

# Lead

**Recommended Safety Standards**  
NC groundwater: 0.015 mg/L  
EPA drinking water: 0.015 mg/L



## ❖ What is lead?

Lead is a naturally-occurring heavy metal that appears bluish-gray. It has been used widely in many industrial applications.

## ❖ How does lead get into my well water?

As you may know, lead commonly enters tap water from corrosion of old lead pipes or other plumbing materials. Lead can be found in all parts of our environment. Much of it comes from human activities including burning fossil fuels (coal combustion), mining, and manufacturing. If your well dates back before the 1980s, your well water is particularly likely to contain lead/lead solder in your plumbing.

## ❖ What are the health effects of lead?

Exposure to high lead levels can severely damage the brain and kidneys in adults or children and ultimately cause death. Smaller doses of lead exposure can increase blood pressure, particularly in middle-aged and older people, and can cause anemia. The Department of Health and Human Services (DHHS) has determined that lead and lead compounds are reasonably anticipated to be human carcinogens and the EPA has determined that lead is a probable human carcinogen. For further reading on the health effects of lead, please visit <https://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=22>.

## ❖ Who is most affected by lead?

The main target for lead toxicity is the nervous system, both in adults and children. Children are more vulnerable to lead poisoning than adults. A Childhood Lead Poisoning Prevention Program (CLPPP) is active in NC. There is no safe blood lead level in children due to its direct negative consequences on academic achievement, IQ, and ability to pay attention. Adults can experience kidney issues and high blood pressure. In particular, pregnant women are at higher risk of damage to their health and their unborn child's health if consuming lead in their drinking water.

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

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?

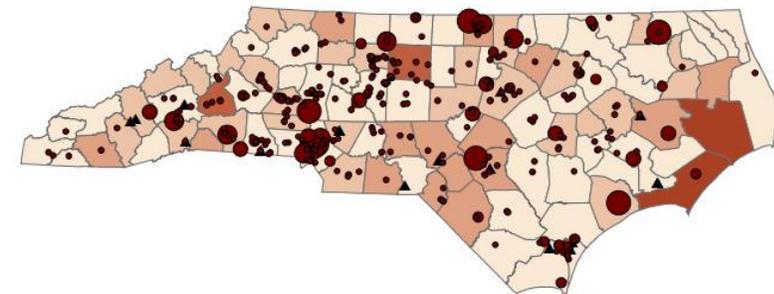
Call Clean Water for North Carolina.

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

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

Website: <http://www.cwfn.org>

Concentration of Lead Detected in NC Private Well Water ( $\mu\text{g/L}$ ), Average 2010



#### Lead reported in Toxics Release Inventory

- 0.1 - 1,802
- 1,803 - 7,975
- 7,976 - 19,707
- 19,708 - 29,783
- 29,784 - 125,023
- ▲ National Priorities List sites reporting lead

#### Concentration of lead detected in private wells ( $\mu\text{g/L}$ )

- 2.44 - 4.00
- 4.01 - 6.00
- 6.01 - 12.00
- 12.01 - 15.00
- 15.01 - 30.00
- 30.01 - 105.39

#### Lead MCL: 15 $\mu\text{g/L}$

Lead is naturally-occurring and may be present in drinking water from the erosion of natural deposits. Lead that is present in drinking water may also be a result of the corrosion of household plumbing fixtures and lead-soldered pipes. Lead is released to the environment from burning fossil fuels, mining, and manufacturing.<sup>11,27</sup>