



Radon 101: Test, Mitigate, Breathe Easy with Zan Jones

ZJ

Zan Jones

0:00

Radon is radioactive. And so, what happens is as it decays and becomes radioactive, it enters your lungs as you inhale. And those radioactive particles damage your lung cells...damage the cells and the DNA of the cells that line your lungs. And over time, that leads to tumors and lung cancer.

KS

Kendra Seymour

0:23

Hello everyone, and welcome to *Your Indoor Air* podcast. My name is Kendra Seymour, and in case you didn't know, it's Radon Awareness Month. So, we're going to be talking about what radon is, how it affects the air in our homes and our health, and what we can do about it. Now, stats in the US have one in 15 homes experiencing high levels of radon, and since we can't see it and we can't smell it, in most cases, we don't even know it's there unless we test for it. So, if you're thinking, "You know what? There's no radon in my area; I don't even have to worry about it. I've seen those government radon maps," I'm going to tell you, after this conversation, you're going to be rethinking that. Because radon is an issue that can happen pretty much anywhere.

So, to talk about this important (and sometimes overlooked) topic, I'm thrilled to introduce Zan Jones. She is a certified radon measurement professional and Vice President of Marketing at Radonova, and she's on a mission to raise awareness about this topic. Now, if you're thinking, "Why should I care about this?" We're going to get into that. But high level, I'm wondering if you know that radon is the number one cause of

lung cancer in nonsmokers, and the number two cause of lung cancers nationwide. So, it's something we all should be paying attention to. So, thank you, Zan, so much for being here.

ZJ

Zan Jones

1:33

Thank you so much, Kendra.

KS

Kendra Seymour

1:34

So, let's jump in. When you and I spoke before, some of the information you're sharing, I knew enough about radon. In my own home, I have a radon mitigation system. But for those listening, help us understand. What is radon? How does it get into our homes?

ZJ

Zan Jones

1:53

Yes, so radon is a gas that...as you mentioned, odorless, colorless gas. And it occurs from the decay of uranium in the soil around your house—around your house, around an office building, around a school building—and then it seeps into your home through cracks in the foundation, through basement walls, through floor joints, through sump holes. And then, as it seeps into your house, it becomes trapped, especially if you have an energy-efficient home built after 1992 whenever we started building homes more energy efficient. So, then the gas becomes trapped in our home, where we inhale it. And over time, the long term, inhaling radon gas will cause lung cancer.

KS

Kendra Seymour

2:36

So, is this something that you only need to worry about if you have, like, a basement or a crawl space, or if you live in a certain area? Like, who should be paying attention to this as a possible, you know, exposure in their home?

ZJ

Zan Jones

2:51

Yes, good question. And so, radon gas does enter homes through basements because it's below the surface, it's below the ground, and so that is the first point of entry. But just because you don't have a basement does not mean you have radon in your home. As a matter of fact, every home has a little bit of radon. And there are some myths surrounding radon that...well, my neighbor tested for radon, and their house was low, and so I don't need to test. And radon varies from home to home within the same neighborhood. It varies from, actually, apartment to apartment within the same complex and between the same building. So that's why it's important to test your home.

KS

Kendra Seymour

3:38

Yeah. Okay, so that's really good to know, because I know sometimes people will say that, "Oh, well, the...you know, the neighbors on both sides are fine." But it really is unique to the home and the situation and, you know, building tightness and things like that. So, does it matter where in the country I live then? Or I know, if you've ever seen some of those radon maps from the government, you know, you may think, "Oh, I'm not in an area that I have to worry about that." But I know you think differently, and that your information supports a different case. Can you talk to us about that?

ZJ

Zan Jones

3:58

Sure, yes. And that's such a good point, because radon maps have been around for about 30 years. The one that the EPA has published is about 30 years old, and they'll be the first to admit that it is an older and possibly outdated map. And what that shows is different areas around the country where radon has tested higher. And what we know is that even in areas that on that radon map show as low, there can be homes in that area that are five and six times the actionable limit for radon exposure. We also know that those maps...that radon varies over time.

And so, just because it was high...radon was high in the area this week, next week, it might be different. This area may be different over time.

And so, additionally, it's important to know that these maps were developed on people who have tested their homes. So, who typically tests for radon? That's...interesting fact, because it's typically people who are aware of radon. They may be in a different socio-economic demographic, because they're in an area where they've been educated about the potential for indoor radon exposure in their house. They may have the ability to afford a radon test. And so, these maps can kind of artificially leave out people in areas that don't have the means to actually test their home and fix their homes. And so, this whole segment of population, this whole segment of demographics and parts of cities and parts of states, are underrepresented in that radon map.

KS

Kendra Seymour

5:27

Yeah, yeah. So, let's talk about testing then. Because I know when I bought my home, we had an inspection, and in the area that I'm in, it was required that new builds have a radon mitigation system installed, but it didn't have to be turned on. And as the homeowner-purchaser, we did a test to see what our radon levels were, and decided to turn on the system, even though it was below level. So, talk to us about...how do we test for this? What does that look like? And then let's talk about permissible exposure limits, or what the government currently has as, you know, this level is safe versus this level might need mitigation.

ZJ

Zan Jones

6:08

Sure, and there's different ways to test for radon in your home. So first, you can get your own radon test and put it in your home. We recommend that you place the radon test kit in the lowest lived-in area of your home...a living room. Stay away from areas of water, like the bathroom or the kitchen, and you can also hire a certified radon measurement professional to come out and test your home. They typically will use an electronic instrument to test your home. And so, there's different ways. If

you go to a website to find a certified radon testing professional, you're able to look up by zip code to find someone that can come test. But the easy home radon test, you can test for two to four days. You can also test for up to a year. So, the longer you're able to test, the more accurate the radon test will be of your overall average radon level.

KS

Kendra Seymour

6:58

That's interesting. So...and we talk about that a lot when we talk about testing for other pollutants, like mold exposure.

ZJ

Zan Jones

7:05

Yes.

KS

Kendra Seymour

7:06

The air in your home is changing: different time of day, different seasons, stack effect, and things like that, all influence. But you're saying that even the short-term tests can give you a pretty accurate...or a glimpse into what might be going on?

ZJ

Zan Jones

7:22

Yes. In the United States, it's a common protocol to test with a short-term test...a two- to four-day test. And...

KS

Kendra Seymour

7:30

Okay.

ZJ

Zan Jones

7:31

But there are some things that you should take and keep in mind. And that is that a short-term test isn't always the best indicator of what the radon level will be over time. So, it could be really high those two days,

two to four days, or really low. So, you could get an artificial indication of what the radon level is. However, it does let you know. And if it's raining or there's bad thunderstorms, or the weather is unusual those days, then the tests can be influenced by that in a way that can make it either seem higher or lower than it really is in the home.

KS

Kendra Seymour

8:01

Yeah. So, I think that's a good thing. It's a data point, right?

ZJ

Zan Jones

8:06

That's right.

KS

Kendra Seymour

8:07

But no test is perfect, and it's not an end-all, be-all. So, if somebody gets a do-it-at-home test, and they send it out and they get the results, what are they looking for in terms of, "Yeah, my home might have a problem. I'm going to need to consider an intervention" versus "I'm good for right now"?

ZJ

Zan Jones

8:23

Yes. So, you're... Kendra, you mentioned earlier that...the limits. And so, there are limits within the United States, Canada, and the World Health Organization. So, the World Health Organization recommends the upper limit for radon to be 2.7 picocuries per liter (Picocurie is named after Marie Curie, which we can talk about as well, but she's a really interesting person) and 100 becquerels per meter cubed as the upper limits. But then when you get to the United States, we...our upper limit is 4.0 picocuries per liter, which is higher than what the World Health Organization actually recommends as the upper limit. But in the United States, 4.0 picocuries per liter. If you receive a home radon test or radon test results and it's 4.0 or higher, then you should consider a radon mitigation system for your home to help bring the level down to a safer

level. And then once the radon mitigation system is installed, then doing a posttest as well to confirm that the radon level is being brought down to below 4.0.

KS

Kendra Seymour

9:22

So, like, what if...what if someone has, like, a 2.5, like, and it's kind of borderline? Do they...do you recommend they wait and test again and see if it's higher? Do you...do you recommend that they consider mitigation anyway?

ZJ

Zan Jones

9:36

Well, there's different schools of thought on that. Some people say there's no safe level of radon in your home. But the upper limit in the United States...if someone, a professional, comes to test your house, or if you get radon results 4.0 or anything below 4.0, they would recommend as being within the limit.

KS

Kendra Seymour

9:56

Yeah. And it's higher in Canada, right? We have a lot of listeners there. I think that their levels are...

ZJ

Zan Jones

10:00

Yes. In Canada, the limit is 200 becquerels per meter cubed. That's their upper limit, whereas the World Health Organization says 100. So, Canada is twice what the World Health Organization calls for. But Canada's at 200 becquerels per meter cubed, which in the United States, that would equate to about 5.4 picocuries per liter.

KS

Kendra Seymour

10:21

Okay. You know, I think, when...sometimes people hear about things like this and they just start hearing like, you know, "Cha ching, cha ching."

Like, what's the cost to fix this? So, let's talk about...because I do want to get into a little bit. It's super interesting, why we test for this and, you know, Marie Curie and stuff, yeah. Um, let's talk first about the...what is the solution to this? You know, do we have to move out of our houses? What's an option here?

ZJ

Zan Jones

10:48

Yes. So, the one myth about radon is that you can't get it out of your home. That's a myth. You can. You can actually, very successfully, with a mitigation system, with proper ventilation in an office building or in a school building, get the radon levels down to a level that's safe, and... considered safe or considered within the limit. So, and a lot of people, when their radon level comes back high, they get concerned that they should move out of their home until it's fixed. That's not the case. Radon is not something that kills you overnight, that's fatal in an instant. It's long-term exposure. And so...there's no need to get excited or scared or afraid over this being an immediate issue, but it is a long-term health problem.

So, for example, when you inhale radon...radon is radioactive. And so, what happens is as it decays and becomes radioactive, it enters your lungs as you inhale. And those radioactive particles damage your lung cells, damage the cells and the DNA of the cells that line your lungs. And over time, that leads to tumors and lung cancer, and it also leads to other things. There was a study that just came out last year from Oregon State that actually linked it to childhood leukemia. And so, it's not just lung cancer, but other cancers.

KS

Kendra Seymour

12:08

Yeah. No, and I think that's, like, an important thing to understand, is that, you know, it's not something to panic over, but it is something to be aware of. And if you've lived in a home for a long time...you know, my parents bought an older home from the '50s, and they remodeled it maybe 10 years ago, and I happened to say, "Oh, you guys getting a radon

test?" Because they had lived in the house for 30, 40-plus years and hadn't at the time. And they did, and the levels were crazy high. And thankfully, they installed a mitigation system. But it was only because they were going to be remodeling that some of these conversations were coming up. So, you know, if you're living in a home and you're like, "Oh, you know, we've lived here forever, it's fine," you know, it's worth checking out for sure.

So, let's...when it comes to the actual system, though, it's actually, I'm going to say, more affordable, compared to something like mold remediation or whatever. What is the basic principle behind how a radon mitigation system works? Can you just give us, like high level?

ZJ

Zan Jones

13:08

Yes. So basically, it pulls the radon up out of the soil under your home and sucks it out and blows it out, blows it out. So usually, it's a sub-slab system where you dig a suction pit in the in the basement floor or underneath the foundation. You might put a sheeting over the foundation, and then you have a pipe that runs up through the home, or sometimes on the outside of the home, with a fan that's installed that actually pulls the radon (sucks, so to speak, the radon) up from the foundation, and then ventilates it up out of the home, into the atmosphere.

KS

Kendra Seymour

13:43

Yeah. What is the...and I know it varies by area and where you live, but what is, can you give us a range of what something like that costs?

ZJ

Zan Jones

13:53

Yes, I would say anywhere from \$1500 to \$3,000, in that range.

KS

Kendra Seymour

13:59

And is there any kind of maintenance associated with those that people like...you know, once a year? Are they having to do anything, or is it just make sure it's still operating? You know, what's the upkeep on that?

ZJ

Zan Jones

14:12

Yes. So, most radon mitigation systems have very nice warranties. They warranty their product, and typically it just keeps running for years. Sometimes the fan can go out or stop running, or maybe accidentally get turned off. And so, that's why the EPA recommends that you do test your home every two years for radon. And to your point earlier about doing a home remodeling project, anytime you remodel your home, that's also another recommendation by the EPA that you test your home for radon, because you're changing the ventilation and the airflow around your house when you do a home remodeling project. And they also test anytime you move to a new home to know what the radon level is in that new home.

KS

Kendra Seymour

14:51

And I know mine, it's down in our basement, and the area is unfinished, and there's...I can see if it's working and when it's not...

ZJ

Zan Jones

14:58

The manometer? Correct.

KS

Kendra Seymour

14:59

...you...Yep, if maybe something has gone out. I know we lived in a house previously where it had stopped working and we were able to be on there, so it's not a guessing game. And since we talked about the cost of the mitigation system, let's circle back for a moment. How much does,

like, a typical at-home test cost? What are people looking at when it comes to purchasing that?

ZJ

Zan Jones

15:19

Yes, so an at-home test cost anywhere from \$25 to \$60. And the way an at-home test works is you deploy the test in your home. You leave it there for two to four days, 90 days to a year, depending on the time frame. And then at the end of that time frame, it gets mailed back into a lab. And so...and then the results are read in a lab and reported out to your homeowner. So, what we would recommend is most home tests will cover about 2000 square feet, just to give you an idea of maybe how many you might want for your home. And so, like I said, test the lowest lived-in area of your home, but also test any room that you spend about more than four hours a day in. Maybe it's a home office, maybe it's the family room. The only rooms I would leave out, definitely, are the kitchen and a bathroom.

KS

Kendra Seymour

16:13

Yeah, yeah, no, that's really helpful advice. Now, we had kind of mentioned before (and I think it's really interesting to talk about) because you mentioned radioactivity. And even if people aren't familiar with radon, they are familiar with that word "radioactivity." They know that is a bad thing; I don't want to be exposed to radiation. But can you tell us how, in the US, we finally started...there was a really interesting story you told me, I don't...was it a nuclear power plant? And...

ZJ

Zan Jones

16:40

Yes.

KS

Kendra Seymour

16:41

...testing for that all came about? because it was super interesting.

ZJ

Zan Jones

16:44

Yes. So really, the reason we're test for radon on here in the United States is because of Stanley Watras. And Stanley Watras was an engineer for the Limerick Nuclear Power Plant in Pennsylvania, and he had recently moved, in 1984, to Pennsylvania with his family to be the new engineer opening up this new power plant. And the power plant installed radiation detectors so that, as people left the plant at the end of the day, to make sure that they weren't carrying radioac...radiation back into the community, to their homes.

Well, even before the power plant was fully operational, Stanley Watras was setting off the radiation detectors on his way into work, before he even been to work. And so, they couldn't figure out: why is he setting off the radiation detectors when he's coming to work versus when he's leaving work? This led them to then go test his home. And they figured out that he was bringing, obviously, the radiation in on his on his body and on his clothing. And it was...they tested his home for radiation. It was 700 times the limit. It was at 2700...the radon in his home was 2700 picocuries per liter. Now mind you, the limit is four. So, they moved his family out; the EPA, moved in, did lots of testing. The people in the neighborhood also got scared. They tested the homes in the neighborhood, but the short story is they actually mitigated his home with a radon mitigation system, and the family moved back in.

And as of 2015 (the latest story I read), the family moved back in, and no one in the family...he had three kids. They...none of them had contacted lung cancer. So, the radon mitigation system did its job. But that's what brought radon to the forefront of home ownership. And at the...also at the, in the '80s, the surgeon general then announced that radon...announced it as a public health concern. And so, that brought even more attention to it at a federal level. But it's all thanks to Stanley.

KS

Kendra Seymour

18:41

No, no, that is, that is really interesting. I think sometimes we discover these things in a rather roundabout way, and it can have very important implications for the rest of us. So, you know, I guess I'm grateful, in that sense, that that happened. But you also mentioned Marie Curie, and you mentioned picocuries, right? So, talk to us...

ZJ

Zan Jones

19:01

Yes.

KS

Kendra Seymour

19:02

...about that, because there's some history there that has led to how we talk about radon now.

ZJ

Zan Jones

19:07

That's right. Marie Curie was the first female to win a Nobel Prize, and also the first person to win two Nobel Prizes in the field of chemistry and physics. And she discovered the elements radium and polonium. She's...actually, was originally from Poland; that's why she named the first element she discovered "polonium." But radon is the gas that...from the decay of radium. Radium is the solid, and radon is the gas. And at the time, when she discovered radium, it was this...heralded as this wonderful in...discovery. And they would put it in food and toothpaste and paint, because it glowed in the dark and it was so pretty, gave off this beautiful green hue. And they even put it in watch dials, if you...so that the numbers on your watch would glow. And if you saw the movie *The Radium Girls*, you might have seen, where they would paint their paint brush, and dip it in the radium paint between strokes. And they actually ended up getting radium poisoning and dying from that exposure.

So, as a matter of fact, Marie Curie's body was buried in a lead-lined box because she was radioactive when she died, and her manuscripts are still radioactive today. They're kept in a lead-lined box in a library in France, and you have to go through and wear a lead vest and sign some papers to be able to view her radioactive manuscripts.

But she was such an interesting lady, because not only was she a pioneer in her field, a legendary in her field, but she closed her very profitable and very prestigious lab down during World War I, and she wanted to take mobile X-ray machines out onto World War I fields. And at the time, you could only get an X-ray in the hospital. And because...she did not discover X-rays; someone else in her field discovered it. But it's very...it's in the same field of radioactivity. And she equipped trucks to have mobile X-ray units on them, and she would take them out onto the medical tents and onto the war fields to X-ray wounded soldiers so they could be treated properly on the field. And before it was over with, she had 150 of these mobile X-ray units running around World War One war fields in France.

And that's what she attributes to her death, was this unprotected exposure to X-rays. Because, like, for example, an X-ray is the...when you get an X-ray, it's the same amount...it's radiation. And so, four picocuries per liter exposure—which is the upper limit for radon—that's the equivalent of about 200 X-rays per year. Just to give you a feel for the amount of radiation it has on your...on your body.

KS

Kendra Seymour

21:51

Wow. No, that is really interesting. And that, like, history there, I always find fascinating and how things are named and how they came to be. So, so we...you talked about the radon gas, right? That comes off of radium, and that's what we're talking about when we talk about mitigation systems, removing that radon from our home. But I know that I've read some things about radon in the water. What's going on there?

ZJ

Zan Jones

22:15

Yes, that's so interesting. We get a lot of questions about radon in water, and people are concerned that they are ingesting water. And there have been some studies that could link radon to stomach cancer. But what we have found is that there was a recent study done by the University of Calgary in Canada, by Dr. Aaron Goodarzi and his team, and it's linking radon in water, actually, to groundwater well holes.

So, the radon is coming into your home, not necessarily in the water, but because if you're on a groundwater well hole...or you have a well, then this, the casing around the pipe that goes down into the ground is where the radon is coming up through. And so, whenever it comes into your house, radon normally is like in the vapors of the shower, the steam, or like if you flush the commode, or if you're cooking and boiling water. So, it usually comes out in the aerosols, because it is a gas. But if you are on a ground well water, then you could...that's where they're linking radon through water. If you're on city water, it's not an issue.

KS

Kendra Seymour

23:26

So, is there a solution, then? If someone has a well and then they're in an area, you know, their property has a problem with this, what do they do about that?

ZJ

Zan Jones

23:34

So, many people...so...and also, to your point, so most of these places are also in rural areas. Most people on well water are out in the country. They're not in urban areas, so they're further out. But test your home. Test your home for radon; see if the home...if it's coming out in the air you're breathing in your home, and pursue it that way. There are other systems that can handle radon in water or can treat water in a way that can reduce the amount of radon that can then come through your house. So, there's systems for that as well.

KS

Kendra Seymour

24:01

Yeah. So, that's in our home. We have a little bit more control about...over that. But what about, like, rentals or big apartment buildings, or even things like school or a place of work? Like, is that something we can ask, you know, the landlord, or we can ask, maybe, the company we work for or the school? Like, are there any rules around that, or laws requiring schools to test for radon?

ZJ

Zan Jones

24:27

Yes, there are some states...the United States, I think it's around...about a little less than 20% of the states do have a requirement. And there's some states that require daycare centers and home daycare centers to test for radon. So, there are some requirements to test, but it really needs to come from a request in the community. So, because school is a...you can certainly get exposed to radon in a school, because people spend 10 hours a day in the school. People that are teachers, faculty, staff, they could spend 10 hours a day for 20 years in the same school building and receive...get lung cancer from radon in that in that area. So, it's important to test schools, and it's important for areas to know about the importance of testing schools.

I know that there's a law that was passed a couple years ago in Iowa. It's called the Gail Orcutt law, and she was a teacher in the school district there for many years. And she attributed her lung cancer to being induced from radon from the school that she worked in. And so, they were able to pass a law there that requires the schools to be tested every five years.

So, there are requirements for that, but there's also...it's also good to know that...people are working from home more as well. And there were even studies during the pandemic that showed that people are actually exposed to 20% more radon now because they were working from home, and it was kind of skewed towards the younger generation.

Younger people and children are getting exposed more because they were going to school every day, or they were playing outside during the day, or playing sports during the afternoon, but now they're in their house all day. So, younger people—high school students, college students, children—are even now, I guess, getting the brunt of us having the ability to do more from home.

KS

Kendra Seymour

26:17

Yeah. Well, and let's talk about for a minute our children, or even, like, our pets, if you have fur babies. Like, are they more at risk for this, for exposure?

ZJ

Zan Jones

26:26

Yes. There's a couple of schools of thought on the children, and...but essentially, yes. I mean, children have smaller lungs. They have faster breathing rates that in...makes them breathe in more of a dose, quicker. They also...the younger that you're exposed to radon, that starts the long-term clock ticking. So, radon exposure over the long term is what causes lung cancer. So, if you're exposed in your...when you're 8 or 10 years old, by the time you're 20 or 30, you've already had 20 years of exposure. And so, that's why we see people in their late 20s, early 30s, with lung cancer.

Pets as well. Pets spend all their time on the floor. They spend their time on the ground. They're close to the floor. They're on the basement. They're in the dirt. They have smaller lungs, and they have faster breathing rates than even children. So, they can get exposed to radon as well. And there have been a few studies that do link radon to illness in pets as well.

KS

Kendra Seymour

27:25

So, you know, I think one of the things as we kind of wrap up here (I know we're low on time). You know, we've talked about where, you

know, you can get an at-home test. We've talked about mitigation and what that looks like. Do you have any tips if someone is looking to hire a company to install a mitigation system? Because when we talk about mold, it's not a very regulated industry. There are a lot of practices that pass as remediation that are insufficient and even unsafe. And so, I'm wondering, is the same kind of problems occurring when it comes to finding someone to install the radon mitigation system? Are there things to avoid, or certain questions we should ask? How do we find a good company?

ZJ

Zan Jones

28:07

Yes, so I would recommend that there's...the NRPP website...is the National Radon Proficiency, and that's the requirement for getting certified to be a radon mitigator and also to be a certified radon measurement professional. And so, if you go to that website, nrpp.org, and you type in your zip code, that will give you people in your zip code that are certified to do radon mitigation, radon testing. And also, you can do an at-home test on your own as well.

KS

Kendra Seymour

28:34

Yeah, that's helpful, and we'll link to that in the show notes so that people can find that easily. And being Radon Awareness Month, there's no better time than right now. After you listen to this podcast, you know, go online, buy that at-home test maybe, and get started. And we'll link to that website in the show notes, like I said. So, that's really helpful. Thank you so much. Now, the last thing I have: are you aware of...because, again, like, there's always a cost factor here. Are there any, like, state or government programs, if somebody can't afford a radon mitigation system, that maybe helps them, you know, get this system in their home? Are you aware of anything like that?

ZJ

Zan Jones

29:15

Yes, there's not a lot, but there is. There are two that potentially can work. Now, both of these don't say we definitely cover radon mitigation, but they don't...also don't say that we don't. So, one is the HUD-funded Community Development Block Grant. It's called the CDBG, and those are usually implemented in cities or counties. So, you could look to your city or county and see if there's a CDBG grant that you could...or CDBG that you could qualify for if you were needing help with your radon mitigation system in your home. The USDA also has a repair loan program for rural housing, and I think they're kind of loose with how they define rural housing, and that is something that you would look at more with the USDA in your state.

KS

Kendra Seymour

30:01

Okay, okay, yeah, and we'll try to link to some of that information as well to get people started on their search. But I think it's an important step that people can take. The initial testing fee, you know, when you say \$25 to \$30, is not unthinkable for many. So, something to think about as people go forward this year, in 2025 when, you know, we want you all thinking about and breathing safer indoor air. Was there anything that you wanted to mention that we didn't cover? Any other myths that you're seeing out there when it comes to radon, that you want to just give one last, you know, shout out for our listeners for?

ZJ

Zan Jones

30:40

Sure. One thing I really want to express concern about and express sympathy for, is for those suffering from lung cancer. Because we know that radon causes lung cancer, and we know that smoking causes lung cancer. And there is a stigma for people that have lung cancer, that somehow...they smoked potentially, and so somehow, they brought lung cancer upon themselves. And even if you do smoke, or did smoke, that doesn't necessarily mean that you deserve lung cancer. But also, just

knowing that, you know, lung cancer is the least funded of the cancers, and it's also the most fatal. And so, taking away the stigma from lung cancer, knowing that it can be caused from other things: work hazards, second-hand smoke, radon exposure, just the environment in general.

KS

Kendra Seymour

31:31

No, I think that's a really important point to touch upon, because there is a lot of stigma in general with any kind of environmentally acquired illness. And I think it's important that we talk about that. Thank you so much for being here and sharing a wealth of information. If people had follow-up questions or wanted to get into contact with you, how could they do that?

ZJ

Zan Jones

31:50

Yes, great. I would love for them to follow Radonova on LinkedIn and connect with me on LinkedIn: Zan Jones. Love to connect there and help you further.

KS

Kendra Seymour

32:03

Wonderful. And we'll link to that as well, so people have that information. Thank you again, so much, for being here.

ZJ

Zan Jones

32:08

Thank you, Kendra. I enjoyed it.

KS

Kendra Seymour

32:09

Yes, it's super important that we all think about this, and I love that we're kicking off the new year with such an important topic. So, for everyone listening, if you found this interview helpful, do me a favor. Head on over to ChangeTheAirFoundation.org and sign up for our newsletter if you haven't already. Not only do you get wonderful freebies, but you get

great information like this directly to your inbox. Thank you so much, everyone. We'll see you next time.