USDA/Cooperative State Research, Education and Extension Service Outreach Initiatives

Laura B. Booth
Alabama Cooperative Extension System

Sandy Wiggins, Ed.D
North Carolina Cooperative Extension Service
USDA/CSREES?

- Cooperative State Research, Education and Extension Service (CSREES)
- Agency within the U.S. Department of Agriculture (USDA)
- One of four USDA agencies in the Research, Education and Economics (REE) area, the others are:
  - Agricultural Research Service (ARS)
  - Economics Research Service (ERS)
  - National Agricultural Statistics Service (NASS)
CSREES advances knowledge for agriculture, the environment, human health and well-being, and communities by supporting research, education, and extension programs in the Land-Grant University System and other partner organizations.
CSREES & Extension

- Extension educators
  - University professionals: University and County
    - 105 land-grant universities/colleges
      - 1862 Colleges - 56
      - 1890 Colleges - 18
      - 1994 Colleges – 31
  - County Extension Service
    - 9,600 Extension educators in 3,150 counties
Cooperative Extension System Offices

This section of our Web site will help you find your nearest Cooperative Extension office. The Cooperative Extension System is a nationwide, non-credit educational network. Each U.S. state and territory has a state office at its land-grant university and a network of local or regional offices. These offices are staffed by one or more experts who provide useful, practical, and research-based information to agricultural producers, small business owners, youth, consumers, and others in rural areas and communities of all sizes.

CSREES is the federal partner in the Cooperative Extension System. It provides federal funding to the system and, through program leadership, helps the system identify and address current issues and problems.

- Text version of map below
What does CSREES DO?

- Program Areas identify, develop, and manage programs to support university-based and other institutional research, education, and extension outreach.
- Bring education to the people, based on knowledge generated through research at our land-grant universities.
- Housing & Indoor Environment Program Area—Dr. Joseph Wysocki, National Program Leader, USDA/CSREES.
USDA/CSREES Housing and Indoor Environment Programs

Program areas related to healthy homes:

- Healthy Homes Partnership (USDA/HUD)
- Healthy Indoor Air for America’s Homes (USDA/EPA)
- ENERGY STAR (USDA/EPA/DOE)
Healthy Homes Partnership

- Interagency agreement: started in 1999, with first grants to states in 2000:

  Emily Williams,
  Healthy Homes Division, HUD
  Joseph L. Wysocki, Ph.D,
  National Program Leader, USDA/CSREES

First coordinated by University of Wisconsin Extension (2000-2005)

Coordinated at Alabama Cooperative Extension System (2005-present)
Healthy Homes Partnership

- Links resources of HUD Healthy Homes with: USDA/CSREES
  - Public outreach education program
  - Goal: To address housing-based health and safety risks, particularly in homes with children and low-income audiences
HUD & USDA/CSREES

- Partnership since 1999
- Product of HUD Healthy Homes Initiative
- Part of Initiative: Provide education and outreach programs
- Link HUD with extensive network of USDA/CSREES
Healthy Homes Partnership Structure

- HUD Healthy Homes
- USDA/CSREES
  - State Healthy Homes Partners
  - ACES
    - Extension programs & outreach
    - Healthy Homes Materials
    - Reporting & Evaluation

2008 National Healthy Homes Conference
“Help Yourself to a Healthy Home: Protect Your Children’s Health”

- Developed from Home*A*Syst (Wisconsin):
  - English
  - Spanish
  - Hmong
  - Vietnamese
  - Bosnian

Next:
- Arabic
- Native American
Healthy Homes Subject Areas

- Indoor Air Quality
- Asthma & Allergies
- Mold & Moisture
- Carbon Monoxide
- Lead
- Drinking Water
- Hazardous Household Products
- Pesticides
- Home Safety
- Each chapter in book written by Extension Specialist
- Low-literacy level
“Help Yourself to a Healthy Home” Exhibit
Tuskegee Healthy House

- Guidance on building healthy, energy efficient, & affordable
- Healthy interior design strategies, worked with Auburn University Interior Design students
Cornell University Extension: DVD and Workbook: English and Spanish

Healthy Homes
Assessing Your Indoor Environment

English & Español
brought to you by
the U.S. Department of Housing & Urban Development,
Office of Healthy Homes & Lead Hazard Control
and the U.S. Department of Agriculture
Cooperative State Research, Education & Extension Service
through Cornell University Cooperative Extension

Healthy Homes
Assessing Your Indoor Environment

Helpful tips and recommendations for protecting yourself and your family from the effects of common indoor health hazards, such as:
- Mold & Muggles
- Carbon Monoxide
- Asbestos
- Common Allergens
- Household Chemicals
- Pesticides
- Asthma Triggers
- Dust & Dirt Mites
- Lead
- Radon
- Fire & Safety Hazards
Montana State
State Program Outputs

- Alabama Cooperative Extension coordinates project with National Program Leader
- Each state receives limited amount of funding each year
- States deliver programs, create materials depending on expertise of state program leader and state concerns
State Program Outputs

- 30 State partners
- 2,091,231 million consumers reached
- 1,934 professionals trained
- Over 200,000 *Help Yourself to a Healthy Home* books distributed by ACES since 2000
- Quarterly reports summarize methods used, consumers reached, partnerships created, materials created, evaluation impacts
- Resources and state partners on Web site: www.healthyhomespartnership.net
Healthy Indoor Air for America’s Homes

- Collaborative interagency project to increase knowledge of indoor air quality issues by the general public
- National Indoor Air Quality program training manual
- Web site: www.healthyindoorair.org
<table>
<thead>
<tr>
<th>IAQ Health Effects</th>
<th>Carbon Monoxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAQ Building Science</td>
<td>Environmental Hazards for the Home</td>
</tr>
<tr>
<td>Home IAQ</td>
<td>Remodeler</td>
</tr>
<tr>
<td>Bugs, Mold and Rot</td>
<td>Household Products</td>
</tr>
<tr>
<td>Lead</td>
<td>Secondhand Smoke</td>
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<tr>
<td>Formaldehyde</td>
<td>Asthma</td>
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<tr>
<td>Radon</td>
<td>IAQ Tools for Schools</td>
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<tr>
<td>Combustion Pollutants</td>
<td></td>
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</tbody>
</table>
Healthy Indoor Air for America’s Homes Program Impacts

- 40,980 families stopped exposing children to secondhand smoke
- 55,108 families tested their homes for radon and 9,044 families mitigated their homes for radon
- 84,304 families took action against carbon monoxide and hazardous combustion gases
- 31,351 families dealt with problems associated with household sources of lead
- 54,274 families reported reducing sources of moisture and biological hazards
- 24,966 families selected and used household products (cleaning, hobby, auto) more wisely
- 38,479 families selected and used home pesticides more wisely to avoid IAQ-related health problems
• Radon Education Program
  – EPA Clean Air Excellence Award for Education/Outreach (2008)
  – 22,000 radon test kits distributed and over 145,000 consumers reached
• National Center for Healthy Housing Training Partner
  – 4 Essentials for Healthy Homes Practitioners trainings
  – 2 Lead Safe Work Practices workshops
• Integrated Pest Management programs & resources
• Childhood Environmental Education reaching thousands
New York and Louisiana

Hiring a Mold Remediation Contractor

Harrisons Katrina and Rita and the resulting floods and extensive evacuations caused unregulated mold damage to homes in 2005—enough to create a cleanup crisis. Yet, anyone with a flood-damaged home faces a similar challenge because mold infestation must be remediated (or contained) before repairs can begin. This process can be hazardous because of potential health threats posed by mold, bacteria, allergens, and structural damage.

Although there is no such thing as “harmless” since mold is a fungus, that is, they can produce and contain toxins. People react differently to the presence of mold—some may have no adverse health reaction to airborne mold spores, while others may experience severe illness from low-level exposure.

Cornell University
College of Human Ecology
LSU AgCenter
Health & Nutrition

2008 National Healthy Homes Conference
Alabama: Radon Mitigation System Model
Alabama—Radon Activity Book
Texas A&M: Put it Outside (secondhand smoke and children)
Tennessee: Smart Growth, Lead, Home*A*Syst and Radon
Kentucky: Mercury at Home

• **Mercury may be found in . . .**
  – Wiring devices & switches
  – Thermostats & thermometers
  – Fluorescent lights
  – Batteries
  – Old paint

• **Safety tips at home . . .**
  – Use digital thermometers
  – Look for batteries that do not container mercury
  – Recycle old gauges

• **If mercury spills . . .**
  – Do not sweep or vacuum
  – Safely clean small spills (amount from a thermometer)
  – Call authorities for larger spills
North Carolina: Mold 101
North Carolina Mold Exhibit

Symptoms of Exposure
- Headache, fatigue, shortness of breath
- Sinus congestion, coughing, and sneezing
- Eye, nose, throat, and skin irritation
- Dizziness and nausea

Individuals at Greatest Risk
- Allergy and asthma sufferers
- People with respiratory disease
- People with compromised immune systems
- Contact lens wearers

Moisture Control is Key
- Find the source of excess moisture and control or eliminate it
- Keep indoor humidity levels below 60%, ideally 30%-50%
- Act quickly on water-damaged areas
- Fix plumbing and roof leaks promptly
- Maintain gutters
- Correct drainage around your home’s foundation
- Vent clothes dryers, stoves, and combustion appliances to the outdoors
- Use air conditioners and dehumidifiers if needed
- Use exhaust fans when showering or cooking

Mold Cleanup
- Limit exposure to mold and mold spores
- Wear protective equipment when cleaning up - goggles, gloves, protective clothing, and N-95 respirator
- Remove mold by scrubbing hard surfaces with detergent and water, dry surfaces completely, and disinfect if needed.
- Paint and caulk only when surfaces are completely clean and dry.
ATTENTION CONSTRUCTION WORKERS

DANGERS & HEALTH
- Dangers to your health
- Protect yourself
- At work
- At home
- Dangers to your children

1978
- News
  - Pope John Paul II chosen to lead Roman Catholic Church
  - US Senate accepts Panama Canal Treaty
- Politics
  - Pedro Joaquin Chamorro, editor of La Prensa, assassinated in Managua, Nicaragua
  - Julio Turbay Ayala wins Colombia election
- SPORTS
  - Argentina beats Netherlands 3-1 in World Cup
  - Hugo Sanchez becomes top scorer in Mexican league "Golden Boy"

LEAD PRE RULE
- WHAT IS IT?
  - National law affecting repairs and renovations in houses built BEFORE 1978
  - Gives people living in pre-1978 housing information
- RENOVATIONS
  - Lead PRE applies to repairs/renovations made to houses BEFORE 1978 which are done for pay.

Who does the Lead PRE rule apply to?
- Home Improvement contractors
- Property managers
- Apartment maintenance staff
- Housekeepers
- Householders
- Plumbers
- Painters
- Carpenters
- ANYONE whose work disturbs paint

WHAT IS NOT COVERED?
- Houses built in 1978 or later
- Houses for the elderly
- Houses with no bedrooms
- Houses declared lead free
- Emergency repairs
- Minor repairs smaller than 2 square feet of paint

Please see handouts for more information!!

2008 National Healthy Homes Conference
North Carolina Lead Pre-renovation Education Rule Exhibit: Spanish
North Carolina Lead Pre-renovation Education Rule DVD and Booklet for Workers

Don’t Paint Yourself into a Corner

Follow the Lead PRE Rule

Regla PRE... Signen La Problemas! Protagese Y Evite

Don’t Paint Yourself into a Corner

...Follow the Lead PRE Rule

BUILDING A FRAMEWORK FOR HEALTHY HOUSING

2008 National Healthy Homes Conference
House Smart is an educational program designed to teach chronically disorganized individuals and families how to develop household management skills to achieve and sustain a healthy home.

Positive impacts for individuals and families:

- Safe indoor and outdoor environments
- Create & sustain healthy homes – remove clutter and safety hazards, reduce pests, mold, dirt & dust; sustain a clean home, organize belongings
- Children learn and apply organizational skills
- Increased space and comfort
- Improved family atmosphere
- Individual and family successes
- Family autonomy from agency/court interventions
Nebraska: Lead Poisoning Prevention
Alabama Sun Safety Exhibit

Sun safe kids always remember to:
- SLAP on sunshades.
- SLOP on sunscreen.
- SLIP on a wrap.
- SLAM on a hat.

2008 National Healthy Homes Conference
Alabama: Asthma exhibit
North Carolina: Water Quality
(NC A&T SU – 1890 University)
Private Drinking Water Well Testing and Protection

- Distributed to libraries and town halls in state where residents rely on private wells for their drinking water.
- Shown on educational cable TV 3 – 4 times/year since January 2007.
- Available on internet: http://www.uri.edu/ce/wq/has/Private%20Wells/PRIVATE.HTM
Louisiana State U : LaHouse
ENERGY STAR
Reaching Educators & Consumers

- Georgia: Spanish language materials
- Wisconsin: Developed Home*A*Syst and started Healthy Homes Partnership
- Maryland: Healthy Homes Web site: http://extension.umd.edu/family/HealthyHomes/index.cfm
- Missouri: www.missourifamilies.org contains FAQs about housing
- Alaska: Energy efficiency in the home
Reaching Educators & Consumers (continued)

- New Mexico: Carbon Monoxide education
- Montana: NativeAir (childhood asthma) and Native American Healthy Homes book
- Nebraska: DVDs on mold (Professionals and Consumers) and lead poisoning prevention
- North Carolina: created CD with powerpoint presentations on each chapter of the Healthy Home book
- Connecticut: House Smart (cleaning clutter)
Reaching Educators & Consumers (continued)

- Rhode Island: Water Quality education
- Tennessee: Children’s Environmental Health
- Indiana: Mold and floods/disaster education resources
- Mississippi: interactive video conferencing to teach in all MS counties
- Louisiana: Has “La House” a demonstration healthy home, many resources on mold and flooding
Reaching Educators & Consumers (continued)

- Several state Extension educators: partnering with National Center for Healthy Housing:
  - Teaching the Essentials for Healthy Homes Practitioners course
  - Teaching Lead Safe Work Practices course
- and many more... check each state’s Web site to download resources and www.healthyhomespartnership.net
Contact

- Joseph L. Wysocki, PhD, National Program Leader, USDA, Housing and Indoor Environments
  (202) 401-4980
  jwysocki@csrees.usda.gov

- Laura Booth, Administrator II, Outreach Programs, Healthy Homes Partnership National Coordinator
  (334) 844-5638
  boothlb@auburn.edu
Building Healthy Houses & People: Healthy Homes Education for Professionals & Consumers Using Electronic Delivery

Shirley Niemeyer, Ph.D.
Extension Specialist, Housing/Environment
University of Nebraska - Lincoln
Healthy Homes Education for Professionals & Consumers Using Electronic Delivery

Available at fingertips for those who have Internet access.
On-line Healthy Homes education

- Collaborative efforts
Why IAQ

- Damp indoor spaces & related biologicals (i.e. mold) associated with:
  - Upper respiratory tract symptoms
  - Cough, wheeze
  - Asthma symptoms in sensitized persons

- Asthma
  - Second most prevalent chronic condition among children  
    [CDC, 2007]
  - Resulting in about 14 million days of missed school each year.  
    [CDC, 2007]
  - Estimated US asthma cost - 13.8 to 16 billion dollars  
Why IAQ

- **Asthma**: Exposure to dust mites, molds, cockroaches, pet dander, ozone, particle pollution & secondhand smoke can trigger asthma attacks in persons sensitized. (EPA Children’s Environmental Health: 2006 Report)

- **Lead**: Damages brain & nervous system. Can cause learning disabilities, lowered IQ, reduced attention span, slowed growth & development, hearing problems, & behavior problems.
Purpose

- Expand our extension programs to meet the needs of professionals & consumers
- How could extension collaborate across states to further develop the programs for use in a broader area of the U.S.
Why?

- Many states have regulations
  - Requiring continuing education credits
    - Childcare providers
    - Real estate professionals
    - Health workers
- Issues:
  - Professionals in rural areas obtaining their required credits.
  - Busy providers often cannot take off a full day to obtain their needed hours during business hours
  - Costs of transportation
Professionals & Consumers

On-line education

**Audience:**

- Householders with Internet access
- Professionals seeking continuing education credits to maintain licenses
  - Childcare provider professionals
  - Real estate professionals
  - Healthcare professionals
Curriculum: Moisture & Mold
From Mold & Moisture to Healthy Homes

DVD Format

- **Audience:**
  - Professionals DVD250
    Housing, Real Estate, Health, Other
  - Consumers DVD249

- **Video – 28 minutes**
  I. Introduction
  II. Inspect Home’s for Moisture & Mold
  III. Inspect Home’s Exterior
  IV. Inspect Home’s Interior
  V. Decisions in Cleaning up Mold & Moisture

2008 National Healthy Homes Conference
Curriculum: Moisture & Mold

From Mold & Moisture to Healthy Homes

PDF Teaching Guides/Resources

- Pre - & Post Evaluation
- Activities
- Teaching Tips
- EPA Publications on Mold
- Frequently Asked Questions
- Teaching Outline with supplies /visuals suggested

www.ianrpubs.unl.edu/epublic/pages/index.jsp

$9.00 each + handling
Curriculum

- Two extensively developed web-based interactive educational programs focus on Indoor air quality
  - Health impacts
  - Identification of air pollutants
  - Reducing pollutants at source
  - Remediation/Mitigation
  - Imbedded evaluation, activities, interaction
Curriculum – Web-based

Indoor Air Quality on-line program includes 10 modules, activities, & evaluation.
Radon program includes a similar format.

Potential problems?
Low & high graphics
Connections
Access for questions
Indoor Air Quality programs

1. Indoor Air Quality Modules:
   - Lead
   - Asbestos
   - Building systems
   - Asthma
   - Formaldehyde
   - Radon
   - Biologicals
   - Chemicals/VOCs
   - Combustion
   - Second hand smoke

2. Radon:
   - Source
   - Health impact
   - Testing & mitigation
Involvement

• Interactive
  – Flash program
  – Interactive rooms
  – Involve learner
  – Evaluation
Indoor Air Quality

- Interactive format
- On-line assessments focus
- Ten modules.
Site

- Indoor Air Quality for Childcare Professionals

- URL

http://nerec.unl.edu/nutrition/study_courses/hgraphicindoorairquality/pollutants.html
Indoor Air Quality: Radon

URL: http://elkhorn.unl.edu/radon/pages/index.jsp?what=rootMenuD&rootMenuId=1

- Modules:
  - Guide for real estate brokers/salespersons
  - What is radon?
  - How does radon enter the home?
  - How can homes be tested for radon?
  - What are the health risks related to radon?
  - How can radon levels be reduced in homes?
  - Where can I find more information on radon?
  - Radon Issues Quiz for credits
- Ways to use programs within your educational programs?
- Ways extend programs throughout U.S.
Healthy Homes Educational Opportunities for Electronic Delivery

Shirley Niemeyer, Ph.D.
Extension Specialist Housing/Environment
University of Nebraska Lincoln Extension
sniemeyer2@unl.edu  Ph: 402-472-6319
Program Design & Delivery
Varies

Individual & small groups
Collaborations
Agency partnerships

Nutrition Ed. Program, WIC, Building NE Families
Other Healthy Homes Programs

- Wildfires: Smoke & Ash in the Home
- Kids Run Better Lead Free
- IPM in Schools
- From Mold & Moisture to Healthy Homes
Impacts

- Knowledge of harmful effects & best mgt. practices to reduce risk increased
- Identified 2 to 3 changes intended to make
- Follow-up – 70% had implemented changes in lifestyle or how they managed their home & landscape.

- Increased calcium & iron in children’s diet
- Covered or stabilized bare soil
- Raised garden beds
- Reduced exposure in play areas
- Adopted wet cleaning
- Filtered vacuuming to manage dust
- Eliminated sources of lead contaminated items
- Used prevention strategies to keep soil out of homes
Impacts?

- Improved knowledge of Extension in Douglas County
- New audiences
- Stronger collaborations & improved communications among agencies, organizations & government involved in addressing the issues
- Strengthened relationships with minority population
Other Healthy Homes Programs & Resources

- *Midwest Regional Healthy Homes Symposiums*

- *Inservice trainings*: educators & other housing & health professional
  - Healthy Homes Kits
  - Nutrition Education Programs
  - Building Strong Families - low income

- *Real Estate Professionals* – 3 hour credit course:
  - Radon, Moisture & Mold in Homes
Looking for Mold in on the Right Places

- Programs:
  - Refrigeration Service Engineers Society
    Omaha & other chapters
  - NE State Convention:
    Fitters & Boiler Makers
  - Rural Health Conference
  - NE Community Action State Conference
  - City of McCook
  - Etc.
- Impact documented
Displays
Healthy Homes Programs

- **Healthy Homes Presentations** focused on asthma, lead, moisture & mold & other topics for multiple audiences:
  - Plumbers/HVAC professionals
  - Midwest Floor Association
  - ALA conferences
  - Etc.

- **Healthy Homes Displays** at health fairs, fairs etc.
  - *Large model* house Plumbers/HVAC professionals
  - Attention getter - Find the M & Ms & Dust Bunnies – children

- **Publications & Mailings**
  - *Lead publications mailed to all NE primary care physicians / GPs*
Phase I

- Identify existing pest management practices & problems

- Actions:
  - Conduct survey. Survey mailed to all NE school administrators (N=716)
  - Survey used to plan needs-based program
Survey outcomes

- Administrators indicated . . .
  - 74% of schools have no IPM written plan & 25% don’t know.
  - 27% of personnel controlling pests are properly certified
  - 61% indicated unnecessary, routine pesticide applications were conducted
### Survey Outcomes

- **Notification of students & parents prior to application of pesticides in schools or on grounds** -

  Yes - 15%  
  No – 79%  
  DK - 9%

- Persons who apply pesticides INDOORS in schools (n=200)

<table>
<thead>
<tr>
<th>Don’t Know</th>
<th>Supt.</th>
<th>Principal</th>
<th>Teacher</th>
<th>Custodian/Maintenance</th>
<th>Volunteer</th>
<th>Pest Control Co.</th>
<th>Lawn Care Co</th>
<th>Someone else</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>6%</td>
<td>7%</td>
<td>11%</td>
<td>38%</td>
<td>10%</td>
<td>75%</td>
<td>17%</td>
<td>6%</td>
</tr>
</tbody>
</table>
Phase I

- Increase awareness & knowledge of IPM program in schools

- Actions:
  - Develop brochure, guidebook & website
  - Develop guidelines for creating IPM plans in schools
  - Distribute guidelines
  - Information mailed to 716 school administrators explaining IPM & the program
  - Guidebook & survey results distributed to school board presidents, educational service units, & principals of all K-12 schools in NE, & all Extension Offices
212 page *IPM in Schools: A How-to Guide* developed

Includes:

- Indoor Air Quality: Molds & Other Asthma Triggers
- Prevention Strategies for Managing Biological Pollutants Inspection Checklist
- Inspection Checklist for Detecting Structural Damage
- Other modules address: VOC’s, mice, cockroaches, dustmites, moisture & mold and other biologicals, and structure & environment/habitat control
Phase II

Objectives:

- Increase in-depth knowledge of IPM practices among school personnel responsible for administration, maintenance & pesticide applications
- Reduce pollutants & specific environmental asthma triggers
Phase II

- Actions:
  - Learning modules created, for workshops, workshops conducted
  - Guidebooks distributed at workshops & other training programs
Phase II

- Training & guidebook provided for 400 at 10 conferences & all day workshops
  - extension faculty
  - pest management professionals
  - school nurses
  - custodians, maintenance workers & supervisors,
  - food service workers
  - school officials
Phase II Outcomes

- Evaluations indicated:
  - 93 – 100% ranked the workshop segments on healthy related pests, pests of moisture prone areas, mold & indoor air quality, IPM concepts & assessment & turf & landscape as superior, excellent or good
  - 83% said information learned would save their school district money
  - 77% said information would improve their ability to work with pest management professionals
Phase II Outcomes

- Participants said learned new information about
  - IPM (93%)
  - Preventing/excluding pests (89%)
  - Inspecting & monitoring for pest activity (82%)

- Participants indicate would always...
  - Identify & eliminate conditions conducive to pests (89%)
  - Use less hazardous control tactics (77%)
  - Reduce their overall pesticide use (66%)
Phase II Outcomes

- Most important thing learned
  - Identify type of pest before treating problem
  - IPM must become every day activity
  - Asthma triggers
  - Rodent control
  - Regular scheduled spraying for pests isn’t the answer
Outcomes

- IPM in schools website
  - [http://schoolipm.unl.edu](http://schoolipm.unl.edu)
    - Guidebook
    - Power points
    - Information for school administrators
    - Links to 40 websites
Phase III Pilot

Objectives

- Encourage adoption of IPM in schools
- Serve as model for other schools
  - 7 pilot schools involved in in-depth on-site assessments & education
  - Detailed recommendations
  - Advanced inservice opportunities
  - On-going assistance
  - Follow-up evaluations – now being returned
  - Successful strategies will be communicated to school officials
Conclusions
To increase adoption of IPM programs in schools . . .

- Recommend
  - Needs assessments prior to program development
  - Collaborative interagency & interdisciplinary teams
  - Multiple program methods & media
  - Including indoor air quality & asthma triggers as part of state IPM educational programs
Healthy Homes Education

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BUILDING A FRAMEWORK FOR HEALTHY HOUSING

Healthy Homes DVD and Manual

Joe Laquatra
Cornell University

2008 National Healthy Homes Conference  September 15-17, 2008 in Baltimore, MD
DVD produced first

- Found local videographer
- Produced script
  - Reviewed by HUD and CDC
    - Decisions regarding what topics to include, what recommendations to make
      - IEQ, household hazardous chemicals, pesticides, fire safety, falling hazards
    - 14 revisions; year-long process
Difficult Choices

- Running cold water to flush pipes
  - How long?
    - 2 minutes – realistic?
    - Until water is as cold as it gets

- Washing hands
  - How long?
    - Still a question
Local Actors
Christopher Julian
Various Sites for Shooting
Script Interpretation
Children on the Set
Distribution of DVDs

- 2006
  - CSREES
  - HUD
  - Extension Educators
  - Notices on Listservs
    Filled requests
  - Priester Extension Health Conference
Uses

- Healthy Homes Trainings
- College Classes
- Public Access Cable TV
- HUD’s *Healthy Homes for Healthy Kids* Campaign
Impacts

- Some anecdotal evidence
  - Natasha Tall stopped on street re: radon
    “I tested my house for radon because of you.”
  - Emily Williams’ experience after using the DVD in a field office training
    “You may have saved my life.”
DVD available online

- Can download from the Healthy Homes Partnership web site:
  - www.healthyhomespartnership.net
The Manual

- DVD User’s Manual
- Training Manual
  - For Healthy Homes programs and other efforts
    - In NYS, used in conjunction with DOH Healthy Neighborhoods Program
Wanted to Complement HYHH
Visual Alerts

“View the DVD” symbol
Visual Alerts

“CHILD ALERT” symbol
Scene-by-Scene Guide

Scene 18: Dust and Dust Mites
Contents

- Biological Pollutants and Other Allergens
- Chemical Contaminants in the Home
- Safety Hazards and Concerns
- Index
- Other Resources
Consistent Layout

Radon

Identifying the Problem:

What Can it Do?

Where is Radon?

Taking Action Against Radon

Other Resources
Images from the DVD

Dust mites also thrive on floors, rugs and carpets.

...more than others, and these places will have higher concentrations of mites.

...since we spend a quarter to a third of our lives asleep, dust mites are found in largest numbers in our beds. This includes our sheets, blankets, mattresses, pillows and pillowcases.
To Date

- 5,200 copies distributed
- More printings planned
- Hoping for more translations
  - Possibly Russian
PDFs

- English and Spanish manuals
  - JL27@cornell.edu