

**CHICAGO DEPARTMENT OF WATER MANAGEMENT
ANNOUNCES PLANS TO EXPLORE LEAD SERVICE LINE REPLACEMENT**

Chicago stays at forefront of water quality efforts

Over past two decades, Chicago has reduced the percentage of children with elevated blood levels of lead from 25 percent to less than one percent – the key health measure for lead

Continuing Chicago's proactive approach on the issue of lead, the Chicago Department of Water Management (DWM) announced that it is commissioning a report to determine the feasibility and framework of what would be a multi-billion dollar program to potentially replace lead service lines – the pipes that connect water mains to single family and two-flat homes – across the city. The report will develop a step-by-step phased replacement program, review industry practices, investigate available technology and assess funding options, including potential federal and state funding sources.

“The safety of Chicago's water is our top priority; Chicago's water consistently meets or exceeds all standards set by the U.S. EPA, Illinois EPA and drinking water industry,” said DWM Commissioner Randy Conner. “Not only will this report ensure that Chicago remains a leader in water quality efforts, the report will help Chicagoans continue to have a high degree of confidence in their water.”

DWM has engaged CDM Smith, a global engineering firm, to evaluate the total cost and multiple factors involved in replacing lead service lines.

Lead service lines are the pipes connecting water mains to homes. They are owned by and located on a homeowner's property and are traditionally found in older single family and two-flat homes built before 1986. Addressing this legacy infrastructure problem would make Chicago the largest city in the nation to explore a complete lead service line replacement program, which would likely cost several billion dollars over multiple decades.

Once complete in the spring, the firm will present a report containing recommendations tailored to Chicago that would facilitate the replacement of lead service lines. CDM Smith has expertise in this field, and is the primary consultant for lead service line replacement projects in other cities.

This report will build on Chicago's strong record of being a leader in water quality and in addressing the issue of lead for children, who are the most vulnerable to its health effects.

Chicago's fight against children's lead exposure has significantly reduced the percentage of children with elevated blood levels of lead – the key health measure for lead. Today, less than one percent of children develop elevated lead levels as compared to 25 percent in the late 1990s. Since 2016, CDPH has offered water testing when conducting inspections for children with elevated lead levels. Of those tested, no child with an elevated blood level lived in a home where the water had elevated lead levels. The city's water also meets or exceeds all state and federal standards for lead, and passed its U.S. EPA review last month.

“The city’s work to address lead based paint hazards in recent decades has led to a significant reduction in the percentage of children with elevated blood lead levels,” said CDPH Commissioner Julie Morita, M.D., who noted the primary cause of elevated blood lead levels in children is lead-based paint. “Even with this progress, we are committed to continuing our efforts to protect the public from exposure to lead.”

The city also provided an update on another ongoing study related to water quality. In 2016, DWM launched a first-of-its kind study to determine the possible impact of water main construction and meter installation on water quality because no comprehensive scientific study had previously explored the topic.

While the study is ongoing, preliminary data indicates that the water main replacement program is not producing large changes in lead concentrations. As such, no changes are warranted to the city’s 10 year capital plan to replace century-old water mains and aging sewer mains that is in progress.

Additionally, the ongoing study is examining the possible impact of water meter installation on water quality. Preliminary data from a small sample size indicates that meter installation may raise lead levels in a portion of homes, though more than 80 percent of homes tested in the study did not have lead levels above the EPA action level after the installation of a meter. The sampling approach taken in the study is more rigorous than the sampling used for EPA testing, and again, Chicago passed its regular water quality review by the EPA last month.

More study is needed to analyze the relationship between water meter installation and lead levels, as the increase may not be related to the meter. For example, these homes may have higher lead levels because of low water usage, which would mean the protective phosphate coating isn’t sufficiently covering the home’s lead service lines and preventing that lead from entering the water.

While initial data shows that 82.8 percent of the 296 homes in the meter portion of the study did not have an increase in water lead levels after meter installation, the city will take several actions out of an abundance of caution. Going forward, residents must provide informed consent and agree to before and after testing in order to have a meter installed. Further, homes getting a meter going forward will be given a free water filter set that includes a pitcher and six filters to use since test results will not be instantaneously available. DWM will also be contacting residents who have had a meter installed previously to notify them that they have the option of requesting a water filter set, starting with the most recent installations first and working backward. In addition, any household that previously tested above the EPA action level will also receive a water filter set free of charge.

As was the case previously, flushing the system – or running water continuously for at least five minutes after not using water for six hours– is encouraged for those concerned about lead levels, as studies show that in almost every case, flushing for at least five minutes provides virtually lead-free water that comes directly from the water main. Flushing should

be done prior to using water for drinking or cooking, and residents may already flush without realizing it, as ways to flush include taking a shower, washing clothes or running the dishwasher. Additionally, as has long been the case, any resident may call 311 to request that their water be tested for free. If any residence tests over the EPA action level, DWM immediately notifies the resident and sends a plumber, sanitary engineer and an electrician to investigate a number of possible contributing factors and create a mitigation plan for the homeowner. The results of all tests are posted online at www.chicagowaterquality.org, with homeowners' identifying information removed.