



# VILLAGE OF BARTLETT



## 2010 Annual Water-Quality Report

By law the Village of Bartlett must provide information to its residents regarding water quality. This is an annual report on the quality of water delivered in 2010 by the Village of Bartlett. The data is from 2010, unless otherwise noted. This report meets the federal Safe Drinking Water Act (SDWA) requirements for “Consumer Confidence Reports” and contains information on the source of Bartlett’s water, its constituents and the health risks associated with any contaminants. Safe water is vital to the community, and the Village tests and monitors its water quality on a continual basis. Please read this report carefully. If you have questions or would like information about the next opportunity for public participation in decisions about Bartlett’s drinking water, call the number listed at the end of this report, on page 14.

**The Village of Bartlett’s drinking water meets or surpasses all federal and state drinking water standards.**

### OVERVIEW

In 2010 the Village water system pumped 1,195,797,200 gallons to its consumers. Village treatment processes include chlorination for disinfection, fluoridation for dental care, and filtration for iron removal. Bartlett’s water is tested continuously by certified laboratories to ensure it meets drinking water standards set by the Illinois Environmental Protection Agency.

### WATER SOURCE

The Village of Bartlett has two sources of water that are blended together in its distribution system. One source is the seven drilled wells located throughout town. The second source is water purchased from the City of Elgin. Elgin blends well water with water drawn from the Fox River, which is treated at its plant and pumped to Bartlett as a “finished” water.

The Illinois EPA has completed Source-Water Assessment for both Bartlett and Elgin water sources. They have determined that Bartlett’s source water is not susceptible to contamination. Since Elgin uses a surface water source, the Illinois EPA considers it susceptible to potential pollution problems. Therefore Elgin uses the mandatory treatment processes of coagulation, sedimentation, filtration and disinfection. Detailed copies of these assessments are available by calling Water Supervisor Tom Ruzicka, Village of Bartlett Public Works, 630-837-0811.

### AN EXPLANATION OF THE WATER-QUALITY DATA TABLE

The tables show the results of Bartlett’s and Elgin’s water-quality analyses. The data presented in this report is from the most recent testing done in accordance with regulations. Every regulated contaminant that the Village detects in the water, even in the most minute traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining Bartlett’s findings and a key to units of measurement.

The definitions of MCL and MCLG are important.

**Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible, using the best available treatment technology.

**Maximum Contaminant Level Goal or MCLG:** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Action Level or AL:** The concentration of contaminant which, if exceeded, triggers treatment or other requirement that a water system must follow.

**Treatment Technique or TT:** A required process intended to reduce the level of a contaminant in drinking water.

### KEY TO TABLE

NTU = Nephelometric Turbidity Units  
mrem/year = millirems per year (a measure of radiation absorbed by the body)

pCi/L = picocuries per liter (a measure of radioactivity)  
ppm = parts per million or milligrams per liter (mg/l)  
ppb = parts per billion or micrograms per liter (ug/l)

# Bartlett Water

SUBSTANCE	DATE TESTED	UNIT	MCL	MCLG	HIGHEST DETECTED LEVEL	RANGE OF DETECTED LEVELS	MAJOR SOURCES	VIOLATION
<b>MICROBIAL SUBSTANCES</b>								
Total Coliform Bacteria	2010	#pos/mo	>1	0	0.0	0.0-0.0	Naturally present in the environment	NO
<b>INORGANIC SUBSTANCES</b>								
Lead	2008	ppb	AL=15	0	7.44	1>AL	Corrosion of household plumbing systems; Erosion of natural deposits	NO
Copper	2008	ppm	AL=1.3		0.17	0>AL	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	NO
Fluoride	2009	ppm	4	4	2.96	1.09-2.96	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	NO
Sodium	2009	ppm	n/a	n/a	36.60	19.9-36.6	Erosion of naturally occurring deposits; Used as a water softener	NO
Iron	2009	ppm	1.0	0	0.245	0-0.245	Erosion of naturally occurring deposits	NO
Barium	2010	ppm	2	2	2.0	0-2.98	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	NO
Nitrate-Nitrite	2010	ppm	10	10	0.433	0-0.433	Runoff from fertilizer; Leaching from septic tanks; Erosion of natural deposits	NO
<b>RADIOACTIVE SUBSTANCES</b>								
Alpha emitters	2010	pCi/L	15	0	12.0	0-13.6	Erosion of natural deposits	NO
Radium 226, 228	2010	pCi/L	5	0	9.0	0-16.1	Erosion of natural deposits	YES
Uranium	2010	ppb	30	0	0.1639	0.1639-0.1639	Erosion of natural deposits	NO
<b>DISINFECTION BY-PRODUCTS</b>								
TTHMs (Total Trihalomethanes)	2010	ppb	*80	0	37.0	26.2-42.5	By-product of drinking water chlorination	NO
Total Haloacetic Acids	2010	ppb	*60	0	22.0	12.5-41.7	By-product of drinking water chlorination	NO
Chlorine	2010	ppm	4	4	2.10	1.988-2.16	Added for disinfection	NO
<b>Additional Table Footnotes. See bottom of Elgin data table</b>								

2010 VIOLATION TABLE			
Violation Type	Violation Begin	Violation End	Explanation
Combined Radium 226/228 - some people who drink water containing radium 226 or 228 in excess of the MCL for many years may have an increased risk of getting cancer			
MCL. Average	1-1-2010	3-31-2010	Water sample showed that the amount of this contaminant in Bartlett drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL. Average	4-1-2010	6-30-2010	
MCL. Average	7-1-2010	9-30-2010	
MCL. Average	10-1-2010	12-31-2010	
Public Notification was made each quarter for this violation. A current notification for the Combined Radium 226/228 violation is included in this report, which explains what the Village is doing to correct the problem.			

# Elgin Water

SUBSTANCE	DATE TESTED	UNIT	MCL	MCLG	HIGHEST DETECTED LEVEL	RANGE OF DETECTED LEVELS	MAJOR SOURCES	VIOLATION
<b>MICROBIAL SUBSTANCES</b>								
Turbidity (% 0.3NTU)	2010	NTU	TT	n/a	100%	100%	Soil Runoff	NO
Turbidity (NTU)	2010	NTU	1NTU	n/a	0.23	n/a	Soil Runoff	NO
<b>INORGANIC SUBSTANCES</b>								
Barium	2010	ppm	2	2	0.18	0.052-0.18	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	NO
Copper	2010	ppm	AL=1.3	1.3	0.077	0>AL	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	NO
Selenium	2010	ppb	50	50	3.0	2.7-2.8	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.	NO
Fluoride	2010	ppm	4	4	0.9	0.85-0.86	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	NO
Iron	2010	ppm	1.0	0	0.10	0-0.062	Erosion of natural deposits	NO
Nitrate-Nitrite	2010	ppm	10	10	2.0	0.76-1.60	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	NO
Lead	2010	ppb	AL=15	0	8.19	0>AL	Corrosion of household plumbing systems; Erosion of natural deposits	NO
Sodium	2010	ppm	n/a	n/a	43	40-43	Erosion of naturally occurring deposits; Used as a water softener	NO
<b>DISINFECTION BY-PRODUCTS</b>								
TTHMs (Total Trihalomethanes)	2010	ppb	*80	n/a	53.0	22-86	By-product of drinking water chlorination	NO
Total Haloacetic Acids	2010	ppb	*60	n/a	27.0	10-55	By-product of drinking water chlorination	NO
Chloramines	2010	ppm	4	4	2.70	2.3925-2.8374	Water additive used to control microbes	NO
<b>RADIOACTIVE SUBSTANCES</b>								
Radium 226, 228	2008	pCi/L	5	0	0.2	0.1-0.2	Erosion of natural deposits	NO

## Water-Quality Table Footnotes

- Turbidity:** Turbidity is a measure of the cloudiness of the water. It is a good indicator of water quality and the effectiveness of the filtration system and disinfectants.
- Iron:** Iron is not federally regulated. The state has set an MCL of 1000 ppb. Excessive iron levels may cause staining of laundry and plumbing fixtures, but is not a health hazard.
- Sodium:** There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If the level is greater than 20 ppm and you are on a sodium restricted diet, you should consult a physician.

\*MCL Statement: The maximum contaminant level (MCL) for TTHM and HAA5 is 80 ppm and 60 ppm respectively and is currently only applicable to surface water supplies that serve 10,000 or more people. These MCLs became effective 01/01/2004 for supplies and surface supplies serving less than 10,000 people. Until 01/01/2004, surface water supplies serving less than 10,000 people, any size water supply that purchases from a surface water source, and groundwater supplies serving more than 10,000 were under a state imposed TTHM MCL of 100 ppm. Some people who drink water containing trihalomethanes in excess of the MCL over many years experience problems with their livers, kidneys or central nervous systems and may have an increased risk of getting cancer.

## ADDITIONAL HEALTH INFORMATION

To ensure that tap water is safe to drink, the EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water. Drinking water, including bottled water, may reasonably expect to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses 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).

Sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of 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 human activity. Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) Pesticides and herbicides, which may come from a variety of sources, such as agriculture, stormwater runoff, and residential uses.

(D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

(E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than is the general population. Immuno-compromised 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 about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

### CONCERNING LEAD IN OUR WATER

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

### OTHER MONITORING

In addition to the testing Bartlett is required to perform, the Village water system voluntarily tests for many additional substances and microscopic organisms to make certain its water is safe and of high quality. If you are interested in a more detailed report or have any additional questions, please contact Water Supervisor Tom Ruzicka, Village of Bartlett Public Works, 630-837-0811.

