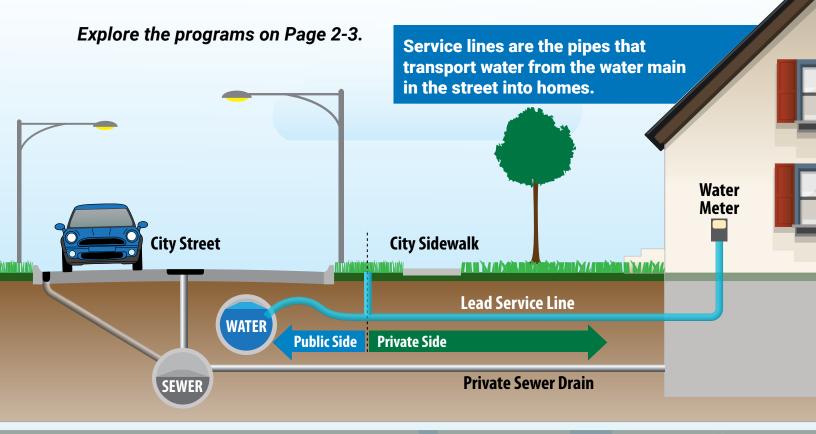


# CITY OF CHICAGO - 2022 WATER QUALITY REPORT

# Learn about Chicago's Lead Service Line Replacement Programs

If you live in a house or two-flat built before 1986, there is a high likelihood that your water service line is made of lead unless it was replaced during renovation or an addition.

Although it will be a multi-year effort to remove all Chicago's lead lines, the City is offering several lead service line replacement programs.









# **Chicago Lead Service Line Replacement (LSLR)**

## **Equity LSLR**

This program provides free LSLR and new water meters for income-qualified homeowners.

## Requirements

- Live in a single family or two-flat home that you own.
- Priority will be given to residents whose water tests above 15 ppb lead.
- Have a household income below 80% of the area median income (see table below for 2022 limits).

Household Size (people)	80% Area Median Income (AMI)			
1	\$58,350			
2	\$66,700			
3	\$75,050			
4	\$83,350			
5	\$90,050			
6	\$96,700			

Income Limits (April 2022) for the Equity Program

## **To Apply**

- Submit application documenting household income and home ownership to see if you qualify at <u>chicagowaterquality.org/LSLREquity</u>
- Get your water tested for free by calling 311 or signing up at <u>chicagowaterquality.org</u>.

### **Questions?**

■ Email: <u>lead.safe@cityofchicago.org</u>

Phone: 312-742-2406



## **Leaks and Breaks LSLR**

This program provides free LSLR and new water meters for properties with leaking or broken lead services.

## Requirements

- You have a leak or break on the lead water service line to your property.
- All properties with a lead service line including renters, owner-occupied and commercial properties are eligible to participate.

## **To Apply**

- Call 311 to report a leak or a break on your water service line.
- A DWM investigator will identify whether the leak or break is on private or public property. DWM will repair the leak or break on the public side and the property owner repairs any leaks or breaks on the private side.
- DWM or contractor will discuss and schedule LSLR with the owner.

### **Ouestions?**

311 to report a leak or break

Email: LSLR@cityofchicago.org

Phone: 312-747-7530

## **Daycares LSLR**

This program provides free LSLR and new water meters for licensed daycares.

## Requirements

A state licensed daycare, both center and in-home. If the daycare is renting, property owner consent is required.

## **To Apply**

Daycare is on a prioritized list.
 The Department of Water will proactively contact daycares when they qualify.

## **Questions?**

Email: daycares@cityofchicago.org

Phone: 312-744-6635







## **Programs and Eligibility**

## **Block-Level LSLR**

This program provides free LSLR and new water meters for properties affected by water main or sewer main replacement work.



## Requirements

 DWM will perform block-level LSLR for all properties located along water main and sewer main construction work. This includes owneroccupied, rental and commercial properties.

## **To Apply**

The City will notify residents of their eligibility and next steps to complete the full LSLR.

## **Questions?**

Phone: 312-744-6635







## Homeowner-Initiated LSLR

This program waives the standard permit fees up to \$5,000 for any property owner who decides to replace their full lead service line.

## Requirements

- All properties with LSLs including renters, owner-occupied, and commercial properties are eligible to participate.
- Property owner must be willing to pay for the full LSLR.

## **To Apply**

- Verify service line material using chicagowaterquality.org/LSLIdentification.
- Hire a licensed plumbing contractor to replace the lead service line. Visit <u>leadsafechicago.org</u> for a list of plumbing contractors licensed in Chicago, steps for lead service line replacement and the permit fees that will qualify for fee waivers.
- Your contractor will notify Department of Buildings that this is a LSLR project eligible for permit fee waivers and will apply for a permit by going to <a href="mailto:chicagowaterquality.org/LSLRPermit">chicagowaterquality.org/LSLRPermit</a>.

## **Questions?**

■ Email: <u>lead.safe@cityofchicago.org</u>

Phone: 312-742-2406









# Message from **Mayor Lori E. Lightfoot**

### Dear Resident:

In 2022, Chicago's tap water once again met or exceeded all standards set by the U.S. Environmental Protection Agency for safe, clean drinking water. This annual report details information on results above detection limits for annual certified testing of Chicago's drinking water.

The City of Chicago Department of Water Management (DWM) purifies and delivers 750 million gallons of clean drinking water to residents of the City and 120 suburbs every day. DWM works tirelessly to keep our water clean by:

- Performing over 600,000 analyses per year of tap water at every step in the treatment process and adjusting treatment protocols as necessary;
- Using corrosion control in our water to minimize the risk of contaminants including lead from leaching into water from plumbing;
- Providing complete instructions for whole house flushing, free NSF-certified water pitchers with six cartridges for removing lead to residences and businesses where there is water infrastructure work being done in the vicinity; and
- Offering completely free residential water testing by an independent certified laboratory.

My administration was the first to address the replacement of the almost 400,000 lead service lines installed before 1986 that serve single family houses and two flats across Chicago. Prioritizing equity, we have developed and launched programs to assist residents who wish to replace these lines:

- Equity Lead Service Line Replacement Homeowners who meet income requirements may be eligible for a completely free full lead service line replacement, a \$16,000-\$30,000 value.
- Homeowner-Initiated Replacement Program If a homeowner wants to hire a contractor and remove the full existing lead service line, the City will waive up to \$5,000 in permit fees.
- Daycare Lead Service Line Replacement The City is offering free lead line replacement to licensed daycares in low-income Chicago neighborhoods. The Chicago Department of Water Management is proactively reaching out to daycares that qualify.

This year, DWM has begun completely replacing lead lines from the street to the house whenever a line is damaged or moved. As it is my priority to prevent an undue burden on residents, these replacements will also be done for free.

Learn more about these programs and future plans for lead line replacement at LeadSafeChicago.org.

Jui E. Jing Majort

Mayor Lori E. Lightfoot

Este informe contiene información muy importante. Tradúscalo ó hable con alguien que lo entienda bien.

## Educational Statements Regarding Commonly Found Drinking Water Contaminants

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 the 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 (1-800-426-4791).

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 healthcare providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 can dissolve naturally occurring minerals and radioactive materials, and pick up substances resulting from the presence of animals or human activity.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that 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.

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 at least 5 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 Drink Water Hotline or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

## Possible contaminants consist of:

- 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 byproducts 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.

2022 Water Quality Data: Detected			Contaminants			
Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Highest Level Detected	Range Of Detections	Violation	Date of Sample
MICROBIAL CONTAMINANTS						
TOTAL COLIFORM BACTERIA (% pos/mo)	0	5%	0.4%	N/A	N	
Naturally present in the environment					I.	
FECAL COLIFORM AND E. COLI (# pos/mo)	0	0	0	N/A	N	
Human and animal fecal waste			owest Monthly S			
TURBIDITY (NTU/Lowest Monthly % ≤ 0.3 NTU)	N/A	TT	100%	100%-100%	N	
Soil runoff	14/74		imit: 95% ≤ 0.3 N			
TURBIDITY (NTU/Highest Single Measurement)	N/A	TT	0.30	N/A	N	
Soil runoff	IN/ A		imit: 1 NTU max		11	
INORGANIC CONTAMINANTS		(L	IIIII. I NIOIIIax	.)		
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	2	2	0.0201	0.0193 - 0.0201	N	
COPPER (ppm) Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives	1.3	AL = 1.3	0.065 (90 <sup>th</sup> percentile)	0 sites exceeding AL	N	6/1/22- 9/30/22
LEAD (ppb) Corrosion of household plumbing systems; Erosion of natural deposits	0	AL= 15	6.8 (90 <sup>th</sup> percentile)	0 sites exceeding AL	N	6/1/22- 9/30/22
NITRATE (AS NITROGEN) (ppm)	10	10	0.30	0.30 - 0.30	N	
Runoff from fertilizer use; Leaching from septic tanks, sewage: Erosion of natural dep	ocito		,	'		
TOTAL NITRATE & NITRITE (AS NITROGEN) (ppm)	10	10	0.30	0.30 - 0.30	N	
DISINFECTANTS \ DISINFECTION BY-PRO	DUCTS					
TTHM [TOTAL TRIHALOMETHANES] (ppb) *	N/A	80	25.1	12.8 - 37.6	N	
By-product of drinking water disinfection	11/7	00	20.1	12.0 37.0	14	
HAA5 [HALOACETIC ACIDS] (ppb) *	N/A	60	11.9	5.8 - 15.2	N	
By-product of drinking water disinfection					<u> </u>	
CHLORINE (as Cl <sub>2</sub> ) (ppm) Drinking water disinfectant	4.0	4.0	1	1 – 1.3	N	
TOC [TOTAL ORGANIC CARBON]						
The percentage of Total Organic Carbon (TOC) removal was	s measured e	ach month	and the system	met all TOC remova	al requirements	set by IEPA.
UNREGULATED CONTAMINANTS						
SULFATE (ppm)	N/A	N/A	27.1	25.8 - 27.1		
Erosion of naturally occurring deposits						
SODIUM (ppm)	N/A	N/A	9.08	8.56 - 9.08		
Erosion of naturally occurring deposits; Used as water softe	ner		<u>'</u>			<u> </u>
STATE REGULATED CONTAMINANTS						
FLUORIDE (ppm)	4	4	0.76	0.63 - 0.76	N	
Water additive which promotes strong teeth						
RADIOACTIVE CONTAMINANTS						
COMBINED RADIUM 226/228 (pCi/L) **	0	5	0.95	0.83 - 0.95	N	2/04/2020
Decay of natural and man-made deposits						
GROSS ALPHA excluding Radon & Uranium (pCi/L) **	0	15	3.1	2.8 – 3.1	N	2/04/2020
Decay of natural and man-made deposits						

## **Definition Of Terms**

for a margin of safety.

the best available treatment technology.

The level of a drinking water disinfectant below which to control microbial contaminants.

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

Highest Level Detected: This column represents the Locational Running Annual Average (LRAA): highest single sample reading of a contaminant of all The average of 4 consecutive quarterly results at each date is indicated.

Maximum Contaminant Level Goal (MCLG): The level Range of Detections: This column represents a range of a contaminant in drinking water below which there of individual sample results, from lowest to highest that is no known or expected risk to health. MCLGs allow were collected during the Consumer Confidence Report (CCR) calendar year.

Maximum Contaminant Level (MCL): The highest level Date of Sample: If a date appears in this column, the of a contaminant that is allowed in drinking water. Illinois EPA requires monitoring for this contaminant MCLs are set as close to the MCLGs as feasible using 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 Maximum Residual Disinfectant Level Goal (MRDLG): the Consumer Confidence Report (CCR) calendar year.

there is no known or expected risk to health. MRDLGs Action Level (AL): The concentration of a contaminant do not reflect the benefits of the use of disinfectants which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Residual Disinfectant Level (MRDL): The Treatment Technique (TT): A required process highest level of a drinking water disinfectant allowed intended to reduce the level of a contaminant in

ND: Not detectable at testing limits; N/A: Not applicable

the samples collected in 2022, except where a specific monitored sample location. The LRAA should not exceed 80 µg/L for TTHM and 60 µg/L for HAA5.

## Water Quality Data Table Footnotes

#### **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 Public Department of Health recommended 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 sodiumrestricted diet, you should consult a physician about the level of sodium in the water.

### **Unit of Measurement**

- ppm Parts per million, or milligrams per liter (mg/L)
- ppb Parts per billion, or micrograms per liter (μg/L)
- 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.
- mrem: millirems per year, a measure of radiation absorbed by the body

Note: TTHM, HAA5, and Chlorine are for the Chicago Distribution System.

\*Data expressed as LRAA - Locational Running Annual Average (See Definition of Terms for Details)

\*\*The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old. Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled during the CCR calendar year. If any of these contaminants were detected the last time they were sampled, they are included in the table along with the date that the detection occurred. Radiochemical contaminant monitoring is conducted every 6 years.

# CITY OF CHICAGO, DEPARTMENT OF WATER MANAGEMENT SOURCE WATER ASSESSMENT SUMMARY FOR THE 2022 CONSUMER CONFIDENCE REPORT (CCR)

#### 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. Further information on our community water supply's Source Water Assessment Program is available by calling the City of Chicago, Department of Water Management at 312-744-6635.

## **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.

### 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 stormwater 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 the City of Chicago, Department of Water Management at 312-744-6635.

## **2022 Voluntary Monitoring**

The City of Chicago has continued monitoring for Cryptosporidium, Giardia, and E. coli in its source water as part of its water quality program. No Cryptosporidium or Giardia was detected in source water samples collected in 2022. Treatment processes have been optimized to provide effective barriers for removal of Cryptosporidium oocysts and Giardia cysts in the source water, effectively removing these organisms in the treatment process. By maintaining low turbidity through the removal of particles from the water, the possibility of Cryptosporidium and Giardia organisms getting into the drinking water system is greatly reduced.

In 2022, CDWM 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. Please address any questions or concerns to DWM's Water Quality Division at 312-744-8190. Data reports on the monitoring program for chromium-6, PFAS/PFOS, and other emerging contaminants are posted on the City's website which can be accessed at the following address below:

https://www.chicago.gov/city/en/depts/water/supp\_info/water\_quality\_resultsandreports.html

# **Cross-Connection Control Survey**

The Chicago Department of Water Management is required by the Illinois EPA to routinely survey all water services connected to our public drinking water supply to help us identify and correct "cross-connections", which are unprotected or improper connections to the public drinking water system that may cause contamination or pollution to enter the system. Please fill out the survey online at:

www.chicagoccr.org





# FREE WATER TESTING

Get a FREE water test by the Chicago Department of Water Management (DWM)

**Get your water tested for lead for FREE!** 

Sign up by calling 311 OR visit

www.ChicagoWaterQuality.org

Visit out website for more information: <a href="https://www.chicago.gov/water">www.chicago.gov/water</a>

Scan this QR code to visit <u>Chicago</u> <u>WaterQuality.org</u>







**E-MAIL:** watermanagement@cityofchicago.org

**DEPARTMENT OF FINANCE WATER BILL QUESTIONS:** (312) 744-4426

WATER IN THE STREET OR BASEMENT:
Call 311

**WATER QUALITY QUESTIONS:** (312) 744-8190

IEPA'S REGIONAL OFFICES (ILLINOIS): (847) 608-3131

**EPA'S SAFE DRINKING WATER HOTLINE:** (800) 426-4791

EPA'S GENERAL INFORMATION LINE: (312) 353-2000

## For Questions, Please Contact

City of Chicago Department of Water Management
Bureau of Water Supply
1000 East Ohio Street • Chicago, IL 60611
Attn: Andrea Holthouse Cheng, Ph.D.
http://dataservices.epa.illinois.gov/swap/factsheet.aspx

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