



NEVADA RADON REPORT

Nevada Radon Education Program

A FEDERALLY FUNDED PROGRAM THROUGH THE NEVADA STATE HEALTH DIVISION AND THE U.S. ENVIRONMENTAL PROTECTION AGENCY



University of Nevada
Cooperative Extension

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Green Living in Douglas County

The Nevada Radon Education Program (NREP) traveled to Gardnerville on Saturday, Sept. 10 for the annual Green Living Festival. The event, which takes place at Lampe Park, showcases vendors and educators with information and products for sustainable living and renewable energy. This is the third year that NREP has attended the event.

The event includes workshops, with three different workshops offered every hour, throughout the day. Megan Long, NREP Education Coordinator, gave a presentation entitled, "Living Green Starts from the Ground Up," to inform attendees about how radon testing is a part living green. The presentation included what radon is, where it comes from, how it enters a building or home, and how to test for radon.

A second part of the presentation was given by local certified radon mitigator, Norm Denny, of Pinnacle Construction. He talked about what to do if you test and find that you have a radon problem. He went through the mitigation process, including how a system is installed and the costs associated with a mitigation.

The attendance at the presentation was small, but a number of residents in Douglas County have already attended one of the many presentations held in previous years, during National Radon Action Month, in January. One attendee at the presentation was having his home mitigated the following weekend but was interested in learning about the mitigation process.

NREP set up its radon booth among the vendors and Susan Howe, NREP Program Director, along with Long, were there to distribute information on radon and offer free short-term radon test kits to attendees.

The radon booth drew about 138 visitors and 70 free



Megan Long explains a radon test kit to a visitor at the NREP booth during the Green Living Festival in Gardnerville.

short-term test kits were given out.

"It is important for residents in this county to test," said Long, "because 39 percent of the homes tested in Douglas County have found they have elevated radon levels."

Many of the booth's attendees included first time testers, but many have already tested their homes and wanted to confirm previous high results with a second test or ask about radon mitigation.

"The Green Living Festival is a great way to keep the radon message strong in a community that has a high potential for elevated radon levels," said Long. "Each year we hear from more and more people who have tested and even mitigated their homes for radon. We can tell that we are making a difference in Douglas County."

Test kits are free at the UNCE office in Douglas County, but are available a low cost in many other counties. For more information

» continued, See GREEN LIVING, Page 2

NREP attends fire summit

University of Nevada Cooperative Extension's Living With Fire program hosted the 2011 Nevada Wildland-Urban Interface Fire Summit on the University of Nevada, Reno campus Sept. 19 and 20. Representatives, fire service personnel, and county managers from extreme, high and moderate wildfire hazard communities, were invited to the summit.

The Nevada Radon Education Program (NREP) was invited to participate in the vendor area and give out information on radon and free radon test kits.

» continued, See SUMMIT, Page 2



Free radon test kits were available to fire summit attendees at NREP's booth.

2011 GREEN LIVING FESTIVAL
Sustainable Living & Renewable Energy

SEPTEMBER 10 • 9 a.m. - 5:30 p.m.
FREE Admission & Parking | LAMPE PARK in Gardnerville
INFORMATION & FUN FOR ALL AGES

- Dr. Solar's Travelling Medicine Show
- Workshops • Family Activities • Exhibitors • Food

FOR DETAILS, VISIT WWW.GREENLIVINGFEST.ORG

We thank NV Energy, our Megawatt Sponsor, and Full Circle Compost, our partner for a Waste-Free Event.

For More Festival Information: Visit www.greenlivingfestival.com or call 775-365-6007

The annual Green Living Festival offers family fun, exhibitors, workshops and food.



Norm Denny presented information on radon mitigation.

Green Living

Continued from Page 1
 on testing visit www.RadonNV.com or call 888-Radon10.



Susan Howe explains radon testing and results to a visitor at the NREP booth during this year's Green Living Festival in Gardnerville.

Summit

Continued from Page 1
 "This was a good conference for NREP to attend," said Megan Long, Radon Education Coordinator for NREP. "The summit it made it possible to get test kits out to people from rural Nevada who have never heard about or tested for radon."

There were about 111 attendees including local community chapter leaders and volunteers, dignitaries, fire service personnel and vendors from 13 Nevada counties.

About 47 attendees visited the radon booth and picked up Environmental Protection Agency (EPA) publications, pens, memo pads and radon test results maps. Free short-term radon test kits were available at the booth and 37 attendees took a test kit home with them.

Some of the visitors said they had already tested for radon and had seen the program represented at another venue or in the media.

NREP encourages all homes in Nevada should be tested. For more information, or to get a radon test kit, visit the NREP website at www.RadonNV.com or call 888-Radon10 (888-723-6610).



The Living With Fire program held a fire summit on the UNR campus; 111 people attended from 13 counties.

County radon potential comparison update

With 10,207 valid test results in Nevada's radon database, the radon potential for the state of Nevada remained largely the same, with 25.2 percent of Nevada homes tested having radon levels over the EPA Action Level of 4 pCi/l.

Results show that 11 counties have a radon potential greater than 15 percent. Pershing County has the highest radon potential with 58.8 percent of the tested homes having radon levels equal to or greater than 4 pCi/l. With 4,091 tested homes, Washoe County leads in number of homes tested.

Although Clark County has the lowest radon potential of 7.5 percent, it is still more homes than in 12 other counties that may need

County Radon Potential Comparison

County	Results as of 12-31-10			As of 9-30-11		
	No. of usable tests	No. of tests over EPA Action Level	% of homes having elevated radon levels	No. of usable tests	No. of tests over EPA Action Level	% of homes having elevated radon levels
Carson City	709	261	36.8%	911	340	37.3%
Churchill	163	20	12.3%	197	24	12.2%
Clark	1,076	86	8.0%	1,345	101	7.5%
Douglas	2,112	868	41.1%	2,409	944	39.2%
Elko	146	50	34.2%	162	56	34.6%
Esmeralda	2	0	*	2	0	*
Eureka	9	5	55.6%*	10	5	50%
Humboldt	69	21	30.4%	102	35	34.3%
Lander	19	5	26.3%	40	6	15.0%
Lincoln	25	7	28.0%	47	15	31.9%
Lyon	442	125	28.3%	489	134	27.4%
Mineral	59	16	27.1%	60	16	26.7%
Nye	113	11	9.7%	118	12	10.2%
Pershing	75	45	60.0%	80	47	58.8%
Storey	11	1	9.1%	11	1	9.1%
Washoe	3,587	711	19.8%	4,091	798	19.5%
White Pine	111	25	22.5%	133	36	27.1%
State Totals	8,728	2,257	25.86%	10,207	2,570	25.2%

UNCE Radon Education Program database of short-term test results data as of Sept. 30, 2011. Results are based on independently tested homes, not scientific sampling. Usable test results include valid tests, one per home, using an average result for multiple tests, from the lowest level of the home tested, and when known, post-mitigation results are not included. Schools and large builders are not included.

*Small sample size; more testing is needed to reference reliable radon potential for this area.

mitigated.

Radon in newsletters...

The July 2011 UNCE Communiqué newsletter included the article, "Area residents win radon mitigation contest."

Radon test kit distribution and tests used for the quarter

The data in these two charts show the number of test kits distributed, as well as the number of kits used, from distribution at various events and activities for the July through September quarter. The percentage represents the percent of usage within the activity.

Distribution point	No. kits distributed	No. tested	% tested
Topaz Ranch Estates cpn.	1	0	0%
IVGID cpn.	1	0	0%
Las Vegas mail	6	1	16.7%
Grassroots Books cpn.	1	0	0%
Reno mail	2	0	0%
Website cpn.	5	2	40%
TOTALS	16	3	18.8%

Distribution point	No. kits distributed	No. tested	% tested
Carson City County UNCE	10	10	100%
Churchill County UNCE	1	0	0%
Clark County UNCE	13	6	46.2%
Douglas County UNCE	23	4	17.4%
2011 Fire Summit	37	0	0%
Incline Village UNCE office	8	1	12.5%
Lander County UNCE	20	20	100%
Lincoln County UNCE	1	1	100%
2011 Living Green Festival	70	1	1.4%
Nevada Tahoe Conservation District Office	7	4	57.1%
Norm Denny kit distribution	2	2	100%
Washoe County UNCE	20	3	15%
TOTALS	212	52	24.5%

Southern Area Update

As of July 1, University of Nevada Cooperative Extension's Radon Education Program in the Southern Area has started to charge residents \$5.00 for short-term radon test kits; prior to this, they were free to Clark County residents.

"We had an overwhelming response by homeowners to the April TV interview concerning radon health hazards in homes in Southern Area, and our radon office could not sustain the cost," said Laura Au-Yeung, Southern Area Radon Coordinator. "We are still receiving calls and requests for radon test kits, and although homeowners are a little disappointed to find out that they now have to pay for the test kits, most are willing to help with covering our costs."

Other city and state agencies have also been affected by the current economic difficulties so the Southern Area Radon

Program has received less than usual requests from community organizations and public libraries for educational program delivery.

"In order to promote the Radon Program, we advertise free test kits to attendees at our Radon Awareness presentations," notes Au-Yeung. "We continue to participate in community health fairs, such as the Sun City Anthem Health Fair, collaborating with community partners such as the Healthy Homes Partnership, and promote the need for homeowners to test for Radon through TV interviews and media news releases.

Low cost short-term radon test kits are available at the Clark County University of Nevada Cooperative Extension Office, located at 8050 Paradise Rd., Suite 100 or by calling Laura Au-Yeung at 702-222-3130.

NREP plans Eureka County presentation

The Eureka Opera House will host Eureka County's first radon presentation on Tuesday, Nov. 15, at 6 p.m. Although radon test kits have been offered in Eureka County for the past two years, little information has been given to residents about why and how they should test for radon.



The radon presentation will take place at the Eureka County Opera House on Nov. 15 at 6 p.m.

To date, only 10 test kits have been used in Eureka County and the Nevada Radon Education Program hopes that a presentation will help bring that number up. Of the 10 kits used, five have been over the EPA Action Level of 4 pCi/l, meaning 50 percent of the homes tested have been high. This is why it is important to get more short-term kits out and used in this community.

Radon in newspapers...



Fumes with a View

Radon exposure risk could be greater than expected

BY ROSEANN KEAGAN
Special to the Tribune
More than two decades after U.S. regulators first issued guidelines on radon infiltration into homes and buildings, the World Health Organization reports that the radon threat to human health is much more serious than previously known.
The news could be particularly significant to communities in the Sierra Nevada, rich with radon exposure from the presence of

smokers.
"Radon increases lung cancer among ever-smokers," said Lisa Shertzer, lung health program manager for the American Lung Association in Reno.
A 2009 report from the California Geological Survey showed residential radon as a significant risk to residents of the Lake Tahoe Basin, particularly on the South Lake.
According to the EPA, it is the leading cause of lung cancer deaths among nonsmokers.
Radon gas is linked to 21,000 lung cancer deaths a year, according to the EPA, in the United States.
Radon gas is colorless and odorless, making it difficult to detect without a radon detector.
Radon is a naturally occurring radioactive gas that comes from the natural decay of uranium and thorium.

OPINIONS & IDEAS

MORE NEEDS TO BE DONE ABOUT RADON

BY ROSEANN KEAGAN
Special to the Tribune
California residents are required to disclose the radon level in their home, if known, before transferring it to a new owner.
Radon is not.
In both states, renters are particularly vulnerable.
There are no regulations to protect renters from radon in Nevada," said Susan Howe, director of the Nevada Radon Education Program, a program of the University of Nevada Cooperative Extension. "There are no regulations dealing with radon in Nevada, period. There are no laws to protect people when they buy or build homes."
Although few deaths from radon exposure than from drunk driving accidents, falls in the home, drownings and home fires, according to the Environmental Protection Agency.
The known carcinogen — radioactive by right smell or taste — is the leading cause of lung cancer among nonsmokers and the second-leading cause of lung cancer for smokers. Radon exposure causes an estimated 21,000 deaths per year in the United States.
California homeowners must complete a disclosure form indicating the presence of all known environmental hazards, including radon gas, mold, asbestos and lead. There are no radon regulations on the books in Nevada, where an estimated one in four homes is said to have dangerous levels of the naturally occurring gas.
Only the Nevada Legislature could pass statewide regulations for real estate transactions requiring radon mitigation and testing, although individual municipalities or cities could create regulations to require new homes to be built with radon systems. There are no current radon laws in Nevada.
"Other states have laws, so it's possible to regulate or protect people," Howe said.

TEST YOUR HOME

Radon regulation varies widely from state to state

BY ROSEANN KEAGAN
Special to the Tribune
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Radon news on the internet...

July 22, 2011 RadonLeaders.org
Radon Leaders Saving Lives
RAREST & EPA
"Building our results in the next five years"

July 24, 2011 RadonLeaders.org
Radon Regulation Varies Widely from State to State
The news could be particularly significant to communities in the Sierra Nevada, rich with radon exposure from the presence of uranium and thorium in the Earth's crust, according to the California Department of Health Services. It is above 4 picocuries per liter — the Environmental Protection Agency's "A" standard for radon.

July 20-21, 2011 Tahoe Daily Tribune
Radon exposure risk could be greater than expected, effects difficult to measure
Special to the Tribune
Send us your news Friday, July 22, 2011

July 22, 2011 Tahoe Daily Tribune
Radon regulation varies widely from state to state
By Roseann Keagan Special to the Tribune
Email Print Recommend Share on Facebook

Keeping renters safe from radon
Filing a radon problem usually involves repairs to the building. Therefore, it is generally the building owner — and not the tenant — who is authorized to have this work done. However, if you have high radon levels, you can take steps to see that the problem is fixed.

Radon regulation varies widely from state to state
By Roseann Keagan Special to the Tribune
Send us your news Friday, July 22, 2011

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Nevada Radon Short-Term Test Results*

From 1989 to September 30, 2011

Nevada counties	Carson City		Churchill		Clark		Douglas		Elko		Esmeralda	
Total number of usable tests per county	911		197		1,345		2,409		162		2	
EPA Action Level	<4.0	>4.0	<4.0	>4.0	<4.0	>4.0	<4.0	>4.0	<4.0	>4.0	<4.0	>4.0
No. of short-term radon test results	571	340	173	24	1,244	101	1,465	944	106	56	2	0
% of homes tested that have elevated radon levels	37.32%		12.18%		7.51%		39.19%		34.57%		sample size too small	

Nevada counties	Eureka		Humboldt		Lander		Lincoln		Lyon		Mineral	
Total number of usable tests per county	10		102		40		47		489		60	
EPA Action Level	<4.0	>4.0	<4.0	>4.0	<4.0	>4.0	<4.0	>4.0	<4.0	>4.0	<4.0	>4.0
No. of short-term radon test results	5	5	67	35	34	6	32	15	355	134	44	16
% of homes tested that have elevated radon levels	50.00%		34.31%		15.00%		31.91%		27.40%		26.67%	

Nevada counties	Nye		Pershing		Storey		Washoe		White Pine		TOTALS	
Total number of usable tests per county	118		80		11		4,091		133		10,207	
EPA Action Level	<4.0	>4.0	<4.0	>4.0	<4.0	>4.0	<4.0	>4.0	<4.0	>4.0	<4.0	>4.0
No. of short-term radon test results	106	12	33	47	10	1	3,293	798	97	36	7,637	2,570
% of homes tested that have elevated radon levels	10.17%		58.75%		9.09%		19.51%		27.07%		25.18%	

*State data provided by the Nevada State Health Division, AccuStar Labs, Alpha Energy Laboratories, Air Chek, Inc. and Pro Lab. Results based on independently tested homes, not scientific sampling. When known, post-mitigation results are not included and usable results are valid tests, one per home, using an average of multiple tests from the lowest level of the home tested. (Schools & large buildings not included.)

Nevada Radon Long-Term Test Results**

From January 2001 to September 30, 2011

Nevada counties	Carson City	Churchill	Clark	Douglas	Elko	Esmeralda	Humboldt	Lincoln	Lyon	Mineral	Pershing	Washoe	White Pine	TOTALS
Total number of usable tests per county	24	2	18	78	7	1	1	1	22	1	1	118	7	281
EPA Action Level	<4.0 >4.0	<4.0 >4.0	<4.0 >4.0	<4.0 >4.0	<4.0 >4.0	<4.0 >4.0	<4.0 >4.0	<4.0 >4.0	<4.0 >4.0	<4.0 >4.0	<4.0 >4.0	<4.0 >4.0	<4.0 >4.0	<4.0 >4.0
No. of long-term radon test results	13 11	2 0	15 3	58 20	4 3	1 0	0 1	0 1	17 5	1 0	1 0	87 31	6 1	205 76
% of homes tested that have high radon levels	45.8%	0%	16.7%	25.6%	42.9%	0%	100%	100%	22.7%	0%	0%	26.3%	14.3%	27.0%

**State data provided by RSSI, Alpha Energy Laboratories and AccuStar Labs. Results based on independently tested homes, not scientific sampling. When known, post-mitigation results are not included and usable results are valid tests, one per home, using an average of multiple tests from the lowest level of the home tested. (Schools & large buildings not included.)

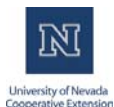
Radon Education Program Numbers

UNCE Radon Program	prior to Sep 07	FY 08	FY 09	FY 10	FY 11	Jul - Sep 11	Total to date
Radon phone and email inquiries	NA	2,136	2,688	1,911	2,209	99	9,043
Direct contacts promoting radon testing and mitigation	NA	3,259	14,000	10,428	7,862	616	36,165
Newspaper/magazine articles	1	99	61	85	68	4	318
Number of TV reports	NA	17	9	57	37	0	120
Website pages of NV Radon information			45	113	253	4	415
Number of radio PSAs	NA	6	6	26	6	0	44
Number of radon exhibits	NA	51	106	186	148	18	509
Radon publications/info distributed	NA	2,798	67,071	59,378	58,545	10,235	198,027
Web site page hits	NA	NA	29,466	59,288	75,920	15,821	180,495
Test kits distributed	971	2,469	8,208	5,321	4,829	304	22,102
Homes tested-Short-Term	726	1,399	4,141	2,522	3,194	246	12,228
Homes tested-Long Term	75	27	55	105	47	15	324
School buildings tested	6	1	16	10	0	0	33
School buildings mitigated	3	1	2	7	0	0	13
Homes mitigated	4	20	75	92	128	15	334
Large buildings mitigated			2	0	0	0	2
Homes tested in real estate transaction	1	27	68	84	168	16	364
Homes built with RRNC features		7	36	30	18	2	93
Number/list of mitigators		3	2	-1	0	0	4
Number of builders using RRNC					5	0	5

Radon Zone Summaries

Nevada Radon Zone Short-Term Test Result Summary			
Zones - Counties	Total Tests	Tests > 4 pCi/l	% high radon
Zone 1 counties			
Carson City, Douglas, Eureka, Lander, Lincoln, Lyon, Mineral, Pershing, White Pine	4,179	1,543	36.92%
Zone 2 counties			
Churchill, Elko, Esmeralda, Humboldt, Nye, Storey, Washoe	4,683	926	19.77%
Zone 3 counties			
Clark	1,345	101	7.51%
Statewide statistics	10,207	2,570	25.18%

Nevada Radon Zone Long-Term Test Result Summary			
Zones - Counties	Total Tests	Tests > 4 pCi/l	% high radon
Zone 1 counties			
Carson City, Douglas, Eureka, Lander, Lincoln, Lyon, Mineral, Pershing, White Pine	134	38	28.36%
Zone 2 counties			
Churchill, Elko, Esmeralda, Humboldt, Nye, Storey, Washoe	129	35	27.13%
Zone 3 counties			
Clark	18	3	16.67%
Statewide statistics	281	76	27.05%



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