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

- Local ordinance requiring lead service line removal and allocation of resources for replacement for households with low incomes
- Program providing filter pitchers to households with lead service lines
- Policy setting stricter state standards for key contaminants in water supply
- System for routine screenings for home water wells, testing and counselling for families with young children in clinical settings
- Policy requiring private well water testing and disclosure during real estate transactions
- Policy requiring water quality disclosures to renter households
- Programs providing water quality testing, filter pitchers and other filtration systems or bottled water to eligible households at no cost
- Income-based subsidies or financing for lead service line replacement
- Strategic partnerships with WIC, academic researchers, water analysis labs, state and local health agencies, and leasing agents
- Collaboration with established organizations to build awareness about local water quality, water testing, and use of water filters


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