

# 2020 Annual Drinking Water Quality Report for Kenilworth, IL

## **Is my water safe?**

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your drinking water comes from, what it contains, how it compares to standards set by regulatory agencies and the efforts made by Kenilworth Public Works Department to provide safe drinking water. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies. For more information regarding this report, please contact Patrick Brennan at 847-251-1666.

## **Do I need to take special precautions?**

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. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

## **Where does my water come from?**

Your water comes from Lake Michigan. Prior to delivery, it is treated at the treatment plant at the lakefront using the unit processes of coagulation, flocculation, sedimentation and filtration. In the treatment process, suspended matter (turbidity) is removed and the water is disinfected using chlorine to kill harmful bacteria and viruses that may be present. The water leaving the treatment plant meets all State and Federal drinking water standards.

## **Source water assessment and its availability**

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings (See: "How Can I get Involved?" below). This source water assessment has been completed by the Illinois EPA. To view a summary version of the completed Source Water Assessment, including Importance of Source Water, Susceptibility to Contamination Determination, and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgibin/wp/swap-fact-sheets.pl>

Susceptibility is defined as the likelihood for the source water of a public water system to be contaminated at concentrations that would pose a concern. The Illinois EPA considers all surface water sources of community water supplies to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intakes with no protection, only dilution. This is the reason for mandatory treatment of all surface water supplies in Illinois. Kenilworth's intake is located far enough offshore that shoreline point sources of contamination are not considered a factor on water quality. However, at certain times of the year the potential for contamination exists due to wet weather flows from the North Shore Channel. If the currents are flowing in a Northerly direction, contaminants from these flows could migrate to Kenilworth's intake and compromise water quality. Correlation between Northbrook's rainfall and Kenilworth's coliform data, combined with North Shore Channel discharge dates, show the potential effect of these flows on Kenilworth's water quality. In addition, the proximity to a major shipping lane adds to the susceptibility should there be a spill near the intake.

Water supply officials from Kenilworth are active members of the West Shore Water Producers Association. Coordination regarding water quality situations (i.e., spills, tanker leaks, exotic species, etc.) is frequently discussed at the Association's quarterly meetings. Lake Michigan, as well as all the Great Lakes, has many different organizations and associations that are currently working to improve overall water quality. Since the predominant land use within Illinois' boundary of the Lake Michigan watershed is urban, most Lake Michigan watershed protection activities are aimed at protecting the source of our drinking water from urban contaminants.

### **Why are there contaminants in my drinking water?**

Drinking water, including bottled water, may reasonably be expected 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 (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;

- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and
- 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### **Cross Connection Control Survey**

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

### **How can I get involved?**

Decisions affecting the Kenilworth water system are made by the Village Board. Village Board meetings are typically held the third Monday of every month at the Village Hall, 419 Richmond Rd., Kenilworth, IL. Residents are encouraged to attend.

### **For more information please contact:**

Contact Name: Patrick Brennan

Address: 419 Richmond Rd. Kenilworth, IL 60043

Phone: 847-251-1666

E-Mail: [info@vok.org](mailto:info@vok.org)

## **Water Quality Data Table**

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions on the last page of this report.

# Consumer Confidence Report

## Annual Drinking Water Quality Report

KENILWORTH

IL0311500

Annual Water Quality Report for the period of January 1 to December 31, 2020

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by KENILWORTH is Purchased Surface Water

For more information regarding this report contact:

Name \_\_\_\_\_

Phone \_\_\_\_\_

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Source of Drinking Water
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.
Contaminants that may be present in source water include: <ul style="list-style-type: none"><li>- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.</li><li>- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.</li><li>- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.</li><li>- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.</li><li>- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.</li></ul>

Drinking water, including bottled water, may reasonably be expected 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 EPAs Safe Drinking Water Hotline at (800) 426-4791.
In order to ensure that tap water is safe to drink, 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 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. 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).
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. We 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 Safe Drinking Water Hotline or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a> .



Source Water Information

Source Water Name

Type of Water

Report Status

Location

CC01-METERED CONNECTION W/ WILMETTE

SW

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## Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at \_\_\_\_\_. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

Source of Water: WILMETTEThe Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intakes with no protection only dilution, which is the reason for mandatory treatment for all surface water supplies in Illinois. A workgroup from the Great Lakes States was organized to develop a protocol for assessing the Great Lakes. The mission of the Great Lakes Protocol was to develop a consistent procedure allowing the flexibility necessary to properly conduct source water assessments of the Great Lakes as a drinking water source. This flexibility takes into account the variability of these sources and site-specific concerns for determination of source sensitivity and susceptibility (Illinois EPA, 1999). Sensitivity is defined as the intrinsic ability of surface water to be isolated from contaminants by the physical attributes of the hydrologic or geologic setting. With this in mind, the degree of sensitivity becomes the prevailing factor in the susceptibility determination for intakes on the Great Lakes. Intakes located close to shore, or close to a major shipping lane will be more sensitive and thus more susceptible to potential contamination. The sensitivity analysis of both Wilmette's intakes are located far enough offshore that shoreline impacts are not considered a factor on water quality. However, at certain times of the year the potential for contamination exists due to wet-weather flows from the North Shore Channel. If currents are flowing in a northerly direction, contaminants from these flows could migrate to Wilmette's intakes and compromise water quality. Correlation between Evanston's rainfall data, North Shore Channel discharge dates and Wilmette's coliform data show the potential effect of these flows on Wilmette's water quality. In addition, the proximity to a major shipping lane adds to the susceptibility should there be a spill near the intakes.

**Lead and Copper**

Definitions:  
 Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2020	1.3	1.3	0.12	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2020	0	15	3	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

**Water Quality Test Results**

- Definitions: The following tables contain scientific terms and measures, some of which may require explanation.
- Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
- 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.
- Maximum residual disinfectant level or MRDL: The highest level of a 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 or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- na: not applicable.
- mrem: millirems per year (a measure of radiation absorbed by the body)
- ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

## Water Quality Test Results

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

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

## Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2020	1.1	0.83 - 1.2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2020	11	7.9 - 14	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2020	47	36 - 53	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	01/09/2017	0.019	0.019 - 0.019	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	01/09/2017	0.595	0.595 - 0.595	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	05/02/2016	0.44	0.44 - 0.44	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	01/09/2017	7.4	7.4 - 7.4			ppm	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	05/04/2015	0.995	0.995 - 0.995	0	5	pCi/L	N	Erosion of natural deposits.

## Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

## Violations Table

<b>Consumer Confidence Rule</b>			
The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.			
<b>Violation Type</b>	<b>Violation Begin</b>	<b>Violation End</b>	<b>Violation Explanation</b>
CCR REPORT	07/01/2019	05/29/2020	We failed to provide to you, our drinking water customers, an annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water.

# Annual Water Quality Report 2020

Dear Resident:

Since 1998, the United States Environmental Protection Agency (USEPA) has required the Village's water plant, as a water producing and treatment agency, to conduct water quality tests and to inform residents of the test results. The Village is pleased to report that again for the year 2020, the water plant met or exceeded the USEPA standards, and did not have a violation of a contaminant level or any other water quality standard. This article will detail the water treatment process and explain the USEPA water quality standards. The Wilmette Water Plant is committed to providing you with the safest and most reliable water supply.

We encourage public interest and participation in our community's decisions affecting drinking water. Regular Village Board Meetings occur on the second and fourth Tuesdays each month starting at 7:30 pm at The Village Hall, 1200 Wilmette Avenue. Information on agendas for these meetings can be viewed at the bulletin boards located at the Metra Train Station and the Village Hall or on the Village's web site, [www.wilmette.com](http://www.wilmette.com). Detailed information on the water purification process is also available on this website. For questions about this report or to receive a copy, please contact Nabil Quafisheh, Director of Water Management at 847-853-7531 or at [quafishehn@wilmette.com](mailto:quafishehn@wilmette.com). To view a summary of the completed Source Water Assessments, including: Importance of Source Water: Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://dataservices.epa.illinois.gov/swap/factsheet.aspx>. The drinking water supplied by the Wilmette Water Plant meets or surpasses all Federal and State drinking-water standards.

## **Water Treatment Process**

The Village receives its raw water from Lake Michigan. It is treated at the Wilmette Water Plant on the lakefront and pumped into the water distribution system. A standpipe (4 million gallons) and an underground reservoir-pumping station (3 million gallons) provide additional storage of treated water on the west side of the Village. These storage reserves are used to maintain water pressure in the distribution system.

The water plant uses a mixture of chemicals, settling basins and filters to remove all contaminants to below regulated levels. Free chlorine residuals are maintained throughout the plant and distribution system to prevent the growth of bacteria. Operators are on duty 24 hours a day year-round to monitor the water system. In addition, the water plant has an Illinois Department of Public Health (IDPH) certified laboratory for conducting bacteriological testing.

At times, the quality of the raw lake water that enters the water plant is affected by the opening of the locks operated by the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC), or from runoff from the use of fertilizers and herbicides on area lawns and golf courses.

The MWRDGC owns and controls a set of locks located in Wilmette Harbor that are occasionally opened during heavy rainfall events to release sewer overflow into the lake. These contaminants, however, do not affect the quality or the safety of the finished water that is delivered to our consumers.

## **Source Water Assessment**

The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intakes with no protection, only dilution, which is the reason for mandatory treatment for all surface water supplies in Illinois. A workgroup from the Great Lakes States was organized to develop a protocol for assessing the Great Lakes. The mission of the Great Lakes Protocol was to develop a consistent procedure allowing the flexibility necessary to properly conduct source water assessments of the Great Lakes as a drinking water source. This flexibility takes into account the variability of these sources and site-specific concerns for determination of source sensitivity and susceptibility (Illinois EPA, 1999). Sensitivity is defined as the intrinsic ability of surface water to be isolated from contaminants by the physical attributes of the hydrologic or geologic setting. With this in mind, the degree of sensitivity becomes the prevailing factor in the susceptibility determination for intakes on the Great Lakes. Intakes located close to shore, or close to a major shipping lane will be more sensitive and thus more susceptible to potential contamination. The sensitivity analysis of both Wilmette's intakes show

that they are located enough offshore that shoreline impacts are not considered a factor on water quality. However, at certain times of the year, the potential for contamination exists due to wet-weather flows from the North Shore Channel. If currents are flowing in a northerly direction, contaminants from these flows could migrate to Wilmette's intakes and compromise water quality. Correlation between Evanston's rainfall data, North Shore Channel discharge dates, and Wilmette's coliform data show the potential effect of these flows on Wilmette's water quality. In addition, the proximity to a major shipping lane adds to the susceptibility should there be a spill near the intakes. Water supply officials from Wilmette are active members of the West Shore Water Producers Association. Coordination regarding water quality situations (i.e., spills, tanker leaks, exotic species, etc) is frequently discussed during the association's quarterly meetings. Lake Michigan, as well as all the Great Lakes, has many different organizations and associations that are currently working to either maintain or improve water quality. Since the predominant land use within Illinois' boundary of Lake Michigan watershed is urban, a majority of watershed protection activities in this document is aimed at this purpose.

### **Water Contaminants**

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. Federal Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, 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:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife
- Inorganic contaminants, such as salts and metals, which may be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban storm water runoff, and septic systems
- Radioactive contaminants, which may be naturally-occurring or be the result of oil and gas production and mining activities

Drinking water, including bottled water, may reasonably be expected 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 USEPA's Safe Drinking Water Hotline, 800-426-4791.

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. EPA/Center for Disease Control 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.

# Regulated Contaminants Detected in 2020

## Lead and Copper Test Results

### Definitions:

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

**Action Level Goal (ALG):** The level of contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.

Lead and copper	Date Sampled	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# Sites over AL	Units	Violation	Likely Source of Contamination
Copper	2020	1.3	1.3	0.100	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; corrosion of household plumbing systems
Lead	2020	0	15	5	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits

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. We 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 **at least 3 minutes and it becomes cold or reaches a steady temperature** 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 Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

## Water Quality Test Results

**Definitions:** The following tables contain scientific terms and measures, some of which may require explanation

### Level 1 Assessment

A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

### Level 2 Assessment

A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

### 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.

### 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 Residual Disinfectant Goal or (MRDLG):

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants

### Maximum Residual Disinfectant Level or (MRDL):

The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants

**ppb or ug/L:** micrograms per liter or parts per billion – or one ounce in 7,350,000 gals of water

**N/A :** Not Applicable

**Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples

**ppm or mg/L:** milligrams per liter or parts per million – or one ounce in 7,350 gals of water

**NTU:** Nephelometric Turbidity Units

**TT:** Treatment Technique

**mrem:** Millirems per year (a measure of radiation absorbed by the body)

**HRAA:** Highest Running Annual Average (quarterly) (RAA). RAA quarterly is calculated by adding the most recent quarter plus the three previous quarters and dividing by four. The highest RAA during the year is reported.

Regulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
<b>Disinfectants &amp; Disinfection By-Products</b>								
NOTE: An asterisk (*) indicates when compliance is based on a running annual average of quarterly samples; therefore the result is not the single result highest level detected.								
Chlorine	2020	1.1*	0.6 – 1.4	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes
Haloacetic Acids (HAA)	2020	15*	7.50 – 23.80	No goal for the total	60	ppb	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHM)	2020	29*	14.90 – 40.70	No goal for the total	80	ppb	No	By-product of drinking water chlorination
<b>Inorganic Contaminants</b>								
Barium	2020	0.020	single sample	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2020	0.706	single sample	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	2020	0.44	single sample	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	2020	13	single sample	N/A	N/A	ppm	No	Erosion from naturally occurring deposits, Used in water softener regeneration.
Sulfate	2020	25	single sample	N/A	USEPA National Secondary Standard of 250	ppm	No	Naturally occurring, coagulant residual.

### Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of contamination
Highest single Measurement	1 NTU	0.24 NTU	No	Soil Runoff
Lowest monthly % meeting limit	0.30 NTU	100 %	No	Soil Runoff

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. The Village monitors it because it is a good indicator of water quality and the effectiveness of the Water Plant's filtration system and disinfectants.

### Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violation section.

### Additional Contaminants – UCMR4

Every five years, in accordance with the Safe Drinking Water Act, the EPA identifies a new list of contaminants that are suspected to occur in public water systems. This list is referred to as the Unregulated Contaminant Monitoring Rule (UCMR). A maximum contaminant level (MCL) for these contaminants have not been established by either state or federal regulations, nor has mandatory health effects language been set. The purpose of unregulated contaminant monitoring is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Below are the contaminants that yielded detectable results, the remaining contaminants returned with non-detects.

Unregulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCL	Units
Bromochloroacetic Acid	2020	3.27	single sample	N/A	ppb
Bromodichloroacetic Acid	2020	2.81	single sample	N/A	ppb
Chlorodibromoacetic Acid	2020	0.84	single sample	N/A	ppb
Dibromoacetic Acid	2020	1.08	single sample	N/A	ppb
Dichloroacetic Acid	2020	4.49	single sample	N/A	ppb
Trichloroacetic Acid	2020	3.38	single sample	N/A	ppb

### Additional Information About Your Water

Measured Parameter	Wilmette Average
pH (0-14 pH units)	8.07
Alkalinity (ppm)	112
Hardness (as mg CaCO <sub>3</sub> /L)	142
Hardness (grains per gallon)	8.31
Calcium (ppm)	34
Chloride (ppm)	27
Magnesium (ppm)	12
Aluminum (ppb)	100
Total Dissolved Solids (ppm)	150

## Q & A about Wilmette's Water Supply

Q: What is the short answer to "how's my water quality?"

A: This water quality report contains a lot of information and data. The short answer is that of the more than 120 contaminants total, all were within the EPA's water quality standards.

Q: Is it advisable to use water from the hot water tap for drinking, cooking or making baby formula?

A: No. Hot water generally comes from a hot water heater that may contain impurities that should not be ingested. Some of these impurities might be metals from household plumbing that are dissolved and concentrated in the heating process.

Q: Why does water sometimes have a musty taste and odor?

A: During the summer months, residents may notice a slight "musty" or "earthy" taste & odor in the water. The chemicals that cause this are naturally occurring but harmless in the concentrations found in Wilmette's drinking water. The Village adds activated carbon to the water to help remove these odors. Keeping an open container of water in the refrigerator allows the odors to dissipate and improves the taste of the water.

Q: Why does water coming out of the faucet sometimes look milky or opaque?

A: This generally occurs in cold weather, when water entering the house is colder than the temperature inside. Cold water holds more oxygen than warm water. As the cold water warms, the oxygen escapes in tiny air bubbles that make the water look "milky".

Q: Is bottled water safer than tap water?

A: Not necessarily. Studies have shown that microbes may grow in the bottles while on the grocers' shelves. Residents do not need to buy bottled water for safety reasons if your tap water meets all federal and state drinking water standards (Wilmette's does!). Those who prefer water with a different taste, can buy bottled water, but it costs up to 1,000 times more than tap water. Of course, in emergencies, bottled water can be a vital source of drinking water for people without water.