# Virginia Household Water Quality Program Virginia

2016 Annual Report



Virginia Tech Virginia State University

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

# 1.7 million, or 22% of Virginians

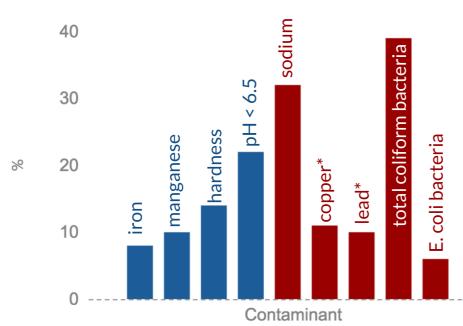
who rely on wells, springs and cisterns for household water. Municipal water supplies are regulated in the U.S., but maintenance, testing and addressing problems with

private water supplies are the responsibility of the owner.



2,554 samples analyzed serving 6,362 Virginians in 78 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.\*\*

<sup>\*</sup> in first draw household tap water samples \*contaminants found in less than 1% of samples not shown; more information on testing here.

### Value

Participation in a VAHWQP clinic is designed encourage subsequent, annual testing using a commercial lab. If delivered commercially, the value attributed to the 64 VAHWQP drinking water clinics offered in 2016 would be \$817,280. The cost to the 2016 participants was \$132,800, a cost savings of approximately 84%.





Of 2016 participants, 45% report NEVER testing their water before; new people are participating in the program. About 36% report testing only ONCE before.

\*based on estimate of \$20 per analyte

## **Impact**



74% of participants reported attending the results interpretation meeting; remaining participants were mailed their reports with additional information.



93% of participants stated that they understand their water test results

Participants were asked what recommended actions they planned to take.



36% will install treatment or improve function of existing treatment devices



26% will shock chlorinate (circulate chlorine through well and plumbing to kill bacteria)



12% will seek additional testing



12% will improve maintenance of well or spring



12% will use bottled water



\*administered online:

1 = completely disagree



390 kids educated

It is a challenge to reach busy families with children. In 2015, VAHWQP added a youth component. In 2016, about 390 kids were reached with hands-on education about groundwater and private water supplies through camps at Virginia Tech and visits to schools.

44 high schoolers came to 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.

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