



Questions & Answers

Arsenic in drinking water

What is arsenic and where does it come from?

Arsenic occurs naturally in the earth's crust. Most arsenic in drinking water comes from natural rock formations. As water flows through these formations, it can dissolve arsenic and carry it into underground aquifers, streams, or rivers that may become drinking water supplies. Arsenic also can come from human activities, such as mining or smelting ores that contain arsenic. In the past, it was used in commercial wood preservatives and agricultural chemicals.

How can I find out if there's arsenic in my drinking water supply?

Arsenic is tasteless and odorless. Public water systems with at least 25 customers routinely test for arsenic in their water supplies. Your utility issues an annual Consumer Confidence Report that will tell you how much arsenic is in your drinking water. Smaller water systems and private well owners should have their water tested for arsenic by a state-certified lab. We recommend testing twice, preferably in summer and winter to account for seasonal fluctuations. Contact our regional office or your local health department for a list of labs equipped to test for arsenic.

Does arsenic affect human health?

Yes. Low levels of arsenic in drinking water, soil, air, and food pose a slight health risk. Like most contaminants, the more you are exposed over time, the greater the risk of experiencing health effects. Arsenic health effects include diseases that can affect the cardiovascular system, kidneys, skin, nervous system, or lead to various forms of cancer. If you are worried about long-term consumption of water with high levels of arsenic, consult your physician. There are tests that can help your doctor determine how much arsenic is in your body.

Getting arsenic on the skin when bathing or washing is not a major health risk, unless the water has arsenic concentrations exceeding 500 parts per billion (ppb). We strongly recommend having no contact with water that contains more than 500 ppb of arsenic.

What is the maximum contaminant level for arsenic in drinking water?

The drinking water standard for arsenic is 10 ppb.

Do some parts of Washington have more arsenic than others do?

Yes. Elevated levels of naturally occurring arsenic have been found in parts of Washington. Scientists attribute these higher arsenic levels to the geologic composition of these locations.

Should I boil my water if it has high levels of arsenic?

No. Boiling water does not remove arsenic.



HELPING TO ENSURE SAFE AND RELIABLE DRINKING WATER

Can I remove arsenic from my drinking water?

Yes. Several treatment methods will effectively remove arsenic from drinking water. Public water systems rely on consulting engineers to determine the best treatment method to use.

If your water comes from a privately owned well, you should select a treatment method certified by a recognized third-party testing organization. These third-party organizations list only treatment methods that meet strict testing protocols established by the American National Standards Institute (ANSI) and NSF International. NSF International is a not-for-profit public health and safety organization that tests and certifies home water-treatment products. Remember, even these products may not be effective in all cases. We recommend that you continue to have your water tested after installing this equipment and that you keep the equipment well maintained.

For organizations that can provide lists of certified treatment units, visit us online at http://www.doh.wa.gov/ehp/dw/our_main_pages/dwlinks.htm

Does bottled water contain contaminants such as arsenic?

The contaminants in bottled water must be below the maximum level set by the U.S. Food and Drug Administration or the state. Consumers can call the bottler directly to find out what contaminants are present in a specific brand. You can also get information about contaminants in bottled water from NSF International at

http://www.nsf.org/consumer/bottled_water/index.asp?program=BottledWat

For more information

Call the Office of Drinking Water at (800) 521-0323 or the:

- Southwest Region, Tumwater (360) 236-3030
- Northwest Region, Kent (253) 395-6750
- Eastern Region, Spokane (509) 329-2100

Visit the following websites:

- Department of Health Office of Drinking Water: <http://www.doh.wa.gov/ehp/dw>
- U.S. Environmental Protection Agency:
<http://water.epa.gov/lawsregs/rulesregs/sdwa/arsenic/index.cfm>
- Agency for Toxic Substances and Disease Registry:
<http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=19&tid=3>
- American National Standards Institute: <http://www.ansi.org>
- NSF International: <http://www.nsf.org/>

