

A. KEY POINTS FOR THE SAFE HANDLING OF ASBESTOS

SAFE HANDLING OF ASBESTOS

1. PROVIDE PROTECTIVE EQUIPMENT AND TRAINING



- As a minimum, provide workers with gloves, goggles, disposable clothing or replacement clothing, adequate footwear and disposable masks (see Appendix C for specifications).
- Dispose of contaminated clothing and protective equipment in the same way as other asbestos-containing materials (ACMs).
- Provide washing facilities for workers and training to all involved if possible, or work supervisors as a minimum



2. IF POSSIBLE, DO NOT DISTURB IT, BREAK IT OR CUT IT

This can release asbestos dust which contains hazardous fibres



3. DO NOT BURN IT

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

4. WET IT



- If it is necessary to move, saw or break up 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 damps cloths. Never dust or sweep as this propels fibres into the air



5. COVER IT

- When disposing of it, keep piles of ACMs covered with plastic sheets until they can be disposed of
- Always wet the materials before moving

6. 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(s) and include a hazard warning before disposal





B. DEDICATED ASBESTOS DISPOSAL SITE SELECTION AND DEVELOPMENT

ASBESTOS SITE SELECTION AND DEVELOPMENT



1. 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-excavation



2. VEHICLES

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



3. 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



4. 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



5. WARNING SIGNS

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



6. 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





MINIMUM STANDARDS

for working with debris waste in Beirut

C. PPE REQUIREMENTS WHEN COMING INTO CONTACT WITH ASBESTOS CONTAINING MATERIALS

Personal protective clothing and equipment is an essential line of defence for minimising the risks presented by contact with asbestos when elimination and isolation of the hazard is not practicable. It is essential that workers receive prior training on the use of personal protective equipment.

WHAT IS PERSONAL PROTECTIVE EQUIPMENT (PPE)?

PPE is clothing or equipment which provides protection to the user from a potential hazard.

WHAT PPE MUST BE WORN WHEN ASBESTOS IS OR MAY BE PRESENT?

If asbestos or asbestos containing materials are present, or there is a possibility of presence, the following should be worn:

- **Respiratory Protective Equipment** (RPE) should be used by those designated to handle asbestos whenever practicable to avoid inhaling asbestos fibres
- Overalls disposable, to avoid the risk of carrying asbestos fibres away from the worksite on clothing
- **Footwear** appropriate for the work being undertaken (see next page for details).

WHAT PPE IS REQUIRED

Although controls must be in place to prevent or reduce exposure to asbestos fibres when working with ACMs (see Appendix A), when exposure cannot be avoided the last line of defence against dangerous exposure is the use of appropriate PPE. The following details the levels of PPE recommended for work with asbestos materials, from that which provides the best protection to the minimum standard required.



Respiratory Protective Equipment

For long periods of continuous use in demolition related works, effort must be made to use the highest level of mask available and practical in the circumstances. Figure 1 shows the type of mask, covering the whole face, which should be used by those working significant amounts of time with or in close proximity to ACMs. Full face masks should conform to BS EN 136 standard with P3 filter and should be used by licensed operators.



If a full-face mask is not available to those needing to clear debris containing or potentially containing ACM, then a face mask covering nose and mouth should be used. Figure 2 shows a reusable mask (applicable standard EN140 with P3 filter), covering nose and mouth, which would be suitable for those working for regular periods in debris clearance.



Figure 3: Basic disposable face covering

Figure 3 shows the minimum standard face mask that must be used by anyone working with or near ACMs. if higher level masks are not available. This equipment should be suitable for most short-duration non-licensed work, especially for open-air debris removal and disposal activities.

The mask used should be of FFP3 or FMP3 standard and should be used at all times when in close proximity to ACMs. When using FFP3 (applicable standard BS EN 1827) or FMP3 (applicable standard BS EN 149) masks. these should be properly disposed of at the end of each day and a new mask worn the following working day.



Figure 4: Safety goggles

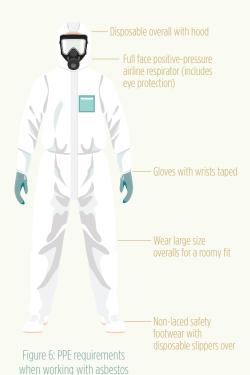
Safety Goggles

Should one of the masks shown in Figure 3 or Figure 6 be used, then it is recommended that safety goggles are used, meeting BS EN 166 standard) as shown in Figure 4.



Footwear

Appropriate footwear is an important part of the PPE required when working with asbestos contaminated debris. It is recommended that Wellington Boots designed specifically for this purpose be worn by everyone involved in this work. Wellingtons should be EN ISO 20345:2011 compliant, to provide solid sole protection from penetration and steel toecaps. An example of this footwear is shown in Figure 5.



Full RPE for High Risk Work

Figure 6 shows the necessary full PPE required when working to clear ACMs. This is the level of PPE necessary for trained people spending significant amounts of time working to separate and dispose of ACMs who will therefore have a high level of exposure to asbestos over a sustained period. Disposable overalls should be Type 5/6 (relevant standard BS EN ISO 13982+A1). Gloves should be Type 5/6 single use and be appropriately disposed of at the end of each day. Footwear should be solid sole, ankle high wherever possible. Wellington boots (see Figure 5) or non-laced pull-on footwear is preferable as these are easier to clean. Disposable overshoes should be used if non-laced footwear is not available. Disposable overalls, gloves and overshoes should be treated as hazardous and disposed of with other asbestos waste.





D. PERSONAL DECONTAMINATION

It is important that everyone working with or near asbestos materials ensures they are fully decontaminated before leaving the workplace. This will help alleviate the possibility of taking asbestos fibres home on clothing and exposing family and friends.

The following procedure should be followed by each person working at on debris clearance involving asbestos materials.

PROCEDURE





- Clean boots with damp rags
- Use damp rags in a gentle 'patting' action on overalls (rubbing can disturb fibres)
- Where there are two workers, they can help to clean each other
- Peel off disposable overalls. They should be inside-out when they have been removed. Put the overalls in a suitable asbestos waste bag (UN-approved Class 9 plastic bag)
- Remove RPE last. If using disposable face covering, place these in the asbestos waste bag. For non-disposable RPE, clean after use and store in safe place away from contamination
- Tape the waste bag securely closed and dispose of with hazardous waste