

Liability in the Air The Threat of Indoor Pollution

BY MARK DIAMOND

here is a danger in America more widespread than AIDS, more insidious than heart disease, more prevalent than cancer. It is a menace that kills tens of thousands of people every year and makes millions ill.

The danger is indoor pollution and it is caused by the buildings in

which we live and work.

"The major source of air pollution in our nation is not the traditional outdoor sources, such as power plants, but the inside of our homes and offices," says Lance Wallace, environmental scientist for the Environmental Protection Agency. "There is generally three times as much risk from breathing indoor air as outdoor air. Tens of thousands of cancer deaths alone are caused by indoor

Mark Diamond is a lawyer and free-lance writer in Garden City, N.Y. His last article for the ABA Journal, "Anatomy of a Disaster, The Dupont Plaza Hotel Fire," appeared in the Aug. 1, 1987 issue. pollution every year."

Often called sick building syndrome (SBS), indoor pollution is caused by:

(a) the methods and materials we use to build and take care of our homes and offices, and by

(b) the failure of most ventilation systems to filter out or dilute

these pollutants.

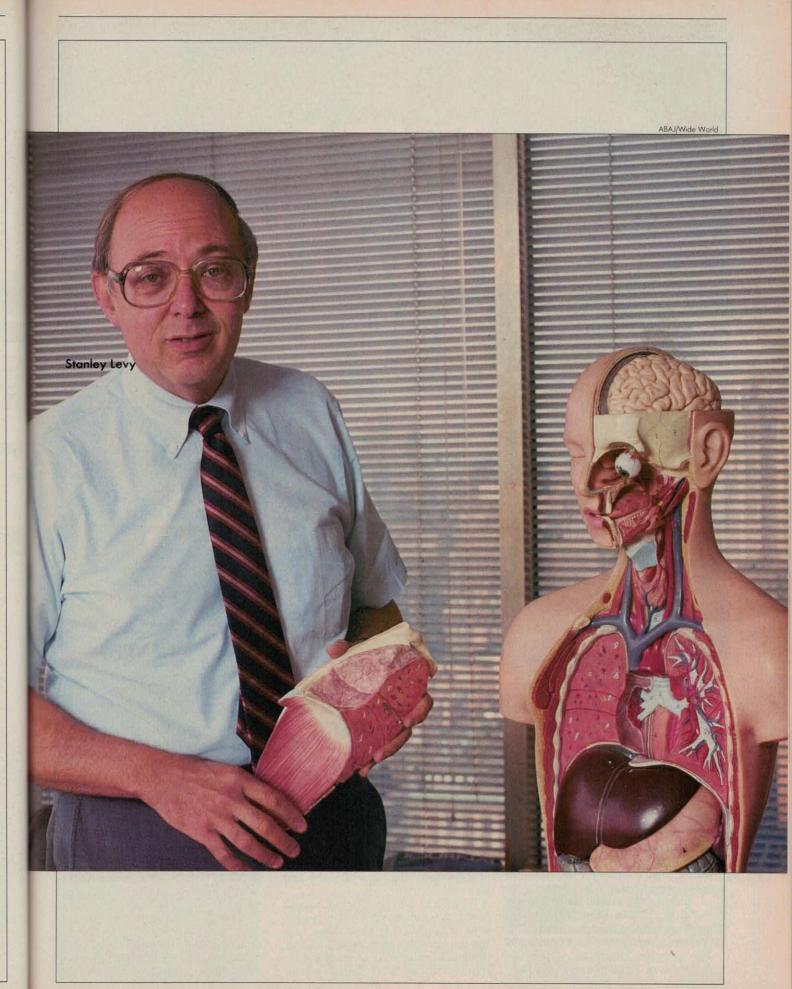
Some of the causes of SBS, such as asbestos or the termite insecticide chlordane, are well-known and restricted. Others, such as radon, are just now being recognized as a major health hazard.

FRONTIER LAW

"Indoor pollution presents attorneys and the legal system with a whole new field of law," says Stanley Levy, a New York attorney.

"People should get ready for a mountainous amount of litigation, because the courts will be a major source of change," says Robert Chestler, an attorney in Newark, N.J.

Until recently, SBS has been ignored by government, industry and employers alike. Office workers who



complained of recurrent colds were deemed sickly. Housewives with bouts of headaches on cleaning days

were called hysterics.

The fact that we can get sick from the gases given off by newly laid rugs, for example, or the chemicals used to make our photocopies and to clean our homes was given little credibility and even less attention.

But with the increasing threat of legal action against the manufacturers of these pollutants and the people who use and tolerate them, such as builders and employers, SBS has finally come to light as an acute legal problem. And with Americans spending abut 90 percent of their lives indoors, it is a pervasive health problem as well

SBS is caused by chemical compounds and materials that exist within a building or home. They include asbestos, formerly used in sound and fire insulation; formaldehyde, formerly used in office furniture and building materials; plasticizers, used in rugs and furniture; paint; wall and ceiling materials; cleaning agents, such as rug shampoos; Fiberglas; tobacco smoke; exhaled carbon dioxide; adhesives; caulking; insecticides; microbes that breed in dirty ventilation systems—the list is extensive.

The symptoms of SBS range from headache, nausea, eyestrain, dizziness, diarrhea, rashes, persistent coughing and insomnia, up to respiratory disorders, heart problems and cancer. Many of these symptoms are incorrectly attributed to stress or

germs

"We introduce thousands of manufactured substances into our workplaces and homes each year," says Ralph Goldman, former director of the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE). "Many of these substances are cutting into our longevity.

The EPA has identified 1,000 indoor pollutants, of which at least 60 are carcinogenic, notes William Ethier, legal counsel for the National Association of Home Builders.

Between 20 and 60 percent of the workforce in an average office building regularly complains of health problems caused by SBS, according to Jan Stolwijk, chairman of the Department of Epidemiology and Pub-

lic Health at Yale University School of Medicine. Millions more may suffer from indoor pollution irregularly.

Indoor air becomes a danger when building contaminants are not flushed out of a structure properly. Before the mid-1960s buildings had enough air leakage and fresh air brought in through ventilation systems to dilute the offensive pollu-

"But with the oil crisis of the 1970s, the cost of heating and cooling a building went sky-high," recalls Milton Meckler, president of The Meckler Group, an engineering firm in Encino, Calif. "There was tremen-

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dous pressure from market conditions, the Department of Energy, and Congress through tax incentives, for building owners to reduce indoor air ventilation as a means of reducing energy costs and dependency on foreign countries.'

THE INSULATION FACTOR

In response to the oil crisis, ASH-RAE reduced its recommended ventilation standards for engineers to about 15 percent fresh air and 85 percent recirculated indoor air. Very often, though, even these minimal standards were and are not met. In many buildings in this country, no fresh air at all is brought in. This is akin to a person breathing in and out of a balloon. After a while, the bad air takes its toll

Owners add insulation to cut heat loss, windows are caulked, sealed shut or built to stay shut. Some ventilation systems automatically halt air intake once the outdoor temperature requires the air conditioning or heat-

ing system to be turned on. The result: Pollutants that once were diluted and flushed out of a building now build up to dangerous levels.

"The level of indoor air contaminants today is often much higher than the level of outdoor air contaminants, even in major cities," warns

Meckler.

Even when there is an adequate intake of outdoor air, the circulation of that air may be stifled. During the life of an office, walls are torn down and rebuilt, vents blocked off by furniture and partitions erected. This can effectively keep fresh air out of many portions of an office.

In addition, says Stolwijk, about 30 percent of the average building's interior space is rebuilt each year. New, offensive building materials may be used and their pollutants circulated throughout the building.

As far as the federal government is concerned, SBS control consists of information gathering and dissemination, and not much of that. A bill proposed by Sen. George Mitchell, D-Maine, to allocate \$58 million for indoor-pollution research is pending.

But no agency has a mandate to develop indoor air-quality standards," notes Michael Dellarco, program manager for the EPA.

Because SBS is a ventilation problem, it is not surprising that the courts and municipalities have turned

to ASHRAE for guidance.

'ASHRAE is currently revising its standard for indoor air quality, says Stolwijk. "But private interest groups such as the tobacco and formaldehyde institutes threatened to sue ASHRAE if they were not included in designing these guidelines. So they were. The result is that the standard does not have as clear a direction as I'd like to see, although it is much better than those we now have. In truth, many buildings do not meet even the old, poorer recommendations

"The standard does recognize that responsibility passes from the engineer to the building's owner and operator once a building goes on line. This clarification will be useful to the courts.'

Notice of standards is often a critical issue. According to Levy, "As these suits become more common it will be easier to hold people liable because industry standards of care will become clearer. In ten years, for example, it will be hard for an architect to claim he is not aware of how to stop indoor pollution."

A ROGUES' GALLERY

Radon is an odorless gas. It is caused by the breakdown of uranium that occurs naturally in the soil under almost every home in the country, according to a recent EPA study. Radon attaches to dust. When the dust is inhaled, the radon breaks down and emits sub-atomic particles that can kill lung tissue and cause irreparable damage and death. It can become a legal problem for sellers of homes and low-rise buildings.

"EPA guidelines permit radon levels in homes and offices of 4 pico Curies per liter (pCi/1)—a unit of measurement of radiation—which gives the occupant a 1 to 5 percent chance of getting lung cancer," notes Richard Guimond, director of the EPA's radon division. "This is equivalent to smoking about half a pack of

cigarettes a day or getting 300 chest X-rays a year. It is downright hazardous."

Four to 10 million homes in the United States have radon levels above 4 pCi/1, adds Guimond, some as high as an incredible 5,000 pCi/1. In all, some 20,000 people die from lung cancer each year because of radon. That's more than 15 percent of all lung cancer deaths each year, says David Grimsrud, program leader for the indoor environment program at the University of California's Lawrence Berkeley Laboratory. Yet the cost of making a home radon-safe runs about \$500 for new homes, \$2,500 for existing homes.

According to a knowledgeable source at EPA, nothing causes more environmental risk to the general population than radon, including toxic waste sites, gasoline combustion and industrial emissions.

Yet no one is regulating indoor pollution. Although the EPA recently was authorized to receive \$5 million to study radon, "controlling radon does not come within our purview," the source said.

Asbestos is another recognized cause of lung impairment and cancer. Asbestos was used extensively as a sound insulation and fire retardant in almost every high-rise building erected from the 1950s through 1972, when it was banned.

Asbestos is released into the air from the natural deterioration of the adhesives that hold it in place, a process that can be speeded up by water damage, vandalism, and even maintenance personnel who must fold, staple and mutilate it to run cables through it.

"Once asbestos is released, the fibers continue to recirculate," says Kenneth Cohen, president of Consulting Health Services, San Diego. "In many buildings asbestos is used to cover every square foot of ceiling and floor space. It's a potentially lethal legacy that's close to impossible to clean up. We're dealing with a fuse that's 20 to 40 years long."

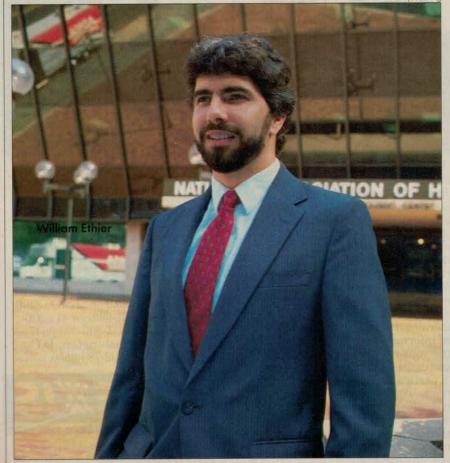
Asbestos is not limited to office and apartment buildings; many private homes have asbestos insulation around boilers and venting ducts.

Biological contamination is yet another problem. It is caused by the build-up of bacteria, viruses, molds and spores in heating and cooling systems. One well-known biological pollutant, Legionnaires Disease, breeds in the water cooling towers of most buildings in this country. From 40,000 to 100,000 cases a year go misdiagnosed. If mistreated, about 15 percent of the stricken will die.

As the problem of indoor pollution comes to light, attorneys and the courts increasingly are called into

"We've begun to see numerous lawsuits for indoor pollution," says Laurence Kirsch, a Washington, D.C., attorney and editor-in-chief of *The Indoor Pollution Law Report*. "But the lawsuits so far are only the tip of the iceberg.

"These lawsuits will proliferate because for some years indoor pollution was treated as a governmental 'hot potato.' No agency wanted to deal with the problem," Kirsch says. "Without any governmental plan to take the issue head-on, allegations of indoor-air injuries have been played out in lawsuits."







Among those who can expect to be sued are manufacturers, wholesalers, distributors, employers, sellers of homes, contractors, builders, brokers, architects, engineers, former and current building owners, as well as the federal and local governments.

They are likely to be sued directly and in third-party suits by building and home owners, operators, builders, unions, employees, lessees and others.

The primary causes of action for indoor pollution are:

1. Breach of contract and express warranties contained in written agreements, sales literature or samples.

2. Breach of implied warranties (including workmanship, fitness, quiet enjoyment and habitability).

3. Negligence.

4. Product strict liability.

5. Fraud and misrepresentation. Consumers may be afforded extra protection by state consumer protection and deceptive trade practices laws.

And, depending on the circumstances, there may be claims for nuisance, assault, infliction of emotional distress, conspiracy and the equitable remedies of restitution and estoppel.

Insurance claims will be a major source of litigation.

"This is going to be a blood bath," says Chestler. "As more and more people are sued, they will be turning to their insurers for compensation and help with the litigation. But the insurer will claim that, since its insured could foresee that he would be sued for causing indoor pollution, the insured is solely responsible, not the insurer."

So far the courts have been inclined to find that insurers have a fiduciary duty. According to Sheila Birnbaum, a New York attorney and member of the Tort and Insurance Section, "Many courts are ignoring the pollution exclusions that are included in many insurance policies."

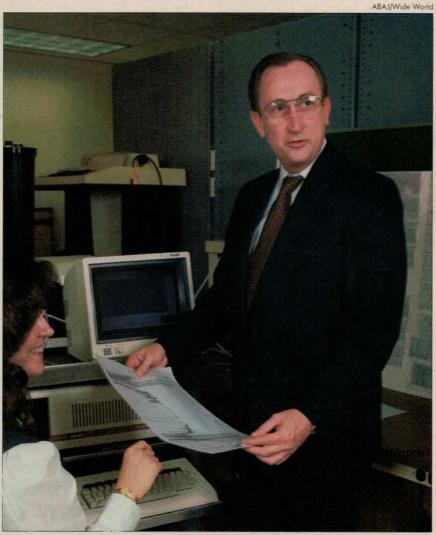
Employees will be another prime source of lawsuits. As the problem becomes more well-known, more employees will be filing disability and workers' compensation claims.

Lawsuits against employers are often forbidden by state workers' compensation laws, but employees and their attorneys are discovering new ways to get around that obstacle. Employees can sue building owners and operators, who in turn crossclaim or in other ways bring in the employers.

Employees are also claiming intentional conduct on the part of employers, which takes their claims outside the purview of the workers' compensation laws. An employee may only need to prove that the employer intended to expose the employee to dangerous elements, not necessarily that he intended to harm the employee.

Another new theory is the dualcapacity doctrine. If an employer is acting in some additional capacity, the employee can sue it in that capacity and not as an employer. For example, a bank employee could sue the building owner, which also happens to be his employer, for its role as a negligent building owner.

Other employee lawsuits include those for fraudulent concealment of a workplace hazard, injunctive relief (one employee suing the employer to prevent other employees from smoking on the job), and unjust dismissal.



Regardless of the theories of liability, an indoor pollution lawsuit often follows several tracks. First, an attorney must determine the nature of the injury. Interestingly, several

key cases permit recovery for the po-

In Brafford v. Susquehanna Corp., 586 F. Supp. 14 (D. Colo. 1984), a negligence case for radon exposure, the court denied a motion by the defendant to dismiss for lack of injury because of the home owner-plaintiff's increased risk of developing cancer. And in an unreported California case, a motion to dismiss for lack of injury was denied because of damage to the employee's immune system that could lead to leukemia.

In general, however, it is a safer case if the plaintiff currently suffers from an injury.

Second, make sure there is no

statute of limitations problem. In New York, for example, the statute starts to run when the plaintiff knew or should have discovered the effect of the toxic substance on his health. This gives a plaintiff more leeway than the pre-July 1986 statute, which started running at the time of the plaintiff's last exposure.

"The old law was a problem in cases such as asbestos, where it can take 30 years or more for the result of exposure to develop," says Levy. "Most states have statutes similar to New York's current law."

Third, decide whom to sue. This task is complicated by the long latency period between exposure and illness. The plaintiff or others in the building may recall the names of manufacturers. The owner-operator may be willing to come up with other names as a way to share liability.

Proving causation among manufacturers is important. It is difficult in many courts to make a successful claim of industry-wide liability for a building product. In the DES cases, where industry-wide liability was found and the judgment apportioned pro rata, there were only about 21 manufacturers. With asbestos, there are hundreds of manufacturers.

Obtain the records of the architects, contractors, subcontractors, engineers and builders to discover the products that were specified.

Fourth, file the lawsuit. With asbestos, almost all of the cases settle, but not until a month or two before trial. Levy says the formaldehyde defendants are tougher. In the past year about 50 percent of those cases have settled. Of those that go to trial, the plaintiff wins about half the time, according to Levy.

As for builders, owners and operators, their pockets are often not as deep as those of the manufacturers. "In an ideal world the best way for these potential defendants to avoid liability is to avoid offensive building and maintenance materials," says Levy. "This is hard to do.

"The second best way is to increase outdoor air flow, which may be costly. Where does this leave owners and operators? It leaves them very worried. Cost-effectiveness usually requires they take the risk that nothing will happen to the occupants."

But James Woods, senior engineering manager for Honeywell Inc., a Golden Valley, Minn., indoor airquality engineering firm, wonders whether cutting back on outdoor air flow is truly cost-effective.

"Improved environmental quality improves worker output," claims Woods. "A 25 percent ventilation cutback causes a loss of one day of work, per year, per worker, from illness or malaise. This comes out to about one minute a day. We calculate that bad air and bad lighting cause workers to lose far more than one minute a day in extra rest breaks alone."

Rest is a luxury that attorneys who practice in the new field of indoor pollution could well choose to ignore. For the litigation promises to be widespread and diverse. That translates into more work for lawyers and the courts, and a chance to make life safer and more pleasant for all of us.