



TOP STORIES

Are granite countertops bad for your health?

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By Lee McGuire / 11 News



At the request of 11 News, Rice University physics professor Bill Llope conducted tests on granite countertops

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It's a popular upgrade for new homes, but could your granite countertop actually be a hazard to your health?

The family who agreed to have their granite countertop tested for radiation wants you to know the answer to that question.

They asked that their identity not be revealed, but they would like to share what was found at their home.

"We're living in a world that has radiation in it. And there's nothing that you can do to stop it. However, that's above background. That is an enhanced source of radiation," said Bill Llope.

Llope is a Rice University physicist.

11 News turned to him after a Houston research group discovered elevated levels of potentially dangerous gamma radiation coming from the home's granite countertop.

[Also online](#)

[Independent report written for 11 News by Dr. Bill Llope, physics professor at Rice University](#)

Llope was asked to double check the findings.

Keep in mind, granite naturally gives off harmless forms of radiation. And that's what most of the countertops in questions does.

"Point two millirem per hour. However, in another location the rate can be quite a bit higher," said Llope.

On other parts of the countertop, the granite is sending off gamma radiation that can slightly increase cancer risks.

In Houston, researchers say they've also found unusual levels of radon gas, which the EPA says can lead to lung cancer.

[EPA on radon](#)
EPA on radon

Sara Speer Selber runs BuildClean.

[What is it? How do you test for it? What can you do?](#)

"Granite countertops have had a tremendous explosion in this country," she said.

Selber says her team has just started testing Houston-area kitchens for radon.

"Not all granites emit radon or radiation. There are some that clearly do. There are some that absolutely don't. We don't know," she said.

In the kitchen her group took us to, BuildClean's radon test revealed a radon level of about three picocuries per liter. Houston homes normally measure around zero.

The EPA says a homeowner should consider adding more ventilation whenever the level is above two. And definitely do something at a level above four.

"We're seeing what would be called alarming, elevated levels of radon," said Selber.

Is granite the source?

Selber thinks so, and showed off a test. It was a granite slab sealed in a plastic box.

The radon level there was 17.3.

"Or four times greater than what the EPA says is an actionable level," said Selber.

So who is paying for the BuildClean study?

They're being set up as a non-profit, and they're funded with two large donations.

The first is \$250,000 from the makers of 'Silestone.' They manufacture quartz countertops, which is a direct competitor to granite.

BuildClean is also getting money from Cambria, another quartz manufacturer.

[Marble Institute of America](#)
Marble Institute of America reports

In fact, Cambria’s marketing director is on BuildClean’s board of directors.

“I don’t believe the issue is who our funders are. And I’m not going to have that debate. The issue is I’m looking at two slabs, Lee. One is showing 17.3 picocures per liter of radon emission,” said Selber.

[1995 report disputing links between granite and radon](#)

[Safety of granite brochure](#)

But the people who make and install granite countertops call BuildClean’s science dubious and overblown —engineered to scare the public and discredit an industry.

[Technical bulletin on granite and radon](#)

“There’s nothing in the archives, there’s no science that indicates or tells us of any stone being sold commercially available to the public for installation that has higher than the four picocures per liter EPA standard,” said Jim Hogan of the Marble Institute of America.

Remember, Llope started as a skeptic, but after measuring this countertop he started to wonder.

Granite can come from all over the world. And how much do we really know about all those quarries?

So Llope went through dozens of academic studies that looked at 95 different types of granite. He took all that research and then created a hypothetical kitchen.

It was unventilated, 20 feet long by ten feet wide and ten feet tall, and contained 16 feet of granite countertops.

Llope found that 92 of those 95 tested granites emitted no radon at all, or very little.

But two of them would fill the kitchen with elevated radon levels.

And one would release a high level of radon, at the level where the EPA recommends taking action.

If you took 1,000, the EPA says, seven of them would likely get lung cancer with those levels of radon in their home.

“What one needs to do especially if you don’t know where your granite came from is to actually measure your granite,” said Llope.

Then there’s that gamma radiation he found.

To put the risk in perspective—if you were to put your hand on a countertop containing gamma radiation 300 hours, Llope says only four out of 10,000 people might get cancer because of it.

“They are still fairly low but it is something that people should be aware of,” said Llope.

So there may be more to learn about what’s inside your countertop.

There could be something you can’t see in a popular stone that makes your kitchen look so much better.