

2003/18/EC amendment to the Asbestos Worker Protection Directive 83/477/EEC**Article 1**

1. This Directive has as its aim the protection of workers against risks to their health, including the prevention of such risks, arising or likely to arise from exposure to asbestos at work. It lays down limit values and other specific requirements.
2. Deleted
3. This Directive shall not prejudice the right of Member States to apply or introduce laws, regulations or administrative provisions ensuring greater protection for workers, in particular as regards the replacement of asbestos by less-dangerous substitutes.

Article 2

For the purposes of this Directive, 'asbestos' means the following fibrous silicates:

- Asbestos actinolite, CAS No 77536-66-4(9),
- Asbestos grunerite (amosite) CAS No 12172-73-5(10),
- Asbestos anthophyllite, CAS No 77536-67-5(11),
- Chrysotile, CAS No 12001-29-5(12),
- Crocidolite, CAS No 12001-28-4(13),
- Asbestos tremolite, CAS No 77536-68-6(14).

Article 3

1. This Directive shall apply to activities in which workers are or may be exposed in the course of their work to dust arising from asbestos or materials containing asbestos.
2. In the case of any activity likely to involve a risk of exposure to dust arising from asbestos or materials containing asbestos, this risk must be assessed in such a way as to determine the nature and degree of the workers' exposure to dust arising from asbestos or materials containing asbestos.
3. Provided that worker exposure is sporadic and of low intensity, and when it is clear from the results of the risk assessment referred to in paragraph 2 that the exposure limit for asbestos will not be exceeded in the air of the working area, Articles 4, 15 and 16 may be waived where work involves:
 - (a) short, non-continuous maintenance activities in which only non-friable materials are handled,
 - (b) removal without deterioration of non-degraded materials in which the asbestos fibres are firmly linked in a matrix,
 - (c) encapsulation or sealing of asbestos-containing materials which are in good condition,
 - (d) air monitoring and control, and the collection of samples to ascertain whether a specific material contains asbestos.
- 3a. Member States shall, following consultation with social partners in accordance with national law and practice, lay down practical guidelines for the determination of sporadic and low-intensity exposure, as provided for in paragraph 3.
4. The assessment provided for in paragraph 2 shall be the subject of consultation with the workers and/or their representatives within the undertaking or establishment and shall be

revised where there is reason to believe that it is incorrect or there is a material change in the work.

Article 4

Subject to Article 3(3), the following measures shall be taken:

1. The activities referred to in Article 3 (1) must be covered by a notification system administered by the responsible authority of the Member State.
2. The notification shall be submitted by the employer to the responsible authority of the Member States, before the work commences, in accordance with national laws, regulations and administrative provisions.

The notification must include at least a brief description of:

- (a) the location of the work site,
 - (b) the type and quantities of asbestos used or handled,
 - (c) the activities and processes involved,
 - (d) the number of workers involved,
 - (e) the starting date and duration of the work,
 - (f) measures taken to limit the exposure of workers to asbestos.
3. Workers and/or their representatives in undertakings or establishments shall have access to the documents which are the subject of notification concerning their own undertaking or establishment in accordance with national laws.
 4. Each time a change in working conditions is likely to result in a significant increase in exposure to dust from asbestos or materials containing asbestos, a new notification must be submitted.

Article 5

The application of asbestos by means of the spraying process and working procedures that involve using low-density (less than 1g/cm³) insulating or soundproofing materials which contain asbestos shall be prohibited.

Without prejudice to the application of other Community provisions on marketing and use of asbestos, activities which expose workers to asbestos fibres during the extraction of asbestos or the manufacture and processing of asbestos products or the manufacture and processing of products containing intentionally added asbestos shall be prohibited, with the exception of the treatment and disposal of products resulting from demolition and asbestos removal.

Article 6

For all activities referred to in Article 3(1), the exposure of workers to dust arising from asbestos or materials containing asbestos at the place of work must be reduced to a minimum and in any case below the limit value laid down in Article 8, in particular through the following measures:

1. the number of workers exposed or likely to be exposed to dust arising from asbestos or materials containing asbestos must be limited to the lowest possible figure;
2. work processes must be designed so as not to produce asbestos dust or, if that proves impossible, to avoid the release of asbestos dust into the air;
3. all premises and equipment involved in the treatment of asbestos must be capable of being regularly and effectively cleaned and maintained;
4. asbestos or dust-generating asbestos-containing material must be stored and transported in suitable sealed packing;

5. waste must be collected and removed from the place of work as soon as possible in suitable sealed packing with labels indicating that it contains asbestos. This measure shall not apply to mining activities. Such waste shall then be dealt with in accordance with Council Directive 91/689/EEC of 12 December 1991 on hazardous waste.

Article 7

1. Depending on the results of the initial risk assessment, and in order to ensure compliance with the limit value laid down in Article 8, measurement of asbestos fibres in the air at the workplace shall be carried out regularly.
 2. Sampling must be representative of the personal exposure of the worker to dust arising from asbestos or materials containing asbestos.
 3. Sampling shall be carried out after consultation of the workers and/or their representatives in undertakings.
 4. Sampling shall be carried out by suitably qualified personnel. The samples taken shall be subsequently analysed, in accordance with paragraph 6, in laboratories equipped for fibre counting.
 5. The duration of sampling must be such that representative exposure can be established for an eight-hour reference period (one shift) by means of measurements or time-weighted calculations.
 6. Fibre counting shall be carried out wherever possible by PCM (phase-contrast microscope) in accordance with the 1997 WHO (World Health Organisation) recommended method(16) or any other method giving equivalent results.
- For the purpose of measuring asbestos in the air, as referred to in the first subparagraph, only fibres with a length of more than five micrometres, a breadth of less than three micrometres and a length/breadth ratio greater than 3:1 shall be taken into consideration.

Article 8

Employers shall ensure that no worker is exposed to an airborne concentration of asbestos in excess of 0,1 fibres per cm³ as an eight-hour time-weighted average (TWA).

Article 9

1. Deleted.
2. The amendments necessary to adapt the Annexes to this Directive to technical progress shall be adopted in accordance with the procedure laid down in Article 17 of Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at the workplace (OJ L 183, 29. 6. 1989, p. 1).

Article 10

1. Where the limit value laid down in Article 8 is exceeded, the reasons for the limit being exceeded must be identified and appropriate measures to remedy the situation must be taken as soon as possible.
Work may not be continued in the affected area until adequate measures have been taken for the protection of the workers concerned.
2. In order to check the effectiveness of the measures mentioned in the first subparagraph of paragraph 1, a further determination of the asbestos-in-air concentrations shall be carried out immediately.
3. Where exposure cannot be reduced by other means and where compliance with the limit value makes necessary the wearing of individual protective breathing equipment, this may not be permanent and shall be kept to the strict minimum necessary for each worker. During periods of work which require the use of such equipment, provision shall be made for breaks appropriate to the physical and climatological conditions and, where relevant, in

consultation with the workers and/or their representatives, in accordance with national laws and practice.

Article 10a

Before beginning demolition or maintenance work, employers shall take, if appropriate by obtaining information from the owners of the premises, all necessary steps to identify presumed asbestos-containing materials.

If there is any doubt about the presence of asbestos in a material or construction, the applicable provisions of this Directive shall be observed.

Article 11

1. In the case of certain activities such as demolition, removal, repairing and maintenance in respect of which it is foreseeable that the limit value set out in Article 8 will be exceeded despite the use of technical preventive measures for limiting asbestos in air concentrations, the employer shall determine the measures intended to ensure protection of the workers while they are engaged in such activities, in particular the following:

- (a) workers shall be issued with suitable respiratory and other personal protective equipment, which must be worn; and
- (b) warning signs shall be put up indicating that it is foreseeable that the limit value laid down in Article 8 will be exceeded; and
- (c) the spread of dust arising from asbestos or materials containing asbestos outside the premises or site of action shall be prevented.

2. The workers and/or their representatives in the undertaking or establishment shall be consulted on these measures before the activities concerned are carried out.

Article 12

1. A plan of work shall be drawn up before demolition work or work on removing asbestos and/or asbestos-containing products from buildings, structures, plant or installations or from ships is started.

2. The plan referred to in paragraph 1 must prescribe the measures necessary to ensure the safety and health of workers at the place of work.

The plan must in particular specify that:

- asbestos and/or asbestos-containing products are to be removed before demolition techniques are applied, except where this would cause a greater risk to workers than if the asbestos and/or asbestos-containing products had been left in place;
- the personal protective equipment referred to in Article 11(1)(a) shall be provided, where necessary;
- when the asbestos demolition or removal work has been completed, the absence of asbestos exposure risks in the workplace shall be verified in compliance with national legislation and practices.

At the request of the competent authorities, the plan shall include information on the following:

- the nature and probable duration of the work,
- the place where the work is carried out,
- the methods applied where the work involves the handling of asbestos or of materials containing asbestos,

- the characteristics of the equipment used for:
- protection and decontamination of those carrying out the work,
- protection of other persons present on or near the worksite.

3. At the request of the competent authorities, the plan referred to in paragraph 1 must be notified to them before the start of the projected work.

Article 12a

1. Employers shall provide appropriate training for all workers who are, or are likely to be, exposed to asbestos-containing dust. Such training must be provided at regular intervals and at no cost to the workers.

2. The content of the training must be easily understandable for workers. It must enable them to acquire the necessary knowledge and skills in terms of prevention and safety, particularly as regards:

- (a) the properties of asbestos and its effects on health, including the synergistic effect of smoking;
- (b) the types of products or materials likely to contain asbestos;
- (c) the operations that could result in asbestos exposure and the importance of preventive controls to minimise exposure;
- (d) safe work practices, controls and protective equipment;
- (e) the appropriate role, choice, selection, limitations and proper use of respiratory equipment;
- (f) emergency procedures;
- (g) decontamination procedures;
- (h) waste disposal;
- (i) medical examination requirements.

3. Practical guidelines for the training of asbestos removal workers shall be developed at Community level.

Article 12b

Before carrying out asbestos demolition or removal work, firms must provide evidence of their ability in this field. The evidence shall be established in accordance with national laws and/or practice.

Article 13

1. In the case of all activities referred to in Article 3 (1), and subject to Article 3 (3), appropriate measures shall be taken to ensure that:

- (a) the places in which the above activities take place shall:
 - (i) be clearly demarcated and indicated by warning signs;
 - (ii) not be accessible to workers other than those who by reason of their work or duties are required to enter them;
 - (iii) constitute areas where there should be no smoking;
- (b) areas are set aside where workers can eat and drink without risking contamination by asbestos dust;
- (c)
 - (i) workers are provided with appropriate working or protective clothing;
 - (ii) this working or protective clothing remains within the undertaking. It may, however, be laundered in establishments outside the undertaking

which are equipped for this sort of work if the undertaking does not carry out the cleaning itself; in that event the clothing shall be transported in closed containers;

(iii) separate storage places are provided for working or protective clothing and for street clothes;

(iv) workers are provided with appropriate and adequate washing and toilet facilities, including showers in the case of dusty operations;

(v) protective equipment shall be placed in a well-defined place and shall be checked and cleaned after each use; appropriate measures shall be taken to repair or replace defective equipment before further use.

2. Workers may not be charged with the cost of measures taken pursuant to paragraph 1.

Article 14

1. In the case of all activities referred to in Article 3 (1), appropriate measures shall be taken to ensure that workers and their representatives in the undertaking or establishment receive adequate information concerning:

- the potential risks to health from exposure to dust arising from asbestos or materials containing asbestos,
- the existence of statutory limit values and the need for the atmosphere to be monitored,
- hygiene requirements, including the need to refrain from smoking,
- the precautions to be taken as regards the wearing and use of protective equipment and clothing,
- special precautions designed to minimize exposure to asbestos.

2. In addition to the measures referred to in paragraph 1, and subject to Article 3(3), appropriate measures shall be taken to ensure that:

- (a) workers and/or their representatives in the undertaking or establishment have access to the results of asbestos-in-air concentration measurements and can be given explanations of the significance of those results;
- (b) if the results exceed the limit value laid down in Article 8 the workers concerned and their representatives in the undertaking or establishment are informed as quickly as possible of the fact and the reasons for it and the workers and/or their representatives in the undertaking or establishment are consulted on the measures to be taken or, in an emergency, are informed of the measures which have been taken.

Article 15

Subject to Article 3 (3) the following measures shall be taken:

1. An assessment of each worker's state of health must be available prior to the beginning of exposure to dust arising from asbestos or materials containing asbestos at the place of work.

This assessment must include a specific examination of the chest. Annex II gives practical recommendations to which the Member States may refer for the clinical surveillance of workers; these recommendations shall be adapted to technical progress 'in accordance with the procedure laid down in Article 17 of Directive 89/391/EEC'.

A new assessment must be available at least once every three years for as long as exposure continues.

An individual health record shall be established in accordance with national laws and practices for each worker referred to in the first subparagraph.

2. Following the clinical surveillance referred to in point 1, the doctor or authority responsible for the medical surveillance of the workers should, in accordance with national laws, advise on or determine any individual protective or preventive measures to be taken; these may include, where appropriate, the withdrawal of the worker concerned from all exposure to asbestos.

3. Information and advice must be given to workers regarding any assessment of their health which they may undergo following the end of exposure.

The doctor or authority responsible for the medical surveillance of workers may indicate that medical surveillance must continue after the end of exposure for as long as they consider it necessary to safeguard the health of the person concerned.

Such continuing surveillance shall be carried out in accordance with the laws and practices of the individual Member States.

4. The worker concerned or the employer may request a review of the assessments referred to in point 2, in accordance with national laws.

Article 16

Subject to Article 3 (3) the following measures shall be taken:

1. The employer must enter the workers responsible for carrying out the activities referred to in Article 3 (1) in a register, indicating the nature and duration of the activity and the exposure to which they have been subjected. The doctor and/or the authority responsible for medical surveillance shall have access to this register. Each worker shall have access to the results in the register which relate to him personally. The workers and/or their representatives shall have access to anonymous, collective information in the register.

2. The register referred to in point 1 and the medical records referred to in Article 15(1) shall be kept for at least 40 years following the end of exposure, in accordance with national laws and/or practice.

3. The documents referred to in point 2 shall be made available to the responsible authority in cases where the undertaking ceases trading, in accordance with national laws and/or practice.

Article 16a

Member States shall provide for adequate sanctions to be applicable in the event of infringement of national legislation adopted pursuant to this Directive. These sanctions must be effective, proportionate and dissuasive.

Article 17

Member States shall keep a register of recognized cases of asbestosis and

Article 18

1. Member States shall adopt the laws, regulations and administrative provisions necessary to comply with this Directive before 1 January 1987. They shall forthwith inform the Commission thereof. The date 1 January 1987 is, however, postponed until 1 January 1990 in the case of asbestos-mining activities.

2. Member States shall communicate to the Commission the provisions of national law which they adopt in the field covered by this Directive.

Article 19

This Directive is addressed to the Member States.

Done at Brussels, 19 September 1983.

For the Council

The President
G. VARFIS

- (1) OJ No C 262, 9. 10. 1980, p. 7 and OJ No C 301, 18. 11. 1982, p. 6.
- (2) OJ No C 310, 30. 11. 1981, p. 43.
- (3) OJ No C 125, 17. 5. 1982, p. 155.
- (4) OJ No C 165, 11. 7. 1978, p. 1.
- (5) OJ No L 327, 3. 12. 1980, p. 8.

- (1) Number in the register of the Chemical Abstract Service (CAS).
- (1) OJ No L 84, 31. 3. 1978, p. 43.

ANNEX I
Deleted

ANNEX II

Practical recommendations for the clinical assessment of workers, as referred to in Article 15

(1)

1. Current knowledge indicates that exposure to free asbestos fibres can give rise to the following diseases:

- asbestosis,
- mesothelioma,
- bronchial carcinoma,
- gastro-intestinal carcinoma.

2. The doctor and/or authority responsible for the medical surveillance of workers exposed to asbestos must be familiar with the exposure conditions or circumstances of each worker.

3. Health examination of workers should be carried out in accordance with the principles and practices of occupational medicine. It should include at least the following measures:

- keeping records of a worker's medical and occupational history,
- a personal interview,
- a general clinical examination, with particular reference to the chest,
- lung function tests (respiratory flow volumes and rates).

The doctor and/or authority responsible for the health surveillance should decide on further examinations, such as sputum cytology tests or a chest X-ray or a tomodensitometry, in the light of the latest occupational health knowledge available.