

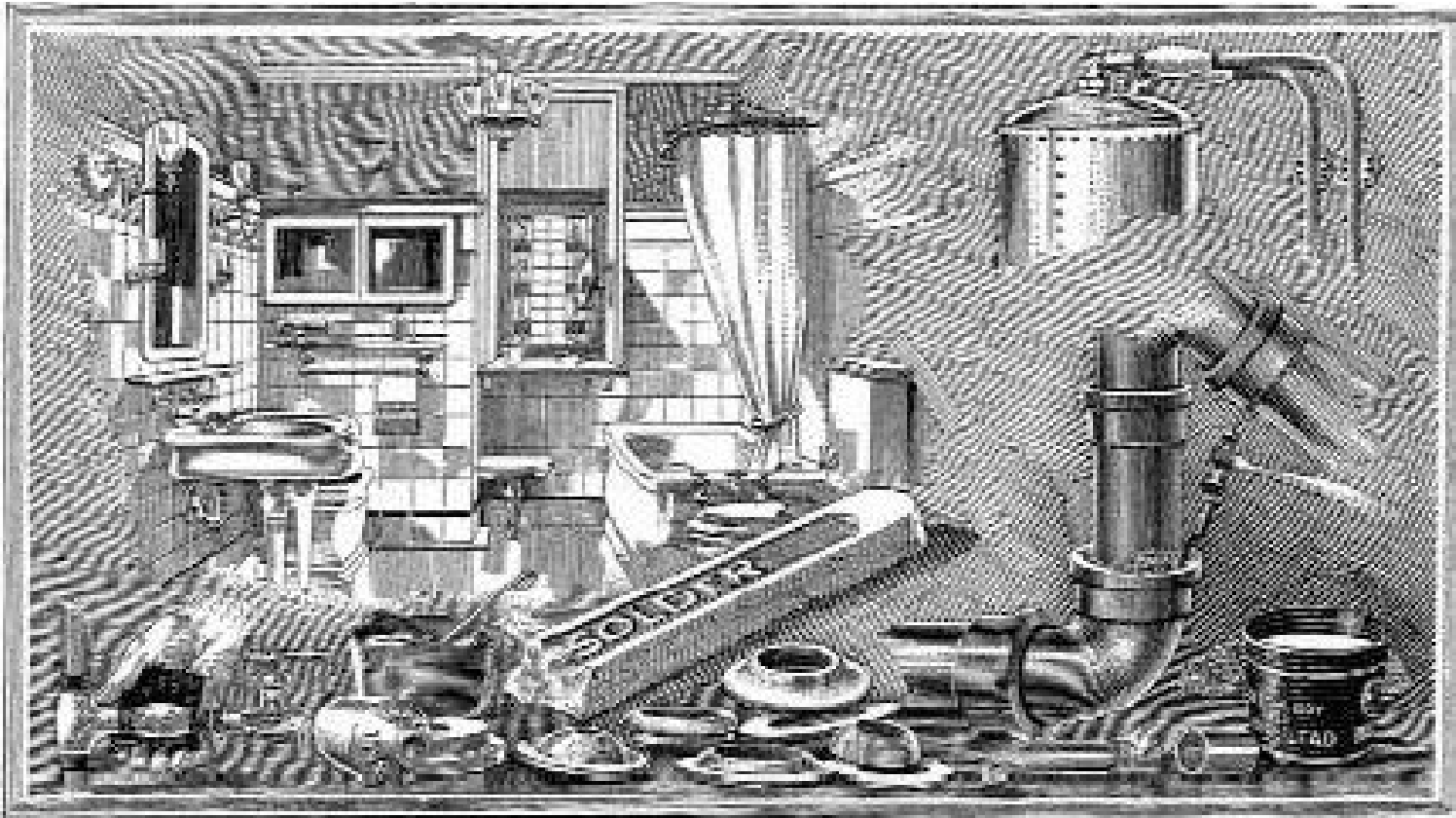
LEAD, DRINKING WATER & REGIONAL RESPONSE

CHESAPEAKE BAY POLICY COMMITTEE BRIEFING

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"Lead helps to guard your health." The illustration for an ad in the November 1923 *National Geographic*, one of a series by the National Lead Company.



At a Glance

Flint raised the level of attention to lead in drinking water.

- The Lead and Copper Rule is complex.
- Infrastructure investment is needed.
- Effective, funded and transparent drinking water governance is a necessity.
- Clear communication across agencies and jurisdictions is essential.



Lead, Drinking Water and Health

- Complex
- Language
- Ubiquitous
- Exposures
- Prior experience
- Media attention

Regional Status



Utilities are in compliance with the Lead and Copper Rule

- Corrosion control programs in place
- Lead service lines audited
- No change in source water or treatment
- Sampling protocols & guidance followed

2013 EPA National Public Water System Compliance Report

	Violation	Violations	(n) PWS
District of Columbia	None	0	0
Maryland			
COG Jurisdictions	None	0	0
State	Treatment Technique	19	19
	Monitoring	130	128
Virginia			
COG Jurisdictions	None	0	0
State	Treatment Technique	5	5
	Monitoring	115	82



Corrosion Control

- All systems implement corrosion control programs, for example
 - The Washington Aqueduct adds orthophosphate for drinking water in DC Water, Arlington and Fairfax Water Falls Church service area.

Monitoring

- Water systems continuously monitor corrosion parameters and to maintain good water quality.
- DC Water and the Washington Aqueduct saw lead pipe loops to simulate residential water use.

Customer Testing

- DC Water offers free lead test kits to customers by request.
- WSSC will test customer water upon request
- Virginia utilities refer customers to state certified laboratories

Lead Service Lines

DC Water

- Replaces lead and galvanized iron service lines in public space during main replacements or construction work.
- Encourage property owners to replace lead service pipes on their private property.
- Replaces the public portion if property owners opt to replace their portion of the lead service line, subject to availability of funds.

Alexandria

- Increase efforts for replacement
- Offer credits for flushing

DC Water's Lead Response By the Numbers



- 125,000 lead service lines, 105,000 residential
- 19,895 lead service pipes replaced in public space since 2003
- \$209 million budget, expenses to date are ~ \$150 million
- At least 100 homes with lead service pipes are tested every 6-months to comply with the Lead and Copper Rule (LCR)
- From 2005 to present, 90% of LCR test results were below 15 ppb
- 90% of 2014 - 2015 of LCR samples were ≤ 5.5 ppb
- 2,500 lead test kits distributed since 2010



Science & Regulation

- 15 ppb
- Action Level vs. MCL
- Household exposure
- Corrosion control
- Sampling
 - Protocol
 - Volunteers

Consumer & Policy

- Responsibilities
 - Residential
 - Utility
- Certified Laboratories
- Advice
 - Good home plumbing practices
 - Health

Collaboration



Public Health

- Lead Prevention Programs
- Drinking water, plumbing
- Consumer actions
- Schools and Daycare

Test your water for lead

In Chicago, you can call 311 for information on how to get your drinking water tested for lead.

You can also visit <http://epa.illinois.gov> to obtain a list of certified laboratories to test for lead.

Be aware of repair work to your lead pipe line



Other steps you can take

- 
#1
Run water before using if it has not been used for several hours
- 
#2
Use only cold water when drinking or cooking
- 
#3
Purchase a water filter that removes lead
- 
#4
Regularly clean and remove debris from faucet aerators


Anything else you can do?

You can remove the lead service line.

You can purchase faucets and other plumbing parts that do not contain lead.

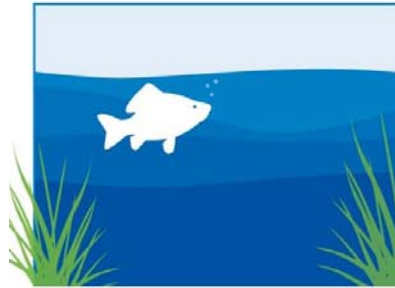


Regional Communication

- Lead as a serious health concern
- Customer health and safety
- Removal of all lead service lines
- Drinking water system actions
- Responsibilities
 - Water system
 - Customers
 - Schools and institutions
- Collaboration



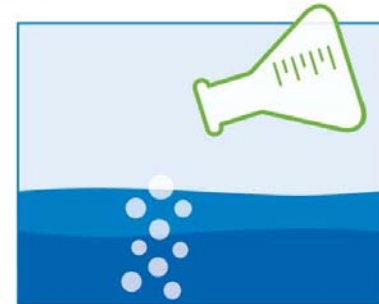
1 WHERE DOES DRINKING WATER COME FROM?



ESSENTIALLY NO LEAD FOUND

The District of Columbia's drinking water is drawn from the Potomac River by the Washington Aqueduct, a federal agency.

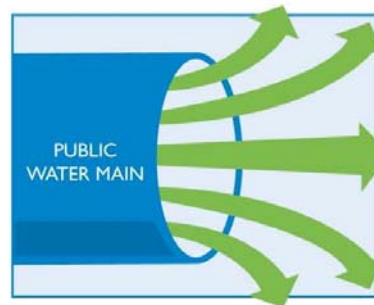
2 WHO TREATS DRINKING WATER?



ESSENTIALLY NO LEAD FOUND

The Washington Aqueduct is responsible for water treatment and adds orthophosphate (a food-grade chemical) to minimize the release of lead from service pipes and household plumbing.

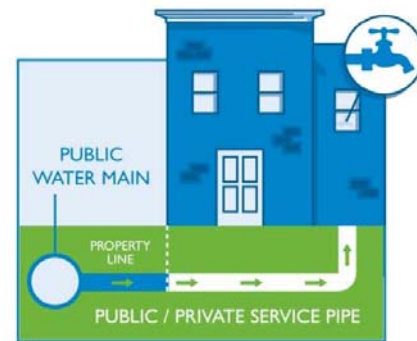
3 WHO DISTRIBUTES THE WATER?



ESSENTIALLY NO LEAD FOUND

DC Water distributes the water to homes and businesses through 1,300 miles of pipes in the District. Source: DC Water

4 WHERE CAN LEAD BE FOUND?



POSSIBLE LEAD

Lead can enter your water if you have a lead service pipe or household plumbing with lead. Orthophosphate can reduce lead release from these sources.

Questions?

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