

Arsenic in New Jersey

General Information

Arsenic is a toxic element that can be found in rocks and soil that are present in New Jersey's (NJ) geology. Arsenic is a concern particularly in NJ's northern counties* because of its bedrock geology. Arsenic can enter groundwater through rocks and soil and drinking water wells can become contaminated with arsenic that is used by families for drinking and cooking.

What is the regulatory standard for arsenic in drinking water?

NJ has a maximum contaminant level (MCL) of 5 micrograms per liter (abbreviated as "µg/L") for arsenic. If arsenic levels are greater than 5 µg/L, we encourage the use of bottled or properly treated water for all drinking and cooking and encourage the installation of a treatment system.

The maximum contaminant level goal (MCLG) for arsenic is 0 µg/L. The MCLG is a non-enforceable public health goal and represents the maximum level of contaminant in drinking water at which no health effects would occur.

Did You Know?

Effective 2006, the NJ arsenic standard was lowered from 50 µg/L to 5 µg/L and the federal standard was reduced to 10 µg/L. NJ's MCL is the most protective in the country.

What are the health effects of arsenic?

Drinking water with high levels of arsenic can increase the risk for several types of cancer including liver, bladder, kidney, lung and skin cancer. Other health problems include heart disease, diabetes, immune effects, and respiratory problems.

Young children and fetuses at greatest risk

- Arsenic crosses the placenta and may affect fetal development.
- Fetuses, infants and children may be more sensitive to the effects of arsenic than adults.
- In utero and early life arsenic exposure has been linked to adverse health effects later in life.
- There is some evidence that long-term exposure to arsenic in children may result in lower IQ scores.

How do you know if there is arsenic in your drinking water?

Arsenic is odorless and tasteless in water and can only be detected through laboratory testing. Individuals on public water are not responsible for water testing while those with a private well are responsible.

• Public water

Your public water utility is required to test for arsenic in their water supply. If levels are found above the NJ drinking water standard of 5 µg/L, your water utility is required to treat and remove the arsenic concentration below this health-based level.

• Private wells

Unlike public water, private well owners are responsible for testing their own well water for arsenic and other contaminants. Additionally, **NJ Private Well Testing Act (NJ PWTA)** is a law which requires private wells to be tested at real estate transfer and every 5 years by properties which are leased. NJ PWTA requires arsenic testing in the twelve northern NJ counties:

***Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Morris, Passaic, Somerset, Sussex, Union, Warren**

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How can I test my well water for arsenic?

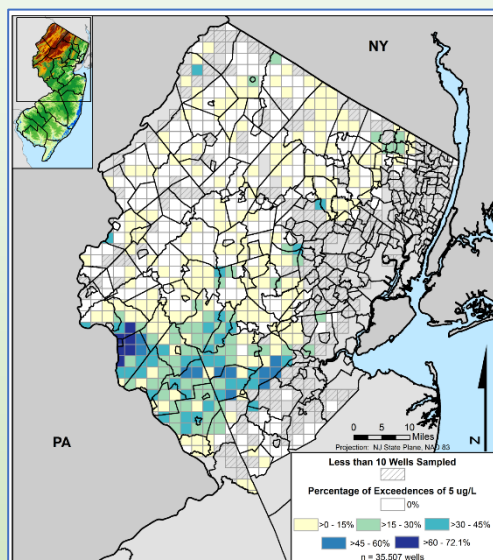
Private well owners should test their well every 5 years for arsenic, even if not required by NJ PWTA.

NJDEP maintains a list of certified laboratories you can find online at www13.state.nj.us/DataMiner

- >Select 'Certified Laboratories'
- >Scroll to and select 'Arsenic'

NJ PWTA Available Testing Data

Certified laboratories which test private well water through the NJ PWTA are required to submit the data electronically to the NJDEP. The data is kept strictly confidential and no names or addresses are disclosed. Instead the NJDEP presents the data in maps at 2 by 2-mile grids that are shared publicly to promote testing and to educate the public regarding risk. Maps are available at: bit.ly/NJPWTAmaps



This map highlight areas in northern NJ, particularly Hunterdon, Mercer, Middlesex and Somerset Counties which have private wells that may be at high risk for arsenic contamination.

Did You Know?

Naturally-occurring arsenic is the second most detected contaminant in private wells in NJ. Almost 9% of all wells tested in northern NJ have arsenic above the NJ drinking water arsenic standard of 5 µg/L.

Can I treat my private well water for arsenic?

Effective treatment devices will reduce contaminant levels in your drinking water. The NJDEP tested and evaluated treatment systems to determine the most efficient, cost-effective and user-friendly treatment devices. They recommend a whole-house (point-of-entry) granular ferric adsorption system. A good description and explanation of this treatment recommendation is available in a NJDEP Information Circular:

NJDEP – Arsenic Water Treatment for Residential Wells in New Jersey

https://www.nj.gov/dep/pwta/Arsenic_Treatment.pdf

Recommendation for treatment devices can vary depending on your water quality. Local water treatment companies may be a good resource. You should get quotes and information from several companies.

What is the cost of treatment?

The cost of arsenic treatment for a private well can vary and may range between \$1,500 to \$3,000 for a whole-house system. Installing treatment at a single tap (point-of-use) is much cheaper (between \$500 to \$1,000) but the drinking water at other water taps in your house will still be contaminated.

Water treatment financing (with 0% interest) is available from the New Jersey Housing and Mortgage Finance Agency (800-654-6873) to private well owners whose drinking water exceeds an MCL, including arsenic. Loan proceeds can be used to pay for appropriate water treatment. Information on this program can be found at <http://tinyurl.com/NJWaterLoans>

Resources

- **NJ Arsenic Awareness Initiative:** You can also find more information about arsenic testing and treatment in northern New Jersey, including treatment FAQ and videos at this NJ focused arsenic awareness website: <http://tinyurl.com/arsenichelp>
- Your **Local health department** may be a good resource for local arsenic contamination concerns. To find your local health department you can visit this link: <https://www.state.nj.us/health/lh/community/index.shtml>

Updated September 2019