

**TEACHER'S NOTES 5****WHAT ARE OUR RISKS FROM RADON?**

---

**BACKGROUND**

There may be millions of homes in the United States that have elevated radon concentrations that produce lung cancer risks much higher than other environmental hazards. Despite the magnitude and widespread distribution of the radon problem, however, it has been estimated that fewer than 10% of the homes in this country have been tested. Our communication of the potential risks of radon in indoor air has been insufficient to initiate an active response on the part of the American public. This lesson plan, and others in this series, may help to fill this communication void.

People are often indifferent to the radon issue and exhibit a tendency to ignore or deny health risks. Some people are negative about radon testing, perhaps because of concerns that property values might be affected or because associated health risks are far off in time. There is also evidence suggesting that people are more apt to accept that other people's risk may be real, rather than their own. This may be from a need or desire to feel that one's home is "safe".

How do you, as a teacher, communicate risk to your students? There is no easy answer to this question. It is important for you to realize, however, that you must walk a fine line between inciting panic in some students versus combating indifference in others. This is a difficult task, and one that requires a great deal of sensitivity on your part. It is a task that calls for open discussions about risks and perceptions of risk with, and among, your students. Good luck!

**MINIMUM RECOMMENDED TIME ALLOCATION**

One class period.

**STUDENT RESPONSES**

Question 3: The graph tells you nothing about the effects of low dose. It only provides information on the effects of high dose. A model must be used to estimate the effects of low dose, based on what is *known* about the effects of high dose.

Question 6: Low dose.

Question 7: Quadratic - this model suggests the lowest effects.

**EXTENDED ACTIVITIES**

1. Devise a model that has a threshold and that incorporates a quadratic effect with concentrations higher than the threshold. Show a graph of the model.
2. Introduce the concept of risk related to environmental factors by displaying the EPA radon risk tables and graph (See Resources, Illustrations/Maps) on an overhead projector. Have students conduct a survey about risk perception using the Vermont study as an example (See Resources, Illustrations/Maps). Develop a list of environmental problems and have two groups (students and parents) rank them in order of perceived hazard.





**Radon Alert**  
**Lesson Plan Evaluation Sheet**  
**and FREE POSTER AND STORYBOOK offer**

The New Jersey Department of Environmental Protection is happy to provide these lesson plans for use by teachers. In order to evaluate the use of the lesson plans, we would greatly appreciate your response to the following questions. All teachers who return these forms will receive a FREE RADON POSTER depicting information about radon in a colorful format and a STORYBOOK about a Native American child and his experience with radon in his home.

**1. Which Radon Alert lesson plan(s) did you use?**

**2. How useful did you find it/them (check one) ?**

- Not useful
- Slightly useful
- Moderately useful
- Very useful
- Extremely useful

**3. Do you plan to use them again in the future?  Yes  No**

**4. In your view, what would make the lesson plans MORE useful:**

**Your name:** \_\_\_\_\_ **Phone Number:** \_\_\_\_\_

**Subject area:** \_\_\_\_\_ **Grade:** \_\_\_\_\_

**Mailing address:**

---

---

**To receive your FREE RADON POSTER and STORYBOOK, mail or fax this completed form to:**

**NJDEP Radon Program, P. O. Box 415, Trenton, NJ 08625**

**Fax: 609-984-5595.**

**(Questions? Call the Radon Program at 1-800-648-0394.)**