

# TALKING POINTS AND FAQs

## What The School Bill Does

- ✓ Ensures schools are tested every 5 years.
- ✓ Allows schools to use their own staff (specially trained) to conduct the initial screening tests.
- ✓ For failing areas, confirmation tests are performed by licensed radon professionals.
- ✓ Ensures mitigation of buildings with confirmed high-radon levels within 2 years.
- ✓ Allows Life Safety Funds to cover cost of radon testing and mitigation.
- ✓ Ensures new schools are built with industry-standard, radon-resistant techniques

**Commented [KS1]:** Reinstated, since initial screening results may be high but they need to be properly confirmed before deciding to move forward with mitigation

## Primary Persuasion Points

1. Schools have an obvious responsibility to provide a safe environment for staff and students.
2. We require schools to protect their people from fire, carbon monoxide, and asbestos. Radon should be on that list.

**In Illinois it kills more people than all three combined.** (from Illinois Emergency Management Agency and Homeland Security radon program, Asbestos Nation, USA Facts summarizing data from the Center for Disease Control, U.S Fire Administration)

3. Radioactive radon poses a confirmed lung cancer risk. (from EPA and at least 30 medical orgs).
4. More than half the Illinois schools tested, have at least one hot spot of high radioactive radon (Illinois State Board of Education's yearly radon report).
5. We tried just recommending testing and mitigation (for ten years). It did not work. In all that time, only a small percentage of schools tested for radon.
6. Testing and mitigations are not ridiculously expensive.
7. Schools need to figure out how to make this happen.

## Other Points

- Children exposed to radon may have higher estimated radiation doses than adults. (from Agency for Toxic Substances and Disease Registry)

- Each person saved from lung cancer saves society \$370,000 est. direct and indirect medical costs. (from American Assoc. of Radon Scientist and Technologists *Combining data from Center for Disease Control, National Institute for Health, US Census and EPA*"K. Hoylman 2022.)
- The School Radon Protection Act can save millions of dollars. |
- Radioactive radon is a colorless, tasteless, odorless, radioactive gas and the second leading cause of lung cancer. (Center for Disease Control).
- Radon can penetrate concrete floors into any style or age building.
- Only testing finds elevated levels.
- Radon-related lung cancers kills 1,100 people in Illinois yearly. (from IEMA)
- This bill changes the existing law to **ensure** schools test and mitigate as needed.
- Enough is Enough Persuasive Argument

35 years ago, the EPA recognized the dangers of radioactive radon and asked all schools to test.

Not enough did so, and so 15 years ago the state of Illinois passed a law saying schools should test.

Six months ago, *The Daily Herald* reported that 85 of the 100 schools they assessed, had not conducted any radon testing. And our review of the ISBE's Radon Reports would indicate less than 3% of schools have tested in the 15 years since the last Illinois law.

And we need the testing, because radon is in our schools.

- We Have the Cure Persuasive Argument

Often, we as people are asked to raise money for research to help find a cure to keep people from dying.

With radon, we don't need the research. We don't need to search for a cure. We have the "cure" radon mitigation systems truly work.

People are not dying because we don't have the cure. They are dying because they don't know. They either don't know about the dangers or they don't know about our "cure".

**Commented [MS2]:** Removing radon caused lung cancer is not something this bill could do. I do not like this headline nor do I really like the implication of it. I do not think we could say we are going to save money on treating lung cancer by passing this bill. I yield to [@Kevin Stewart](#) on this

**Commented [KS3R2]:** [@Mike Seilback](#) [@Kristina Hamilton](#) Mike, please see this response and let me know I'm understanding your concern: If this bill is enacted and schools are tested and mitigated as a result that otherwise would not be, then **eventually over time** some people can be expected not to get lung cancer who otherwise would have from the radon exposure that had thereby been prevented. Of course, the consequences of this bill, once made law, will **not** eliminate radon exposure in schools and **will not prevent all** radon-induced lung cancer from school exposures.

**Commented [KH4R2]:** [@Kevin Stewart](#) I like [@Mike Seilback](#)'s edits here. Are you okay with them?

**Commented [KS5]:** You could just say "85 of the 100" as well.

We know this, because the same ISBE's Radon Reports indicate about 63% of tested schools had areas of high radon.

## Size of Issue

### Schools

Illinois has about 4,000 public schools

### People

1,925,415 Students Public 2022

130,467 Teachers Public 2022

**2,055,882 Total** (from Ballotpedia)

## Costs

Costs vary greatly per school district because of the variance in the number, size and the complexity of buildings.

But costs for the routine, every five-year, type tests is kept low by this bill allowing schools to use their own staff (specially trained). The training is provided free from the state radon program. The actual physical tests can be obtained for as little a \$15 to \$20 each. So, it depends how you look at their labor, but raw testing costs are likely in the hundreds or low thousands per building.

But some examples are: Daily Herald reported that the Milburn Elementary District spent \$11k testing and mitigating their District and that the Medina District spent \$12k on testing six buildings and \$7k on mitigation of five buildings.

Mitigation costs tend to run from a couple thousand to small-tens of thousands, depending on footprint and other factors. Really complicated mega school mitigations might be higher

And if schools opt for a professional testing, a feel, a local tester indicates that most their school tests for Elementary and Middle Schools are between \$1k and \$3,500. High Schools tend to be \$5k to \$10k depending on the footprint. .

The bill allows usage of Life Safety Funds. We also understand that not all schools have those funds and some may have to find alternate methods to absorb the costs. We are willing to help in any way we can to find alternatives.

But when it comes to keeping our schools from killing our children, teachers and staff, we believe the funds simply need to be found.

### **USE ONLY IF REALLY PUSHED FOR OVERALL COSTS**

We don't have statistics on the number of buildings per "school" but if we assume it is three buildings, and a 60% failure rate. **So this is a rough estimate.**

Testing the 13,161 buildings (4,387x3) at 60% = \$13 to \$130 mil and mitigation \$31 to \$310 mil.

All in \$44 mil to \$440 mil for the state, one-time costs.

### **MAINTENANCE COSTS**

There is very little maintenance, periodic checking the system and fan replacement ever 5-12 years equaling a few hundred dollars.

## **Proof of Radon's Tie to Lung Cancer**

The research indicating that radioactive radon causes lung cancer has been examined and confirmed by virtually all major medical and health protection agencies:

- American Medical Association
- US Surgeon General
- American Cancer Society
- World Health Organization
- American Lung Association
- US Environmental Protection Agency

## **How Does Radon Actually Cause Cancer?**

1. We breathe in radioactive radon particles.
2. The alpha particles damage the DNA chains of our lung tissue.
3. The body fixes it.

- As this happens over and over, the body can make a mistake fixing it and that causes cancer.

## Where Else Has School Testing Laws Been Done?

Nine other states have some form of required testing or required mitigations,

Four of them require both:

- Washington DC,
- Iowa
- Rhode Island
- West Virginia

(from a report by National Library of Medicine)

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			
• 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

## Why EPA (or Others) Have Done So Little Over 35 Year?

With EPA, we were kind of last to the table. Funding had been set for asbestos, and other major pollutants and a fight for funding meant convincing some divisions to give up funds from their cause. Not easy.

Also, awareness was/is further hampered by the fact that there are not deep pockets to either support the industry (no big vendors) nor deep pocket entities to sue for damages. So, no huge awareness campaigns have been accomplished.

**As a result, as you can see, radon response has never been even close to proportional to the health risk.**

## Why Not Private Schools also?

Private schools have an entirely different set of rules they live by, so a different bill would be needed. We are going after the biggest impact first.

## Why do You Need to Test Every Few Years?

### Or Where Does Radon Come From?

Radon is a product of the decay chain of uranium. It is scattered in the soil all over the world. It's just luck of the draw if your house sits on soil with it.

Over time uranium turns into Radium and then into radon gas.

For years you may have some specs of Radium in your soil that were not ready to turn to radon. So, you had low radon levels for years.

And today might be the day when it was the radium time to start turning to radon.

So, now you suddenly have high radon, when for a long time you did not. That is why it is suggested you test every two years.

### How do Mitigation Systems Work?

The mitigation systems suction the soil gas from under the house before it even enters.

We do this by coring a hole in the concrete floor of the lowest level and pipe it to the outside where we connect a fan. We run electric to the fan and from the top of the fan we pipe it to above the roof edge.

The system runs 24/7 pumping radon from the soil to outside, up high where it dilutes with the outside air.

### Have You Talked to (or What is the Reaction of) any of the School Groups?

We have reached out to 26 school groups, including the Illinois Board of Education, the teachers' unions and parent groups. Most we spoke with, support the bill.

Of those that do not, cost was the only reason given. None seemed likely to aggressively oppose the measure.

Illinois Education Association  
Illinois Federation of Teachers  
Illinois Association of School Administrators  
Illinois Board of Education

Illinois Principals Association  
Large Unit District Association  
Illinois Association of School Boards  
Legislative Education Network of DuPage  
ED-RED - North Suburban advocacy group  
Illinois PTA  
Illinois Families for Public Schools  
Healthy Schools Campaign  
Parents Rights in Education in Illinois  
Illinois Parents Union  
Kids First Chicago  
Illinois Action for Children  
Chicago Teachers Union  
Illinois Association of School Business Officials  
Northern Illinois School Safety Administrators Association  
Illinois Association of Regional Superintendents of Schools  
Chicago Principals & Administrators Association  
Suburban Superintendent's Association  
Illinois Association of Professional of Educational Leadership  
Illinois Association of Christian Administrators  
Illinois Vision 20/20  
Illinois Safe Schools Alliance