Mercury

Recommended Safety Standards
NC groundwater: 0.001 mg/L
EPA drinking water: 0.002 mg/L

❖ What is mercury?

Mercury is a shiny, silver-white, odorless liquid. If heated, it is a colorless, odorless gas. Inorganic mercury (metallic mercury and inorganic mercury compounds) enters the air from mining ore deposits, burning coal and waste, and from manufacturing plants.

❖ How does mercury get into my well water?

It enters the water or soil from natural deposits, disposal of wastes, and volcanic activity. Mercury builds up in the tissues of fish. Larger and older fish tend to have the highest levels of mercury.

❖ What are the health effects of mercury?

The nervous system is very sensitive to all forms of mercury. Exposure to high levels of metallic, inorganic, or organic mercury can permanently damage the brain, kidneys, and developing fetus. Effects on brain functioning may result in irritability, shyness, tremors, changes in vision or hearing, and memory problems. Mercuric chloride has caused increases in several types of tumors in rats and mice, and methylmercury has caused kidney tumors in male mice. The EPA has determined that mercuric chloride and methylmercury are possible human carcinogens. For further reading on the health effects of mercury, please visit https://www.atsdr.cdc.gov/toxfaqs/TF.asp?id=113&tid=24#bookmark05.

❖ Who is most affected by mercury?

Very young children are more sensitive to mercury than adults. Mercury in the mother's body passes to the fetus and may accumulate there. Mercury can pass to a nursing infant through breast milk.

Clean Water for North Carolina

❖ How do I know if my well water is contaminated with mercury?

If your well was installed before July 2008, call your local environmental health office and ask for the well program or contact Clean Water for North Carolina if you are unsure of the appropriate point of contact for your area.

Still have questions or concerns?

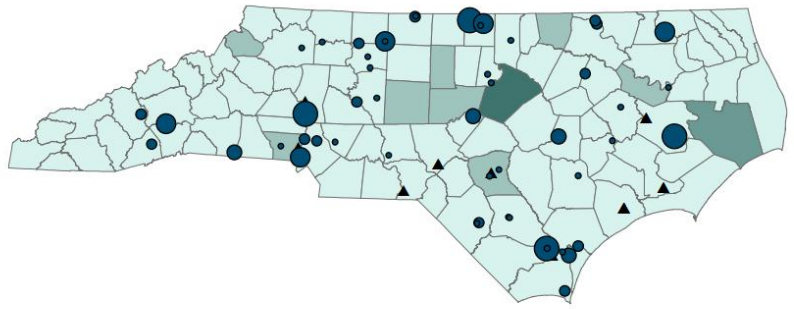
Call Clean Water for North Carolina.

Asheville office: 800-929-4480, amanda@cwfnc.org

Durham office: 919-401-9600, hope@cwfnc.org

Website: http://www.cwfnc.org

Concentration of Mercury Detected in NC Private Well Water (µg/L), Average 2010



Mercury reported in Toxics Release Inventory (lbs.)

- 0.1 - 39
- 40 - 123
- 124 - 212
- 213 - 577
- 578 - 1,033
- **National Priorities List sites reporting mercury**

Concentration of mercury detected in private wells (µg/L)

- 0.25
- 0.26 - 0.35
- 0.36 - 0.50
- 0.51 - 1.0
- 1.1 - 2.0

Mercury MCL: 2 µg/L

Mercury can be present in drinking water from the erosion of natural deposits, discharges from refineries and factories, and runoff from landfills and croplands. Metallic mercury is used to produce chlorine gas and caustic soda, and is also used in some thermometers, dental fillings, and batteries.[11,29]