

THE HOUSEHOLD ENVIRONMENTALIST

Radon? Yes, it's boring . . .

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This is going to be a difficult column to write. The trouble is that the subject is so boring I keep drifting off as I do my

research. And I'm not the only one. Experts in this field are invariably asleep when I call.

The subject is radon, the Rodney Dangerfield of environmental health issues.

The federal Environmental Protection Agency and health officials across the country have designated radon the No. 1 environmental health hazard in the U.S.. (Hang on while I have a swig of my latte.) Studies show it is the second leading cause of lung cancer in the U.S. — tobacco is king, of course.

Why is it that the very whisper of the word makes even the most zealous of environmentalists' eyes glaze over?

Perhaps it's because we have no one to blame or sue. After all, if a cancer risk this high were coming from a factory or a landfill we'd all be foaming at the mouth, chaining ourselves to the barricades.

Or it might be that radon is sort of the last straw. Asbestos, fattening desserts, wood-stove smoke. And now your house is sucking an invisible gas that causes cancer.

A type of natural gas

Here are the facts:

Radon is an odorless, colorless, tasteless gas (perhaps if it were mauve or smelled of rotten eggs . . .) that is a product of decaying uranium, which occurs naturally in the earth's crust. Radon seeps through the spaces between particles of soil. If your house's crawl space is improperly ventilated, or the basement unsealed, your house can draw radon up into it. How much radon ends up in your house depends on how much radon there is in the soil and how your house is pressurized.

Radon gas itself is pretty blameless. But it decays into solid products called daughters, and they are the villains — the ugly stepsisters of this environmental Cinderella story.

The evil radon daughters can become attached to dust and other airborne particulates, which you breathe into your lungs. Deep in your lungs, those slutty radon girls — do I have your attention now? — decay further, releasing bursts of energy that bombard your lungs with the equivalent of X-rays.

How much damage these intimate X-rays cause depends on how much radon you are exposed to and for how long. Are you still awake? Have a little more coffee. It doesn't get any more stimulating. The average indoor level of radon is about 1 picocurie per liter. (Pico and Curie were the names of Cinderella's stepsisters, as I'm sure you

remember.) The so-called "action level," the level above which you should do more than worry, is 4 picocuries per liter.

The latest, brand-spanking-new Swedish study, reported in the current *New England Journal of Medicine*, found that people who were exposed to 3.8 to 10.8 picocuries had a lung-cancer risk 30 percent higher than people whose average exposure was less than 1.4 picocuries. The risk was 80 percent higher when radon levels averaged above 10.8 picocuries.

Still reading? The EPA's Office of Radiation Safety estimates that those dastardly radon daughters are responsible for between 8,400 and 43,200 lung-cancer deaths a year.

This is a figure not to be sneezed at — even though America is sneezing at it — and it is why the EPA wants every household in America to buy a kit and test their home's air for radon.

What's a homeowner to do?

Should you shake off your lethargy and test? If you live in a part of the country where radon levels are high — Northeastern Washington, Pennsylvania and New Jersey, for example — you would be wise to do so, especially because "fixing" a radon problem is generally not terribly expensive, considering the alternative.

But what if you live west of the Cascade foothills, where levels tend to be very low? The EPA wants you to test anyway, because radon is a very flighty thing. It may appear at your house and never bother your neighbor at all.

The reality is I'm probably the only person in Seattle who has tested her house for radon, and I did it only to ingratiate myself with the EPA. I did pick up some very good advice for those who don't intend to test, however: Take a few simple steps to make sure your house

doesn't draw its breathing air from the soil below it. Air in soil tends to be unhealthy for humans even apart from radon.

If you have a basement, look for cracks between the concrete and the soil below. Consider sealing these. If you have a crawl space, make sure it is vented to the outside. That way, if those radon girls are down there, they'll have to leave you alone.

Resources: For more information, call the Washington State Office of Radiation's Radon Hotline, 1-800-323-9727, or the EPA's national hotline, 1-800-SOS-RADON. (I know this is too many numbers, but it seems to work.) Call Group Health's "Take Care" store at 1-800-447-2839 to order a test kit for \$13.95, including lab analysis.

Susan McGrath's column runs every two weeks in the Home/Real Estate section.