

Annual Drinking Water Quality Report for Carol Stream – IL0430200

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 utility to provide safe drinking water.

The source of drinking water used by CAROL STREAM is purchased surface water from Lake Michigan. The City of Chicago's 2020 Water Quality Data is attached to this report.

For more information regarding this report contact:

**Ron Roehn**  
Superintendent of Operations  
Carol Stream Public Works  
124 Gerzevske Lane  
Carol Stream, IL 60188  
630-871-6260

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 result from 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 EPA's 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 from 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 <http://www.epa.gov/safewater/lead>.

## 2020 Regulated Contaminants Detected

### Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	5% of monthly samples are positive.	1.9		0	N	Naturally present in the environment.

### Water Quality Test Results

The following tables contain scientific terms and measures, some of which may require explanation.

Definitions:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Avg:	
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.
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	0.9	0.5 - 1	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids(HAA5)	2020	26	14.8 - 35	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2020	47	17.64 - 62.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Following the introduction of Lake Michigan water in 1992, the Village de-commissioned several of its wells, but retained several others for emergency purposes. Under the DuPage Water Commission Charter Customer Contract, the Village is not allowed to co-mingle water from our wells with the Lake Water. The remaining three wells are run monthly to insure operation and water quality sampling is performed. Data on our standby wells is available upon request. Contact Ron Roehn at Carol Stream Public Works at 630-871-6260 for any additional information about our standby wells and raw water sample information.

## 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 ADEQUACY / AVAILABILITY / CONTENT	07/01/2020	10/08/2020	We failed to provide to you, our drinking water customers, an annual report that adequately informed you about the quality of our drinking water and the risks from exposure to contaminants detected in our drinking water.

This was a reporting violation, not a water quality violation. The Village of Carol Stream had some discrepancies on our 2020 Consumer Confidence Report and accidentally used sample results which did not represent a four quarter average. Once notified by the IEPA, the Village immediately corrected the 2020 Consumer Confidence Report.

## Violations Table continued

<b>Lead and Copper Rule</b>			
The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.			
<b>Violation Type</b>	<b>Violation Begin</b>	<b>Violation End</b>	<b>Violation Explanation</b>
LEAD CONSUMER NOTICE (LCR)	12/30/2020	01/19/2021	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.
This was a reporting violation, not a water quality violation. The Village did send notification to the five (5) customers where a detectable level of lead or copper was reported, but failed to send notice of results to those homes that had no detectable levels of lead and copper in their water. Once the Village was notified of this violation, we immediately sent letters to those homes.			

### 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 Village Board 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 contact Public Works at 630-871-6260 to request a copy. 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 -- CHICAGO: 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 intake with no protection, only dilution. This is the reason for mandatory treatment for all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance that shoreline impacts are not usually considered a factor on water quality. At certain times of the year, however, the potential for contamination exists due to wet-weather flows and river reversals. In addition, the placement of the crib structures may serve to attract waterfowl, gulls and terns that frequent the Great Lakes area, thereby concentrating fecal deposits at the intake and thus compromising the source water quality. Conversely, the shore intakes are highly susceptible to storm water runoff, marinas and shoreline point sources due to the influx of groundwater to the lake.

The City of Chicago's 2020 Water Quality Data is attached to this report.



CITY OF CHICAGO



DEPARTMENT OF WATER MANAGEMENT

**TO:** Administrative Contact/Operator-In-Charge/Bottle Recipient

**FROM:** *Andrea R.H. Cheng*  
Andrea R.H. Cheng, Ph.D., P.E.  
Acting Commissioner  
Department of Water Management

**SUBJECT:** Consumer Confidence Report Parent Supply Information

**DATE:** March 29, 2021

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The Consumer Confidence Report (CCR) rule requires that all community water systems provide an annual report to their customers on the quality of the drinking water. The Department of Water Management (DWM), as your source water supplier, is providing the required information pertaining to compliance monitoring for the period of January 2020 through December 2020. You will need this data to complete your Consumer Confidence Report, if you are required to do so.

The completed 2020 report for DWM will be mailed to consumers before the July 1<sup>st</sup> deadline. If you are not the correct contact person to receive this package, please send accurate contact information to:  
e-mail: [andrea.cheng@cityofchicago.org](mailto:andrea.cheng@cityofchicago.org), fax: (312) 742-9123, or phone: (312) 744-7001

Included in this information package are summary tables containing:

- 2020 Water Quality Data – includes Regulated and Non-Regulated Contaminant Detections
- Source Water Assessment Program Summary
- Educational Statements Regarding Commonly Found Drinking Water Contaminants
- Voluntary Testing – additional testing done by this facility outside of the required testing

In order to expedite the CCR to you, we have enclosed 2020 tables that were prepared by DWM with the help of the Illinois EPA. The Illinois EPA posts data tables for the Department of Water Management on the internet at: <http://water.epa.state.il.us/dww/index.jsp>

Additionally, we are adding renewed focus on strengthening our regional partnerships through the formation of a wholesale customer advisory council and the creation of a more transparent wholesale rate-setting methodology. We are also happy to announce that we will be adding a Deputy Commissioner of Regional Partnerships dedicated solely to sustaining and growing our regional partnerships. We will be introducing you to our new team member in the coming weeks. We value your partnership and look forward to working with you on these efforts in the near future.

Should you have any questions, please feel free to contact me at 312-744-7001.

Attachments

Cc: Director Water Purification Laboratories; Director Water Quality Surveillance Section

# 2020 Water Quality Data

DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT  
0316000 CHICAGO

**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 Contaminant Level (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.

**Highest Level Detected:** This column represents the highest single sample reading of a contaminant of all the samples collected in 2020.

**Range of Detections:** This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

**Date of Sample:** If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.

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

**N/A:** Not applicable

## DETECTED CONTAMINANTS

Contaminant (unit of measurement) <i>Typical source of Contaminant</i>	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Date of Sample
<b>Turbidity Data</b>						
<b>Turbidity (NTU/Lowest Monthly % ≤0.3 NTU)</b> <i>Soil runoff</i>	N/A	TT(Limit: 95%≤0.3 NTU)	Lowest Monthly %: 100%	100% - 100%		
<b>Turbidity (NTU/Highest Single Measurement)</b> <i>Soil runoff</i>	N/A	TT(Limit 1 NTU)	0.16	N/A		
<b>Inorganic Contaminants</b>						
<b>Barium (ppm)</b> <i>Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits</i>	2	2	0.0201	0.0198 – 0.0201		
<b>Nitrate (as Nitrogen) (ppm)</b> <i>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</i>	10	10	0.42	0.35 – 0.42		
<b>Total Nitrate &amp; Nitrite (as Nitrogen) (ppm)</b> <i>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</i>	10	10	0.42	0.35 – 0.42		
<b>Total Organic Carbon (TOC)</b>						
<b>TOC</b>	The percentage of TOC removal was measured each month and the system met all TOC removal requirements set by IEPA.					
<b>Unregulated Contaminants</b>						
<b>Sulfate (ppm)</b> <i>Erosion of naturally occurring deposits</i>	N/A	N/A	27.8	27.5 – 27.8		
<b>Sodium (ppm)</b> <i>Erosion of naturally occurring deposits; Used as water softener</i>	N/A	N/A	9.55	8.73 – 9.55		
<b>State Regulated Contaminants</b>						
<b>Fluoride (ppm)</b> <i>Water additive which promotes strong teeth</i>	4	4	0.75	0.65 – 0.75		
<b>Radioactive Contaminants</b>						
<b>Combined Radium (226/228) (pCi/L)</b> <i>Decay of natural and man-made deposits.</i>	0	5	0.95	0.83 – 0.95		02-04-2020
<b>Gross Alpha excluding radon and uranium (pCi/L)</b> <i>Decay of natural and man-made deposits.</i>	0	15	3.1	2.8 – 3.1		02-04-2020

## Units of Measurement

ppm: Parts per million, or milligrams per liter

ppb: Parts per billion, or micrograms per liter

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water

%≤0.3 NTU: Percent of samples less than or equal to 0.3 NTU

pCi/L: Picocuries per liter, used to measure radioactivity

## TURBIDITY

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

## UNREGULATED CONTAMINANTS

A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

## FLUORIDE

Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride level of 0.7 mg/L with a range of 0.6 mg/L to 0.8 mg/L.

## SODIUM

There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials who have concerns about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

## SOURCE WATER ASSESSMENT SUMMARY

### Source Water Location

The City of Chicago utilizes Lake Michigan as its source water via two water treatment plants. The Jardine Water Purification Plant serves the northern areas of the City and suburbs, while the Sawyer Water Purification Plant serves the southern areas of the City and suburbs. Lake Michigan is the only Great Lake that is entirely contained within the United States. It borders Illinois, Indiana, Michigan, and Wisconsin, and is the second largest Great lake by volume with 1,180 cubic miles of water and third largest by area.

### Source Water Assessment Summary

The Illinois EPA implemented a Source Water Assessment Program (SWAP) to assist with watershed protection of public drinking water supplies. The SWAP inventories potential sources of contamination and determined the susceptibility of the source water to contamination. The Illinois EPA has completed the Source Water Assessment Program for our supply.

### Susceptibility to Contamination

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 intake with no protection only dilution. This is the reason for mandatory treatment of all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance that shoreline impacts are not usually considered a factor on water quality. At certain times of the year, however, the potential for contamination exists due to wet-weather flows and river reversals. In addition, the placement of the crib structures may serve to attract waterfowl, gulls and terns that frequent the Great Lakes area, thereby concentrating fecal deposits at the intake and thus compromising the source water quality. Conversely, the shore intakes are highly susceptible to storm water runoff, marinas and shoreline point sources due to the influx of groundwater to the lake.

Further information on our community water supply's Source Water Assessment Program is available by calling DWM at 312-742-2406 or by going online at <http://dataservices.epa.illinois.gov/swap/factsheet.aspx>

### **THE FOURTH UNREGULATED CONTAMINANT MONITORING RULE (UCMR 4)**

In compliance with UCMR 4, samples were collected at Chicago Water System's entry points to the distribution system (EPTDS), also known as finished water, and analyzed for all contaminant groups except for Haloacetic Acids (HAAs), which were sampled from the distribution system. All the contaminant groups tested in finished water were below the minimum reporting levels specified in the test method under UCMR 4. Samples for HAA indicators (Total Organic Carbon and Bromide) were collected at two source water influent points for the system. For Bromide, test results ranged from 28.2 to 35.3 ppb, and for TOC, test results ranged from 1.79 to 1.80 ppm.

### **ILLINOIS EPA'S SAMPLING OF PER- and POLYFLUOROALKYL SUBSTANCES (PFAS)**

The Illinois EPA collected finished water samples from Chicago's Water System on 10/29/2020 and analyzed the samples for a total of 18 PFAS contaminants. In its notification to Chicago, the Illinois EPA stated that these contaminants were not present in Chicago's drinking water at concentrations greater than or equal to the minimum reporting levels.

### **2020 VOLUNTARY MONITORING**

The City of Chicago monitors for Cryptosporidium, Giardia and E. coli in its source water as part of its water quality program. Cryptosporidium has not been detected in these samples, but Giardia was detected in September 2010 in one raw lake water sample collected. Treatment processes have been optimized to provide effective removal of Cryptosporidium and Giardia from the source water. By maintaining low turbidity through the removal of particles from the water, the possibility of such organisms getting into the drinking water system is greatly reduced. In 2020, the City of Chicago has also continued monitoring for hexavalent chromium, also known as chromium-6. USEPA has not yet established a standard for chromium-6, a contaminant of concern which has both natural and industrial sources. Chromium-6 sampling data are posted at: [https://www.chicago.gov/city/en/depts/water/supp\\_info/water\\_quality\\_resultsandreports.html](https://www.chicago.gov/city/en/depts/water/supp_info/water_quality_resultsandreports.html)

For more information, please contact  
Andrea Cheng, Acting Commissioner  
At 312-744-8190

Chicago Department of Water Management  
1000 East Ohio Street  
Chicago, IL 60611  
Attn: Andrea Cheng

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by:  
The City of Chicago  
Department of Water Management  
Water System ID# IL0316000