

Vermont Public Water System Lead Data Summary, 2015-2018

In Vermont, lead in drinking water is the result of water leaching lead from lead pipes or lead-containing solder, fixtures, and plumbing equipment. We have not seen an instance where source water for a public water system contained lead. To address lead in drinking water in public drinking water systems, the State of Vermont has adopted the federal Lead and Copper Rule (LCR).

The LCR applies to Community (C) and Non-transient Non-Community (NTNC) water systems. There are 662 of these system in Vermont. Because lead varies from fixture to fixture, rather than a single maximum contaminant level, the LCR established a lead action level based on the 90th percentile of results (e.g., the second highest result out of a set of 10 samples). The action level is exceeded if more than 10% of the sample results in a monitoring period exceed 15 ppb (= 0.015 mg/L) of lead. An action level exceedance triggers additional testing and treatment steps for the water system. The Maximum Contaminant Level Goal for lead is 0.

Lead sampling at schools regulated as public water systems

There are 148 schools that are served by on-site public water systems; 145 are NTNC systems and 3 residential schools are C systems. All compliance samples under the lead and copper rule are 1 Liter samples with a stagnation time of at least 6 hours

Lead summary data from school public water systems, 2015-2018. ALE = Action Level Exceedance (10% of samples over 15 ppb).

Total Schools	Sampling Events	Schools without ALE	Schools with ALE	Schools with 1 ALE	Schools with 2 or more ALEs	Total School ALEs
148	286	138	10	8	2	12

How many samples are required at school public water systems per monitoring period. Minimum number of required samples is based on user population and previous lead and copper results. Most schools are small enough to collect 5 samples. Some larger schools collect 10 or 5 depending on their previous results (higher results requires more samples).

5 samples	10 samples	20 samples
136	11	1

How often samples are required at school public water systems. The interval is based on prior results and any significant changes to water source or treatment (ALEs or changes return a system to sampling twice per year).

6-month monitoring	Annual monitoring	Triennial monitoring
7	11	130

Summary of all lead results across all fixtures collected at school public water systems. Note that not all taps in every school are required to be sampled, so sites such as kitchens, fountains, nurse’s office, etc., usually take priority depending on the building’s plumbing materials and ages.

Samples	Samples Over 15 ppb	Samples Over 5 ppb	Samples Over 1 ppb
1799	35	116	526
	(1.9%)	(6.4%)	(29.2%)

Community (municipal) systems that also serve at least one school

Lead summary data from community public water systems that serve at least one school. ALE = Action Level Exceedance (10% of samples over 15 ppb). Data from 2015-2018.

Systems Collecting	Systems without ALE	Systems with ALE	Systems with 1 ALE	Systems with 2 or more ALEs	Total ALEs
110	104	6	2	4	12

Individual first-draw lead results from residences on community systems where the community system also serves at least one school. Residences take priority over other buildings for sampling under the LCR. These results are not indicative of water entering residences or schools from the community water system from water mains; these results reflect the effects of local plumbing in residences.

Samples	Samples Over 15 ppb	Samples Over 5 ppb	Samples Over 1 ppb
2323	47	157	805
	(2.0%)	(6.8%)	(34.7%)

Revised 2/27/19. Data based on results received by the VT ANR DEC Drinking Water and Groundwater Protection Division and uploaded to the state Safe Drinking Water Information System (SDWIS) as of 1/7/2019.