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Subcommittee on Environment and Climate Change
Ban Asbestos Now: Taking Action to Save Lives and Livelihoods
Legislative Hearing on H.R. 1603—Alan Reinstein Ban Asbestos Now Act of 2019
May 8, 2019

Chairman Tonko, Ranking Member Shimkus and members of the committee, I appreciate the opportunity to testify today on behalf of the AFL-CIO on legislation to ban asbestos.

The AFL-CIO is a federation of 55 national and international unions and we represent more than 12.5 million working people in their workplaces. Our unions represent workers in a broad range of industries including construction, education, emergency response, manufacturing, healthcare, transportation, utilities, retail and service, and others; in private and public sectors; in stationary and mobile workplaces. They work side-by-side millions of non-unionized workers. Hundreds of thousands of these workers have been exposed to asbestos and continue to become ill and die from asbestos exposure.

The AFL-CIO strongly supports this federal legislation to ban asbestos. We applaud the efforts of Representative Suzanne Bonamici and this committee to champion and guide the asbestos ban legislation in the House of Representatives and the efforts of Senator Jeff Merkley to initiate similar legislative efforts in the Senate.

Over the last four decades, the AFL-CIO and our affiliated unions have acted to protect workers from the hazards of asbestos exposure through the development and implementation of asbestos regulations and legislation, including OSHA regulations, EPA regulations, legislative efforts to compensate asbestos victims for their diseases, and the recently amended Toxic Substances Control Act—the Frank R. Lautenberg Chemical Safety for the 21st Century Act—as well as the 1986 International Labor Organization Convention on Asbestos and the successful efforts at the 2006 ILO Conference to adopt a resolution calling for elimination of the future use of asbestos worldwide.[1]

Asbestos is the poster child of the historical failure under the original Toxic Substance Control Act to protect people from a chemical known to have serious health effects at low levels of exposure and known to be extremely difficult to control exposures over its long lifespan. But that law was updated in 2016, with clear intention by Congress to prevent exposure to asbestos and create a pathway for banning this dangerous substance. This legislation to further amend that law and specifically address asbestos will finally protect working people and save lives.

[1] International Labor Organization. Resolution Concerning Asbestos, 2006. http://www.ilo.org/safework/info/standards-and-instruments/WCMS_108556/lang--en/index.htm.

The magnitude of the asbestos disease problem is enormous and totally unacceptable.
Since 1999, more than 50,000 people died from mesothelioma and nearly 25,000 people died from asbestosis.[2] These numbers do not include other asbestos-related diseases such as cancers of the lung, larynx, ovary, pharynx, stomach, colorectum, and non-cancer effects like respiratory and immune effects.[3,4] The number of deaths from asbestos-related lung cancer or other asbestos-related cancers are expected to be six to 10 times greater than the number of deaths from mesothelioma.[5]

The number of deaths that continue today from mesothelioma and asbestosis are significant and alarming, especially considering the protections put in place over the years. Historical disease estimates for the present day are now underestimates of the real problem. The numbers of asbestos-related diseases in 2017 are worse than they were projected to be in the 1980s. Nicholson, et al, estimated that in 2017 there would be 2,082 total deaths from mesothelioma, 2,108 total deaths from all asbestos-related lung cancer, 564 deaths from all asbestos-related gastrointestinal and other cancers, and 4,754 deaths from all asbestos-related cancer in selected occupations and industries.[6] These estimates were developed because the authors expected the installation use of "legacy" asbestos to result in serious health effects in the future. According to CDC's Wide-ranging ONline Data for Epidemiologic Research (WONDER) database, 2,882 people died from mesothelioma and 1,102 people died from asbestosis in 2017.[7] This is an increase in mesothelioma deaths from 2016, when there were 2,707 mesothelioma deaths and 2,138 asbestosis deaths. Given the proportion of lung cancer deaths to mesothelioma deaths, the estimated number of asbestos-related lung cancer deaths in 2017 would be 12,492 to 28,820—well in excess of the projections and certainly alarming.[8] Noticeably, the number of mesothelioma and asbestosis deaths among women is relatively unchanged or has even spiked in recent years.

The largest extent of the asbestos-related disease burden is a result of occupational exposures. Workers are exposed to asbestos at all stages of its life cycle and often at the highest exposure levels; and they are a conduit for bringing asbestos home to their families via clothing, equipment, skin and hair.

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[2] Center for Disease Control and Prevention. Wide-ranging ONline Data for Epidemiologic Research https://wonder.cdc.gov/.
[3] International Agency for Research on Cancer. Asbestos (Chrysotile, Amolite, Crocidolite, Tremolite, Actinolite, Anthophyllite) Monograph, updated in 2018. https://monographs.iarc.fr/wp-content/uploads/2018/06/mono100C-11.pdf.
[4] Environmental Protection Agency. "Restrictions on Discontinued Uses of Asbestos; Significant New Use Rule." 84 Fed. Reg. 80 (April 25, 2019).
[5] Furuya S, Odgerel C, Takahashi K, David A, Takala J. "Global Asbestos Disaster." Int J Environ Res Public Health. 2018. 15: 1000.
[6] Nicholson WJ, Perkel G, Selikoff IJ. "Occupational Exposure to Asbestos: Population at Risk and Projected Mortality—1980-2030." Am J Ind Med 3:259-311 (1982).
[7] Center for Disease Control and Prevention. Wide-ranging ONline Data for Epidemiologic Research https://wonder.cdc.gov/.
[8] Furuya S, Odgerel C, Takahashi K, David A, Takala J. "Global Asbestos Disaster." Int J Environ Res Public Health. 2018. 15: 1000.

The CDC and other surveillance data show that a new generation of workers have significant levels of asbestos disease and death, notably workers 55 and younger, who would have entered the job market in the 1980s and later, after asbestos regulations were adopted. Results from the Chicago Insulators Union Early Detection Lung Cancer Screening Program show that 47% of those insulators who started work in the 1980s have asbestos pleural disease; many were under 50 years old.[9] An insulator in Chicago who started the trade in 1993 was screened in 2016. He recently died at the age of 45 with elevated levels of asbestos fibers in his lungs. Clinic data also show workers in their 40s appearing with asbestos-related disease.[10]

Occupational exposures like asbestos extend beyond the workplace. For decades, family members of asbestos-exposed workers have been adversely affected by asbestos fibers transferred directly from the workplace to the home. Given the notable deaths from mesothelioma and asbestosis among women, it also is deeply concerning that asbestos fibers transfer through the placenta and may be responsible for stillborn deaths, affecting a very young generation as well. A 1996 study identified the presence of short and thin asbestos fibers in stillborn infants compared to live born infants, and their positive association with working mothers.[11]

Regulation and control of asbestos is not enough.

Early regulation of asbestos is out of date and does not reflect the magnitude of the current and future asbestos-related disease problem.

Immediately following the passage of the Occupational Safety and Health Act, in 1971, the AFL-CIO's Industrial Union Department petitioned OSHA to take emergency action to regulate asbestos. In response to that petition, the Department of Labor issued an emergency standard on asbestos—the first standard under the new OSH Act—in December 1971. But that standard, and the subsequent permanent rule, failed to adequately protect workers. So our efforts to reduce asbestos exposures continued through the 1970s, 1980s and 1990s, repeatedly seeking stricter control measures through petitions, legislation and court action. The unions' efforts led to the current OSHA asbestos standard that sets a permissible limit of 0.1 fibers per cubic centimeter (f/cc), issued in 1994.

While OSHA regulates some areas of occupational use of asbestos, it does not address the full extent of the problem, in several major ways:

- Early OSHA regulations left workers at significant risk, but could not further reduce the permissible exposure limit because of restrictions on the limit of detection capabilities (i.e., the technical methods at the time could not reliably test below the permissible

[9] Johnson TM. Continuing Asbestos Exposures and Disease: Major Refineries and Industrial Facilities, 1980-2018. White Paper Re: Chicago Insulators Union. August 2018. Available at: https://www.regulations.gov/document?D=EPA-HQ-OPPT-2018-0210-0102.

[10] Association of Occupational and Environmental Clinics. Submission to EPA. Available at: https://www.regulations.gov/document?D=EPA-HQ-OPPT-2016-0736-0476.

[11] Haque AK, Vrazel DM, Burau KD, Cooper SP, Downs T. "Is there transplacental transfer of asbestos? A study of 40 stillborn infants." Pediatr Pathol Lab Med. 1996 Nov-Dec;16(6):877-92.

exposure limit of 0.1 f/cc). The agency discussed this in their preamble to the 1994 final asbestos standard.[12]

- Many large, older, industrial facilities have not complied and do not comply with the OSHA asbestos regulation.
- Many workers in the U.S. are not covered by the Occupational Safety and Health Act. Currently, 8 million public sector workers, including many firefighters and teachers; 15 million self-employed workers including independent contractors, day laborers and temporary workers; 350,000 workers in the mining industry; and many agricultural workers on small farms are not afforded safety and health protections under the OSH Act.
- Even where OSHA has coverage, OSHA is staffed with so few resources that it would take federal OSHA 165 years to visit every workplace in the U.S. once.[13]
- OSHA's standard-setting process has become unduly burdensome and lengthy, and the agency is not under strict timelines to establish protections from chemicals. OSHA's system for addressing toxic substances is broken. The Trump administration has removed all chemical regulatory activity for OSHA in the near future.

Existing EPA statutes on asbestos have gaps in occupational coverage, gaps in effectiveness of requirements, inadequate enforcement and the agency's capacity may not have kept pace with the increase in asbestos removal and disposal. Through its passage of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, Congress recognized the benefit of broad EPA protection for workers. Lawmakers recognized that OSHA 1) cannot regulate, enforce or compel data from manufacturers, 2) cannot ban a chemical, and 3) has not required substitution with a safer chemical or process, but that EPA can take all of these actions. But EPA has indicated it will not act and continues to endanger the lives of workers and the public. The agency has failed to scope the asbestos problem adequately and meaningfully— it has ignored "legacy uses, associated disposal, and legacy disposal" of asbestos—and has failed to issue requirements that provide comprehensive protection against asbestos.

In EPA's most recent effort to address a limited number of asbestos exposures through a Significant New Use Rule, EPA misleads the public and opens a pathway for the U.S. to be a major source of asbestos production and use once again. In its rule, EPA considers a significant new use of asbestos as any use "initiated prior to August 25, 1989, for which manufacturing and processing are no longer ongoing in the United States," because these uses were previously banned (temporarily). Through this SNUR mechanism, EPA would be notified when raw asbestos and asbestos-containing articles manufactured or processed in other countries are imported into the U.S., or when asbestos-containing materials are produced here in the U.S. and that EPA could allow these uses. The very issuance of this rule is a declaration by the agency that some uses of asbestos are safe, as well as an indication the agency refuses to use its authority to ban this dangerous substance.

This is totally contrary to the intent of Congress under LSCA and the direction taken by most of the industrialized world. To date, 65 countries have moved to ban asbestos.[14] The recent passage

[12] Occupational Safety and Health Administration. Final asbestos standard and preamble. 29 C.F.R. § 1910.1001 1994; 29 C.F.R. § 1915.1001 1994; 29 C.F.R. § 1926.58 1994.
[13] AFL-CIO. "Death on the Job: The Toll of Neglect."28th edition, 2019. Available at: https://aflcio.org/dotj.
[14] International Ban Asbestos Secretariat. http://ibasecretariat.org/alpha_ban_list.php.

of LSCA did not intend to invite—or even encourage—a resurgence of asbestos manufacturing, processing or distribution to the U.S. under certain conditions of government approval. The U.S. is moving in the wrong direction. By allowing new and previous uses, we will see another resurgence of disease in a few decades. It is time to ban this dangerous substance, without exception or loopholes.

Legacy uses of asbestos result in ongoing exposures to asbestos, not legacy exposures.
In the U.S., asbestos is widespread throughout refineries, power houses, steel factories, schools, utilities and many other buildings. It is in worse condition than it was in the 1980s due to deterioration and weathering over time, which means exposures are worse under certain conditions and the need to remove it is more urgent. With time, asbestos installed 40 years ago only becomes more friable and endangers workers who must either intentionally or unintentionally disturb it.[15]

Most occupational uses of legacy asbestos involve tasks where workers are:

- Installing, maintenance, repairing or otherwise making adjustments to non-asbestos containing material (ductwork, electrical, plumbing and mechanical systems) located near existing asbestos material;
- Installing, maintenance, repairing or otherwise making adjustments to asbestos material itself;
- Removing and disposing of asbestos-containing material;
- General work activity around fallen asbestos material on the floor and throughout facilities; and
- Activity related to accidental release of asbestos during building work, disasters and other events that are reasonably foreseeable.

The number of workers being exposed is enormous. In 1982, Nicholson, et al estimated the number of construction insulators in 1980 to be 37,630; and 27,527 workers potentially exposed to asbestos between 1940 and 1979, 7,505 in the construction trades.[16] By the late 1980s, these numbers grew. In its 1994 preamble, OSHA estimated that 683,670 workers were exposed to asbestos during manufacturing, auto repair and ship repair (Table 2) and that between 1,578,006 and 5,751,586 workers were exposed to asbestos during new construction, abatement, renovation, routine maintenance work and custodial activities (Table 3).[17] Previous submissions

[15] Australian Government. Asbestos Safety and Eradication Agency. "National Strategic Plan for Asbestos Management and Awareness 2014–18" (2015) https://www.asbestossafety.gov.au/research-publications/national-strategic-plan-asbestos-management-and-awareness.
[16] Nicholson WJ, Perkel G, Selikoff IJ. "Occupational Exposure to Asbestos: Population at Risk and Projected Mortality—1980-2030." Am J Ind Med 3:259-311 (1982).
[17] Occupational Safety and Health Administration. Final asbestos standard and preamble. 29 C.F.R. § 1910.1001 1994; 29 C.F.R. § 1915.1001 1994; 29 C.F.R. § 1926.58 1994.

to EPA from several unions document exposure to asbestos under deteriorating conditions and accidental release of asbestos in school buildings during regular work activities.[18,19]

According to OSHA's 1986 Regulatory Impact and Regulatory Flexibility Analysis, which was centrally relied upon in OSHA's preamble to the 1994 revised asbestos standard, the industries primarily affected by asbestos exposures are manufacturing, service and repair and construction [begins page II-7 and details follow; tables II-8 through II-15].[20] The industry profiles of tasks and exposures in the documents above are the most comprehensive assessment of occupational exposures that exist. Since then, there has been no attempt to understand where asbestos is today, its condition and the tasks associated with occupational exposure.

The job tasks involving asbestos have changed little since the 1980s; the same types of work are performed by workers daily and are the primary sources of occupational contact and exposure with asbestos. In 2015, a more narrow examination of OSHA exposure monitoring data from recent years revealed many industry profile similarities: High asbestos exposures were measured in the categories "building construction-general contractors and operative builders," "heavy construction, except building construction-contractors," "construction-special trade contractors," "petroleum refining and related industries" and others.[21] These OSHA inspection data show that asbestos exposures have decreased since the bulk of asbestos was installed, but exposure levels are still significant, and often much higher than OSHA's permissible exposure limit of 0.1 f/cc. In FY 2018, federal OSHA reported 304 violations of its asbestos standards, the majority of them in the construction industry.[22]

As disposal of asbestos increases, more workers are exposed to asbestos. Even though consumption of asbestos in the U.S. has slowed since the partial asbestos bans issued in the 1970s, the disposal rate of asbestos actually has increased. According to the Toxics Release Inventory onsite and offsite reported disposal data, disposal of friable asbestos steadily increased from 8.7 million pounds in 2009 to 20.5 million pounds in 2017.[23] Two severe limitations of this data are 1) it does not include key industries where asbestos is still installed and disturbed (including construction), and 2) it only reports friable asbestos, even though it is well known and documented that non-friable asbestos becomes friable with time and other conditions (such as moisture and other weathering). Both of these factors increase the amount of asbestos needing to be discarded.

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[18] Johnson TM. Continuing Asbestos Exposures and Disease: Major Refineries and Industrial Facilities, 1980-2018. White Paper Re: Chicago Insulators. August 2018. Available at: https://www.regulations.gov/document?D=EPA-HQ-OPPT-2018-0210-0102.

[19] Long J. United Federation of Teachers. Available at: https://www.regulations.gov/document?D=EPA-HQ-OPPT-2016-0736-0477.

[20] OSHA. Regulatory Impact and Regulatory Flexibility Analysis. 1986.

[21] Cowan DM, Cheng TJ, Ground M, Sahmel J, Varughese A, Madl AK. "Analysis of workplace compliance measurements of asbestos by the U.S. Occupational Safety and Health Administration (1984-2011). Regul Toxicol Pharmacol. 72: 615-629 (2015).

[22] Occupational Safety and Health Administration. Industry Profile for an OSHA Standard, search results for 1910.1001 and 9126.1101. Available at: https://www.osha.gov/pls/imis/industryprofile.html.

[23] Environmental Protection Agency. Toxics Release Inventory, 2009-2016. https://iaspub.epa.gov/triexplorer/tri_release.chemical.

Many authorities, such as the International Labor Organization, have declared no safe level of asbestos exposure and have called for bans on all uses of the chemical and protective remediation requirements to eliminate existing asbestos in buildings today.[24] Other industrialized nations that have ignored legacy-associated exposures to asbestos have finally decided to act. According to a recent study, 652 Australians died from mesothelioma in 2012 and more than 25,000 Australians are expected to die from mesothelioma over the next 40 years.[25,26] To address asbestos in the built environment, the Australian government published a comprehensive framework, "National Strategic Plan for Asbestos Management and Awareness 2014–18."[27] This document outlines a plan for assessing current asbestos in place in Australia. The World Health Organization states clearly that eliminating asbestos-related diseases should take place through:

a. recognizing that the most efficient way to eliminate asbestos-related diseases is to stop the use of all types of asbestos;
b. replacing asbestos with safer substitutes and developing economic and technological mechanisms to stimulate its replacement;
c. taking measures to prevent exposure to asbestos in place and during asbestos removal (abatement), and;
d. improving early diagnosis, treatment, social and medical rehabilitation of asbestos-related diseases and establishing registries of people with past and/or current exposures to asbestos.[28]

The last time the U.S. profiled the occupational scope of the asbestos problem was in the 1980s. The only way to know where asbestos is located throughout the country, putting workers and the public at risk through ongoing exposures, is to conduct a comprehensive evaluation as described in Section 3 of the legislation. This study will provide updated information on the number of buildings where asbestos is present, an estimate of the amount of asbestos present, the number of individuals potentially exposed and the conditions and operations that create the greatest potential for exposure. This information is necessary to assess the risk from ongoing asbestos exposure and the sufficiency of existing regulations in protecting the public and workers from such exposure. The study will provide recommendations on additional measures that may be required to reduce or eliminate risk to health, which may include mandatory building inspections and inventorying the presence of asbestos, mandatory removal of asbestos or other measures to limit exposure.

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[24] International Labour Organization. Resolution Concerning Asbestos, 2006. http://www.ilo.org/safework/info/standards-and-instruments/WCMS_108556/lang--en/index.htm.

[25] Australian Mesothelioma Registry. (2014). 3rd Annual Report – Mesothelioma in Australia 2013. Retrieved from http://www.mesothelioma-australia.com/publications-and-data/publications.

[26] Olsen, Nola J Franklin, P, Reid, A, de Klerk, N, Threlfal, T, Shilkin, K, Musk, B (2012), 'Increasing incidence of malignant mesothelioma after exposure to asbestos during home maintenance and renovation', The Medical Journal of Australia, vol. 195, no. 5.

[27] Australian Government. Asbestos Safety and Eradication Agency. "National Strategic Plan for Asbestos Management and Awareness 2014–18" (2015) https://www.asbestossafety.gov.au/research-publications/national-strategic-plan-asbestos-management-and-awareness.

[28] World Health Organization. International Programme on Chemical Safety: Asbestos. http://www.who.int/ipcs/assessment/public_health/asbestos/en/.

Millions of workers have been exposed to asbestos in the U.S. and are still being exposed today. Early regulatory and legislative efforts reduced but did not eliminate the significant burden of asbestos-related disease. The only way to stop this epidemic is to stop the introduction of asbestos into the stream of commerce as quickly as possible, and to conduct an assessment of the presence and full extent of exposure and risk associated with asbestos already in buildings today in order to determine what additional regulatory measures or other interventions are needed to reduce the ongoing risk from asbestos exposure. To date, EPA has totally failed to take action to stop the future use of asbestos or address exposure to legacy asbestos. This legislation will once and for all address the ongoing crisis of asbestos exposure and disease and protect the public and workers from this deadly hazard. The AFL-CIO urges the committee and the Congress to move without delay to enact this lifesaving bill.