

Public Health Division
Environmental Health

Radon in Schools Risk Communication Toolkit

Developed for Oregon Schools by the Oregon Health
Authority, Public Health Division Radon Awareness
Program

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Revision History

Summary of Changes	Date	Point of Contact
First version created	June 2017	Lindsay Spears
Second version includes fillable forms	May 2019	Curtis Cude

Introduction

Radon is the second leading cause of lung cancer in the U.S. The risk of developing lung cancer increases when an individual breathes air with high levels of radon over a long period of time. You can't see, smell or taste radon and there are no immediate health effects.

Schools are likely the second largest source of radon exposure for students and staff. Oregon law requires school districts to test for radon gas before January 1, 2021. The test results must be sent to Oregon Health Authority (OHA) and be posted on the school or school district website.

This Radon in Schools Risk Communication Toolkit has been designed to assist Oregon schools communicate radon risk, provide education, and create awareness among occupants and parents while radon activities are being performed. It includes helpful suggestions and many useful templates that can be customized. The components included in this toolkit offer a means for more effective and efficient communication between school officials, staff, parents and guardians.

Radon is not a well-known environmental health risk. Interest and concern may vary based on knowledge and acceptance of the potential presence of radon gas. Schools are advised to use the components based on their need and available resources.

This toolkit offers the following components and recommended use:

Component	Use
Sample Communication Plan	To help develop a risk management and communications team, designate responsibilities and communication channels, and recommend notice distribution timeline and methods.
Frequently Asked Questions	Quick reference to common questions regarding radon in schools. Should be posted on school and/or district website, and can be used as a reference for school officials when answering questions from employees, parents and guardians.
Fact Sheet	Provides a brief, very general radon and school testing information. It can be used as a hard copy handout at informational sessions or as PDF document to be available on school websites.
Social Media Messages	Via social media platforms like Facebook and Twitter to provide radon education and awareness.
Resources	Provides a list of local and national resources, radon hotlines, and publications.
Sample Press Release – Attached Separately	To announce radon testing in schools and increase community's awareness of radon presence.
Memo Templates (3) – Attached Separately	To notify occupants, parents and guardians of radon activities before testing begins, update after initial testing, and conclude once testing has completed.
Informational Session Presentation Templates (3) – Attached Separately	A chance for schools to provide further information in the form of an informational session.

The Center for Disease Control (CDC) Risk Communication Principles

1. **Be first**

Provide information as soon as possible. The first source of information often becomes the source against which all others are measured.

2. **Be right**

Accuracy establishes credibility. Tell people what you know, when you know it. And the opposite of that, tell people what you don't know and what you are doing to find out.

3. **Be credible**

Be truthful about everything, even the bad. Uncertainty is worse than not knowing and rumors can be more dangerous than hard truths.

4. **Express empathy**

Acknowledge what people are feeling.

5. **Promote action**

Give individuals a sense of control during times of high stress and concern. Giving people things to do often calms anxiety.

6. **Show respect**

Respectful communication is most important when people feel vulnerable.

Sample Communication Plan for Radon Testing in Schools

“Radon Risk Management Communication Plan”

For communicating information throughout the process for all affected parties.

Developing your team:

Management Team:	Name:	Date:
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- Senior
- Communication
- Maintenance
- Radon professional

Responsibility	Qualification/Skills Needed	# of Staff Needed	Staff Name and Title	Contact Information
Developing and Distributing Notices				
Onsite Activities (including test placement, maintenance, pickup, etc.)				

Distribution of Radon Test Data (includes receiving, compiling, and reporting of results)				
Occupants and Parents/Guardian Inquiries				
Media Inquiries				
Web Content				

Notice Dissemination:

**Recommended timeframes and methods of distribution.*

Before testing:

PRE-TEST NOTICE including general radon information and details on the testing process should be distributed to:

- Staff helping perform testing such as maintenance managers, teachers and supervisors

Distribute in advance: 3 weeks, 2 weeks* 1 week, or other _____

Method of distribution: Letter*, Email, or other _____

Reminder notice: 1 week, 2 days*, or other _____

Method of distribution: Letter, Email*, or other _____

- Other staff (not involved in the testing process) and students

Distribute in advance: 3 weeks, 2 weeks* 1 week, or other _____

Method of distribution: Letter*, Email, or other _____

Reminder notice: 1 week, 2 days*, or other _____

Method of distribution: Letter, Email*, or other _____

- Parents and guardians

Distribute in advance: 3 weeks, 2 weeks* 1 week, or other _____

Method of distribution: Letter*, Email, or other _____

Reminder notice: 1 week, 2 days*, or other _____

Method of distribution: Letter, Email*, or other _____

Signage will be posted onsite:

Post: Same day, 2 days in advance, 1 day in advance*, or other _____

Location: In visible areas near test kits*, other _____

After testing:

Once radon test results have been received, if elevated radon is found, an UPDATE NOTICE including general radon information, summary of radon test results and next steps will be distributed to:

- Employees and Occupants
Distribute: Immediately*, Within 1 week, or other _____
Method of distribution: Letter*, Email, or other _____
- Parents and Guardians
Distribute: Immediately*, Within 1 week, or other _____
Method of distribution: Letter*, Email, or other _____

After UPDATE NOTICE is distributed, radon test results will be posted to the school website:

Post: Within 2 days, Within 5 days*, other _____

Following completion of all testing and mitigation processes, a CONCLUSION NOTICE including general radon information, summary of testing and/or mitigation, and details for future testing should be distributed to:

- Employees and Occupants
Distribute: Within 1 week*, Within 2 weeks, or other _____
Method of distribution: Letter*, Email, or other _____
- Parents and Guardians
Distribute: Within 1 week*, Within 2 weeks, or other _____
Method of distribution: Letter*, Email, or other _____

**Recommended timeframes and methods of distribution.*

Radon in Schools Frequently Asked Questions (FAQs)

Q: What is radon?

A: Radon is a naturally occurring radioactive gas that you can't see, smell or taste. Because radon is a gas, it can seep up through the soil and enter buildings, like homes, schools and workplaces. There are high levels of naturally occurring radon in several locations throughout Oregon.

Q: How is radon measured?

A: Radon in the air is measured in units of picocuries per liter (pCi/L). The Environmental Protection Agency (EPA) strongly recommends you take steps to reduce radon if levels are higher than the action level of 4.0 pCi/L. Radon risk reduction in buildings is also known as mitigation.

Q: What are the health effects?

A: Radon is the second leading cause of lung cancer in the U.S. Breathing radon does not cause any short-term human health symptoms such as shortness of breath, coughing, headaches, or fever. The risk of developing lung cancer increases when an individual breathes air with high levels of radon over a long period of time. The risk also depends on many other factors such as genetic disposition, family history, smoking, presence of other indoor air quality issues (at home, school or work), radon levels, the type and condition of building and ventilation systems, seasonal and weather variations, etc.

While radon is proven to cause cancer, not everyone exposed to elevated radon levels will develop lung cancer. For those who do, the onset of lung cancer usually occurs years after exposure.

If you live in a home with high radon levels, smoking raises your risk of lung cancer by 10 times. Smoking is the leading cause of lung cancer in the U.S. If you are ready to quit smoking and would like help, contact the Oregon Tobacco Quit Line by calling 1-800-QUIT-NOW, or visit their website at www.quitnow.net/oregon.

Q: What prompted _____ to test for radon in _____?

A: _____ began testing for radon _____ to comply with the state legislation, ORS 332.166-167, mandates radon testing in every public school by January 2021.

**If your school began testing before legislation passed, please state the reasoning and date testing began.*

Q: What is _____ doing to make sure classrooms are safe and that all buildings are tested and mitigated if needed?

A:

Q: Should students, staff and visitors be allowed in school buildings with rooms that have high levels of radon?

A: Since radon occurs naturally, a person can never completely get away from it. According to the EPA, radon averages 1.3 pCi/L inside and 0.4 pCi/L outside homes and buildings across the country.

The overall goal of radon reduction is risk reduction. So the lower the levels of radon that an individual is exposed to, the better. However radon levels can be influenced by building design, room size, etc.

Large buildings, like schools, have many rooms and the radon levels in each room may be different from each other. The focus of radon testing is not on the school building as a whole. Instead, the goal is to understand radon levels in individual, frequently-used rooms in the building where people may spend long periods of time. The EPA recommends school officials consider relocating individuals in rooms that have radon levels near 100 pCi/L. However, it is likely that school officials will evacuate rooms at a much lower level.

Because students and other occupants of school buildings spend much of their time at home, the home may be a significant source of radon exposure. The EPA recommends that all homes AND schools be tested for radon.

Q: Do children have a greater risk of cancer from radon exposure?

A: Children are usually more sensitive to environmental pollutants. However, no current data concludes that children are more at risk than adults from radon exposure.

Q: Can my child be tested for radon?

A: There is no medical test for radon. The only way to find out an individual's radon exposure is to test the inside of buildings like homes and schools, where the majority of time is spent.

Children spend more than twice as much time at home as they do in school. While school districts are testing the radon levels within their school buildings, parents should also be testing their homes for radon to reduce that potential exposure pathway.

Q: While my school is performing radon testing and mitigation, what can I do to reduce my or my child's risk?

A: There are many ways to reduce your radon risk:

- Test your home for radon. You can find do-it-yourself (DIY) test kits similar to those being used for testing in schools at a local hardware store. Or you can order one online from the American Lung Association. Information on where to find a test kit is below.
- If high levels are found at school or within your home, encourage local residents to test their homes.
- If you are a smoker, stop smoking. Or at least cease smoking inside of the home. Call 1-800-QUIT-NOW for help.

Q: Where can I find the school's radon test results?

A: _____

Q: Where can I find a radon test kit?

A: DIY radon test kits can be found at most local hardware stores for around \$10 to \$40 plus shipping and analysis fees. The following resources also offer DIY radon test kits:

- [American Lung Association](#)
- [National Radon Program Services](#)
- [Oregon Radon Awareness Program](#) offers FREE radon test kits to those living in areas where no risk level is assigned on the [Radon Risk by Zip Code Map](#). Please email radon.program@state.or.us to find out if you are eligible.
- The National Radon Proficiency Program has a webpage listing of all approved consumer devices (<http://aarst-nrpp.com/wp/consumer-devices>). Going directly to the labs can be much less expensive.

Q: Are the test kits safe?

A: Yes. However, kits should be kept away from very young children (toddlers and infants) so they don't eat or chew on them.

Q: How do I find out radon levels in my rental home?

A: You can ask you landlord if the home has already been tested. If so, request a copy of the test results. If not, you can ask the owner to test or you can test yourself using a DIY test kit (see above Q: Where can I find a radon test kit?). At this time, Oregon does not have any specific radon standards or regulations for rental homes.

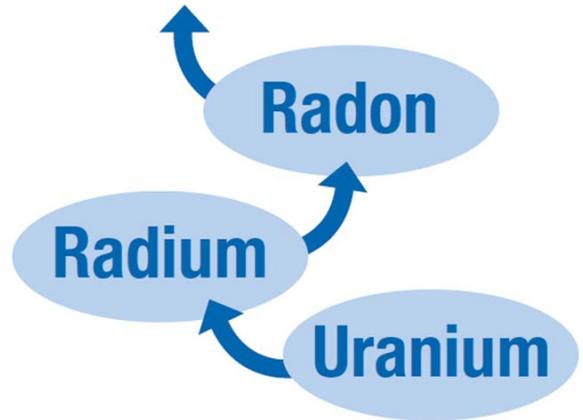
Q: Where can I learn more about radon?

A:

- Oregon Health Authority: www.healthoregon.org/radon
- Environmental Protection Agency (EPA): <http://www.epa.gov/radon>
- EPA – Radon in Schools: <http://www.epa.gov/radon-schools>
- Centers for Disease Control and Prevention: <http://www.cdc.gov/radon/>
- National Radon Program Services: <http://www.sosradon.org>; 1-800-SOS-RADON

Radon in schools

Fact Sheet on Radon Exposure for Students and Staff



What is radon?

Radon is a radioactive gas you can't see, smell or taste. It is a decay product of uranium and is found all over the world. Uranium and its decay products are naturally found in the soil and rocks beneath buildings. Our school image (right) shows how uranium naturally decays into radium that further breaks down into radon gas. Radon moves up through the soil and enters buildings in contact.

Why is radon a problem in Oregon schools?

Radon is the 2nd leading cause of lung cancer, after smoking. The Environmental Protection Agency (EPA) estimates around 21,000 radon-related lung cancer deaths occur each year. Breathing high levels of radon in combination with smoking is even more dangerous and increases your risk by ten times.

Home is likely the most significant source for breathing radon. According to the EPA, 1 out of 15 homes has high radon levels. School is likely the second largest source of radon exposure for students and staff. The only way to know your radon levels is to test. The EPA recommends that **all** homes and schools be tested for radon.

EPA
ACTION
LEVEL

4.0 $\frac{\text{Picocuries}}{\text{Liter of air}}$

Testing at Home

Radon testing at home can be simple and inexpensive. You can find do-it-yourself test kits at most local hardware stores and online from the [American Lung Association](http://www.AmericanLungAssociation.org). Oregon Health Authority (OHA) Radon Program also offers FREE test kits to those living in areas where little data is available. To find out if you are eligible, contact radon.program@state.or.us.

Testing in Oregon Schools

By law (ORS 332.166-167), all Oregon schools are required to test for radon before January 1, 2021.

School radon testing involves the placement of small testing devices in all frequently occupied rooms on the lowest level of the building. Initial testing is short-term and lasts between 2 and 7 days. Test devices are not dangerous in any way.

Rooms that test at or above 4.0 picocuries per liter of air (pCi/L) (EPA recommended action level) are subject to longer confirmation testing and radon reduction systems.

*Test results for your school can be found at:

For more information about radon, visit www.healthoregon.org/radon.

If you have other questions or concerns about radon testing at your school, contact _____ at _____.

Place Your Logo Here

Align Center

Oregon
Health
Authority

Social Media Messages for Radon in Schools

Facebook	Twitter	Visual
Radon in Schools		
[Insert school or district name] will begin radon testing on [insert date]. Stay up to date on the testing process and results by visiting [insert web link].	[Insert school or district name] will begin radon testing on [insert date]. Learn more at [insert bitly].	
An important step is being taken to ensure the buildings of [insert school or district name] are healthy and safe. Find out more about radon testing at [insert we link].	#Radontesting in your school will help ensure a healthy and safe environment for students and staff. Learn more at [insert bitly].	
Did you know schools are likely the second largest contributor to radon exposure for students and staff? As a result, the law now requires radon testing in Oregon schools. Find out more about radon and testing in your school at [insert web address].	Schools are likely the 2nd largest contributor to #radon exposure. Learn more about #radontesting in your school: [insert bitly]	 <p>The diagram features a red school building with a green roof and a flag on top. Below the building, three blue ovals are arranged in a triangle, labeled 'Radon', 'Radium', and 'Uranium'. Blue arrows point from 'Radium' to 'Radon' and from 'Uranium' to 'Radon', illustrating that both Radium and Uranium are sources of Radon.</p>
General		
Radon is the 2nd leading cause of lung cancer - but you can protect yourself! More on radon & cancer: http://www.healthoregon.org/radon	Radon is the 2nd leading cause of #lungcancer - but you can protect yourself. More on #radon & #cancer: www.healthoregon.org/radon	
Radon is a radioactive gas you can't see, smell, or taste. Are you breathing radon? For more information, visit http://www.healthoregon.org/radon	#Radon is a radioactive gas you can't see, smell, or taste. Are you breathing radon? http://www.healthoregon.org/radon #radonawareness	
Radon and cancer: find out how they're related at www.healthoregon.org/radon	#Radon and #cancer: find out how they're related at http://www.healthoregon.org/radon #radonawareness	

<p>Eddie is a radon-induced lung cancer survivor. Listen to his story to learn more about what you can do to protect yourself and your family. http://bit.ly/1HZxGAQ</p>	<p>Learn from Eddie, a #survivor of radon-induced #lungcancer: http://bit.ly/1HZxGAQ</p>	<p>https://youtu.be/WcvoZ1pP3ak</p>
<p>Since radon occurs naturally, you can never completely get away from it. The goal of radon reduction is risk reduction. So the lower your levels the better. Have you tested your home for radon? Call 1-800-SOS-RADON to get your easy, inexpensive do-it-yourself test kit now!</p>	<p>You can never get rid of #radon. So the lower your levels the better. Call 1-800-SOS-RADON for an easy, inexpensive DIY test kit.</p>	
<p>1 in 15 homes have high radon levels. Test your home to protect your family. 1-800-SOS-RADON</p>	<p>1 in 15 homes have high #radon levels. Test your home to protect your family. 1-800-SOS-RADON</p>	
<p>Radon exposure increases the risk of lung cancer for everyone, whether they are current, former or never-smokers. The only way to know your radon levels is to test. You can find simple, inexpensive test kits here: www.lung.org/radon</p>	<p>#Radon exposure increases the risk of #lungcancer for everyone. Test your home. http://bit.ly/2ph3aol</p>	
<p>Awareness Months</p>		
<p>January is National Radon Action Month! Radon is the number one cause of lung cancer among non-smokers. Find out more about radon at http://www.healthoregon.org/radon</p>	<p>January is #NationalRadonActionMonth! #Radon is the number one cause of #lungcancer among non-smokers. Find out more about radon at http://bit.ly/2hQShTs #Radonawareness #NRAM</p>	

<p>June is National Healthy Homes Month! Improve your home's air quality by testing for radon. For more radon information and to order a DIY test kit, visit www.healthoregon.org/radon.</p>	<p>June is National Healthy Homes Month! Improve your home's air quality by testing for #radon. Find DIY test kits at http://bit.ly/2hF1nVg</p>	
<p>November is Lung Cancer Awareness Month! The second leading cause of lung cancer is radon, a radioactive gas that you can't see, smell or taste. The only way to know your radon levels is to test. For more information, visit www.lung.org/radon.</p>	<p>November is #LungCancerAwarenessMonth! Lower your #lungcancer risk by testing your home for #radongas. www.lung.org/radon</p>	
<p>Radon and Smoking</p>		
<p>Radon is the 2nd leading cause of lung cancer in the U.S., after cigarette smoking. If you live in a home with high radon levels, smoking raises your risk of lung cancer even more. Learn more about radon and cancer at www.healthoregon.org/radon</p>	<p>#Radon is the 2nd leading cause of #lungcancer in the U.S., after smoking #testyourhome #quitsmoking 1-800-SOS-RADON http://bit.ly/2hQShTs</p>	
<p>Radon and smoking are a dangerous combination. Test your home. Protect your health. Call 1-800-QUIT-NOW.</p>	<p>#Radon + #smoking = a dangerous combination. Call 1-800-QUIT-NOW.</p>	
<p>There are NO safe levels of either radon or second hand smoke. The only way to know your radon exposure is to test. Find out more about testing at www.healthoregon.org/radon</p>	<p>There are NO safe levels of either #radon or #secondhandsmoke. www.healthoregon.org/radon</p>	
<p>Lung cancer is the most preventable cancer. Reduce your risk by: never smoking or quit smoking, avoid secondhand smoke and test your home for radon.</p>	<p>#Lungcancer is the most preventable cancer. Quit smoking and test your home for #radon. www.lung.org/radon</p>	

Radon Resources

Local and National Resources:

Oregon Radon Awareness Program

www.healthoregon.org/radon
971-673-0440

Oregon American Lung Association

www.lung.org/radon
503-718-6141

Environmental Protection Agency (EPA)

www.epa.gov/radon

National Radon Program Services at Kansas State University

www.sosradon.org

National Radon Program Hotlines:

National Radon Hotline:

Purchase radon test kits by phone

1-800-SOS-RADON (767-7236)

National Radon Helpline:

Get live help for your radon questions

1-800-55RADON (557-2366)

National Radon Fix-It Line:

For general information on fixing or reducing the radon levels in your home

800-644-6999

National Hispanic Radon Hotline:

Get live help for your radon questions / Obtener ayuda en vivo con sus preguntas

866-528-3187

EPA FREE Consumer Publications:

A Citizen's Guide to Radon:

Contains basic information about radon in the home, how to test and read the results.

[PDF Version](#) – English
[PDF Version](#) – Spanish

Consumer's Guide to Radon Reduction:

Contains information about home radon mitigation: radon reduction techniques and radon reduction systems.

[PDF Version](#) – English

Home Buyers and Sellers Guide:

Answers important questions about radon and lung cancer risk, testing and fixing for anyone buying or selling a home.

[PDF Version](#) – English
[PDF Version](#) – Spanish

A Radon Guide for Tenants:

For renters – explains what radon is, how to find if there is radon in the home and what can be done if there are high radon levels in the home.

[PDF Version](#) – English