
To: House Committee on Education

From: David Englander, Senior Policy and Legal Advisor for the Department of Health

Date: May 11, 2021

Re: H.426 – Radon Amendment; Act 66 (2019) Update

Background on Radon

- Radon is a naturally occurring radioactive gas that has no color, smell or taste. There is no way to know if radon is a problem in a building without testing.
- Radon comes from the decay of uranium found in the earth's crust.
- Radon is present outdoors but becomes a problem when it builds up indoors.
- Breathing air with radon increases a person's risk of getting lung cancer.
- In the US, Radon is the second leading cause of lung cancer behind smoking. It is estimated that 21,000 people die from radon related lung cancer each year in the US.
- The risk of dying from radon related lung cancer at 4.0 picoCuries per liter (pCi/L) is 7 deaths per 1000. For smokers, the risk increases to 62 deaths per 1000.
- 1 in 7 Vermont homes has an elevated level of radon. This is more than twice the US average of 1 in 15 homes.
- For most school children and staff, the second largest contributor to their radon exposure is likely to be their school.

School Radon Program

- The radon program provides no-cost radon testing to a limited number of schools each winter. This work is funded by the EPA State Indoor Radon Grant.
- The Health Department's Public Health Industrial Hygienist is a certified radon mitigation professional that conducts school radon testing following the [ANSI/AARST standard](#) for schools and large buildings.
- At current staffing and funding levels, the radon program can test 10 to 15 schools per winter. Testing must take place between October and March when the building is closed, and the heat is on.
- 101 schools have tested for radon through the radon program (less than a quarter of all Vermont schools), 57 schools during the last five years.
- 12% (12 schools) of schools have had at least one room with an elevated radon level.
 - 8 schools installed mitigation systems.
 - 3 schools fixed their radon problem by making HVAC adjustments.

- One school put mitigation on hold due to significant renovations that have the potential to impact radon levels.
- Based on existing results, more than 20 schools likely have at least one room with an elevated radon level and they do not know it.
- Based on an estimate from one certified radon measurement specialist and the range of test kits that we have placed in schools previously, testing is estimated to cost \$245 to \$5,350 per school plus travel time and mileage for two trips to the schools.
- Some schools can fix a radon problem by adjusting an existing HVAC system. Other schools will need to install a radon mitigation system. In schools and large buildings these can cost anywhere from no-cost (e.g. changing the HVAC system's operations), to tens of thousands of dollars.

Lead in School and Child Care Water Update

- <https://anrweb.vt.gov/DEC/leadinschools/summary> (Summary below)
- 57 schools were re-scheduled for initial testing this spring. About 40 of them have collected their samples so far, but not necessarily had them analyzed or have results posted yet.
- After the end of the current school year, any schools that have not completed initial testing will be re-schedule for the fall.
- 298 schools and 850 non-school based child care providers have completed initial testing and have results on the [results website](#).

Overall Summary as of May 10, 2021

Category	Number	Percent of Total
Schools with results	303	67% of all schools
Schools with no taps at or above the action level	74	24% of schools with results
Schools with at least one tap at or above the action level	229	76% of schools with results
Child cares with results	859	96% of child cares not located within schools
Child cares with no taps at or above the action level	745	87% of child cares with results
Child cares with at least one tap at or above the action level	114	13% of child cares with results
Total samples analyzed	26,045	N/A
Total samples with results at or above the action level	3,476	13% of all samples
Total taps tested	12,456	N/A
Total taps with initial results at or above the action level	2,322	19% of all taps tested