Napa County
Drinking Water Fact Sheet: Arsenic

What is arsenic? Arsenic is an element found naturally in air, water, soil, rocks and minerals, food and even in living organisms. Arsenic compounds are used in industry, most commonly as wood preservative, but also as components of pesticides, paints, dyes, and semiconductors.

How does arsenic end up in groundwater? In Napa County, natural erosion of rocks and minerals is believed to be the primary source of the arsenic found in drinking water supplies and in soil. Arsenic-containing rocks can release arsenic into the groundwater, especially in low-oxygen conditions and/or low acid conditions. Arsenic can also find its way into ground water when grape stakes, treated with arsenic, are burned.

How much arsenic is too much? The California Department of Public Health (CDPH) sets Maximum Contaminant Levels (MCLs) for contaminants, based on health risks, available technology and economics. As science reveals new information, MCLs are adjusted accordingly.

The previous MCL was set for arsenic at 50 ug/l because of the risk associated with skin cancers. However, many scientific studies have concluded that exposure to arsenic through drinking water is associated with risks of cancer of the lungs, bladder, liver and kidneys and recent studies have also been associated with other serious health effects. Some of these effects may take years to develop. Because of this information, the State of California has reduced the limit to 10 ug/l.

What should you do? Don't panic. Remember that arsenic presents a relatively low risk to you and your family, but if arsenic is found in your water, it is a problem worth addressing.

If your water is provided by a public agency, the water is already required to meet the MCLs set by CDPH.

If your drinking water source is a private well, especially a well extracting hot groundwater in the Calistoga area or possibly in the deeper aquifers in the Sarco-Tulocay Basin, it is a good idea to have your water tested for arsenic.

Napa County currently does not test water for arsenic; however, State Certified Laboratories in the area do provide this service. If you choose to test your well, call the lab directly for instructions on how to collect a sample and submit it for testing. Once the water is tested, the Division of Environmental Health can help interpret the results and water treatment companies can review treatment options with you. Several point-of-use filters can be installed and if maintained correctly, can reliably remove arsenic from your drinking water.