Did Flawed Science and Litigation Help Bring Down the World Trade Center?

Andrew Schlafly, Esq.

On September 11, 2001, I was scheduled to argue a case in federal court in Newark, New Jersey, which had a clear view of the World Trade Center (WTC). That hearing, like everything else in the New York City (NYC) area, was canceled in the wake of the fateful news. At 8:45 a.m. local time, a hijacked 767 commercial jet airplane rammed into One World Trade Center, the North Tower, fully loaded with fuel for a transcontinental flight. Eighteen minutes after the initial impact, a second jet crashed into Two World Trade Center, the South Tower.

My immediate reaction was that the attack occurred too early for the office building to be completely filled with workers. Unlike most places, Manhattan is not in full swing until 9:30 a.m. local time. NYC workers are late risers and long commuters. Had the terrorists struck an hour later, the loss of life would have been far greater.

The initial crash into the WTC killed relatively few people. The planes were not filled with passengers, and the floors were not filled with workers. A few workers on the impacted floors even survived. It was the premature collapse of the towers that caused the thousands of casualties.

The South Tower, which had been hit second, was the first to collapse. It fell at 10:05 a.m., a mere 62 minutes after being struck by the jetliner. The North Tower collapsed at 10:29 a.m., 104 minutes after being hit. Seven World Trade Center, an adjacent 48-story building, totally collapsed around 5:20 p.m. although not struck by an airplane nor doused in jet fuel.

The WTC was expressly designed to withstand the impact of a large commercial jetliner having weight and fuel capacity comparable to the 767. Every architect of skyscrapers is familiar with the collision of the B-25 bomber into the 79th floor of the Empire State Building in heavy fog in 1945. That crash killed 14 people, but caused only \$1 million in damage. The structure of the building easily survived the impact and the resultant fire.

Given the design parameters and the experience with the Empire State Building, why did the WTC collapse so quickly on September 11? Why did the North Tower remain standing 68 percent longer after impact than the South Tower did? And still more curiously, why did "Building 7" collapse?

As the Federal Emergency Management Agency (FEMA) has officially admitted, "The collapse of the towers astonished most observers, including knowledgeable structural engineers."

"I have to say the collapse of buildings this size is a little bit surprising," declared James Milke, associate professor of the University of Maryland's department of fire protection engineering. Milke contrasted the WTC collapse to skyscrapers that survived long-burning fires in Philadelphia (a 19-hour inferno in the Meridian Bank Building in 1991) and in Los Angeles (a 3.5-hour blaze in the First Interstate Bank in 1988). Neither of those buildings even approached collapsing, despite the inability of firefighters to control the blazes for prolonged periods.²

Nearly two years after the WTC massacre, the families of the victims of the attack still lack honest answers. The \$16-million government-funded investigation has provided nothing meaningful in explanation. Instead, politics and money have distorted the process. We are not constrained by these factors here.

History

The World Trade Center was unique, but not by virtue of its height. Its singularity was that it was built and owned by government for private, commercial purposes. A brief review of the political and economic history of the WTC sheds light on its fatal safety flaw.

In the early 1960s, David Rockefeller was the preeminent real estate developer in NYC, and his brother Nelson was the governor of New York. David Rockefeller had just completed the 60-story Chase Manhattan Bank Tower in lower Manhattan in 1960, the first new skyscraper there in a generation. He needed more development to energize the neighborhood, and cleverly prodded the Port Authority of New York and New Jersey to study a proposal for a \$250-million trade center there.

The Port Authority is a very powerful government entity, established in 1921, which operates the bridges, tunnels, and airports around NYC. In some respects it has more power and authority than NYC itself. It can seize property, dictate travel, and secure credit. This is not an entity that ever should have built commercial towers for private use.

The Port Authority did not even have to comply with NYC building codes. "When the trade center was built, the Port Authority – as an interstate agency – was not bound by New York City building codes, or any other for that matter. In 1963, the agency instructed engineers and architects to comply with the local building code, but it was not until 30 years later that an agreement was established to allow fire and other inspections."

Before the arrival of the Rockefellers, the Port Authority itself was opposed to the idea of a WTC. Its Chairman Howard Cullman declared that the proposed building was "primarily an extensive real estate operation" and thus inappropriate for the "self-perpetuating public benefit corporation" of the Port Authority.

Once Nelson Rockefeller became governor of New York, he installed four loyalists on the board of the Port Authority, and its view changed. Despite vociferous objections by small businessmen in the area, the Port Authority endorsed the project. *The New York Times* editorial page insisted that "no project has ever been more promising for New York." *The Washington Post* supported it from afar. Gov. Nelson Rockefeller signed enabling legislation on March 27, 1962. Detractors said the twin towers should be named Nelson and David.

The construction was everything one might expect from a government project. It was more expensive and took longer to build than a private counterpart. The WTC was also less attractive, less efficient, and less safe than privately built structures.

The supporters of the WTC said its cost would be \$350 million, but by completion more than a decade later its actual costs were at least double that. It lost money through the 1970s and probably never recouped the value of its investment and expenses. It took the dot-com boom of the 1990s, not world trade, to push occupancy to high levels. Though sold to the public as government-promoted export-import, only 5 percent of the WTC leases were held by trade service and export-import tenants. The original plan for a brotherhood of shipping concerns to do business out of one building failed because these competitive shippers did not want to share the same building.

In contrast, the Sears Tower cost only about \$150 million – roughly one-fifth the cost of the WTC, even though built around the same time. The WTC took nearly a decade to be completed; the Sears Tower, only three years.

In 1993, a terrorist detonated a bomb at the WTC. Smoke filled the building and its vulnerability to fire or collapse was exposed. Government spent an outrageous \$525 million to repair the damage, more than the inflation-adjusted total cost of building the Sears Tower. No asbestos fire-proofing was added to the WTC after the 1993 attack, despite its demonstrated vulnerability.

Why do government buildings often exceed reasonable costs? Ray Monti, a construction manager on the WTC project, explained: "There's a natural tendency in all government projects to want to convince others to authorize you to proceed. One puts a favorable interpretation on the facts." He then explained that the tendency is the opposite once the project gets started. "Once I'm started, what are you going to do to me? Stop the building in the middle?" Of course not—that would be a disaster for the politicians in charge.

The original plans for the WTC called for 70 stories, which would have been more in line with its surroundings. But the quest for media attention drove its height to record-breaking levels. "Is that two buildings with fifty-five stories each?" Nelson Rockefeller once asked the architect. "Oh no," he replied. "One-hundred-ten stories apiece!" "My God!" Nelson gushed. "These towers will make David's building [the Chase Manhattan Bank Tower] look like an out-house!"

The workmanship on the WTC was superb – Mohawk Indians traveled down from Canada each week to work at the enormous heights required, but the design plainly was not. Architectural critics unanimously panned the WTC, which committed the architectural sin of ignoring its surroundings. The adjacent skyscrapers looked Lilliputian in comparison.

Harper's magazine called it "The World's Tallest Fiasco." The American Institute of Architects said that "the public agency that built [the WTC] ran amok with both money and aesthetics." Paul Goldberger, the prominent architectural critic for *The New York Times*, called the WTC "so utterly banal as to be unworthy of the headquarters of a bank in Omaha." ⁵

The WTC used a government one-size-fits-all approach. For example, there were originally no light switches in the offices. The lights would typically remain on unless shut off in unison. The floors were identical to each other. The towers were little more than a single shaft, straight up for 110 stories. It was a steel skyscraper version of government buildings in Washington, D.C.

Its main flaw, however, was its lack of safety. The decision to use mostly steel in the WTC made it vulnerable to fires. Concrete, which dominates the Empire State Building, withstands fire far better than steel does, and experts are confident that the Empire State Building would not have collapsed after a September 11-type of attack. Nor would the Sears Tower, which uses nine structurally separate tubes rather than the solitary tube used by each WTC tower.

The original design and construction of the WTC included fire-proofing of the steel. The longstanding industry standard for steel skyscrapers was to use spray-on asbestos. Otherwise, unprotected steel will warp, melt, sag, and ultimately collapse when heated to normal fire temperatures of 1,100 to 1,200 degrees Fahrenheit.

Mixed with water and sprayed onto the steel beams as well as the floors and ceilings, asbestos adds resilience and insulation against fire to the structure.

The spray contractor, Mario and DiBono, had taken one additional level of precaution. In the first and last time for a NYC building, the contractor guarded against the scattering of dried asbestos. The contractor even planned elaborate procedures for cleanup and disposal of the asbestos. Canvas was used to seal off the spraying of the asbestos from both interior and exterior space.

The WTC was constructed between 1968 and 1972, beginning with the North Tower. At least forty stories of the North Tower received the permanent fireproofing protection of the sprayed mixture of asbestos and cement. But mid-construction, hysteria about asbestos broke loose.⁶

At the Mt. Sinai School of Medicine in uptown NYC, Dr. Irving J. Selikoff, director of the environmental sciences laboratory, declared that high concentrations of asbestos cause cancer.

High concentrations of many useful substances cause, or at least facilitate, cancer. Sunlight is an example. We do not prohibit items simply because they may be associated with cancer in high doses. Even useless substances like cigarettes are not banned from the market simply because they cause cancer.

Moreover, Dr. Selikoff failed to adjust for tobacco use in his study. Tobacco is known to cause lung cancer, more frequently than asbestos does. It was a fatal defect not to separate out the smokers from the non-smokers in the study. Only later did Dr. Selikoff publish a study showing that the lung cancer risk from asbestos exposure is highly dependent on smoking habits, with extremely few asbestos lung cancer cases found in non-smokers.⁷

Environmental regulators, however, are anxious to assert their power immediately, regardless of the facts. David Kessler of the Food and Drug Administration (FDA), for example, became dictator-for-a-day by temporarily banning all breast implants, even though countless studies showed no causation of cancer.

The Environmental Protection Agency (EPA) seized upon Dr. Selikoff's asbestos work and issued new regulations sharply restricting use of asbestos. In 1971, NYC banned the use of asbestos in spray fireproofing. But the Port Authority simply continued the project without the asbestos protection. The South Tower therefore received little to no asbestos. Building 7, completed in 1987, received no asbestos protection against fire.

The inventor of the asbestos spray being used in the North Tower, Herbert Levine, was despondent. "If a fire breaks out above the 64th floor [of the North Tower], that building will fall down," Levine predicted. The insulation was designed to protect the building from collapse for four hours, which would have saved many hundreds or thousands of trapped occupants. This resultant fire hazard was unnecessary. As Harvard physics professor emeritus Professor Richard Wilson observed, "No adverse health effect has ever been attributed" to the Levine process."

One week after the WTC collapsed, Brooklyn College environmental scientist Arthur Langer, who once supported Dr. Selikoff's claims, stated: "In retrospect, considering the recent events... I wonder if the performance characteristics of the replacement material were as good." Dr. Selikoff's successor at Mount Sinai, Dr. Philip Landrigan, conceded that the quality of non-asbestos insulation is "a legitimate question."

Testing the WTC debris for toxins, the Centers for Disease Control and Prevention (CDC) found remarkably little asbestos – and hence little protection against fire. Twenty-six of 29 bulk samples had less than 1 percent asbestos. The CDC then tested 3 samples taken from the pivotal I-beams themselves. One was completely negative for asbestos, and the other two had less than 1 percent asbestos. The air samples had less than 0.1 fiber per cubic centimeter, the low federal threshold.¹¹

The WTC was thereby distinctive in this final respect. As confirmed by the National Council of Structural Engineers Association, the WTC was the first steel structure to use non-asbestos fireproofing.

Flawed Science

Asbestos is a naturally occurring mineral fiber. We are all inhaling it now. Urban air has asbestos fiber levels around 0.001 fibers per cubic centimeter of air (f/cm³). San Francisco and many cities are built on rocks that naturally contain asbestos.

Asbestos has extraordinary resistance to heat, mechanical stress, and water. It is flexible and has low electrical conductivity. It is also resistant to acids and alkalies, making it useful in guarding against corrosion. It is composed of silicon, the building block of integrated circuits, and oxygen, hydrogen, and various metals.

No other material can rival its usefulness in buildings. Its resistance to fire and stress made it a popular construction material from the 1930s until the 1970s.

The federal Occupational Safety and Health Administration (OSHA) set a permissible exposure limit of 10 fibers per cubic centimeter of air (10 f/cm³) in the 1970s, but because of litigation and pressure that exposure level has been reduced to a current level of 0.1 f/cm³. The lower the official limit is, the more lucrative the asbestos litigation is for plaintiffs. Employees who are exposed for more than thirty days above 0.1 f/cm³ each year are considered to be asbestos workers and require medical examinations.

Asbestosis is the most common disease resultant from heavy exposure to asbestos. Dry airborne asbestos fibers in concentrated doses have also been correlated with mesothelioma, predominantly in smokers. The asbestos at issue in the WTC fireproofing, however, was in a wet slurry form unlikely to generate significant levels of airborne asbestos for occupants. Indeed, the spray-on asbestos remained in roughly half of the North Tower until September 11.

The CDC studied the number of deaths from asbestosis and mesothelioma in New Hampshire over a 20-year period from 1963 through 1983. 12 Only 13 died from mesothelioma, and 9 from asbestosis. In sum, only about one person in New Hampshire died per year from these asbestos-related diseases. Moreover, the average age at death was not much different from the United States average. In fact, those with asbestosis lived *longer* than expected from the average American life expectancy.

In 1998, the prestigious *New England Journal of Medicine* reported no increased risk of death from cancer among women because of prolonged exposure to asbestos. Based on a thorough study of mines and mills that have the world's greatest concentration of asbestos, the researchers concluded: "The [Environmental Protection Agency] model overestimated the risk of asbestos-induced lung cancer by at least a factor of 10."¹³

Harvard University's Energy and Environmental Policy Center ranks asbestos as having a very low comparative risk of premature death, less important than being struck by lightning (see Table 1).

T	Table 1. Proportion of Premature Deaths Caused by Various Risk Factors ¹²		S
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Smoking	21.9%
Motor vehicles	1.6%
Frequent flying on airlines	0.73%
Coal mining accidents	0.44%
Indoor radon	0.4%
Lightning	0.003%
Asbestos in school buildings	0.001%

The EPA not only exaggerated the effect of asbestos; it also ignored its benefits in effectively banning it from buildings in the 1970s.

Meanwhile, smoking plainly does cause lung cancer, and hundreds of thousands of smokers die each year from it. Had the law recognized and applied the doctrine of intervening cause, then the frenzy over asbestos may never have occurred. But the courts opened their gates to attorneys claiming that smokers contracted their lung disease from exposure to asbestos. The issue was presented to juries, beginning as early as the 1960s, and enormous verdicts began rolling in.

No government-funded scientist is willing to defend asbestos. This enables those profiting from asbestos litigation to fan public fear to astounding levels.

Litigation

The direct economic cost of the September 11 attack is estimated to be between \$40 and \$60 billion. This enormous figure is about ten times the insured value of the buildings themselves.

As large as the September costs are, however, they pale in comparison to the estimated costs of asbestos litigation. *The Economist* magazine put the cost of asbestos litigation at \$200 billion. That is probably a low estimate.¹⁵

Already more than 500,000 individuals have sued for exposure to asbestos, with each claim typically naming twenty defendants. Some insurance reports estimate that one million people will ultimately file claims and that the costs could rise as high as \$275 billion.¹⁶

The Supreme Court has repeatedly implored Congress to save the courts from having to handle asbestos lawsuits. But the usual victims of this litigation are engineering companies that lack political muscle and are no match for the clout of the trial lawyers.

America's top asbestos producer, Johns Manville, was forced into bankruptcy in 1982. By 1992, Lloyds of London was averaging nearing \$3 billion a year in losses, mostly related to asbestos claims.

Asbestos litigation has driven at least 60 companies into bankruptcy since 2000, including Bethlehem Steel.¹⁷ Judgments are often imposed with little regard for proof of wrongdoing or causation. Encouraged by porous legal standards, asbestos attorneys have filed claims for more than 1.4 million persons, against more than 1,400 companies. More than 90,000 new claims were filed just last year. Only 6 percent of those claimants actually suffered from an asbestos-related illness.¹⁸

In 2000, the four major companies sent into bankruptcy by asbestos litigation were Armstrong World Industries (construction products), Babcock & Wilcox (boilers), Burns and Roe (engineering and construction), and Pittsburgh Corning (glass insulation). In 2001, asbestos litigation casualties included the chemical and materials giant W.R. Grace (which did not even make asbestos), the prominent construction materials company G.A.F., the gypsum wallboard maker USG, and the auto-parts maker Federal-Mogul.

Fortune 500 victims of the asbestos litigation monster can witness sudden drops in their stock prices. Hit with a Texas-sized verdict in December 2001, Halliburton stock abruptly dropped 43 percent.

In February 2002, a Manhattan jury awarded \$53 million to the estate of a deceased auto mechanic who allegedly died from exposure to asbestos in brake linings. That decision jeopardizes the entire auto industry; full-page ads for auto mechanics with lung cancer now run in New York newspapers.

The performance behavior of asbestos in brakes is steady and predictable. Asbestos brakes wear out very slowly, thereby alerting drivers when it becomes necessary to replace them. But the same cannot be said for the asbestos substitutes, which can degrade quickly based on heat and other climatic conditions. Cars and trucks on our highways today are using inadequate substitutes for asbestos in their brakes, thanks to 20,000 lawsuits against the big three auto makers over past asbestos use. By the end of 2001, more than 3,500 lawsuits were being filed each month against Ford, General Motors, and DaimlerChrysler, based on junk science and past use of asbestos.¹⁹

In March 2002, a West Virginia jury ordered DuPont to pay \$6.4 million to a bank officer who died of mesothelioma. How could a bank officer have been exposed to asbestos? The banker was allegedly injured by fibers that might have attached to the clothing of his father who worked with asbestos at DuPont.

Some of the cases involve heavy, lifelong smokers who claim they have asbestosis, an asbestos-related disease. Plaintiffs and defendants bring in medical experts who testify to contrary diagnoses, and the jury is left to decide, often against the corporate defendants.

Senior United States District Court Judge Charles R. Weiner observed: "Today, given the volume of claims and the disappearance of any effective injury requirement, defendants are paying those who are not really injured."²⁰

In February 2002, 2,645 plaintiffs sued asbestos attorneys, arguing that "this case arises from corruption within the asbestos personal injury bar." Reports are that the majority of asbestos settlements enrich the attorneys, rather than going to the allegedly harmed individuals.

On the Asbestos Network website, there is the following statement: "In the workplace, there is no 'safe' level of exposure." This falsehood is seized upon by the asbestos bar to promote the mistaken view that anyone exposed to asbestos in any way should be able to sue for damages. The runaway litigation has distorted the science.

The U.S. Supreme Court has repeatedly urged Congress to take action in curbing abusive litigation, but the pleas have gone unheeded.²² This past spring, the Court itself considered a West Virginia award of millions of dollars to a few workers without evidence of physical or independently corroborated emotional harm from exposure to asbestos, and without apportioning damages based on relative culpability. Imagine that – millions of dollars in damages without proven harm. Despite reviewing the case, the High Court ultimately affirmed the decision in favor of the plaintiffs.²³

The asbestos panic even became a political scandal for Vice President Dick Cheney. He orchestrated a merger by his company, Halliburton, with a company vulnerable to asbestos claims, Dresser Industries. The rampant asbestos lawsuits subsequently weakened Halliburton's stock after the acquisition. Piling fiction upon fiction, attorneys later argued that Cheney should have done due diligence and learned that the runaway asbestos litigation would infect and substantially weaken Halliburton.²⁴

All this for a substance that, in the words of Professor R.S. Mitchell of the University of Colorado School of Medicine, does not even initiate cancer: "Asbestos is regarded as a promoter, not an initiator, of lung cancer." ²⁵

Silence by the Scientific Community

Tens of millions of dollars in government money are being spent on investigations of the WTC collapse. Paid for by government, these studies are designed to exonerate government. A researcher would risk his career and future funding by asserting that government negligence or malfeasance contributed to the WTC collapse.

Also, do not expect the government to release its data in connection with the WTC. When the conclusions of the government studies are announced, it is unlikely that the underlying data will be released for scrutiny.

Silence by academic scientists about junk science is a growing problem. On July 19, 2002, *The Christian Science Monitor* reported on some high-profile examples of scientific fraud. The article noted that some scientists "say publicized cases of scientific misconduct are only the tip of the iceberg. Surveys have indicated that scientists often are aware of misconduct in their labs but fail to report it. Research also shows that small but significant numbers of graduate students and postdoctoral fellows would be willing to fudge or ignore data if it helped them land research grants or publish a paper."

Asbestos hysteria falls in that category. There is enormous financial and political motivation behind perpetuating the exaggerated fears. Nothing but silence is on the other side.

Many government-funded scientists claimed in the aftermath of September 11 that no structure could have survived such an attack. That is clearly false. Steel reinforced by concrete, as used by the Empire State Building, would have almost certainly survived. Steel protected by asbestos would have survived as a function of how much asbestos was used. This is demonstrated by the ability of the partially asbestos-protected North Tower to stand 68 percent longer after impact than the South Tower. Moreover, WTC buildings 4, 5, and 6 – all built in the 1970s – did not collapse on September 11. Building 7, built in the 1980s, which was a full block away, did collapse from the heat.

Other apologists pretend it does not matter that the building collapsed, because supposedly the persons trapped above the impact could not have escaped regardless. But that is also plainly false. Brian Clark was in his office on the 84th floor of the South Tower when it was struck by the jet, and he survived by escaping down an available staircase. His story is available online at PBS's website.²⁶

The plane struck his building 4-6 stories below him, at about the 78-80th floors. He described many others around him who ended up dying in the collapse of the building. In addition to Brian Clark, there were at least 15 others who did survive despite being in the top floors of the South Tower. An entire stairway to the higher floors provided a passageway for occupants to escape long after impact. But the quick collapse of the building in a mere 62 minutes prevented many from surviving.

Then there are those who claim that simply because asbestos does facilitate lung cancer for some individuals, particularly smokers with high exposure to asbestos fibers, it must be banned regardless of the consequences for building fires. This is the most irresponsible position of all. The simple fact is that no one at the EPA or anyone else has accurately studied the costs of banning asbestos.

As to the collapse of the WTC, studies are slowly migrating to the obvious lack of fireproofing. The building's leaseholder, Larry Silverstein, has a financial interest in demonstrating that the collapse was a separate and distinct event from the attack, in order to collect insurance for two incidents of loss rather than merely one. His study, as well as another recent study, found that the fireproofing was indeed inadequate.

Sally Regenhard's son was among the 343 firefighters killed. In response to the suggestion in an interim report released in May 2003 by the National Institute of Standards that the WTC fireproofing may have been inadequate, Ms. Regenhard said she was "horrified to know we could build such a fragile building with a minimum amount of fire protection."

However, the Federal Emergency Management Agency (FEMA) released a study that gave only scant and unsatisfying attention to the asbestos fireproofing issue.²⁸ This deficiency in analysis requires remedy.

Conclusion

The United States has one of the highest fire death rates in the industrialized world. In 2001, there were 6,196 civilian fire deaths (including 2,451 in the September 11 attack) and 21,100 civilian fire injuries (including 800 attributed to the September 11 attack). In a typical year, 100 firefighters are killed from duty-related incidents, often from premature collapses of buildings. Fires kill more Americans than all other natural disasters combined. Direct property loss due to fires is estimated at \$10 billion for 2001, not including the September 11 attack losses.²⁹

The tragic reality is that all buildings constructed after the asbestos ban are vulnerable to premature collapse. Many modern skyscrapers are probably firetraps because of this.

A highly publicized recent example was the inferno at the West Warwick, Rhode Island, nightclub on February 20, 2003, which

killed 100 persons. Reports have traced the cause of the rapidly spreading fire to \$575 worth of inflammable soundproofing material used within the facility.³⁰ Occupants had at most only a few minutes to escape.

Apparently inadequate fireproofing caused other high-profile tragedies. The explosion of the Challenger in 1986 was ultimately traced to O-rings that could not withstand temperature change, as colorfully demonstrated by Dr. Richard Feynman at a Senate committee hearing. Less well-known, however, is that environmentalist pressure forced the removal of asbestos from sealants and caused the use of the faulty O-rings in the first place. More recently, the failure of insulation on the Columbia space shuttle resulted in its tragic burning and the loss of life of all its crew members on February 1, 2003. Asbestos insulation would surely have been superior at resisting the heat.

The litigation-fed hysteria over asbestos has led to the fiction that adequate substitutes exist. But there is no known equivalent for the naturally occurring asbestos. Asbestos is by far the best defense against fire. There is no substitute. No other material even approaches the strength and resistance of asbestos. Under Rhode Island fire codes applicable to the nightclub that tragically burned, "flamespread rating" is regulated for materials. By statutory definition, the "flamespread rating" of an asbestos cement board is zero (0), while that of red oak lumber is 100. Ironically, asbestos is so versatile that it has even been used for soundproofing – the need so poorly met by the inflammable substitute in the nightclub.

While there may be risks associated with certain forms of asbestos, these are far less than the risks of many substances that are still widely used or ingested despite lack of any compensatory benefits, such as cigarettes.

Asbestos should not have been banned from the WTC, and should not be banned from other buildings or products either. Currently, routine fires result in building collapse, and asbestos would greatly reduce the number of deaths.

Aside from the enormous economic losses, Americans, particularly New Yorkers, have paid a heavy price in lost lives for the unjustified pseudoscientific demands to ban asbestos, especially on September 11. We should never again permit such bad science to interfere with safety and to increase tragedy.

Andrew Schlafly, Esq., is General Counsel for the Association of American Physicians and Surgeons. Some of this material was previously presented at the 20th annual meeting of Doctors for Disaster Preparedness in Colorado Springs, Colo., July 27, 2002.

 $\label{lem:mass} \mbox{Mr. Schlafly has no financial interest in the outcome of as bestos litigation.}$

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