European Parliament

Protecting workers from asbestos

European added value assessment accompanying request for a legislative proposal 2019/2182(INL)

IN-DEPTH ANALYSIS

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Asbestos was commonly used for trade and industrial purposes before the discovery of its serious health risks. Exposure to asbestos could account for more than half of the deaths from occupational cancer in the world. As the prevalence of diseases related to asbestos is concentrated in Europe, due to considerable asbestos use in earlier decades, in 2005 this substance was ultimately banned for use on the continent. Nevertheless, maintenance or demolition work on older buildings and their renovation for energy efficiency purposes still result in substantial exposure to asbestos. Furthermore, many people still work and live in asbestos-contaminated buildings.

This EPRS paper has been prepared in support of the work of the EMPL committee on its legislative-initiative report on protecting workers from asbestos – Rapporteur: Nikolaj Villumsen, The Left, Denmark; 2019/2182(INL).

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Executive summary

Asbestos was commonly used for trade and industrial purposes before the discovery of its serious health risks. Known for its strength and ability to resist heat and corrosion, asbestos was used widely in ships, train coaches, aeroplanes and military vehicles, as well as in industrial buildings and private homes. The level of asbestos contamination in public and private buildings is often unknown.

In all European countries, an estimated 70-80 % of raw asbestos by weight was used for the manufacturing of cement products. The rest was used for construction products, floor coverings, brake linings, asbestos textiles, insulating board, spray insulation, filter materials, etc.

Exposure to asbestos could account for more than half of the deaths from occupational cancer in the world. The burden of asbestos-related disease is concentrated in Europe due to heavy asbestos use in earlier decades.

The asbestos epidemic has unfolded in four 'waves':

- First wave: handling of raw asbestos by miners and dockers, manufacturing of asbestos products;
- Second wave: installing of asbestos products by insulation workers;
- Third wave: repair, renovation and removal of asbestos by construction workers;
- Fourth wave: people working and living in buildings containing asbestos, which means that virtually anybody could have been exposed to the impact of this substance.

The third and fourth waves remain relevant today, since work linked to the maintenance, demolition or retrofitting of older buildings results in substantial exposure to asbestos, and many people still work and live in buildings containing this substance.

Exposure to asbestos leads to an elevated risk of developing certain diseases, the most well-documented ones being asbestosis, mesothelioma (a cancer of the pleural and peritoneal linings caused almost exclusively by exposure to asbestos) and lung cancer. The number of asbestos-related lung cancer cases is about the same as that of mesothelioma cases.

The social costs of asbestos are enormous. They include lost lives (at least 14 000 per year in the EU- 27) and lost life years due to disease and disability. EU action in the past, especially the EU-wide ban of asbestos products in 2005 and the protection of workers have and will have a positive impact on health and safety at work. However, further EU action (legislation and enforcement) is needed to reduce the continued costs of asbestos to society. In the context of the renovation wave (inter alia the renovation wave linked to climate change), a stronger focus needs to be placed on workers in the construction sector. The Member States can access resources from the European structural and investment funds for handling and removal of asbestos in line with the objectives of the respective national or regional programmes. Based on EU action in the past and taking into account the long latency period of asbestos-related diseases (around 40 years), a reduction of these diseases by 30 % or more could be achieved from 2045 onwards. This would translate into savings of no less than €12 billion per year (e.g. lower medical costs and indirect costs such as pensions, increased productivity and alleviation of pain and suffering).

The Employment and Social Affairs (EMPL) Committee of the European Parliament is preparing a legislative-initiative report on protecting workers from asbestos – Rapporteur: Nikolaj Villumsen, The Left, Denmark; 2019/2182(INL) – to which this EPRS paper provides input.

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1. Asbestos – One of the biggest occupational health challenges in the world

Asbestos was commonly used for trade and industrial purposes before the discovery of its serious health risks.[1] Known for its strength and ability to resist heat and corrosion, asbestos was used widely in ships, train coaches, aeroplanes and military vehicles, as well as industrial buildings and private homes. The level of asbestos contamination in public and private buildings is often unknown.

All forms of asbestos are carcinogenic. Exposure to asbestos leads to an elevated risk of developing certain diseases, the most well-documented ones being asbestosis, mesothelioma (a cancer of the pleural and peritoneal linings caused almost exclusively by exposure to asbestos) and lung cancer. The annual incidence of mesothelioma is the significant marker of past exposure to asbestos, because asbestos is the only important cause of mesothelioma. The number of asbestos-related lung cancer cases is about the same as that of mesothelioma cases.[2]

Asbestos remains one of the most significant occupational health challenges in the world. In 2016, it was responsible for the largest number of deaths due to occupational carcinogens (63 %).[3] In addition, exposure to asbestos at home is considered to be the cause for the loss of several thousand lives a year. Co-exposure to tobacco smoke and asbestos fibres 'substantially increases the risk for lung cancer – and the heavier the smoking, the greater the risk'.[4]

Asbestos fibres released into the air have made this substance the number one cause of death among occupational diseases in Europe. Once absorbed, asbestos fibres cannot be removed from the body. There is no therapy for diseases due to asbestos; it is only possible to influence symptoms to a modest extent. 'The diagnosis of a mesothelioma is a death sentence.'[5] Due to the long latency period, neither the workers affected nor the employers responsible are alerted after exposure by specific symptoms. 'The parties responsible for the practical maintenance of occupational health measures often do not have to bear the resulting high financial, but also social-ethical costs. The monetary consequences are shifted to the following generations 30 years to a maximum of 60-70 years later. Therefore such costs fall onto the shoulders of the state and society in general.'[6] Due to the long latent period for this type of disease (in some cases more than 40 years), it must be underlined that today's mortality and morbidity cases relate to past exposures, before the entry into force of the 1999 and 2009 EU directives meant to prevent these work-related health risks.[7] Due to

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1 US Department of Labour, OSH Fact Sheet, Asbestos, 2014.

2 European Forum of the Insurance against Accidents at Work, Asbestos related Occupational Diseases, 2006.

3 Driscoll Tim, Global and regional burden of cancer in 2016 arising from occupational exposure to selected carcinogens: a systematic analysis for the Global Burden of Disease Study, University of Sydney, Australia, 2019.

4 WHO, Asbestos: elimination of asbestos-related diseases, 2018, DG Employment, Social Affairs and Inclusion, Evaluation of the practical implementation of the EU occupational safety and health (OSH) directives in EU Member States. Directive 2009/148/EC on the protection of workers from the risks related to exposure to asbestos at work, 2015.

5 European Commission, Practical guidelines for the information and training of workers involved with asbestos removal or maintenance work, 2012, p. 10.

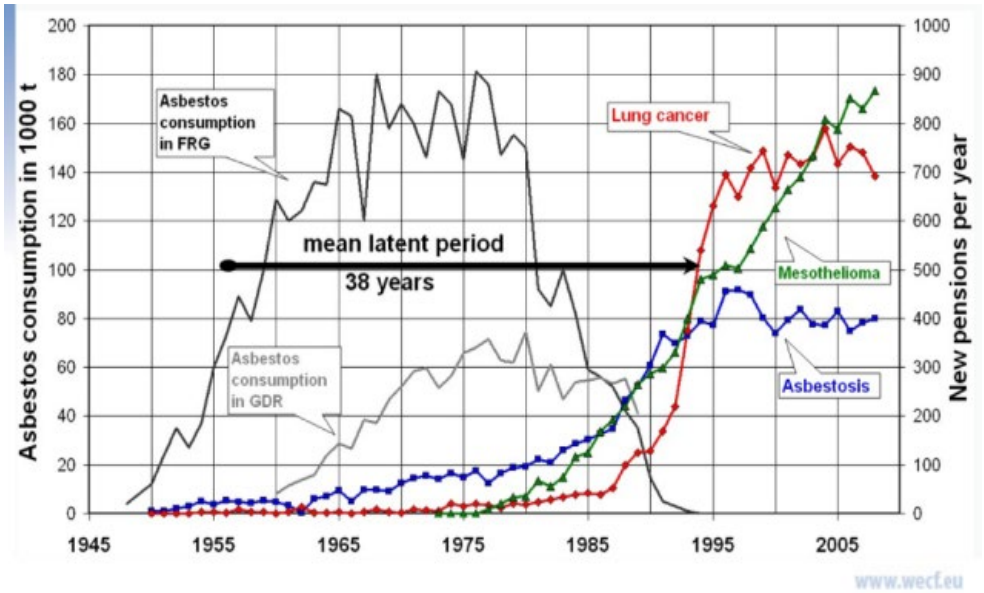
6 ibid. In Germany, the total number is 30 % higher.

7 European Commission, Ex-post evaluation of the European Union occupational safety and health directives (REFIT evaluation), SWD (2017) 10 final, 2017, p. 39.

the very long latency periods, asbestos victims are often unable to substantiate the causality of their occupational asbestos exposure.[8]

The following graph illustrates the long time lag between asbestos consumption and asbestos-related occupational diseases in Germany.

Figure 1: Asbestos-related occupational diseases in Germany



Source: Dr Markus Mattenklott, Institute for Occupational Safety and Health of the German Social Accident Insurance (FIA).

Around 125 million people in the world have been exposed to asbestos at the workplace. In 2004 alone, asbestos-related lung cancer, mesothelioma and asbestosis from occupational exposures resulted in 107 000 deaths and a loss of 1 523 000 disability-adjusted life years (DALYs).[9] Because of the restrictive recognition practices of asbestos-related occupational diseases (in Germany, for example, a worker needs to have been in contact with asbestos for 25 years of their working life),[10] a considerable number (minimum up to 30 %) of cases could be added to these official numbers.

[8] European Economic and Social Committee on Freeing the EU from asbestos, 2015.

[9] WHO, Asbestos, 2014.

[10] In Germany, an important condition for the validation of an asbestos-based occupational disease is the objective evidence of the so-called 25 'asbestos fibre years' (years that a worker was in contact with asbestos for 240 working days per year). Arbeitsschutz in NRW 2021.

2. The use of asbestos in Europe

In all European countries, an estimated 70-80 % of raw asbestos by weight was used for the manufacturing of cement products. The rest was used for construction products, floor coverings, brake linings, asbestos textiles, insulating board, spray insulation, filter materials, etc.[11]

The burden of asbestos-related disease is concentrated in Europe due to heavy asbestos use in earlier decades.[12] For western Europe, projections in 1998 suggested that the number of men dying from mesothelioma each year would almost double, from 5 000 in 1998 to about 9 000 around 2018, and then decline, leading to more than 190 000 deaths by 2029 in six countries alone.[13]

The asbestos epidemic has unfolded in four 'waves':[14]

- First wave: handling of raw asbestos by miners and dockers, manufacturing of asbestos products;
- Second wave: installing of asbestos products by insulation workers[15];
- Third wave: repair, renovation and removal of asbestos by construction workers;
- Fourth wave: people working and living in buildings containing asbestos, which means that virtually anybody could have been exposed to the impact of this substance.

The third and fourth waves remain relevant today, since work linked to the maintenance, demolition or retrofitting of older buildings results in substantial exposure to asbestos, and many people still work and live in buildings containing this substance.

Almost all of the countries that used asbestos at high or very high levels in the period between 1920 and 1970 also experienced high mortality rates from mesothelioma and/or asbestosis. Between 2001 and 2012, Europe (not only the EU-27) used 7.8 million metric tonnes of asbestos. This share (31 % of global use) is still disproportionately high relative to the population of this continent. However, absolute use of asbestos declined significantly from 1971 to 2000, registering very low levels in 2001-2012.[16] Directive 1999/77/EC banned the use of any asbestos fibres throughout the European Union as of 1 January 2005.[17]

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11 ibid., p. 14f.

12 *WHO Bulletin*, 'Asbestos: use, bans and disease burden in Europe', 2014 and Driscoll Tim, Global and regional burden of cancer in 2016 arising from occupational exposure to selected carcinogens: a systematic analysis for the Global Burden of Disease Study, University of Sidney, Australia, 2019.

13 Peto, Decarli, La Vecchia, Levi and Negri, 'The European mesothelioma epidemic', *British Journal of Cancer* (1999) 79(3/4), pp. 666–672. These projections were based on a simple age and birth cohort model from 1970 to 1989 for six countries (Britain, France, Germany, Italy, the Netherlands and Switzerland).

14 Van der Laan Gert, The Burden of Asbestos-related Diseases in the EU, WHO Collaborating Center, 2013.

15 The Asbestos Victims' Families Association sent a statement to Turin's public prosecutor with the names of 1 000 people who had fallen ill or died as a result of asbestos exposure. Eternit lawsuit, asbestos exposure in Italy, 2019.

16 LaDou Joseph, 'The Case for a Global Ban on Asbestos', *Environmental Health Perspectives*, July 2010, p. 897.

17 European Commission Directive 1999/77/EC of 26 July 1999 adapting to technical progress for the sixth time.

Table 1: Status of asbestos bans and asbestos use, Europe, 1920–2012[18]

		Average per capita asbestos use kg/capita/year		
Country	**Status of asbestos**	**1920-1970**	**1971-2000**	**2001-2012**
Austria	Early	1.17	2.09	0.00
Belgium	Early	3.08	3.02	0.00
Bulgaria	Late	0.14	1.31	0.02
Croatia	Late	0.78	3.57	0.39
Cyprus	Late	6.41	2.36	0.02
Czechia	Late	0.82	1.85	0.06
Denmark	Early	2.16	1.97	0.00
Estonia	Late	0.07	0.06	0.26
Finland	Early	1.49	0.86	0.03
France	Early	1.08	1.44	0.00
Germany	Early	1.17	2.18	0.00
Greece	Late	0.41	1.28	0.00
Hungary	Late	0.78	2.36	0.03
Ireland	Early		1.57	0.19
Italy	Early	0.83	1.61	0.00
Latvia	Late	0.26	0.66	0.08
Lithuania	Late	0.05	0.14	0.00
Luxembourg	Late	3.48	3.13	0.08
Malta	Late			0.00
Netherlands	Early	0.84	0.87	0.00
Norway	Early	0.98	0.36	0.00
Poland	Early	0.39	1.72	0.00
Portugal	Late	0.27	1.06	0.11
Romania	Late	0.62	0.76	0.24
Slovakia	Late	1.52	3.01	0.02
Slovenia	Early	1.70	6.78	0.00
Spain	Late	0.51	1.35	0.03
Sweden	Early	1.20	0.51	0.00

[a] Early: ban adopted before/by 2000; Late: ban adopted 2001-2013;
[b] Values below 0.05 were given the value 0.00.

Source: Kameda, Takashi, Asbestos: use, bans and disease burden in Europe and own calculations.

3. Protecting workers from asbestos – The legal framework

Already in 1898, labour inspectors suspected a connection between ill health and asbestos. For instance, the UK's chief factories inspector published a report citing cases of pulmonary fibrosis among textile workers. Labour inspectors in other European countries reported similar observations. The first observations of lung cancer associated with asbestosis date back to the 1930s. In the mid-20th century, the carcinogenic properties of asbestos were proven scientifically,[19] but it was only after 2010 that all forms of asbestos were banned in 52 countries, including all EU Member States.[20]

[18] Kameda, Takashi, 'Asbestos: use, bans and disease burden in Europe', *Bulletin of the World Health Organization*, 2014.

[19] European Forum of the Insurance against Accidents at Work and Occupational Diseases, Asbestos-related occupational disease in Europe, April 2006.

[20] LaDou Joseph, The Case for a Global Ban on Asbestos, Environmental Health Perspectives, July 2010, p. 897

3.1. ILO and WHO rules on asbestos

The ILO adopts international labour standards in the form of conventions and recommendations, including in the field of occupational safety and health (OSH). A large part of the European Framework Directive is influenced to a considerable degree by prior work that took place within the ILO. However, EU legislation covers more aspects, is more detailed in this area and applies throughout the EU. ILO conventions have to be ratified by individual states.[21]

In 1974, a long time before asbestos was banned in Europe, the Occupational Cancer Convention, 1974 (No 139), provided for measures to be taken for the control and prevention of occupational hazards caused by carcinogenic substances and agents. In 1986, the ILO Asbestos Convention, 1986 (No 162), provided for measures to be taken for the prevention and control of, and protection of workers against, health hazards due to occupational exposure to asbestos.

In 2006, the International Labour Conference adopted a resolution on asbestos. Noting that all forms of asbestos, including chrysotile, classified as human carcinogens by the International Agency for Research on Cancer (IARC), and expressing its concern that workers continue to face serious risks from asbestos exposure, it called for the elimination of the future use of asbestos and the identification and proper management of asbestos currently in place as the most effective means to protect workers from asbestos exposure and to prevent future asbestos-related diseases and deaths.[22]

The WHO, in collaboration with the ILO, works towards the elimination of asbestos-related diseases, focusing mainly on:[23]

- stopping the use of all types of asbestos;
- replacing asbestos and providing economic incentives for its replacement;
- preventing people's exposure to asbestos including during asbestos removal (abatement);
- improving diagnostics, treatment and rehabilitation;
- registering people with exposure to asbestos and organising medical surveillance;
- raising awareness that waste containing asbestos should be treated as hazardous waste.

3.2. The European approach and Directives 1999/77/EC on the ban of asbestos and 2009/148/EC on the protection of workers from the risks related to exposure to asbestos at work (the Asbestos Directive)

EU legislation covers more aspects than the ILO conventions, including 'risk assessment, control and supervision by the authorities (labour inspection), the obligation to prepare a list of occupational accidents, protective and preventive services, health surveillance, rules on specific risks including cancer, asbestos and chemicals, and on specific sectors, such as construction, mining and agriculture'.[24]

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21 SWD(2017) 10 final, 2017, p. 9, op. cit.

22 ILO, The ILO position on safety in the use of asbestos, 1996-2021.

23 WHO, Asbestos: elimination of asbestos-related diseases, 2018.

24 ibid.

In 1989, the European Framework Directive on Safety and Health at Work (Directive 89/391 EEC) was adopted as a substantial milestone in improving safety and health at work in the EU. It guarantees minimum safety and health requirements throughout the EU. Member States are allowed to establish more stringent measures.

Through the adoption of Directive 2009/148/EC (the Asbestos Directive) in 2009, the EU established the legal basis for both national and EU-wide action aimed at protecting workers against risks to their health, including the prevention of such risks, arising from exposure to asbestos at work, and at defining maximum limits for this exposure. A series of measures were defined to help protection from and prevention of risks at work linked to asbestos:

- prohibiting certain [25] activities using asbestos;
- introducing measures to reduce exposure to asbestos to a minimum (and in any case below the limit value laid down);
- establishing maximum limits for exposure to asbestos; requiring the measurement of asbestos exposures;
- in the case of certain activities such as demolition, asbestos removal work, repairing and maintenance, adopt measures intended to ensure protection of the workers while they are engaged in such activities;
- monitoring the health of those working with asbestos. [26]

In addition, employees must have the opportunity to undergo a medical examination. Moreover, before commencing demolition and refurbishment work, companies should give proof of their expertise and, if the national legislation so requires, have an official licence for working with asbestos. The more conscientiously the employers and their workers observe these rules, the more risk-free the work can be. [27]

3.3. Evaluating the practical implementation of the Asbestos Directive (2015)[28] and the EU occupational safety and health directives (2017)[29]

Under Article 22 of the Asbestos Directive, every five years the Member States have to report to the Commission on their practical implementation of the directive; these reports serve as a basis for the evaluation carried out by the Commission. The legislation transposing the Asbestos Directive sets out more detailed requirements, e.g., on workers' training, more particularly in terms of its frequency. [30]

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25 For instance, banning the application of asbestos by means of spraying and prohibiting activities that expose workers to asbestos fibres during the extraction of asbestos or the manufacturing and processing of asbestos products.

26 DG Employment, Social Affairs and Inclusion, Evaluation of the practical implementation of the EU occupational safety and health (OSH) directives in EU Member States. Directive 2009/148/EC on the Protection of Workers from the Risks related to Exposure to Asbestos at Work, September 2015.

27 European Commission, Practical guidelines, 2012, op. cit., p. 16 f.

28 DG Employment, Social Affairs and Inclusion, Evaluation of the practical implementation of the EU occupational safety and health (OSH) directives in EU Member States. Directive 2009/148/EC on the Protection of Workers from the Risks related to Exposure to Asbestos at Work, September 2015.

29 SWD (2017) 10 final, 2017, op. cit., p. 257.

30 ibid., p. 160.

In 2015, the Commission published the first mandatory report on the practical implementation of the directive, concluding that it had been transposed and implemented in all Member States. In 2015, based on existing data, no conclusive assessment could be made regarding compliance.

The Commission did not publish the mandatory evaluation report in 2020, which explains why the data on the implementation are not available in March 2021. One reason to explain the absence of a Commission report could be that some Member States did not submit their own reports on the practical implementation to the Commission.

The conclusions of the Commission's 2015 evaluation report are still valid today:

- Data on compliance are patchy and incomplete. Such data as are available suggest variable degrees of compliance with different provisions, ranging from 15 % (consultation) to 80 % (ensuring protective and preventive services). However, these data are derived from a limited number of Member States and should not necessarily be considered as representative of the wider EU-27.
- Guidance and other supporting material has been prepared at both Member State and EU level, and the views expressed by individual Member States seem to suggest that this is sufficient (although there are some conflicting views over whether or not enough has been done to support SMEs). Very little support for SMEs relating specifically to asbestos has been identified. Consideration could be given to encouraging greater coordination of efforts between Member States and, in particular, to more focused support for SMEs.

In January 2021, the Commission reported that it is carrying out an evaluation of the implementation of the EU OSH directives required by Article 17a of the EU OSH Framework Directive 89/391/EEC. This is a follow up to the large in-depth ex-post evaluation of the EU OSH directives carried out in 2015-2016. The Commission is now examining the developments that have occurred since then, in terms of the practical implementation of the directives and the overall trends in relation to different aspects (including those linked to asbestos at work) of workers' health and safety.

The results of this evaluation will contribute to the future EU strategic framework on safety and health at work 2021-2027 (due by Q2 2021) and identify any further initiatives that could be adopted to improve the execution of the regulatory framework. Furthermore, more in-depth information on the implementation will be presented in the planned Commission staff working document accompanying the new strategic framework. Relevant stakeholders, including social partners, are consulted throughout the process.

3.4. European structural and investment funds

The EU has made funding available for the handling and removal of asbestos. In 2018, in an answer to the European Parliament, the Commission underlined that it is up to the Member States to ensure compliance with the relevant legislation, to correctly implement the national transposition measures, and to decide on the approach they should take regarding their priorities for asbestos removal. 'The Member States can allocate European structural and investment funds money for

handling and removal of asbestos in line with the objectives of the respective national or regional programmes.' However, the Commission does not collect data on investment in this area.[31]

3.5. Effectiveness of the existing framework

The long latency period of asbestos-related diseases does not make it possible to fully monitor the effectiveness of the directive through the available volume of data. However, the available evidence from some Member States regarding the levels of exposure to asbestos shows a significant reduction in the use of asbestos and asbestos-containing articles and supports the view that the directive has been effective. [32]

The (not systematically) available national data/research results suggest a decrease in asbestos exposure. The need for developing a proper evidence base for the future monitoring of the effectiveness of the directive should be considered.

The Asbestos Directive remains highly relevant and its implementation has contributed to the significant reduction in the use of asbestos in the EU. However, workers in the construction and maintenance sectors are still exposed, as are inhabitants and users of buildings. What are defined at the beginning of this study as 'third' and 'fourth' waves of the asbestos epidemic are still having major health impacts.[33] When it comes to the renovation of buildings, there are no national asbestos removal strategies nor are the authorities required to maintain a public register of asbestos contamination, especially in buildings.

4. The European Parliament's position

In March 2013, the Parliament proposed a resolution,[34] in which it voiced its support for a model for asbestos screening and registration in the Member States in accordance with Article 11 of Directive 2009/148/EC. Under this model, owners of public or commercial buildings would be required to prepare plans to manage asbestos-related risks, to ensure the availability of information to workers, and to increase the efficiency of existing schemes.

The European Commission should integrate the asbestos issue into other policies, such as those on energy efficiency and waste. In view of the lack of information for employers and staff regarding asbestos, the Commission should cooperate with the Member States and the social partners in creating and developing services providing advice and topical information.

The Parliament urged the Commission to establish a working group for the purposes of developing minimum asbestos-specific qualifications and providing asbestos-specific qualifications, with a strong focus on people in charge of removing asbestos on the ground.

The Parliament called on the Commission and the Member States' bodies entrusted with enforcing control to respect all of the health provisions set out in Directive 2009/148/EC and to ensure that all

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31 Parliamentary questions, Answer given by Ms Thyssen on behalf of the European Commission, Question reference: E-000862/2018, 10 April 2018.

32 SWD(2017) 10 final, 2017, op. cit., p. 259.

33 Van der Laan Gert, 2013, op. cit.

34 European Parliament resolution on asbestos related occupational health threats and prospects for abolishing all existing asbestos (2012/2065(INI)) of 14 March 2013.

waste containing asbestos is classified as hazardous (Decision 2000/532/EC) and disposed of solely in dedicated hazardous-waste landfills (Directive 1999/31/EC).

As also noted in the resolution (and referred to in the report), some Member States already have such measures in place and it is suggested that a good starting point for introducing such a requirement would be to explore the experience of the Member States that already require or maintain registers of asbestos in buildings.

In October 2019, the EMPL committee requested authorisation to draw up a legislative own-initiative report (INL) on protecting workers from asbestos (EMPL/9/0179), focussing on health and safety at work.

In February 2021, EMPL requested authorisation to widen the scope of its INL.[35] Based on the Green Deal, the new renovation wave, Europe's Beating Cancer Plan and consultations with stakeholders, EMPL 'identified a broader scope beyond the Asbestos at work Directive would take into account the cross cutting nature of asbestos, requiring a more comprehensive approach. However, the focus would remain above all on occupational exposure to asbestos, as the health risks arising from asbestos mostly concern workers'. The INL report could provide further recommendations, inter alia, with regard to:

- updating EU measures aimed at protecting workers and inhabitants and users of buildings in the context of the EU renovation wave strategy that seeks to prevent a new wave of asbestos victims (EMPL and ENVI competence);
- a call for minimum EU standards for the recognition and compensation of victims including all known asbestos-related diseases (EMPL competence);
- a call for an EU framework directive for national asbestos removal strategies, including a legislative proposal for public registers (EMPL and ENVI competence);
- a call for an amendment to Directive 2010/31/EU on the energy performance of buildings; this amendment would focus on the mandatory screening and subsequent removal (EMPL and ENVI competence).

In February 2021, the ENVI committee supported the EMPL committee's initiative to extend the scope of its INL report on asbestos.[36]

5. Assessment of the European added value

Due to the long latency period and the fact that there is no cure for diseases due to asbestos, the most important strategies are linked to prevention, a ban on asbestos products, and protection of workers against exposure.

In the area of safety and health, improving the working conditions and the working environment is among the EU's key goals.[37] The implementation of minimum standards brings added value due to an upward convergence of all Member States towards higher standards of prevention, safety standards and working conditions. Member States also have the opportunity to apply or introduce

[35] EMPL committee (2021) 266, Request for authorisation to change the scope of the own-legislative report on Protecting workers from Asbestos /EMPL/9/01679, 4 February 2021.

[36] ENVI committee, EMPL request to extend the scope of the own-legislative report on Protecting workers from Asbestos, EMPL/9/01679, 8 February 2021.

[37] European Commission, Practical guidelines, 2012, op. cit.

laws and/or regulations to ensure greater protection for workers, especially as far as the replacement of asbestos with less dangerous substitutes is concerned. That said, EU Member States' practices as regards the handling of asbestos products and prevention culture are quite disparate.

Against this background, the EU took strong action, banning asbestos products overall in the EU. Pursuant to Directive 1999/77/EC on new applications for chrysotile asbestos, all asbestos fibres were banned from use throughout the EU on 1 January 2005.[38] This directive affected the practices of both existing and newly joined EU Member States (see Table 2). The-absolute use of asbestos declined significantly over 1971–2000 with close to zero levels in 2001–2012 (see Table 1 above).

Table 2: General ban on asbestos use

Date	Country
1986	Denmark and Sweden
1990	Austria
1991	The Netherlands
1992	Finland and Italy
1993	Germany
1996	France
1998	Belgium
2000	Ireland
2002	Spain and Luxembourg
2005	Greece and Portugal

There is a positive synergy at EU level between the Asbestos Directive and Directive 87/217/EEC[39] on the protection of the environment from asbestos. The former contributes to the objectives of the latter, in particular related to activities involving the demolition of buildings and installations containing asbestos, the removal of asbestos and of products containing asbestos involving the release of asbestos fibres or dust preventing a new wave of asbestos victims (e.g. in the context of the EU renovation wave strategy).

In this context, the European Commission stated in 2015 that, 'The prohibition of the application of asbestos by spraying and on activities which expose workers to asbestos fibres during the extraction of asbestos or the manufacture and processing of asbestos products are the most effective aspects of the Directive together with restrictions in other asbestos-specific legislation'.[40]

As far as the Asbestos Directive is concerned, 'a deeper analysis is required to determine whether the combined implementation of the provisions of Directive 2009/148/EC in particular on the demolition of buildings containing asbestos and asbestos-added products and on the removal therefrom of these raw material and products (Article 12(c)), and of the provisions set out in other Union instruments (e.g. Regulation (EC) No 1907/2006 (REACH)) ensure the full achievement of the objective of Article 7(2) of Directive 87/217/EEC (protection of human health and the environment against asbestos)'.[41]

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[38] Commission Directive 1999/77/EC of 26 July 1999 adapting to technical progress for the sixth time.

[39] Council Directive 87/217/EEC of 19 March 1987 on the prevention and reduction of environmental pollution.

[40] DG Employment, Social Affairs and Inclusion, Evaluation of the practical implementation of the EU occupational safety and health (OSH) directives in EU Member States. Directive 2009/148/EC on the protection of workers from the risks related to exposure to asbestos at work, September 2015.

[41] SWD (2017) 10 final, 2017, op. cit., p. 66 and p. 258.

A commitment by employers to act in relation to asbestos risks, supported by trade unions and workers, will have a crucial role in decreasing the number of asbestos-caused illnesses.[42]

Concerning the interface between the REACH Regulation and the Asbestos Directive, the benchmark value used in the risk in entry 6 of Annex XVII to REACH Regulation156 is lower than the value for maximum airborne asbestos fibre concentration in the Asbestos Directive. The difference indicates that the maximum limit may need to be reconsidered. [43] 'In the light of scientific progress and in order to increase the effectiveness of the Directive for the future, the lowering of exposure limits as set in the Directive should be considered.[44]

Due to the latency period, neither the workers affected nor the employers responsible for occupational health and safety are alerted during or immediately after exposure by specific symptoms or a rise in the number of disease cases. Because of this, the protection of employees and other affected persons can only be achieved through regulatory measures. Alongside such measures, the legislator must provide sufficient staff and financial resources to enforce the agreed regulations efficiently and competently with regard to occupational health as well as supervise the work places accordingly.

Future actions and the related European added value

In 2016, asbestos was (and continues to be) the predominant carcinogen contributing to the global burden of disease, accounting for about 220 000 deaths. Over the past three decades, there has been considerable effort to reduce exposure to asbestos. However, even if this exposure were eliminated completely, deaths from asbestos-related cancers would be expected to continue for the next four to five decades, due to the latency period of exposure.[45]

The projections suggest that deaths related to asbestos will decline due to protective measures that are beginning to yield results. However, the available data of the national authorities (e.g. Table 1) show that asbestos will still be present (in existing infrastructure) and the EU workforce will still be at risk of exposure.

Asbestos places a high monetary burden on the public health systems in the EU.

In 2002-2009, the annual asbestos-related costs exceeded €34 billion (costs for the public health system and including elements for pain and suffering) in 14 Member States (representing more than 80 % of the EU-27 population), with more than 12 000 deaths (these are only the validated death cases) per year.[46] If one extrapolates these figures including all 27 Member States, [47] the costs in 2021 alone would be higher than €40 billion and more than 120 000 deaths would have been registered by 2029.

The measures taken since the adoption of the European Framework Directive on Safety and Health at Work (Directive 89/391 EEC) in1989 have to be enforced and will continue to have a significant

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42 European Commission, Practical guidelines, 2012, op. cit., p. 10.

43 SWD (2017) 10 final, 2017, op. cit., p. 65. ECHA, Annex XV Restriction Report, Amendment to a Restriction, Asbestos (Substance name Chrysotile), p. 27.

44 SWD (2017) 10 final, 2017, op. cit., p. 66 and p. 259.

45 Driscoll Tim, Global and regional burden of cancer in 2016, Australia, 2019.

46 As illustrated by the German example above, the validation practice is restrictive.

47 Including the other 13 Member States with a 25 % higher share of the population and taking into account the increase in price levels since then leads to a minimum amount of €40 billion, without taking into account the fact that, based on the existing practice, the number of cases and deaths is underestimated.

impact, especially from 2030 onwards. A new INL initiative accompanied by additional proposals/enforcement especially in the context of renovation, maintenance work and removal will have a further impact; however, substantial benefits that will accrue not only to workers but also inhabitants and users of buildings cannot be expected to be generated before 2060.

EU action therefore would be a long-term investment: a 1 % reduction in the incidence of cancer equates to €400 million in savings (costs for the public health system, pensions and including elements for pain and suffering). A 30 % reduction in the number of mesothelioma and lung cancer cases could lead to savings of €12 billion per year (in 2021 prices). Even more important will be the saving of at least 4 000 lives, the avoidance of occupational illnesses and the gaining of at least 60 000 of life years per year.

Table 3: Estimates of mesothelioma costs based on French and European figures[48]

Country	Number of mesothelioma cases	Costs, 2009 (€)*	Number of lung cancer cases	Costs in 2012 (€)**
Austria	80	10 000 000	160	487 001 280
Belgium	156	19 500 000	2 512	7 645 920 096
Denmark	71	8 875 000	142	432 213 636
Finland	75	9 375 000	150	456 563 700
France	826	103 250 000	1 652	5 028 288 216
Germany	1 063	132 875 000	2 126	6 471 029 508
Italy	1 235	15 437 500	2 470	7 518 082 260
Netherlands	395	49 375 000	790	2 404 568 820
Poland	96	12 000 000	192	584 401 536
Portugal	19	2 375 000	38	115 662 804
Romania	58	7 250 000	116	353 075 928
Spain	263	32 875 000	526	1 601 016 708
Sweden	123	15 375 000	246	748 764 468
	4 460	418 562 500	11 120	33 846 588 960

Sources: data from Park et al WHO and the Environment, Food and Rural Affairs Department and

* Based on the €125 000 estimated cost of one average case of mesothelioma in France. These figures exclude elements of the full costs.

** Based on the €3 043 758 cost of a case of lung cancer due to chemical exposure under REACH. The REACH figures for a typical case of occupational cancer are more comprehensive and include elements for pain and suffering.

[48] WHO Regional Office for Europe, The Human and Financial Burden of Asbestos in the WHO European Region, Meeting Report 5-6 November 2012, Bonn, Germany. However, the final report The Cost of Occupational Cancer in the EU-28 prepared for the European Trade Union Institute (ETUI, 2017) cites even higher figures are a you are a you are a you are a you are you are you are a you are you are a you are a you are a you are a you are a you are a you.

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Before the discovery of the deleterious effects of asbestos on human health, this substance was widely used for its strength and ability to resist heat and corrosion. It is now a scientific fact that asbestos is responsible for more than half of the deaths from occupational cancer in the world. Europe carries the majority of the global asbestos-related disease burden as a result of heavy asbestos use in earlier decades. All these facts led to the ban of asbestos in Europe in 2005. Nevertheless, asbestos-related risks remain: works linked to the maintenance, demolition or retrofitting of older buildings result in substantial exposure to asbestos and many people still work and live in asbestos-contaminated buildings.

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