

Improving Spring Water Quality with Data and Atypical Partnerships

In Tennessee, it is estimated that 11% of the population derives their drinking water from an unregulated, private water supply such as a well or spring. With the support of the Centers for Disease Control and Prevention (CDC) Safe Water for Community Health, the Tennessee Department of Health (TDH) [Communicable and Environmental Diseases and Emergency Preparedness](#) was funded to evaluate and address gaps in unregulated private water sources using the [10 Essential Environmental Public Health Services](#) (EEPHS) framework. To assist with planning and implementation of CDC guidance and evidence-based practices, on-site and remote technical assistance and quality improvement training from Public Health Foundation (PHF) was provided.



TDH has identified and is addressing three gap areas in private water:

- Strengthening water-disease investigation capacity through partnerships with the environmental staff (EEPHS 2, 4)
- Addressing inequities in access to private well and spring water testing (EEPHS 3)
- Planning and laying groundwork to execute longer-term goals, such as a crowdsourced GIS map to post analysis of well and spring water (EEPHS 1)

With its small team, TDH recognized its strength comes from focused, collaborative partnerships, particularly with the Tennessee Department of Environment and Conservation (TDEC). TDH is addressing spring water quality by offering water testing to residents through a Cannon County pilot program and with atypical partners often out in the community – such as the TDH Family Health and Wellness Evidence-Based Home Visiting Program, the TDEC state parks and natural area programs zoological staff, and Communities Unlimited, Inc., a part of the Rural Community Assistance Program.

“Approximately 650,000 people in Tennessee rely on private wells and springs as their primary source of household water. Finding these individual households or rural communities not served by public, municipal water is challenging and evaluating the quality of drinking water from these systems is even more challenging. Reliance on our partners is essential in reducing potential private drinking water related exposures to waterborne contaminants”

Judy Manners, MSc, Environmental Health Specialist
Tennessee Department of Health

Tracking Planning and Progress

To track and organize their short and long-term activities, TDH created a five-year modified Gantt Chart with focus areas and clear objectives and targets. At the end of their improvement initiative, they anticipate an increase in the reach of drinking water safety programs and reduced exposure to waterborne contaminants.

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