Virginia Household Water Quality Program

2019 Annual Report

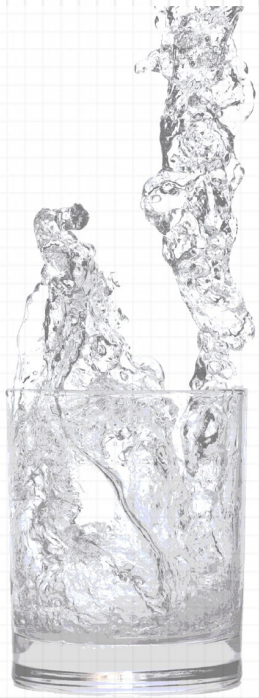
Virginia Cooperative Extension
Virginia Tech
Virginia State University

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.

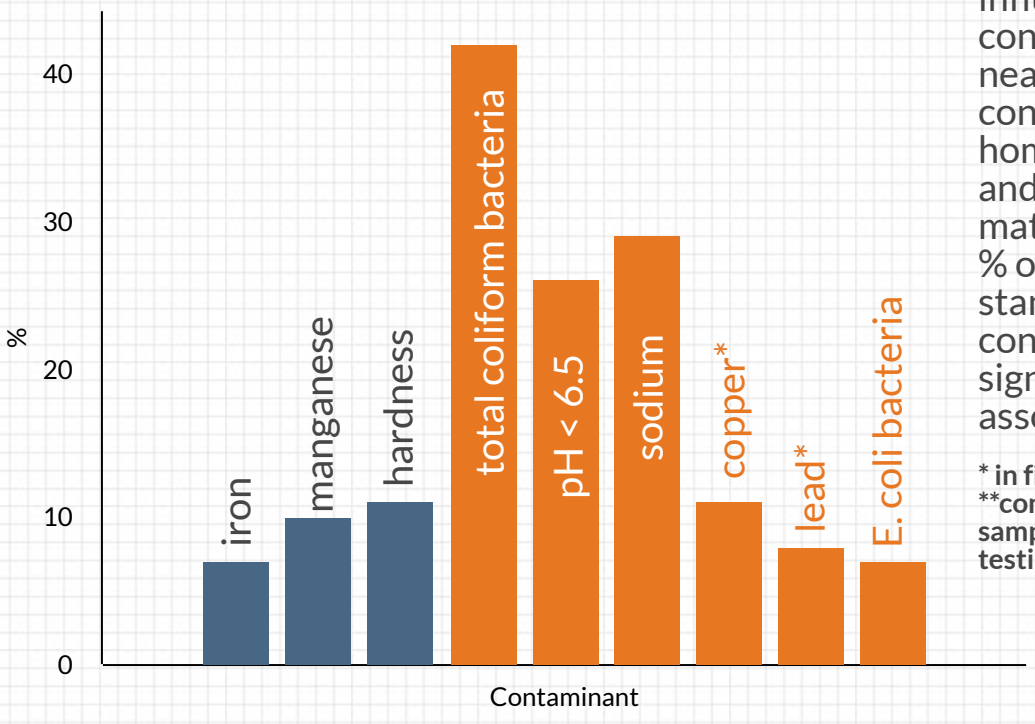


2,294 samples analyzed serving

5,917 Virginians

in 88 counties

What's in the water?



Household water quality is influenced 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. Orange 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 64 VAHWQP drinking water clinics offered in 2019 would be $734,080. The cost to the 2019 participants was $123,670, a cost savings of approximately 84%. In addition, grant funding** reduced the cost of testing for 737 families, making the program more accessible for many.

NEW

Annual well testing is recommended. Of 2019 participants, 41% report NEVER testing their water before and 30% have tested only once. About 21% of participants are return clients; new people participate each year.

*based on estimate of $20 per analyte; **grant funding from an EPA grant, "Untapping the Crowd: Consumer Detection and Control of Lead in Drinking Water", The Private Well Class through Rural Communicty Assistance Project and Virginia Tech Freshwater Systems seed grant

Impact

96% of participants stated that they understand their water test results

Participants were asked what recommended actions they planned to take:

- 19.2 % will install treatment or improve function of existing treatment devices
- 17% will shock chlorinate (circulate chlorine through well and plumbing to kill bacteria)
- 14.4% will improve maintenance water system or move a source of contamination
- 10% will seek additional testing
- 22% shared more detailed actions they will take

Program satisfaction survey*

*administered online; RR=15%

1=completely disagree; 10 = completely agree

I gained useful information.	9.7
9.4	It was affordable.
I feel empowered to manage my water supply.	9.2
9.7	I will recommend this program to my friends and neighbors.
This program was valuable to me.	9.7
9.3	It was easy to participate.

About 560 kids were reached in 2019 with hands-on education about groundwater, drinking water and private water supplies through camps and fairs at Virginia Tech and visits to schools.

122 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 career opportunities. They helped educate their families about their own water safety. We appreciate grant funding from the VT Freshwater Systems seed grant and a donation from the Virginia Lakes and Watersheds Association to support these youth experiential education efforts!

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