

SPECIAL HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

CRYPTOSPORIDIUM & RADON

Cryptosporidium is a microscopic protozoan that, when ingested, can cause diarrhea, fever and other gastrointestinal symptoms. Scientific knowledge about Cryptosporidium shows that it is naturally present in surface water throughout the world. Surface water supplies are especially vulnerable if they receive runoff or pollution from human or animal waste. The Cudahy Water Utility tests untreated Lake Michigan water monthly for Cryptosporidium using current test methods. In 2005, monthly samples of untreated Lake Michigan water were collected and tested for Cryptosporidium. No evidence of cryptosporidium was found.

Our systems did not monitor the water for Radon in 2014. We were not required by state/federal regulations to do so.

Dear Water Utility Customer:

This 2014 Water Quality Report describes the City of Cudahy's drinking water source, drinking water quality, and programs that are in place to protect the high quality of our water.

This report complies with federal regulations included in the 1996 Amendments to the Safe Drinking Water Act which require all water utilities to provide this information annually. The Cudahy Water Utility supported passage of the 1996 Amendments and believes that the information in this Water Quality Report will provide a valuable service to all of its customers.

The information contained in this report is also routinely submitted to the Wisconsin Department of Natural Resources and to the United States Environmental Protection Agency. Both of these agencies monitor the Utility's compliance with the many regulations that have been established to assure the community of safe drinking water.

Sincerely,
John Hohenfeldt, Mayor
Frank Miller, Water Superintendent

THE CUDAHY WATER UTILITY

The Cudahy Water Utility was established in 1947. It has a 6.0 million-gallon per day conventional surface water treatment plant that uses Lake Michigan as a water source. The treatment plant uses a combination of chlorine disinfection; coagulation, flocculation, sedimentation, filtration and UV disinfection to provide clean safe water to the City of Cudahy.

Utility Governance

The Water Utility is overseen by a 5 person Water Utility Commission appointed by the Mayor for 5 year terms. The Utility Commission meets the 3rd Thursday of each month in City Hall at 5050 S. Lake Drive. Meeting agendas are available at www.cudahy-wi.gov.

Utility Contacts:

Superintendent Frank Miller – 414-769-2234
millerf@ci.cudahy.wi.us
Utility Billing – 414-769-2237
Water Treatment Plant- Water Quality questions and emergencies – 414-769-2235

Cudahy Water Utility
Water Quality Report



LEAD IN DRINKING WATER

Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. EPA estimates that drinking water can make up 20% or more of a person's total exposure to lead.

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome-plated brass faucets, and in some cases, pipes made of lead that connect your house to the water main (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0%.

When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

STEPS TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER

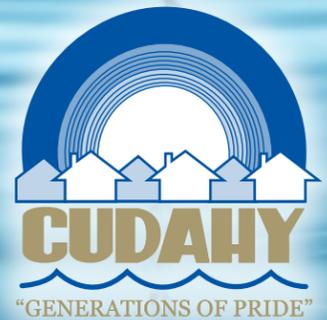
Despite our best efforts to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high. To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water. For more information on having your water tested, please call (414) 769-2234.

Definitions

1. Maximum contaminant level goal (MCLG) – The level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
2. Maximum contaminant level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology.
3. Treatment technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
4. Action Level (AL) – The concentration of a contaminant which, if present, triggers a treatment or other requirement which a water system must follow.
5. PPM – Part per million
6. PPB – Part per billion
7. Trihalomethanes – by-products of the disinfection process; chloroform, bromochloromethane, dibromochloromethane, and bromoform.
8. NTU – Nephelometric Turbidity Units, a unit to measure turbidity or suspended solids in water.
9. Pci/L – Picocuries per liter is a measure of radioactivity in water. A picocurie is 10 to the power of -12 curies.
10. Inorganic Contaminants – Chemical substances of mineral origin such as lead or copper.
11. Organic Contaminants – Naturally occurring OR synthetic substances containing mainly carbon, hydrogen, nitrogen and oxygen. This includes most pesticides and industrial chemicals.

The test results in this report show that there are low levels of some contaminants found in Cudahy water. Is this safe?

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. As water travels over the surface of the land, or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. The presence of these contaminants does not necessarily indicate a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking water Hotline (800-426-4791)



Unregulated Contaminant Monitoring (UCMR3)

The 1996 Safe Drinking Water Act (SDWA) amendments require that once every five years EPA issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems (PWSs). The first Unregulated Contaminant Monitoring Rule (UCMR 1) was published on September 17, 1999, the second (UCMR 2) was published on January 4, 2007 and the third (UCMR 3) was published on May 2, 2012. This monitoring provides a basis for future regulatory actions to protect public health.

In this report you will see several compounds that were tested for in 2014. At this time the USEPA does not know if those compounds are harmful or at what level they may pose a health risk. If you would like more information on UCMR3 please visit the EPA web site at: <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/index.cfm>



WATER QUALITY TABLE

Inorganic Contaminants

Contaminant (Units)	Mcl	Mclg	Level Found	Range	Sample Date	Violation	Source
Antimony Total (ppb)	6	6	.2	.2	-	No	Discharge from petroleum refineries, fire retardants, ceramics, electronics, solder
Arsenic (ppb)	10	N/A	1.0	1.0	-	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	.021	.021	-	No	Discharge of drilling wastes; Discharges from metal refiners; Erosion of natural deposits.
Copper (ppm)	AL=1.3	1.3	.14	0 of 30 results were above the action level	2014	No	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Fluoride (ppm)	4	4	.7	.7	-	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (ppb)	AL=15	0	12	0 of 30 results were above the action level	2014	*	Corrosion of household plumbing systems; Erosions of natural deposits.
Nickel (ppb)	100	0	.83	.83	-	No	N/A
Nitrate (NO3-N) (ppm)	10	10	.35	.35	-	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium (ppm)	N/A	N/A	12	12	-	No	N/A

* Systems exceeding a lead and/or copper action level must take actions to reduce lead and/or copper in the drinking water. The lead and copper values represent the 90th percentile of all compliance samples collected. If you want information on the NUMBER of sites or the actions taken to reduce these levels, please contact your water supply operator.

Radioactive Contaminants

Contaminant (Units)	Mcl	Mclg	Level Found	Violation	Sample Date	Source
Radium (226 & 228)	5	0	1.5	No	03/03/09	Erosion of natural deposits.

Unregulated Contaminants

Contaminant (Units)	Mcl	Mclg	Level Found	Range	Violation	Source
Sulfate (ppm)	N/A	N/A	23.0	24.0	No	N/A

Volatile Organic Contaminants

Contaminant (Units)	Mcl	Mclg	Level Found	Range	Sample Date (if prior to 2011)	Violation	Typical Source of Contaminant
P-Dichlorobenzene (ppb)	75	75	.3	.3		No	Discharge from industrial chemical factories

Other Contaminants

Contaminant (Units)	Site	Mcl	Mclg	Level Found	Range	Violation	Source
Coliforms	D10	0	0	0	-	No	Naturally Present
HAA5(ppb)	D10	60	60	6.0	3-11	No	By-product of chlorination
TTHM (ppb)	D20	80	0	20.0	10.4-28.4	No	By-product of chlorination
HAA5 (ppb)	D20	60	60	7.0	1-11	No	By-product of chlorination
TTHM (ppb)	D20	80	0	19.6	9.1-31.6	No	By-product of chlorination

Radium & Arsenic

Recently the media has been reporting that some water in Wisconsin is contaminated with radium and arsenic. Both of these elements are naturally occurring in soil and rock formations throughout Southeastern Wisconsin. In high levels these elements may pose a health hazard. Radium and arsenic are found in well water, and are not found in significant levels in surface water.

SINCE THE CUDAHY WATER UTILITY USES LAKE MICHIGAN AS IT'S SOURCE WATER ARSENIC AND RADIUM POSE NO HEALTH HAZARD IN CUDAHY WATER.

Following are some water quality issues common to many public water supplies:

• **Yellow/Brown/Dirty Discoloration** – Brown or dirty colored water occurs when harmless silt particles, which typically settle along the bottom of water mains, are stirred up by high flows of water. This can occur when a fire hydrant is used, when a main breaks or when the system is flushed annually. Run the cold water tap for 3-5 minutes to determine if the water in the distribution main is cleared up. If not, avoid using the water for a few hours (to give crews a chance to finish their work) and try it again. If the water is still discolored, contact the Water Utility at 769-2235.

• **White Discoloration** – Cloudy or milky white water is usually caused by an abundance of small air bubbles in the water. The bubbles are harmless and enter the water when air is drawn into the transmission system that carries water through the distribution system. This is very common in the winter with colder water. A freshly filled glass of cold water should clear after a few minutes. When the water clears, people usually report a thin film on the top, an odor and a metallic taste. The thin film is the micro particles in the water. The odor is the gases stripped from the water. The metallic taste is thought to be the bubbles' effect in your mouth.

• **Sand and Grit** – Sandy particles and grit occur in the home plumbing system as a result of rust particles from steel pipe and mineral scale sloughing off the pipe wall. A common knife blade will

crush rust or mineral scale, while true sand will resist crushing. This grit may cause premature failure of faucets. It will also affect the operation of faucet aerators. Check your washing machine if it is filling too slowly, replace the screen filters where the hot and cold water hoses enter the back of the machine.

• **Pink Stains** – Bright pink stains on fixtures, drainboard surfaces and pet dishes are caused by the interaction of oxygen in the air with dissolved rust, resulting in an iron hydroxide precipitate on the surfaces. Run the cold water for 15-60 seconds or until the water temperature changes. Keep the surface dry to help reduce this problem. Pale pink or black-gray stains around bathtubs or showers may also be a form of mildew.

• **Chlorine Taste/Odor** – The City adds chlorine to its water supply to kill bacteria and other microbes. Some chlorine taste/odor may be detected by sensitive individuals at different times of the year. Residual levels of chlorine in the late spring and summer may appear to be higher due to the combination of chlorine with naturally occurring plant materials. These levels will appear to be lower and chlorine odor and taste should be less in the fall. Drinking water may be more appealing if it is left in the refrigerator overnight to minimize the chlorine taste and odor.