

# Radon

In Georgia

www.p2ad.org  
 www.southface.org  
 www.fcs.uga.edu  
 www.epa.gov/radon

404-872-3549  
 1-800-745-0037

## Quarterly Newsletter and Outreach Reports July through September 2004

Made possible through a partnership between the University of Georgia Cooperative Extension Service Environmental Education, the Georgia Department of Public Health, the Pollution Prevention Assistance Division (P2AD) of the Georgia Department of Natural Resources



## Chest Cancer Center Partners with The UGA College of Family and Consumer Sciences

The University of Georgia, College of Family and Consumer Sciences (FACS), Radon Education Program, is pleased to announce a new partnership with the recently opened Chest Cancer Center at Athens Regional Medical Center. The Chest Cancer Center will reach out to patients in 17 surrounding counties with radon information. With radon identified as the second leading cause of lung cancer, the partnership will help maximize our efforts of reaching out to Georgians with radon education.

The initial partnership meeting took place on August 18<sup>th</sup> at Athens Regional. The participants were: Jane Parks M.D., Chest Cancer Center Director, Mona Mercardante, Manager, Cancer Support Center, Rhonda Bogdanow, Chest Cancer Center Coordinator, Dean Sharon Nickols, College of Family and Consumer Sciences, Jorge Atilas, Radon Education Program Director and Assistant Dean, College of Family and Consumer Sciences, and Becky Chenhall, Radon Educator.



**Dr. Parks, Chest Cancer Center Director (left) giving a radon test kit to Rhonda Bogdanow, Chest Cancer Center Coordinator.**

Out of approximately 160,000 predicted deaths nationwide from lung cancer in 2004, radon may be responsible for

up to 22,000, and possibly more because many are exposed to both radon and cigarette smoke, making it difficult to determine the exact cause. Also, the risk of lung cancer is over 10 times greater for those who smoke and are exposed to radon. This is in comparison to those who are exposed to the same levels of radon and do not smoke.

When patients have been diagnosed with lung cancer, they are especially concerned with preventing other family members from developing lung cancer. Most want to know how to lower the risk for lung cancer and are willing to perform a simple radon test in their home.

As a result of this partnership, radon education programs will be provided to patients, families and staff, complimentary radon test kits will be distributed and physicians will promote radon testing to the patients.

Dr. Parks plans to participate in media efforts to create a greater awareness of the health effects of radon. She said, "Everyone should test for radon. I am encouraging all my patients to do so."

**Jorge H. Atilas, Ph.D.  
 Radon Education Program Director**

### INSIDE RADON IN GEORGIA

4-H's Receive Radon Grant	2
Quarterly Radon Outreach Report	3
Radon Solutions for New Construction	4
Braves Fans Learn About Radon	4
Accumulative Radon Outreach Report	5
Radon Testing Can Be Done With Kits	6
Radon Test Kits Available	7
Featured Homebuilder	8

## 4-H'ers Receive Radon Grant

CONYERS — Rockdale County Extension Services will soon receive help in educating the public about the dangers of radon.

The department has received a \$7,500 grant from the Pollution Prevention Assistance Division (P2AD), which will fund radon education for 4-H participants. This includes a 30-minute television program, a new educational brochure, take-home radon test kits and educational boards to be displayed at local schools.

"No one has been doing anything for school kids, to teach them about radon. So we thought this was an important area to address," said Jule-Lynne Macie, Extension Services director. "We have a likelihood for radon in this county with our high levels of granite, and this will be a way to educate kids but also educate adults through their kids."

In addition to the materials, 4-H kids will get credit toward their Red Clover awards for using the radon kits in their homes.

As a nonregulatory division of the Georgia Department of Natural Resources (DNR), P2AD provides free, confidential environmental expertise about pollution prevention, resource conservation, waste reduction, byproduct reuse and recycling. In particular, these grant funds have been provided by the U.S. Environmental Protection Agency (EPA) to educate the public about radon by supporting local efforts.

"We are extremely proud to recognize Rockdale County Extension Service for their efforts to incorporate radon education into their 4-H programming," said

Marci De Sart, a pollution prevention specialist with P2AD. "They have created a unique approach to educating youth and their families about the potential dangers of radon and continue to be a valuable resource for Rockdale County citizens."

Government groups are concerned about radon education because of its potentially harmful effects on residents and its propensity to go unnoticed. Radon is a naturally occurring, invisible, odorless, tasteless gas that is produced as uranium and radium break down in soil and rock.

Usually dispersed in open air, radon can become harmful when trapped indoors, and, in fact, has been identified by the U.S. surgeon general as the second leading cause of lung cancer. Because of its gaseous form, radon can easily seep from the soil or rock in the ground and into a building through cracks or holes in its foundation or crawl spaces.

In addition to providing the grant for the local Extension Services, P2AD also gave grants to the Atlanta Fire-Rescue Department and the DeKalb County Board of Health-Division of Environmental Health to fund radon education programs.

For more information about radon and other services of P2AD, go to [www.p2ad.org](http://www.p2ad.org). To contact Rockdale Extension Service, call 770-785-5952.

**Adapted from the article in the  
Rockdale Citizen  
September 19, 2004**

# Quarterly Radon Outreach Report

## Program and Media Contacts

These figures represent programming and Media contacts for the months of July—September 2004.

PROGRAM CONTACTS	Gwinnett	Hall	Walton	Southface	Other	Totals
Programs, Meetings, Classes	7	14	17	16	0	54
Number reached	157	348	416	515	0	1,436
Number of medical professionals reached	2	20	24	0	0	46
Number of home builders reached	0	0	2	339	0	341
Number of realtors reached	0	1	22	105	0	128
Number of materials distributed	471	762	1,700	233	0	3,166
Exhibits or Events	1	6	4	0	5	16
Number reached	200	620	755	N/A	1,200	2,775
Number of materials distributed	25	1,148	450	N/A	600	2,223
Radon Test Kits Distributed	144	370	385	153	934	1,986
Test Results Received	94	66	150	0	210	520
Results above 4.0 pCi/L	26	15	29	N/A	35	105
Results below 4.0 pCi/L	67	43	107	N/A	175	392
Results incomplete	3	8	14	N/A	0	25
Percentage of homes with elevated levels	27.6	25	21.3	N/A	16.6	
Highest Reported Level	49	16.4	21.2	N/A	77.1	
Mitigation completed or in progress	1	0	2	0	0	3
Radon resistant new construction built or being built	0	0	3	0	0	3

MEDIA	Gwinnett	Hall	Walton	Southface	Other	Totals
Radio Spots	0	4	0	0	0	4
Listening Audience	N/A	333,000	N/A	N/A	N/A	333,000
TV Spots	108	3	5	0	0	116
Viewing Audience	11,124,000	1,536,000	20,050,000	N/A	N/A	32,710,000
Newspaper articles published	1	2	5	0	2	10
Reading Audience	152,000	32,000	150,000	N/A	23,000	357,000
Newsletters/articles or radon information published	0	0	3	1	0	4
Number Distributed	N/A	N/A	35,300	3,000	N/A	38,300

## Radon Solutions for New Construction

What if you could protect your home from radon for the small price of \$50? If you add the radon control system during your home's construction, the price of the pipes would be around \$50, substantially lower than if you detected radon after your home's construction. For a contractor to lower the radon levels in your home after it's built, it could cost between \$500 and \$1,200.



The radon pipe looks similar to the plumbing in your home. The radon pipe, nothing more than a 4-inch PVC pipe, runs from the foundation of your home up to the roof through an interior wall. The bottom of the pipe is buried in the gravel under the foundation slab. If radon is detected, a fan is added to move the gases through the pipes and out of your home at harmless levels.

If you're thinking about building a new home or currently building, ask your contractor about the radon mitigation system for new construction.

**Adaptation of Article from  
[Walton EMC Natural Gas](#),  
Published September 2004.**

## Braves' Fans Learn About Radon

As part of Fire Awareness and Safety Night at Turner Field, Vanessa Freeman and Marci De Sart of P2AD, passed out radon test kits and radon information at the Braves' game on Saturday, September 11, 2004. They gave out about 400 test kits, with the help of DeKalb County Board of Health, Division of Environmental Health. They received a wide range of reactions and responses from fans, reinforcing the fact that radon related outreach and education is very important and necessary.



## Accumulative Radon Outreach Report to Date

### Program and Media Contacts

These figures represent programming and media contacts from April, 2003—September, 2004

Program Contacts	Gwinnett	Hall	Sumter	Walton	Southface	Other	Totals
Programs, Meetings, Classes	61	60	23	75	43	4	266
Number Reached	8,020	2,117	1,022	2,186	1,140	1,130	15,615
Number of medical professionals reached	2	20	0	24	0	0	46
Number of home builders reached	0	0	0	4	996	0	1,000
Number of realtors reached	0	16	0	22	130	0	168
Number of materials distributed	969	1,262	11	2,130	553	600	5,525
*Exhibits or Events	9	11	0	24	5	5	54
Number Reached	2,433	1,535	0	11,113	800	1,200	17,081
Number of materials distributed	887	1,943	0	2,390	590	600	6,410
Radon Test Kits Distributed	1,655	1,335	403	2,151	519	2,498	8,561
Test Results Received	643	320	128	828	2	636	2,557
Highest Reported Radon Level	49	25.5	4.9	42	4.2	77.1	
Mitigation Efforts	1	1	1	8	0	0	11
Radon Resistant New Construction Built or being built	0	0	0	7	58	0	65

\*The Exhibits and Events totals represent reports beginning January, 2004 to date.

Media Contacts	Gwinnett	Hall	Sumter	Walton	Southface	Other	Totals
Radio Spots	0	16	5	5	1	0	27
Listening Audience	N/A	754,000	552,000	250,000	2,000	0	1,558,000
TV Spots	108	76	2	16	0	114	316
Viewing Audience	11,124,000	3,945,000	700,000	20,387,000	N/A	2,129,000	38,285,000
Newspaper Articles	2	5	4	16	0	3	30
Reading Audience	220,000	91,300	41,000	408,000	N/A	49,000	809,300
Newsletters/Articles	3	4	13	13	3	3	39
Number Distributed	7,090	740	1,980	197,320	6,032	15,000	228,162
Total Media Impressions	11,351,090	4,791,040	1,294,980	21,242,320	8,032	2,193,000	40,880,462

## Radon Testing Can Be Done with Kits Supplied By Local Extension Office

### Special to Oconee

Radon is the second leading cause of lung cancer.

And the greater the concentrations of radon gas in a home, the greater the risk of lung cancer, according to the University of Georgia.

Testing for radon is easy and takes only a few minutes of time. Complimentary radon tests are available at the Oconee County Extension Office located behind the Oconee County Courthouse.

The following is information on radon from UGA: Radon is a naturally occurring radioactive gas formed from the radioactive decay of uranium and radium. These elements are found at varying levels in almost all rock and soil. The radon gas formed is odorless and colorless.

If radon gas rises under a home, it will collect there and may enter the building through cracks or joints in the floor. Unless vented to the outside, radon can collect in the lower levels of the house. All types of homes, basement, crawl space and slab, can have a radon problem.

Radon is the second leading cause of lung cancer. Radon is estimated to cause up to 22,000 lung cancer deaths per year. That is more deaths than caused by drunk driving.

The greater the concentrations of radon gas in a home, the greater the risk of lung cancer. Testing is the only way to know if you and your family are at risk from radon. The Environmental Protection Agency and the Surgeon General recommend testing all homes.

Radon levels can vary considerably from house to house, even on the same street. It is nearly impossible to predict the exact nature of geologic soil deposits and the extent to which soil gasses will seep into and be retained by a specific house. Again, the only way to know whether radon exists in elevated levels in your home, and to protect your family from radon, is to test. All homes, even those with very high levels,

can be reduced to acceptable levels. New homes can be built with radon-resistant features. Radon-resistant construction techniques can be effective in preventing radon entry. Installing them at the time of construction makes it easier and less expensive to reduce radon levels. Every new home should be tested after occupancy, even if it was built radon-resistant.



**Becky Chenhall, a radon educator with the Walton County Extension Service, gives a radon test kit to Steven Wideman, a salesperson with The Leaders Real Estate Group.**

***Adaptation of Article Published in the Athens Banner-Herald on Wednesday, September 8, 2004***

## Radon Test Kits Available

Radon is a naturally occurring radioactive gas that results from the breakdown of radium and uranium in soil, rock and water. When uranium decays, radon is produced and tends to work its way up through the soil and into the atmosphere where it's effects on human health are minimal, but if it seeps into your home, it can be deadly.

You can't see, taste or smell radon, so it's necessary to get a test kit to be sure the levels in your home aren't elevated. According to the EPA, Gwinnett is among counties that fall into Zone 1 (higher levels). In the rest of our service area, Banks, Barrow, Clarke, Franklin, Hall, Jackson, Lumpkin, Madison and Oglethorpe counties fall into Zone 2 (moderate levels).

A Class A carcinogen, radon can damage your lung tissue if you breathe the gas over extended periods of time. If you get a radon reading over 4 picocuries/L with the test kit,

confirm the results with a second test. If the second test confirms an elevated level, you should contact a certified radon mitigation contractor for help. The contractor may use a combination of sealing and depressurizing the slab or crawlspace using a vent stack or electric fan. The cost for decreasing the radon levels in your home can run anywhere from \$500 to \$2,500.

Test kits can be picked up at several locations, (see below), Monday-Friday from 8 a. m. to 5 p.m. You can also download or order the Consumer's Guide to Radon Reduction pamphlet from the Environmental Protection Agency at [www.epa.gov/iaq/radon/pubs/con-guid.html](http://www.epa.gov/iaq/radon/pubs/con-guid.html). This guide will give you information on the variety of radon reduction systems available.

*Adaptation of article published in Jemco News, a newsletter published by Jackson EMC , August 2004.*

**Gwinnett County  
Extension Service**  
750 S. Perry Street  
Suite 400  
Lawrenceville, GA 30045  
678-377-4010

**Hall County  
Extension Service**  
734 Crescent Drive  
Gainesville, GA 30501  
770-535-8293

**Walton County  
Extension Service**  
203 Milledge Avenue  
Monroe, GA 30655  
770-267-1324

**Elbert County  
Extension Service**  
10 Cloverleaf Drive  
Elberton, GA 30635  
706-283-2037

**P2AD—Department of Natural Resources**  
#7 MLK Jr. Drive, Suite 450  
Atlanta, GA 30334  
404-657-5204

**Southface Energy Institute**  
241 Pine Street  
Atlanta, GA 30308  
404-872-3549 or 1-800-745-0037

# P<sup>2</sup>AD

**P2AD staff taught attendees of the New Life Community Ministries community event about radon. The event took place on August 31, 2004 in DeKalb County.**



## Featured Homebuilder

### Radon Resistant New Construction is Cost Effective.

Clarke County homebuilder, Jim Casey, now builds his new homes in Athens with radon resistant features. Mr. Casey built three homes which had to be mitigated after they were completed, due to elevated radon levels, above 4.0 pCi/L. He found it to be much more cost effective to add a radon vent stack to homes during pre-construction.

tion into the building process is the logical way to go.

Builder Jim Casey is a leader in his profession. Being proactive, Mr. Casey is preventing potential radon problems before they occur. Building his homes with radon resistant features makes his new homes safer, thereby increasing their sellability.



**Jim Casey in front of the radon resistant house he is building in Athens.**

Mr. Casey said, "My plumber now automatically adds the radon PVC vent pipe to all my homes at the plumbing stage." A 3" or 4" PVC pipe is installed to vent soil gases under the foundation up to a discharge point above the roof. This diverts the radon gas from under the home where it can enter and concentrate to unsafe levels, to the outside air where it diffuses and is not a problem. After the home is completed, a fan can easily be added to the pipe, if needed, to further decrease the radon level in the home.

The cost of the PVC pipe is less than \$50.00. Mitigation costs after the home is completed can exceed \$1200.00, making it clear that the approach of incorporating radon resistant construc-



**Jim Casey standing by the radon vent stack (the radon pipe is the one on the right) in the basement of the new house.**

**Jim Casey Construction  
P.O. Box 6882  
Athens, GA 30604**