



North Carolina Healthy Housing Fact Sheet

The home is the most dangerous place for U.S. families.ⁱ Nearly six million families live in housing rivaling that of developing countries, with broken heating and plumbing, holes in walls and windows, roach and rodent infestation, falling plaster, crumbling foundations, and leaking roofs. Millions more in all 50 states live in housing with serious health and safety hazards, including mold, exposed wiring, radon, unvented heaters, toxic chemicals, broken stairs, missing smoke detectors, and other hazards.ⁱⁱ Home-based interventions to address health hazards improve health and have a large return on investment: Each dollar invested in lead paint hazard control results in a return of \$17–\$221ⁱⁱⁱ and each dollar invested in asthma home-based interventions that include education and remediation results in a return of \$5.30 to \$14.00.^{iv}

The need in North Carolina

Thirty-four percent of children in North Carolina live in households with high housing cost burden, and over one in four children in North Carolina live in poverty.^v The potential effect of high housing cost burden and poverty on children and families is exacerbated by the age of North Carolina's housing stock. Approximately 13% of North Carolina's homes were built before 1950 and are likely to contain lead-based paint.^{vi} Unhealthy housing conditions can lead to lead poisoning, injuries, and asthma and other respiratory problems. These health problems in turn result in missed school days and poor school performance for children, as well as missed work days for parents.

The need for funding

To protect the health of North Carolina families and prevent continued increases in associated healthcare costs and societal consequences, full funding in FY 2017 and beyond is needed for the following:

- ✓ **CDC's Healthy Homes and Lead Poisoning Prevention Program = \$35,000,000**
- ✓ **CDC's National Asthma Control Program = \$30,596,000**
- ✓ **HUD's Office of Lead Hazard Control and Healthy Homes = \$230,000,000**

Funding for healthy housing in North Carolina

- North Carolina has received a total of \$57,768,068 in funding for 31 grants from HUD's Office of Healthy Homes and Lead Hazard Control since 1999. Of this funding:
 - Two grants totaling \$3,235,264 were awarded in FY13 to the City of Winston-Salem (\$2,500,000) for lead-based paint hazard control activities and the North Carolina State University (\$735,264) for healthy homes technical studies activities.
- From FY05 – FY14, North Carolina received a total of \$7,587,987 in funding from the Centers for Disease Control and Prevention's Healthy Homes and Lead Poisoning Prevention and National Asthma Control programs. Of this funding:
 - North Carolina has received a total of \$4,544,200 from the Healthy Homes and Lead Poisoning Prevention Program.
 - The North Carolina State Department of Health and Human Services has received a total of \$3,043,787 in funding for asthma-related activities; most recently for \$8,000 in FY14 for surveillance activities only.

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Childhood lead poisoning^{vii, viii}

- In 2012, 5,908 of the children tested in North Carolina had an elevated blood lead level, which is five or more micrograms of lead per deciliter of blood ($\mu\text{g}/\text{dL}$); 541 of them had blood lead levels of 10 $\mu\text{g}/\text{dL}$ or more.
- Only 52% of the target population for blood lead level testing was tested in the state of North Carolina in 2011.

Asthma^{ix, x}

- 8.8% of adults in North Carolina had current asthma in 2011.
- 10.3% of North Carolina youths had current asthma in 2010.
- In North Carolina, children with public health insurance had a higher rate (15.5%) of current asthma prevalence than children with private insurance coverage (7.6%).
- The average charge per hospitalization case for asthma in North Carolina increased from \$7,503 to \$12,632 from 2003-2010. Hospitalization charges from asthma in North Carolina in 2010 totaled over \$132 million.

Carbon monoxide deaths

- There were 584 deaths in North Carolina due to carbon monoxide exposure in 2000-2007.^{xi}

Injury-related deaths

- For every 100,000 persons in North Carolina, there were 36.3 unintentional injury deaths caused by dangers other than automobile-related issues.^{xii}

National rankings

- NCHH's 2013 *State of Healthy Housing* report ranks 45 metropolitan statistical areas (MSA) according to healthy housing-related data in the American Housing Survey. The Charlotte, NC-SC MSA, is tied for 10th and categorized as one of the "most healthy" communities. No other North Carolina MSAs are included in this report.^{xiii}
- The Asthma and Allergy Foundation of America's listing of "Asthma Capitals" for 2014 ranks the 100 largest U.S. metro areas to identify the "most challenging places to live with asthma." The state of North Carolina does not have any cities identified within the top 60 "most challenging." Greensboro, in 62nd place, is the "most challenging" city identified for the state; three additional cities are also identified: Winston-Salem (80th); Raleigh (81st); Charlotte (87th).^{xiv}

Healthcare financing for healthy homes^{xv, xvi}

The National Center for Healthy Housing's November 2014 [study](#) regarding state Medicaid reimbursement for environmental health services in the homes of people with asthma and children exposed to lead shows that in [North Carolina](#) some level of Medicaid reimbursement is in place for

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activities related to both asthma and lead but no efforts to expand reimbursement for services related to asthma or lead were identified.¹

Opportunities for North Carolina to further improve reimbursement of environmental health services include:

- Extending coverage for asthma control services to include those administered by nontraditional providers, such as certified asthma educators and community health workers;
- Ensuring that services and supports are in place to eliminate or reduce exposure to asthma triggers identified in the home environment.
- Aligning the eligibility criteria for lead poisoning follow-up services with the current CDC reference value for lead poisoning (5 µg/dL) to include children with elevated blood lead levels lower than 10 µg/dL for investigation and lower than 20 µg/dL for remediation.

NSHHC members in North Carolina

The National Safe and Healthy Housing Coalition (NSHHC) is a broad, voluntary coalition of over 225 organizations working to improve housing conditions nationwide through education and outreach to key national stakeholders and federal public decision-makers. Current NSHHC organizational members from North Carolina include:

- Greensboro Housing Coalition
- Operation Paydirt
- Reinvestment Partners
- The RL Mace Universal Design Institute

For additional information, please contact:

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ⁱ Centers for Disease Control and Prevention. (2007). Injury in the United States: 2007 chartbook. Retrieved from <http://www.cdc.gov/nchs/data/misc/injury2007.pdf>

ⁱⁱ National Center for Healthy Housing. (2013). State of healthy housing. Retrieved from <http://www.nchh.org/Policy/2013StateofHealthyHousing.aspx>

ⁱⁱⁱ Gould, E. (2009, July). Childhood lead poisoning: Conservative estimates of the social and economic benefits of lead hazard control. *Environmental Health Perspectives*, 117(7), 1162-1167. Retrieved from <http://ehp.niehs.nih.gov/wp-content/uploads/117/7/ehp.0800408.pdf>

^{iv} The Guide to Community Preventive Services (The Community Guide). (2013, September 27). Asthma control. Retrieved from <http://www.thecommunityguide.org/asthma/multicomponent.html>

^v The Annie E. Casey Foundation. 2014 *Kids Count Data Book: North Carolina State Profile*. Retrieved from http://www.aecf.org/m/databook/2014KC_profile_NC.pdf

^{vi} U.S. Census Bureau. 2000. *Percent of Housing Units Built Before 1950*. Retrieved from http://www.dataplace.org/rankings?selected_cid=113910&bt=5&per_page=50

^{vii} Centers for Disease Control and Prevention. Number of Children Tested and Confirmed EBLLs by State, Year, and BLL Group, Children < 72 Months Old. Retrieved from <http://www.cdc.gov/nceh/lead/data/StateConfirmedByYear1997-2012.htm>

^{viii} North Carolina Department of Health and Human Services. Environmental Health Unit. 2011 North Carolina Childhood Blood Lead Surveillance Data, By County. Retrieved from <http://ehs.ncpublichealth.com/hhccehb/cehu/lead/docs/2011AnnualBloodLeadTbl.pdf>

^{ix} CDC's National Environmental Public Health Tracking Network Reporting Tool. Retrieved from <http://ephttracking.cdc.gov/QueryPanel/EPHTNQuery/EPHTQuery.html?c=AS&i=-1&m=-1#>

^x North Carolina Department of Health and Human Services, Asthma Program, Chronic Disease and Injury Section, Division of Public Health. The Burden of Asthma in North Carolina 2010. Retrieved from <http://www.asthma.ncdhs.gov/docs/TheBurdenOfAsthmaInNorthCarolina-2010.pdf>

^{xi} CDC Environmental Health Tracking Network (2000-2007). Carbon Monoxide Deaths (#)/Multi-Year Period. Retrieved from <http://ephttracking.cdc.gov/QueryPanel/EPHTQuery.html?c=CO&i=-1&m=-1#>

^{xii} Centers for Disease Control and Prevention. (n.d.). Injury prevention & control: Data & statistics (WISQARS) [Database]: Injury statistics query & reporting system: Composite indicator (excluding unintentional deaths related to motor vehicles): Unintentional injury death rate (per 100,000). Retrieved from <http://www.cdc.gov/injury/wisqars/index.html>

^{xiii} <http://www.nchh.org/Policy/2013StateofHealthyHousing/NationalRankings>?tabid=861/healthy/1/Default.aspx

^{xiv} http://www.aafa.org/pdfs/2014_AC_FinalPublicList1.pdf

^{xv} <http://www.nchh.org/Resources/HealthcareFinancing/Snapshot.aspx>

^{xvi} National Center for Healthy Housing. (2014). Healthcare Financing of Health Homes: Findings from a 2014 nationwide survey of state reimbursement policies. Retrieved from [http://www.nchh.org/Portals/0/Contents/Reimbursement%20Landscape_MAIN%20REPORT_FINAL%20\(18%20November%202014\).pdf](http://www.nchh.org/Portals/0/Contents/Reimbursement%20Landscape_MAIN%20REPORT_FINAL%20(18%20November%202014).pdf)

¹ Note: (a) These are self-reported results that have not been independently verified, and (b) the existence of a policy does NOT mean that services are actually being delivered on the ground.

Funding from HUD's Office of Lead Hazard Control and Healthy Homes

State	Name	City	Amount	L or HH	Year	Program
NC	North Carolina State University		\$ 735,264	HH	2013	HHTS
NC	City of Winston-Salem	Winston-Salem	\$ 2,500,000	L	2013	LBPHC
NC	City of Charlotte	Charlotte	\$ 2,479,414	L	2012	LBPHC
NC	City of High Point	High Point	\$ 2,475,000	L	2011	LHC
NC	North Carolina State University		\$ 541,179	HH	2011	HHTS
NC	State of North Carolina	Raleigh	\$ 2,596,543	L	2010	LBPHC
NC	City of Greensboro	Greensboro	\$ 3,100,000	L	2010	LBPHC
NC	City of Winston-Salem	Winston-Salem	\$ 2,070,000	L	2009	LBPHC
NC	City of High Point	High Point	\$ 3,000,000	L	2008	LBPHC
NC	City of Charlotte	Charlotte	\$ 2,999,903	L	2008	ARRA
NC	City of Greenville	Greenville	\$ 1,922,370	L	2008	ARRA
NC	City of Greensboro	Greensboro	\$ 3,000,000	L	2007	LBPHC
NC	City of Rocky Mount	Rocky Mount	\$ 2,765,585	L	2007	LBPHC
NC	Research Triangle Institute	Durham	\$ 448,276	L	2007	LTS
NC	City of Charlotte	Charlotte	\$ 2,999,944	L	2006	LHC
NC	Research Triangle Institute	Durham	\$ 190,000	L	2006	LTS
NC	State of North Carolina	Raleigh	\$ 3,000,000	L	2006	LHC
NC	Research Triangle Institute	Durham	\$ 313,467	L	2005	LTS
NC	City of Charlotte	Charlotte	\$ 3,000,000	L	2004	LHCR
NC	City of Greensboro	Greensboro	\$ 3,000,000	L	2004	LHCR
NC	Research Triangle Institute	Durham	\$ 403,163	HH	2003	
NC	City of Durham	Durham	\$ 2,018,016	L	2002	
NC	City of Rocky Mount	Rocky Mount	\$ 2,121,431	L	2002	
NC	Research Triangle Institute	Durham	\$ 194,194	HH	2002	
NC	Advanced Energy	Raleigh	\$ 700,000	HH	2002	
NC	City of Charlotte	Charlotte	\$ 3,000,000	L	2001	
NC	City of Greensboro	Greensboro	\$ 3,000,000	L	2001	
NC	Duke University		\$ 405,217	HH	2001	HHD
	Research Triangle Institute					
NC	Research Triangle Park	Durham	\$ 220,082	HH	2001	HHD
NC	City of Durham	Durham	\$ 2,400,000	L	1999	
	Research Triangle Institute					
NC	Research Triangle Park	Durham	\$ 169,020	L	1999	

\$ 57,768,068 Total FY99-FY15

Funding from CDC's Childhood Lead Poisoning Prevention and National Asthma Control Programs - NORTH CAROLINA

Program and Grantee	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	TOTALS BY PROGRAM
Childhood Lead Poisoning Prevention*											\$ 4,544,200
North Carolina Department of Environment and Natural Resources	\$ 728,923	\$ 430,706	\$ 486,429	\$ 486,430	\$ 471,837	\$ 440,976	\$ 593,597	\$ 593,597	\$ -	\$ 311,705	
Addressing Asthma in Public Health											\$ 2,994,451
North Carolina State Department of Health and Human Services	\$ 195,000	\$ 195,000	\$ 274,418	\$ 375,000	\$ 450,000	\$ 450,000	\$ 393,318	\$ 387,031	\$ 274,684	\$ -	
Surveillance - Asthma											\$ 49,336
North Carolina State Department of Health and Human Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,000	\$ 35,336	\$ 8,000	
Other - Asthma											\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
TOTALS BY FISCAL YEAR	\$ 923,923	\$ 625,706	\$ 760,847	\$ 861,430	\$ 921,837	\$ 890,976	\$ 986,915	\$ 986,628	\$ 310,020	\$ 319,705	

GRAND TOTAL FY05 - FY 14 \$ 7,587,987

* Timeline of CDC's Childhood Lead Poisoning Prevention Program's Name:

2005-2010: Childhood Lead Poisoning Prevention Program

2011, 2012, 2014: Healthy Homes and Lead Poisoning Prevention Program

2013: The lead program was not funded.