

Lead Reduction Program & Equity

December 4, 2020



 DENVER WATER

Agenda



- Denver Water Overview
- Lead Reduction Program & Equity
- Lessons learned, next steps
- Resources & questions

Who is Denver Water?



Denver Water Overview

- Established in 1918.
- Serving 1.5 million people (25% of state's population) using less than 2% of water used in the state.
- Water supply comes from snowmelt in the Rocky Mountains feeding the South Platte and Colorado Rivers.
- Total watershed area: 4,000 square miles.
- 3,000 miles of pipe.
- Approximately 1,100 employees working all over the state.
- 20 dams, 12 reservoirs, 4 treatment plants and 18 pump stations.
- Approximately 320,000 customer taps

Lead Reduction Program

A road map for incorporating equity



A History of Lead in Drinking Water



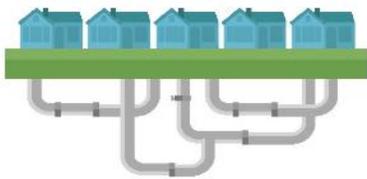
1918
Denver Water
Established

1951
Denver
Water Changes
Standards

Denver Water allows use of galvanized steel and copper pipes instead of lead for customer-owned service lines.

Pre-1951
Lead as Industry Standard

Lead is used to make customer-owned service lines that carry drinking water from main pipelines into homes and businesses.



1977
Lead Banned
from Paint

The Consumer Product Safety Commission bans lead from the consumer paint market to take effect in 1978.

1971
Denver Water
Bans Use of Lead
in Service Lines

Fifteen years before a national ban would be enacted, Denver Water bans use of lead in customer-owned service lines.



1991

**Lead Removed
from Gasoline**

Amendments to Clean Air Act require lead be removed from gasoline by 1995.

1986
Lead Pipes
Banned

Congress approves amendments to the Safe Drinking Water Act, banning lead pipes and phasing out lead solder.

1991-1992
Lead and
Copper Rule
Established,
Denver Water
Enhances Water
Quality Testing

EPA's 1991 Lead and Copper Rule establishes water quality testing requirements and action levels for corrosion control. In 1992 Denver Water begins testing water from homes with known lead service lines.

1994
Denver Water
Identifies pH
Adjustments
to Reduce
Corrosion

Denver Water begins using pH adjustments to reduce likelihood of lead getting into water from customer-owned lead piping.



2011
Reduction of
Lead in Drinking
Water Act Passes

Congress passes Reduction of Lead in Drinking Water Act, lowering the amount of lead allowed in "lead-free" household faucets and parts.

2012
Denver Water
Sampling Exceeds
Action Level

Denver Water's lead monitoring of homes with lead service lines shows results exceeding EPA's action level by 2 parts per billion (ppb).



2016
Denver Water
Launches Lead
Reduction
Program

Denver Water launches ongoing program to continue education and reduce lead in drinking water, including replacing lead service lines during construction, offering free lead testing, community meetings, school-based outreach, collaboration with community partners and more.

2012-2017
Denver Water
Conducts Public
Education
Campaign and
Study

Denver Water launches extensive public education campaign and begins detailed study and analysis of optimal corrosion control methods to enhance protection for customers with lead service lines and plumbing.



2018-2019
Denver Water
Seeks Variance to
Orthophosphate

Denver Water studies impact of orthophosphate as well as elements of an alternative solution by requesting a variance that includes an accelerated lead service line replacement program, filter program and increasing pH for corrosion control, with final proposal due August 2019.

2018
(March)
CDPHE
Designates
Orthophosphate

In response to 2012 sampling, CDPHE designates use of additive orthophosphate to reduce risk of lead in drinking water.

2019
(Dec. 16, 2019)
EPA Approves
Variance

Denver Water will commence Lead Reduction Program beginning in 2020.

2019
Lead and Copper
Rule Revisions

EPA publishes draft LCR revisions for review.

Learn More:
303-893-2444
lead@denverwater.org
denverwater.org/Lead

 DENVER WATER

Lead Reduction Program Elements

Corrosion Control Treatment

Managing water chemistry (pH)

Lead Service Line Inventory

Building, maintaining, a searchable database of service line compositions.

Filter Program

Full replacement of lead service lines (paid for by Denver Water)

Lead Service Line Replacement

Provide pitcher filter (and cartridges) to all enrolled in program.

Communications, outreach and education

Promote program understanding and filter adoption.

LRP - Health Equity & Environmental Justice



Working towards equity

- Focus on underserved neighborhoods to increase access.
- Equity woven throughout program elements
 - ALSLR
 - Filter distribution
 - COE
 - Learn by Doing
- Entire program is bilingual (English/Spanish)





El plomo pesa mucho en nuestras mentes.

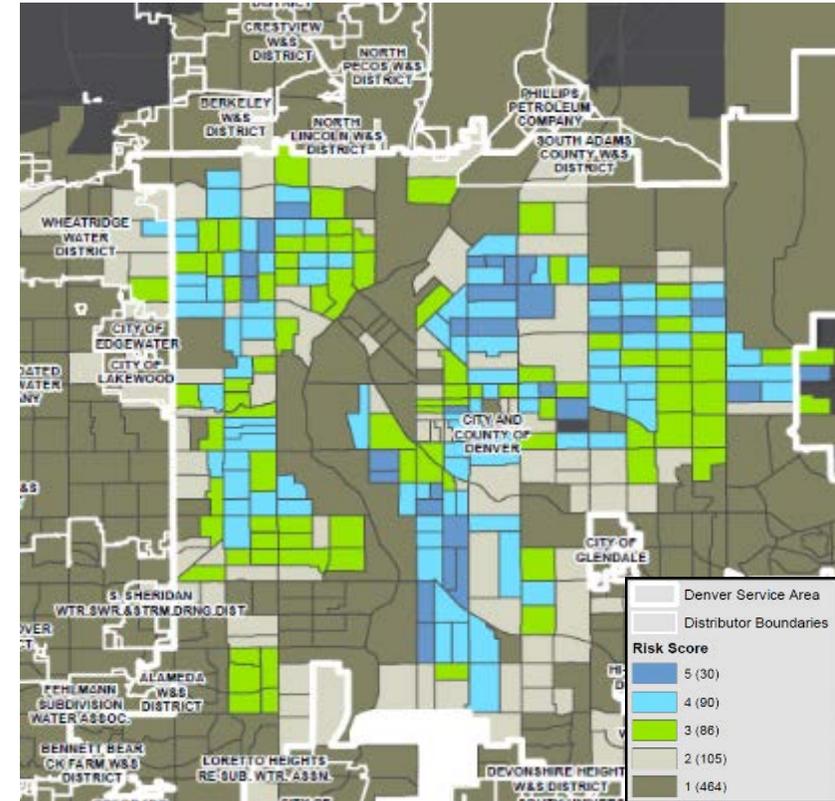
Aunque el agua que proveemos es segura, limpia y libre de plomo, este se puede mezclar con el agua al pasar por las tuberías de su casa. Por eso, estamos reemplazando las líneas de servicio de nuestros clientes, una por una. Para saber si tiene una línea de servicio de plomo, visite nuestro sitio web.

Obtenga más información en [DenverWater.org/Lead](https://denverwater.org/lead)

 DENVER WATER

Prioritization Model & Where to Work

- Critical Customers
- Potential for Health Impacts
 - Age (Children & Expecting Families)
 - Filter Adoption Rate
 - Statistics from CDPHE Blood Lead Level Study
- Socioeconomic & Demographic
 - Income
 - Minority
 - Women, Infant, Children (WIC) Participation

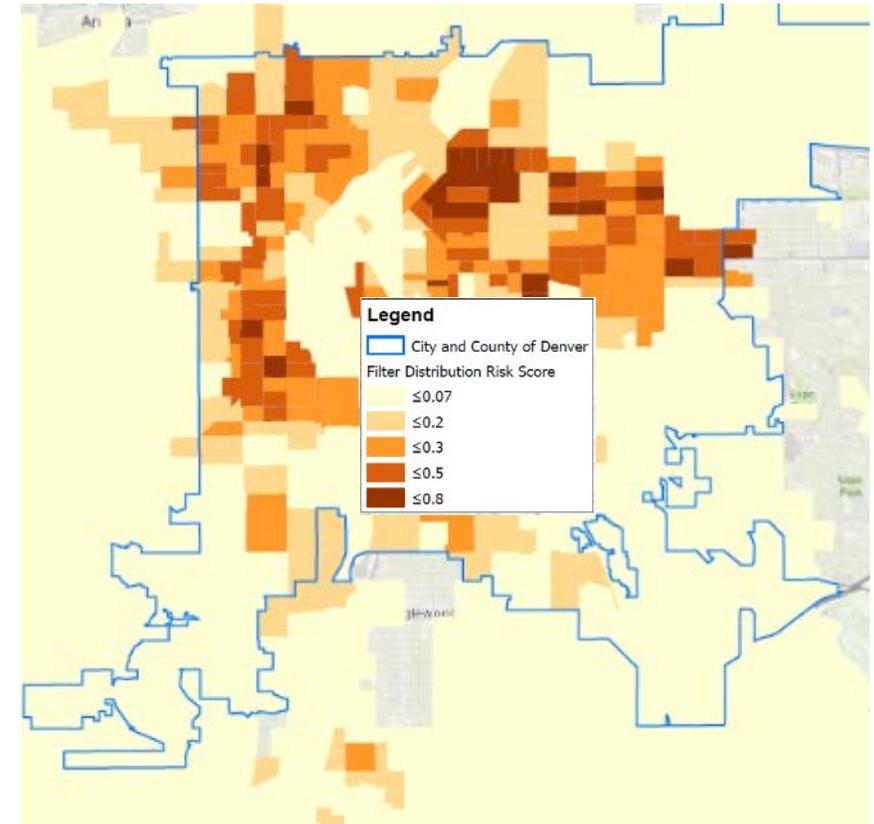


Filter Program

Initial filter distribution

- Based on prioritization model
- Use the model to support distribution logistics (number that can fit in truck per week)
- Accompanied with an outreach strategy to educate on the importance of use.

Customized outreach based on filter adoption surveys



Communication, Outreach & Education - Strategies

- Traditional communications
- Outreach tailored to our diverse population
- Targeted outreach to specific audiences
- Community engagement
- Ambassador Program
- Learn by Doing



Ambassador Program

What: Partnerships with trusted community organizations in communities where residents face higher risk of lead exposure.

Why: Reach more people in more places in multiple languages to remove barriers from the Lead Reduction Program.

How: Activate community ambassadors to conduct virtual engagement opportunities and “future” in-person grassroots activities.





¿Ha recibido un filtro de agua Britta de Denver Water?



Estos embajadores estarán educando a los clientes acerca de los esfuerzos de enlace comunitario de Denver Water que incluye proveer gratuitamente jarras de agua y filtros que están certificados para remover plomo, recomendando su uso a todos los clientes hasta que las líneas sean reemplazadas y hasta seis meses después.

Denver Water está proporcionando gratuitamente a todos sus usuarios que puedan tener líneas de servicio de plomo jarras para agua con filtro y filtros de reposito que están certificados para remover el plomo. Revise el mapa interactivo para saber si su hogar o negocio tiene o se sospecha que tenga líneas de servicio de plomo.

A pesar de que el agua que Denver Water suministra a los hogares y negocios está libre de plomo, el plomo puede entrar al agua a medida que pasa por las líneas de servicio y plomería del cliente si contienen plomo. CREA Results estará trabajando con Denver Water como parte de su Programa de Embajadores para promover el programa de Reducción de Plomo en comunidades latinas en el área de Denver.



Visite <http://www.crearesults.org/denver-water>
FB @crearesults.

Lláme a nuestra línea de ayuda gratuita
1-800-500-4668

DENVER WATER





Outreach partner, iNOW, reached over **2,500** people with content in **five** languages, supporting immigrant and refugee families.



Communications & Outreach – Progress to date & upcoming

- Public online accessible LSL inventory March 2020.
- More than 95% of all customers enrolled reached in first year.
- Over 115,000 page views of denverwater.org/Lead.
- Over 800,000 people reached through social media activity.
- Over 3 million impressions from digital paid media strategy.
- 13 virtual bilingual community events with 8,000+ attendees & over 17,000 reached via outbound call and messaging.
- Outreach to 250+ community organizations in service area.
- Stakeholder advisory committee up and running.
- Up next – Spanish Lead Reduction Program website.

Lessons learned & next steps

- Follow state and local programs focused on equity to strengthen your program.
- Cultural practice for the program and its workforce.
- Commit to progress not perfection.
- Get on the same page about terminology.
- Partner where possible.
- Watch out for tunnel vision.
- Evaluate often to course correct.
- Talk and share with others frequently.



Thank you (and resources)

Program info:

- denverwater.org/Lead
 - Sign up for updates
- denverwaterTAP.org

Follow-up questions for me?

- Alexis.Woodrow@denverwater.org