EPA’S FAILURE TO BAN ASBESTOS

THE IMPACT FROM 1989 - 2019 ON PUBLIC HEALTH, ENVIRONMENT, AND THE ECONOMY

ASBESTOS DISEASE AWARENESS ORGANIZATION

This report is dedicated to the millions of asbestos victims who have suffered or died from preventable asbestos-caused diseases
In 1989, the United States Environmental Protection Agency (EPA) attempted to ban asbestos, a known carcinogen, in all forms. Two years later, the asbestos industry fought hard and challenged the EPA in court. Profits won over public health and the ban was overturned.

Nearly 70 other countries have banned asbestos, and though the majority of Americans believe that the fiber has already been banned, the truth is that it's still a real and ever present threat. Therefore, the Asbestos Disease Awareness Organization (ADAO) has put together the first-ever report about the human cost of inaction from the time when the EPA banned asbestos to present day.

Some of the main aspects that this document hopes to shed light on are:

- Unveiling the ties between the chlor-alkali industry, their wealthy connections, and the government
- One of the most important aspects of ADAO's report is revealing the connection between the chlor-alkali industry, the strong chemical lobby, and the government.
- These ties include James Chao, father of Elaine Chao — who is the U.S. transportation secretary and wife of Senate Majority Leader Mitch McConnell — and Saudi Arabia's crown prince, Mohammed bin Salman.

Current Quick Facts
- Members of the current EPA have significant conflicts of interest in regulating asbestos due to previous work in the chemical industry.
- In 2018, more than $1,000,000 USD was spent purchasing toxic deadly raw chrysotile asbestos from Brazil and Russia.
- One of the world’s biggest producers of asbestos, a Russian company with ties to Vladimir Putin, is praising the continued legality of asbestos in the U.S.

Deadly Risks
- Since 1989, more than one million Americans have died from preventable asbestos-caused diseases since and an estimated 375,000 metric tons of asbestos has been imported.
- There are still multiple ways Americans can be exposed to asbestos in everyday life, starting with their homes, schools, and workplaces.
- Asbestos can be found in consumer and automotive products, cosmetics, and construction materials.

History of Legislation and Legal Action
- Starting in the late 1960s, numerous agencies, laws and regulations surrounding asbestos have cropped up. Congress has introduced 12 ban asbestos bills and 28 anti-asbestos victims bills. Some of the more important legislation includes:
  - Occupational Safety and Health Act
  - Toxic Substances Control Act (TSCA) of 1976
  - Frank R. Lautenberg Chemical Safety for the 21st Century Act
  - The bicameral Alan Reinstein Ban Asbestos Now Act of 2019

www.asbestosdiseaseawareness.org
The Asbestos Disease Awareness Organization (ADAO) was founded in 2004 by two families in crisis. Doug Larkin and I met when our loved ones, Bill and Alan, were battling mesothelioma. Neither of us had ever heard of mesothelioma and learned during this trying time that it was caused by asbestos, a known carcinogen that is still legal and lethal in the United States to this day. Tragically, Bill and Alan both died from the disease.

During the past 15 years, I’ve read everything I could get my hands and eyes on — from treatment for Alan to the deadly asbestos man-made disaster. This report, “EPA's Failure to Ban Asbestos: The Impact from 1989 - 2019 on Public Health, Environment, and the Economy,” is a compilation of historical facts, new data, the latest policy efforts, and hard-hitting truths all Americans should know about asbestos prevention and policy.

This report marks a significant milestone. On July 12, 1989, the Environmental Protection Agency (EPA) issued the Asbestos Ban Phase-Out Rule, which should have banned asbestos by 1996. However, the asbestos industry fought hard and challenged the EPA in court. Just two years later the ban was overturned.

Thirty years after the EPA’s failure, disease, deaths, and imports all continue. More than one million American families have lived through the same horrors that the Larkin and Reinstein families experienced: losing a loved one to asbestos-related disease. Unfortunately, these deaths come as no surprise given that figures show about $100,000,000 USD has been spent on 375,000 metric tons of asbestos imports from 1989-2019. Now, the United States of America has arrived at a moment of reckoning with asbestos. As we mark this important 30-year touchpoint, the Alan Reinstein Ban Asbestos Now Act continues to gather support in Congress. The bill seeks to enact a no-loopholes, no-exemptions ban on asbestos. Thirty years after the EPA came up short, the American people have another chance to ban this carcinogen once and for all.

It is our hope in publishing this report that we may provide the context of why and how this movement to ban asbestos is essential for furthering improvements in global public health. We hope to demonstrate both the rationale and urgency behind the movement and prevent other families from experiencing the pain that we lived through in 2004. And most importantly—after 30 years of inaction as a nation—we hope to show that the time has finally come to act on asbestos.

ADAO’s report is dedicated to the millions of asbestos victims who have suffered or died from preventable asbestos-caused diseases.

As we write this report on the 30th anniversary of the Environmental Protection Agency’s failed ban on asbestos, we are pleased to share that 18 Attorneys General of Massachusetts, California, Connecticut, Delaware, Hawaii, Iowa, Maine, Maryland, Minnesota, New Jersey, New York, North Carolina, Oregon, Rhode Island, Vermont, Virginia, Washington and The District of Columbia have sent a letter of support for the Alan Reinstein Ban Asbestos Now Act of 2019. In the letter they stated, “Our states and the District are committed to safeguarding our residents from the risks posed by asbestos, a chemical for which there is no safe level of exposure.”

Introduction

For most of the twentieth century, the United States dominated global asbestos consumption. Once known as the “Magic Mineral,” this recognized human carcinogen was used in many industries, including construction, fireproofing, insulation, petrochemical, automotive, and ship building.

Scientific evidence mounted as early reports and studies linked exposure to asbestos to deadly diseases. In 1906, Dr. Montague Murray, a physician in London’s Charing Cross Hospital, performed a postmortem examination on a British asbestos textile plant worker and attributed his death to lung fibrosis caused by asbestos dust exposure.

Boldly putting profits over people, U.S. companies steadily increased the use of asbestos after the Depression and through the 1970s. In fact, even after the Soviet Union became the leading global asbestos consumer, America still remained one of the top five worldwide consumers until the late 1980s, according to a U.S. Geological Survey.

Dr. Irving Selikoff (1915-1992), one of the world’s foremost medical experts on asbestos-related diseases, told more than 400 scientists at the 1964 Conference on the Biological Effects of Asbestos that asbestos was killing workers. In addition to his research, Dr. Selikoff was a leading advocate for asbestos prevention and policy.
Asbestos accounts for the majority of mesothelioma cases and causes a number of other cancers and fatal diseases. Nearly 40,000 Americans die from preventable asbestos-caused diseases every year. These deaths occur in firefighters, police officers, construction workers, miners, military veterans, shipyard workers, and maintenance workers whose exposures to asbestos are primarily occupational. These deaths also occur among women with paraoccupational exposure to asbestos as a result of laundering their husband’s work clothes and as a result of personal use of talc products containing asbestos.

Thirty years ago, the United States Environmental Protection Agency (EPA) tried to ban most uses of this poisonous substance under the Toxic Substances Control Act (TSCA) by issuing the 1989 Asbestos Ban and Phase-Out Rule. EPA Administrator William K. Reilly told the New York Times that over the next seven years the EPA would bar the manufacture, use and export of most asbestos products, which he said had left "a terrible legacy of dead, dying and crippled."

Two years later, the Fifth Circuit Court of Appeals in New Orleans overturned the ban, ruling that the agency had not “adequately considered alternative regulation short of the prohibition.” As a result, only five asbestos-containing products—flooring; felt; rollboard; corrugated, commercial, or specialty paper; and new uses after 1989—are regulated today.

Congress amended the TSCA in 2016 to strengthen the EPA’s authority to ban chemicals like asbestos, but the current administration’s EPA is failing to take effective action. As the regulatory process mandated by TSCA has unfolded, EPA leadership and Trump political appointees have been criticized for failing to heed the warnings of their own scientists and staff with regard to the rulemaking around asbestos, raising alarm within the agency and among advocates who have waited decades for the EPA to act.
Since 1989, when the EPA last tried to ban asbestos, an estimated one million Americans have died from asbestos-caused diseases. Alarmingly, more than 375,000 metric tons of asbestos have been imported during the past three decades. Yet asbestos remains legal and lethal in the U.S.

In contrast to the U.S., Brazil, Canada, and Colombia have recently joined over 60 other countries that have banned asbestos.

**Exposure Risks**

Many Americans, including members of Congress, believe that asbestos has already been banned in this country, but the truth is that it has not, and the threat is real and ever present.

The World Health Organization (WHO) states that exposure to all types of asbestos, including chrysotile, causes:
- lung cancer
- mesothelioma
- cancer of the larynx
- ovarian cancer
- asbestosis (fibrosis of the lungs)

“Exposure to asbestos occurs through inhalation of fibers in the 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 friable (crumbly) asbestos materials,” according to the WHO.

Asbestos-caused diseases have long latency periods, with symptoms typically not presenting themselves until 10-50 years after the initial exposure. Respirable asbestos fibers are undetectable by sight, smell or taste; so those who are exposed may have no knowledge that they have been put at risk of developing a potentially fatal disease.

While occupational exposure represents a large share of asbestos-caused disease, especially in certain high-risk industries, all Americans have the potential to be exposed due to the presence of legacy asbestos in aging buildings and infrastructure. For example, school teachers and janitorial staff are considered among high-risk groups for asbestos-caused diseases because many schools were built with and contain asbestos-containing materials (ACMs) that have become friable (easily can release asbestos fibers through normal use).
The impact of legacy asbestos exposure is evident in the 2013 NIOSH Study of Firefighters, which found that “the population of firefighters in the study had a rate of mesothelioma two times greater than the rate in the U.S. population as a whole.”

Globally, asbestos is the biggest workplace cancer killer, responsible for hundreds of thousands of deaths each year. Because tracking and recording asbestos deaths has historically been a challenge, annual casualties have previously been underestimated, but the 2018 Global Asbestos Disaster study, published in the International Journal of Environmental Research and Public Health, sheds new light on the true rate of asbestos-caused deaths. The study found that asbestos causes an estimated 255,000 deaths annually around the globe.

In January 2017, during a meeting with the EPA, “industry representatives stated that in the United States, there are three companies who own a total of 15 chlor-alkali plants that continue to manufacture and use asbestos-containing semipermeable diaphragms onsite.” According to the EPA, the three chlor-alkali companies using asbestos diaphragms, are Olin Corporation, Occidental Chemical, and Axial/Westlake Corporation; The Chlorine Institute lists one more—SABIC, the fourth plant using asbestos diaphragms in the North American Chlor-Alkali Industry Plants and Production Data Report and Production Data Report for 2017, published in November 2018.

Exposure:

Pathways
Focusing on the primary importer of raw asbestos, the chlor-alkali industry (see page 10-12), there are six common pathways to asbestos exposure that put both workers and the public at risk:

1. Mining

While the U.S. ceased mining asbestos in 2002 and relies solely on international imports, American purchases of raw asbestos create a significant pathway to exposure for those global workers who mine the raw substance to meet the U.S. demand.

2. Transportation from mine to plant

As described by the industry representatives to the EPA, “the asbestos for these diaphragms is imported in sealed containers, with the asbestos in sealed bags made of dust-proof woven plastic.” Any tear or puncture in those bags can result in microscopic fibers escaping into the air, putting shipyard workers who unload it and the truckers who transport it from the docks to its final destination at risk. Transporting damaged bags can also lead to asbestos fibers being released into the air during the land travel from dock to destination, creating risk for communities along the route.

3. Storage at plants

Raw asbestos is stored in dry form at plants. Asbestos is at its most dangerous when stored dry, as there is the highest potential for its fibers to become airborne. This poses a threat to all workers at storage plants, as well as to their families via take-home exposure (see page 7).

4. Processing raw asbestos for use

Companies in the chlor-alkali industry use asbestos diaphragms in its process of creating chlorine. Workers must use raw asbestos to create the diaphragms, putting them at risk for exposure. They are also exposed during maintenance operations and removal and disposal of used diaphragms.

5. Spillage and clean-up
Cleanup of asbestos spills should be performed by specially trained personnel, who use approved remediation techniques including respiratory protection, special enclosures, exposure monitoring, and medical surveillance. If this protocol is not followed properly, people who clean up asbestos spills (for example, the collapse of a ceiling containing spray-on asbestos) are at risk of exposure.

6. Disposal

When damaged or deteriorating ACMs or used asbestos diaphragms from chlor-alkali manufacturing are disposed of in landfills, they pose a risk to communities in the vicinity of the disposal site. Asbestos fibers are essentially indestructible, and thus once introduced to an environment, they remain there.

In addition to chlor-alkali industry, exposures can occur during abatement (removal) of asbestos in existing structures and in industries that import and use asbestos-containing products.

The law requires that ACM be removed from buildings prior to demolition. When structures containing asbestos are demolished are demolished without asbestos removal; when repair, maintenance, and/or renovation work is performed in buildings with ACM; or when removal of ACM in a structure is attempted in the absence of proper training of abatement workers, exposure risk increases unless the strict protocols are followed. Depending on the size of the project, this risk can affect the people inhabiting the buildings but can also extend to the surrounding community.

Asbestos Imports and Use

Valued for its high heat tolerance, tensile strength, and indestructible nature, commercial exploitation of asbestos began in the 1860s and quickly grew in popularity. Since 1901, the U.S. has imported more than 31 million metric tons of asbestos. Ignoring the science, asbestos mining and use continued in California until 2002.

According to the USGS, construction trades (such as roofing) were the major importers of asbestos from 1996 to about 2010. However, a few other industries also imported asbestos, including the friction industry (cars and manufacturing) and the gasket industry. USGS data shows that after the major importers of asbestos learned about the negative health impacts and the danger
this carcinogen posed to workers, they limited their imports. In 2012, the chlor-alkali industry took over the majority of imports, and in 2015, it became the only industry to import raw asbestos into the United States. However, a number of asbestos-containing products continue to be imported and remain in U.S. commerce. In 2018, 750 metric tons of raw chrysotile asbestos were shipped into the U.S. from Brazil and Russia. The 2019 Mineral Commodities Summary from the United States Geological Survey (USGS) shows that U.S. imports of asbestos more than doubled within a year, \textit{from 332 metric tons of raw chrysotile asbestos in 2017 to 750 metric tons in 2018.}

Waves

The history of asbestos use and exposure in the U.S. is commonly described to have occurred in three \textit{“waves.”}

\textit{“Wave One”} of asbestos diseases and deaths occurred in the early 1900s among workers who mined, milled, or transported raw asbestos.

This gave way to \textit{“Wave Two”} exposures, in high-risk industries that manufactured and used asbestos-containing products. These high-risk industries include construction, automotive, shipbuilding and the military, all of which had laborers handling or working in direct contact or close proximity to raw asbestos and ACMs.

\textit{“Wave Three”} refers to exposure from asbestos-in-place in ACM in buildings primarily structural, environmental, and second-hand exposures. This Third Wave is the most pervasive of the three waves in many respects, and the one that currently poses the biggest threat to Americans.
Environmental exposure happens in buildings that were constructed using ACM for structural insulation, pipe and boiler insulation, wallboard, joint compound, floor tiles, and decorative ceiling and wall plasters. When do-it-yourself or commercial repairs and remodels are done to structures containing asbestos, the fibers can be released into the breathing zone of those doing the work and into the environment. Not only planned demolition of structures with ACM, but also unintentional and unpredictable “demolition” from natural disaster or fire may release toxic asbestos fibers into the environment.

An example of the latter is the attack on the World Trade Center Towers in New York City on September 11, 2001 when untold amounts of asbestos were released into the air.

Hurricanes, tornadoes, and other natural disasters wreak similar havoc, but even without such catastrophes, aging infrastructure can also be a source of workplace and environmental exposure. City water pipes, for example, often contain asbestos, and when damaged, fibers can be dislodged and cause exposure to workers and the environment.

Through all three waves, there has been the risk of second-hand exposure, which happens when workers bring asbestos fibers home on their clothing, exposing their children and other members who experience paraoccupational exposure as a result of proximity to a loved one and/or the cleaning contaminated clothes worn home from work.

In recent decades, many industries that used asbestos in their manufacturing of products, including the construction sector, have switched to safer substitutes because of either the health risks or related financial and legal liability. However, ACMs continue to be used in certain applications because imports of these products remain lawful.

Buildings and schools

In 1984, the EPA released a structural report in which they stated, “It is estimated with 95 percent confidence that the number of buildings with asbestos-containing sprayed- or troweled-on friable material is between 18,000 and 365,000 buildings, with a point estimate of 192,000 buildings.”

According to the Cleveland Clinic, “any building built before the 1970s could contain asbestos, especially old houses and offices from the first half of the last century.”
Schools also provide a major risk. According to the EPA Office of Inspector General (OIG), “students and school employees may face significant health risks from asbestos in schools across the United States.” This is because “substantial amounts of asbestos, particularly in sprayed form, have been used in school buildings, especially from 1946 through 1972. More than 50 million students from kindergarten through 12th grade attend more than 131,000 public and private school facilities in the United States, and more than 7 million teachers and others work in those schools.” Older schools, built before the 1980s, pose the biggest threat. The OIG reports that “asbestos in older schools can be commonly found in vinyl floor tiles, vinyl sheet flooring and adhesives; textured paint and patching compounds used on walls and ceilings; and insulation on hot water and steam pipes.” Students and school staff members can be exposed to asbestos when fibers are released into the air through “product use, demolition work, building maintenance, and repair and remodeling.”

In 2018, the EPA Office of Inspector General (OIG) conducted an audit on the U.S. EPA’s efforts to protect children’s health from asbestos exposure in schools. Their subsequent report stated that, “Asbestos exposure risk is higher in children because they are more active, breathe at higher rates and through the mouth, and spend more time closer to the floor where asbestos fibers can accumulate.”

Due to the Asbestos Hazard Emergency Response Act (AHERA), which became law in 1986, the EPA is supposed to inspect, manage and respond to asbestos-containing material found in elementary or secondary schools. However, the EPA has greatly reduced its efforts in this area. For example, although the EPA has primary responsibility for enforcing AHERA, from “fiscal years 2011 through 2015, the EPA conducted 13 percent of AHERA inspections, whereas states with jurisdiction over their own inspections performed 87 percent.”

Cosmetics
The products Americans buy, including cosmetics, consumer goods, friction and construction products and materials, also pose a deadly hazard.

In 2017, the United States Food and Drug Administration (FDA) became aware of reports of asbestos contamination in certain cosmetic products for children and tweens sold by Claire’s and Justice retailers. They conducted an investigation and through tests found the presence of asbestos in three of the product samples collected from Claire’s and one of the product samples collected from Justice.

Again in 2019, the FDA found asbestos in multiple makeup products at Claire’s and warned consumers not to use them, prompting the company to issue a voluntary recall.

**Toys**

Asbestos has been found in children’s toys. In 2015, the presence of asbestos in a number of children’s products from China was confirmed. CNN also reported in 2015 that two toy crime lab kits were contaminated, included the black fingerprint powder in the Edu Science Deluxe Forensics Lab Kit, available at the Toys-R-Us website, and the white fingerprint powder from the Inside Intelligence Secret Spy kit, available on Amazon. In 2018, Playskool crayons — sold at Dollar Tree stores, and online via Amazon — were found to be contaminated with tremolite, a type of asbestos.
Construction Materials and Automotive Products

According to the EPA, asbestos-containing products remaining in use within the United States include some roof and non-roof coatings, gaskets, brake blocks and after-market friction products, most of which are imported.

Asbestos Superfund Sites

Numerous asbestos Superfund sites existing today as a reminder of decades of manufacturing and processing facilities litter communities and expose residents to asbestos. Most notably, W.R. Grace in Libby, Montana and Ambler, Pennsylvania have impacted communities and taxpayers. According to the EPA, studies show Libby amphibole asbestos can be found in soil, duff, tree bark, ash resulting from wood burning, surface water, and sediment in the properties and surrounding areas around the former W.R. Grace mine.

Below is a partial list of Superfund sites:

**Superfund Responses at Sites with Improper Disposal/Management of Asbestos Containing Materials**
- Torch Lake Superfund Site, Houghton, County, MI*
- Ambler Asbestos Piles, Ambler, PA*
- BoRit Asbestos, Ambler, PA*
- Carter Carburetor Superfund Site, St. Louis, MO*
- North Ridge Estates Superfund Site, near Klamath Falls, OR*
- Johns Manville Corp., Waukegan, IL*
- Powhatan Mining Company (POWMINCO) Site Powhatan, MD

**Superfund Responses at Sites with Vermiculite**
- Libby Asbestos Site, Libby, MT*

**Superfund Responses at Sites with Naturally Occurring Asbestos**
- Atlas Asbestos Mine, Fresno and San Benito Counties, CA*
- Coalinga Asbestos Mine, Fresno County, CA*
- El Dorado Hills, El Dorado County, CA
- South Bay Asbestos Area, Santa Clara County, CA
- Sumas Mountain Asbestos Site, Whatcom County, WA

*NPL Superfund Site
The Impact of the Chlor-Alkali Industry

As noted above, the chlor-alkali industry uses chrysotile asbestos to manufacture semipermeable diaphragms for use in the **chlorine and caustic soda production process**. Asbestos diaphragms are used to make more than 45% of the chlorine produced in the U.S. The use of asbestos in chlorine production in the U.S. has declined by a third since 1985, when 30 plants had an estimated combined production capacity of 9.3 million tons per year. At several plants, non-asbestos membrane processes have been installed. Over two-thirds of the world’s asbestos diaphragm-based chlorine production capacity (over 6 million tons per year) is currently located in the United States. Outside the United States, asbestos diaphragm plants account for a small share of chlorine output.

According to the Chlorine Institute, there are four companies (Olin Corporation, Occidental Chemical, Axial/Westlake Corporation and SABIC) who own a total of 15 chlor-alkali plants in the US that continue to manufacture and use chrysotile-containing semipermeable diaphragms onsite. The chlor-alkali industry lobbied for and secured an exemption from the EPA’s attempted asbestos ban in 1989 and would have been exempted from the **Ban Asbestos in America Act of 2007** had it passed.

According to documents submitted to the Brazilian Supreme Court, the 2018 SAMA’s client manifest revealed that three companies, Blue Cube/Olin, Occidental, and Oxy Vinyl, spent nearly $900,000 USD importing an estimated 550 metric tons of raw chrysotile asbestos.

Actively lobbying for another asbestos exemption, both the American Chemistry Council and The Chlorine Institute continue to claim they have controlled use. In fact, Mike Walls, American Chemistry Council, Vice President of Regulatory and Technical Affairs, recently testified, “We certainly are not opposing a ban for all other uses of asbestos. And I just want to make that clear.”

The chlor-alkali industry has connections to wealth and political power as well. **James Chao**, father of Elaine Chao — who is the U.S. Secretary of Transportation and wife of Senate Majority Leader Mitch McConnell — owns Westlake Chemical, one of the 15 companies that uses asbestos diaphragms in its production of chlorine and caustic soda. According to their website, “the principal products in our integrated **Vinyls** segment include PVC, VCM, EDC, Chlorine, Caustic Soda and Ethylene.” Vinyl is the second-largest-selling plastic in the world and approximately 40 percent of chlorine produced in the United States is used to make polyvinyl chloride (PVC or vinyl).

**History of Regulation, Legislation, Legal Action**

There have been multiple attempts to ban or limit the amount of asbestos allowed into the United States, but regulations on the books provide limited and incomplete protection against exposure to asbestos.

**Regulations**

Starting in the late 1960s, numerous laws and regulations surrounding asbestos were enacted.

1. **Clean Air Act 1963 (CAA)**

   The Clean Air Act of 1963 was first passed to improve air pollution and provide more protection to human health and the environment. Changes were made to the act in 1970 and 1990, implementing stronger regulations and enforcement. The Act also gave the EPA the “authority to set regulations on the use, management and removal of asbestos.” The Clean Air Act allows “for agencies to regulate and intervene whenever their asbestos could potentially be dispersed into the air, causing pollution and risk to public health or the environment.”

   Under the CAA, the following asbestos-containing uses are banned.
   
   a) Asbestos pipe insulation and asbestos block insulation on facility components, such as boilers and hot water tanks, if the materials are either pre-formed (molded) and friable or wet-applied and friable after drying.
   
   b) Spray-applied surfacing asbestos-containing materials
   
   c) Spray-on application of materials containing more than 1% asbestos to buildings, structures, pipes, and conduits unless certain conditions specified under 40 CFR 61, Subpart M are met.

2. In 1970, the [Occupational Safety and Health Act](https://www.osha.gov) was passed, which emphasized the need for standards to protect the health of workers exposed to hazards at their workplace. Soon after,
in 1972, the National Institute for Occupational Safety and Health (NIOSH) established criteria for a recommended standard of occupational exposure to asbestos. NIOSH was requested in 1992 under the Worker’ Family Protection Act (Public Law 102-522, 29 U.S.C.671) to conduct a study to “evaluate the potential for, prevalence of, and issues related to the contamination of workers’ homes with hazardous chemicals and substances…transported from the workplaces of such workers.” In this report, concerning asbestos, NIOSH found “Fatal lung diseases have occurred among family members of workers…”. OSHA then used the NIOSH criteria as the basis for the first occupational health standard for asbestos. The OSHA standard was tightened in 1994.

This was revised in 1976, following an updated review of the available information on the health effects of exposure to asbestos. NIOSH proposed a new “recommended standard of 100,000 fibers > 5mm in length/m3 is intended (1) protect against the noncarcinogenic effects of asbestos, (2) materially reduce the risk of asbestos-induced cancer (only a ban can assure protection against carcinogenic effects of asbestos) and (3) be measured by techniques that are valid, reproducible, and available to industry and official agencies.”.

3. In 1973, the EPA banned spray-applied surfacing asbestos-containing material for fireproofing/insulation purposes. See National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR Part 61, Subpart M.

4. In 1975, the EPA banned installation of asbestos pipe insulation and asbestos block insulation on facility components, such as boilers and hot water tanks, if the materials are either pre-formed (molded) and friable or wet-applied and friable after drying. See National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR Part 61, Subpart M.

1989 Partial Ban

The Toxic Substances Control Act (TSCA) of 1976 afforded the EPA authority to ban or restrict chemicals that posed an “unreasonable risk of injury to health or to the environment.” In 1989, using the Regulation of Chemicals under Section 6(a) of TSCA, the EPA promulgated the Asbestos Ban and Phase-Out Rule prohibiting the manufacture, import, processing, and distribution of most asbestos-
containing products. The Agency also banned new uses of asbestos which prevented new asbestos products from entering the marketplace after August 25, 1989. With limited exceptions, the original ban in the 1989 final rule was overturned in 1991 by the Fifth Circuit Court of Appeals after the powerful industry lobby sued to maintain the ability to use asbestos. As a result, the 1989 asbestos regulation only bans new uses of asbestos in products that would be initiated for the first time after 1989 and 5 other specific product types that were not involved in the industry suit:

1. Corrugated paper
2. Rollboard
3. Commercial paper
4. Specialty paper
5. Flooring felt
6. New commercial uses that began after August 25, 1989

Now, under the Consumer Product Safety Act (Consumer Product Safety Commission), asbestos in artificial fireplace embers and wall patching compounds are banned. Under the Food and Drug Administration (FDA), asbestos-containing filters in pharmaceutical manufacturing, processing and packing are also banned.

The Frank R. Lautenberg Chemical Safety for the 21st Century Act (2016)

Over time, the 1991 asbestos court decision became the poster child for the inability of TSCA to take meaningful action on unsafe chemicals. After a multi-year effort to overhaul and strengthen its key provisions, TSCA was amended by The Frank R. Lautenberg Chemical Safety for the 21st Century Act (“LCSA”), which took effect on June 22, 2016. When signing the bill into law,
President Barack Obama specifically singled out asbestos as a prime example of why TSCA reform was necessary.

“...the system was so complex, so burdensome that our country hasn’t even been able to uphold a ban on asbestos—a known carcinogen,” President Obama said at the TSCA signing ceremony.

The TSCA amendments establish a new integrated process for (1) prioritizing chemicals, (2) conducting risk evaluations on high-priority chemicals and (3) issuing rules to eliminate unreasonable risks identified in risk evaluations. Congress set strict deadlines for each of these steps and directed the EPA to address a minimum number of chemicals by these deadlines. It also removed the impediments to effective regulation created by the 1991 asbestos court decision by eliminating any consideration of costs and other non-risk factors in determining whether chemicals present an unreasonable risk of injury and directing the EPA to impose requirements “necessary so that the chemical no longer presents such [unreasonable] risk.”

Legislation

Legislation to ban asbestos and reduce corporate liability at victims’ expense has been a persistent subject of debate in Congress.

Asbestos Ban Legislation

From 2002 to 2019, there have been 12 asbestos ban bills introduced in Congress — seven general and five versions of the Alan Reinstein Ban Asbestos Now Acts (ARBAN) have been introduced. In March, Senator Jeff Merkley (D-OR), Representative Suzanne Bonamici (D-OR), Chairman Frank Pallone (D-NJ), Representative Elissa Slotkin (D-MI) and several other members of Congress introduced The Alan Reinstein Ban Asbestos Now Act (ARBAN) of 2019 (S. 717 and H.R. 1603).
The 2019 version of ARBAN is the strongest ban bill yet introduced and will save lives by banning asbestos use and importation, without exceptions or exemptions. It would:

1. Ban the importation, manufacture, processing, and distribution of all forms of asbestos and asbestos-containing mixtures and articles within 12 months, including products in which asbestos is present as an impurity;
2. Establish a new Right-to-Know program to require current importers, processors and distributors to report and disclose to the public how much asbestos is in U.S. commerce, where and how it is used, and who is exposed;
3. Require EPA and the Departments of Labor and Human Services to conduct a comprehensive study of risks presented by the presence of asbestos in the millions of residences, businesses, factories, public buildings and schools, where it was used in building construction decades ago; and
4. Impose these requirements on the extremely hazardous Libby Amphibole, richterite, winchite, as well as the other six asbestos fibers: chrysotile, actinolite, amosite, anthophyllite, crocidolite, and tremolite.

In 2019, the U.S. House of Representatives Committee on Energy and Commerce Subcommittee on Environment and Climate Change held the first legislative hearing on banning asbestos, which they called "Ban Asbestos Now: Taking Action to Save Lives and Livelihood" focused on the Alan Reinstein Ban Asbestos Now Act.

**Asbestos Awareness Resolutions**

In addition to ban asbestos legislative efforts, the U.S. Senate has unanimously passed 15 Asbestos Awareness Day/Week Resolutions thus increasing awareness, prevention, and regulatory compliance.

**Asbestos Industry Bail-Out Legislation**

Since 1998, there have been 28 bills introduced to make it more difficult for victims of asbestos disease to seek compensation. These bills claim to protect against fraud in asbestos litigation and bear misleading names such as the FACT (Furthering Asbestos Claim Transparency) Act, the FAIR Act, and the Protect Asbestos Victims Act. However, the Government Accountability Office reported to Congress in the Asbestos Disease Awareness Organization is a registered 501(c) (3) nonprofit organization
Injury Compensation: The Role and Administration of Asbestos Trusts study that very little fraud actually exists in asbestos compensation claims, making it clear that these laws are about protecting industry, not victims.

The Trump Administration

Donald Trump, both before and during his presidency, has supported asbestos use. In his 1997 book, “The Art of the Comeback,” Trump claimed asbestos is “100 percent safe, once applied.” In 2012, he tweeted that “if we didn’t remove incredibly powerful fire retardant asbestos & replace it with junk that doesn’t work, the World Trade Center would never have burned down.”

Trump’s EPA

As president, Trump has appointed staff members to the EPA who have significant conflicts of interest to the asbestos industry. For example, Nancy Beck, the Deputy Assistant Administrator for Chemical Safety and Pollution Prevention at the EPA (the department in charge of regulating toxins) was formerly Senior Director for Regulatory Science Policy at the American Chemistry Council (ACC), the lobbying group that represents the chlor-alkali industry. However, as this report was being written, it was announced that Beck is heading to the White House. She is being replaced by David Fischer from the American Chemical Council, another appointment with a clear conflict of interest.

Many observers expected that 2016 TSCA amendments would enable the EPA to reinstate the comprehensive ban on asbestos use it had imposed in 1989. The decision to include asbestos in the first 10 risk evaluations under the new law seemed to reinforce this hope. However, any expectation that the EPA would take meaningful action on asbestos has been dashed by its 2017 scoping document and June 2018 problem formulation for the asbestos risk evaluation.

The narrow risk evaluation will only focus on the Known Use in the Industrial Sector, Evidence of Use, and Reasonably Foreseen.
Through a combination of legally indefensible exclusions and loopholes, deviations from accepted scientific methods and refusal to accept previous peer reviewed determinations of risk, the Agency is on a path to produce an asbestos risk evaluation that ignores important exposure pathways and at-risk populations and reaches inadequate conclusions about asbestos’ ongoing and future dangers to public health. For example, the evaluation will ignore legacy uses of the mineral. This means the EPA will not evaluate the risk posed by the asbestos present in our homes, schools, workplaces and already built infrastructure. Our firefighters are left at risk as they become exposed to older infrastructure. The 25.6 million pounds of asbestos that are disposed of each year — left in landfills near where people live — will also be ignored in risk evaluation.

In 2019, seventeen EPA career employees — including senior scientists, cleanup specialists, and lawyers — sent emails to senior managers that documented the deep concerns of the agency’s career staff about their failure to take effective action on asbestos under TSCA. These emails show that dedicated EPA asbestos experts have voiced their disappointment with the Agency’s weak and limited efforts to reduce and eliminate asbestos exposure and risk. The staff members also made strong recommendations — including a complete ban — which to date, that EPA leadership has rejected.

“The EPA should seek to ban all new uses of asbestos,” the staff members wrote, “because the extreme harm from this chemical substance outweighs any benefit… there are adequate alternatives to asbestos.”

The documents reveal that there was significant internal criticism of the Agency’s recent “Significant New Use Rule” (SNUR) for asbestos. This regulation requires that the EPA be notified before certain old uses of asbestos come back into commerce, but does not restrict use. Career EPA staffers make it clear that the SNUR does not go far enough to regulate asbestos to protect public health. They call on the Agency to join “the United Kingdom, Japan, South Korea, France, Italy,
Spain, Australia, Germany, the Netherlands, Finland, and many others” who have banned asbestos use and imports.

**Limited Asbestos Risk Evaluation**

On May 23, 2019, ADAO delivered to Alexandra Dunn, Assistant Administrator, Office of Chemical Safety and Pollution Prevention, a letter signed by 26 renowned scientists who urged Ms. Dunn to reconsider the Narrow and Limited TSCA Asbestos Risk Evaluation which:

- Excludes the ongoing and future use and disposal of “legacy” asbestos in residences, schools, commercial buildings and infrastructure—a pervasive source of exposure and risk for millions of workers and consumers throughout the U.S.
- Excludes the Libby Amphibole, whose presence in the environment because of historical mining activities and in attic insulation installed in millions of homes, poses a serious threat to health.
- Only considers the asbestos contribution to lung cancer and mesothelioma and, in the words of the career staff, ignores “other significant lethal and non-lethal harms from asbestos [that]. . . should be included if there is to be a comprehensive evaluation of the risks from exposure to asbestos.”

**Current Legal Actions**

**Legal Action**

In response to the EPA’s failure to adequately address asbestos, nonprofit organizations and elected officials at the state and federal level have taken action.

In September 2018, the Asbestos Disease Awareness Organization (ADAO) and five other nonprofits focused on environmental and public health, filed a “Right to Know” petition under the Toxic Substances Control Act (TSCA) to require reporting on importation and use of deadly asbestos and asbestos-containing products. ADAO was joined by the American Public Health Association, Center for Environmental Health, Environmental Health Strategy Center, Environmental Working Group, and Safer Chemicals, Healthy Families. The EPA denied the petition in late December 2018.

In February 2019, ADAO and the co-petitioners filed suit in the U.S. District Court for the Northern District of California to overturn the EPA’s 2018 petition denial.

On July 1, 2019, after the EPA had denied a similar petition from 14 states and the District of Columbia, Attorneys General Xavier Becerra of California and Maura Healey of Massachusetts announced they and other attorneys general were filing suit against the EPA, calling for TSCA reporting requirements to dramatically increase transparency within the asbestos industry.
Conclusion

In the 30 years since the EPA last tried to ban asbestos, the harmful effects of asbestos have only become more well-known, and the death toll has steadily risen. But the importation and use of this mineral has continued to sicken and kill Americans.

The EPA’s 1989 ban attempt was effectively snuffed out because the agency, according to the 5th Circuit Court of Appeals, did not have the regulatory authority to withstand challenges from the chemical industry. Despite legislative reforms that have strengthened the Agency’s authority, under the Trump administration, the EPA has conspicuously backed away from completing the job it started in 1989. Instead, it has chosen to side with industry interests and ignore overwhelming evidence created by both governmental and private scientists worldwide of the dangers of asbestos.

The EPA’s failure to act on asbestos disregards decades—and tens of millions of dollars—worth of research proving asbestos’s fibrogenic and carcinogenic nature, as well as the human cost of a million American lives.

It is clear that under the Trump administration, the EPA is unwilling to ban asbestos—they will also fail to properly implement the new regulatory pathways developed under TSCA by instituting policies that have no bearing on the existing uses of asbestos.

With such calculated inaction from the Agency designed to regulate toxins, the only path to a federal ban lies in the legislative process. Support from the general public and from Congressional Republicans is critical to the success of such legislation. History has proven that continued failure to act will only lead to more preventable diseases and deaths.