FILE NAME: Newspaper & Magazine Articles (NMA)

DATE: 1978 Dec 3

DOC#: NMA131

DOCUMENT DESCRIPTION: Kansas City Star - Amazing Mineral Poses Deadly Threat - Part 1 Sidebar

Kansas City Star, 12-3-78

Amazing Mineral Poses Deadly Threat

Asbestos and its dangers have raised questions over the last few years. Here are a few facts about the insulator itself.

• **What is asbestos?**

It is a naturally formed mineral fiber. The world's great asbestos deposits were formed millions of years ago when gaps in the earth's crust filled with mineral water. In those gaps, several different kinds of minerals formed into fibers—not plant fiber, like cotton, but a mineral fiber formed from rock.

• **What good is it?**

It has many uses. Most important is that the fibers, when joined together in a kind of mineral textile, have enormous resistance to heat, acids, alkalines and other irritants. They are also very strong and can be cleaned by fire. It's said that the Emperor Charlemagne owned a tablecloth made of asbestos fibers, and he would amaze his dinner guests by throwing the cloth into a raging fire, then pulling it out unburned and spanking clean.

• **When did man start using it?**

The modern age of asbestos use began in 1879 when a huge deposit of the fibers was found in Quebec, Canada—a deposit 70 miles long and six miles wide. Asbestos mines also were opened in Vermont, Arizona, California, North Carolina and Oregon. The discovery of these North American deposits resulted in a surge of demand for the fibers and a flurry of new products utilizing them.

• **What kinds of products was it used in?**

Asbestos went into almost anything that needed insulation from heat or other irritants. It was used in building and ship insulation, coats for firefighters, floor and ceiling tiles, paper, brake linings, paints, adhesives, fabrics, theater curtains, awnings, conveyor belts, clutch facings, wallboard, gas burners, water pipes and furnaces.

• **Is it dangerous?**

Many scientists are convinced that it is, and they've convinced the government. The National Institute for Occupational Safety and Health (NIOSH) has determined that sufficient evidence is available to conclude there is a direct link between exposure to asbestos fibers and the development, 15 to 40 years later, of cancer and asbestosis.

Kansas City is believed to be relatively free of such pollution.

• **Is all asbestos harmful?**

Apparently not. Scientists believe that it's only harmful when the fibers are allowed to float into the air and into a person's lungs. It's still used in firefighting gear, but the fibers are safely sealed and can't escape into the atmosphere. It's also used in water pipes, but it is encased in concrete and government officials believe the use is safe.

• **Are any current uses of asbestos dangerous?**

Officials aren't sure, but they think so. There is certainly a danger if proper precautions aren't taken at a plant that is still using asbestos in its products. Also, the Asbestos Worker's Union estimates that 75 percent of the asbestos ever mined is still out in the world somewhere—in insulation in older buildings, in floor tiles, in the linings on your car's brakes.

• **Does any of this asbestos around pose a threat?**

It depends on how much there is and whether the fibers are able to come loose and float into the atmosphere. NIOSH has determined that there is no such thing as a "safe" level of asbestos, but the Occupational Safety and Health Administration is currently enforcing an asbestos standard that makes it illegal for a workers to be exposed to more than an average of 2 asbestos fibers smaller than 5 microns per cubic centimeter in an eight-hour period.

• **How can this old asbestos harm people?**

The asbestos fibers were put in place with some sort of adhesive. As the buildings or ships get old, the adhesive corrodes and the microscopic fibers are released into the atmosphere. Also, it's possible for fibers to be released when old buildings are torn down, although federal regulations specify how such demolition jobs should be completed to prevent such an occurrence.

• **Where is all this asbestos?**

In schools, hospitals, nursing homes, shops, factories, ships—in almost any type of building constructed before word got out that asbestos can be dangerous.

• **Is asbestos poisonous?**

No. The problem is that the asbestos fibers get into the lungs and digestive tract and just stay there forever. They are coarse and hard and they tear up human tissue. Asbestosis is nothing more than the result of having asbestos fibers rattling around a person's chest for many years, scarring the lung tissue. For some reason not totally clear to scientists, studies show that the presence of asbestos fibers also weakens the body to an extent that the person becomes much more susceptible to cancer of the lungs, stomach, colon, rectum and body lining. How significantly they increase the risk of cancer is a matter of some debate in the medical community.

• **How big are these fibers?**

Microscopic. The most dangerous of them is smaller across than 5 microns. They can't be seen except with the aid of a powerful electron microscope.

• **Is asbestos still being used?**

Yes, but not nearly as much as it was 20, 30 or 40 years ago. In 1964 the first of a series of medical reports came out linking asbestos to cancer. In the intervening years, industry has drawn back its use of most kinds of asbestos, particularly in its most dangerous applications. However it is still used in brake linings, friction points, paints and many other products. In all, asbestos is used in more than 3,500 products. Also, most American cities have varying amounts of "fiber pollution" just floating around.

• **What about people who have been exposed?**

People who believe they may have been exposed to asbestos fibers, even as long as 40 years ago, are advised to stop smoking immediately. There is overwhelming evidence that smokers who have been exposed to asbestos over a long period of time run a serious risk of lung cancer. Persons who believe they may have been exposed also are advised by medical and government experts to regularly visit their doctor and be checked for asbestosis or cancerous tumors. Specifically, the government is trying to track down the 3 million Americans who worked in shipyards during World War II. It is believed that the amount of asbestos to which they were exposed poses a serious threat to their lives.

• **How many Americans have been exposed to asbestos?**

It isn't known. The government estimates that as many as 11 million workers have been exposed—but that doesn't include the wives who washed their asbestos-coated clothes, their children, their neighbors or the people who used their products.

• **How serious is the threat of death?**

Secretary Joseph Califano of the U.S. Department of Health, Education and Welfare has estimated that more than 5.6 million Americans will die as a direct result of their exposure to asbestos fibers. There is some question about the validity of that figure, but there is little argument that the threat of death is serious enough to deserve some sort of action.