

## Asbestos in the home Health and safety in the home





## Did you know?

- Asbestos is the name given to a group of fibrous silicate minerals that can potentially cause lung disease if inhaled.
- Asbestos can be found in a number of products used in the Australian building industry between the 1940s and late 1980s, and in the brakes, clutches and gaskets of many cars.
- The most commonly found household building materials that contain asbestos are asbestos-cement products (also called 'fibro' and 'AC sheeting').
- Generally the presence of asbestos in home building materials does not pose a risk to health unless the material is broken, deteriorating, or disturbed in such a way that dust containing asbestos fibres is produced.
- Special precautions should be taken by anyone needing to disturb any asbestos.

The information contained in this booklet has been prepared by the Department of Human Services. It is for general information only and does not purport to be comprehensive. It is current only at the date it is printed, and the Department of Human Services is under no obligation to update the information or correct any inaccuracy that may become apparent at a later date. The Department of Human Services specifically excludes any liability for any error or inaccuracy in, or omissions from these pages and any loss or damage that you or any other person may suffer.

Published by Rural and Regional Health and Aged Care Services, Department of Human Services, Victoria, Australia. June 2003

Also published on www.dhs.vic.gov.au/phd/environmental/

© Copyright State of Victoria 2003

This publication is copyright, no part may be reproduced by any process except in accordance with the provisions of the *Copyright Act 1968*.

Authorised by the Victorian State Government, 120 Spencer Street, Melbourne. Printed by Print Bound, 8 Apollo Court, Blackburn Victoria 3130 This booklet has been developed for householders who intend to work with or remove asbestos from their home, shed or fence; or carry out maintenance on car brakes, clutches and gaskets at home.

It provides information on precautions that should be taken by anyone needing to disturb asbestos-containing materials in the home environment, and details how to safely dispose of asbestos waste.

The advice in this booklet is based on the most recent information available. It is recommended that you follow this advice to minimise the risks of exposure to asbestos in the home environment.

We cannot guarantee that following this advice will eliminate all risks as circumstances vary depending on the type and condition of the asbestos-containing material, and other factors. If you are uncertain about any of the advice in this booklet, it is recommended that you make further enquiries using the contact details listed at the end of this booklet prior to commencing any work.

## What is asbestos?

Asbestos is the name given to a group of fibrous silicate minerals that occur naturally in the environment. Asbestos was commonly used in many building materials between the 1940s and late 1980s because of its durability, fire resistance and excellent insulating properties. Asbestos is also present in the brakes, clutches and gaskets of many cars.

Generally, the presence of asbestos in home building materials or in car parts does not pose a risk to health unless they are:

- broken;
- in poor or deteriorated condition; or
- disturbed during activities that produce dust containing asbestos fibres.

## What are the health effects of exposure to asbestos?

Some people have developed asbestos-related lung disease, such as asbestosis, lung cancer or mesothelioma, after inhaling asbestos fibres. Asbestos-related disease is generally associated with long-term exposure to asbestos in an occupational setting. However, as the level of exposure that may cause health effects is not known, exposure to asbestos fibres or dust containing asbestos fibres should always be kept to a minimum.

### Where can asbestos be found in the home?









Asbestos fibres may be found either firmly or loosely bound in a number of products once used in the Australian building industry.

#### Firmly-bound asbestos ('non-friable' asbestos)

Fibre-cement products formerly contained asbestos fibres, firmly embedded in a hardened cement matrix. Cellulose fibres have since replaced asbestos in today's fibre-cement products.

Asbestos-cement products that may be found around the home include:

- Flat or corrugated sheeting (commonly called 'fibro' or 'AC sheeting').
- Water or flue pipes.
- Roof shingles.
- Flexible building boards.
- · Imitation brick cladding.

Other materials that may contain firmly bound asbestos fibres include:

- Plaster patching compounds.
- Textured paint.
- Vinyl floor tiles.
- The backing of linoleum floor coverings.

#### Loosely-bound asbestos ('friable' asbestos)

The loose form of asbestos fibres may be found in a few older forms of insulation used in domestic heaters and stoves, and in ceiling insulation products. It should be noted, however, that ceiling insulation containing asbestos was generally used in commercial buildings and it is unlikely that the ceiling insulation in a domestic building will contain asbestos. In most cases, glass fibres have replaced asbestos in today's insulation products.

### Where can asbestos be found in cars?

Care must be taken by anyone carrying out maintenance on their car brakes, clutches or gaskets.

Asbestos has been used by the automotive industry in brake linings, clutch facings, and gaskets, for many years. Asbestos-free parts are now available, and any new parts purchased or installed after 31 December 2003 must not contain asbestos.

#### What does asbestos look like?



It is very difficult to identify the presence of asbestos by eye. As a general rule, certain building materials installed before the late 1980s may contain asbestos. However, the only way to be certain is to have a sample of the material analysed by a laboratory. Contact the National Association of Testing Authorities (NATA) (see contact details at the end of this booklet) for an analytical laboratory in your area that is accredited to identify asbestos. This should be carried out before any general maintenance, renovation or demolition activities proceed.

If you do not want to go to the expense of testing to determine if asbestos is present, then the material should be treated as though it contains asbestos.

### What should I do if I find asbestos?

In many cases the presence of asbestos-containing building materials in the home is no cause for alarm and these materials can be left in place. For example, internal asbestos-cement sheet walls or ceilings that are in good condition and coated with paint do not pose a risk to health. Also, external asbestos-cement roofs and wall cladding do not need to be replaced unless they are broken or the surfaces have deteriorated.

### Can I remove asbestos from my home myself?

A householder may legally remove asbestos from their property. As asbestos poses a health risk during removal, packaging, transport and disposal, it is important that it is handled safely during these operations.

It is recommended that loosely-bound asbestos only be removed by a licensed professional, as the health risks associated with handling this type of material are far greater than for firmly-bound asbestos.

## What should I do if I need to disturb any asbestos?

Asbestos-cement building products can be maintained, removed or disposed of safely, as long as certain precautions are taken. These precautions are detailed in the next sections, and will reduce exposure to asbestos during procedures that release asbestos fibres or dust. It should be noted that if these precautions cannot be followed you should call in a licensed asbestos removalist to do the work.

It is not advisable to do any work yourself with materials that contain loosely-bound asbestos due to the increased potential health risks in handling such material. In this case, always consult a licensed asbestos removalist. A list of licensed asbestos removalists can be obtained from the Service Provider Directory at the WorkSafe Victoria website (see contact details at the end of this booklet).

#### Consider your neighbours

When deciding how to work with, remove or dispose of asbestos-containing materials do not forget your neighbours. Under the nuisance provisions of the Health Act 1958, any nuisances which are, or are liable to be, offensive or dangerous to health could be investigated by an environmental health officer of your local council. Consequently, any asbestos work carried out without appropriate precautions may be investigated.



#### Other things to consider:

- Some renovation or demolition activities may require planning approval, and/or building/demolition permits. Contact your local council's building and planning departments for more information.
- If you are employing someone to remove asbestos products from your property, that person may need to be a licensed asbestos removalist. Unlicensed contractors (tradespeople or handymen) are not allowed to remove loosely-bound asbestos, and may only remove firmly-bound asbestos if the amount to be removed is less than 10m<sup>2</sup> in area and they conduct asbestos removal for less than 1 hour in any 7-day period. Contact WorkSafe Victoria for more information (see contact details at the end of this booklet).

# How do I safely work with or remove asbestos-cement products?

When handling asbestos-cement roofing, sheeting or other 'fibro' products, a number of precautions need to be observed to minimise the release of asbestos fibres and dust.

#### Protect yourself:

- Ordinary dust masks are not effective in preventing the inhalation of asbestos fibres and dust. Wear a half-face filter respirator fitted with a class P1 or P2 filter cartridge, or a class P1 or P2 disposable respirator appropriate for asbestos. These are available from safety supply stores (refer to the Yellow Pages) and some hardware stores. Respiratory protection devices should comply with Australian Standard 1716. Males should be clean-shaven, and the wearer should ensure the respirator has an airtight fit.
- · Wear disposable coveralls to prevent contamination of any clothing.
- Wear a disposable hat and disposable gloves.
- After the work is complete, remove the coveralls, hat and gloves. Seal these in a container and mark 'asbestos contaminated clothing' for disposal (dispose of contaminated clothing with other asbestos waste see later section). Leave the respirator on until contaminated clothing is removed, bagged and sealed.
- Thoroughly wash your hands and shower and wash your hair after handling asbestos.



#### When working outdoors:

- Keep all windows and doors of the house closed, and cover air vents to prevent asbestos fibres and dust from entering the building.
- Avoid contaminating the soil by covering the ground and vegetation with heavy duty plastic sheeting to catch dust, debris and off-cuts.
- Remove play equipment, personal belongings and vehicles from the work area.
- Keep household members and pets away from the area until the work is completed.
- Tell your neighbours that they should close their windows and doors while the work is being undertaken.
  - · Don't work with asbestos on a windy day.

#### When working indoors:

- Isolate the area you are working in from the rest of the building by closing doors. However, exterior doors and windows should be left open so as to maximise ventilation.
- Cover the floor with heavy duty plastic sheeting to catch dust, debris and off-cuts.
- Keep household members and pets away from the area until the work is completed.
  - Don't walk debris through the building.

#### When handling asbestos-cement products:

- Work with asbestos-cement products in well-ventilated areas, and where possible, in the open air (but not on windy days).
- Thoroughly wet down the material before you start work by lightly spraying it with water. Keep it wet while working to reduce the release of fibres and dust. Do not use high-pressure water jets as this may increase the spread of any loose fibres or dust. Also, do not wet down sheets if it creates a high risk of slipping from a roof.
- Only use non-powered hand tools (for example a guillotine, hand-saw, or hand-powered drill) as these generate a smaller quantity of predominantly coarser dust and waste chips.
- If removing asbestos-cement sheeting, pull out any nails first and remove the sheeting with minimal breakage. Carefully lower, but not drop, the sheets to the ground and stack them on two layers of polythene sheeting, approximately 0.2 mm thick (for example heavy duty builders plastic). Avoid skidding one asbestos-cement sheet over the surface of another as this may abrade the surface of the materials and increase the likelihood of the release of fibres and dust.
- Minimise cutting or breaking up of the asbestos-cement products.
  - Don't use power tools, abrasive cutting or sanding discs, or compressed air on asbestos-cement products.
  - Don't walk on corrugated asbestos-cement roofs, if it can be avoided. Many people have been injured by falling through weathered asbestos-cement roofs while attempting to treat or repair the roof surface.
  - Don't leave asbestos-cement products around the garden where they may be broken or crushed.

#### As soon as practicable after the work is finished:

- Clean up any asbestos-cement residues remaining in the work area using either a
  wet mop or a vacuum cleaner fitted with a High Efficiency Particulate Air (HEPA) filter.
  Mops should be cleaned by thorough washing in a sink connected to the sewer or
  septic tank system. Vacuum cleaners should comply with Australian Standard 3544.
  It is unsafe to use a domestic vacuum cleaner due to the poor containment of asbestos
  fibres and dust.
- Keep all asbestos waste wet until it is wrapped in plastic and sealed. Transport it from the site as soon as practicable, as detailed in the next section.
  - Don't clean the work area by dry sweeping, or by using a conventional vacuum cleaner.
  - Don't store or reuse asbestos-cement sheeting. As of 31 December 2003, the storage, installation and reuse of asbestos-containing materials will be prohibited under the Occupational Health and Safety (Asbestos) Regulations 2003.
  - Don't leave asbestos-cement products around the garden where they may be broken or crushed.



# How do I safely package and dispose of asbestos-cement products?

Take the following precautions when removing and disposing of asbestos-cement products:

- Protect yourself, as described previously.
- Thoroughly wet down the material before you start, and maintain it in a wet condition until packaged.
- Carefully package asbestos-cement waste, including any off-cuts, in two layers of polythene sheeting, approximately 0.2 mm thick (for example heavy duty builders plastic). Completely seal up the packages with adhesive tape and keep them to a manageable size.
- Smaller-sized asbestos waste such as tiles, off-cuts and dust can be placed in double polythene bags, approximately 0.2 mm thick. Completely tie or seal these up.
- Clearly label packages to identify the contents as shown below.

Caution – Asbestos

Do not open or damage bag

Do not inhale dust

Continued on next page ...

- Place the packages in the cargo-carrying compartment of the vehicle and dispose of them at an asbestos waste disposal site, licensed by the Victorian Environment Protection Authority (EPA). Contact the EPA (see contact details at the end of this booklet) for details of a licensed asbestos waste disposal site in your area. Many sites require 24–48 hours notice before the arrival of asbestos waste.
- Alternatively, property owners can hire a mini-skip from some licensed asbestos removal companies to fill with asbestos waste, and then have it collected by the removalist. Check the Yellow Pages telephone directory under 'asbestos removal' for details of companies that provide this service.
- Contact the EPA (see contact details at the end of this booklet) for further advice on the packaging, transport and disposal of domestic asbestos waste.

- Don't dispose of asbestos waste in a normal rubbish skip.
- Don't dump asbestos waste.
- Don't dispose of asbestos during council 'hard rubbish' collections.

## How do I safely carry out maintenance on my car brakes, clutch or gaskets?

Asbestos is present in the brakes, clutches and gaskets of many vehicles. These parts can safely be worked on, provided the following precautions are taken:

- Work in the open air if possible, and exclude other people and pets from the area you are working in.
- Use plastic drop sheets to collect dust and debris.
- Protect yourself by wearing a respirator and disposable coveralls (as described on page 7 of this booklet).
- Use hand tools, as these minimise dust generation.
- Wet parts, before starting work, to prevent fibres and dust from becoming airborne. This method is only effective if a fine mist is used.
- Wipe parts with a damp cloth to clean them, and dispose of this cloth after use.
- Clean the work area after the job is completed, using either a wet mop or a vacuum cleaner fitted with a High Efficiency Particulate Air (HEPA) filter. Clean the mop thoroughly by washing in a sink connected to the sewer or septic tank system.
- Package and dispose of waste as described on pages 11 and 12 of this booklet.
  - Don't use compressed air to clean or help remove parts that could contain asbestos, as this will disperse asbestos fibres.
  - Don't clean parts by either dry brushing or hitting them against a surface, as this causes dust and fibres to become airborne.
  - Don't use air tools or power tools.
  - Don't clean the work area by dry sweeping or using a conventional vacuum cleaner.

## Who do I contact for further information about asbestos?

#### Local Council

(Environmental Health Officer)

For enquiries or complaints regarding the incorrect removal or disposal of asbestos in your neighbourhood, and for enquiries regarding the potential health effects of exposure to asbestos in the home environment. (Refer to telephone directory)

#### **Department of Human Services**

(Environmental Health Unit) For enquiries regarding the potential health effects of exposure to asbestos in the home environment. Tel (03) 9637 4156 www.dhs.vic.gov.au/phd/environmental/

#### **Environment Protection Authority**

For a list of licensed asbestos disposal sites in your area, and enquiries relating to the correct disposal of asbestos-containing materials. Tel (03) 9695 2722 www.epa.vic.gov.au

#### WorkSafe Victoria

For a list of licensed asbestos removalists in your area, complaints regarding work carried out by an asbestos removalist, and enquiries or complaints regarding asbestos in the workplace.

Tel 1800 136 089 www.workcover.vic.gov.au

#### National Association of Testing Authorities

For a NATA-accredited laboratory in your area that can identify asbestos. Tel (03) 9329 1633 www.nata.asn.au

This booklet was prepared by the Environmental Health Unit, Victorian Government Department of Human Services, in consultation with WorkSafe Victoria, the Environment Protection Authority, local government and the Building Commission. June 2003.

