

The Vermont Department of Health Laboratory supports public health investigations and protects Vermonters from disease outbreaks. These highlights represent some of the Lab's accomplishments in 2021.

Lab Staffing and Capacity

In response to the pandemic, the Lab increased staffing through significant grant funding to build capacity. Seventeen total staff were added to customer service, microbiology, and administration which includes a Safety Compliance Specialist, a Courier Coordinator and a Health Care Training Coordinator.

75,000

COVID Specimens Tested by the Lab

COVID Testing & Tracking

Vermont is ranked as the third highest state in testing volume per capita. The lab played a critical role in this effort, and was the first lab in Vermont to perform COVID testing.

The Lab provides PCR test kits to health care providers, public testing sites, and to facilities experiencing an outbreak. The Lab analyzes COVID tests from these locations to ensure Vermonters get their test results as quickly as possible to protect themselves and their families.

Blood Lead Testing

Lead is a highly toxic metal causing damage to the brain, kidneys, nervous system, and red blood cells.

Young children are at highest risk because their developing bodies absorb lead more easily. Lead dust exposure can have life-long health effects such as lowering a child's IQ. All children should be screened for lead at ages 1 and 2 by their health care providers.

The Lab quickly responded to a national lead testing supply recall which created an influx of blood lead samples coming to the Lab from providers.

3,419 samples received in 2021

a 43% increase from 2019

Testing for Lead in School Drinking Water

The Lab tests drinking water from homes, businesses, and towns across Vermont including child cares and schools. In 2021, the Lab analyzed 2,400 school and child care samples for the 2021-22 school year.



The Lab analyzed 2,400 water samples from schools in four months.

Drinking Water Drop-off Program

The Lab initiated the Drinking Water Drop-off Program in May 2021, which provides statewide district drop-off locations for the public's water samples.

Outreach and engagement occurred with home inspectors, real estate agents, treatment professionals, well drillers, and Vermont Parks.

Despite the pandemic, the number of samples received is on par with years past.

Drop-off Water Specimens

**1,900 from 850
distinct customers**

Ensuring Preparedness as a Biosafety Level 3 Laboratory

The Biosafety level 3 (BSL-3) lab is used to study infectious agents or toxins that may be transmitted through the air and cause potentially lethal infections. The Lab maintains the only secure BSL-3 suite in Vermont. The Lab is working in collaboration with UVM on use of this lab for specialty research.



Participation in National and Global Public Health Networks:

CaliciNet

- National Norovirus outbreak surveillance network that allows for quick identification of outbreaks and the source of the outbreak
- **The Lab is the only Norovirus testing lab in Vermont**

World Health Organization Influenza Surveillance and Testing Lab

- Global network that tracks what influenza viruses are circulating and detects changes in the virus
- **Helps determine which influenza strains to include in the next year's vaccine**

PulseNet & FERN

- National network that uses the DNA fingerprints of the bacteria making people sick to detect thousands of local and multistate outbreaks
- Includes foodborne, waterborne and animal diseases. Recently includes COVID strain identification
- **Allows earlier identification of an outbreak, its cause, and earlier intervention**

CDC Lab Response Network

- Network of national and international labs that provides quick response to biological and chemical threats and other public health emergencies
- Integrates public health labs, veterinary, agriculture, military, and water and food-testing labs