

Asbestos in Drinking Water

Nearly everyone is aware of the health hazards of inhaling asbestos fibers from ceiling tiles and insulation. But asbestos found in drinking water also can be hazardous to your health.

Asbestos, which is a fibrous mineral sometimes used for fireproofing, has long been used to strengthen the cement used to construct water pipes. It was commonly used for this purpose until recently. Asbestos also is naturally found in some types of rocks and therefore is often found in well water and in surface supplies near mining operations.

Although asbestos in drinking water is regulated today by the Environmental Protection Agency, it still can be found in drinking water across the United States, everywhere from big cities to smaller rural areas. Asbestos is known to cause several types of cancer, including mesothelioma and colon cancer. It can enter the human body by being inhaled and by being ingested through food or drink. Although it is more commonly associated with cancer when it is inhaled, asbestos is still dangerous when it is ingested because most inhaled asbestos is eventually coughed up and swallowed.

How Asbestos Enters Water

Asbestos enters water in several ways. Many water sources naturally contain asbestos, and standard filtration is not completely effective at removing it. The chemistry of the water also affects how much asbestos enters the water. The more corrosive the water, the more likely it is to liberate asbestos fibers.

As water travels through asbestos-cement pipes, corrosion can free small fibers from the walls of the water pipes, which are then carried by the water to your tap. When water municipalities detect asbestos in the water, they can alter the water chemistry accordingly to reduce corrosiveness, much as they do to prevent corrosion of lead.

Government Regulation

The EPA requires regular testing for the presence of asbestos fibers in tap water and has set an MCL (maximum contaminant level) of 7 million fibers longer than 10 microns for asbestos in drinking water.

Detecting Asbestos in Your Drinking Water

Asbestos cannot be detected by our senses. The best way to determine its presence is to ask the waterworks for a copy of their latest tests. If you have a private well, inquire at the state or county health department or environment office about local soils. Special tests for asbestos are unfortunately not worthwhile, because analysis costs several hundred dollars per sample. Thus, if there is any cause for suspicion, it is more cost effective to buy a filter than to conduct a test.

Protection Against Asbestos

The best way to protect yourself against asbestos is to remove it from the water. This can be done easily by a point-of-use (POU) water filtration system certified for Asbestos Reduction by NSF International under Standard No. 53: Health Effects. NSF International is an independent testing agency that sets product standards for manufacturers of POU systems. A POU system is a simple and cost-effective way to protect yourself from asbestos and many other water contaminants.

Typically the size of a household fire extinguisher, POU systems designed for residential use are installed under the kitchen sink and are plumbed from the cold water line. The filtered water is served through a dedicated faucet to dispense water for drinking and cooking. Commercial systems are larger in size due to their increased capacity, and are usually wall-mounted near the incoming water line.

Everpure manufactures drinking water systems for both home and commercial use that are NSF-Certified to remove at least 99 percent of asbestos fibers. Everpure's unique precoat filtration process reduces or removes off-tastes and odors, chlorine, dirt, rust, parasitic protozoan cysts such as Cryptosporidium and Giardia, and 99.9 percent of particles 1/2 micron and larger in size.

Everpure, Inc., a leading manufacturer of water filtration systems for residential and commercial use, offers a full line of systems to meet all water quality needs.

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