Asbestos pollution found in homes, offices

By BOB ANDERSON
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While the danger of asbestos in schools has received national attention, the problem of asbestos in other government buildings, private companies and homes has received little publicity, according to experts who say it can be posing health threats in many cases.

Buildings constructed in the 1960's and 1970's are very likely to contain the material, says Bill Davis, who heads the state's toxic air pollutants program.

The danger that is posed by this asbestos varies greatly depending on how much was used, its accessibility and its condition.

Some buildings have air-conditioning systems that use the space above a suspended ceiling for the air return, which can be a particular problem in buildings where the beams have been coated with asbestos, says Dr. Victor Alexander of Ochsner Clinic in New Orleans.

The air-conditioning system can spread the invisible, cancer-causing fibers into work areas where employees breathe them unknowingly, he says.

He suggests that the owners or potential buyers of homes and other buildings investigate whether the buildings contain asbestos, how much of a danger it poses and the complexity of removing it.

Labels on tiles or wall boards can be taken to building supply stores for information, the manufacturers can be contacted, or, for about $100, a homeowner can get the material analyzed, Alexander says.

Alexander says if he was considering living in a house that had material he suspected was asbestos, he would go to the trouble of finding out.

In the case of office buildings, a clue can be the date of construction or remodeling. Buildings built between 1950 and 1978 are far more likely to contain asbestos, Alexander says.

The big worry, the doctor says, is sprayed-on insulation, from which asbestos tends to become airborne with comparative ease.

Surveys can be done to determine whether this is a problem. Alexander said he would first talk to the contractor to find out if there is asbestos in the building.

"I'd want to know if somebody used asbestos in my building," he said.

If there was, he would hire an industrial hygienist to determine if there is any danger. A basic survey for a large building can be done for around $1,000, he says.

Unfortunately, air sampling is often done at night or on weekends, which may not give a true picture of what is happening.

Comparative tests have shown a
Asbestos

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ten-fold difference in the amount of asbestos in the air between when a building is in use and when it is not, says Dr. Barbara Shane, an LSU professor of occupational medicine.

Movement, air flow, general vibration of people and business machines can make such a difference, she says. A survey by the American Federation of State, County and Municipal Employees found that asbestos was present in hospitals, prisons, mental health institutions, office buildings, libraries and almost every other category of building.

"Most of the asbestos present in public buildings is in bad shape — flaking, damaged physically or by water, drilled, cut or deteriorating," AFSCME says in a study on public health in public buildings.

Generally, workers are not given any special training when told to deal with a job involving asbestos and are not given proper masks to wear, the survey concluded.

Usually the asbestos was not properly disposed of and only in a very few cases was the asbestos dust vacuumed with a proper vacuum cleaner that will trap the tiny fibers involved, according to the AFSCME survey.

The survey also said "scandalous work procedures" are going on in auto maintenance shops across the country where asbestos levels are frequently blown off brake drums, "creating clouds of dust."

Proper disposal and the use of proper vacuums is rare and "cases of asbestosis, lung cancer and other lung problems are common."

Especially high concentrations of asbestos have been found in buildings sprayed with asbestos containing materials, a French study reports.

That study, published by the New York Academy of Sciences, included tests of the air inside 33 buildings. Of those, 23 had levels so high that the researchers termed them "polluted."

The researchers said that in all cases where asbestos had been sprayed in easily reachable areas the concentrations in the air were high enough to be considered polluted. Where the asbestos was not easily reached, 58 cases had levels high enough to be considered polluted.

"Outside of the occupational arena, we don't have a full understanding of the health effects, but we do know it is a potent cause of cancer and lung disease" Alexander says. Cancer can be caused by relatively small exposures.

As it becomes more obvious how widespread asbestos use was in schools and public buildings, "there is cause for concern," he adds.

One of the big problems about asbestos is that it is persistent. Once a fiber is released, it never degrades, says Alexander.

"It poses potential harm forever," according to the doctor. "It can do mischief long after its commercial use is over."

The peak of asbestos use was in the 60s and 70s, so it still may be years before the full health effects manifest themselves on the nation, says Alexander.

Another area in which workers are often exposed unknowingly is remodeling and demolition, according to Ross Vincent, head of the Ecology Center in New Orleans.

The care of materials being pulled out of a building is usually not very good, and when the material happens to be asbestos, there is usually a lot of asbestos dust around, says Alexander.

Davis says that even though state law requires contractors to report demolition and renovation jobs involving asbestos, only 10 or 15 percent do, indicating that most contractors may not realize what a serious danger they are dealing with and may not be taking proper precautions for their workers and bystanders.

The U.S. Environmental Protection Agency has published procedures for such projects, requiring workers to be isolated by plastic sheeting and requiring those inside to wear special masks and clothing that will not come home where it can expose others.

Alexander warns employers and homeowners who may do such work themselves that masks with special filters are needed because the most dangerous asbestos particles are so tiny. The kind of masks most people buy over the counter provide little protection and may give a false sense of security, he said.

A homeowner contemplating doing asbestos-containing projects at home should determine whether the material is, or is likely to be, asbestos, and if it is, should consider hiring a professional to remove it, especially if it is a large job, Alexander said.

If the homeowner decides to do a job involving asbestos-containing materials, he should wet the material first to reduce that dust, says Alexander.

Asbestos fibers should be used to keep it away from the rest of the house, he cautions. Old clothes should be worn that won't be washed with others and can be thrown away.

EPA also warns that dust should not be vacuumed after a job, unless the dust is left alone with a special asbestos filter. Otherwise, tiny asbestos fibers will be put back in the air when they can float for two days.

The dust does need to be carefully removed, EPA says, or it will be continually resuspended by other activities.

EPA suggests damp mopping and dusting. The plastic should be left in place for two days and more mopping and dusting done before it is removed.