, asbestos fibers must be released from the material and be present in the air for people to breathe.

Q: *Are all products with asbestos a health risk for the consumer?*

A: NO. A health risk exists only when asbestos fibers are released from the material or product. Soft, easily crumbled asbestos-containing material has the greatest potential for asbestos release and therefore has the greatest potential to create health risks.

Q: *Do all people exposed to asbestos develop asbestos-related disease?*

A: NO. Most people exposed to small amounts of asbestos do not develop any related health problems. Health studies of asbestos workers and others, however, show that the chances of developing some serious illnesses, including lung cancer, are greater after exposure to asbestos.

Q: *What hazards do cigarette smokers face when exposed to asbestos? Do they have a greater chance of developing lung cancer than smokers not exposed to asbestos?*

A: YES. Asbestos exposure and cigarette smoking together have been shown to cause a greater risk of lung cancer than either the risk of cancer produced by smoking or working with asbestos alone.

Q: *Where is asbestos used in the home?*

A: Asbestos has been used in a wide variety of products, including household and building materials, such as appliances, ceilings, wall and pipe coverings, floor tiles, and some roofing materials. Basically, asbestos has been used in products for four reasons: (1) to

strengthen the product material; (2) for thermal insulation within a product; (3) for thermal or acoustical insulation or decoration on exposed surfaces; and (4) for fire protection.

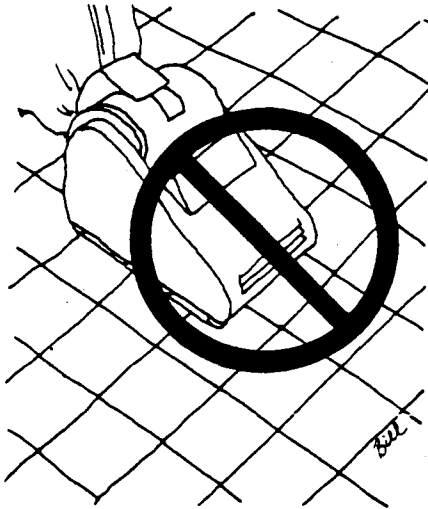
Q: *How can I tell if I have asbestos in my home?*

A: The manufacturer of a product may be able to tell you, based on the model number and age of the product, whether or not the product contains asbestos. People who have frequently worked with asbestos (such as plumbers, building contractors, or heating contractors) often are able to make a reasonable judgment about whether or not a material contains asbestos based on a visual inspection.

Q: *If I find asbestos in my home, what should I do?*

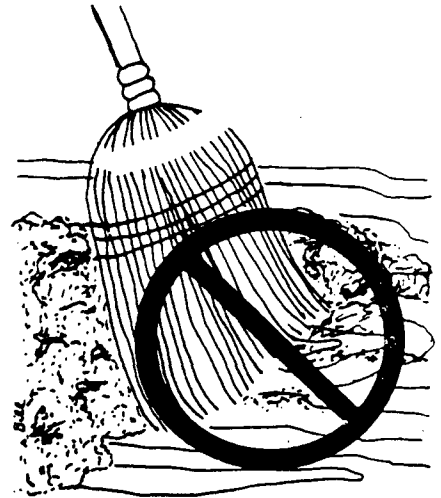
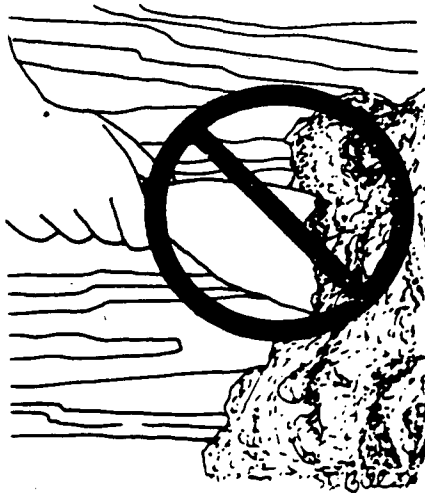
A: **In most cases, asbestos-containing materials are best left alone.** When it is necessary to use or work with asbestos-containing materials, reduce your exposure to fibers as much as possible. To help you do this, we have provided some general guidelines on pages 10-11 for working with products containing asbestos. If at all possible, get help from a contractor who is trained and experienced in working with asbestos. Be sure the contractor is familiar with and follows the guidelines on pages 10-11 for handling asbestos-containing materials. In general, home repair contractors are not experienced in the proper procedures for handling asbestos.

Vinyl Floor Tiles and Vinyl Sheet Flooring



Asbestos has been added to some vinyl floor tiles to strengthen them. Asbestos is also present in the backing on some vinyl sheet flooring. The asbestos is often bound in the tiles and backing with vinyl or some type of binder. Asbestos fibers can be released if the tiles are sanded or seriously damaged, or if the backing on the sheet flooring is dry-scraped or sanded, or if the tiles are severely worn or cut to fit into place.

When replacement or repair becomes necessary, follow the guidelines given on pages 10-11. The tiles should be handled as little as possible. Avoid sanding or otherwise damaging them. A safe and recommended alternative is to place a new flooring material directly over the old tiles or sheet.



For additional information, you may wish to read: "Recommended Work Procedures for Resilient Floor Covers," available on request from the Resilient Floor Covering Institute, 1030 15th St., NW, Suite 350, Washington, DC 20005. Enclose a business-size, self-addressed, stamped envelope for that publication.

Patching Compounds and Textured Paints

In 1977, CPSC banned asbestos-containing patching compounds. Some wall and ceiling joints may be patched with asbestos-containing material manufactured before 1977. If the material is in good condition, it is best to leave it alone. Sanding and scraping will release asbestos fibers. If it is in poor condition, or if the wall or ceiling needs to be removed or repaired, follow the guidelines on pages 10-11.

Some textured paint sold before 1978 contained asbestos. It is unlikely that asbestos is being added to textured paint today, based on information obtained from manufacturers by the CPSC. As with patching compounds, textured paint is best left alone if undamaged. Sanding or cutting a surface with textured paint that may contain asbestos should be avoided.



Ceilings

Some large buildings and a few homes built or remodeled between 1945 and 1978 may contain a crumbly, asbestos-containing material which has been either sprayed or troweled onto the ceiling or walls. If the material is in good condition, it is best to leave it alone. If the mate-

rial appears damaged, you may want to consider having it repaired or removed.

If possible, contact the builder or the contractor who applied the ceiling coating to determine whether asbestos-containing material was used. This may be difficult to do in

older homes. If you decide that it is necessary to remove this type of asbestos material, follow the guidelines on pages 10-11. The use of a trained asbestos contractor is highly advised when asbestos-containing material is to be removed.



Stoves and Furnaces

Stove Insulation

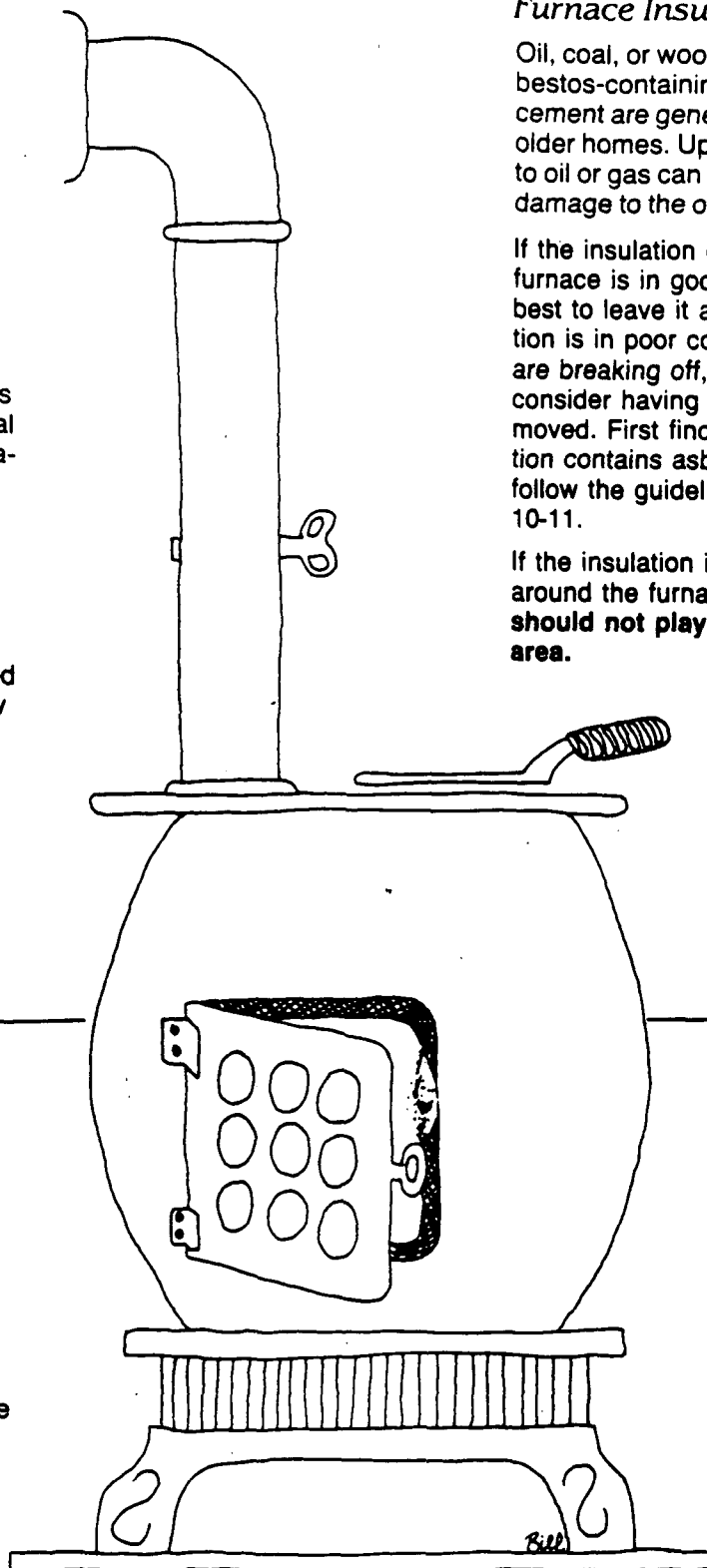
Asbestos-containing cement sheets, millboard and paper have been used frequently in homes when wood-burning stoves have been installed. These asbestos-containing materials are used as thermal insulation to protect the floor and walls around the stoves. On cement sheets, the label may tell you if it contains asbestos.

The cement sheet material probably will not release asbestos fibers unless scraped. This sheet material may be coated with a high temperature paint, which will help seal any asbestos into the material.

Asbestos paper or millboard are also used for this type of thermal insulation. If these materials have been placed where they are subjected to wear, there is an increased possibility that asbestos fibers may be released. Damage or misuse of the insulating material by sanding, drilling, or sawing will also release asbestos fibers. Suitable precautions should be taken (see guidelines on pages 10-11).

Door Gaskets

Some door gaskets in furnaces, ovens, and wood and coal stoves may contain asbestos. The asbestos-containing door gaskets on wood and coal-burning stoves are subject to wear and can release asbestos fibers under normal use conditions. Handle the asbestos-containing material as little as possible, following the guidelines on pages 10-11.



Furnace Insulation

Oil, coal, or wood furnaces with asbestos-containing insulation and cement are generally found in some older homes. Updating the system to oil or gas can result in removal or damage to the old insulation.

If the insulation on or around your furnace is in good condition, it is best to leave it alone. If the insulation is in poor condition, or pieces are breaking off, you may want to consider having it repaired or removed. First find out if the insulation contains asbestos; if it does, follow the guidelines on pages 10-11.

If the insulation is breaking off around the furnace, **children should not play in this dusty area.**

Walls and Pipes

Pipe Insulation

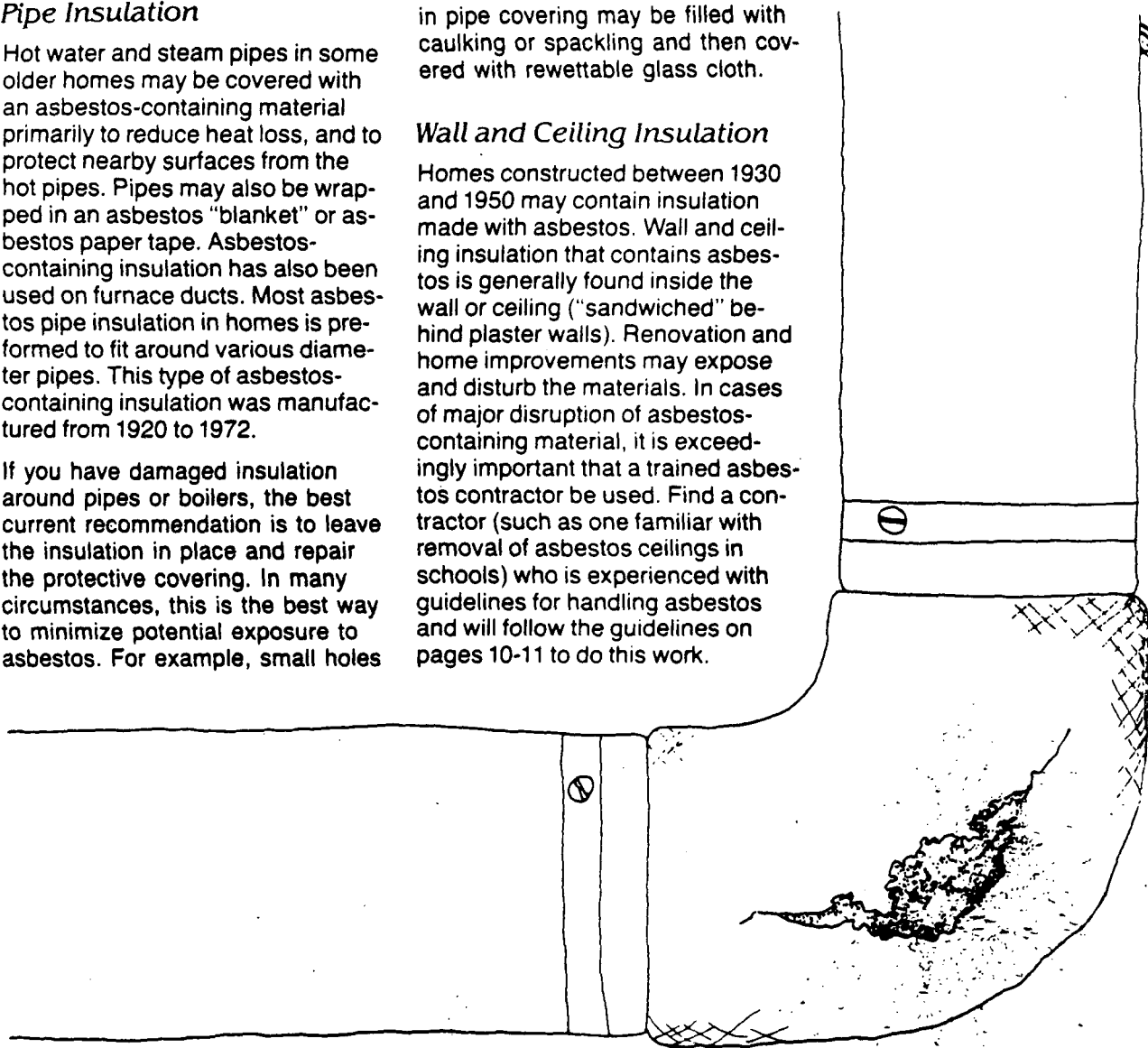
Hot water and steam pipes in some older homes may be covered with an asbestos-containing material primarily to reduce heat loss, and to protect nearby surfaces from the hot pipes. Pipes may also be wrapped in an asbestos "blanket" or asbestos paper tape. Asbestos-containing insulation has also been used on furnace ducts. Most asbestos pipe insulation in homes is performed to fit around various diameter pipes. This type of asbestos-containing insulation was manufactured from 1920 to 1972.

If you have damaged insulation around pipes or boilers, the best current recommendation is to leave the insulation in place and repair the protective covering. In many circumstances, this is the best way to minimize potential exposure to asbestos. For example, small holes

in pipe covering may be filled with caulking or spackling and then covered with rewettable glass cloth.

Wall and Ceiling Insulation

Homes constructed between 1930 and 1950 may contain insulation made with asbestos. Wall and ceiling insulation that contains asbestos is generally found inside the wall or ceiling ("sandwiched" behind plaster walls). Renovation and home improvements may expose and disturb the materials. In cases of major disruption of asbestos-containing material, it is exceedingly important that a trained asbestos contractor be used. Find a contractor (such as one familiar with removal of asbestos ceilings in schools) who is experienced with guidelines for handling asbestos and will follow the guidelines on pages 10-11 to do this work.



Appliances

Some appliances are, or have been, manufactured with asbestos-containing parts or components. The CPSC is making an effort to identify household appliances which could release asbestos fibers during use. The CPSC has reviewed information on the use of asbestos-containing parts in toasters, popcorn poppers, broilers, slow cookers, dishwashers, refrigerators, ovens, ranges, clothes dryers and electric blan-

kets. There has been a general decline in the use of asbestos in these appliances during recent years. When asbestos is used, it is in parts which will probably not result in the release of asbestos fibers during use. It is unlikely that asbestos components in these appliances present a significant health risk from release of asbestos fibers.

An exception was hair dryers with asbestos-containing heat shields. Manufacturers voluntarily recalled

such hair dryers in 1979. Laboratory tests of most hair dryers showed that asbestos fibers were released during use. Current production hair dryer models do not contain asbestos heat shields.

If you are concerned about asbestos in an appliance, do not repair it yourself. Instead, have a qualified repair technician repair it.

Roofing, Shingles, and Siding

Some roofing shingles, siding shingles and sheets have been manufactured with asbestos-using portland cement as a binding agent. Since these products are already in place and outdoors, there is likely to be little risk to human health. However, if the siding is worn or dam-

aged, you may spray paint it to help seal in the fibers.

You should avoid disturbing these products if they are already part of your home. Unless the roofing must be replaced as a result of normal wear, it is wiser to simply leave it in

place. If repair or replacement is necessary, follow the guidelines on pages 10-11.

How to Identify Asbestos

You should first try to determine whether the material does in fact contain asbestos. Avoid disturbing the material if at all possible. If you cannot determine from the label, installer, or manufacturer whether the material contains asbestos, it is best to assume that the product does contain asbestos.

People who have frequently worked with asbestos material (such as plumbers, building contractors or heating contractors) often are able to make a reasonable judgment

about whether or not a product contains asbestos, based on a visual inspection. If you are uncertain whether some materials contain asbestos, you may want to call such people for advice.

In some cases, you may want to have the material analyzed. Such analysis may be desirable if you have a large area of damaged material or if you are preparing a major renovation which will expose material contained behind a wall or other barrier. Before attempting to sample

the material, call the CPSC Hotline number on page 12 for information on sampling and to locate a laboratory capable of analyzing material samples for asbestos. Laboratory analysis can be expensive, ranging from about \$20 to more than \$40 per sample, and several samples may be required to have a more accurate determination of asbestos content.

General Guidelines

for Handling Products Containing Asbestos

If you think that a material contains asbestos, and you have to disturb it, handle it very carefully. Special precautions should be taken during removal of exposed or damaged asbestos-containing material. If possible, find a contractor trained in safe procedures for handling asbestos (such as a contractor familiar with removal of asbestos ceilings in schools). Always keep the following caution in mind:

Follow these basic precautions for working with asbestos:

1. Do not disturb any material you think may contain asbestos unless you have to. Removal of the material is usually the last alternative.
2. Seal off the work area from the rest of the residence. Plastic sheeting and duct tape may be used. Take great care not to

track asbestos dust into other areas of the residence.

3. Always wear a certified respirator appropriate for the specific asbestos activity. Wear gloves, hats, and other protective clothing. If possible, dispose of all of this equipment immediately after using it. If you cannot dispose of your clothing, wash it separately from the family's wash. (Call the CPSC Hotline number listed on

Caution:

Do not dust, sweep, or vacuum particles suspected of containing asbestos. This will disturb tiny asbestos fibers and may make them airborne. The fibers are so small that they cannot be seen and can pass through normal vacuum cleaner filters and get back into the air. The dust should be removed by a wet-mopping procedure or by specially-designed "HEPA" vacuum cleaners used by trained asbestos contractors.



page 12 for information on respirators.)

4. When working with asbestos-containing material, wet it with a hand sprayer. The sprayer should provide a fine mist, and the material should be thoroughly dampened, but not dripping wet. Wet fibers do not float in the air as readily as dry fibers and will be easier to clean up. The addition of a small amount (about a teaspoon to a quart of water) of a low-sudsing dish or laundry detergent will improve the penetration of the water into the material and reduce the amount of water needed.

5. If you must drill or cut an asbestos-containing material, do the drilling or cutting outside if possible. Wet the material first (according to instructions in item 4, above).
6. If you must remove the material, avoid breaking it into small pieces. While it is easier to remove and handle small pieces, you are more likely to release asbestos fibers if you break the material into small pieces. Pipe insulation was usually installed in preformed blocks; remove these in complete pieces.

7. Place any material you remove and any debris from the work in plastic trash bags and dispose of it in a proper land-fill. Call your health department for instructions about how to dispose of this. Take care not to break the bag.
8. After you finish removing the material, thoroughly clean the area with wet mops, wet rags, or sponges. Repeat the cleaning procedure a second time. Wetting will help to reduce the chance that the fibers get spread around. Again, see that *no* asbestos material is tracked into other areas. If possible, dispose of the mop heads, rags, and sponges in the trash bags with the removed materials. Otherwise, vigorously flush the mop, rag, or sponge in running water in a sink or basin with a drain. Make sure to completely rinse both the utensil and the basin.
9. If you are going to have work done by a contractor, discuss these guidelines and other steps to minimize asbestos exposure.



More Information

For information about laboratories for asbestos testing, advice about where to get respirators, and guidelines for how to repair or remove asbestos, call the CPSC Hotline (numbers below) or write to the U.S. Consumer Product Safety Commission, Washington, DC 20207. The CPSC Hotline also has information on certain appliances and products (such as the brands and models of hairdryers that contained asbestos).

Call CPSC at 800-638-CPSC ²⁷⁷²

A teletypewriter (TTY) for the deaf is available on the following numbers:
National TTY (including Alaska and Hawaii)—800-638-8270.
Maryland TTY only—800-492-8104.

The U.S. Consumer Product Safety Commission (CPSC) is an independent regulatory agency charged with reducing unreasonable risks of injury associated with consumer products. CPSC is headed by five Commissioners appointed by the President with the advice and consent of the Senate.

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