

## **Arsenic and Drinking Water**

Arsenic is a naturally occurring element that can be found in the ground and in groundwater (well water). Elevated levels of arsenic in well water can pose a health risk. The Environmental Protection Agency has set a maximum contaminant level (MCL) of 0.010 milligrams per liter (mg/L) for arsenic in drinking water. Arsenic concentrations below the MCL are considered safe. Below are some frequently asked question about arsenic.

### ***What are the health risks associated with exposure to arsenic in drinking water?***

Several factors influence the health risks of drinking water containing arsenic. They include the amount of arsenic in the water, the amount of water you drink, how long your exposure is, and the type of arsenic in the water (inorganic or organic). Other factors to be considered include the general health, age, lifestyle, and nutritional status of the person consuming the water. Studies have shown that long term exposure to high levels (greater than 0.30 mg/L) can cause thickening and discoloration of the skin which could lead to skin cancers, stomach pain, nausea, vomiting, diarrhea, and numbness in the hands and feet.

### ***How can I tell if I have arsenic in my well water?***

Humans cannot see, smell, or taste arsenic. The only way to know how much arsenic is in your well water is to test. The Macomb County Health Department can collect a water sample and measure the arsenic levels in your drinking water. There is a fee associated with this analysis.

### ***Can I do anything to remove the arsenic from my well water?***

If another source of water is not available for use (i.e. municipal water or bottled water), you may want to consider treatment to remove the arsenic. There are several types of treatment systems that work with varying degrees of success in reducing or removing arsenic from the water. As with any treatment device, its' success or failure is dependent on the unit receiving regular maintenance. For more information about arsenic treatment devices, contact NSF International at [www.nsf.org](http://www.nsf.org) or call 877-867-3435.

### ***Where can I get more information?***

You can contact the Macomb County Environmental Health Division at 586-469-5236, Monday through Friday, 8:30 a.m. - 5:00 p.m. Additional information can also be found at the following web sites:

U.S. Environmental Protection Agency - [www.epa.gov/safewater/arsenic.html](http://www.epa.gov/safewater/arsenic.html)

Michigan Department of Environmental Quality - [http://www.michigan.gov/deq/0,1607,+7-135-3313\\_3675\\_3692-66053--,00.html](http://www.michigan.gov/deq/0,1607,+7-135-3313_3675_3692-66053--,00.html) or call 517-241-1381