



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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McCloud homeowners encouraged to test

Homeowners at McCloud Condominiums in Incline Village were educated about the radon health risk at their annual meeting Aug. 29. Eric Matus, Radiation Staff Specialist with the Nevada State Health Division, and Megan Long, Radon Education Coordinator with University of Nevada Cooperative Extension, attended the meeting. Matus gave a short presentation on the importance of testing all homes for radon, whether homeowners live in the home all year or just spend their vacations there.

Long set up a radon display, answered questions after the meeting and handed out radon information. Many were interested in the display, which included a Washoe County GIS map, highlighting areas of elevated radon potential by zip code.

The McCloud Homeowners Association



Eric Matus, Radiation Staff Specialist, NSHD, talked to members of the McCloud Homeowners Association at Incline Village about the radon health risk.

hopes to have all ground level units tested this winter to determine whether there are any radon problems.

» continued, See **MCLOUD**, Page 2

Radon program utilizes area outreach opportunities

Radon test kits were offered to area residents at several different sites during the week of Sept. 11 to 13.

On Friday, Sept. 11, Barton Health sponsored a free medical health check for families at the Lake Tahoe Airport in California. Among the free health checks provided, California residents could get radon test kits from El Dorado County Environmental Management Department in California, and Nevada residents received kits from UNCE's Nevada Radon Education Program (NREP). Although the event was held in California, 14 Nevada residents picked up a test kit.

NREP employees, Megan Long, Radon Education Coordinator, Jordan Lubek, UNCE GIS Coordinator, and Susan Howe, Program Director, set up a display, distributed test kits and answered questions.

"Both California and Nevada had state-specific radon information to hand out," said Howe, "but it was nice for both programs to work together answering radon testing and mitigation questions."

On Saturday, Sept. 12, NREP traveled to Gardnerville for the annual Green Living



Susan Howe and Jordan Lubek worked at the Nevada Radon Education Program booth distributing test kits to Nevada residents.



Susan Howe answered questions and distributed test kits at the Green Living Festival held Sept. 12, at Lampe Park in Gardnerville.



Jordan Lubek, UNCE GIS Coordinator, set up a booth at the annual Lungs on Legs run sponsored by the American Lung Association, Sept. 13, at Damonte Ranch High School.

Festival held at Lampe Park. The radon team set up a booth alongside many other "green" issue booths, such as renewable energy and green building. Megan Long, radon education coordinator for NREP, gave a presentation explaining what radon is, how to test for it, how to fix a radon problem and building homes radon-ready. Test kits were available to all who

» continued, **SEPTEMBER OUTREACH**, Page 2

McCloud

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Information about the testing project was included in the McCloud HOA monthly newsletter.

Kudos to board member Wayne Clerk for researching the radon health risk and organizing the testing project for the HOA.



McCloud Homeowners Association members take information on radon testing from the radon booth.



Wayne Clerk and Eric Matus discuss radon potential in the Incline Village area.

Distribution data for the quarter

Short-term test kits distributed from county offices and partners from July through September 2009*			
Distribution Office	# Distributed	# Tested	% Used
Carson City County	3	1	33.3%
Churchill County	1	0	0.0%
Clark County	7	3	42.9%
Douglas County	27	6	22.2%
Elko County	3	1	33.3%
NV State Health Division	1	0	0.0%
S Nye County	3	1	33.3%
Washoe County	26	6	23.1%
Incline Village	2	1	50.0%
Washoe Health Dept.	4	3	75.0%
White Pine County	3	0	0.0%
DISTRIBUTION TOTALS	80	22	27.5%

*Distribution chart does not include kits given out at presentations, home shows, health fairs or expos.

Short-term test kits distributed at Western and Central area programs from July to September 2009				
Date	Program/Presentation	No. kits distributed	No. tested	% tested
8/29/09	McCloud Homeowners Assoc.	3	1	33.3%
9/11/09	Barton Health Fair	14	3	21.4%
9/12/09	Green Living Festival	36	2	5.6%
9/13/09	Asthma Walk/Lungs on Legs	7	0	0.0%
Program Totals		60	6	10.0%

September Outreach

Continued from Page 1

attended the presentation as well as at the radon booth throughout the day. Thirty-six short-term radon test kits were distributed at the event, of which two have been used.

“The festival was a great way for NREP to send the message that “living green” includes healthy indoor air and testing for radon is important for everyone,” said Long.

The following day, Sept. 13, Lubek set up a booth at Lungs on Legs, an annual event sponsored by the American Lung Association. The event, held in Reno at Damonte Ranch High School, was created to raise money and awareness for asthma and other air quality issues. Radon test kits and literature were available to participants and visitors. Lubek distributed seven short-term test kits.

“It was a good opportunity for NREP to partner with the American Lung Association and spread awareness that radon is the leading cause of lung cancer for nonsmokers,” said Lubek.

“These events are very successful for NREP to get information to the public,” said Long. “We hope the test kits that were distributed at these events get used in homes throughout the area.”



Test kits were offered to California and Nevada residents at the Barton Health Fair by Karen Bender, El Dorado County Environmental Management, and Jordan Lubek, Megan Long and Susan Howe.



Area residents viewed the Nevada Radon Program's exhibit display during the Barton Health Fair, held Sept. 11, at the Lake Tahoe Airport.

Nevada group attends national meeting

Nevada Radon team members, Megan Long, Susan Howe, and Laura Au-Yeung of the Nevada Radon Education Program and Adrian Howe of the Nevada State Health Division, traveled to St. Louis for the 19th annual National Radon Training Conference held Sept. 20-23.

“It was a good opportunity for Nevada to network with other states and share ideas for the upcoming year,” said Susan.

The conference featured keynote speaker Dr. R. William Field, University of Iowa, and Terry Leach, University

of California. Other speakers included members of the American Association of Radiation Scientists and Technologists (AARST), the Conference of Radiation Control Program Directors (CRCPD), U.S. Environmental Protection Agency (EPA), American Lung Association and many state radon programs.

Attendees heard a variety of radon topics including testing, indoor air quality issues and research. Included in the 300 attendees were radon measurement and mitigation providers, radon labs, scientists and state radon programs.



The Nevada contingent at the National Radon Conference: Megan Long, Laura Au-Yeung, Susan Howe and Adrian Howe.



World renowned radon scientist and researcher, Dr. R. William Field, was a keynote speaker at the 19th National Radon Training Conference.

Southern area radon outreach activities recap

The Southern Area Radon Education Program focused on outreaching to youth this summer and encouraging them to submit entries to the Nevada Radon Poster contest.

A radon awareness presentation was made to the Junior Gardener group at the Extension orchard in July and to another Junior Gardener group that met at the Clark County Extension office in September. Over 20 youth were reached, ranging in age from seven to 14, in the two sessions.

"They were very interested in the poster contest and asked many pertinent questions concerning health hazards in their homes," noted Laura Au-Yeung, Southern Area Radon Coordinator. "An added benefit of these presentations was that the parents who volunteered at the sessions got involved in the radon health risk discussions and they



22 attendees at the Sept. 12 Henderson Library Health Fair received radon test kits.

were excited to get radon test kits to test their homes."

Another radon presentation was made at the Summer Camp for 4-H youth in July. The 19 participants' ages ranged from nine to 14.

"They were very involved in science projects," said Au-Yeung, "and some of them have a keen understanding and basic knowledge about radioactive gases. We engaged them in learning about radon using the Radon Bingo Game as a teaching tool. The 4-H youth enjoyed the game and were happy to receive

radon T-shirts and backpacks as prizes."

The Southern Area Radon Education Program also participated in the Back-to-School Health Fair sponsored by the College of Southern Nevada (CSN) in August, held at the CSN campus in North Las Vegas.

"We had the opportunity to outreach to different ethnic community groups and their families at this event," said Au-Yeung. About 400 families attended the event. "All were happy to receive radon information, radon mementos and free radon test kits."

Totally different audiences were reached at the Fiesta Station Casino Health and Wellness Fair in August and the Clark County Library Community Health Fair held in the Galleria Mall in September. At both events, Radon Program brochures and free short-term radon test kits were distributed to local residents. As in other community events, residents who are transplants from other states are much more aware of the radon health risk in their homes than many native Nevadans. The total attendance at the Station Casino Health and Wellness Fair was 870. The Library Health Fair had an attendance of about 150.

Speaking of radon awareness, no other group can be more aware of the health risk of radioactive gases than former employees of the Yucca Nuclear Plant and their families. The Southern Area Radon Education Program was invited to participate at the Yucca Informational Center opening in August. About 50 local residents, including county government officials, were present to celebrate the opening of the center that sits on the site of the old nuclear plant that was closed this summer. Extension's Radon Program handed out 42 radon test kits and received valuable feedback from local residents, some of whom had first-hand knowledge of radioactive gas exposure.

Short-term test kits distributed at Southern area programs from July to September 2009

Date	Program/Presentation	No. kits distributed	No. tested	% tested
8/1/09	Yucca Information Center	42	5	11.9%
8/12/09	Henderson Fiesta Station Health Fair	29	3	10.3%
8/22/09	Back to School Health Fair	14	0	0.0%
9/12/09	Henderson Library Health Fair	22	3	13.6%
	LV mailed out kits	172	42	24.4%
	Program Totals	279	53	19.0%

Radon in the News



Sept. 11, 2009
Tahoe Daily Tribune.com

Event today offers medical screenings, disaster preparedness

By Denise Smart Sloan / Barton Health

Send us your news... back Friday, September 11, 2009

It's been eight years since terrorism changed community celebrate emergency preparedness at Tahoe Airport.

There will be more than a dozen free medical screenings and disaster preparedness presentations at the Tahoe Airport.

Area agencies that will also participate in the event include the Nevada State Fire Department, South Lake Tahoe Fire Department, Community Coalition, American Red Cross, Yuba County, Klamath Community Center, Barton Foundation, Barton University and Public Air Highway Patrol, BlueGO and Lake Tahoe Har...

Whether you live in California or Nevada, it's important to be prepared for a disaster. To make sure that every family has prepared at 4, 5 and 6 p.m.

The entire family can receive free expert disaster plan, then break into family groups to discuss the plan.

People may tour fire trucks, ambulances, fire trucks, take part in children's fitness activities, and receive free radon test kits, either from scratch or from a...

Medical screenings include the two orthopedic screenings.

Visitors can learn to drag friends to safety, CPR and AED instruction, and can first aid and hand-washing activities.

There will also be advice on medical financial health care wishes known in advance of a...

All booths and screenings are free to the public.

Special BlueGO routes will take guests to the event.

For details, call (530) 543-5615 or go visit w...

June 29, 2009
Las Vegas Now-Ch. 8

Some Clark County Homes Show High Radon Levels
Updated: Jun 29, 2009 3:45 PM PDT

Testing of homes in Clark County showed that 8 percent of homes have high radon levels.

Radon, which is radioactive, is found in soil, rocks and water and is usually found in the soil beneath a home. The radon can enter the house through foundation cracks, plumbing and porous building materials.

"You can't predict which homes will have high radon levels," Susan Roberts, Nevada radon program director, said. "Two neighboring homes can have very different radon levels. The only way to know a building's radon level is to test."

Clark County Extension and the Nevada State Health Division are urging residents to get a radon test kit from their local Cooperative Extension office for free.

One person a year in the U.S. die from lung cancer associated with radon.

10 Thursday, July 2, 2009 - MIRROR

Radon a danger in 10% of Nye homes

By Dawn Hivko
Mirror Staff

Radon is a radioactive gas that can be found in soil, rocks and water. It can enter a home through foundation cracks, plumbing and porous building materials. Radon is a leading cause of lung cancer.

According to a report recently released by University of Nevada Cooperative Extension (UNCE) and the Nevada State Health Division the radon potential for Nye County is 10 percent, with 10 percent of homes being above the EPA action level of 4 pCi/L (picocuries per liter of air).

Radon comes from the natural radioactive decay of uranium and is found in soil, rocks and water. It can enter a home through foundation cracks, plumbing and porous building materials. Radon is a leading cause of lung cancer.

According to Susan Roberts, Nevada radon program director, "You can't predict which homes will have high radon levels, two neighboring homes can have very different radon levels."

Clark County Extension and the Nevada State Health Division are urging residents to get a radon test kit from their local Cooperative Extension office for free.

One person a year in the U.S. die from lung cancer associated with radon.

County Radon Potential Update

County	As of 12-31-08	As of 5-31-09
	No. of homes tested	No. of homes tested
Clark	11	11
Church & Moses	11	11
Esmeralda	11	11
Humboldt	11	11
Lincoln	11	11
Mineral	11	11
Nye	11	11
Ormskirk	11	11
Pershing	11	11
Springer	11	11
Washoe	11	11
White Pine	11	11
Yuba	11	11
Total	110	110

Clark County University of Nevada Cooperative Extension

Science Project



Earlier this year, Susan Howe, Radon Education Program Director, met with the Resneys, Alex, Elizabeth, and Walker, along with their mother, Autumn, to discuss Alex's science project involving radon testing and data.

Nevada Radon Short-Term Test Results*

From February 2003 to September 30, 2009

Nevada counties	Carson City		Churchill		Clark		Douglas		Elko		Esmeralda	
Total number of usable tests per county	448		105		611		1,250		92		0	
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	294	154	91	14	567	44	736	514	57	35	0	0
% of homes tested that have elevated radon levels	34.38%		13.33%		7.20%		41.12%		38.04%			

Nevada counties	Eureka		Humboldt		Lander		Lincoln		Lyon		Mineral	
Total number of usable tests per county	4		31		15		15		223		22	
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	2	2	20	11	10	5	11	4	156	67	14	8
% of homes tested that have elevated radon levels	sample size too small		35.48%		33.33%		26.67%		30.04%		36.36%	

Nevada counties	Nye		Pershing		Storey		Washoe		White Pine		Grand	
Total number of usable tests per county	76		61		10		2,350		81		5,394	
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	70	6	24	37	9	1	1,916	434	64	17	4,041	1,353
% of homes tested that have elevated radon levels	7.89%		60.66%		10.00%		18.47%		20.99%		25.08%	

*State data provided by the Nevada State Health Division, AccuStar Labs, Alpha Energy Laboratories 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.

Nevada Radon Long-Term Test Results**

From January 2001 to September 30, 2009

Nevada counties	Carson City		Churchill		Clark		Douglas		Elko		Lyon		Washoe		White Pine		TOTALS	
Total number of usable tests per county	3		1		18		43		1		13		94		6		179	
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
No. of long-term radon test results	1	2	1	0	18	0	28	15	1	0	8	5	64	30	6	0	127	52
% of homes tested that have high radon levels	66.67%		0.00%		0.00%		34.88%		0.00%		38.46%		31.91%		0.00%		29.05%	

**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.

Radon Education Program Numbers

UNCE Radon Program	prior to Sep 07	FY 08	FY 09	July-Sept	Total to date
Radon phone and email inquiries	NA	2,136	2,688	310	5,134
Direct contacts promoting radon testing and mitigation	NA	3,259	14,000	1,834	19,093
Newspaper/magazine articles	1	99	61	4	165
Number of TV reports	NA	17	9	1	27
Number of radio PSAs	NA	6	6		12
Number of radon exhibits	NA	51	106	10	167
Radon publications/info distributed	NA	2,798	67,071	2,927	72,796
Web site page hits	NA	NA	29,466	10,754	40,220
Test kits distributed	92	2,274	10,622	632	13,620
Homes tested-Short-Term	843	1,430	3,884	-14*	6,143
Homes tested-Long Term	60	32	49	19	160
Schools tested	6	1	16	1	24
Schools mitigated	3	1	2		6
Homes mitigated	4	20	75	12	111
Large buildings mitigated			2		2
Homes tested in real estate transaction	1	27	68	3	99
Homes built with RRNC features		7	36	2	45
Number/list of mitigators		3	2		5

*decrease in homes tested due to refinement of data this quarter.

Radon Zone Summaries

Nevada Radon Zone Short-Term Test Result Summary			
Zone 1 counties	Total Tests	Tests > 4 pCi/l	% high radon
Carson City, Douglas, Eureka, Lander, Lincoln, Lyon, Mineral, Pershing, White Pine	2,119	808	38.13%
Zone 2 counties			
Churchill, Elko, Esmeralda, Humboldt, Nye, Storey, Washoe	2,664	501	18.81%
Zone 3 counties			
Clark	611	44	7.20%
Statewide statistics	5,394	1,353	25.08%

Nevada Radon Zone Long-Term Test Result Summary			
Zone 1 counties	Total Tests	Tests > 4 pCi/l	% high radon
Carson City, Douglas, Eureka, Lander, Lincoln, Lyon, Mineral, Pershing, White Pine	65	22	33.85%
Zone 2 counties			
Churchill, Elko, Esmeralda, Humboldt, Nye, Storey, Washoe	96	30	31.25%
Zone 3 counties			
Clark	18	0	0.00%
Statewide statistics	179	52	29.05%



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