



Did you know . . .

While many systems claim to meet NSF/ANSI standards or to use NSF certified components, only those that bear the NSF certification mark are truly verified to comply with all material, labeling and performance requirements of these standards by NSF.



What You Should Know About Arsenic in Drinking Water

Arsenic is a naturally occurring element that can be found in both public and private groundwater supplies. It can also be introduced into water through industrial or agricultural practices. Current U.S. drinking water standards limit arsenic to no more than .010 mg/L.

When present in drinking water, arsenic can be either in the pentavalent form (also known as arsenic 5 or arsenate) or the trivalent form (also known as arsenic 3 or arsenite). Although both arsenic types are potentially harmful to human health, trivalent arsenic is considered more harmful to people than pentavalent arsenic.

Because arsenic doesn't impart any taste or odor to water, it can only be detected through laboratory testing. While public water utilities monitor for arsenic regularly, consumers with private water sources will need to have a sample of their well water tested by a state-licensed laboratory if they suspect arsenic might be present.

If you discover that arsenic is present in your water, there are some steps you can take to reduce this contaminant from your home's drinking water supply. Trivalent arsenic is the most difficult type of arsenic to reduce, and most water treatment technologies are only certified to reduce arsenic 5. For this reason, if you believe arsenic is present in your water in the trivalent form, it may be necessary to add chlorine to the water. In addition to disinfecting water, chlorine will "oxidize" or convert trivalent arsenic to the pentavalent form,

which can then be removed through filters or reverse osmosis systems certified for this purpose.

In water supplies treated with chlorine, most likely any detectable arsenic will be present in the pentavalent form. However, treatment with chloramines (combined chlorine) is not usually sufficient to ensure arsenic 3 is completely converted to arsenic 5. If you receive drinking water from a public or private water utility, contact them to determine whether the local water supply is being treated with chloramines or chlorine.

Many water treatment systems are [NSF certified](#) for arsenic reduction. Certified systems are tested under laboratory conditions to determine their effectiveness at reducing arsenic 5 or total arsenic (which includes both arsenic forms) up to either 0.30 mg/L or 0.050 mg/L. In

both cases, systems must be able to reduce arsenic to less than 0.010 mg/L in the treated water. Because actual performance of a system can vary depending on specific water quality conditions at the installation site, consumers should have samples of the treated water tested for total arsenic to ensure the system is effectively reducing their arsenic concentration.

To ensure ongoing performance, be sure to change the filter component(s) of the system as instructed by the manufacturer, and always use the manufacturer's replacement components recommended for your specific system.

