



WATER QUALITY Consumer Confidence REPORT- 2018



City of Dubuque Water Department
563.589.4291
www.cityofdubuque.org/water

2017

Drinking Water Summary

The City of Dubuque is responsible for providing a safe and reliable water supply meeting the requirements established by state and federal government agencies. The City of Dubuque treats and distributes on average between 6.5 to 7.2 million gallons per day to over 23,500 customers through more than 320 miles of water main piping. Dubuque's Water Department is proud of the high quality of our water supply, which meets all state and federal drinking water quality requirements.

The City's Water Department is pleased to report that Dubuque had no drinking water violations in 2017.

Our water quality testing results includes testing for regulated contaminants that were at detectable levels in the distributed water. The contaminants or analytes are reported in comparison to a maximum contaminant level (MCL) established by the U.S. Environmental Protection Agency's (EPA) Safe Drinking Water Act. Testing is not required for each parameter every year.

For questions regarding this information, please contact City of Dubuque Water Department Manager Denise Ihrig, P.E., at 563-589-4291 or Water Distribution Supervisor Brant Schueller at 563-589-4303.

Key Capital Improvement Project:

ROOSEVELT STREET TOWER PROJECT

The City of Dubuque's water distribution system covers several square miles of varying elevations. In areas without pumping stations, elevated towers, or distribution system valving, the resulting water pressures can range from below 35 pounds per square inch (psi) to over 100 psi. Therefore, it is necessary to either boost the water to increase the pressure or to reduce the pressure to prevent damage to pipelines. Over the course of several evaluations of the City's distribution system, one of the City's eight (8) pressure zones, Zone 2, was identified as needing attention to address low pressure and increase operational and emergency flows.

In 2017, the City initiated a notable capital project to improve the water pressure and flows in Zone 2, known locally as the Roosevelt Street and Peru Road area. The project involves the removal of the existing water tower in Eagle Point Park and installation of a new water tower where it can provide the necessary pressure and flows for our community. The construction of a new 1.25 million gallon elevated tower located near Roosevelt Street and Peru Road is in the process of being funded and designed, with construction set to start in 2019. The completed project will provide the necessary pressures and flows for daily operations and emergency demands.



LEAD & COPPER WATER SAMPLING PROGRAM

Dubuque's Lead and Copper Sampling Program is an annual program mandated by the U.S. Environmental Protection Agency (EPA) and the Iowa Department of Natural Resources (DNR). It requires the City to reach out to residents that may have lead or copper water service lines and sample the water at no charge to the property owner. The City's Water Department provides property owners with a one-liter bottle to fill with tap water, along with a simple instruction form. After the bottle is filled, the customer may leave it on their door step or porch the following morning or call the Water Department to have it collected. Following analysis, results are sent to the property owner. Any residents whose samples are over the "Action Level" for lead or copper are contacted within 24 hours and options on how to reduce lead and/or copper in the water are discussed. The City of Dubuque completed Lead and Copper sampling of 61 Dubuque properties in 2017.

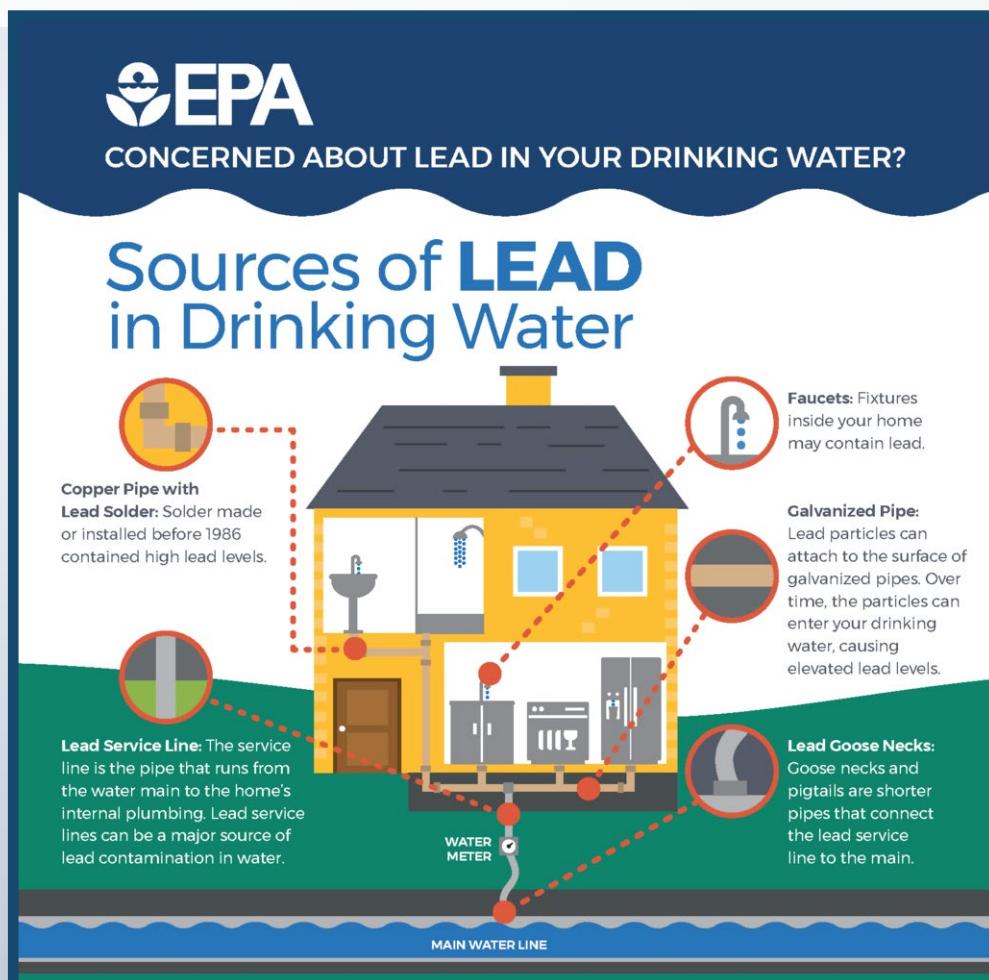
The Lead and Copper Rule as published and enforced by the EPA will be changing in coming years, making the program more prominent within communities to aid in the reduction of lead service lines and reduce the possible exposure to lead through drinking water.

If you are interested in being part of the annual Lead and Copper Sampling Program, please contact the City of Dubuque Water Department for further information.

Lead and Copper Reporting

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Dubuque Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA at www.epa.gov/safewater/lead.



General Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Some people may be more vulnerable to contaminants in drinking water than 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 about drinking water from their health care providers.

More information about contaminants or potential health effects and EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants can be obtained by submitting a form on the Environmental Protection Agency's website at www.epa.gov/ground-water-and-drinking-water

Table Definitions

Action Level (AL) - The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

LRAA - Locational Running Annual Average

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set a close to the MCLGs as feasible using the best available technology.

Maximum Contaminant Level Goal (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.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health.

N/A - Not Applicable

ND - Not Detected

ppb - parts per billion

ppm - parts per million

RAA - Running Annual Average

SGL - Single Sample Result

Source Water Information

The City of Dubuque obtains water from the Apple-Plum Alluvial aquifer and the Jordan (Cambrian-Ordovician) aquifer. Every aquifer has a degree of susceptibility to contamination because of the characteristics of the aquifer, overlying materials, and human activity. Susceptibility to contamination generally increases with shallower aquifers, increasing permeability of the aquifer and overlying material, nearby development or agricultural activity, and abandoned or poorly maintained wells. The Apple-Plum Alluvial aquifer is considered to be highly susceptible to contamination, while the Cambrian-Ordovician aquifer has a low degree of susceptibility. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources, and is available on our website, www.cityofdubuque.org/water. You may also call 563-589-4291 to obtain a copy of the report.



DISTRIBUTION SYSTEM REPORT											
ANALYTE	MCL - (MCLG)	COMPLIANCE		RANGE		DATE	VIOLATION	TYPICAL SOURCE			
		TYPE	VALUE	MIN	MAX						
Total Trihalomethanes (ppb)	80 (N/A)	LRAA	55.00	55	55	9/30/2017	NO	By-products of drinking water chlorination			
Total Haloacetic Acids (ppb)	60 (N/A)	LRAA	8.00	8	8	9/30/2017	NO	By-products of drinking water chlorination			
Total Chlorine (ppm)	MRDL = 4.0 (MRDLG = 4.0)	RAA	1.1	0.40	1.62	12/31/2017	NO	Water additive used to control microbes			
FINISHED WATER TAP REPORT											
ANALYTE	MCL MCLG	COMPLIANCE		RANGE		DATE	VIOLATION	TYPICAL SOURCE			
		TYPE	VALUE	MIN	MAX						
Nitrate [as N] (ppm)	10	10	SGL	0.64	N/A	N/A	2017	NO	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.		
Fluoride (ppm)	4	4	MCL	0.66	0.39	1.06	2017	NO	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories		
Sodium (ppm)	N/A	N/A	SGL	16	N/A	N/A	07/21/2015	NO	Erosion of natural deposits; Added to water during treatment process		
LEAD AND COPPER REPORT											
ANALYTE	AL	MCLG	SAMPLES		COMPLIANCE		DETECT		DATE	VIOLATION	TYPICAL SOURCE
			TOTAL	EXCEED	TYPE	VALUE	MIN.	MAX.			
Lead (ppb)	15	0	61	1	90th	4.00	ND	27	2017	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Copper (ppm)	1.3	1.3	61	0	90th	0.04	ND	0.08	2017	NO	Corrosion of household plumbing systems; Erosion of natural deposits

Note: Contaminants with dates, indicate results from the most recent testing done in accordance with regulations.

INTRODUCING WATERSMART

A free online water management tool and payment portal for City of Dubuque water customers.

WaterSmart, Dubuque's new and improved, free water management tool and online payment portal, helps you track your home's water use and spending with an easy-to-use web and mobile portal.

www.cityofdubuque.org/watersmart

