

## Introduction

Thank you for participating in testing and data sharing for Vermont's Lead in Drinking Water in Schools and Child Care Program. [Act 66 \(2019\)](#) requires all samples to be analyzed by Vermont-certified drinking water laboratories according to [the Rule](#). Laboratories must submit sample data to the State in the approved format. This guide outlines the steps that a certified laboratory must take to comply with this law and provides information to help facilitate testing.

## Overview of the Act 66 Testing Process

All Vermont-based schools and child care providers (**clients**) must test all of their taps used for drinking or cooking for lead. There are three stages of testing through Act 66.

1. Clients are required to collect **initial samples** every three years for all taps that are used for consumption, and any new taps that have never been tested during the three-year interval. Any tap with a result at or above the Vermont Action Level of 4 ppb must be remediated.
2. If the remediation action was anything other than permanent removal from service, **follow-up samples** must be collected.
3. If the laboratory, or the Vermont Department of Environmental Conservation, determines that a sample is of poor quality (for example, insufficient volume for testing) or was collected incorrectly, then **resamples** must be collected to ensure accuracy of the results. Resampling should be coordinated with the Department of Environmental Conservation if results for the faulty samples were already reported and uploaded to the public results website.

## Requirements of Act 66 and the Rule

- All analyses must be conducted by a certified drinking water laboratory.
- All samples must be collected using a 250 mL bottle.
- Clients must collect both a first draw and a flush sample from most taps. Fixtures that have multiple taps (such as a sink with a faucet and a drinking fountain, or bottle fill station and drinking fountain) are called “combo fixtures” and need two first draw samples, but only one flush sample. Ice machines only need one first draw sample. [View photos of different types of taps.](#)
- Clients are responsible for all testing costs, including shipping.
- Laboratories must submit all results to the Health Department in the approved format within 30 days after analysis has been completed and within 2 days of notifying the client.

- A specific analytical methodology is not required. However, laboratories should use an EPA-approved method that they are certified for.
- Laboratories should be able to report results with a reporting limit that is no greater than 0.001 mg/L (1 ppb). This ensures that reported results can be compared to the Vermont Health Advisory Level of 1 ppb.

## Test Kit Work Orders

All schools and child care providers in Vermont are required to test their taps for lead in accordance with [the Rule](#). Laboratories that provide Act 66 testing will send test kits directly to schools and child care providers and receive samples back from those clients. The Vermont Department of Health supports facilities in complying with Act 66 by helping to understand which taps must be tested, how to submit work orders, what the testing requirements are, and how to interpret results.

When requesting a test kit, each client will submit a work order to the certified laboratory they are using. See an example work order in [csv format](#) or in [xlsx format](#). The work order lists the samples that need to be collected. [Learn more about water sample collection for schools and child care facilities](#).

**Test Kits:** Laboratories should provide test kits to clients using their preferred method (shipping or pickup). Test kits should include information to facilitate testing. The Health Department has templates or examples of the following items:

1. [Pre-labeled sample bottles](#) – labels need to match information included in the work order and needs to clearly identify which sample location and type (first draw or flush) to be collected.
2. [Water Sample Collection and Return Instructions](#)
3. [Water Sample Worksheet](#)

## Sample Analysis

Follow the steps below to help avoid common problems and save time for laboratory, clients, and Health Department staff:

1. Check that all samples listed in the work order have been received.
2. Identify missing or problematic samples and notify the client.
3. Make sure taps have a paired first draw and flush sample, except combo fixtures will have two first draw samples (one from each of two taps) and only one flush sample from either tap, and ice machines will only have one first draw sample.

## Data Reporting and Submission Instructions

Laboratories are required to report results to the client and the Health Department. Lead result values must be reported to three decimal places (for example, 0.003 mg/L or ppm) to both the client and to the Health Department.

## Submitting Results to Clients

Laboratories may report results directly to each facility using their normal process and format (for example, Certificate of Analysis, summary of results, by email or hard copy). The Health Department suggests using an **Act 66 results cover sheet** to facilitate the interpretation of results and next steps.

## Submitting Data to the Health Department

1. Identify a primary point of contact at your laboratory to manage data submission.
2. Review the documents in the Data Submission Resources table below. Send any questions to [LeadSchool@vermont.gov](mailto:LeadSchool@vermont.gov).
3. Populate a results file for the Health Department following the [Act 66 Lead Testing Data and File Format Guide](#). This Guide provides instructions on how to format and import results files to the Tap Inventory Management System (TIMS).
4. Submit results within 30 days after analysis is completed, and within 2 days of reporting results to the client. Labs may submit one result file containing all results per facility. Batched files containing results for multiple facilities are acceptable.
5. Results imported to TIMS are automatically uploaded to the [public results website](#).
6. Questions on how to submit results or to resolve issues can be sent to [LeadSchool@vermont.gov](mailto:LeadSchool@vermont.gov).

## Data Submission Resources

Document	Description
<a href="#">Act 66 Lead Data and File Format Guide</a>	This guide outlines file format, data elements, and required data.
<a href="#">Act 66 Data File Template</a>	A csv file that contains column headers for all data elements both required and optional.
Act 66 Data File Example	An example <a href="#">csv file</a> and <a href="#">xlsx file</a>
<a href="#">The Rule Governing Testing and Remediation of Lead in the Drinking Water of Schools and Child Care Facilities</a>	The Rule specifying testing requirements as required by Act 66 (2019).

## Interacting with Clients

In some cases, clients will need assistance from the laboratory, the Health Department or the Department of Environmental Conservation (DEC). The following table specifies who can best assist clients under different circumstances.

Inquiry	Laboratory Assists	Health Department Assists	DEC Assists
Questions or issues related to work orders	✓		
Billing	✓		
Resampling*	✓		✓
Act 66 testing requirements		✓	
Interpreting lead test results and next steps		✓	✓
Remediating taps			✓
Tap inventories		✓	

\*If results for faulty samples were already reported and uploaded to TIMS, clients or the laboratory should coordinate resampling with the Department of Environmental Conservation. Otherwise, clients can coordinate resampling directly with the laboratory.

## Compliance Checking

Periodically, the Health Department will request information from laboratories to track facilities' compliance with testing. This includes:

1. Lists of clients that have ordered or been sent test kits, but have not returned them.
2. Lists of clients that have submitted samples that have not yet been analyzed.
3. Related information such as types of samples (initial, follow-up).

## Important Tips

### Test Kit Work Orders

- Provide information on how you prefer to receive orders (for example, a link, phone, or email) to the Health Department to include on our website.
- Upon receiving samples at the laboratory, prior to analysis, first check:
  - All samples listed in the work order have been collected.
  - Each flush sample has a first draw sample from the same tap.
  - If samples are missing, please contact the client. If needed, the Health Department can assist with the taps included in the work order.

### Data Submissions

- Identify a primary point of contact at your laboratory to manage data submissions.
- Follow the [Data and File Format Guide](#), including checking for the “Common Errors” and using the “Best Practices” listed in the Guide.