CHICAGO

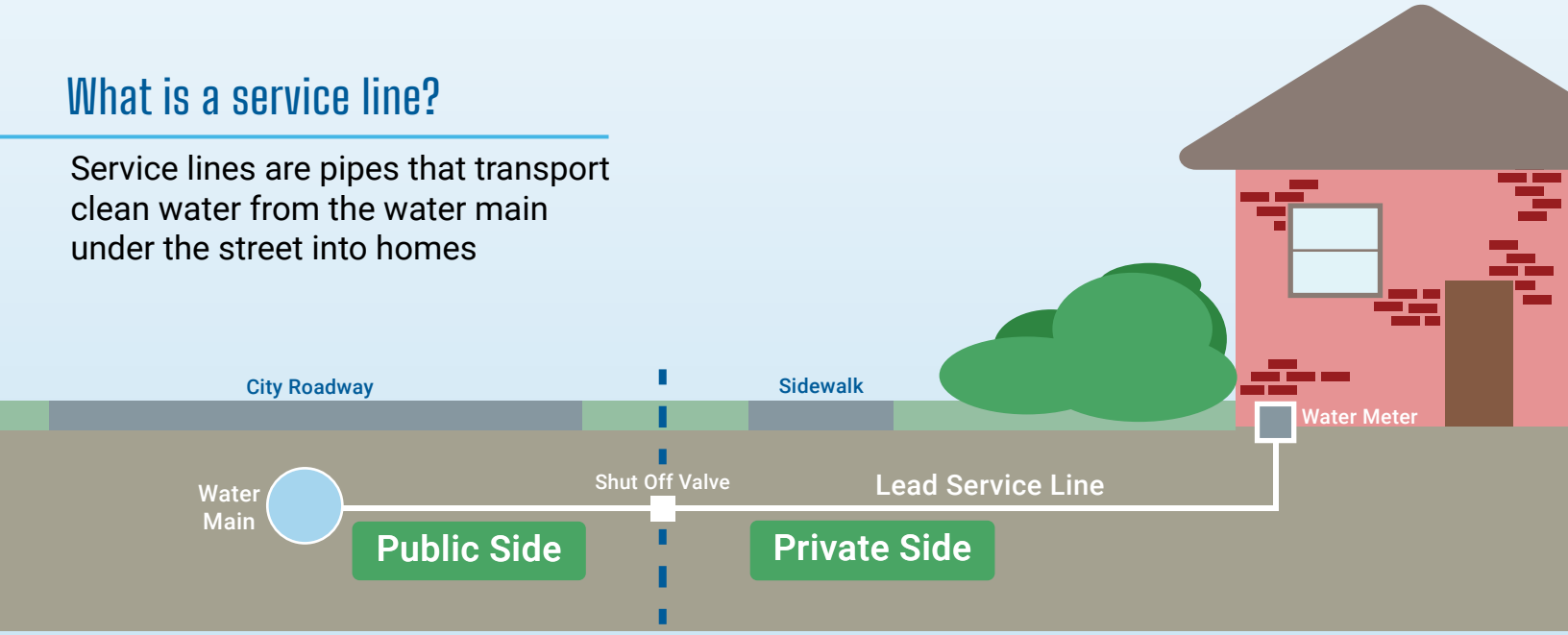
City Of Chicago ★ 2023

WATER QUALITY REPORT

Chicago is replacing lead service lines

What is a service line?

Service lines are pipes that transport clean water from the water main under the street into homes



Is my service line lead?

If you live in a house or two-flat built before 1986, there is a high likelihood that your water service line is lead

To look up your home on our citywide Service Line Inventory visit: **SLI.ChicagoWaterQuality.org**

What is the City doing to replace lead service lines?

The City is offering several replacement programs that replace both the public and private side of the lines- for Free! More information inside...

DWM
Department Of
Water Management

Commissioner Randy Conner

Mayor Brandon Johnson's
"A Better, Stronger, Safer Chicago"

Lead Service Line Replacement Programs (LSLR)

Equity LSLR

Program:

FREE LSLR and new water meters for income-qualified residents

Requirements:

- Live in a house / two-flat which you own
- Have a household income below 80% of the area median income (see table to the right)

Household size (People)	80% of Area Median Income
1	$62,800
2	$71,800
3	$80,750
4	$89,700
5	$96,900
6	$104,100
7	$111,250
8	$118,450

To Apply:

Submit documentation of household income and home ownership to qualify at: **chicagowaterquality.org/LSLREquity**

Leaks and Breaks

Program:

FREE LSLR and new water meter for properties with leaking or broken lead services

Requirements:

You have a leak or break on the lead water service line to your property. Any building type is eligible

To Apply:

- Call 311 to report a break or leak on your service line
- A DWM investigator will identify if the leak or break is on the public or private side of the service line
- DWM will complete the repair on the public side and the property own is responsible for repairs on the private side
- A DWM or a contractor will discuss and schedule the LSLR with the property owner

Block-Long LSLR

Program:

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 owner occupied, rental, and commercial properties.

To Apply:

DWM will notify residents of their eligibility and next steps to complete the full LSLR

Questions?

Visit: Leadsafechicago.org
Email: Lead.safe@cityofchicago.org
Call: 312-742-2406

Lead Service Line Replacement Programs (LSLR)

Daycare LSLR

Program:

FREE LSLR and new water meters for licensed daycares.

Requirements:

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

To Apply:

Daycares are on a prioritized list, DWM will proactively contact daycares when they qualify

Homeowner-Initiated LSLR

Program:

Waives the standard permit fees of up to **$5000** for any property owner who decides to replace their full lead service line. This is the one of the City's programs that is not free to residents.

Requirements:

- All properties with LSLs including rentals, 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 LeadSafeChicago.org 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 the permit by going to **https://chicagowaterquality.org/LSLRpermit**

DWM is switching to stronger lead protection!

DWM adds corrosion control in the distribution system to help prevent lead and other contaminants from leaching into the clean drinking water. While we know that the blended phosphate formula we have been using is effective, our research has determined that orthophosphate is significantly better at reducing lead levels at the homeowner's tap.

Orthophosphate is a colorless, tasteless, and odorless food-grade additive and is approved by the U.S. Environmental Protection Agency and the U.S. Food and Drug Administration. It is used by approximately 50% of the water systems across the United States for lead control. The Illinois Environmental Protection Agency agreed with our research and has approved our corrosion control transition to orthophosphate.

New chemical feed facilities are being constructed at both of our plants (Jardine and Sawyer Water Purification Facilities) to add orthophosphate to the water distribution system. DWM plans to begin to switch from blended phosphate to orthophosphate in the Fall of 2024. During this transition period, DWM will continue to monitor water quality in the distribution system.

Questions?

Visit: Leadsafechicago.org
Email: Lead.safe@cityofchicago.org
Call: 312-742-2406

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 **www.epa.gov/safewater/lead**

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 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.

2023 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						
FECAL COLIFORM AND E. COLI (# pos/mo)	0	0	0	N/A	N	
Human and animal fecal waste			(Lowest Monthly %)			
TURBIDITY (NTU/Lowest Monthly % ≤ 0.3 NTU)	N/A	TT	100%	100%-100%	N	
Soil runoff			(Limit: 95% ≤ 0.3 NTU)			
TURBIDITY (NTU/Highest Single Measurement)	N/A	TT	0.25	N/A	N	
Soil runoff			(Limit: 1 NTU max)			
INORGANIC CONTAMINANTS						
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	2	2	0.0195	0.0192 -0.0195	N	
COPPER (ppm) Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives	1.3	AL = 1.3	0.079 (90th percentile)	0 sites exceeding AL	N	6/1/23-9/30/23
LEAD (ppb) Corrosion of household plumbing systems; Erosion of natural deposits	0	AL= 15	7.2 (90th percentile)	0 sites exceeding AL	N	6/1/23-9/30/23
NITRATE (AS NITROGEN) (ppm)	10	10	0.33	0.29 – 0.33	N	
Runoff from fertilizer use; Leaching from septic tanks, sewage: Erosion of natural deposits						
TOTAL NITRATE & NITRITE (AS NITROGEN) (ppm)	10	10	0.33	0.29 – 0.33	N	
DISINFECTANTS \ DISINFECTION BY-PRODUCTS						
TTHM [TOTAL TRIHALOMETHANES] (ppb) *	N/A	80	32.6	15.9 – 51.0	N	
By-product of drinking water disinfection						
HAA5 [HALOACETIC ACIDS] (ppb) *	N/A	60	16.4	6.0 – 26.9	N	
By-product of drinking water disinfection						
CHLORINE (as Cl_2) (ppm) Drinking water disinfectant	4.0	4.0	1	0 – 1	N	
TOC [TOTAL ORGANIC CARBON]						
The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA.						
UNREGULATED CONTAMINANTS						
SULFATE (ppm)	N/A	N/A	27.8	25.0 – 27.8		
Erosion of naturally occurring deposits						
SODIUM (ppm)	N/A	N/A	8.71	8.43 – 8.71		
Erosion of naturally occurring deposits; Used as water softener						
STATE REGULATED CONTAMINANTS						
FLUORIDE (ppm)	4	4	0.74	0.66 – 0.74	N	
Water additive which promotes strong teeth						
RADIOACTIVE CONTAMINANTS						
COMBINED RADIUM 226/228 (pCi/L) ** Decay of natural and man-made deposits	0	5	0.95	0.83 – 0.95	N	2/04/2020
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

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.

Maximum Residual Disinfectant Level Goal (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 (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.

Highest Level Detected: This column represents the highest single sample reading of a contaminant of all the samples collected in 2023, except where a specific date is indicated.

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

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

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

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

Locational Running Annual Average (LRAA): The average of 4 consecutive quarterly results at each monitored sample location. The LRAA should not exceed 80 µg/L for TTHM and 60 µg/L for HAAS.

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 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 has recommended an optimal fluoride level of 0.7 mg/L, with a range of 0.6 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.

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, HAAS, 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

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 SWAP for our supply. Further information on our community water supply's SWAP 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 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 the City of Chicago, Department of Water Management at 312-744-6635.

2023 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 2023. 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 2023, DWM 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:

www.chicago.gov/city/en/depts/water/supp_info/water_quality_resultsandreports.html

Cross-Connection Control

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 Lead Testing For Chicago Residents

Request Water Lead Testing

- Call 311
- Visit Chicagowaterquality.org
- Scan to connect with us:

This document contains important health information for Chicago residents.

Please share this packet with anyone who uses Chicago water systems, especially those are high risk or may not have direct access to this document (e.g. nursing home residents, pregnant people, schools, etc.)
You may post this information in public places, distribute copies by mail or by hand.

This message is being sent to you by the City of Chicago, Department of Water Management.
Water System ID #IL0316000

City Resources:

Visit Our Website
www.chicago.gov/water
E-Mail DWM
WaterManagement@cityofchicago.org
Water Bill Questions
Call (312) 744-4426
Flooded Basement or Street
Call 311
Water Quality Information
Call (312) 744-8190

EPA Resources:

EPA's Information Line
Call (312) 353-2000
EPA's Safe Drinking Water Hotline
Call (800) 426-4791
Illinois EPA Regoinal Office
Call (847) 608-3131

City of Chicago
Department of Water Management
Bureau of Water Supply
1000 East Ohio Street, Chicago IL 60611
Attn: Commissioner Randy Conner

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