Asbestos Disease Awareness Organization

Executive Summary
Asbestos: The Impact on Public Health, the Environment, and the Economy

Asbestos cancer and respiratory diseases claim more than 10,000 Americans each year. The deadly hazard of asbestos has been known for decades; the Environmental Protection Agency and U.S. Surgeon General have declared there is no safe level of exposure to asbestos. Even limited exposure over a short period of time can lead to disease, sometimes decades later. More than 50 countries worldwide have banned asbestos; although safe substitutes exist, the United States has still not implemented a ban.

Briefing Highlights

1) Asbestos fibers are nearly invisible, odorless, tasteless and indestructible. Once airborne, inhaling asbestos fibers can cause permanent and irreversible damage to vital organs.

2) Increasingly, younger men and women are developing asbestos-related diseases from occupational, take-home, and environmental exposures, deviating from the traditional patient profile of older men primarily exposed at work.

Linda Reinstein, Asbestos Disease Awareness Organization

1) Asbestos exposure has caused a pandemic; more than 90,000 deaths worldwide every year.

2) Asbestos-related deaths are increasing.

Richard A. Lemen, PhD, MSPH, Assistant Surgeon General, USPHS (ret.)

1) The exposure limit to protect workers from disease and disability is inadequate.

2) Producers of construction aggregate, represented by the National Stone, Sand and Gravel Association (NSSGA), argue that only some mineral fibers are harmful to health. However, CDC's National Institute for Occupational Safety and Health (NIOSH), indicates that exposure to thoracic-size elongate mineral particles (EMPs) should be eliminated or effectively controlled.

Celeste Monforton, DrPH, MPH, immediate past chair, Occupational Health & Safety Section, American Public Health Association

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1) EPA enforcement is dismal and violations continue. Abatement contractors know the likelihood of getting caught is slim, so new and ingenious ways of breaking the law continue. Violations mean exposures. Exposures mean disease. Disease means death.
2) By prohibiting the import, manufacturing, distribution, and processing of asbestos in the US, eventually we will stop the exposures, the disease, the deaths, the cost of abatement of these materials, and the cost of disposal of these materials.

   **Brent Kynoch**, Environmental Information Association

1) The U.S. imported over 10,000 tons of asbestos-cement construction materials, plus other asbestos products in 2009.
2) The U.S. can meet the California limit of asbestos content for stone and gravel in construction (CARB 435)

   **Barry Castleman**, ScD, Environmental Consultant

1) The Toxic Substances Control Act (TSCA) is broken and needs to be comprehensively reformed; asbestos is the poster-child for how TSCA is broken.
2) The TSCA "discussion draft" contains numerous provisions that would dramatically improve the EPA's ability to regulate asbestos. However, chemicals for which we already know enough about, including asbestos, it is not enough just to allow EPA to take action. Instead Congress should direct EPA to take specific action on asbestos and set a deadline, without waiting for additional assessment of the safety of asbestos.

   **John Walke**, National Resource Defense Council

1) There is a solid economic case for prohibiting asbestos-containing products, with net benefits to citizens, businesses, and government.
2) From the Federal view, in the long run, prohibiting asbestos-containing products would create jobs, decrease Federal benefits payments, and decrease Federal operating costs.

   **Paul Zygielbaum**, MS, MBA, Business Executive and Mesothelioma Patient
Welcome. Thank you for joining us today. I am Linda Reinstein and in 2004, Doug Larkin and I co-founded the Asbestos Disease Awareness Organization (ADAO). We have now grown to an international organization with more than 6000 supporters, yet our mission continues to prevent asbestos exposure to eliminate asbestos-caused diseases. I would like to first thank Representative Lois Capps for her leadership and support of public health issues. For more than three years, ADAO has had the opportunity to work with her and our respect for her steadfastness has grown immensely.

Today you will hear from world renowned experts, who collectively, have more than 200 years experience in asbestos-related issues. As the U.S. House of Representatives considers the Toxic Chemicals Safety Act of 2010 discussion draft, we hope that the information presented today will aid your bosses to support legislation that strengthens the EPA’s authority to reduce risk from exposure to toxic chemicals, thus protecting men, women, and children.

Today my speech is dedicated to the young asbestos victims. Traditionally, mesothelioma and asbestos-related diseases (ARD) are thought only to afflict the eldest generations and more men than women. However, the new patient profile shows younger women and men diagnosed with disease. Only three of these young victims are still living.
In 2003, after enduring 9 months of common symptoms, my husband, Alan, was diagnosed with mesothelioma. Alan chose to undergo an Extra-Pleural Pneumonectomy (EPP) -- a radical surgical procedure that removed his left lung, pericardium, and replaced his diaphragm. As a result of asbestos exposure, our 13 year-old daughter watched her father slowly die from a preventable disease. Unfortunately, Alan’s experience is not unique. Every year 3,000 Americans die from mesothelioma and another 7,000 from asbestos-caused diseases.

For more than a century, asbestos has been known to cause deadly diseases. The World Health Organization, Environmental Protection Agency, and U.S. Surgeon General ALL agree: asbestos is a human carcinogen and there is no safe level of exposure. Asbestos is the most common cause of occupational death.

Asbestos fibers are nearly invisible. See the size comparison on this penny to the 20,000 microscopic fibers are under President Lincoln’s nose. These odorless, tasteless, indestructible fibers can remain suspended in the air for days. Once airborne, asbestos fibers can cause permanent and irreversible damage to vital organs including asbestosis, lung and gastrointestinal cancers, and an aggressive cancer called mesothelioma. Mesothelioma patients’ average life expectancy is six - twelve months.

You do not have to work around asbestos to get sick. Though most reports cite workers’ statistics, exposure can be caused from contaminated clothing or the environment. Disasters, natural and manmade, can release asbestos into the air. The collapse of the World Trade Center released...
400 tons of asbestos into the air that day. Thousands of first responders, workers, residents, and school children have already developed disease. Here in Washington, DC, 10 AoC employees who manage your Capitol Tunnels, where knowingly exposed to asbestos. Nearly all have developed diseases and are now unable to work.

You each have the exterior and interior of the ADAO House graphic in your packets, depicting where asbestos is commonly found in houses and other buildings. As you can see, exposure dangers are real and closer to home than you might realize. Asbestos exposure continues to impact public health, our environment, and economy every day.

Today’s briefing is designed to inform, not to scare. But we hope that you’ll listen to some important information and support the upcoming TSCA reform act to create a healthier and safer environment for kids and adults, end the financial devastation suffered by victims, and stimulate economic development.
Richard A. Lemen, Ph.D.
Assistant Surgeon General,
U.S.P.H.S. (ret.)
15 June 2010

What Happens to Asbestos in the Respiratory System

Nose Filters out fibers >100µ long
Cilia Clears mucus (and fibers) from lung
Free Alveolar Macrophages (FAMs): Phagocytize fibers within lung

By R.A. Lemen
Are Asbestos-Related Diseases a Pandemic?

A pandemic is the excessive occurrence of a disease in a large portion of the world

H1N1 Pandemic
- 14,142 Deaths worldwide

Asbestos-related diseases
- More than 90,000* Deaths worldwide each year
- More than 10,000 Deaths in the U.S. each year**

*90,000 is probably an underestimate because it doesn’t include other cancers (e.g. Larynx and Ovary)
**WHO 2009, Update 84

Asbestosis deaths increased 20-fold from 1960s to 1990s and are continuing

From: NIOSH
Relative Inhalation Toxicity of Chemicals Listed in the EPA's Toxic Release Inventory

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Known Carcinogen</th>
<th>Toxicity Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos (friable) (1332-21-4)</td>
<td>Known Carcinogen</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Benzidine (92-87-5)</td>
<td>Known Carcinogen</td>
<td>480,000</td>
</tr>
<tr>
<td>Bis(chloromethyl) ether (542-88-1)</td>
<td>Known Carcinogen</td>
<td>440,000</td>
</tr>
<tr>
<td>N-Nitrosodiethylamine (55-18-5)</td>
<td>Known Carcinogen</td>
<td>310,000</td>
</tr>
<tr>
<td>Propyleneimine (75-55-8)</td>
<td>Known Carcinogen</td>
<td>300,000</td>
</tr>
<tr>
<td>N-Nitroso-N-ethylurea (759-73-9)</td>
<td>Known Carcinogen</td>
<td>280,000</td>
</tr>
<tr>
<td>Diisocyanates (N120)</td>
<td>Non-Carcinogen</td>
<td>180,000</td>
</tr>
<tr>
<td>N-Nitrosodimethylamine (62-75-9)</td>
<td>Known Carcinogen</td>
<td>100,000</td>
</tr>
<tr>
<td>Acrolein (107-02-8)</td>
<td>Non-Carcinogen</td>
<td>90,000</td>
</tr>
<tr>
<td>Cadmium and cadmium compounds (7440-43-9)</td>
<td>Known Carcinogen*</td>
<td>90,000</td>
</tr>
<tr>
<td>Chromium and chromium compounds (7440-47-3)</td>
<td>Known Carcinogen</td>
<td>86,000</td>
</tr>
<tr>
<td>Polybrominated biphenyls (PBBs) (N575)</td>
<td>Known Carcinogen*</td>
<td>71,000</td>
</tr>
</tbody>
</table>

**Toxicity weight**: is a proportional numerical weight applied to a chemical based on its toxicity. The toxicity of a chemical is assessed using EPA-established standard methodologies. For each exposure route, chemicals are weighted based on their single, most sensitive adverse chronic human health effect (cancer or the most sensitive noncancer effect). In the absence of data, the toxicity weight for one pathway is adopted for the other pathway. The range of toxicity weights is approximately 0.01 to 1,000,000.

Celeste Monforton, DrPH, MPH

Occupational Health and Safety Section
American Public Health Association
Impact of Asbestos Exposure on Public Health: Worker Health and Safety

The exposure limit to protect workers from disease and disability is inadequate. The US Dept of Labor Occupational Safety and Health Administration's (OSHA) standard to protect asbestos-exposed workers was issued in 1994.

- At the current exposure limit, an estimated 6 out of 1,000 workers exposed over their working life will still develop cancer and
- 5 out of 1,000 will develop asbestosis.
- This same exposure limit was adopted in 2008 by the US Dept of Labor Mine Safety and Health Administration (MSHA).

Impact of Asbestos Exposure on Public Health: Worker Health and Safety

- Producers of construction aggregate, represented by the National Stone, Sand and Gravel Association (NSSGA), argue that only some mineral fibers are harmful to health.*
- A peer-reviewed intelligence bulletin prepared by CDC’s National Institute for Occupational Safety and Health (NIOSH), however, indicates that exposure to thoracic-size elongate mineral particles (EMPs) should be eliminated or effectively controlled.**

Impact of Asbestos Exposure on Public Health: Worker Health and Safety

- Research on occupational and community exposures to EMPs and health outcomes are needed, but conduct of toxicological and epidemiological should not forestall action to protect public health today.

J. Brent Kynoch
Managing Director

THE ENVIRONMENTAL INFORMATION ASSOCIATION

6935 Wisconsin Ave, Chevy Chase, MD 20815
888-343-4342 www.eia-usa.org

“our multi-disciplinary membership collects, generates and disseminates information about environmental issues in buildings and facilities”
Good morning. My name is Brent Kynoch, and I am the managing director of the Environmental Information Association, located in Chevy Chase, MD. As a bit of background, EIA is composed of contractors, consultants, building owners, laboratories, training providers and more .... all persons that are involved in the remediation of environmental issues in buildings. As you can see from the slide, our mission is to collect, generate and disseminate information about environmental issues in buildings and facilities.

I have a few concerns I would like to share with you today. The first of these is a concern regarding the difference between asbestos-containing products and asbestos-containing materials. First, a discussion of asbestos-containing materials. This definition comes from the Subchapter II portion of TSCA, which is the “Asbestos Hazard Emergency Response Act.” This defines asbestos as any material containing great than 1% asbestos by weight. This is NOT a health based definition of asbestos. Rather, the 1% was established because the analytical methods in place at the time of the regulation provided analytical sensitivity only to levels that were approximately 1%.

Asbestos-containing products, on the other hand, are products that contain asbestos in any concentration whatsoever. Analytical methods have improved today to the point that laboratories can detect fractional percentages of asbestos in materials.

Why is this important, you might ask? Two reasons: 1) the definition of “asbestos” can be important in any legislation that might seek to prohibit or control its importation, use, production or distribution. In Senate bill 742 – introduced and passed approximately 2 years ago, the control of asbestos referred specifically to “asbestos-containing materials “ - - which meant that products with 1% or less of asbestos were not controlled. 2) – and most important - - - - We have learned that significant exposures can occur from materials and products that contain less than 1% asbestos.
There have been studies conducted on flooring products, drywall joint compound, roofing materials, and ceiling materials that contain less than 1% asbestos and these studies have shown that significant exposures to workers can occur when these materials are disturbed. And the most “disturbing” part of this, pardon the pun, is that these materials are currently not regulated. A worker may saw, drill, cut or sand a material that is 1% asbestos, and does not need to be provided with any protection against exposure to deadly asbestos fibers.

The most recent study regarding exposures to “non-regulated” materials was conducted by the SC Department of Health and Environmental Control. In this study, non-regulated drywall joint compound, or drywall mud, was studied. The material was “non-regulated” because the combination of the joint compound and the drywall to which it is applied is less than 1% asbestos by weight. SC allowed demolition of a structure to occur, using wet methods to contain fugitive dust, and conducted personal sampling on the demolition workers during the activities. Even with the wet methods being employed, the demolition workers were exposed to asbestos fibers in excess of the OSHA Permissible Exposure Limits for asbestos. This proves that even materials with less than 1% asbestos need to be considered when regulating or controlling asbestos.

Imagine this as a for instance. You purchase sand for your child’s sand box. In this sand box, you place 100 pounds of sand. Imagine that in the sand is 1 pound of asbestos. Not much, but this bag of asbestos is only one pound. The material is not regulated, so you allow your child to play in the sand without any knowledge of the potential exposure of your child to deadly asbestos fibers. And I think we can all agree that the actions of playing in the sand definitely create dust that can be inhaled by your child. Just look at this picture.

Moving forward, I would also like to discuss enforcement with you. Asbestos abatement laws have been on the books since 1978, and they have been “improved” several times since then, with the most recent improvements being the revisions to the
asbestos NESHAP rules in 1990 and the OSHA asbestos in construction standard revised in 2002.

By EPA’s own admission, enforcement of their regulations regarding asbestos is “dismal.” There aren’t enough inspectors, there isn’t enough money, and frankly, EPA needs some creativity and new ideas when it comes to enforcement. The regulations regarding asbestos abatement are fine . . . we do not need new regulations. We simply need to enforce what we have in place today.

**Slide 6**

Consider these two, very recent and very egregious examples of my concern regarding the lack of enforcement.

**Slide 7**

The first of these occurred in Marco Island, Florida. In 2005, the city engaged the services of a contractor named Quality Enterprises to widen Collier Boulevard and to replace the existing sewer lines. The old, existing sewer lines were asbestos cement pipe, and as these pipes were dug up and removed, here is where they were stacked. *(next image)* I believe that this shows you how this debris can be reduced to a rubble and can become airborne leading to serious exposures. On June 5th, EPA levied a “settlement” of $81,772 against the city and Quality Enterprises. There was no admission of guilt and no fine. The funds are to be used to clean up the mess. Oh, and by the way, asbestos cement pipe can still be purchased, installed and used today. It is an asbestos product that has not been banned.

**Slide 8**

The next example involves a contractor in upstate New York, run by the Mancusos . . . brothers Paul and Steve, and father Lester. On June 9th, just last week, each of the Mancusos received jail time and fines for improperly disposing of asbestos waste at the conclusion of an asbestos abatement project. And worse, Paul is a repeat offender. He was convicted of similar crimes in 2003 and 2005, and was allowed to continue his shady business practices.
These examples show us that if such egregious offenders are getting caught, imagine how much of this kind of activity is going on that EPA enforcement officers never find out about.

Slide 9

As a summary, if you take only two points away from my talk today, they are these:

1) EPA enforcement of asbestos regulations is dismal. Asbestos abatement contractors know that this likelihood of getting caught is very slim, so they are creating new and ever more ingenious ways of breaking the law. These violations mean exposures. Exposures mean disease and disease means death.

2) All of us here today believe that asbestos is deadly and that our government should take steps to prohibit the importation, manufacture, distribution and use of asbestos as soon as is practically possible. This will stop the legacy of exposure, disease and death that is before us today. We believe that the House discussion draft for TSCA reform equips the EPA Administrator with the necessary authority to deal with asbestos quickly and efficiently. We encourage the introduction of the House discussion draft for TSCA reform, and we hope that it can be done quickly.
Barry Castleman, ScD
Environmental Consultant

US Asbestos Product Imports and Contaminant-Asbestos

U.S. Imports of Asbestos

2009 USGS Imports

- A-C Products
  - (10,600 tons)
- Gaskets, packing, & seals
  - (244 tons)
- Paper, millboard, and felt
  - (~$200k China)
- Jointing
  - ($420k Mexico)
- Brake linings & pads
  - (~$2.2 M China & India)
- Mixtures of asbestos and magnesium carbonate
  - (33.6 tons Mexico)
ADAO Product Testing

5 Products contaminated with asbestos

Monitoring Needed

Once a ban is enacted, the US will need to analyze imported products so that Americans will not be endangered by unlabeled asbestos products which may already be coming in (violating OSHA regulations).

Substitutions

- No U.S. manufacturers make asbestos brake pads, gaskets, and A-C pipes. Banning imports of these asbestos products protects U.S. workers and companies.
- Non-asbestos diaphragms and membrane cell technology are alternatives to discredited asbestos diaphragm and mercury cell technology.
Contaminant Asbestos in Stone and Minerals

- NIOSH is looking into contaminant asbestos in talc, stone, & other minerals.
- Ban legislation can provide support and research funding for continuing efforts.
- The California Air Resource Board (CARB 435) limit of 0.25% asbestos in stone and gravel should be able to be met nation-wide.

52 Countries Banned Asbestos

*exemptions for minor use

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<td>Argentina</td>
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<td>Austria</td>
<td>Estonia*</td>
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<td>Czech Republic*</td>
<td>Iceland</td>
<td>Netherlands</td>
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Toxic Substances Control Act

- The Toxic Substances Control Act (TSCA) is broken and needs to be comprehensively reformed; asbestos is the poster-child for how TSCA is broken.
Toxic Substances Control Act

- The TSCA "discussion draft" contains numerous provisions that would dramatically improve the EPA's ability to regulate asbestos.
- However, regarding chemicals for which we already know enough about, including asbestos, it is not enough just to allow EPA to take action.
- Instead Congress should direct EPA to take specific action on asbestos and set a deadline, without waiting for additional assessment of the safety of asbestos.
“Economic Impacts of Asbestos-Related Disease”

Paul S. Zygielbaum, MS, MBA
Business Executive
Peritoneal Mesothelioma Patient

My name is Paul Zygielbaum. I’m currently co-founder and chief operating officer of C8 MediSensors, a medical device startup. My career has spanned nearly 4 decades as a business manager and executive in the aerospace/defense, electric power, electronic communications, and biomedical devices industries. I have also been treated for peritoneal (or abdominal) mesothelioma, caused by asbestos exposures.

My documented exposures to asbestos include my father’s occupation, my own home repair work, and my work as an engineer in the aerospace and power industries.

My original treatment included extensive surgery and chemotherapy. I had a recurrence in 2006 and am currently undergoing diagnosis of a new suspicious mass. The direct medical expenses for my treatment have reached nearly a half-million dollars. In addition, I’ve lost over 6 months of work time in recovery from treatment, and hundreds of hours in medical examinations, consultations, tests, and follow-ups. I have already survived longer than the median survival for my cohort of patients, I know I’m on borrowed time; therefore I am doing as much good as I can with the time I have left.

Patients of asbestos-related diseases and their families incur enormous financial loss. By the time a patient dies, medical expenses can approach $1 M and much is not covered by Medicare or other insurance.

Patients lose productive work time to diagnosis, treatment and follow-ups. Considering that many are diagnosed in their 50s or even younger, significant work years can be lost due not only to death but also...
disability. At least 10,000 people each year die from asbestos-related diseases, and currently some 30-40,000 Americans are suffering. Usually caregivers within families must give up work time and sometimes their own jobs. The World Health Organization suggests that every year, the US loses about 150,000 total person-years of potential life due to premature mortality and actual person-years of productive life due to asbestos disability. Clearly, the overall economic impact is substantial.

Ultimately, some families are left destitute. I knew a woman who died of mesothelioma, as did her father and grandfather, both of whom were shipyard workers. Generational impact is not uncommon.

Asbestos-related diseases lead to huge litigation costs for businesses. Additional direct and indirect costs are incurred when companies remove asbestos from buildings, especially when done improperly. A recent investigation in Texas indicated about 90% of abatements was completed improperly. Additional losses include employee productivity and increased premiums for workers’ compensation and medical insurance, adversely impacting job creation within the operational segments of businesses.

However, within this challenge lurks a great opportunity: Prohibiting asbestos-containing products would create productive jobs. Thousands of products would have to be reformulated or replaced, and manufacturers and marketers would be freed to divert investment from legal defense and compliance to growing their businesses, while fewer workers would be affected by asbestos-related diseases.

Federal and state governments pay for asbestos-related diseases in the form of medical care, disability, and other workers’ benefits not to mention the costs of regulatory enforcement and abatement in public buildings, and the impact on judicial systems.

A strong business case exists in favor of Federal investment to prohibit asbestos-containing products, to support related public education and awareness - mitigating exposures from existing products, and to provide effective incentives for regulatory compliance.

The direct return to the Federal Government would include reduced benefits payments and operational costs while extending productive working years.

Perhaps more importantly, such an investment would lead to the creation of private-sector jobs in the replacement of asbestos as a product ingredient and in
eliminating asbestos as a product contaminant. Jobs would include factory labor, engineering, marketing and sales, and other business functions.

Like so many before me, my own life is already forfeit. It’s a matter of time. But if you take away only two things today, take away this:

1. The economic impact of asbestos on business and governments is significant
2. A U.S. ban of asbestos would create ample new jobs, would not eliminate any existing US jobs, and would alleviate financial medical burdens on companies in the long-term.

Thank you.
1. Shingles and roofing felt
2. Gutter and spout joints
3. Eaves and paneling
4. Window sealant compounds
5. Siding and cladding
6. Corrugated roofing
7. Sealed block curving
8. Broke pads and gaskets
9. Electric motors
10. Home repair materials

ASBESTOS, A HUMAN CARCINOGEN, WAS WIDELY USED IN HOMES, BUILDINGS, AND SCHOOLS UP TO 1980

CONTACT THE EPA AT WWW.EPA.GOV FOR FURTHER INFORMATION

1. Vermiculite insulation
2. Heating units and ducting
3. Recessed lighting fixtures
4. Textured wall coverings
5. Bath paneling
6. Batt insulation
7. Fuel logs, heat reflectors, hearth bases
8. Refrigerators, dishwashers, toasters
9. Oven exhaust hoods
10. Resilient floor tile, linoleum sheet flooring, and application mastic
11. Children’s toys
12. Water heaters, boilers, pipe insulation
13. Electrical panels, wire insulation
14. Washer/dryer units

MORE THAN 30 MILLION HOMES HAVE CONTAMINATED VERMICULITE INSULATION

CONTACT THE EPA AT WWW.EPA.GOV FOR FURTHER INFORMATION
American Public Health Association Policy: Elimination of Asbestos
Policy Date: 11/10/2009      Policy Number: 20096

As early as 1898, British government factory inspectors recognized adverse health effects associated with exposure to asbestos fibers. By the 1930s, the scientific evidence of the association between asbestos exposure and nonmalignant respiratory disease was well established. With the publication of Irving Selikoff's study of insulation workers in 1964, the evidence of carcinogenicity was incontrovertible.

Despite the concerns of asbestos-exporting countries and business interests of the mining industry, the scientific consensus today is that all types of asbestos fibers, including chrysotile, cause asbestosis and lung and other cancers, specifically mesothelioma. The magnitude of the public health problem presented by asbestos and its ubiquitous use during the last 50 years is revealed by death certificate data analyzed by the National Institute for Occupational Safety and Health (NIOSH). NIOSH identified 2,485 deaths in the United States in 1999 in which malignant mesothelioma was listed as an underlying or contributing cause of death. During 1968–2005, asbestosis was identified as the underlying cause of death for 9,024 decedents, 13% of these people were aged 25 to 64 years. These data undoubtedly underestimate the situation, because asbestos-related disease can take 10 to 50 years to present. The estimated portion of lung cancer deaths attributed to asbestos exposure is 2% to 3%.

With respect to disability, asbestosis is a chronically progressive, disabling, and often fatal disease that cannot be cured and continues to affect workers in the United States and around the globe today. These characteristics present particular problems for the workers’ compensation systems in the United States, prompting the American Public Health Association (APHA) to oppose legislation that would limit the rights of victims of asbestos disease to recover damages from asbestos manufacturers.

As a surprise to many, asbestos still is used in the United States for certain products manufactured domestically. The government estimates 2,200 metric tons of asbestos is used annually in US manufacturing, and scant data are available on the amount of asbestos imported into the United States in the form of asbestos-containing products manufactured elsewhere. In addition, despite active removal efforts, an estimated 1.3 million construction- and general-industry workers in the United States potentially are exposed to asbestos each year, mainly from manipulation of asbestos during renovation or demolition activities.

The acting US Surgeon General in April 2009 responded to US Senate Resolution 57, which urged “the Surgeon General to warn and educate people about the public health issues of asbestos exposure.” However, the statement did not respond to the spirit of Senate Resolution 57 to communicate the severity and magnitude of the public health threat. In a global context, the World Health Organization (WHO) has estimated that in the Year 2000 alone, the mortality and morbidity impact of asbestosis was 7,000 deaths. In addition, at least 125 million people across the globe are currently exposed to asbestos at work or in their communities. Moreover, countries such as Canada mine and manufacture asbestos for exportation to developing countries, while banning it for local use because of its health hazards. These countries continue to stand in the way of international consensus by blocking even the
inclusion of chrysotile asbestos in a list of hazardous substances requiring prior informed consent when exporting them under the Rotterdam convention.\textsuperscript{20}

The World Federation of Public Health Associations, the International Commission on Occupational Health, and the International Trade Union Confederation have joined to seek a global ban on mining and use of asbestos products, and currently more than 40 industrialized countries have banned asbestos.\textsuperscript{21} WHO called for the elimination of asbestos-related disease, noting that the “most efficient way to eliminate asbestos-related diseases is to stop using all types of asbestos . . .”\textsuperscript{22} In addition, the International Labour Organization has stated 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 . . ..”\textsuperscript{23} Finally, in the 110th Congress, the APHA supported the Bruce Vento Ban Asbestos and Prevent Mesothelioma Act of 2008.\textsuperscript{24} We recognize that a ban on asbestos would save lives and reduce the suffering experienced by victims of exposure. It also has the potential to displace workers, causing economic hardship and the resulting impacts. Therefore, attention must be given to steps to be put in place for a just transition for these displaced workers, particularly in countries such as Zimbabwe.

**Recommendations**

APHA urges the following actions:

1. Congress should pass legislation banning the manufacture, sale, export, or import of asbestos-containing products (i.e., products to which asbestos is intentionally added or products in which asbestos is a contaminant). The ban should also apply to products containing asbestos or arising from asbestos-contamination of other ingredient minerals (e.g., talc, vermiculite, taconite, quarried stone).

2. Congress should direct research funding that will identify significant remaining public health hazards caused by mining of asbestos or mining or excavation of other minerals naturally occurring with asbestos.

3. The US Surgeon General should warn and educate people periodically about the public health issues related to asbestos exposure, ensuring that the information reflects current scientific knowledge about adverse health consequences.

4. The US Surgeon General should disseminate widely and periodically its asbestos warning to all relevant federal and state and local health, consumer, labor, and environmental protection agencies.

5. NIOSH and the Occupational Safety and Health Administration should issue an annual statement to alert workers in high-risk occupations, such as vehicle mechanics, construction, and shipbuilding, of the adverse health risks associated with exposure to asbestos and include information on potential early warning symptoms in at least English, Spanish, and French.

6. Congress should ensure that all public and commercial buildings have their asbestos-containing materials identified and managed to observe strict safeguards when repairs and renovations are made.

7. The US government should refrain from the use of asbestos products, where possible, specifically eliminating asbestos brakes from government vehicles.

8. The US Administration should support efforts for a legally binding treaty to ban asbestos mining and manufacturing throughout the world.

9. Congress should ban the exportation of asbestos or asbestos-containing materials for use or destruction in developing countries.

10. The US Administration should use its diplomatic influence with Canada, Russia, and other countries to stop their dangerous practice of exporting asbestos.

11. Global corporations and development banks should establish policies prohibiting asbestos-containing materials in new construction and disaster relief projects.

12. Governments should provide income support and retraining, and funding for relocation if necessary, for workers who would lose their jobs as a result of protective legislation. In addition, international aid agencies should assist in this effort. For instance, the health agenda of WHO, the World Bank, International Monetary Fund should include adjustment assistance to workers.
References


7 Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, NIOSH. Figure 2–168. Worker Health Chartbook 2004. NIOSH Publication No. 2004–16.


17 US Senate. S. Res. 57. Congressional Record, March 5, 2009; S2852.


