



Unit 4 Working Safely with Asbestos

Learning Outcomes

By the end of this unit the learner will be able to:

- ✓ Work safely in an area where asbestos-containing materials are present or suspected to be present
- ✓ Dispose of asbestos-containing waste in an appropriate manner
- ✓ Determine which equipment should be used to clean up an area contaminated with asbestos

Unit 4

Working Safely with Asbestos

Make sure you work safely by taking appropriate precautions when carrying out any work that could disturb asbestos.

Do:

stop work and speak to your employer, or the building owner if you are suspicious something may be asbestos or if you think the work might need to be carried out by a licensed contractor follow the plan of work and the essentials guidance sheets; make sure you use the right sheet for the job

- make sure you take account of other risks such as work at height
- use your protective equipment, including a suitable face mask, worn properly
- clean up as you go - stop waste building up
- make sure waste is double-bagged and is disposed of properly (PDF) at a licensed tip
- wash before breaks and before going home
- check whether the work should be notified
- make sure you have had adequate training before you start work

Don't:

- use methods that create a lot of dust, like using power tools
- sweep up dust and debris - use a Type H vacuum cleaner or wet rags
- take home overalls used for asbestos work
- reuse disposable clothing or masks
- smoke
- eat or drink in the work area

What should those in Charge of the Job do?

They must:

- find out if asbestos-containing materials are present and plan the work to avoid disturbing these materials if possible
- ensure that anyone who is going to work on asbestos material has had appropriate information, instruction and training and is supervised
- know what work can be carried out on asbestos-containing materials, ie does this work need to be carried out by a licensed contractor
- take account of other risks as well as asbestos, eg work at height, and take the precautions necessary to do the job safely
- use the equipment and method sheets and the right task sheet to make sure that the job is carried out properly and that exposure to asbestos is kept as low as possible
- prepare a plan of work, explaining what the job involves, the work procedures, and what controls

to use

- provide you with the right equipment, which is clean, in good working order, and protects you against asbestos
- train you in using this equipment
- make sure the work area is inspected visually at the end of the job, to check it's fit for reoccupation
- make arrangements for the safe disposal of any asbestos waste
- consult the health and safety representative (if there is one)

What does the Law Require?

There are a number of sets of regulations, which cover work with all types of asbestos-containing material; they place duties on 'duty holders', employers and the self-employed. A quick summary of these regulations can be found in the asbestos regulations section of this website.

Safer Handling Asbestos In-Situ

Even in an emergency setting under difficult conditions with little or no existing asbestos control, legislation or local awareness – transitional settlement and reconstruction specialists can take a few key steps that will contribute towards minimising health risks.

1. Identify the locations of asbestos-containing materials and assess the risks.
2. Ensure that people are adequately informed of the risks and methods of best practice.
3. Minimise the disturbance of asbestos-containing materials.
4. Minimise the extent to which people have contact with asbestos.
5. Ensure that waste is securely stored and adequately labeled.

Asbestos identification

Identifying ACMs is an important first step in minimising health risks.

Post Disaster Clear up

The normal procedure for asbestos identification in clean-up operations is for trained personnel to inspect and test the materials and to determine the hazard and best course of action. This, however, may not always be possible in a disaster or conflict situation given the lack of facilities, shortage of trained personnel and the scale of the damage.

The safest step is to seek information on local construction practices and, if in doubt, to assume that the debris does contain Asbestos. This is normally the case in urban settings, given the prevalent international use of asbestos.

Transitional Settlement and Reconstruction

The use of new asbestos products perpetuates the problem for workers and the public in the long-term and should be avoided. When buying new materials such as roofing sheets, ask suppliers for certification. Certification, however, does not guarantee that a product will be asbestos-free as fake certificates are common. It is advisable to send a carefully collected and wrapped sample of the material to the nearest reliable laboratory for confirmation, while also investigating alternative materials. This is the only reliable way to confirm whether a material is asbestos-free and to ensure that reconstruction activities do not contribute to the problem in the long-term.

Awareness and Training

A second step in minimising health risks is to ensure that people are aware of the risks and know what to do.

Public Awareness

Following a disaster or emergency, should there be suspected ACMs in the damaged buildings and debris, a public awareness campaign disseminated with the support of local and regional authorities will help raise awareness of the issue.

The campaign should be aimed at relevant representatives of the general population and provide simple and easy to understand information that describes:

- what asbestos is;
- where it might be found;

“A key message of the campaign should be that ACMs should only be handled and disposed of by trained and experienced people.”

- What the hazards are; and
- That only trained personnel with adequate protective equipment should access suspect sites and/or handle asbestos-containing material.

Worker Training

In addition to the above information, worker training should include:

- Risk assessment;
- Required Personal Protection Equipment; and
- Control measures for asbestos during handling and disposal.

Asbestos Handling

Reducing health risks of asbestos handling is based on two principles:

- minimise the disturbance of ACMs; and
- minimise the extent to which people have contact with ACMs

In most post-disaster situations, ACMs have already been disturbed and dealing with Themis a reality. Once they have been identified and a public awareness campaign launched, consider the following steps to minimise the extent of contact with asbestos.

Safer Handling of Asbestos in-Situ Key Points

Provide protective equipment and training as a minimum, provide workers with gloves, goggles, disposable clothing or replacement clothing and dust masks. Dispose of contaminated clothing and protective equipment in the same way as other asbestos-containing materials. Provide washing facilities for workers and training to all involved.

If possible, don't disturb it, break it or cut it

This can release asbestos dust which contains hazardous fibres.

Don't burn it

Never burn suspected ACMs as this releases dangerous fibres into the air.

Wet it

If it is necessary to move, saw or breakup the materials, keep them thoroughly wet to reduce the amount of airborne fibres. Work only in well-ventilated areas. Take particular care with friable materials. Clean any contaminated surfaces by wetting the area or using damp cloths. Never dust or sweep as this propels fibres into the air.

Cover it

If you are keeping it, coat it with watered down paint or glue. If you are disposing of it, keep piles of ACMs covered with plastic sheets until they can be disposed of. Always wet the materials before moving

Wrap it up

Store asbestos-containing waste in sealable containers until it can be disposed of safely. Use metal or plastic drums or strong polyethylene bags. If using bags put one bag inside another and seal with strong tape. Label the containers in the local language and include a hazard warning before disposal.

“Asbestos waste should not be disposed of with other wastes. It should be enclosed in a sealable container and disposed of at separate facilities.”

Asbestos Disposal

If asbestos is improperly disposed of, it can cause additional health risks. Exposed and visible materials may be re-used by scavengers who are not aware of the risks. Children may play with the debris. Insufficient covering or erosion control may expose the waste and increase the likelihood of asbestos fibres contaminating both air and water.

Asbestos waste should not be disposed of with other wastes. It should be enclosed in a sealable container and disposed of at separate facilities. In countries where asbestos use is regulated, there will be special or hazardous waste disposal facilities.

If special facilities are unavailable, asbestos waste should be sealed in triple lined bags and disposed of at a secured waste site and kept separate from other types of waste. Work with the local government to identify a suitable and safe site and ensure that a record is kept of the location.

Selecting and Creating an Asbestos Disposal Site Key Points

Site

In collaboration with the local government, locate a site where adequate cover material is available, access is good and controllable and where the waste cannot be exposed by water or wind erosion, slope failure, further disasters or re-excitation.

Vehicles

Clearly label vehicles transporting asbestos waste and ensure they are operated by trained personnel.

Emission Protection

During and after the disposal of asbestos waste, make sure no visible emissions occur and cover waste with at least 15cm of compacted non- asbestos-containing material within 24 hours of disposal.

Barriers

If no natural barriers exist around the site to deter access, install fencing, trenches or other barriers to prevent unauthorised access to the designated area.

Warning Signs

Post warning signs at the entrance of the site and around the perimeter.

Closure

Final closure of an area containing asbestos waste requires at least an additional 75cm of compacted non-asbestos material to provide a 1m final cover. This must be done within 90 days of the last deposition.

“The most efficient way to eliminate asbestos-related diseases is to stop the future use of all types of asbestos.”

Further Reading:

- ✓ The Health Effects of Asbestos: An Evidence-based Approach 1st Edition, Kindle Edition by Dorsett D. Smith (Author), 2015
- ✓ Working Safely in Health Care: A Practical Guide (Safety and Regulatory for Health Science) 1st Edition by Deborah Fell-Carlson, 2007