Testing School Buildings for Radon

Why Require that Schools Be Tested for Radon?

Radon is a naturally occurring colorless, odorless, and tasteless gas that seeps into buildings from the surrounding soil. Radon can damage lung tissue and lead to lung cancer over the course of a lifetime.

Children breathe deeper, faster, and proportionately more air than adults. A case study by the Agency for Toxic Substances and Disease Registry concluded that due to lung shape and size differences, children have higher estimated radiation doses than adults. Their lungs are developing faster, making them more sensitive to the indoor air quality. Children are among the most sensitive to radon gas. Children and adolescents grow quickly, and their cells are more sensitive to radiation. Individuals exposed to elevated levels of radon in their youth are more likely to develop radon-related illnesses later in life.

Schools are often more crowded than other indoor spaces – four times the population density of a typical office means less fresh air available. School staff could have long-term exposure.

EPA conducted a nationwide survey of radon levels in schools, and has estimated that nearly one in five U.S. schools have at least one ground contact room with short-term radon levels above 4 pCi/L. To date, approximately 20% of the schools nationwide have done some testing. The only way to know whether an elevated level of radon is present in any room in a school is to test. It is recommended that all schools nationwide be tested for radon.

Summary: Existing State Policies on Radon in Schools

Seventeen states have radon-related policies.

Ten require testing schools for radon; four require mitigation of schools with radon ≥ 4 pCi/L.

Requirement	CO	CT	DC	FL	IL	IN	IA	ME	MN	NE	NJ	NY	OR	RI	VT	VA	WV
Test for Radon	X	X*	X	X	~	~	X	~				~	X	X	X	X	#
• Funding if Available								X	X								
• Per a Standard	X			X				X						X	X		
• Results Are Public	X	X	X		~		X	X					X	X		X	X
• Report to State				X	X		X	X	X				X			X	X
Mitigate > 4 pCi/L			X		~		X							X			X
• Funding if Available							X		X								
RRNC - New School	X	1,2			~		X	X		X	1	~	1	1,2			

X required * post-2003 only ~ recommended 1 or 1,2 radon zone(s) # state performs test

For more information on these policies, check out *Radon in Schools: Overview of State Laws* from the Environmental Law Institute

Model Legislation: Radon Testing in School Buildings

(1) **Testing for Radon**. Every school building shall be tested in accordance with this section.

(2) **Frequency of Testing.**

a. The initial measurement of a building's radon levels shall occur within one year of enactment.

b. Follow-up testing of a building with all radon levels below 4 pCi/L shall occur every five years.

c. Follow-up testing of a building with a radon level equal to or exceeding 4 pCi/L shall occur every two years.

(3) **Standard for Testing**. Measurement shall be performed in accordance with *ANSI-AARST MALB: Protocol for Conducting Measurement of Radon and Radon Decay Products in Schools and Large Buildings*. [1]

(4) **Testing Device**. Measurement shall be performed using a device that has been approved by an EPA-recognized certification program, such as a continuous radon monitor that has been calibrated and passed a device performance test, or a test kit that will be submitted for analysis to a laboratory approved by an EPA-recognized certification program.

(5) **Qualified Personnel**. Measurement shall be performed by an individual who is currently licensed under the state radon licensing program and/or currently certified by the National Radon Proficiency Program.[2]

Mitigation Requirement. If radon measurement results for any room or area indicate that the radon level equals or exceeds 4.0 picocuries per liter of air (pCi/L), the building shall be mitigated in accordance with *ANSI-AARST RMS-LB: Radon Mitigation Standards for Schools and Large Buildings*, and retested in accordance with *ANSI-AARST MALB: Protocol for Conducting Measurement of Radon and Radon Decay Products in Schools and Large Buildings* until the radon levels are less than 4.0 pCi/L.[3] Mitigation shall be performed by an individual who is currently licensed under the state radon licensing program and/or currently certified by the National Radon Proficiency Program.[4] Operation, maintenance and monitoring shall comply with Section 10.1.1 of *ANSI-AARST RMS-LB: Radon Mitigation Standards for Schools and Large Buildings*.

(6) **Reporting**. Results of radon testing, mitigation plans, and mitigation results shall be reported within 30 days after they have been received as follows:

a. presentation at a public meeting of the school board

b. communication to the parents' organization;

c. communication to the teachers' union or other staff organization;

d. website and other social media posting by both the school board and individual school; and

e. report submitted to the state radon program and state board of education.

[1] or in accordance with a "national consensus standard recommended by the US Environmental Protection Agency"

[2] or currently certified by "an EPA-recognized certification program."

[3] or in accordance with a "national consensus standard recommended by the US Environmental Protection Agency"

[4] or currently certified by "an EPA-recognized certification program."