



# Radon Testing for Schools

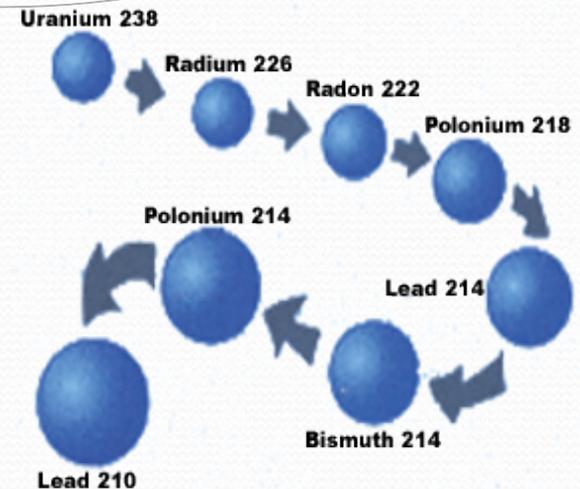
Fall School Workshop, 2016

**PUBLIC HEALTH**  
ALWAYS WORKING FOR A SAFER AND  
**HEALTHIER COMMUNITY**



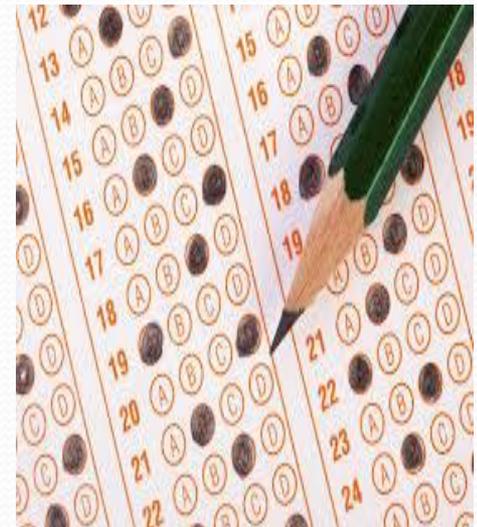
# Radon

- Naturally occurring gas due to Uranium decay (Uranium is everywhere)
- Usually comes from the ground
- Radioactive
- Increases lung cancer risk; Radon caused lung cancer is second only to lung disease caused by smoking

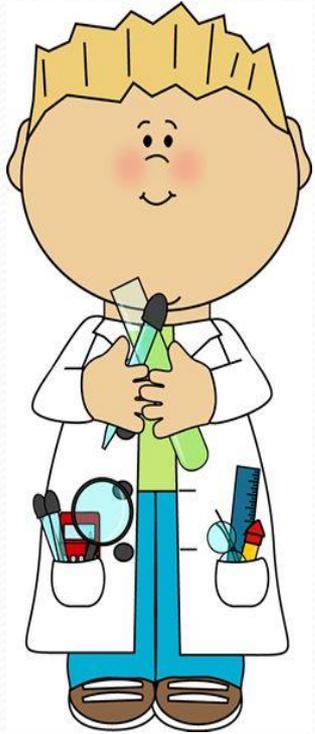


# Why Test in Schools?

- **Radioactive; can cause cancer**
- **Possible laws** (Oregon, Colorado, Connecticut, Florida & Virginia require schools be tested for Radon)
- ***If you don't test, you don't know***



# How Should We Test?



- **DEVELOP A PLAN!**

*(More to follow on this!)*

Test in accordance with ANSI Approved Test Protocols

Testing conducted by Certified Radon Test Professionals or Specialists (American Association of Radon Scientists and Technologists-National Radon Proficiency Program (AARST-NRPP))

# Why Use ANSI Protocols?

- Testing is conducted in accordance with nationally accepted standards that provide reproducible data
- Test results are validated using standard laboratory quality assurance methods
- ***Don't have to explain why you didn't***



# Who should do the testing?

*To Conduct Radon Testing in Large Buildings,  
Specific Training is Recommended.*



**Certified Radon Professional/Testing Specialist** : Will be able to provide proof of certification

**IN HOUSE**: District Safety/Environmental Compliance Officer

# HAVE A PLAN!

The EPA  
recommends  
using a Six  
Phase Planning  
Process for  
Radon  
Management



# GET ORGANIZED

## Radon Planning Steps:

1. **Organize**
2. Communicate
3. Assess
4. Identify Short & Long-Term Activities
5. Act to Address Issues; Structural, Institutional, and Behavioral
6. Evaluate



- **Get Support:** Parents, Teachers, Students, Administration, Community
- **Train and Educate:** Radon mitigation is important because...
- **Integrate** Radon Management with all the other Environmental Plans that are present in your District
- **Create a Team:** Everyone has a part in this

# COMMUNICATE

## Radon Planning Steps:

1. Organize
2. **Communicate**
3. Assess
4. Identify Short & Long-Term Activities
5. Act to Address Issues; Structural, Institutional, and Behavioral
6. Evaluate



- **Why is our Radon Management Plan Important?:** Let people know what the District has in mind, why is radon mitigation important to Public (STUDENT) health
- **Be Upfront and Transparent** from “Day One”. Include everyone in the status of planning, progress of the project and let people know where they can find the Radon Test results.

# ASSESS the Situation

## Radon Planning Steps:

1. Organize
2. Communicate
3. **ASSESS**
4. Short & Long-Term Activities
5. Act to Address Issues; Structural, Institutional, and Behavioral
6. Evaluate

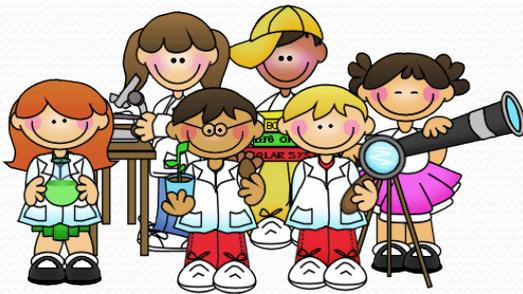
- **Inspect** the Facilities
- **Where** should we put Radon Test Kits and **how many** do we need
- **Technology** works for **YOU**; develop a Radon Test Result database for the district, by school, and plan Indoor Air Quality work based on those results



# Identify Short and Long-Term Activities

## Radon Planning Steps:

1. Organize
2. Communicate
3. ASSESS
4. **Identify Short & Long-Term Activities**
5. Act to Address Issues; Structural, Institutional, and Behavioral
6. Evaluate



- **STAGE THE WORK:** Build teams at each school; they know the ground
- **FUND** the testing/mitigation activities
- **Make** sure that the team agrees on the Radon Test Kit placement and number of kits needed
- **Prioritize Mitigation;** reduce radon in the highest areas first
- This could cover more than one facility at a time

# Act to Address Issues

## Radon Planning Steps:

1. Organize
2. Communicate
3. Assess
4. Identify Short & Long-Term Activities
5. **Act to Address Issues; Structural, Institutional, and Behavioral**
6. Evaluate



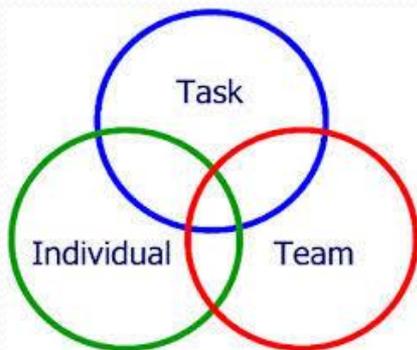
gg64829851 www.gographi.com

- **Conduct** Radon Testing
- **Evaluate** the results
- **Implement** radon reduction work; remember fix the areas with the highest radon concentrations first\*
- **Prioritize Mitigation**; reduce radon in the highest areas first
- **Educate** the Staff (Teachers, Administrators, and Support Personnel) about radon

# EVALUATE

## Radon Planning Steps:

1. Organize
2. Communicate
3. Assess
4. Identify Short & Long-Term Activities
5. Act to Address Issues; Structural, Institutional, and Behavioral
6. **Evaluate**



- **Feedback:** How did we do? Parents, Teachers, Students, Administration, Community
- **What** went well, what could we have done better?
- **Ensure** that the “District” Radon Management Plan is considered when facilities are renovated or NEW facilities are built

# Resources/References

- ANSI online store: **Protocol for Conducting Measurement of Radon and Radon Decay Products in Schools and Large Buildings**
- <http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI%2FAARST+RMS-MALB-2014>

ANSI/AARST

Designation: MALB 20xx



An Approved American National Standard



## Protocol for Conducting Radon and Radon Decay Product Measurements in Schools and Large Buildings

AARST CONSORTIUM ON NATIONAL RADON STANDARDS

[www.radonstandards.us](http://www.radonstandards.us)

[standards@aarst.org](mailto:standards@aarst.org)



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# Resources/References

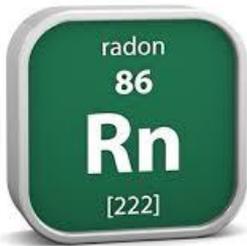
- **Certification for Radon Testing**

- **National Radon Safety Board**

- <http://www.nrsb.org/professionals.asp>

- **AARST-National Radon Proficiency**

- **Program (NRPP.info)** <http://aarst-nrpp.com/wp/certification/>



# Resources/References



**US EPA Radon Management Program:**

<https://www.epa.gov/iaq-schools>



**Washington State Dept of Health:**

<http://www.doh.wa.gov/CommunityandEnvironment/Radiation/RadiationTopics/Radon>



**AARST-NRPP:**

<http://aarst-nrpp.com/wp/>

# Questions?

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