

Agency for Toxic Substances and
Disease Registry's Partnership to
**Promote Local Efforts To Reduce
Environmental Exposures**

APPLETREE

Hooksett Residential Well Health Consultation

Karen Craver, MPH
Principal Investigator
karen.m.craver@des.nh.gov

Robert Thistle, Ph.D.
Health Risk Assessor
robert.thistle@des.nh.gov

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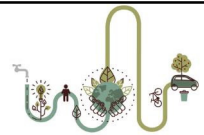


What we will cover tonight:

- Who we are
- What we do
- Why we're here
- How we can help your community



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Who we are:

- We are a team of:
 - Health risk assessors
 - Toxicologists
 - Principal Investigators and Epidemiologists
 - Health Communication Specialists
- Staff and partners from:
 - NH Department of Environmental Services
 - NH Division of Public Health Services
 - United States federal government
 - Academic institutions
 - Community leaders
 - Community members

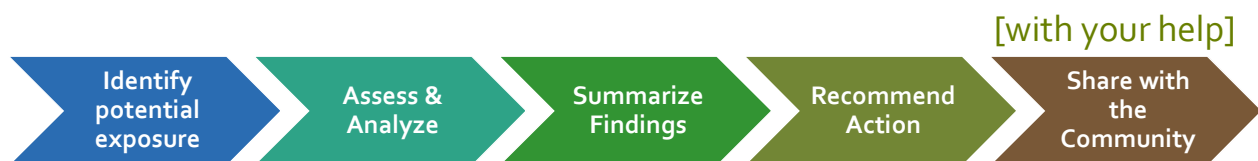


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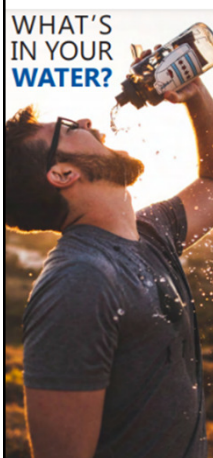
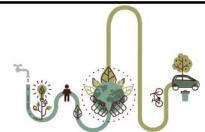


What we do:

- APPLETREE's main job is to help reduce your exposure to hazardous chemicals.
- We need your help to accomplish this! Local leaders are expert at reaching their community.



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Why we're here:

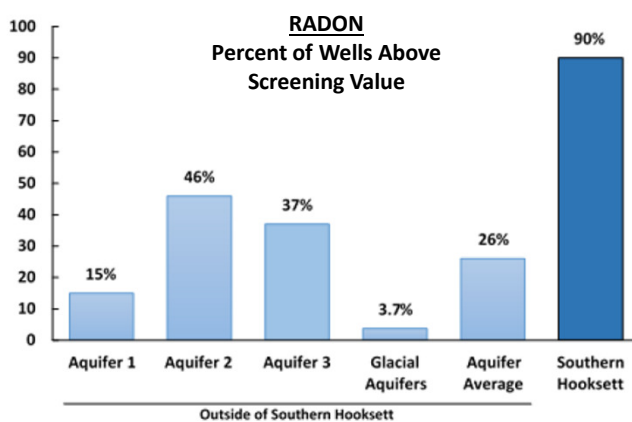
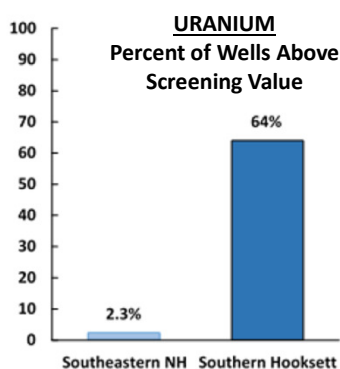
- In 2019 sampling from local groundwater detected elevated chemicals and caused community concern
- The NH DES Drinking Water and Groundwater Bureau partnered with the EPA to further test surrounding residential wells
- APPLETREE team reviewed the test results to examine potential health risks
 - NHDES, Environmental Health Program
 - NH Division of Public Health Services
 - ATSDR subject matter experts



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Why we're here:

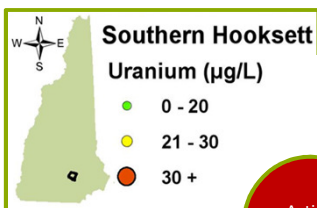
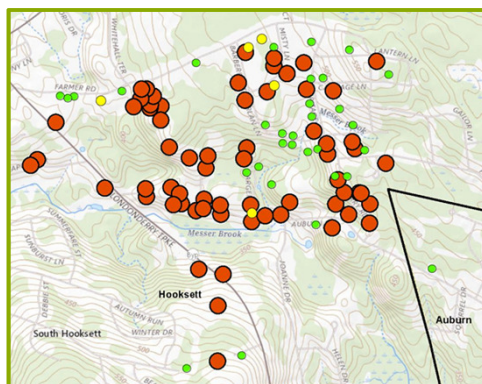
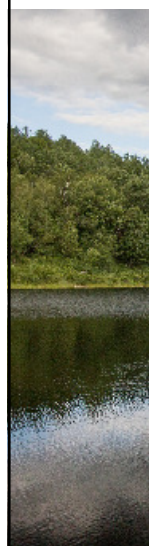
- 138 residential wells were sampled and tested for over 100 different chemicals
- Radionuclides like uranium and radon have the biggest associated exposure risk



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Why we're here:

- Uranium is a naturally occurring, radioactive part of earth's crust

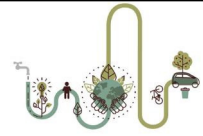


Action
Recommended

Action Value: 30 µg/L

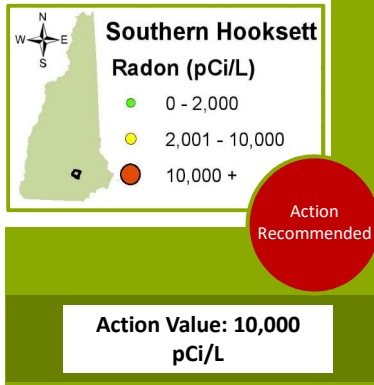
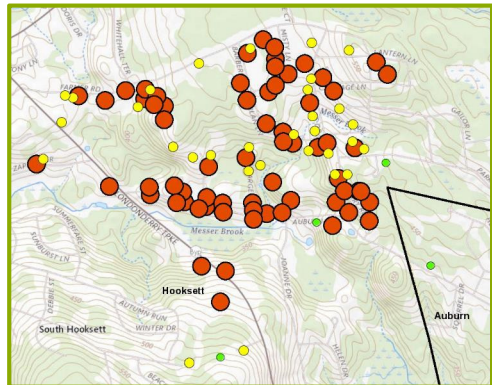


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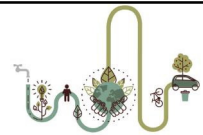


Why we're here:

- Radon is a gas byproduct released into homes from the decay of naturally occurring elements in Earth's crust



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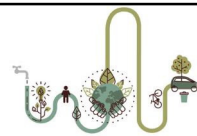


Why we're here:

- APPLETREE Identified 5 Contaminants of Concern using the most protective scenario modeling:

Contaminant	Associated potential health risk
Uranium	Certain cancers, kidney damage
Radon	Certain cancers
Manganese	Neurological effects in infants and children
Arsenic	Certain cancers, diabetes, heart disease, and skin lesions; short term exposure among pregnant women associated with impact to fetal growth and increased infections in first year of life of infants
PFAS	Increased cholesterol, changes in liver enzyme levels, altered hormone function, delayed growth in infants; and potentially certain cancers, associated with chronic exposure to certain PFAS

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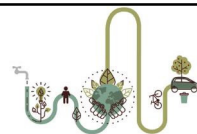


Why we're here:

- APPLETREE is not a regulatory body, but we can help residents make informed choices!
- Owners of each tested well in this health consultation have received a copy of their personalized water results
- There are many ways that residents can reduce exposure risks that are both affordable and effective
- It should be stressed that elevated risk does not automatically mean residents will experience a negative health impact



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APPLETREE Recommendations:

1. Test your well water
We recommend doing this every 3-5 years, unless otherwise specified
2. Test your home air for radon gas
High radon levels in your well suggest that indoor air levels will also be high. Radon gas contributes to lung cancer, and further elevates health risks in smokers.
3. Install treatment or remediation systems in your home
We strongly recommend installing treatment systems when any chemical in your well exceeds its specific guidance value. The health consultation lists contacts for help interpreting results and taking action.



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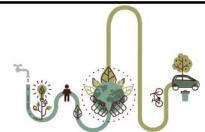


How we can help your community:

- Share results and recommendations:
 - With your input
 - With your assistance
- We are available to answer questions:
 - Now
 - As they arise in the future



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Contact Information:

Karen Craver, MPH
 APPLETREE Principal Investigator
Karen.m.craver@des.nh.gov
 (603)-271-6803



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