

INTERNATIONAL ASSOCIATION OF FIRE FIGHTERS



STATEMENT OF

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**BEFORE THE SUBCOMMITTEE ON CHEMICAL SAFETY,
WASTE MANAGEMENT, ENVIRONMENTAL JUSTICE, AND
REGULATORY OVERSIGHT**

**OF THE COMMITTEE ON ENVIRONMENT AND PUBLIC
WORKS**

UNITED STATES SENATE

ON

ALAN REINSTEIN BAN ASBESTOS NOW ACT OF 2022

**JUNE 9, 2022
WASHINGTON, DC**

Chairman Merkley, Ranking Member Wicker, and members of the subcommittee, thank you for the opportunity to testify before you today about the hazards that asbestos poses to fire fighters and the need to ban it from future construction and renovation projects. The International Association of Fire Fighters strongly believes it is of utmost importance to protect our first responders and community members who may not realize the risk they face from asbestos.

My name is Danny Whu and I am honored to serve as the Chief Medical Officer of the International Association of Fire Fighters (IAFF). When I was young, I dreamed of becoming a doctor. I first became a firefighter-paramedic to experience medicine as quickly as possible with the end goal being to get into medical school as soon as possible. However, I fell in love with the fire fighters' mission of service to mankind and proceeded to spend the next 30 years working in the fire service and EMS (Emergency Medical Service). I retired from the 6th largest fire-rescue and EMS department in the nation, where I served as a Division Chief for Operations, Assistant Director for the Office of Emergency Management, and Deputy Incident Commander of its Emergency Operations Center.

In 1992, I joined one of FEMA's (Federal Emergency Management Agency) newly formed Urban Search & Rescue Teams; Florida Task Force-1. Since then, I have had the honor to respond to many national and international missions to help, and one that will be important to mention today is my deployment to 9/11. Since my dream of becoming a doctor never left me, I put myself through medical school while working as a fire fighter. Afterward, I received both my medical doctorate and a master's in public health.

As you may know, the IAFF represents more than 328,000 professional fire fighters and EMS personnel. Our members serve communities in all 50 states and protect more than 80% of the United States' population. The IAFF's members work as our nation's all-hazards emergency responders and protect their communities from a wide range of emergencies, including structural fires, wildland fires, building collapses, natural disasters, terrorist incidents, and more.

While the IAFF is active in many policy areas, none is more important than our work to ensure the health and safety of fire fighters. For more than 100 years, the IAFF has been proud to be the nation's leading voice on health and safety issues impacting the fire service. The IAFF diligently works to research threats facing our fire fighters and recommends ways to mitigate these threats. Our work has helped advance the research agenda of institutions such as the Occupational Safety and Health Administration (OSHA), the National Institute of Health (NIH), and the Centers for Disease Control and Prevention (CDC). IAFF General President Edward Kelly's vision is to further connect the IAFF with leading research, academic, and scientific institutions in order to advance our mission-critical charge of protecting fire fighters from all the hazards we face. This is why I stand here today as the first Chief Medical Officer in IAFF history. The IAFF's commitment to improving fire fighter health and safety is unwavering.

Furthermore, IAFF General President Kelly would like to extend his apologies for being unable to attend the hearing today, as he is attending a pre-scheduled meeting with the IAFF Board of Directors. General President Kelly sincerely appreciates the Subcommittee's interest in protecting fire fighters from all forms of carcinogens, including asbestos. Preventing occurrences

of cancer has been a cornerstone of General President Kelly's, and he deeply appreciates your partnership in protecting the health of fire fighters and the general public alike.

Cancer Among Fire Fighters

Fire fighters often work in austere and hostile conditions when serving their communities and are routinely exposed to a variety of carcinogens. In fact, fire fighters are surrounded by these killers daily. These carcinogens are clearly in the smoke produced by structural and wildland fires and in the building debris fire fighters sift through when working on emergency scenes. They are even present in fire fighters' protective gear; for example, the PFAS (Per- and Polyfluoroalkyl Substances) chemicals applied to our gear is heavily carcinogenic. These daily exposures to carcinogens have made cancer the leading cause of fire fighter line of duty deaths. The IAFF maintains a memorial for our fallen brothers and sisters. Each year, the IAFF holds a ceremony where we add to the memorial the names of fire fighters who died in the line of duty from the previous year. Occupational cancer is such a hazard for fire fighters that 75% of the names we added to the memorial in 2019 were occupational cancer deaths.¹ We have not held our fallen fire fighter memorial for the last two years because of Covid, but will be holding our annual Memorial Service this year September 17. I invite all of you to join us for this solemn gathering and remembrance.

Numerous studies of fire fighters in the United States and Europe have consistently shown that fire fighters are significantly more likely than the average person to develop various types of cancer. In 2013, NIOSH published a study of nearly 30,000 fire fighters from San Francisco, Chicago, and Philadelphia. The study tracked fire fighters from 1950 to 2009 and found that fire fighters were 14% more likely to die from cancer than the average person. This study further showed that fire fighters were at a 100% increased risk of developing mesothelioma, a 45% increased risk of developing rectal cancer, and a 40% increased risk of developing buccal/pharynx and esophageal cancer, among other types of cancers.² The NIOSH study findings were largely consistent with another study published in 2014, which examined nearly 16,500 fire fighters in five Nordic nations.³

The IAFF is grateful that Congress established the National Firefighter Registry (NFR) program within the CDC several years ago (P.L. 115-94). The NFR will be an essential tool to identify and track fire fighters from across the nation who develop cancer. These data will be invaluable in showing us the most significant cancer risks in the fire service and help us identify ways to prevent fire fighters from battling this disease. As we look towards to the FY 2023 appropriations cycle, we urge Congress to fully fund the Registry at the \$5.5 million level that the CDC has requested. This increase in funding is needed to ensure the Registry meets current federal cybersecurity standards and can begin tracking participants.

¹ <https://www.iaff.org/cancer/#ff-cancer-awareness-month>

² Daniels RD, Kubale TL, Yiin JH, et al. Mortality and cancer incidence in a pool cohort of US firefighters from San Francisco, Chicago, and Philadelphia (1950-2009). *Occup Environ Med*. Published Online First: [14 Oct 2013] doi:10.1136/oemed-2013-101662

³ Pukkala, E, et al. (2014). "Cancer Incidence among firefighters: 45 years of follow-up in five Nordic countries" *JPccup Environ Med* 71:398-404.

Asbestos Poses a Unique Risk

Unlike some of the newer carcinogens that we are still studying, we already have proof-positive knowledge of asbestos' carcinogenicity. Asbestos was once thought to be a miracle compound that could shield people and buildings from fires. Unfortunately, it has turned into a nightmare that haunts fire fighters and wreaks havoc in their lives. Studies have shown that asbestos exposures are linked to causing a variety of cancers, including cancer of the pharynx, stomach, colon and rectum, larynx, lung, ovaries, and mesothelium.^{4 5}

Fire fighters are exposed to asbestos in a variety of ways. When we respond to fires, we rapidly breach walls, ceilings, and other building structures to save lives and extinguish any fire extensions that may be hidden. In the course of this work, any asbestos fibers present will unavoidably become airborne and present a clear and present danger to fire fighters. After this initial exposure during active firefighting operations, asbestos fibers can remain on our turnout gear which contributes to moving these deadly fibers onto our uniforms, which furthers the spread to the interior of our trucks and fire stations. During active fire conditions, asbestos fibers are lifted into the air as a component of smoke where it then falls onto fire fighters, their equipment and apparatus. Consequently, fire fighters will inhale large amounts of asbestos fibers before we can decontaminate ourselves, gear and apparatus following a call. It is now well known to fire fighters that this secondary exposure increases our risk of developing asbestos-related diseases such as mesothelioma (lung cancer) and asbestosis. Even in the face of these known daily risks, fire fighters still answer all calls for help without fail, 24/7.

Fire fighters also routinely respond to partial and complete building collapses. These incidents produce even more significant asbestos exposures for fire fighters due to greater volumes of asbestos fibers being released into the air. Fire fighters tasked with locating and rescuing victims from the collapse face significant exposures when crawling through debris from the collapsed building.

As the Medical Team Manager for FEMA's Urban Search & Rescue, Florida Task Force-1, I have experienced and seen these exposures firsthand. By far, the most serious asbestos-related exposure of my career has been the search and rescue mission in the aftermath of 9/11. Massive amounts of asbestos were released into the air that day posing a serious threat to the emergency responders who worked around the clock to rescue and recover victims. The effects of this exposure can be seen in the more than 270 fire fighters who have since died from 9/11-related illnesses – a number rapidly approaching the 343 fire fighters we lost on 9/11.

Speaking from my other role as a fire fighter chief, I saw asbestos exposures happen on "routine" emergency responses too. Building collapses, fires in structures built before the 1970s, and responses to industrial facilities can all be common exposures that fire fighters experience throughout our careers.

⁴ <https://monographs.iarc.who.int/wp-content/uploads/2018/07/Table4.pdf>

⁵ Markowitz SB, Garibaldi K, Lilis R, et al. Asbestos and fire fighting. *Ann N Y Acad Sci* 1991;643:573–81.

Regardless of what type of emergency fire fighters are responding to or how long they have been serving, it is essential to remember that OSHA has noted that there is no “safe level” of exposure to asbestos.⁶ Every exposure that fire fighters experience makes them more likely to develop a debilitating, and all too often lethal form of cancer.

The IAFF is deeply troubled by the fact that asbestos continues to be used in commercial buildings and construction projects despite our common knowledge of the lethality of asbestos exposure, such as those that fire fighters regularly experience. Congress must protect the lives of the public who live and work in asbestos-filled buildings and the fire fighters who will eventually respond to emergencies and be exposed to these known carcinogens. The federal government took similar actions in 1978 when it banned the sale of lead-based paint after medical evidence proved the danger that these paints posed to all people, especially small children. We face a similar threat from asbestos today and need Congress to act to reverse it.

Alan Reinstein Ban Asbestos Now Act (ARBAN) Act of 2022

The IAFF is proud to have worked closely with Chairman Merkley, Representative Suzanne Bonamici (D-WA), and other industry stakeholders to support the development and introduction of the Alan Reinstein Ban Asbestos Now Act of 2022. This pivotal legislation builds on extensive medical evidence that proves the causal link between asbestos and cancer. Nearly every major nation in the world has acted on this information and banned the use of asbestos materials during the construction of buildings. Canada, the United Kingdom, Japan, Australia, and all European Union member nations, are among the 70 nations which have banned the manufacturing, sale, import, or export of asbestos.⁷ Despite the prohibitions on importation of asbestos in those 70 countries, the US continues to import more than 100 metric tons of carcinogenic asbestos fibers each year. Sadly, the US, where more than 15,000 Americans die from asbestos-related illnesses every year, is the only industrialized nation that is yet to ban this killer substance.

Given the vast array of medical evidence proving the carcinogenic nature of asbestos, it is alarming that the federal government continues to permit the use of asbestos material during building construction projects in the United States. Fire fighters’ health and lives will continue to be jeopardized as long as asbestos continues to be commercially available for use in building construction. The IAFF wholeheartedly endorses the ARBAN Act of 2022, as it will prohibit the manufacturing, importation, distribution, sale, and use of commercial asbestos products. Banning this carcinogen from future building projects is key to reducing cancer incidence rates among fire fighters.

While the IAFF appreciates the opportunity to address commercially available asbestos, equally important is to address the topic of legacy asbestos. Fire departments across the nation, particularly those serving historic jurisdictions, know well the dangers of responding to fires and other emergencies in homes and buildings built when the dangers of asbestos were not publicly

⁶ U.S. Department of Labor. Occupational Safety and Health Administration. Safety and Health Topics. Asbestos. <https://www.osha.gov/SLTC/asbestos/>. Accessed August 22, 2017.

⁷ <https://www.asbestosdiseaseawareness.org/newsroom/blogs/adao-resource-nearly-70-countries-have-banned-asbestos-but-the-usa-is-not-on-the-list/>

known. Developing a policy solution to address the dangers posed by legacy asbestos is much more challenging. We appreciate Chairman Merkley's commitment to working with us to find pathways to address these dangers.

The IAFF is also aware that the Environmental Protection Agency (EPA) would prefer to focus its regulatory efforts on "occurring or reasonably foreseen" uses of asbestos, rather than evaluating the legacy use of asbestos. However, the EPA must do this and is required to do so by law. Our members are one of the many reasons legacy uses must be evaluated, addressed, and resolved. Exposures due to legacy asbestos occur whether or not fire fighters are aware of it. One study of New York City fire fighters found that these individuals have an increased risk of developing asbestos-induced pulmonary and pleural fibrosis, including those with no history of asbestos exposures other than from their career as a fire fighter.⁸

Not only do we want the EPA to look at fire fighters and their exposures as a susceptible subpopulation, but we would also like the EPA to create a requirement for inspection of commercial buildings or industrial facilities to identify where asbestos may be present. For our members to have the knowledge of what buildings have asbestos and which do not, would significantly improve our planning and prevention of asbestos exposure, thus reducing the incidence of mesothelioma and other asbestos-related diseases.

Feder Firefighters Fairness Act of 2021 (S. 1116/H.R. 2499)

As I mentioned earlier, the IAFF is deeply committed to addressing all forms of cancer that fire fighters face. One of the most critical components of the IAFF's mission is ensuring all fire fighters can access the medical care and support they need when battling this relentless illness. Today, 49 out of 50 states provide presumptive workers' compensation benefits for fire fighters who develop cancer. These 49 states have enacted those policies following the clear evidence mentioned earlier, which shows that fire fighters are significantly more likely than the average person to develop cancer. Numerous studies have shown that this increased risk is due to fire fighters' routine exposure to carcinogens such as asbestos and PFAS, which are used when manufacturing fire fighters' protective equipment and common household products.

Despite this clear medical evidence linking a career in firefighting with an increased likelihood of developing cancer, the federal government does not provide a similar presumptive benefit for the federal fire fighters who protect military installations, research laboratories, or suppress wildland fires. Historically, federal fire fighters have faced steep hurdles in accessing their earned workers' compensation benefits. They have been required to identify which specific fires in their careers resulted in their cancer diagnoses. This burden of proof is nearly impossible to meet as fire fighters respond to thousands of incidents across their careers. This impossibly high standard has resulted in countless federal fire fighters being denied the benefits and support they have earned when they need it most.

While the U.S. Department of Labor recently announced some procedural changes to assist fire fighters in accessing their benefits, statutory limitations prevented this policy change from truly providing the automatic benefits that federal fire fighters deserve. The IAFF applauds Senators

⁸ Markowitz SB, Garibaldi K, Lilis R, et al. Asbestos and fire fighting. *Ann N Y Acad Sci* 1991;643:573–81.

Tom Carper and Susan Collins for introducing the Federal Firefighter Fairness Act which would provide presumptive workers' compensation benefits for federal fire fighters with at least five years of service who develop cancer. In May, this critical legislation was passed in the House on a strongly bipartisan basis. The Senate Committee on Homeland Security and Governmental Affairs marked up and unanimously approved the legislation several weeks ago. The IAFF urges the Senate to take up S. 1116 and bring the bill to a final vote.

Medicare Multi-Cancer Early Detection Screening Coverage Act (H.R. 1946/S. 1873)

As I mentioned earlier, cancer-related deaths are by far the most common cause of line of duty deaths for fire fighters. This number far exceeds fire fighters' deaths due to heart attacks, smoke inhalation, burns, vehicular accidents, and other fatal injuries. It is well known that early cancer detection saves lives, lowers treatment costs, and increases patients' quality of life. In fact, the average five-year survival rate for most cancers is almost 90% when the cancer is found in its early stages. Sadly, only five cancers have available screenings (breast, cervical, colon, lung, and prostate) paid for in public programs, such as Medicare. Fire fighters are at increased risk for many cancers beyond the five types with screenings. We need more tools that can identify more cancers early.

The IAFF is pleased to endorse the Medicare Multi-Cancer Early Detection Screening Coverage Act of 2021 (H.R. 1946/S. 1873). There is incredible promise surrounding developing and implementing blood-based multi-cancer screenings, and ensuring access to them is critical. This legislation would help ensure there is no delay in access for Medicare beneficiaries to multi-cancer detection once the Food and Drug Administration approves it. Enabling fire fighters and retirees to have access to these early detection screenings makes good policy sense when considering the improved health outcomes it will produce and the savings to the Medicare program by preventing Medicare beneficiaries from requiring more aggressive and costly medical treatments for their health conditions.

Supporting access to early cancer screenings also is an important component to the IAFF's recent partnership with the American Cancer Society (ACS). Given ACS' status as the nation's leading cancer advocacy organization, the IAFF is looking forward to collaborating with the ACS and our fire service partners such as the Firefighter Cancer Support Network, all of whom are dedicated to addressing the cancer epidemic in our profession and promoting the needs of America's fire fighters among those researching cancer and advancing meaningful treatments. The IAFF is hoping to work with the ACS to also promote a nationwide annual cancer screening initiative for all fire fighters throughout the United States. This initiative would be essential to providing fire fighters with a baseline assessment of their health and the ability to identify any potentially worrisome health conditions while they are still treatable and in their earliest stages.

Conclusion

I am sincerely grateful for the opportunity to speak with this distinguished subcommittee on the need to ban the sale, importation, distribution, manufacturing, and use of commercial asbestos products. We have long known the devastating health effects of chronic exposures to asbestos, and it is now overdue that we stop the continued proliferation of these carcinogens. Our brother

and sister fire fighters across the United States are surrounded by carcinogens every day and it is incumbent upon us to remove as many of those dangers as we can.

The ARBAN Act of 2022 is a common-sense bill that will ban asbestos and bring the United States in line with nearly every other industrialized nation. The IAFF is pleased to support this bill as it will help reduce a significant source of cancer exposure that fire fighters face on a daily basis. It is time that we align our laws and regulations with the scientific evidence that we know to be true. Fire fighters across the United States are suffering every day while fighting for their lives against cancer diagnoses. We owe it to these men and women to eliminate every possible hazard they face. Asbestos is a known carcinogen and must be prevented from being incorporated into more buildings and construction projects throughout the nation.

Furthermore, the IAFF urges the Senate to advance the Federal Firefighter Fairness Act of 2021 and the Medicare Multi-Cancer Early Detection Screening Coverage Act of 2021. Much like the ARBAN Act of 2022, these two pieces of legislation represent easy ways to ensure our brother and sister fire fighters battling cancer are given every advantage in their battles. Fire fighters and EMS personnel serve on the frontlines of our communities to protect us from unimaginable dangers and threats. Now is the time for Congress to take care of them in their time of need.

This Subcommittee may be familiar with arguments that the application of asbestos is safe, as long as the asbestos remains undisturbed. However, these arguments will never state that asbestos itself is safe, since it is undeniable common knowledge that asbestos inhalation poses a lethal risk. Asbestos is not a possible or probable carcinogen; it is a *known* carcinogen. There is evidence to suggest that a single asbestos fiber may be enough to cause asbestosis and mesothelioma. What obscures these conditions is the decades-long latency period of their onset. Decades are a long time, unless it is decades of *your* life, then it becomes a very short interval. I often say biostatistics are only statistics when they happen to someone else. Once it happens to you, *you* are the statistic, and there is 100% incidence upon yourself.

My fellow fire fighters and I who responded to the 9/11 terror attacks are the poster children for exposure to safe asbestos made unsafe. During construction of the World Trade Center's north tower, the first 40 floors were coated with asbestos. As the dangers of asbestos were already becoming known by then, the builders discontinued its use for the rest of the towers' construction. The already "safely" applied asbestos was simply abated in place and rendered "safe", according to them. What happened next is that I, and tens of thousands of fire fighters, EMS personnel, police officers, rescue workers, tradesmen, civilian volunteers, and clean-up crews were exposed to hundreds of thousands of tons of "properly applied and abated" asbestos that had now been pulverized and aerosolized. Equally exposed were the over half a million New Yorkers and school children that were told the area was safe to return to. We now know that the 9/11 dust cloud contained approximately 0.8% asbestos and anyone within 1.5 miles of Ground Zero was at risk of asbestos exposure. Please recall that, as OSHA has noted, there is no safe exposure level for asbestos.

Because of asbestos' latency period, approximately 30 to 40 years from 9/11, there will be an increased incidence of asbestos-induced diseases and cancers. So, in 10 to 20 years from now, we will see that nightmare for countless Americans that responded to, or were nearby Ground

Zero. And while we cannot change the past, we can prevent future tragedies by banning this known carcinogen now. Oftentimes, doing the right thing is unclear. Fortunately, that is not the case with asbestos. When it comes to a known carcinogen like asbestos, Congress must protect the lives of our fire fighters and the general public now.

I close with this; For there is no greater love than to lay your life down for a friend. Fire fighters are willing, and too often do, lay their lives down not for friends, but for strangers. We owe it to our fire fighters to ensure their safety by banning proven killers such as asbestos. Thank you again for the opportunity to testify before you today. I stand ready to answer any questions you may have and provide any additional information that you may need.