



BUILDING A FRAMEWORK FOR HEALTHY HOUSING

2008 National Healthy Homes Conference

Indoor Environmental Quality: Which pollutants are most important?

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RUTGERS

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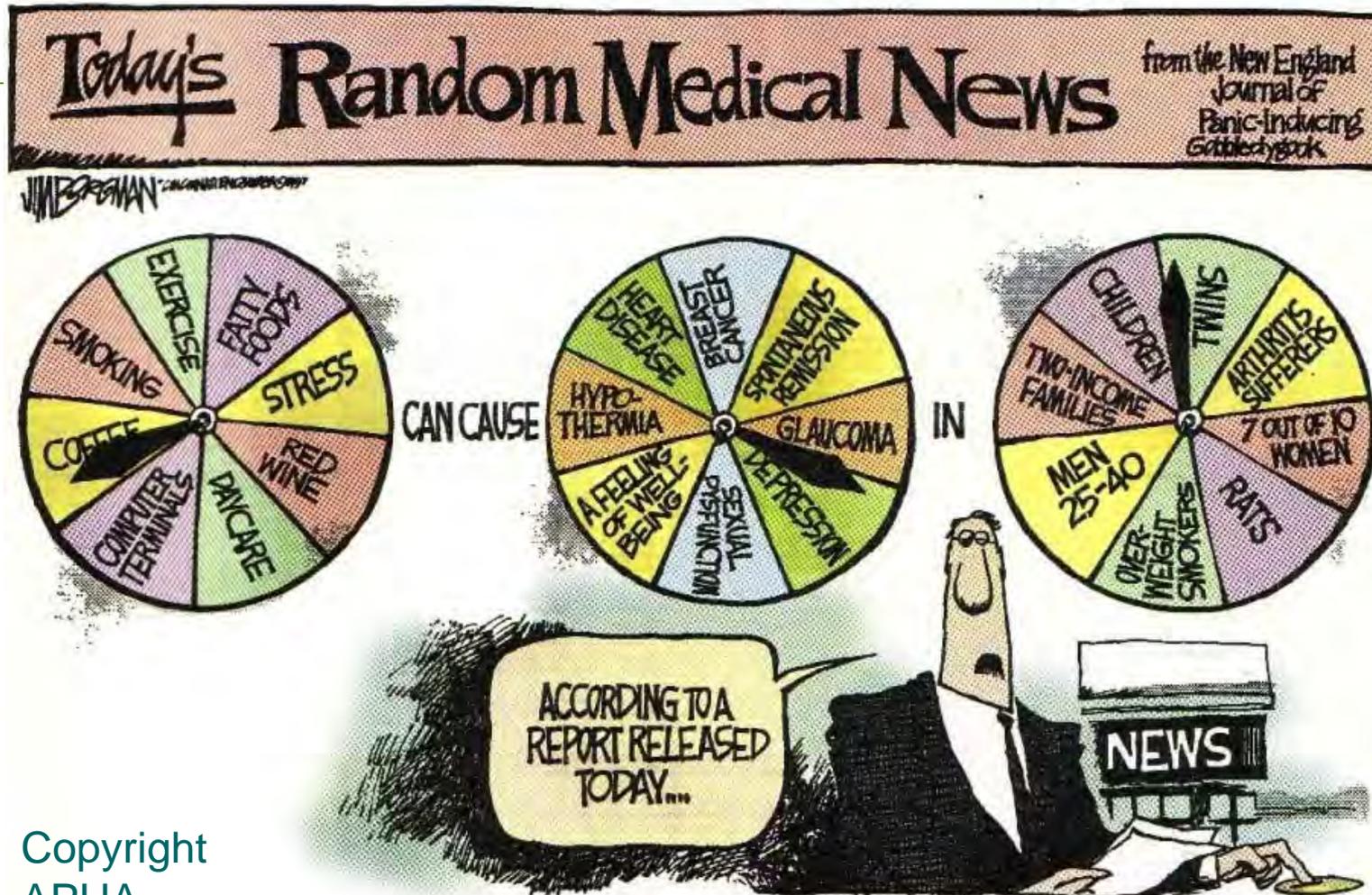
IEQ- Priorities

Why is it important to prioritize pollutants?

- Media bombardment creates the ‘risk burnout’ phenomenon among our audiences
- Educators should distinguish *‘interesting’* from *‘important’*



Media and Risk Perception...



Copyright
APHA



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What determines the health effects of pollutant exposure?

- **Toxicity of the pollutant**
- Dosage (exposure)
- Individual sensitivity (Genetics, age)
- Cofactors



Which pollutant is most important?

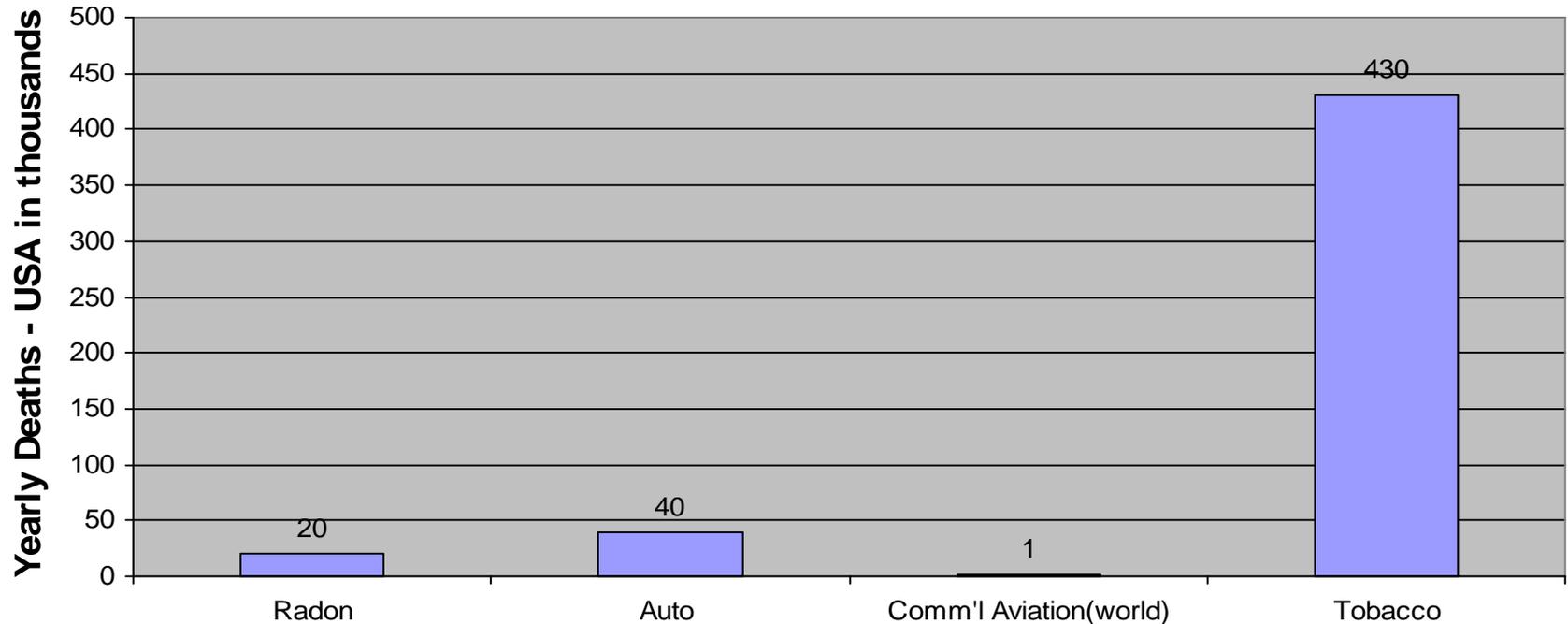
This depends on who is asking the question:

- Public health officials will be most concerned with mortality and morbidity
- Occupants may be equally concerned with (olfactory) discomfort



Some risks in perspective

Mortality Comparison Chart



Sources: US EPA; Nat'l Safety Council



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Which pollutant is most important?

A scheme for setting priorities



Which pollutant is most important?

Kills Many

Radon

**15,000-
22,000/yr (US)**

Tobacco

**430,000/yr
(US)**



Which pollutant is most important?

Kills Many	Serious Impairments
Radon	Dust Mites 1/3rd of 14MM As visits/yr
(Tobacco)	Lead Pois. 310,000 Kids/yr



Which pollutant is most important?

Kill Many	Serious Impairments	Irritation
Radon	Dust Mites	Formaldehyde
		VOC's
(Tobacco)	Lead Pois.	<u>Mold [Damp indoor spaces]</u> Allergens, Toxic particles, [bacteria, viruses, etc.] VOC's



Which pollutant is most important?

Kill Many	Serious Impairments	Irritation
Radon	Asthma triggers	Formaldehyde
		VOC's
(Tobacco)	Lead Pois.	Mold, Damp

Kill Quick
Carbon Monoxide 500 deaths/yr; Low dose impairments



A scheme for setting priorities: MAJOR INDOOR POLLUTANTS

KILL MANY	KILL QUICK	SERIOUS IMPAIRMENTS	IRRITATION/ DISCOMFORT
<u>Radon</u> 15,000 to 22,000 deaths per year	<u>Carbon Monoxide</u> 500 deaths per year, US homes	<u>Lead</u> 310,000 US kids- elevated BLL's	<u>Formaldehyde</u> Strong irritant
<u>Tobacco</u> 430,000 deaths per year		<u>Dust Mites</u> Asthma: 14 Million Doctor visits/year, 1/3 Blamed on mites	<u>Mold [Damp indoor spaces]</u> <u>Allergens, toxic particles,</u> <u>VOC's [bacteria, viruses,</u> etc.]
		<u>Mold [Damp indoor spaces]</u> Allergens, Toxic particles, VOC's [bacteria, viruses, etc.]	<u>VOC's</u> Irritants, poss. or known carcinogens

Sources: USEPA; CDC

J. Ponessa. Rutgers Cooperative Extension



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Recent Issues

Phthalates

- Constituent of some plastics (Flexibility)
- Found in many products, including toys
- Linked to organ damage, birth defects
- Use restricted in California

Bisphenol A (BPA)

- Constituent of some plastics (hardener)
- Found in baby bottles, sippy cups, other products
- Endocrine disruptor (also: PBDE's)
- Use restricted in Europe, some US states



Indoor Environmental Quality: Which pollutants are most important?

THANKS FOR YOUR ATTENTION!

Joseph Ponessa, Ph.D
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Educating Public and Practitioners

Minnesota Department of Health

Division of Environmental Health

Indoor Air Unit

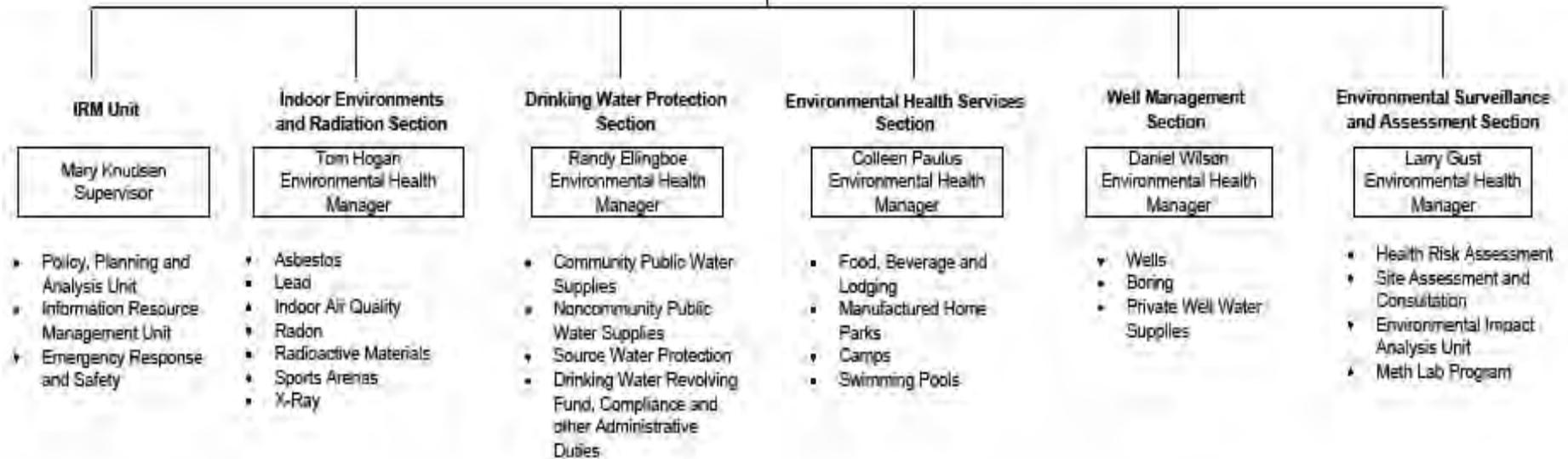
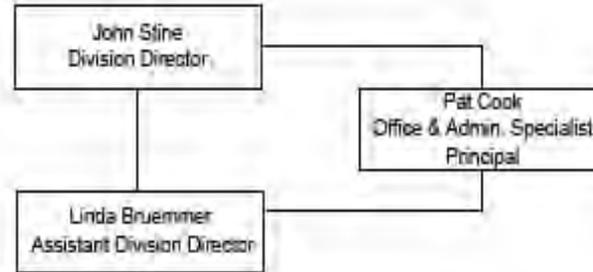
Dale F. Dorschner

MDH – EH Healthy Homes Initiative

- Work to better collaborate efforts of all environmental health programs to educate on IAQ/IEQ issues
 - ◆ Share/leverage existing resources
 - ◆ Informational Opportunities (conferences, trainings, personnel etc.)
 - ◆ Combine messages to address multiple IAQ/IEQ issues simultaneously
 - ◆ i.e. Tight Houses & IAQ Concerns



Environmental Health Division
Minnesota Department of Health



MN EH Resources Currently used for HH Activities

- Minnesota's Radon Program housed at the MN Dept. of Health – Indoor Air Unit
- General Fund Budget Approx. \$500K
 - ◆ MCIAA
 - ◆ Enclosed Rules
 - ◆ SIRG Match
 - ◆ School IAQ and other IEQ Issues
- Federally funded program
 - ◆ U.S. EPA State Indoor Radon Grant (SIRG)
 - ◆ Approx. \$300-400K 1-1 matching dollars

Division of Environmental Health - Indoor Air Unit's Role

■ Regulatory –

- ◆ Enforcement of Minnesota Clean Indoor Air Act (MCIAA)
- ◆ Enforcement of Enclosed Sports Arena Rules

■ Non-Regulatory –

◆ Federal Voluntary Programs –

- ◆ EPA SIRG
- ◆ EPA TfS

◆ Outreach/Education Activities - Social marketing

- ◆ Educate-Presentations
- ◆ Develop Guidance Documents
- ◆ Establish Fact Sheets

Education/Outreach Activities

- Public Vs. Practitioners which one is more important?
 - ◆ Both can influence public opinion, policy, behavior modification
 - ◆ Both are needed to achieve effective action to improve public health

Educational Opportunities for Target Audiences

■ Public

- ◆ Homeowners
- ◆ Tenants
- ◆ Landlords

■ Practitioners

- ◆ Builders
- ◆ Contractors
- ◆ Attorneys
- ◆ Realtors
- ◆ Building Officials
- ◆ Housing Officials
- ◆ Public Health Officials



Public Education Opportunities



■ General Public Outreach Strategies

- ◆ Informational Booths
- ◆ Mass Media
- ◆ Presentations
- ◆ Informational Hotlines/Websites



2008 Mpls Home and Garden Show – General Public



- 500 Test your Home for Radon Magnets
- 500 RRNC Rulers
- 2000 Factsheets Distributed
 - ◆ VOC's
 - ◆ Asbestos
 - ◆ Lead
 - ◆ CO
 - ◆ Radon
 - ◆ Mold
 - ◆ Env. Asthma Triggers

Mass Media – Public Education



Mass Media Opportunity

Major Television News Story

- WCCO - Minneapolis/St. Paul CBS affiliate
 - ◆ #1 or #2 in market share
 - ◆ WCCO radon story in November Sweeps Week
- Public Interest story w/ multiple components and stories
 - ◆ General Info w/ Human Component
 - ◆ Through ALA and CanSAR, WCCO contacted Elizabeth Hoffmann
 - ◆ How to test and mitigate
 - ◆ Investigative portion
 - ◆ Undercover work at the “Parade of Homes”

Impact of Mass Media Result...

- Air Chek distributed:
 - ◆ 52,752 ST kits to MN
 - ◆ 38,212 directly to home owners
 - 24,950 ST kits analyzed
 - 38% above 4.0 pCi/L 150 Bq/M³
 - ◆ 1,500+ LT kits to MN
- 10,000+ calls and emails to MDH
- 80,000+ Web Hits
 - ◆ More than 5,000 inquiries answered in November

Result Cont....

- Increased “State Listed” contractors
 - ◆ Up from 14 to 34 (May '04 to Sept '06)
 - ◆ MURC trainings better attended
- 60% Increase in testing at the local level
- Increase in amount of mitigation requests
- Some contractors booked for a year

Outreach - Non English Speaking Using Mass Media

Ayúdenos a repartir información sobre los peligros del plomo — En seis idiomas diferentes



El Departamento de Salud de Minnesota y sus asociados están colaborando para producir un programa de televisión para las personas que no comprenden el inglés muy bien. Este programa sobre los peligros del plomo será transmitido en seis idiomas diferentes con subtítulos en inglés. Mire el programa ECHO en el "canal 17 de Minnesota" (Twin Cities Public Television) durante la Semana para la Prevención de Envenenamiento del plomo en niños con el Plomo (Childhood Lead Poisoning Prevention Week).

¡POR FAVOR AYUDENOS A REPARTIR ESTA INFORMACION!



El programa ECHO - Emergency and Community Health Outreach (programa de alcance para la salud y emergencias comunitarias) - existe para asegurar a las personas que tienen conocimientos limitados del inglés de recibir información sobre la salud y la seguridad que podrían salvarles la vida, en un idioma que comprendan. Aprenda más visitando la página de Web www.echominnesota.org.

Todos los programas de ECHO son televisados por el canal 17 de Minnesota - Twin Cities Public Television.



Presentado en TV en español, hmong y somalí:

Domingo, Octubre 22
Español - 8:00 p.m.
Hmong - 8:20 p.m.
Somalí - 8:40 p.m.

Repetición - Sábado, Noviembre 18
Español - 11 p.m.
Hmong - 11:20 p.m.
Somalí - 11:40 p.m.

Presentado en TV en Vietnamita, Laosiano, y Khmer (Camboyano).

Premier - Domingo, Octubre 29
Vietnamita - 8:00 p.m.
Laosiano - 8:20 p.m.
Khmer (Camboyano) - 8:40 p.m.

Repetición - Sábado, Noviembre 25
Vietnamita - 11 p.m.
Laosiano - 11:20 p.m.
Khmer (Camboyano) - 11:40 p.m.



Co-patrocinadores:



Opportunities to Cross Educate on Topic Areas



Programmatic Opportunities for Cross Educating

- CEU trainings for licensed professionals
 - ◆ Licensed Specialist Contractors
 - ◆ Asbestos
 - ◆ Lead
 - ◆ Radon
 - ◆ Realtors
 - ◆ General Building Contractor
 - ◆ Attorneys
 - ◆ Building Maintenance
 - ◆ **Public Health Nurses*****



Private Public Partnerships

“ECO House” Exhibit



- MN State Fair-
ECO House Exhibit
- 350K (3000/hr)
People Walked
through the house
- 600 RRNC
Informational
sheets taken.

Builder (Practitioner) Partnerships - Radon Model

- MDH - provides resources and support (Technical) to help assure the success of builders/contractors in reducing radon in homes
- MDH - promotes builders that utilize RRNC building practices - Free Marketing
- Builders Providing Healthier Homes
- Builders help educate consumers on the health affects of radon



College City Homes
Building for Generations

HOME



[Home](#) | [About Us](#) | [Neighborhoods](#) | [Home Plans](#) | [Customers](#) | [Remodeling](#) | [Contact Us](#)

Welcome

We have pr
over 38 yea
the latest te
building mi
technique.

[Trade Partners](#)

[Energy Star](#)

[Radon Information](#)

[Testimonials](#)

[Newsletter](#)

[Home](#)

The results have been superior, and the company has been the recipient of numerous ReggieSM and TrilliumSM awards for excellence from the Builders Association of the Twin Cities.

The Pavek family, our professional staff, and our skilled crafts persons invite you to come in and see what we have to offer.

Thank you for visiting us.
We look forward to serving you.



Let Us Show You
what makes us
an Award-Winning
Home Builder



College City Homes Advantage

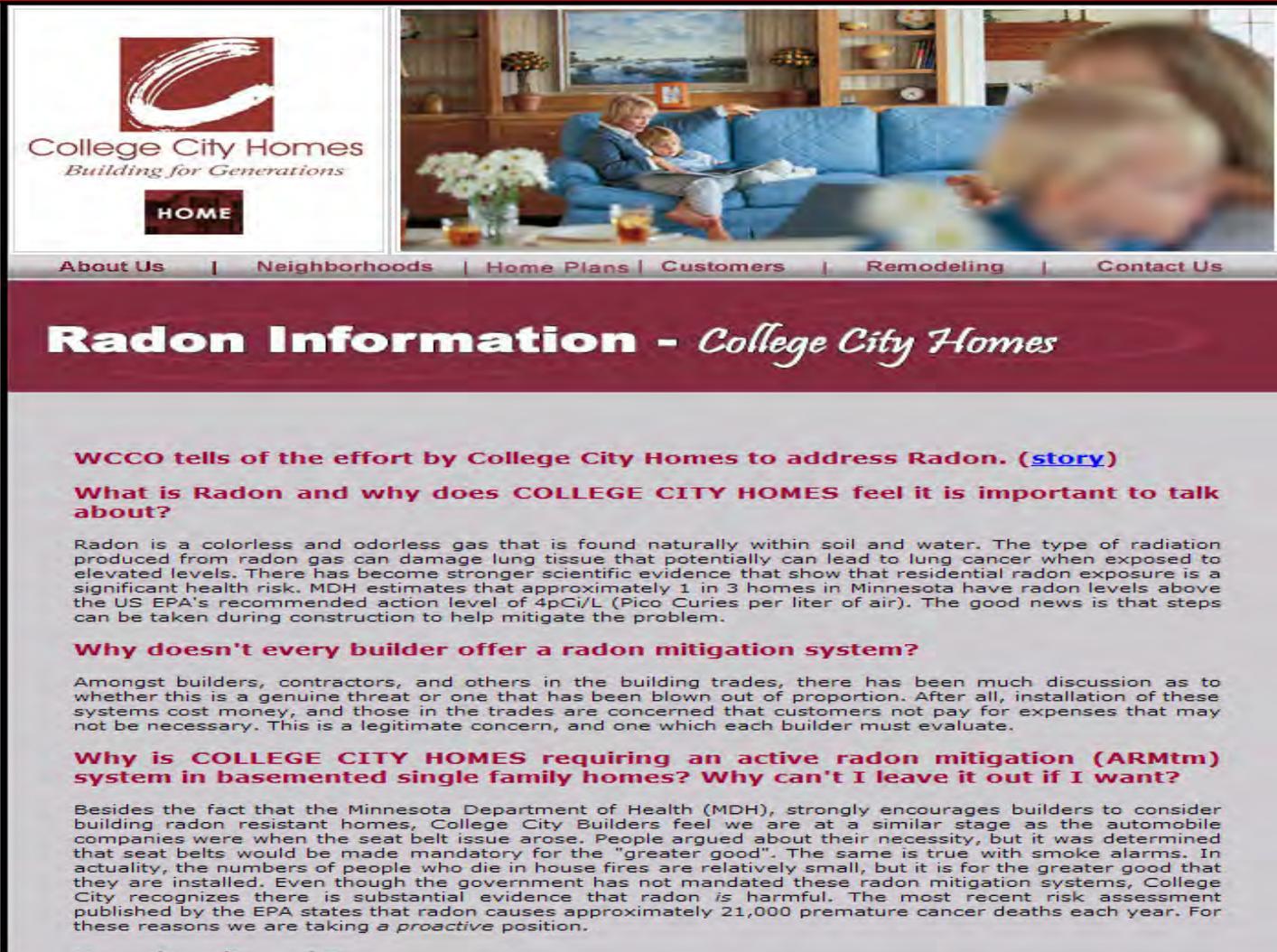
Radon Resistant New Construction
for a Safe & Sound Home



College City Homes
7920 Lakeville Boulevard
Lakeville, MN 55044
Phone: 952.469.6900 - Fax: 952.469.6910
Email: information@collegicityhomes.com



Practitioner Partnership Educating Home Owners



The screenshot shows the College City Homes website. At the top left is the logo with a stylized 'C' and the text 'College City Homes Building for Generations' and a 'HOME' button. To the right is a photo of a woman and child on a blue sofa. Below the photo is a navigation menu: 'About Us | Neighborhoods | Home Plans | Customers | Remodeling | Contact Us'. The main content area has a dark red header with the text 'Radon Information - College City Homes'. Below this is a link: 'WCCO tells of the effort by College City Homes to address Radon. (story)'. The first section is titled 'What is Radon and why does COLLEGE CITY HOMES feel it is important to talk about?' and contains a paragraph about radon's health risks. The second section is titled 'Why doesn't every builder offer a radon mitigation system?' and discusses the cost and concerns of builders. The third section is titled 'Why is COLLEGE CITY HOMES requiring an active radon mitigation (ARMtm) system in basemented single family homes? Why can't I leave it out if I want?' and explains the company's proactive stance based on health department recommendations and EPA data.

College City Homes
Building for Generations

HOME

About Us | Neighborhoods | Home Plans | Customers | Remodeling | Contact Us

Radon Information - College City Homes

WCCO tells of the effort by College City Homes to address Radon. ([story](#))

What is Radon and why does COLLEGE CITY HOMES feel it is important to talk about?

Radon is a colorless and odorless gas that is found naturally within soil and water. The type of radiation produced from radon gas can damage lung tissue that potentially can lead to lung cancer when exposed to elevated levels. There has become stronger scientific evidence that show that residential radon exposure is a significant health risk. MDH estimates that approximately 1 in 3 homes in Minnesota have radon levels above the US EPA's recommended action level of 4pCi/L (Pico Curies per liter of air). The good news is that steps can be taken during construction to help mitigate the problem.

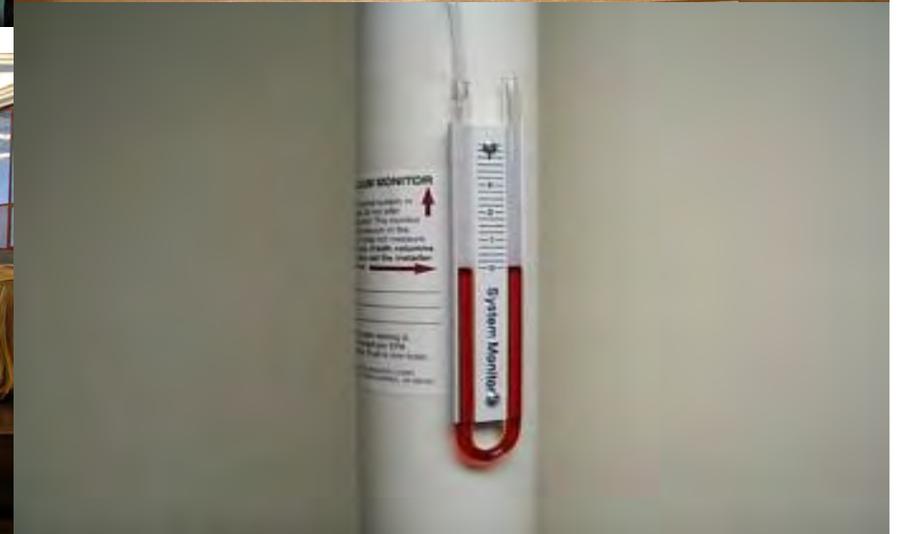
Why doesn't every builder offer a radon mitigation system?

Amongst builders, contractors, and others in the building trades, there has been much discussion as to whether this is a genuine threat or one that has been blown out of proportion. After all, installation of these systems cost money, and those in the trades are concerned that customers not pay for expenses that may not be necessary. This is a legitimate concern, and one which each builder must evaluate.

Why is COLLEGE CITY HOMES requiring an active radon mitigation (ARMtm) system in basemented single family homes? Why can't I leave it out if I want?

Besides the fact that the Minnesota Department of Health (MDH), strongly encourages builders to consider building radon resistant homes, College City Builders feel we are at a similar stage as the automobile companies were when the seat belt issue arose. People argued about their necessity, but it was determined that seat belts would be made mandatory for the "greater good". The same is true with smoke alarms. In actuality, the numbers of people who die in house fires are relatively small, but it is for the greater good that they are installed. Even though the government has not mandated these radon mitigation systems, College City recognizes there is substantial evidence that radon *is* harmful. The most recent risk assessment published by the EPA states that radon causes approximately 21,000 premature cancer deaths each year. For these reasons we are taking a *proactive* position.

Building Technical Practitioner Partnerships



How To Mitigate - Alternatives

- Builders and Contractor CEU Trainings
Tech Colleges







Results: Builder Partnerships

- College City Homes – MDH Partner
 - ◆ Building all of their new homes RRNC with ASD
 - ◆ 150 - 200 new homes each year
 - ◆ “For the greater good”
 - ◆ LT kits left in home during closing walkthrough
 - ◆ Retrieved at 1 year walk through

Another Opportunity! Kevin O'Conner Comes Knocking....

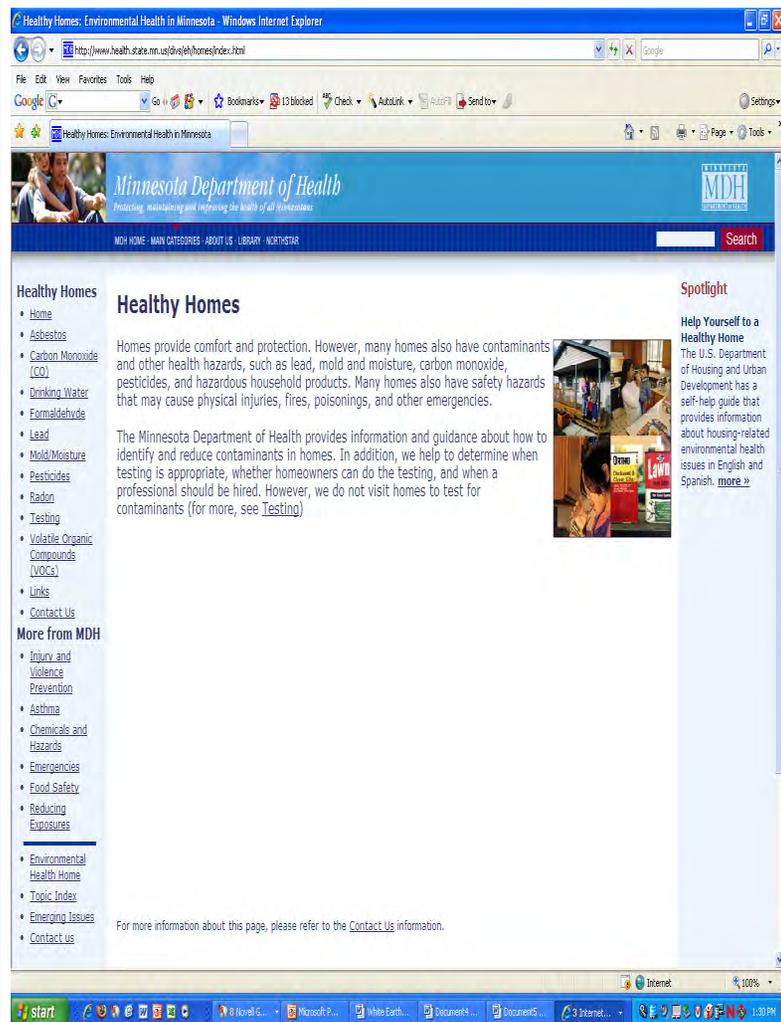


Ask This Old House

- Jason White, executive producer, contacted MDH in late August
- Wanted input from MDH regarding radon and fixing a potential problem
- “Do you know a contractor that can help?”
 - ◆ Yes we do!
- MURC Instructor – Jack Bartholomew
- Filmed Sept. 21



MDH Healthy Homes Page Informational Fact Sheets



Environmental Health Issues

- **Asbestos**
- **Carbon Monoxide (CO)**
- **Drinking Water**
- **Formaldehyde**
- **Lead**
- **Mold/Moisture**
- **Pesticides**
- **Radon**
- **Testing**
- **Volatile Organic Compounds (VOCs)**

Additional Links

- **Injury and Violence Prevention**
- **Asthma**
- **Chemicals and Hazards**
- **Emergencies**
- **Food Safety**
- **Reducing Exposures**

Tracking Informational Interest Website Hits

Top Pages					
Pages	Visits ▼	%	Views ▼	Avg Time Viewed	
1. http://www.health.state.mn.us/	490,773	2.08%	1,009,539	00:01:25	
2. http://www.health.state.mn.us/robots.txt	131,538	0.56%	206,065	00:02:10	
3. http://www.health.state.mn.us/wrtk/handbookspa.html	120,861	0.51%	140,463	00:03:55	
4. http://www.health.state.mn.us/divs/chs/osr/birth.html	115,927	0.49%	163,024	00:02:51	
5. http://www.health.state.mn.us/divs/chs/osr/	114,526	0.48%	149,737	00:01:09	
6. http://www.health.state.mn.us/divs/idepc/diseases/staph/basics.html	113,732	0.48%	138,432	00:02:48	
7. http://www.health.state.mn.us/divs/idepc/dtopics/tickborne/ticks.html	97,454	0.41%	120,723	00:02:56	
8. http://www.health.state.mn.us/divs/idepc/diseases/mrsa/basics.html	94,032	0.40%	116,261	00:01:18	
9. http://www.health.state.mn.us/wrtk/handbook.html	74,068	0.31%	88,445	00:03:05	
10. http://www.health.state.mn.us/divs/eh/meth/methdrug.html	61,668	0.26%	76,105	00:03:10	
11. http://www.health.state.mn.us/divs/idepc/diseases/flu/	60,537	0.26%	85,754	00:01:28	
12. http://www.health.state.mn.us/facilities.html	51,258	0.22%	67,371	00:01:07	
13. http://www.health.state.mn.us/divs/eh/indoorsair/mold/	50,705	0.21%	62,465	00:02:53	
14. http://www.health.state.mn.us/orginfo.html	47,088	0.20%	68,174	00:00:36	
15. http://www.health.state.mn.us/cgi-bin/idepc/flu/schedule/fluclinic_process.cgi	45,474	0.19%	86,945	00:03:07	
16. http://www.health.state.mn.us/divs/ph/newborn/	42,039	0.18%	53,322	00:01:59	
17. http://www.health.state.mn.us/diseases.html	41,312	0.17%	56,042	00:00:47	
18. http://www.health.state.mn.us/divs/chs/osr/registrars.html	40,115	0.17%	48,489	00:04:08	
19. http://www.health.state.mn.us/divs/chs/rhpcb/shared/survey.cfm	38,272	0.16%	46,245	00:01:17	
20. http://www.health.state.mn.us/healthcare.html	38,135	0.16%	46,766	00:01:01	
Subtotal	1,869,514	7.91%	2,830,367	00:01:44	
Other	21,753,168	92.09%	29,135,596	00:01:50	
Total	23,622,682	100.00%	31,965,963	00:01:49	

items: 1 - 20 of 200

Future Opportunities

- More Prominent Healthy Homes Page
- Lead Program
 - ◆ Dept of Employment and Economic Development (DEED) Trainings
- Building/Housing Code Officials
 - ◆ Train the Trainer on IEQ Issues
- Public Health Nurses
 - ◆ Training Visiting Home Nurses on HH - Environmental Issues

Questions

- Call: Dale Dorschner 651-201-4603
- Email: dale.dorschner@state.mn.us
- Website:
<http://www.health.state.mn.us/divs/eh/air/>

News Stories:

http://search.wcco.com/?_LOGIC=1111§ion=News&SearchString=radon

MDH Indoor Air Unit Outreach

Activities

- 1) **Event:** MN Fire Prevention Day
Partners: Minnesota Fire Marshal (MN Public Safety) and MN Poison Control Center
Place: Minnesota State Fair
Topic: Carbon monoxide
Venue: Spin the wheel—Question and answer to get a lollipop; hand out magnets; informational literature; table-top display with CO alarm;
Number of people reached: Thousands of adults, children and the general public
Hundreds of people spun the wheel and tried to answer the question.
Outcome: Personal protection and public education

- 2) **Event:** English as a Second Language Classes
Partners: MDH Minority Health and other non-profits that help immigrant populations assimilate into MN culture
Place: Various day and night school classes at various Twin Cities locations
Topic: Carbon monoxide
Venue: CO presentation; Question/answer session and “show and tell” with CO alarm;
Number of people reached: Hundreds of immigrant students.
Outcome: Personal protection and public education

- 3) **Event:** MN Department of Corrections (Shakopee) inservice training
Partners: Minnesota Corrections
Place: Shakopee Women’s Correctional Facility
Topic: Indoor Air Quality (mold, radon, CO, allergens, equipment, etc.)
Venue: Lecture with question and answer session afterwards; handouts—NDSU Healthy Homes booklets, rulers, magnets;
Number of people reached: A couple hundred over several presentations on two different days.
Outcome: Public/worker education and for personal use as well (basic understanding of IAQ problems and where to get resources to address IAQ issues)

- 4) **Event:** Isanti County Human Services—In service (part of monthly meeting)
Partners: Isanti County Human Services
Place: Isanti County Minnesota
Topic: Carbon monoxide
Venue: : CO presentation; Question/answer session and “show and tell” with CO alarm;
Number of people reached: About 70 human services workers who often work in the field visiting homes of people in need of County services.
Outcome: Public/worker education and for personal use as well (basic understanding of CO problems)

- 5) **Event:** U of MN – Boynton Health Center inservice training
Partners: MN Poison Control Center
Place: : Boynton Health Care Center, U of MN
Topic: Carbon monoxide
Venue: : CO presentation/lecture style; Question/answer session;
Number of people reached: About 50 physicians, nurses, and health educators.
Outcome: Worker education and for personal use as well (basic understanding of CO problems and why they have not been “solved” to date as well as studies that have been done and what role the MDH has in CO-related issues--- MPCC addressed medical management of CO)

- 6) **Event:** Life Long Learner Series
Partners: College of St. Catherine Alumni Association
Place: : Boynton Health Care Center, U of MN
Topic: Indoor Air Quality (mold, biologicals, allergens, radon, equipment, etc.)
Venue: : Lecture style presentation; Question/answer—handouts too
Number of people reached: About 15
Outcome: Personal protection and public education

- 7) **Event:** Building Operator Certification classes (rules and regulations/ indoor air quality)
Partners: Department of Energy has had a hand in getting this program up and running although it is part of the Northwest Energy Efficiency Council
Place: Outstate Minnesota (Duluth; Park Rapids; Owatonna)
Topic: Indoor Air as well as rules and regulations
Venue: Part of a larger energy efficiency effort aimed at building operators—usually commercial buildings; Teaching is done in an 8-hour classroom session but key indoor air quality issues are addressed; resources from the MDH are provided including info on lead, asbestos, radon, mold, etc. etc.
Number of people reached: About 180 within the past 2 years.
Outcome: Improvement of indoor air quality and safety and health issues related to the building he or she is in charge of.
- 8) **Event:** Pesticide Applicator training
Partners: MN Department of Agriculture and U of MN Extension Service
Place: : Andover Minnesota
Topic: Health effects from exposure to mold
Venue: : Presentation; Question/answer session; Hand out CDC fact sheet
Number of people reached: TBD
Outcome: Personal protection and public education—in hopes to bring these issues out to the general public who may hire these individuals to mitigate their mold problems.
- 9) **Event:** After school science program
Partners: Minneapolis Schools
Place: : Northrop Magnet School, Minneapolis, MN
Topic: Carbon monoxide and radon
Venue: : CO presentation with question/answer as we went along; handouts/rulers
Number of people reached: About 30 older elementary school students
Outcome: Personal protection and public education—hopefully these children will bring the safety messages home
- 10) **Event:** Duluth Energy and Design Conference on February 26 and 27th, 2008
Partners: Local public health
Place: DECC
Topic: Asbestos, Lead and IAQ issues in the home
Venue: Education booth/handout flyers for the HUD LHR grant
Number of people reached: 76
Outcome: expect about 10% to respond to the flyers, which is about 7 people.
- 11) **Event:** Rochester Area Builders Home Show Feb 8-10, 2008
Partners: Local public health
Place: Convention Center
Topic: Asbestos, Lead and IAQ issues in the home
Venue: Education booth/handout flyers for the HUD LHR grant
Number of people reached: 88
Outcome: expect about 10% to respond to the flyers, which is about 8 people.
- 12) **Event:** MEHA Annual Conference – May 2, 2008
Partners: Local public health and Public Health Officials
Place: Brainerd, MN
Topic: Lead 101 and info on the HUD grant
Venue: Education booth/handout flyers for the HUD LHR grant
Number of people reached: 30
Outcome: awareness of grants for homeowners with lead concerns

MDH Childhood Lead Poisoning Prevention Program

- 13) **Event:** Detroit Lakes SCDP informational event - April 8th, 2008. This event provides information to the general public, cities and county governments about the Small Cities Rehab Program.
Partners: SCDP Administrators and rehab program reps
Place: N/A
Topic: Overview of HUD LHR grant
Venue: Presentation/handout flyers for the HUD LHR grant
Number of people reached: 29
Outcome: Awareness of HUD grants for homeowners with lead concerns
- 14) **Event:** Mankato SCDP informational event - April 15th, 2008. This event provides information to the general public, cities and county governments about the Small Cities Rehab Program.
Partners: SCDP Administrators and rehab program reps
Place: N/A
Topic: Overview of HUD LHR grant
Venue: Presentation/handout flyers for the HUD LHR grant
Number of people reached: 43
Outcome: Awareness of HUD grants for homeowners with lead concerns
- 15) **Event:** Saint Cloud MN, Central Minnesota Housing Partnership Skills Training and Program information, May 7th, 2008. This event provides information to the general public, cities and county governments about the Small Cities Rehab Program.
Partners: SCDP Administrators and rehab program reps
Place: N/A
Topic: Overview of HUD LHR grant
Venue: Presentation/handout flyers for the HUD LHR grant
Number of people reached: 11
Outcome: Awareness of HUD grants for homeowners with lead concerns.
- 16) **Event:** Mankato SCDP Application Workshop -Wednesday, July 16, 2008
Partners: SCDP Administrators
Place: N/A
Topic: Overview of application process for funding
Venue: Presentation
Number of people reached: 22
Outcome: Understanding of application process for MDH HUD Grant.
- 17) **Event:** Little Falls SCDP Application Workshop – July 23, 2008.
Partners: SCDP Administrators
Place: N/A
Topic: Overview of application process for funding
Venue: Presentation
Number of people reached: 20
Outcome: Understanding of application process for MDH HUD Grant.
- 18) **Event:** Detroit Lakes SCDP Application Workshop – July 24, 2008.
Partners: SCDP Administrators
Place: N/A
Topic: Overview of application process for funding
Venue: Presentation
Number of people reached: 13
Outcome: Understanding of application process for MDH HUD Grant.
- 19) **Event:** Healthy Mothers, Healthy Babies
Partners: St. Paul Archdiocese, MDH OMMH
Place: SOP
Topic: Training on EH issues to leaders in Hispanic community – included lead

- Venue:** held annually since 2005
Number of people reached: 100 attend each year
Outcome: entire workshop held in Spanish, with all Spanish educational materials provided
- 20) **Event:** Minnesota Legislative Lead Issues forums
Partners: local governments, health plans, advocacy organizations, other state agencies
Place: SOP
Topic: Review/assess lead legislative issues, including issues related to housing-based lead
Venue: held in 2004, 2006, and 2007
Number of people : statewide jurisdiction
- 21) **Event:** Minnesota State Fair outreach
Partners: CDC
Place: Minnesota State Fair
Topic: Lead poisoning prevention awareness
Venue: Advertisement locations in bathrooms
Number of people : thousands (1.6 million attend Fair)
- 22) **Event:** Child and Teen Checkup Grand Rounds
Partners: State C&TC program, local C&TC programs statewide
Place: 7 talks across the state
Topic: Updates on lead guidelines and requirements for lead poisoning prevention
Venue:
Number of people : 20-30 public health nurses each meeting, who then each contact hundreds of individual clients in their homes
- 23) **Event:** Emergency Community Health Outreach (ECHO) program
Partners: HealthPartners, Medica, UCare, Minneapolis, St. Paul/Ramsey Co
Place: lead educational segment broadcast on MN public television; 7 segments produced in 7 languages
Topic: basic topics related to lead in housing
Venue: shows can be see on www.echominnesota.org or on DVD (2000 copies distributed to date)
Number of people : broadcast over 2 weekends on Channel 17; Mpls/St. Paul is US's 14th largest TV market
- 24) **Event:** National Lead Poisoning Prevention Week
Partners: Media outlets; Governor's office (for proclamation)
Place: Proclamation issued in 2005, 2007; outreach materials distributed annually
Topic: Updates on lead guidelines and requirements for lead poisoning prevention
Venue: Focus is on addressing housing-based lead hazards
Number of people :
- 25) **Event:** MDH Lead Program Website
Partners:
Place: www.health.state.mn.us/divs/eh/lead
Topic: Comprehensive information on lead poisoning and hazard reduction
Venue: Fact sheets, links, and background information on reducing lead exposure from housing sources
Number of people : over 200,000 hits on website in 2007; average visit just over 8 minutes