

Leveraging Partnerships to Advance Lead & Healthy Homes Programming in North Carolina

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Community Outreach and Engagement Core (COEC)
UNC Center for Environmental Health and Susceptibility



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UNC Center for Environmental Health & Susceptibility

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Translating interdisciplinary research on environmental health threats to improve public health in North Carolina



- Research foci: environmental cancer, cardiopulmonary disease ([asthma](#)) & developmental disease ([toxic metals](#))
- COEC engages public health professionals, community health workers & susceptible populations
 - Lead poisoning prevention and asthma outreach for >10 years
 - Supplemental funding to manage statewide education and engage communities and professionals in lead poisoning prevention

Evolution of NC Healthy Homes Programming



Lead Ad Hoc Committee

- Founded in 1989
- Goal: advance primary prevention
- Local & state health and housing agencies
- Informed investigation and remediation policy
- State & CDC funding

COEC as participant

NC Lead and Healthy Homes Outreach Task Force

- Evolved from Lead Ad Hoc in 2006
- Goal: expanded focus to asthma & home safety
- Home visiting professionals saw opportunity to broaden outreach
- Better positioned to seek federal funding

COEC as co-convener

Developing a Statewide Strategic Plan, ~2010-2012



- Initial focus: create strategic plan to reduce home health hazards
- Task force co-convened by NC Childhood Lead Poisoning Prevention Program-DHHS and UNC CEHS
- Key partners
 - Asthma Alliance of NC
 - Local housing coalitions
 - Local health departments
 - NC Asthma Program
 - NC Pediatric Society
 - Partnership Effort to Advance Children's Health
 - Reinvestment Partners
 - State Laboratory of Public Health and other DHHS programs

Training PH Professionals to Reduce Home Hazards



- 6-hour train-the-trainer course to prepare public health professionals to address environmental health hazards
 - Over 300 participants
 - Content knowledge improved for over 90% of participants, especially related to lead, pests/IPM and indoor air quality
 - Subset used materials and recommended interventions during home & clinical visits, reaching over 1,000 families
 - Interventions focused on asthma triggers, mold & pests
- Additional healthy homes outreach
 - 3-hour course on environmental asthma triggers
 - 90-minute updates on emerging sources of lead & policies
 - Tailored training sessions

Supporting Implementation of Screening for Pregnant Women

Are You Pregnant?



Protect your baby from lead poisoning.



Protect your baby from lead poisoning.

- Lead poisoning is caused by breathing or swallowing lead.
- Lead can pass from a mother to her baby.
- Ask your medical provider if you are pregnant or planning to get pregnant.
- You may need a blood test to find out if you have lead in your blood that could affect your pregnancy.

- Assisted in developing exposure assessment questionnaire
- Trained over 320 EH & clinical staff in screening procedures
- Informed addenda to health department policies

1. Last Name	First Name	MI
2. Patient Number		
3. Date of Birth (MM/DD/YYYY)	Month	Day
	Year	
4. Race	<input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Asian <input type="checkbox"/> Black/African American <input type="checkbox"/> Native Hawaiian/Other Pacific Islander <input type="checkbox"/> Unknown <input type="checkbox"/> White	
5. Ethnic Origin	<input type="checkbox"/> Hispanic Cuban <input type="checkbox"/> Hispanic Mexican American <input type="checkbox"/> Hispanic Other <input type="checkbox"/> Hispanic Puerto Rican <input type="checkbox"/> Not Hispanic/Latino <input type="checkbox"/> Unreported	
6. Gender	<input type="checkbox"/> Female <input type="checkbox"/> Male	
7. County of Residence		

N.C. Department of Health and Human Services
Division of Public Health
Women's and Children's Health Section
Women's Health Branch

Lead and Pregnancy Risk Questionnaire

Answer each question by checking the small "YES," "NO," or "UNSURE" box.

	YES	NO	UNSURE
1. Have you ever had a high blood lead level?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Have you spent any time outside of the United States in the past 12 months? If yes: Where?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Do you use pottery, remedies, spices, foods, candies or make-up that are not sold in a regular drug store or are...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Developing and Sharing Resources



Asthma and Allergy Triggers

Mold and Moisture

Molds are everywhere and float through the air inside and outside all of the time. When mold spores land where there is moisture and food, they grow. Molds can cause allergy symptoms and trigger an asthma attack when breathed in.



Asthma and Allergy Triggers

Chemical Irritants

Asthma symptoms may be worse around secondhand smoke, cleaners, paints, cosmetics, and air fresheners. Large amounts can stay in the air long after you have used them. Any steps you take to reduce the amount of chemical irritants in your home will make your home healthier.



Asthma and Allergy Triggers

Over 1 million people in North Carolina have been diagnosed with asthma during their lifetimes.



Follow these steps to prevent or eliminate indoor and outdoor asthma and allergy triggers.

DUST AND DUST MITES

- Cover mattresses and pillows with dust mite proof zippered covers.
- Wash bedding (sheets, pillow cases, blankets and bedcovers) every week in hot water.
- Vacuum carpet and fabric-covered furniture every week.
- Choose washable stuffed toys, wash them often in hot water and dry them completely.
- Control humidity (as low as 30-50%) with a dehumidifier or the air conditioner.
- When cleaning dust, animal dander and other allergens, use vacuums with high efficiency particulate air (HEPA) filters or central vacuums.
- Remove dust often with a damp cloth.
- Replace blinds with washable curtains, where possible, or regularly wipe down blinds to remove dust.

ANIMAL DANDER

CHEMICAL IRRITANTS

- Don't allow smoking in your home or car.
- Quit smoking. Never smoke in the home car. Visit www.smokefreehousingnc.com for steps to protect yourself from neighbors' secondhand smoke.
- Keep fireplaces, gas stoves and furnaces regularly serviced. Increase ventilation when using them.
- Read labels and follow directions when using, storing or disposing of personal care products, cleaning products, paint and glue.
- Keep these products out of reach of children.
- When possible, allow materials and finishes (such as new carpet or paint) to off-gas or dry outside.

Los riesgos en el hogar pueden conducir a problemas de salud serios para los niños.

Plomo
El plomo se encuentra en la pintura de casas pintadas antes del 1978, en cañerías, en productos de vidrio en tierra y juguetes. El consumo de plomo puede causar problemas de peso, de aprendizaje, crecimiento y comportamiento en los niños.

Moho
Techos que gotean, cañerías, áreas acústicas mal localizadas en ventanas y sistemas pueden generar el crecimiento de moho. El moho puede causar problemas de peso, de aprendizaje, crecimiento y comportamiento en los niños.

Pesticidas
Si se usan en exceso, algunos pesticidas pueden causar problemas de peso, de aprendizaje, crecimiento y comportamiento en los niños.

Home Hazards May Lead to Serious Health Problems For Children.

Lead
Lead may be found in pre-1978 housing paint, water pipes, vinyl mini-blinds, soil and toys. Childhood lead poisoning can cause problems with learning, growth and behavior that last a lifetime.

Mold
Leaky roof, water pipes, windows, air conditioners and basements can spur mold growth. Mold is an allergen and asthma trigger.

Pesticides
Used unsafely, some pesticides may cause poisoning, birth defects, nerve damage and even cancer.

Indoor Air Quality
Pollutants from tobacco smoke, fragrant candles, new furniture, carpets and some cleaning products can make it unsafe to breathe.

Home Safety
Young children and older adults are most likely to get hurt at home by falls, drowning, fires, poisoning, suffocation, choking and guns.



REYNA'S STORY

A healthy home assessment by a trained professional can help uncover hidden hazards in your home. Watch this video to see the Vazquez family's story.



REYNA'S STORY: UNCOVERING HIDDEN HAZARDS IN YOUR HOME | APRIL 25, 2014 |

Is your home healthy?

Opportunities to Expand Programming



- Work with PH professionals & healthcare providers to identify interventions for children with blood lead levels $< 10 \mu\text{g/dL}$
- Improve cultural competency of those leading interventions
- Share resources with tribal nations to address their identified needs related to healthy housing
- Seek funding to sustain healthy homes programs

We are grateful for
the leadership and
support of our
colleagues!



Members of the NC Lead and Healthy Homes Outreach Task Force

National Healthy Homes Training Center

NIEHS Core Center Collaborators

- Katrina Korfmacher, PhD, & Val Garrison, University of Rochester
- Ogonnaya Dotson-Newman, WE ACT for Environmental Justice

NCDHHS

- Children's Environmental Health Branch: Ed Norman, David Brown, Kim Gaetz, PhD, Tena Hand
- Women's Health Branch: Maria Valentin-Welch

UNC CEHS: Rebecca Fry, PhD, Megan Hughes, Amy Macdonald, Terry Noah, MD, David Peden, MD, Karin Yeatts, PhD

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