Virginia Household Water Quality Program

2017 Annual Report

Virginia Cooperative Extension
Virginia Tech
Virginia State University

The Virginia Household Water Quality Program provides affordable, confidential water testing and education to the

1.7 million, or 22% of Virginians

who rely on wells, springs and cisterns for household water.
Municipal water supplies are regulated in the U.S., but maintenance, testing and addressing problems with

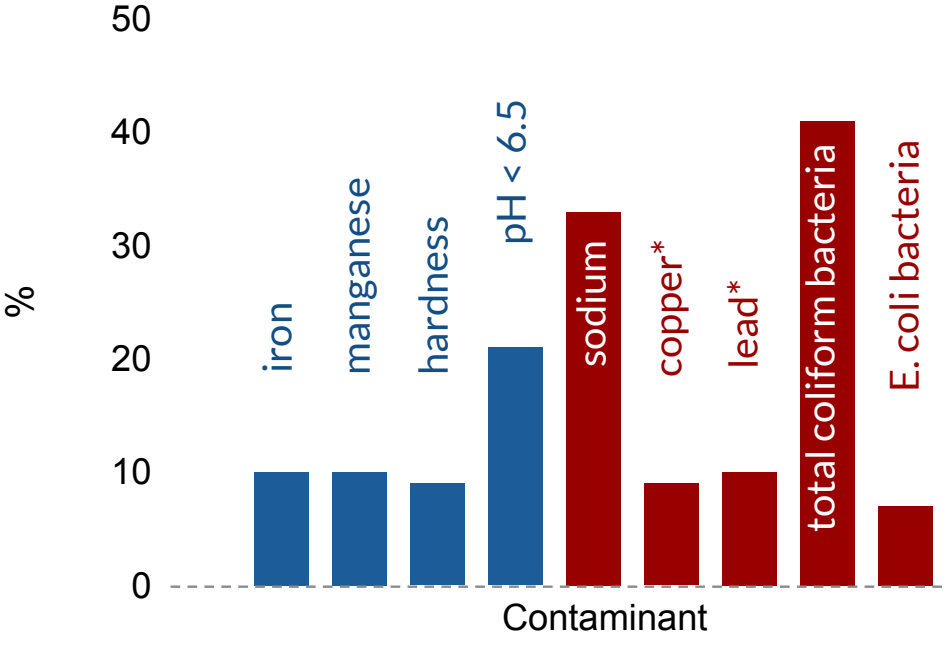
private water supplies are the responsibility of the owner.

2,178 samples analyzed

serving 5,368 Virginians

in 87 counties

What's in the water?



Household water quality is driven by geology, well construction and condition, nearby sources of contamination, and, within the home, water treatment devices and composition of plumbing materials.

Blue bars represent % of samples exceeding standards for NUISANCE contaminants.

Maroon bars signify contaminants with associated HEALTH impacts.**

* in first draw household tap water samples
**contaminants found in less than 5% of samples not shown; more information on testing here.

Value

Participation in a VAHWQP clinic is designed to encourage subsequent, annual testing using a commercial lab. If delivered commercially, the value attributed to the 69 VAHWQP drinking water clinics offered in 2017 would be $696,960. The cost to the 2017 participants was $113,256, a cost savings of approximately 84%.

NEW

Annual well testing is recommended. Of 2017 participants, 42% report NEVER testing their water before. About 20% of participants are return clients; many new people participate each year.

*based on estimate of $20 per analyte

Impact

68% of participants reported attending the results interpretation meeting; remaining participants were mailed or emailed their reports with additional information

92% of participants stated that they understand their water test results

Participants were asked what recommended actions they planned to take:

- 20% will install treatment or improve function of existing treatment devices
- 19% will shock chlorinate (circulate chlorine through well and plumbing to kill bacteria)
- 10% will seek additional testing
- 9% will improve maintenance of well or spring
- 20% shared more detailed actions they will take

Program satisfaction survey*

*administered online; RR=12%

1=completely disagree; 10 = completely agree

I gained useful information.	9.5
9.4	It was affordable.
I feel empowered to manage my water supply.	9.1
9.4	I will recommend this program to my friends and neighbors.
This program was valuable to me.	9.4
9.0	It was easy to participate.

About 350 kids were reached in 2017 with hands-on education about groundwater and private water supplies through camps at Virginia Tech and visits to schools.

45 high schoolers visited the Virginia Tech campus with their own water samples, participated in lab activities, learned about food safety, water quality, well construction and associated career opportunities. They helped educate their families about their own water safety. We appreciate donations from Southeast Rural Community Assistance Project and Virginia Lakes and Watersheds Association to support these youth experiential education efforts!

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