

Good afternoon, my name is Peter Crowley. I live in Manchester Vermont and I am the parent of a high school student attending a school that has tested for radon. I am nationally certified in both radon mitigation and testing. My work includes; Residential, Commercial, Schools and Multi-Family projects. I am on the board of directors of the New England chapter of AARST (American Association of Radon Scientists and Technologists) I am the founder of a non-profit whose mission it is to rid radon in Vermont schools. Speaker and Presenter at the 2018 International Radon Symposium. A contributor to the Middlebury College School of Environmental Studies definitive work, "Radon Risk and Public Health in Vermont".

Thank you for the opportunity to address you on this important matter.

I would like to make a few points and answer any questions you might have.

- Radon is a naturally occurring Class-A Carcinogen. (a known cancer-causing agent)
- It is found in every town in the state.
- 51 Vermonters die every year from radon related lung cancer.
- The only way to know if are Radon levels are elevated is to test.

- To the question of why does this need to be legislated? Free tests have been available since 2005 through the Department of Health. They are getting 10 requests per year. At this rate, it would be 2039 before we tested every school.
- The testing requirement called for in this bill is revenue neutral. The funding is in place.
- You will hear testimony about the health risks of exposure to radon from The Department of Health. NG
- So many of society's problems are complex and seem to defy solutions. Heroin, Fentanyl and opioids where interdiction, counseling, incarceration and millions of dollars have not scratched the surface of the solution. They each took the lives of 60-90 Vermonters in 2018. The radon issue before you today kills one Vermont resident every week. Here the solution is shockingly simple...Test and mitigate if necessary.
- Rightly, there is a presumption that the buildings where our children attend school, where our neighbors teach and work, are safe. Today, 24 schools in the state have elevated levels of radon and they don't know it. That translates to 8,519 Vermonters that are sitting in classrooms that have toxic levels of a Class A Carcinogen. Even at the EPA threshold level of 4.0 pCi/L it represents

the same health risk of smoking 8 cigarettes a day. That is 70 packs of cigarettes every school year.

I would like to finish with a quick story that illustrates why H.138 is so critical to the health and well-being of the students, teachers and staff.

- A few years ago, the Wells School was looking for proposals to address elevated radon levels. mitigation professionals were asked to come in for a meeting and walk through in this effort. We were assembled in a conference room, in attendance was the school's principal and a school board member. The principal gave us some background on the story. It turns out that the school had been tested almost two years prior. The board was notified and chose not to make the information public. We were told that it was only after a resignation and public outcry that the board moved forward with the mitigation. As the collective eyes in that conference room turned to the board member present, our thoughts ran from: What? Are you serious? Is this criminal? His fumbling response went to budgets and priorities. I thought to myself that he should be very happy that my daughter didn't go to school there. How could this happen? How would you feel, as a parent, if you found out that this information was withheld by your school? As I considered these questions I realized that action was required. I formed AVRIP, we have mitigated schools at no/very low cost, testified in rooms like this one. I have traveled to international symposiums, working with Radon Professionals, advocates, survivors

and policy makers like yourselves. We have addressed a very central question; How do we get the message of the dangers of Radon out? How can we move the needle? What we discovered, across the country, is that it begins with the schools. Just test in the schools, how could that not be well received? ??? We test the schools, the parents test the homes, businesses, hospitals adopt a more proactive stance. The news outlets pick it up and before you know it you are saving lives.

Thank you...

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## Schools that have tested: (as of 2/19/19)

1. Flood Brook
2. Manchester Elementary
3. Sunderland Elementary
4. Mettawee Community
5. Dorset
6. Wells Village
7. Currier Memorial
8. Montpelier High
9. Green Street
10. Oak Grove
11. Champlain Valley Union High #15
12. Hinesburg Community
13. Coventry Village
14. Craftsbury Schools
15. Hardwick Elementary
16. Neshobe
17. Charlotte Central
18. Shelburne Community
19. Brewster Pierce Elementary
20. Williston Central
21. Roxbury Village School
22. Main Street Middle
23. Union Elementary
24. Allen Brook
25. Putney Central
26. Dummerston
27. Guilford Central
28. Canal Street
29. Fletcher Elementary
30. Georgia Elementary/Middle
31. Academy School
32. Wardsboro Elementary
33. Dover Elementary
34. Marlboro Elementary
35. NewBrook Elementary
36. Townshend Elementary
37. Windham Elementary
38. Albany Community
39. Bellows Free Academy - Fairfax
40. Fayston Elementary
41. Tunbridge Central
42. Barre Town Middle & Elementary
43. Lakeview Union
44. Jamaica Village
45. Danville
46. Lyndon Town
47. Johnson Elementary
48. Tinmouth Elementary
49. St. Albans Town Education Center
50. Barton Graded
51. Addison Central
52. Colchester High
53. Cabot
54. Hazen Union High #26
55. Monkton Central
56. Grand Isle Elementary
57. Sustainability Academy at Lawrence  
Barnes
58. St. Albans City School
59. Stockbridge Central
60. Westminister Central
61. Whitcomb Jr/Sr High
62. Weathersfield Middle
63. Newbury Elementary
64. Beeman Elementary
65. Summit Street School
66. Orleans Elementary
67. Burke Town
68. Berlin Elementary
69. Sherburne Elementary
70. Barnet School
71. Waitsfield Elementary
72. Ferrisburgh Central
73. Newark School
74. Millers Run
75. Leland and Gray High
76. Randolph Union High
77. Bristol Elementary
78. Robinson Elementary
79. Peacham School
80. Hiawatha Elementary
81. Milton Elementary
82. Milton High
83. Crossett Brook Middle
84. Stowe Elementary
85. Stowe Middle/High
86. Rutland Area Christian School
87. Brownington Central
88. Lake Region Union High
89. Glover Village
90. Irasburg Village
91. Vernon Elementary

## Bore them with numbers!

Information Obtained from Department of Health and Agency of Education

295 Schools

102,676 Students, Teachers & Staff

348 Persons per building

91 Schools Have been tested since 2005

11 Schools have tested above EPA action threshold of 4.0 pCi/L

12% were elevated

204 Schools have not yet tested

12% of 204 Schools is 24

24 Schools that have not yet tested will be high

24 Schools X 348 Persons per school is 8,519

This morning there are 8,519 students, teachers and staff in buildings that have toxic levels of radon gas.

4.0 pCi/L exposure is equivalent to smoking 8 cigarettes per day

This morning we are exposing 8,519 Vermonters to poisonous levels of radon gas that is equivalent to smoking 8 cigarettes per day.

175 days x 8 is 1,400 Cigarettes a year or 70 Packs per year.

So, what can you do? Nothing? Everything? Or a bare minimum?

H.138 is far from nothing, it isn't everything either...It is a start

Bits & Pieces:

Middlebury College School of Environmental Studies Senior Seminar (2015) produced the most comprehensive dive into Radon in Vermont. For anyone that wants Vermont Specific info:

[http://www.middlebury.edu/system/files/media/ES401\\_S15\\_DMFINAL.pdf](http://www.middlebury.edu/system/files/media/ES401_S15_DMFINAL.pdf)

EPA- Citizens Guide to Radon (2016)

[https://www.epa.gov/sites/production/files/2016-12/documents/2016\\_a\\_citizens\\_guide\\_to\\_radon.pdf](https://www.epa.gov/sites/production/files/2016-12/documents/2016_a_citizens_guide_to_radon.pdf)