

## **Branch-Hillsdale-St. Joseph Community Health Agency**

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**FOR IMMEDIATE RELEASE**

### **Arsenic and Drinking Water – Know the Risks**

**Coldwater, MI.** Arsenic is known for being a deadly element and fears of contaminated water supplies have circulated for years. But, in many parts of Michigan, low levels of arsenic are commonplace and it has been found in local well water. Knowing what arsenic is and when to be concerned about its presence is fundamental to understanding if your health is at risk, and the Branch-Hillsdale-St. Joseph Community Health Agency is here to assist you with knowing the facts.

Arsenic is a natural occurring element that can be found in rocks and soil and is used for a variety of purposes within industry and agriculture. It is also a byproduct of copper smelting, mining and coal burning. Arsenic can get into our water supply when groundwater flows through mineral deposits. It can also enter in through industrial or agricultural pollution.

Arsenic has no smell or taste in drinking water. You need to test your well water to find out if arsenic is present. According to the EPA, if your water tests above the maximum contaminant level of 10 micrograms/liter ( $\mu\text{g/L}$ ), you should not use your well water for drinking or cooking.

According to Rebecca Burns, Environmental Health Director for the tri-county health department, “Branch, Hillsdale and St. Joseph Counties have all had reports of well water samples that exceed the 10 micrograms/liter. Hillsdale County has had reports of well water that tested up to the 20 micrograms/liter; while Branch and St. Joseph Counties have had reports that tested up to 50 micrograms/liter. This does not

mean that all county well water is contaminated, but rather that there are pockets of groundwater that have concentrations well beyond acceptable levels defined by the EPA.”

If your household water supply is provided by a well, the health department is recommending that you test your water to assure its safety. Testing is easy to do, but there is an \$18 fee associated with testing. Sample bottles must be obtained from the county health department office. Ms. Burns adds “The health department can assist you with understanding how to collect the water and provide you a bottle for submitting your water sample. The actual testing is done at the State of Michigan Drinking Water Laboratory, who receives the fee.”

Once you have obtained your water sample, mail it to the State Lab, per the instructions. You can expect results back in 10 business days. If your water tests are above the recommended EPA maximum level for contamination, you should contact your local health department to discuss options that have worked in your area. There are several options available to reduce exposure to arsenic in drinking water, including:

- Connecting the home to a public (municipal) water supply (if available).
- Replacing a water well or modifying a well to draw water from an aquifer with lower levels of arsenic. Be sure to contact your local health department **before** replacing or modifying your water well and ask if this is a viable option.
- Using bottled water for drinking and cooking purposes.
- Treating drinking water with point-of-use reverse osmosis (RO) or arsenic adsorption media cartridge filters. This may be the most effective and practical treatment method for residential use. Point-of-entry treatment which treats all water entering the home is also an option. Before installing a water treatment system, owners should carefully research the treatment system’s effectiveness for arsenic reduction and its operational and maintenance requirements. Water softeners and activated carbon filters do not reduce arsenic levels effectively. A treatment unit certified by NSF International for arsenic reduction and installed to their specifications is recommended. Information is available at <http://www.nsf.org>.

**Known Health Effects:** Based on studies in other countries, long term exposure to high arsenic levels in drinking water has caused the following health effects:

- Thickening and discoloration of the skin. Sometimes these changes can lead to skin cancers. These cancers can be cured if discovered early.
- Stomach pain, nausea, vomiting and diarrhea.
- Numbness in the hands and feet.

Some of these problems can be seen with other illnesses, which makes it difficult for a doctor to detect arsenic poisoning. If you, or your family, are worried about health problems caused by arsenic, see your doctor. You should also have your well water tested. To learn more about arsenic or about other environmental issues, please visit our website at [www.bhsj.org](http://www.bhsj.org) or call your local office.

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