

IS ARSENIC IN WELLS A PROBLEM IN SHEBOYGAN COUNTY?

by Kevin Struck, Growth Management Educator

An article in the January 24, 2016 issue of *The Sheboygan Press* entitled “Wisconsin an ‘Arsenic Hot Spot’” reported that arsenic has been found at levels above the health standard in 51 of the state’s 72 counties. The WDNR has identified Winnebago and Outagamie Counties as arsenic advisory areas and has implemented stricter regulations for testing and well construction in those two counties.

Prolonged arsenic exposure has been linked to a variety of cancers, nerve damage, diabetes, and cardiovascular disease. Even low-level (5 ppb) exposure during childhood, if chronic, can potentially lead to decreased intelligence.

In Wisconsin, arsenic is typically released in groundwater when naturally occurring sulfide minerals in certain bedrock aquifers break down by coming into contact with oxygen, which can happen during well drilling or well maintenance—or when the water table is drawn down. This may occur during droughts, the operation of high-capacity wells, or a high density of new development dependent on private wells.



Since you cannot taste, see, or smell the presence of arsenic in water, testing is critical. There is no requirement for private well owners to test for arsenic, however, except in certain situations during a home sale. This is one of the reasons UW-Extension Sheboygan County has promoted one or two voluntary community well water testing programs in Sheboygan County annually over the last few years. Further, Sheboygan County’s Planning & Conservation Department has subsidized the cost of the arsenic test to make it more affordable.

Although arsenic levels above the 10 parts per billion (ppb) health standard have been found in 11% of the wells tested under these local programs, keep in mind that levels as high as 1,650 ppb have been found in the Fox Valley and 1,000 ppb in Kewaunee County. (The highest ever found in northeastern Wisconsin is 15,000 ppb.)

Wells Tested for Arsenic

TOWNSHIP	YEAR	WELLS TESTED	# ABOVE 10 PPB HEALTH STANDARD
Herman / Mosel	2015	53	5
Sheboygan Falls / Lyndon	2014	64	12
Wilson	2013	80	4
Lima	2012	13	1
Plymouth	2011	29	4

Note:
None of these test results exceeded 50 ppb of arsenic.

Residents with well water exceeding 50 ppb of arsenic are eligible for up to \$9,000 through a WDNR grant program to drill a new well. Other options include switching to municipal water if possible, purchasing bottled water, or installing an in-home water treatment system.