



HARVARD
T.H. CHAN

SCHOOL OF PUBLIC HEALTH
Prevention Research Center
on Nutrition and Physical Activity

Safe Home Drinking Water: A Series of Six Case Study Briefs

Executive Summary



THE ISSUE

Water security means having stable access to available, acceptable, and safe drinking water and it is key to supporting good nutrition and health. Water security is particularly important for families with formula-fed infants because powdered infant formula is reconstituted with plain water. Families with low incomes, communities of color, and non-native English speakers are disproportionately affected by exposure to unsafe drinking water.



THE CASES

This series of case studies describes six state and local strategies to address equitable home drinking water access and quality for families with children 0–5 years old experiencing low income. Researchers interviewed key informants about the community context, supportive policies, program design, program activities, and lessons learned. The cases highlight programs and policies for home water quality testing, home well water treatment device installation, filter pitcher distribution, and lead service line (LSL) replacement. Partnering with organizations with established relationships with families vulnerable to unsafe drinking water like the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) was a key program activity.

New Jersey Private Well Testing Act

State policy requiring home well water quality testing when a property is sold and every five years for rental properties served by wells.

Well Testing Via Healthcare Clinics in New Hampshire and Vermont

Local program that educated primary care clinical providers to conduct screenings, offer home well water testing for arsenic at no charge to families with infants, and conduct follow-up reminders.

New Hampshire's Water Well-Ness Initiative

State-wide initiative training WIC clinicians to conduct screenings of pregnant people, offer home well water testing, and, if needed, provide filter pitchers and filter cartridges free of charge.

Porterville, California Program

Local program that provided water sampling and testing services for nitrate along with associated education, water filtration systems, and bottled water delivery to WIC-eligible families free of charge via community organizations and a local WIC office.

Cincinnati's Enhanced Lead Program

Local ordinances prohibiting private LSLs and providing local financing and subsidies for private LSL replacements.

Denver Water's Filter Program

Local water utility program providing filter pitchers and replacement filter cartridges appropriate for household water needs free of charge to all properties with a known or suspected LSL. Program activities included the use of LSL inventory and demographic data to identify neighborhoods with high concentrations of pregnant people and young children, outreach to leasing agents, and provision of filter kits to apartment complexes for distribution to new tenants.

IMPLICATIONS

The lessons learned from these policies and programs can inform equity-based efforts to improve water security with a focus on young children in households experiencing low incomes.



Equity framework to increase water security at home

Opportunities for Policy and Systems Change



ADAPTED FROM: Shiriki K. Kumanyika, 2019: A Framework for Increasing Equity Impact in Obesity Prevention. *American Journal of Public Health* 109, 1350-1357, <https://doi.org/10.2105/AJPH.2019.305221>

SUGGESTED CITATION

Wilking C, Nink E, Cradock AL. Safe Home Water: Executive Summary. Boston, MA: Prevention Research Center on Nutrition and Physical Activity at the Harvard T.H. Chan School of Public Health; 2022. Executive Summary and detailed case study briefs available at <https://www.hsph.harvard.edu/prc/projects/safe-home-water>. Address correspondence to Angie Cradock, ScD, MPE at acradock@hsph.harvard.edu

AUTHORS

Prepared by Cara Wilking, JD, independent legal consultant, Barnstable, Massachusetts; Emily Nink, MS, CPH, Prevention Research Center on Nutrition and Physical Activity, Department of Social and Behavioral Sciences at the Harvard T.H. Chan School of Public Health; and Angie Cradock, ScD, MPE, Prevention Research Center on Nutrition and Physical Activity, Department of Social and Behavioral Sciences at the Harvard T.H. Chan School of Public Health.

FUNDING & ACKNOWLEDGEMENTS

This work was supported by a grant from the Robert Wood Johnson Foundation (#76333) and in part by funding from the Centers for Disease Control and Prevention (U48-DP006376). The views expressed are those of the authors and do not necessarily reflect those of any funding agency. The design for this brief was developed by Molly Garrone, MA, Prevention Research Center on Nutrition and Physical Activity at the Harvard T.H. Chan School of Public Health.