Arsenic

- **What is arsenic?**

Arsenic has been a known human poison since ancient times and large oral doses can result in death. Most inorganic and organic arsenic compounds are white or colorless powders that do not evaporate. Arsenic has no smell, and most compounds have no special taste. Thus, you usually cannot tell if arsenic is present in your food, water, or air.

- **How does arsenic get into my well water?**

Many common arsenic compounds can dissolve in water. Arsenic cannot be destroyed in the environment. It can only change its form, or become attached to or separated from particles. Studies show that arsenic co-precipitates with a number of other metals in coal ash, namely iron (Fe). Common sources of arsenic from the environment are runoff from glass and electronics production wastes and orchards and natural deposit erosion.

- **What are the health effects of arsenic?**

If you swallow lower levels of inorganic arsenic, you may experience irritation of your stomach and intestines, with symptoms such as stomach ache, nausea, vomiting, and diarrhea. The Department of Health and Human Services (DHHS) has determined that inorganic arsenic is known to be a human carcinogen (a chemical that causes cancer). Long-term exposure above the MCL include circulatory system issues and skin damage. For further reading on the health effects of arsenic, please visit [https://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=3](https://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=3).

- **Who is most affected by arsenic?**

Children – possible lower IQ scores

Pregnant women – womb exposure can lead to young adult mortality; low levels in breast milk

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**Recommended Safety Standards**

NC groundwater: 0.010 mg/L  
EPA drinking water: 0.010 mg/L

- **How do I know if my well water is contaminated with arsenic?**

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](http://www.cwfnc.org)

Most arsenic in NC is naturally-occurring.