



Towards the elimination of asbestos-related diseases in the WHO European Region

*Assessment of current policies
in Member States, 2014*

Abstract

This is an update on the implementation of the commitment made at the Fifth Ministerial Conference on Environment and Health, held in Parma, Italy, in 2010, to develop national programmes for elimination of asbestos-related diseases in the WHO European Region by 2015. The specific aim of this report is to assess current policies in countries, based on a survey conducted in 2014. This report is a supplement to the mid-term review, analysing progress achieved in the Region since the Conference.

Keywords

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Abbreviations

ARDs	asbestos-related diseases
EU	European Union
EH	environment and health
ILO	International Labour Organization

Introduction

All forms of asbestos are carcinogenic. About 125 million people worldwide are exposed to asbestos at work, and more than 107 000 people die every year from asbestos-related diseases (ARDs) resulting from such exposure.

Countries have committed themselves to developing national programmes for the elimination of ARDs by 2015, in collaboration with WHO and the International Labour Organization (ILO).

WHO and the ILO recommend that the use of all forms of asbestos should be banned in order to eliminate ARDs.

Of the 53 Member States in the WHO European Region, 37 ban the use of all forms of asbestos.

In 2010, the Fifth Ministerial Conference on Environment and Health held in Parma, Italy, adopted the Parma Declaration on Environment and Health (1). In the Declaration's fourth Regional Priority Goal, to prevent diseases caused by the chemical, biological and physical environments, countries committed themselves to develop national programmes for the elimination of ARDs by 2015, in collaboration with WHO and the ILO.

All forms of asbestos are carcinogenic to humans and may cause mesothelioma¹ and cancer of the lung, larynx and ovary (3). Asbestos exposure is also responsible for other diseases, such as asbestosis (fibrosis of the lungs), pleural plaques, effusions and diffuse pleural thickening (according to the ILO classification of pneumoconiosis). Exposure to asbestos occurs through inhalation of fibres in air in the working environment, ambient air in the vicinity of point sources (such as factories handling asbestos) or indoor air in housing and buildings containing asbestos materials (4).

Worldwide about 125 million people

are exposed to asbestos at work (5). According to the WHO global estimates (WHO fact sheet 343, July 2014), over 107 000 people die annually from asbestos-related lung cancer, mesothelioma and asbestosis resulting from such an exposure. Asbestos is one of the most important occupational carcinogens, causing about half the deaths from occupational cancer (6). In 2000, total deaths from ARDs due to occupational exposure were estimated to be 14 600 in the Region (7). Overall, 49 779 mesothelioma deaths were registered in the Region between 1994 and 2008, 54% of the global sum (8).

All forms of asbestos should be considered as silent killers as health disorders may appear several decades after an exposure, even after only a short exposure time.

WHO and the ILO recommend that all forms of asbestos should be banned in order to eliminate ARDs (6). Many countries worldwide, including those in the Region, have adopted this recommendation.

1 Mesothelioma is a rare form of cancer of the protective lining that covers many of the internal organs of the body. Some 85–90% of male mesothelioma cases are due to occupational asbestos exposure (2).

A compilation of the results from the 2014 WHO Environment and Health Policy Action Questionnaire, data obtained from governmental publications of national legislation, and updates by the International Ban Asbestos Secretariat (9) show that 37 Member States out of 53 in the Region have adopted policies banning the use of all forms of asbestos.

While WHO acknowledges the efforts made and the progress achieved, still one third of 900 million people in the WHO European Region live in the countries which did not yet ban the use of all forms of asbestos. WHO calls on Member States in which the public, particularly workers, are not protected from exposure to asbestos to develop and implement such strategies.

The purpose of this publication is to assess the current status of efforts to eliminate ARDs in European Member States. The main objectives are:

- to assess the current policies and practices aiming to eliminate ARDs, and to obtain an overview of awareness-raising efforts in countries where asbestos is still being used or produced;
- to summarize the assistance provided by WHO for the elimination of ARDs at the regional level within given international policy frameworks;
- to provide recommendations to develop new or better policies and activities to meet the commitments in the Parma Declaration.



WHO and ILO global policies to eliminate asbestos-related diseases

The following ILO instruments play an important role in the management of all forms of asbestos and prevention of ARDs: the Occupational Cancer Convention, 1974 (No.139) (10), the Asbestos Convention, 1986 (No.162) (11), the Chemicals Convention, 1990 (No.170) (12), and the Resolution on asbestos of the 95th International Labour Conference (2006) (13).

World Health Assembly resolution WHA58.22 on cancer prevention urged Member States to pay attention to cancers for which avoidable exposure is a factor, including exposure to chemicals at the workplace (14).

WHO is carrying out a global campaign to eliminate ARDs (World Health Assembly resolution WHA60.26), "... bearing in mind a differentiated approach to regulating its various forms in line with the relevant international legal instruments and the latest evidence for effective interventions ..." (15).

Member States are recommended to prepare, and periodically update, their national asbestos profiles as the first step towards a national programme for the elimination of ARDs.

At its meeting in April 2013, the European Environment and Health Ministerial Board supported the proposal of the Chemical Review Committee to the Rotterdam Convention to include chrysotile asbestos in Annex III of the Convention.

Action on elimination of ARDs has a sound international basis that includes primarily ILO international instruments,

WHO recommendations and multilateral environmental agreements.

International instruments that play an important role in the management of all forms of asbestos and prevention of asbestos-related diseases

The Occupational Cancer Convention, 1974 (No.139) requires Parties to "periodically determine the carcinogenic substances and agents to which occupational exposure shall be prohibited or made subject to authorization or

control..." (Article 1). Parties to the Convention "shall make every effort to have carcinogenic substances and agents to which workers may be exposed in the course of their work replaced by non-carcinogenic substances or agents



or by less harmful substances or agents; in the choice of substitute substances or agents account shall be taken of their carcinogenic, toxic and other properties” (Article 2) (10).

The Asbestos Convention, 1986 (No.162) provides that “where necessary to protect the health of workers and technically practicable, national laws or regulations shall provide for one or more of the following measures – (a) replacement of asbestos or certain types of asbestos or products containing asbestos by other materials or products or the use of alternative technology, scientifically evaluated by the competent authorities as harmless or less harmful, whenever this is possible; (b) total or partial prohibition of the use of asbestos or certain types of asbestos or products containing asbestos in certain work processes.” (Article 10) (11). The Asbestos Convention prohibits the use of crocidolite and products containing this fibre, as well as spraying of all forms of asbestos.

The Chemicals Convention, 1990 (No.170) requires that “when in an exporting Member State all or some uses of hazardous chemicals are prohibited for reasons of safety and health at work, this fact and the reasons for it shall be communicated by the exporting Member State to any importing country” (Article 19) (12).

The Resolution on Asbestos of the 95th International Labour Conference (2006) stipulates that the elimination of the future use of asbestos and the identification and proper management of asbestos currently in place are the most effective means to protect workers from asbestos exposure and to prevent future asbestos-related diseases and deaths (13). It also indicates that the Asbestos Convention, 1986 (No.162) (11), should not be used to provide a justification for, or endorsement of, the continued use of asbestos. It encourages countries to ratify and give effect to the provisions of the Asbestos Convention, 1986, and the Occupational Cancer Convention, 1974; to promote the elimination of future use of all forms of asbestos and asbestos containing materials; to promote the identification and proper management of all forms of asbestos currently in place; and to include measures in national programmes on occupational safety and health to protect workers from exposure to asbestos (13).

The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade was adopted by the Conference of the Plenipotentiaries in 1998 and entered into force in 2004. The Convention aims: to promote shared responsibility and cooperative efforts among Parties in the international

trade of certain hazardous chemicals in order to protect human health and the environment from potential harm; and to contribute to the environmentally sound use of those hazardous chemicals by facilitating exchange of information about their characteristics, by providing for a national decision-making process on their import and export and by disseminating these decisions to Parties (16). Forty-two Member States of the WHO European Region are Parties to the Convention.²

This legally binding instrument includes all types of asbestos of the amphibole group (actinolite, anthophyllite, amosite, crocidolite, tremolite) in its Annex III of substances subject to the prior informed consent procedure, meaning all forms of asbestos except chrysotile asbestos. Since 2006 the Chemical Review Committee of the Rotterdam Convention has concluded that chrysotile asbestos should also be included in Annex III. Nevertheless, there is as yet no consensus on its inclusion (17). In April 2013 at its fourth meeting in Belgrade, the European Environment and Health Ministerial Board made a statement supporting the proposal to include chrysotile asbestos in the Annex III of the Rotterdam Convention (Fig. 1).

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted in 1989 and entered into force in 1992

Fig. 1. Statement of the European Environment and Health Ministerial Board, April 2013



(18). Under the Convention, waste that contains asbestos dust and asbestos fibres is considered hazardous waste (Annex I, item Y36) and is, therefore, subject to strict control.

WHO recommendations

The Fifty-eighth World Health Assembly urged Member States to pay special attention to cancers for which avoidable exposure is a factor, particularly exposure to chemicals at the workplace and the environment (14).

In 2007, the Sixtieth World Health Assembly endorsed a global plan of action on workers' health 2008–2017 in which Member States requested the WHO Secretariat to include in its activities “a global campaign for elimination of

2 The following Member States of the WHO European Region ratified/accepted/approved/accessed the Rotterdam Convention: Albania, Armenia, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Montenegro, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia, Ukraine, United Kingdom of Great Britain and Northern Ireland. Tajikistan and Turkey signed the Rotterdam Convention but did not ratify it. Andorra, Azerbaijan, Belarus, Iceland, Malta, Monaco, San Marino, Turkmenistan and Uzbekistan neither signed nor ratified the Rotterdam Convention.

asbestos-related diseases – bearing in mind a differentiated approach to regulating its various forms – in line with the relevant international legal instruments and the latest evidence for effective interventions...” (15). It should be underlined that this formulation does not mean that WHO endorses any use of asbestos.

In 2007, WHO in collaboration with ILO published guidance for the elimination of ARDs (6). The strategic directions are:

- to recognize that the most efficient way to eliminate ARDs is to stop the use of all types of asbestos;
- to provide information about asbestos substitutes and to develop financial and technological mechanisms to foster its replacement;
- to take measures to prevent exposure

to asbestos in all situations, including asbestos removal (abatement);

- to improve early diagnosis of, treatment for, and social and medical rehabilitation from ARDs and to establish registries of people with past and/or current exposures to asbestos.

The outline recommended that countries should prepare a national asbestos profile as the first step towards a national programme for the elimination of ARDs. Such profiles, which should be updated periodically, define the baseline situation with regard to (among other things) consumption of the various types of asbestos, populations at risk from current and past exposures and the status of ARDs. They are instruments to measure progress made towards the target set by the national programme for the elimination of ARDs.



Progress in eliminating asbestos-related diseases in the Region

Significant progress has been made since the 2010 Parma Conference in adopting new policies to eliminate ARDs in the Region. Eighteen of 29 countries responding to a survey have introduced some new policies.

The use of asbestos is not decreasing in countries without policies to ban all forms of asbestos.

Banning the use of all forms of asbestos does not prevent people from being exposed to it. Countries need to protect their populations against these hazardous exposures, especially when removing, transporting and disposing of existing asbestos.

Countries that banned the use of all forms of asbestos before 2005 need to review their national programmes to comply with WHO and ILO recommendations issued after that date.

Countries should strengthen their public health systems, and develop and implement better monitoring of malignant and occupational diseases to enable identification of all ARDs in accordance with national legislation.

The Regional Office has focused on three areas of activity:

1. quantifying the human and economic burden of ARDs in WHO European Member States;
2. providing technical assistance to Member States to develop national programmes for the elimination of ARDs); and
3. organizing awareness-raising activities in collaboration with nongovernmental organizations in asbestos-using countries.

The Regional Office has hosted a series of meetings to provide technical assistance to Member States and to facilitate the development of national programmes for the elimination of ARDs in line with the recommendations of the Parma Declaration. National representatives from 16 Member States participated in the first

meeting held in 2011. They exchanged information on national experience with asbestos policies and identified priority needs for the development of national programmes (19). In the conclusion of this meeting, the Regional Office was asked to organize annual meetings on aspects of asbestos policy to monitor progress made in the development of national asbestos profiles and national programmes.

The main objective of the second meeting in 2012, which gathered participants from 26 countries, was to help build national capacity regarding the assessment of death rates, disability-adjusted life-years, potential years of life lost and the economic burden attributable to ARDs. The data presented at this meeting showed that:

- the number of mesothelioma deaths during the period 1994–2010 accounted

for 1.2 million potential years of life lost in the Region, with an average of 16.8 potential years lost earlier than life expectancy;

- mesothelioma due to work-related asbestos exposure in the Region accounted for 80 195 disability-adjusted life-years in 2000, representing 43% of the total disability-adjusted life years (186 500) in the Region;
- the total estimated economic costs for one average year's mortality from mesothelioma across 15 European countries was estimated to be €1 684 124 295 in 2012 (7).

A workshop in 2013 dealt with public health approaches regarding the elimination of asbestos at work, addressing mainly the combined risks from exposures to asbestos and other substances. Member States asked for support from the Regional Office in obtaining exposure and health data and in developing national programmes for the elimination of ARDs.³

Finally, awareness-raising activities have targeted policy-makers and civil society, with support from WHO, so as to facilitate political dialogue and engage key stakeholders. Such activities will be discussed in a separate section of this publication.

Results from the Environment and Health Policy Action Questionnaire

Member States have only one year left to fulfil the 2010 Parma Declaration commitments and develop national programmes for ARDs elimination. In this urgent context, the WHO Regional Office for Europe carried out a survey in early 2014 to assess Member States' progress in implementing the goals of the Parma Declaration. The survey included questions regarding existing policies to eliminate ARDs (Annex 1); 31 Member States (out of 53) responded (58%). Following European Union (EU) directive 1999/77EC in force from 2005 requiring all types of asbestos to be banned, the

responding countries were divided into groups as follows:

- group A: 14 countries that banned asbestos before 2005⁴ (out of 21 countries⁵)
- group B: 12 countries that banned asbestos after 2005⁶ (out of 16⁷)
- group C: 5 countries that have no policy on an asbestos ban⁸ (out of 16⁹).

The response rate among countries with policies legally banning the use of asbestos was 70% (= 26/37); the response rate of countries with no such policies was 30% (= 5/16) (Fig. 2).

3 Multiple exposures and risks: evidence review, knowledge transfer and policy implication training workshop. WHO meeting report. Copenhagen: WHO Regional Office for Europe; 2013 (unpublished document).

4 Austria, Belgium, Denmark, Finland, Germany, Ireland, Italy, Latvia, Norway, Poland, Slovakia, Slovenia, Spain, Sweden.

5 Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Latvia, Luxembourg, Netherlands, Norway, Poland, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom, San Marino.

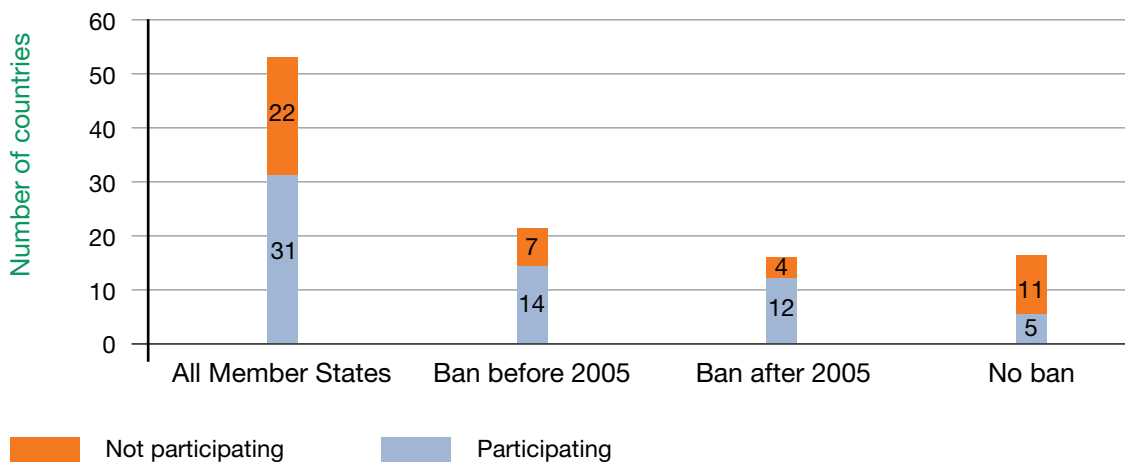
6 Portugal, Croatia, Czech Republic, Estonia, the former Yugoslav Republic of Macedonia, Hungary, Israel, Lithuania, Malta, Montenegro, Serbia, Turkey.

7 Portugal, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, the former Yugoslav Republic of Macedonia, Greece, Hungary, Israel, Lithuania, Malta, Montenegro, Romania, Serbia, Turkey.

8 Albania, Armenia, Belarus, Georgia, Tajikistan.

9 Albania, Andorra, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Monaco, Russian Federation, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.

Fig. 2. Participation in the 2014 survey by countries' banning policies



The use of asbestos in countries which have no policy to ban all forms of asbestos is not decreasing, according to the data provided by Member States in the survey. There is a strong need in those countries to raise awareness and educate the public about harms from asbestos through the labelling of products containing asbestos, training of health professionals, handling of asbestos as a hazardous waste, legal recognition of ARDs as occupational diseases and safe removal of asbestos.

Countries that banned the use of all forms of asbestos before 2005 (group A) need to review their national programmes to improve their compliance with WHO and ILO recommendations issued in 2007 (6). Currently, 62% (eight out of 13 responding to this question) of group A countries have national programmes to eliminate ARDs. A quarter of national programmes in group A countries (two out of eight) include an asbestos profile in accordance with the ILO/WHO recommendations, with a higher rate in group B countries (67%, or four out of six national programmes).

Banning all forms of asbestos does not, of course, stop people from being exposed to it, mainly due to its presence in building and household materials. European countries need to protect

their entire populations against these hazardous exposures, especially during the removal, transport and disposal of existing asbestos. Only in 32% (eight out of 25¹⁰ countries with bans on asbestos) are provisions for preventing environmental exposures in the general population included in national asbestos programmes.

In order to define the baseline situations and targets, it is necessary to make an inventory of existing asbestos-containing materials and to review this inventory on a regular basis. Only 11 out of 31 respondents, however, indicated that they conducted periodic inventory reviews.

Many countries in groups A and B have legally binding policies to treat asbestos and asbestos-containing waste as hazardous waste. However, respondents from group C indicated that they do not have such provisions.

Sixty-eight percent of countries in groups A and B (17 out of 25 with bans on asbestos) are running educational or information programmes about health hazards for all forms of asbestos. When just group A countries are considered, the ratio goes up to 79% (11 out of 14 countries). Educational or information programmes about the hazards of asbestos need to be expanded to involve

10 A total of 26 countries from groups A and B responded to the survey. However, the number of countries being analysed is less than 26 for some cases as answers were missing for some questions.

all population groups (for example, construction or demolition workers, plumbers and building management personnel). Only 18% of countries with educational programmes (three out of 17 countries) answered that they involve all population groups in their educational programmes; 30% of these (five out of 17 countries) do not involve construction and demolition workers in the programmes.

Different clinical and epidemiological aspects of mesothelioma should be included in asbestos-related continuing education programmes for primary care physicians, and respiratory tract and occupational health specialists in group C countries. Some of these countries have general programmes on asbestos issues targeting physicians and specialists (three out of five), but the majority (80%, or four out of five) do not include the topic of differential diagnosis of mesothelioma in their programmes.

Moreover, group C countries do not list mesothelioma as a separate form of cancer in their cancer registries. Since these countries do not have occupational disease registries, neither mesothelioma nor asbestosis is, therefore, considered as an occupational disease. According to another survey conducted by the Regional Office in 2013 on the assessment of a progress in prevention and control of noncommunicable diseases (20), group C countries are also lagging behind in the establishment of national cancer registries. These countries are encouraged to strengthen their public health systems as appropriate, and to develop and implement better monitoring of malignant and occupational diseases to enable identification of all ARDs in accordance with the national legislation.

Most countries in groups A and B include the diagnosis of mesothelioma in their education programmes for primary care



physicians and occupational health specialists (76%), record mesothelioma as a separate form of cancer in their cancer registries (85%), and include mesothelioma (77%) and asbestosis (69%) in their occupational disease registries. These countries (81%) also have a legal basis for registration and lifelong medical surveillance of workers who have been occupationally exposed to all types of asbestos.

Policies on incentives for the safe removal and disposal of asbestos from buildings need to be promoted, including provision for the safe transport of asbestos-containing materials and for landfills. In group A, 71% of countries A (10 out of 14) have established such policies; in group B, however, only half of the countries (six out of 12) have implemented these policies.

The analysis of responses to the survey showed that the following are the main

messages to be considered as priorities for further action.

- National asbestos programmes need to be reviewed on a periodic basis to fulfil the requirements of the ILO/WHO outline (including in group A countries). This should guarantee more comprehensive protection against asbestos risks and should help monitor Member States' achievements.
- The safe removal and disposal of asbestos should be the focus of extra efforts as only 50% of responding Member States have promoted incentives for these procedures.
- Policies to eliminate ARDs should take into consideration the entire population, including children, who are the most vulnerable. Even the latest policies implemented after endorsement of the Parma recommendations do not address existing asbestos in schools or kindergartens.



Promoting policy development through engaging all of society

In 2010, Women in Europe for a Common Future and some of its partner organizations in eastern Europe, the Caucasus and central Asia (Eco-Accord, Volgograd Ecopress, Green Women Information Centre, the Social Ecological Forum, MAMA-86 and BIOM), located in five countries where asbestos is of concern, launched a campaign of awareness-raising activities.

The growing involvement of nongovernmental organizations and other key stakeholders is important in tackling asbestos exposure and related diseases.

WHO has supported a series of workshops organized by nongovernmental organizations to secure the achievements made, engage the general population through awareness-raising activities and encourage further policy changes in the countries where asbestos is still used.

In 2010, the nongovernmental organization Women in Europe for a Common Future and some of its partner organizations in eastern Europe, the Caucasus and central Asia (Eco-Accord, Volgograd Ecopress, Green

Women Information Centre, the Social Ecological Forum, MAMA-86 and BIOM), located in five countries where asbestos is of concern, launched a campaign of awareness-raising activities. Initially, an inventory was conducted to assess the scale of production and use of asbestos in those countries, as well as the general knowledge, attitudes and practices regarding asbestos. This provided some information on the production and use of asbestos and on current legal requirements (Fig. 3). Further activities

Fig. 3. Asbestos cement factory (left) and sample collection from a demolition site (right)



Source: Women in Europe for a Common Future, 2013.

also indicated a poor level of awareness and little available information regarding the dangers from asbestos.

Based on feedback received from participants in workshops who responded to the inventory question and research carried out by nongovernmental organizations, initial information about asbestos and its use was presented at the workshops as a first contribution to discussion of the issue. A short video and several leaflets have been produced and several information workshops have been held for the public.

Four high-level multi-stakeholder conferences on asbestos use and related diseases have also been organized involving participants from governmental, intergovernmental and nongovernmental organizations as well as business sectors and scientific communities.

The campaign of awareness-raising activities has been followed by a strong initiative supported by the Ban Asbestos Network. This initiative, which was located in three hot spots, aimed to investigate current asbestos consumption patterns, to assess the impact on local populations and to consider measures to eliminate asbestos-related risks.

Findings from surveys have been compiled in a report which has identified the poor level of information on the incidence of ARDs. Information about the threats from asbestos and data on occupational diseases is not publicly available and remains confidential. Information about the use of protective measures to reduce the risks from exposure to asbestos has not been provided to workers, including those involved in construction and demolition activities (such as construction workers, plumbers, electricians and

building managers). The majority of local authorities and environment agencies are poorly informed about health protection for construction workers when handling asbestos. The nongovernmental organizations' report presented an alarming situation concerning the collection and disposal of waste containing asbestos.

In 2013, Women in Europe for a Common Future and some local nongovernmental organizations, in collaboration with the WHO Regional Office for Europe organized four workshops in countries of concern with the aim of improving understanding and raising awareness about the effects of asbestos on health, the production and use of asbestos, waste management and available safer alternatives. Presentations focused on recent developments in the production and use of asbestos, the reasons for economic losses faced by the asbestos industry, the current asbestos waste management situation and the effects on health of asbestos. Lecturers also highlighted the need for more information about available safer alternatives and for the development of inventory data. The responsibility of manufacturers was discussed in connection with the export of asbestos to developing countries. The WHO/ILO position on the elimination of ARDs was presented together with a detailed work plan for the development of national programmes to eliminate ARDs.

The examples above show that the growing involvement of nongovernmental organizations and other key stakeholders is important to tackle both exposure to asbestos and ARDs.



Conclusions and recommendations

All forms of asbestos are carcinogenic. Asbestos is responsible for about half of all deaths from occupational cancers and is one of the most severe and widespread environmental health hazards in the Region.

There is no safe level of exposure to asbestos. Cancer risks are increased even at low levels of exposure. The most efficient way to eliminate ARDs is to stop the use of all forms of asbestos.

A consolidated approach towards the elimination of ARDs in the community should be developed using government and society approaches proposed in the Health 2020 European policy framework.

In view of the severe health risks from asbestos exposure, the Chemical Review Committee of the Rotterdam Convention proposed that chrysotile asbestos should be included in Annex III of the Convention.

Many countries in the Region have implemented internationally guided policies on prevention of asbestos exposures and taken action to eliminate ARDs.

Reinforced guidance and support should be given to countries without adequate policies and programmes. Member States with national programmes for the elimination of ARDs are encouraged to align their national asbestos profiles with WHO/ILO recommendations and to share their experience.

All forms of asbestos are carcinogenic to humans. Asbestos is responsible for about half of all deaths from occupational cancers and is one of the most severe and widespread environmental health hazards in the Region. Following WHO and ILO recommendations, 37 countries in the Region have banned the use of all forms of asbestos. However, chrysotile asbestos is still produced, used and traded in some Member States.

Since there is no safe level of exposure to asbestos and cancer risks are increased even at low levels of exposure, the most efficient way to eliminate ARDs is to stop the use of all forms of asbestos. In its various applications, asbestos can be replaced by some safer alternative

materials which, according to existing scientific knowledge, pose less risk to health.

Awareness of the risk of exposure to asbestos should be increased and relevant information made available to all sectors in society, including health professionals and the general public. A consolidated approach towards the elimination of ARDs in the community should be developed using government and society approaches proposed in the Health 2020 European policy framework. Full attention must be given to training workers employed in the demolition, reconstruction and renovation of buildings in the safe handling and disposal of asbestos-containing materials and waste.

Recognizing the severe health risks from exposure to asbestos, the Chemical Review Committee of the Rotterdam Convention proposed that chrysotile asbestos should be included in Annex III of the Convention.

The Regional Office has been providing technical support for the implementation of the recommendations on the elimination of ARDs by 2015, as stated in the Parma Declaration.

Many countries in the Region have implemented internationally guided policies on prevention of exposure to asbestos and taken action to eliminate

ARDs. However, inequalities in the risks to health from such exposure exist and are even intensified in some countries because of a poor consensus on the regulatory framework dealing with asbestos.

Reinforced guidance and support should be given to countries without adequate policies and programmes. Member States with national programmes for the elimination of ARDs are encouraged to align their national asbestos profiles with WHO/ILO recommendations and to share their experience.



References

1. Parma Declaration on Environment and Health. Copenhagen: WHO Regional Office for Europe; 2010 (http://www.euro.who.int/__data/assets/pdf_file/0011/78608/E93618.pdf, accessed 30 July 2014).
2. Straif K. The burden of occupational cancer. *Occup Environ Med.* 2008;65(12):787–8. doi:10.1136/oem.2007.038224.
3. International Agency for Research on Cancer. Asbestos (chrysotile, amosite, crocidolite, tremolite, actinolite, and anthophyllite). *IARC Monogr Eval Carcinog Risks Hum.* 2012;100C:219–309 (<http://monographs.iarc.fr/ENG/Monographs/vol100C/index.php>, accessed 15 July 2014).
4. International Programme on Chemical Safety. Asbestos [website]. Geneva: World Health Organization; 2014 (http://www.who.int/ipcs/assessment/public_health/asbestos/en/, accessed 15 July 2014).
5. Concha-Barrientos M, Nelson DI, Driscoll T, Steenland NK, Punnett L, Fingerhut M et al. Selected occupational risk factors. In: Ezzati M, Lopez AD, Rodgers A, Murray CVL, editors. *Comparative quantification of health risks: global and regional burden of disease attributable to selected major risk factors.* Geneva: World Health Organization; 2004:1651–1801 (http://whqlibdoc.who.int/publications/2004/9241580348_eng_Volume2.pdf, accessed 15 July 2014).
6. Outline for the development of national programmes for elimination of asbestos-related diseases. Geneva: International Labour Office and World Health Organization; 2007 (http://www.who.int/occupational_health/publications/Out_NPEAD_ENG.pdf?ua=1, accessed 15 July 2014).
7. The human and financial burden of asbestos in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2013:41 (http://www.euro.who.int/__data/assets/pdf_file/0003/194133/RB-Asbestos-Mtg-Report-Bonn-2012.pdf, accessed 15 July 2014).
8. Delgermaa V, Takahashi K, Park EK, Le GV, Hara T, Sorahan T. Global mesothelioma deaths reported to the World Health Organization between 1994 and 2008. *Bull World Health Organ.* 2011;89:716–24, 724A–C (<http://www.who.int/bulletin/volumes/89/10/11-086678/en/#>, accessed 15 July 2014).
9. Kazan-Allen L. Chronology of National Asbestos Bans [website]. London: International Ban Asbestos Secretariat; 2014 (http://www.ibasecretariat.org/alpha_ban_list.php, accessed 15 July 2014).
10. ILO Occupational Cancer Convention, 1974 (No.139) and ILO Occupational Cancer Recommendation, 1974 (No.147). Normlex Information System on International Labour Standards [website]. Geneva: International Labour Organization; 2014 (<http://www.ilo.org/ilolex/english/index.htm>, accessed 18 August 2014).
11. ILO Asbestos Convention, 1986 (No.162) and ILO Asbestos Recommendation, 1986 (No.172). Normlex Information System on International Labour Standards [website]. Geneva: International Labour Organization; 2014 (<http://www.ilo.org/ilolex/english/index.htm>, accessed 18 August 2014).

12. ILO Chemicals Convention, 1990 (No.170) and ILO Chemicals Recommendation, 1990 (No. 177). Normlex Information System on International Labour Standards [website]. Geneva: International Labour Organization; 2014 (<http://www.ilo.org/ilolex/english/index.htm>, accessed 18 August 2014)
13. Ninety-fifth International Labour Conference, Geneva, 31 May–16 June 2006. Report of the Committee on Safety and Health. Provisional Record 20 (Annex 20/69). Geneva: International Labour Conference; 2006 (<http://www.ilo.org/public/english/standards/relm/ilc/ilc95/pdf/pr-20.pdf>, accessed 18 August 2014).
14. Resolution WHA58.22. Cancer prevention and control. In: Fifty-eighth World Health Assembly, Geneva, 16–25 May 2005. Resolutions and decisions, annexes. Geneva: World Health Organization; 2005:92 (http://www.who.int/ipcs/publications/wha/cancer_resolution.pdf?ua=1, accessed 15 July 2014).
15. Resolution WHA60.26. Workers' health: global plan of action. In: Sixtieth World Health Assembly, Geneva, 14–23 May 2007. Resolutions and decisions, annexes. Geneva: World Health Organization; 2007:94 (http://apps.who.int/gb/ebwha/pdf_files/WHASSA_WHA60-Rec1/E/reso-60-en.pdf, accessed 30 July 2014).
16. Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade [website]. Rome and Châtelaine: Secretariat of the Rotterdam Convention; 2014 (<http://www.pic.int/>, accessed 18 August 2014).
17. Chemicals recommended for listing in Annex III [website]. Rome and Châtelaine: Secretariat of the Rotterdam Convention; 2014 (<http://www.pic.int/TheConvention/Chemicals/RecommendedtoCOP/tabid/1185/language/en-US/Default.aspx>, accessed 15 July 2014).
18. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal [website]. Châtelaine: Secretariat of the Basel Convention; 2014 (<http://www.basel.int/>, accessed 18 August 2014).
19. National programmes for elimination of asbestos-related diseases: review and assessment. Copenhagen: WHO Regional Office for Europe; 2012 (http://www.euro.who.int/__data/assets/pdf_file/0005/176261/National-Programmes-For-Elimination-Of-Asbestos-related-Diseases-Review-And-Assessment.pdf, accessed 15 July 2014).
20. Prevention and control of noncommunicable diseases in the European Region: a progress report. Copenhagen: WHO Regional Office for Europe; 2014 (http://www.euro.who.int/__data/assets/pdf_file/0004/235975/Prevention-and-control-of-noncommunicable-diseases-in-the-European-Region-A-progress-report-Eng.pdf?ua=1, accessed 15 July 2014).



Annex 1. Environment and Health Policy Action Questionnaire

Purpose

The purpose of this policy Questionnaire is to assess the existing policies on environment and health (EH) in relation to the Parma Declaration's Commitment to Act.

The Questionnaire addresses selected areas of EH policies, with a focus on those related to the attainment of the time-bounded targets in the Parma Declaration. The results of this questionnaire will be presented in the form of summary tables and graphs demonstrating the proportion of countries which have specific policies, regulations or guidelines, or other summary measures. The data will be analysed in conjunction with data on exposure and health outcomes from other sources in order to identify linkages

and possible gaps in environment and health policies in the European Region, and suggest priorities for policy actions.

The information collected using the Questionnaire will be supplemented with information available from previously administered relevant policy Questionnaires on injury prevention in the European Region, the implementation of the Transport, Health and Environment Pan-European Programme (THE PEP), climate change related policies, chemical safety policies, smoking prevention policies, etc.

The results of this work were to be included in the assessment report for the mid-term review meeting in late 2014.

Definitions and instructions

Policy

For the purpose of this Questionnaire, the term "policy" refers to an officially adopted document, which includes a set of statements defining goals or standards, principles, obligations and responsibilities for attaining the stated goals.

Types of policy

- *Legally binding standards or regulations* include legislation enacted by a legislature, regulations (compulsory norms and standards) promulgated by governmental institutions, agencies and organizations, or decrees of executive governmental authorities.
- *Legally non-binding recommendations or guidelines* include documents

issued by government institutions and organizations that establish uniform technical specifications, criteria, methods, processes, guidelines, recommended limits or practices.

- *Action plans or programmes* are defined as formally adopted, but legally non-binding documents that define objectives, principles, priority actions and coordinated mechanisms within a specific field.

Policy levels

- International policies are adopted by international bodies. Examples include EU policies, which have effect in EU member states, and recommendations and guidelines issued by WHO and other international organizations.

- National policies are adopted at the national level and are applicable to an entire WHO Member State.
- Subnational policies are adopted at a subnational level and are applicable to parts of a WHO Member State. These include regional policies in large administrative units, such as *länder* in Austria or Germany, cantons in Switzerland and counties in Croatia or Hungary, and local policies applicable in specific cities, small administrative districts or communes.

School

For the purpose of the Questionnaire, schools are defined as officially accredited institutions for educating

children (generally, 5–17 years of age) to meet national requirements for general education.

Kindergarten

For the purpose of the Questionnaire, kindergartens are defined as day care institutions for children up to the primary school age.

Links to documents and resources

The Questionnaire asks respondents to provide, when feasible and possible, links to internet-based resources and policy documents in their countries regardless of the language in which the documents or web pages are available.

D. Policies for the prevention of asbestos-related diseases

Pertinent Parma Declaration commitment (for questions 1 – 15):

RPG 4 – Preventing disease arising from chemical, biological and physical environments

(iii) We will act on the identified risks of exposure to carcinogens... including... asbestos... In particular, unless we have already done so, we will develop by 2015 national programmes for elimination of asbestos-related diseases in collaboration with WHO and ILO.

1. Is there a programme for eliminating asbestos-related diseases?

Notes. According to IARC monograph 100c (2012), asbestos-related diseases include asbestosis, pleural plaque, mesothelioma, lung cancer, laryngeal cancer and ovarian cancer. WHO recommendation on the development of national programmes for elimination of ARDs can be accessed at: http://www.who.int/occupational_health/publications/elimasbestos/en/index.html

- No. Go to next question.
- Yes. Please provide additional information below.

Please specify the type of document that the programme is based on:

- legally binding standards or regulations
- legally non-binding recommendations or guidelines
- action plan or programme.

Please specify the level of the programme(s):

- international
- national
- subnational (regional); please specify regions which have such programmes.

Please enter the title of the programme(s), responsible institution and link(s)

to reference materials on-line (for subnational programmes, provide an example).

Please provide information on specific aspects of the programme (*mark all that apply*).

- The programme includes an asbestos profile developed in accordance with WHO recommendations.
- The programme includes provisions for preventing environmental exposure to all forms of asbestos including chrysotile asbestos in the general population.

2. Is there a legally binding policy that completely bans the production, distribution, and use of all forms of asbestos including chrysotile asbestos and products which contain it?

- No. Go to question 3.
- Yes. Please provide additional information below; then skip questions 3, 4 and 5, and go to question 6.

Please specify the level of the policy(-ies):

- international
- national
- subnational (regional); please specify regions which have these policies.

Please enter policy title, year of adoption and reference website (for subnational policies, provide an example).

3. Is there a legally binding policy to restrict the use of chrysotile asbestos?

- No. Go to next question.
- Yes. Please provide additional information below.

Please specify the level of the policy(-ies):

- international
- national
- subnational (regional); please specify regions which have these policies.

Please enter the policy title, year of adoption and reference website (for subnational policies, provide an example).

Please specify which uses of chrysotile asbestos are prohibited (*mark all that apply*):

- mining of chrysotile asbestos;
- production, import and use of chrysotile asbestos thermal insulation products in new construction and building repairs;
- production, import and use of other friable materials containing chrysotile asbestos (e.g., asbestos textiles);
- production and import of asbestos-cement pipes, roofing materials and other construction materials.

4. If chrysotile asbestos is still consumed in your country, has the consumption (total production and import) declined since 2002?

- No.
- Consumption has declined by less than 50% from 2002 to 2010.
- Consumption has declined by 50% or more from 2002 to 2010.
- Data are not available.

5. If chrysotile-containing products are still available in your country, is there a policy that they shall bear health hazard warning signs or labels?

- No. Go to next question.
- Yes. Please provide additional information below.

Please specify the type of the policy:

- legally binding standards or regulations
- legally non-binding recommendations or guidelines
- action plan or programme.

Please specify the level of the policy(-ies):

- international
- national
- subnational (regional); please specify regions which have these policies.

Please enter the policy title, year of adoption and reference website (for subnational policies, provide an example).

6. Is there a policy to conduct periodic inventory of existing asbestos-containing materials which are still in use? *Example of such materials include but are not limited to building and pavement materials, pipes, fittings, roofing materials, insulation materials.*

- No. Go to next question.
- Yes. Please provide additional information below.

Please specify the type of the policy:

- legally binding standards or regulations
- legally non-binding recommendations or guidelines
- action plan or programme.

Please specify the level of the policy(-ies):

- international
- national
- subnational (regional); please specify regions which have these policies.

Please enter the policy title, year of adoption and reference website (for subnational policies, provide an example).

7. Is there a legally-binding policy to treat asbestos and asbestos-containing waste as hazardous waste? Such policy shall specify requirements for all asbestos-containing waste including chrysotile asbestos to be contained, transported, and disposed of as hazardous waste.

- No. Go to next question.
- Yes. Please provide additional information below.

Please specify the level of the policy(-ies):

- international
- national
- subnational (regional); please specify regions which have these policies.

Please enter the policy title, year of adoption and reference website (for subnational policies, provide an example).

8. Are there educational or information programmes about the health hazards of all forms of asbestos including chrysotile asbestos?

- No. Go to next question.
- Yes. Please provide additional information below.

Please specify the level of the policy(-ies):

- international
- national
- subnational (regional); please specify regions which have these policies.

Please enter the policy title, year of adoption and reference website (for subnational policies, provide an example).

Please specify which uses of chrysotile asbestos are prohibited (*mark all that apply*):

- the programme involves workers who are exposed to asbestos including construction and demolition workers;
- the programme involves all population groups.

9. Are there asbestos-related education programmes for primary care physicians and occupational health specialists? *Such programmes may include training as part of standard curricula in medical schools or re-training courses for practicing professionals.*

- No. Go to next question.
- Yes. Please provide additional information below.

Please specify which uses of chrysotile asbestos are prohibited (*mark all that apply*):

- diagnosis of mesothelioma
- primary prevention (industrial hygiene and risk assessment).

10. Is there a cancer registry in your country?

- No. Go to next question.
- Yes. Please provide additional information below.

Please specify the level of the registry(-ies):

- national
- subnational (regional); please specify regions which have such registries.

Please enter a link to reference materials on-line (for subnational registries, provide an example).

Check this box if the cancer registry includes data specifically on mesothelioma as a separate form of cancer:

11. Is there a registry of occupational diseases in your country?

- No. Go to next question.
- Yes. Please provide additional information below.

Please specify the level of the registry(-ies):

- national
- subnational (regional); please specify regions which have such registries.

Please enter the policy title, year of adoption and reference website (for subnational policies, provide an example).

Please specify which uses of chrysotile asbestos are prohibited (*mark all that apply*):

- the registry includes mesothelioma;
- the registry includes asbestosis;
- the registry includes asbestos-related precancerous conditions and asbestos-related cancers other than mesothelioma in workers who have been occupationally exposed to asbestos (*examples include pleural plaque, lung cancer, laryngeal cancer, and ovarian cancer*).

12. Is there a legally binding policy requiring registration and lifelong medical surveillance of workers who have been occupationally exposed to all types of asbestos including chrysotile asbestos?

- No. Go to next question.
- Yes. Please provide additional information below.

Please specify the level of the policy(-ies):

- international
- national
- subnational (regional); please specify regions which have these policies.

Please enter the policy title, year of adoption and reference website (for subnational policies, provide an example).

Does the policy include provisions for early diagnosis and treatment of ARDs?

- No
- Yes.

13. Is there a policy providing incentives for safe removal of asbestos from buildings and decontamination of buildings?

- No. Go to next question.
- Yes. Please provide additional information below.

Please specify the type of the policy:

- legally binding standard or regulation
- legally non-binding recommendation or guideline
- action plan or programme.

Please specify the level of the policy(-ies):

- international
- national
- subnational (regional); please specify regions which have these policies.

Please enter the policy title, year of adoption and reference website (for subnational policies, provide an example).

Please specify which uses of chrysotyle asbestos are prohibited (*mark all that apply*):

- children's facilities (schools, kindergartens, etc.)
- health care facilities
- other public buildings
- private residences.

14. Are there specific new policies in your country which have been introduced after the Parma conference and which contribute to the implementation of RPG 4 commitments (ii) and (iv)?

- No. Go to next question.
- Yes. Please provide additional information below.

Please specify the coverage of the policy(-ies) (*mark all that apply*):

- the policy is applicable to schools
- the policy is applicable to kindergartens.

Please specify the type of the policy:

- legally binding standards or regulations
- legally non-binding recommendations or guidelines
- action plan or programme.

Please specify the level of the policy(-ies):

- national
- subnational (regional); please specify regions which have these policies.

Please enter the policy title, year of adoption and reference web-site (for subnational policies, provide an example):

15. Optional additional remarks (e.g. information of the geographic coverage of policies which are implemented at a subnational level, extent of enforcement and implementation of specific policies, information on new policies which will be introduced in the near future, etc.).

16. Optional question about other RPG 4 commitments. Please provide brief information on other policy initiatives in your country aiming at the implementation of the other RPG 4 commitments and parts off commitment (iii), which were not addressed in the above section. Please address the following:
 - title of the policy initiative(s), year(s) of adoption and internet site(s) where more detailed information can be found;
 - type(s) of policy initiative (e.g. legislative action, regulation, guidelines, recommendations, national action programme, etc.);
 - effects of the policy(-ies) and progress towards the implementation of specific RPG 4 commitments;
 - actions planned for the near future.

17. Optional question about policies aiming at preventing disease arising from chemical, biological and physical environments which do not pertain to specific Parma Declaration commitments under RPG 4. Please address the following:
 - title of the policy initiative(s), year(s) of adoption and internet site(s) where more detailed information can be found;
 - type(s) of policy initiative (e.g. legislative action, regulation, guidelines, recommendations, national action programme, etc.);
 - effects of the policy(-ies) and progress towards the implementation of specific RPG 4 commitments;
 - actions planned for the near future.



The WHO Regional Office for Europe

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