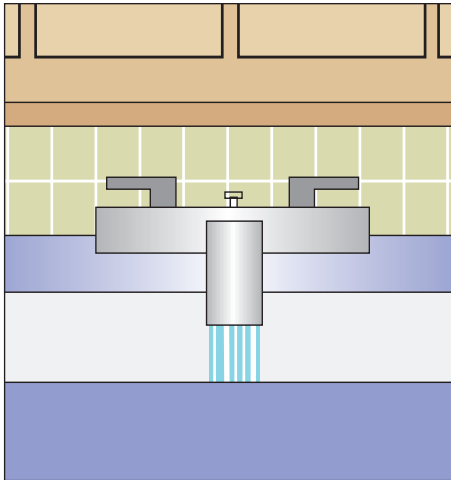




HOUSING & ENVIRONMENT

THE UNIVERSITY OF GEORGIA
COOPERATIVE EXTENSION
JORGE H. ATILES
PAUL F. VENDRELL
PHILIP M. HERRINGTON



YOUR HOUSEHOLD WATER QUALITY: MERCURY IN YOUR WATER

Mercury in your drinking water poses a threat to your health. The U.S. Environmental Protection Agency (EPA) has set the current standard for mercury in drinking water at 2 parts per billion (ppb).

The amount of mercury in public water systems is regulated according to EPA standards. If your water comes from a public system, it is routinely tested to ensure safe mercury levels. However, if you are concerned about mercury levels in your municipal water supply, you should request a consumer confidence report from your water provider.

Unlike users of public water systems, those who use private water supplies (such as wells, springs, and cisterns) are responsible for ensuring the quality of their own drinking water. Since private systems are more susceptible to mercury than public water systems, private well owners should take steps to guard their health. Measures include routine testing and wellhead maintenance and protection.

MERCURY OCCURRENCE

A naturally occurring element found in the earth's crust, mercury is released into the atmosphere by natural geological activity and by mining. Mercury is used in a number of commercial products, including thermostats, thermometers, fluorescent light bulbs, paint, pesticides, and batteries. Mercury-containing products and their manufacturing processes are possible sources of mercury contamination. Mercury can also be deposited from air pollution generated by the combustion of fossil fuels, cement manufacturing, and metal refining.

The natural release of mercury from the earth's crust can affect drinking water, but man-made causes for mercury contamination are far more common. Mercury that is spilled or improperly stored at industrial and hazardous waste sites can penetrate underground water supplies, thus contaminating private water sources. Even simple household products, such as outdoor paint and thermostats, can leak mercury into the environment if not properly discarded. Mercury can also be present at former agricultural sites where mercury-containing pesticides were once used.

POTENTIAL HEALTH CONCERNS

Over time, mercury can build up in the body until it adversely affects your health. The EPA has established that repeated exposure to mercury at levels above the Maximum Contaminant Level (MCL) of 2 ppb can cause damage to the brain and kidneys, depending on the type and amount of the mercury contamination. Mercury can also harm a developing fetus.

SHOULD I HAVE MY WATER TESTED FOR MERCURY?

People who use private water supplies are responsible for ensuring the quality of their own water. Private water sources should be tested for contamination at least once a year, but no single test can identify all possible contaminants. For more information about testing for contamination, contact your county extension agent or refer to the University of Georgia publication, *Testing for Water Quality*, available at your local extension office and online at: www.fcs.uga.edu/housing/water or <http://aesl.ces.uga.edu>. If an initial test shows that mercury is below the MCL, yearly follow-up testing is not recommended unless appreciable changes occur in routine testing results, water quality or the health of the residents.

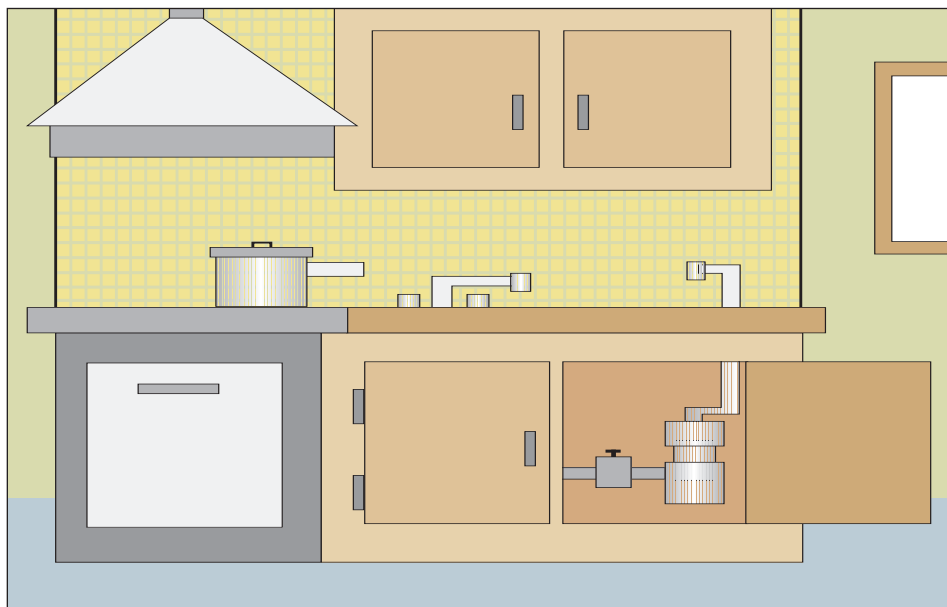
Should your water supply test higher than the recommended 2 ppb for mercury, consider installing a home water treatment system. You should not boil your water to combat mercury contamination, as this process can release mercury into the air.

A "point of use" filtration system can be used to remove mercury from drinking water.

IS MY HOME TREATMENT SYSTEM ELIMINATING MERCURY?

If you are concerned about mercury levels in your private water supply, you will need to test specifically for mercury. There are a number of treatment systems that are effective in removing mercury:

- reverse osmosis
- distillation
- copper-zinc filtration
- granular activated carbon



MORE ABOUT MERCURY

Testing your drinking water for mercury contamination is only one way to avoid exposure to mercury. Only purchase mercury-containing products when there is no other alternative. Digital thermostats and thermometers are an excellent substitute for the traditional mercury-containing variety. Low-mercury bulbs (with green end caps) are a better option than standard fluorescent bulbs. Be sure to dispose of mercury-containing items properly as hazardous waste. Tightly seal the item in a bag or container and label it MERCURY WASTE. Be aware that mercury spilled inside or outside the house can lead to exposure.

Certain cultural rituals and the consumption of various types of fish also present risks of mercury exposure. For more information about mercury, potential sources of mercury exposure, and the proper disposal of mercury-containing products, contact your county extension agent.

Sources:

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Reviewers: David Kissel, Penny Thompson, Carl Varnadoe, The University of Georgia; Jane Perry, Georgia Department of Human Resources; James Hairston, Auburn University; Thomas Miller, University of Maryland; Stephanie Clemens, Bryan Swistock, Pennsylvania State University

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J. Scott Angle, Dean and Director

Sharon Y. Nickols, Dean and Associate Director