

Healthy Homes: A Key to Asthma Management

Sally Herndon

Public Health Leaders Conference

January 24, 2017

Workshop Agenda

- * Sally Herndon, MPH Moderator and Overview
 - Introductions of Presenters and Audience
 - Brief data on asthma in NC, with focus on children, ED visits and hospitalizations
 - Quick review of the Recommendation from the Guide for Community Preventive Services
 - NC data on the Return on Investment
 - Opportunities to Scale up and Spread this Evidence-based intervention

- * Neasha Graves, MPA, UNC Environmental Resource Program
 - The new CDC/EPA/HUD guidelines for Asthma home visits
 - Practical tips to its implementation in NC
 - Link to the NC Healthy Homes group

- * Local Health Department experiences in implementation
 - Anne Lowry, Chatham County Health Department

- * Q+ A and Discussion – 10-15 Minutes

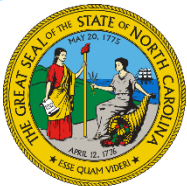
North Carolina Asthma Statistics: Nothing to Wheeze At

Farnaz Chowdhury

North Carolina Department of Health & Human Services

Division of Public Health

State Center for Health Statistics



NC DEPARTMENT OF
HEALTH AND HUMAN SERVICES

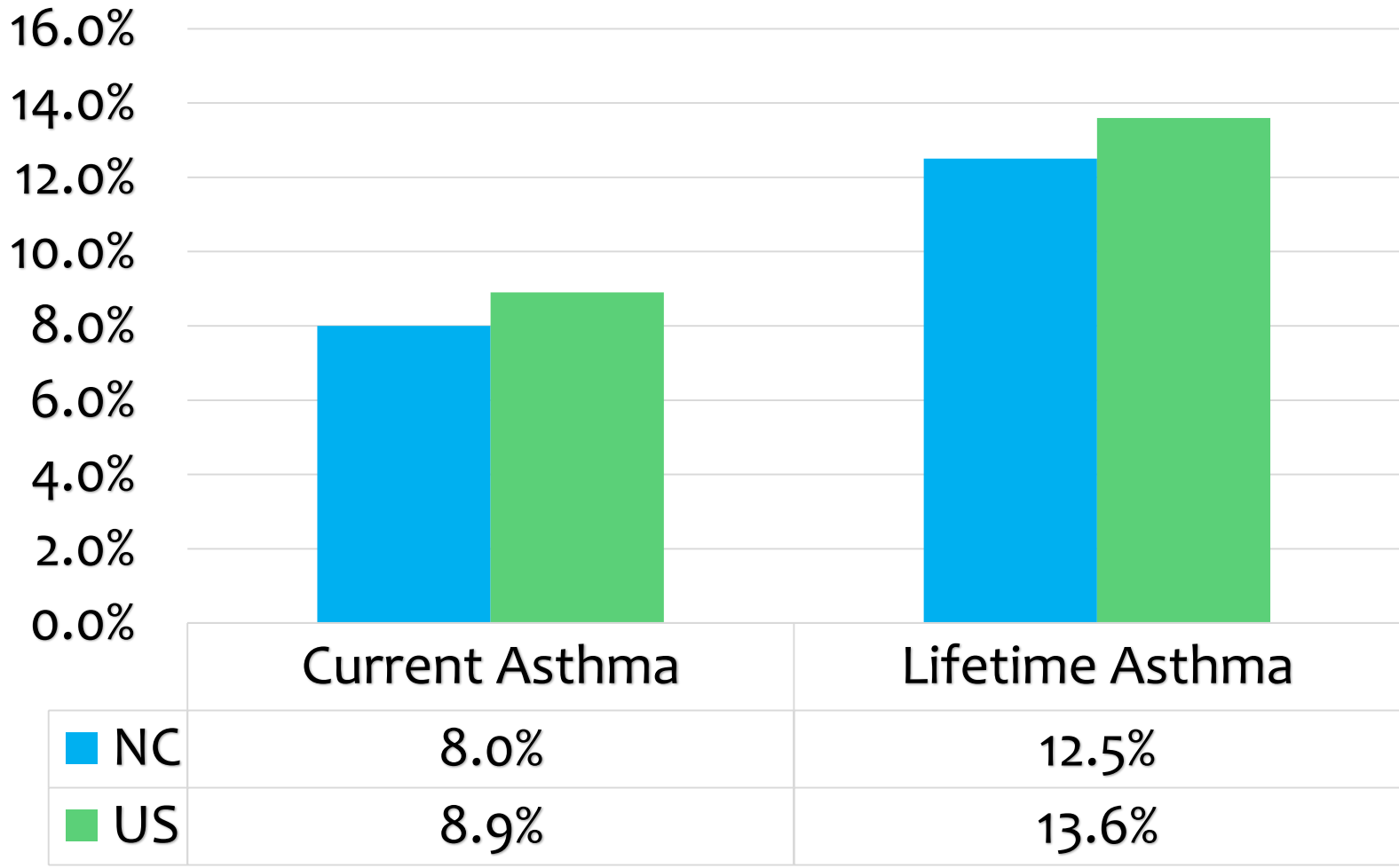
Division of Public Health

**North Carolina State Center
for Health Statistics**



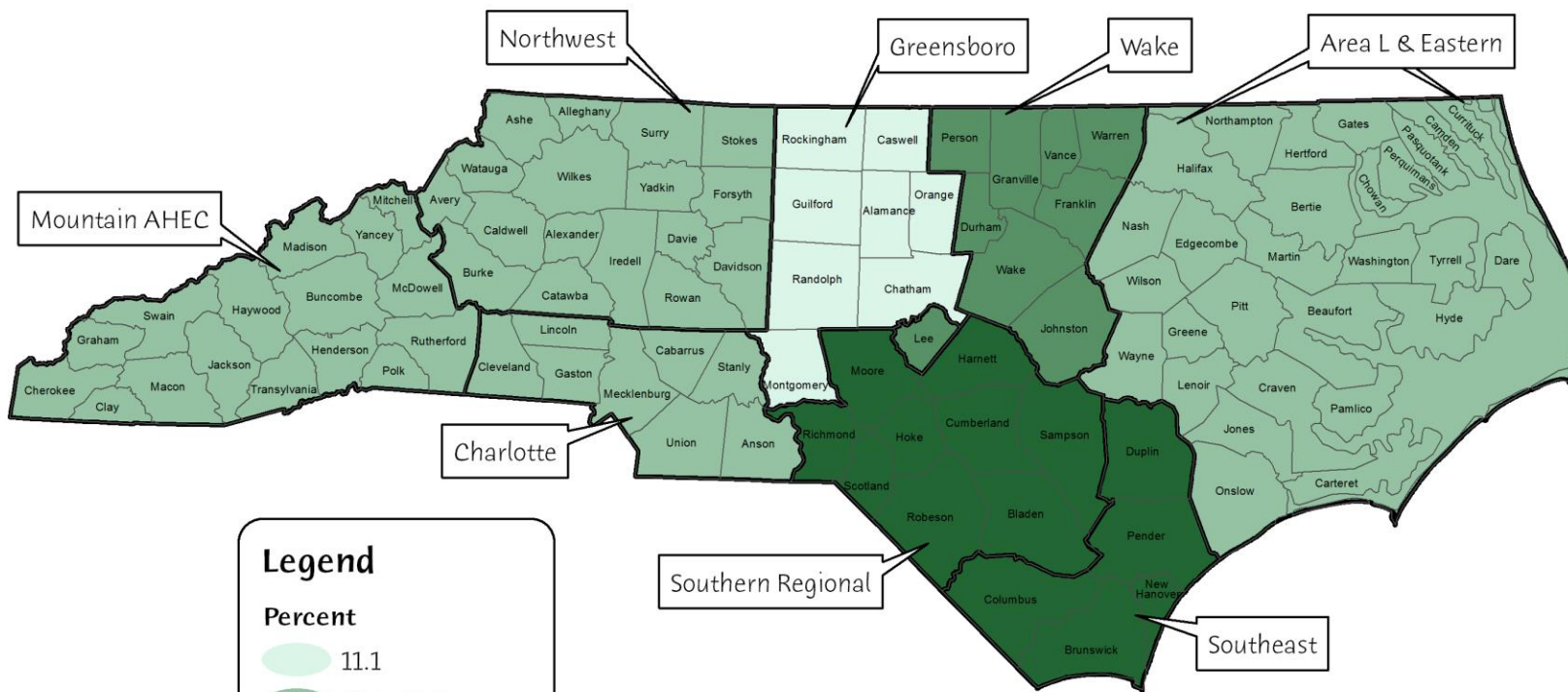
Adult Asthma Prevalence

2016 Adult Asthma Prevalence, Current & Lifetime: U.S. & N.C.



Percentage of North Carolina Adults Who Answered Yes to "has a doctor, nurse, or other health professional EVER told you that you had asthma?"

by Area Health Education Center (AHEC) Regions, 2016

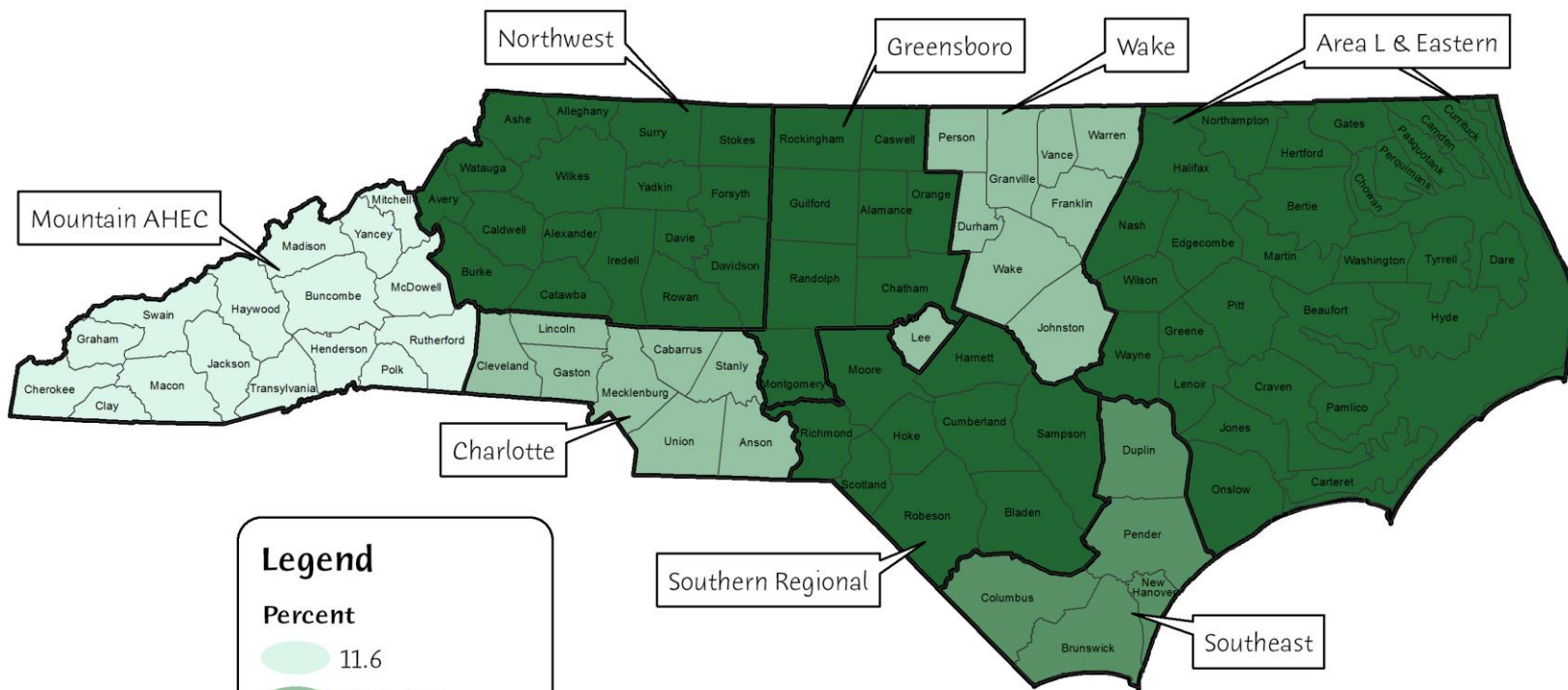


Source: 2016 Behavioral Risk Factor Surveillance System (BRFSS)

*Derived from the chronic health condition questions



Percentage of North Carolina Adults Who Answered Yes to "has a doctor, nurse, or other health professional EVER told you that you had asthma?" by Area Health Education Center (AHEC) Regions, 2017



Legend

Percent

- 11.6
- 11.7 - 12.7
- 12.8 - 12.9
- 13.0 - 15.2

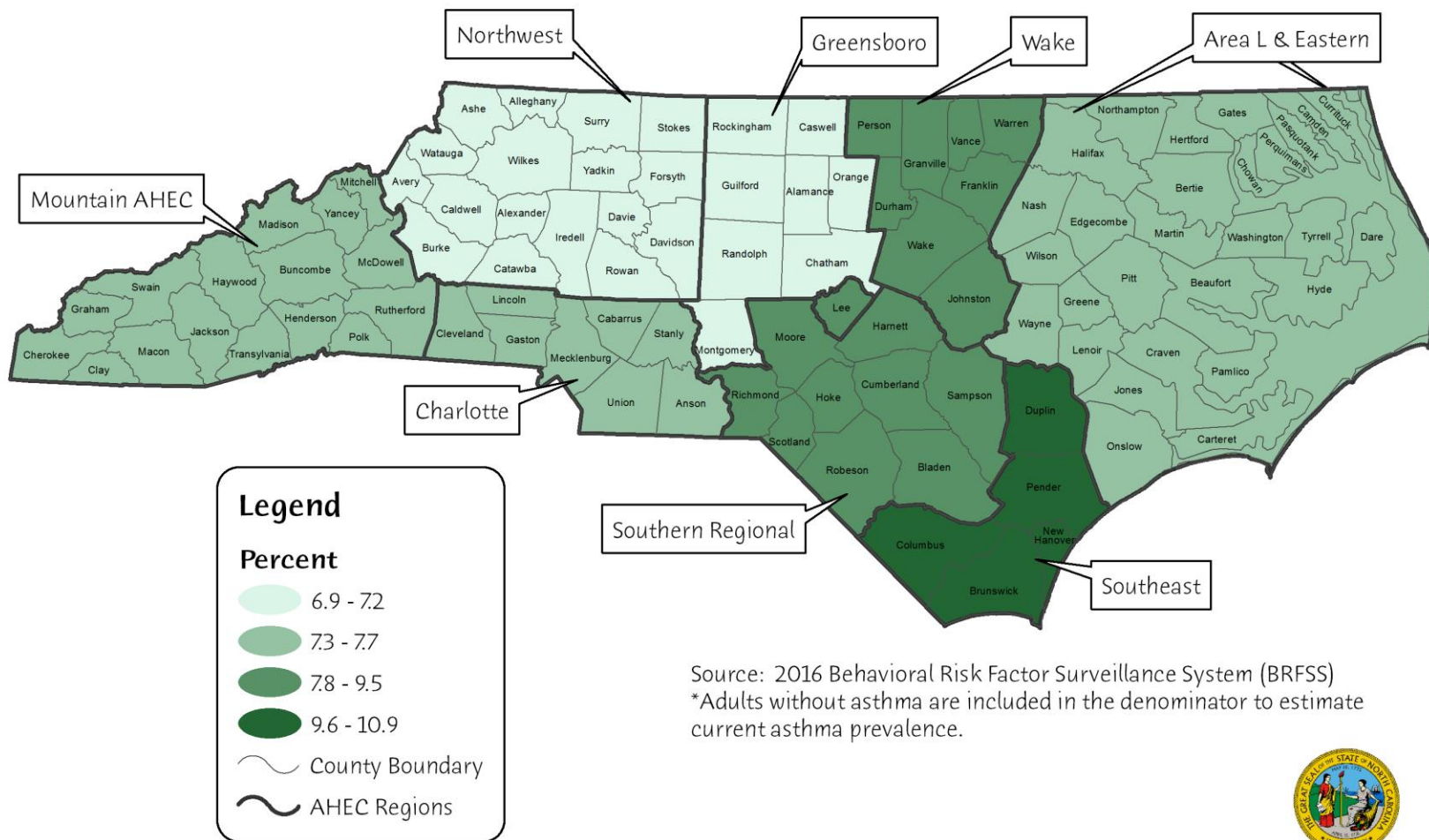
County Boundary

AHEC Regions

Source: 2017 Behavioral Risk Factor Surveillance System (BRFSS)
*Derived from the chronic health condition questions



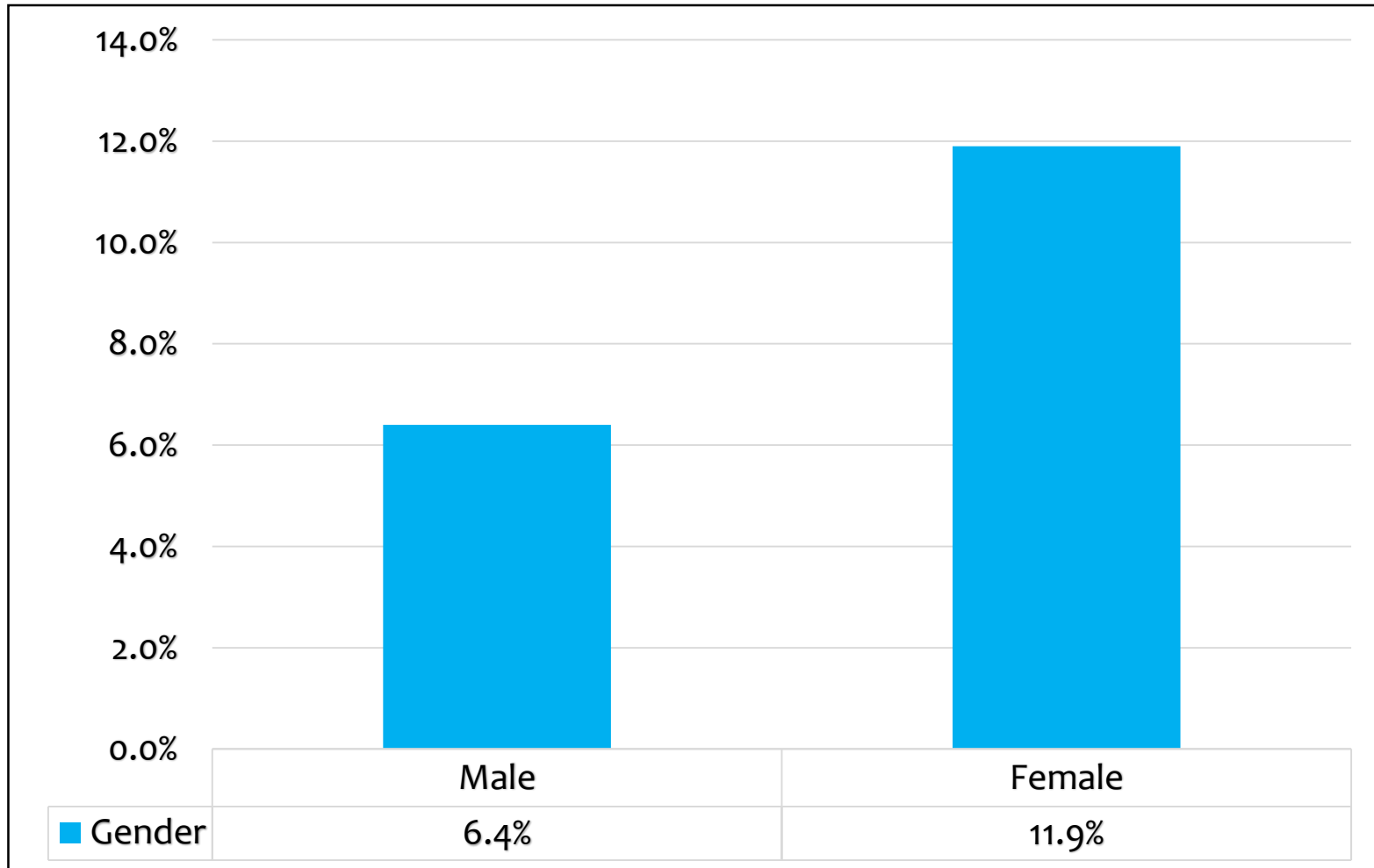
Percentage of North Carolina Adults Who Answered Yes to "Do you still have asthma?*" by Area Health Education Center (AHEC) Regions, 2016



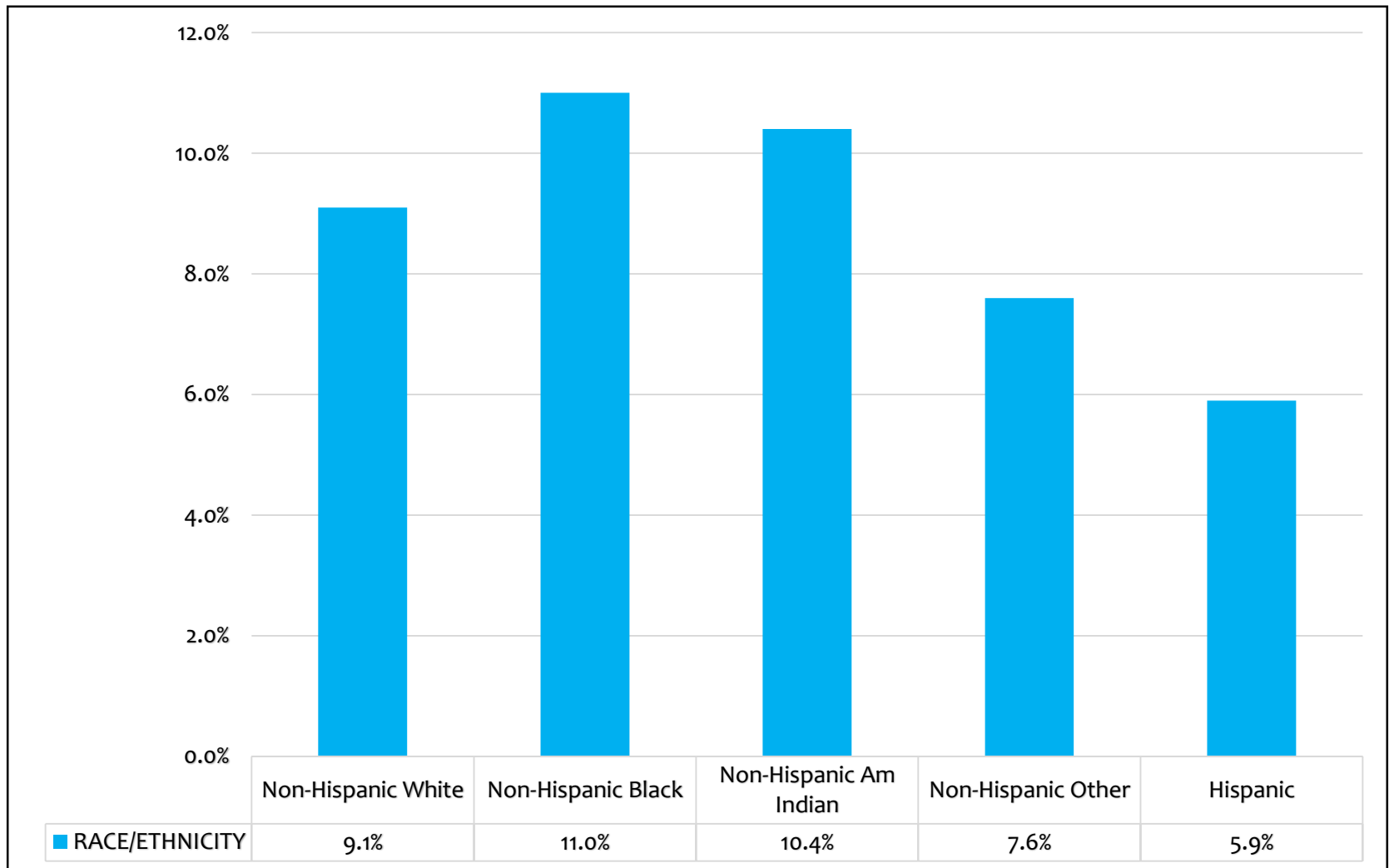
Source: 2016 Behavioral Risk Factor Surveillance System (BRFSS)
 *Adults without asthma are included in the denominator to estimate current asthma prevalence.



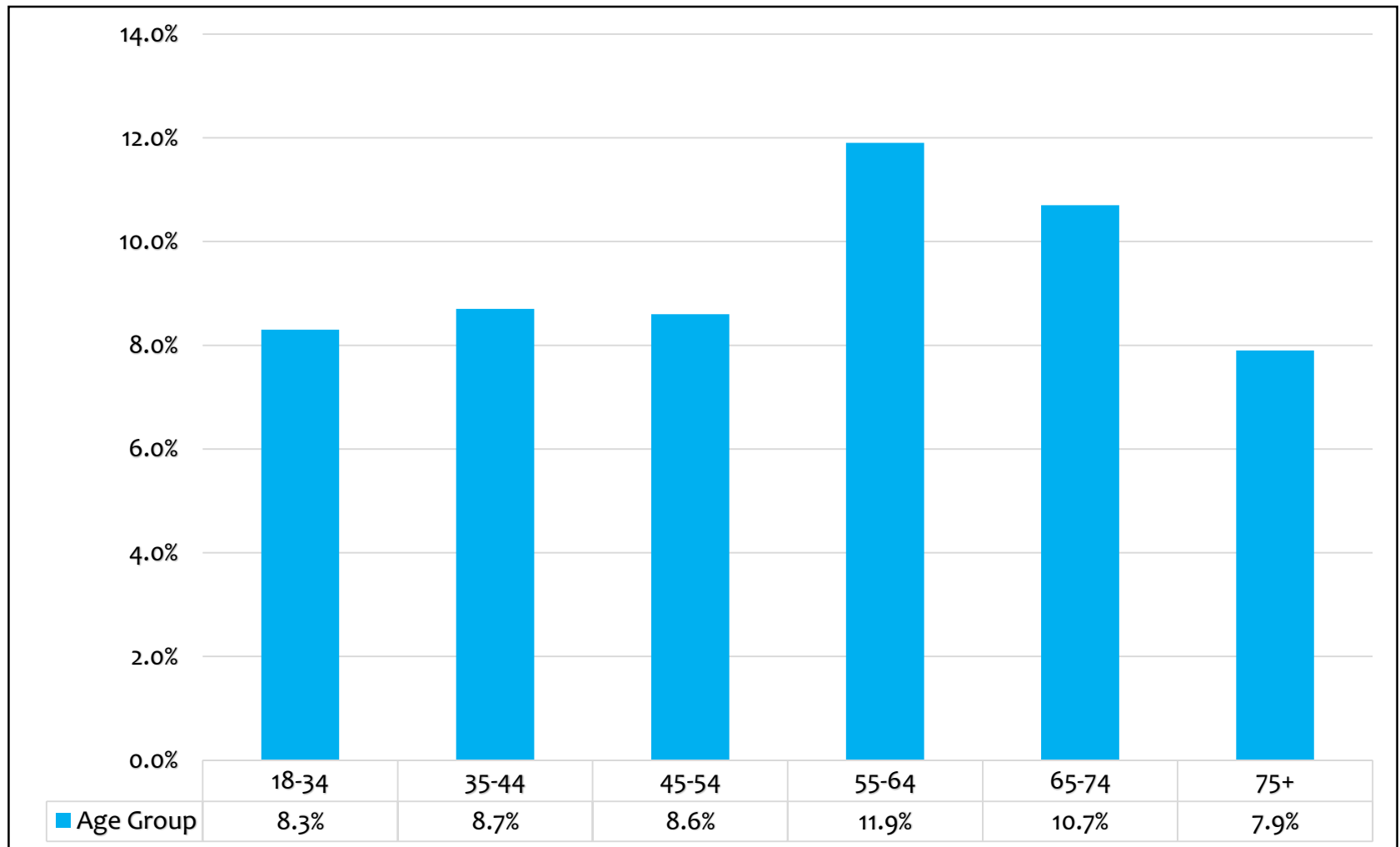
NC Adult Current Asthma Prevalence Rates by Gender, 2017



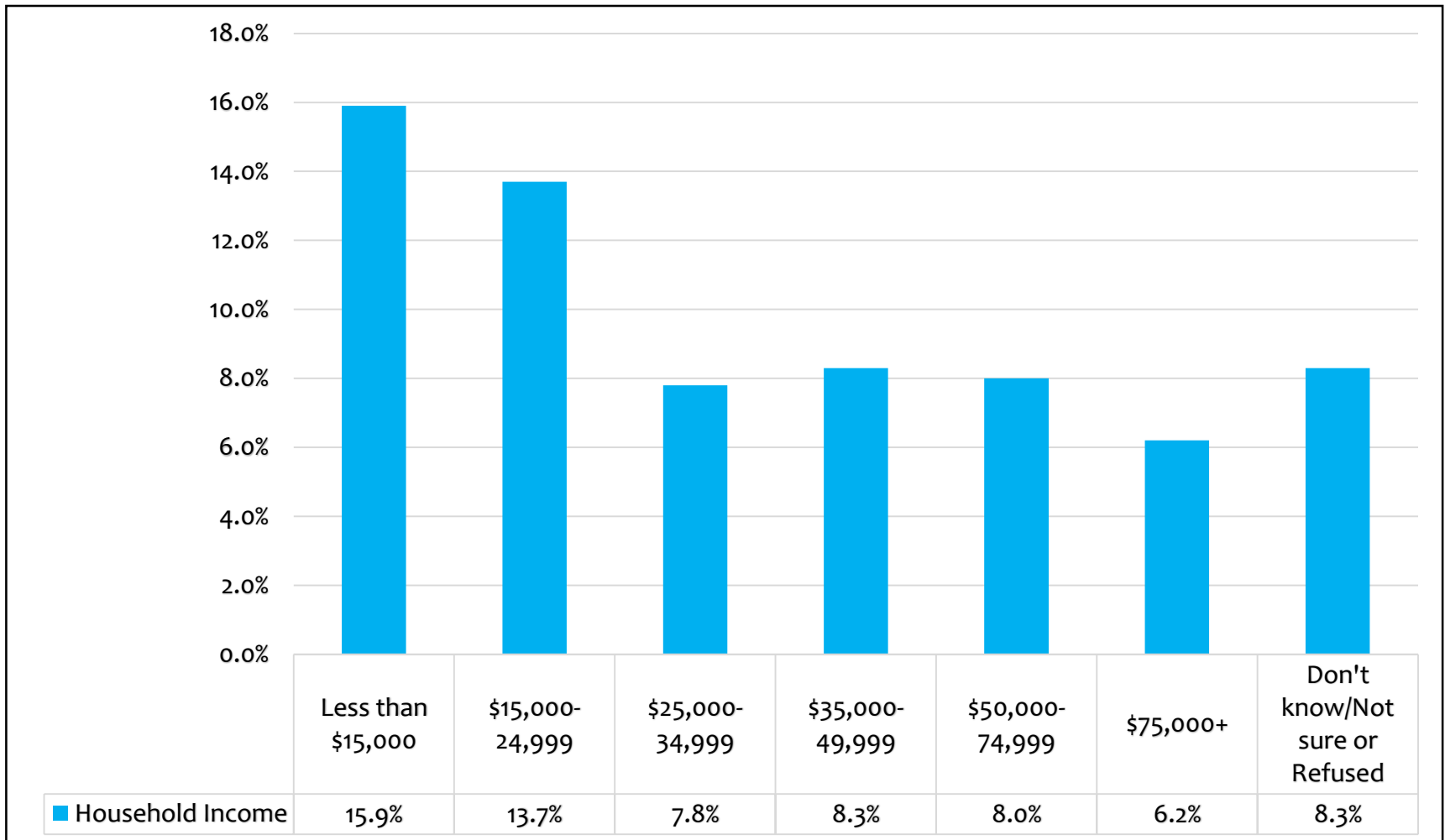
NC Adult Current Asthma Prevalence Rates by Race/Ethnicity, 2017



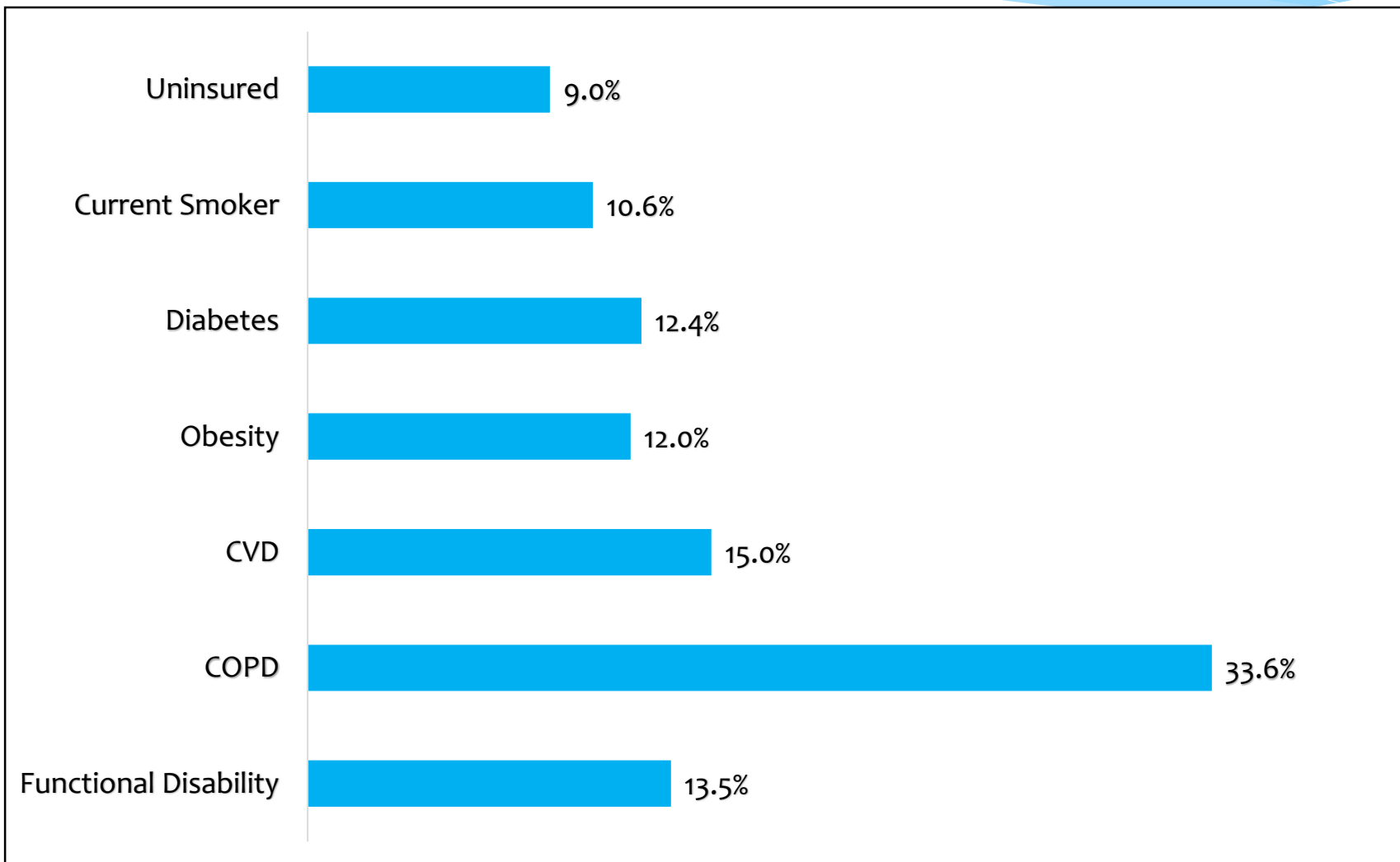
NC Adult Current Asthma Prevalence Rates by Age Group, 2017



NC Adult Current Asthma Prevalence Rates by Household Income, 2017



NC Adult Current Asthma Prevalence by Comorbid Conditions/Risk Factors, 2017





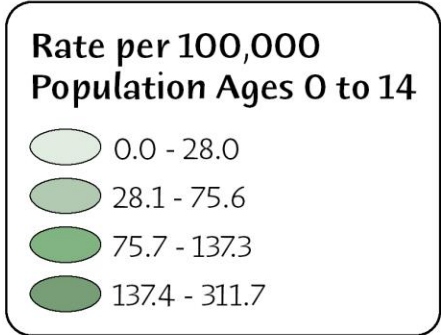
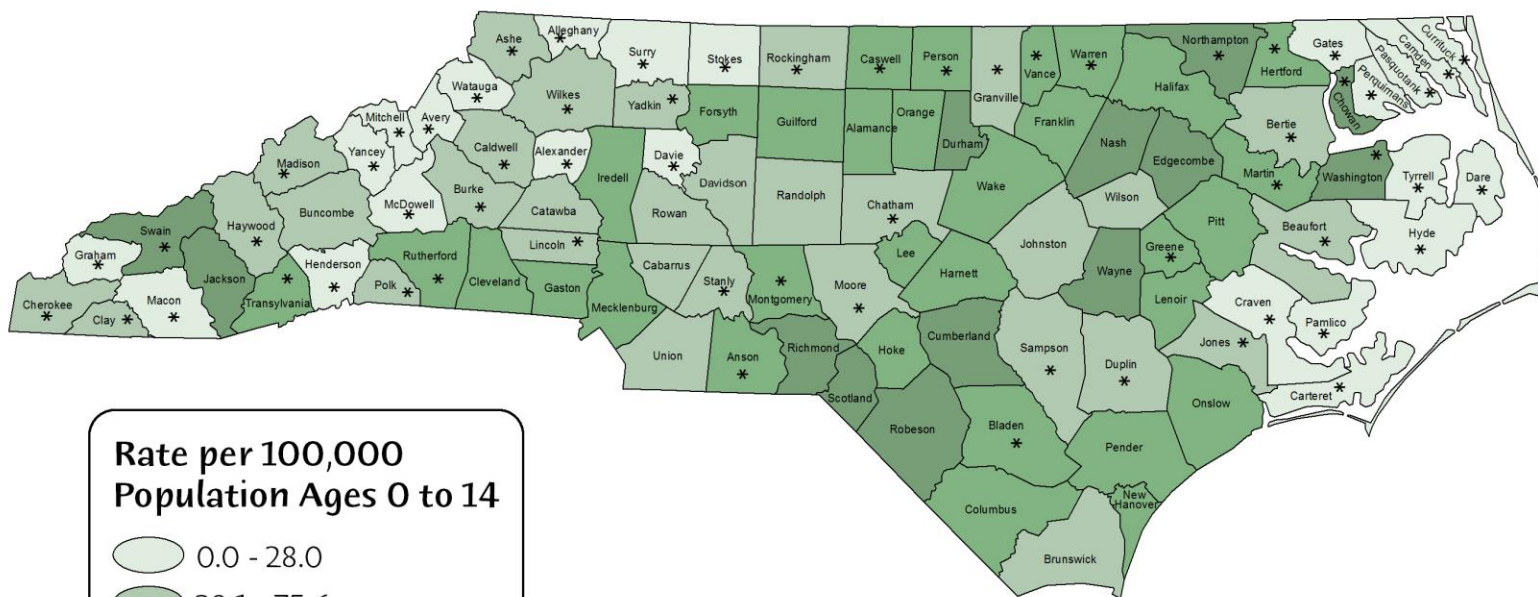
Asthma Hospitalizations

2016 NC Resident Inpatient Hospitalizations for Asthma*

Total Hospital Discharges	4,956
Discharge Rate per 100,000 Population	48.8
Average Length of Stay (in days)	2.8
Total Charges	\$77,464,678
Average Charge per Day	\$5,575
Average Charge per Hospitalization	\$15,630

* Asthma as a Primary Diagnosis

North Carolina 2016 Hospital Discharge Rates with the Primary Diagnosis of Asthma for Ages 0 to 14, by County



Source: North Carolina Hospital Discharge Data
Data includes only North Carolina resident data,
served in North Carolina hospitals. It is provisional
data and is subject to change.

*Rates based on small numbers (fewer than 10 cases)
are unstable and should be interpreted with caution.

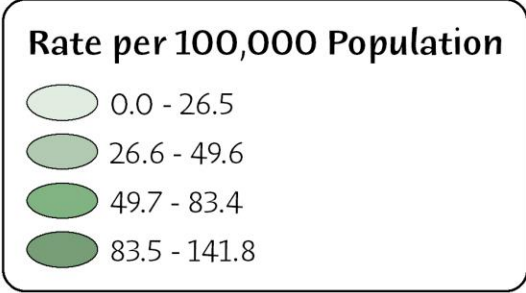
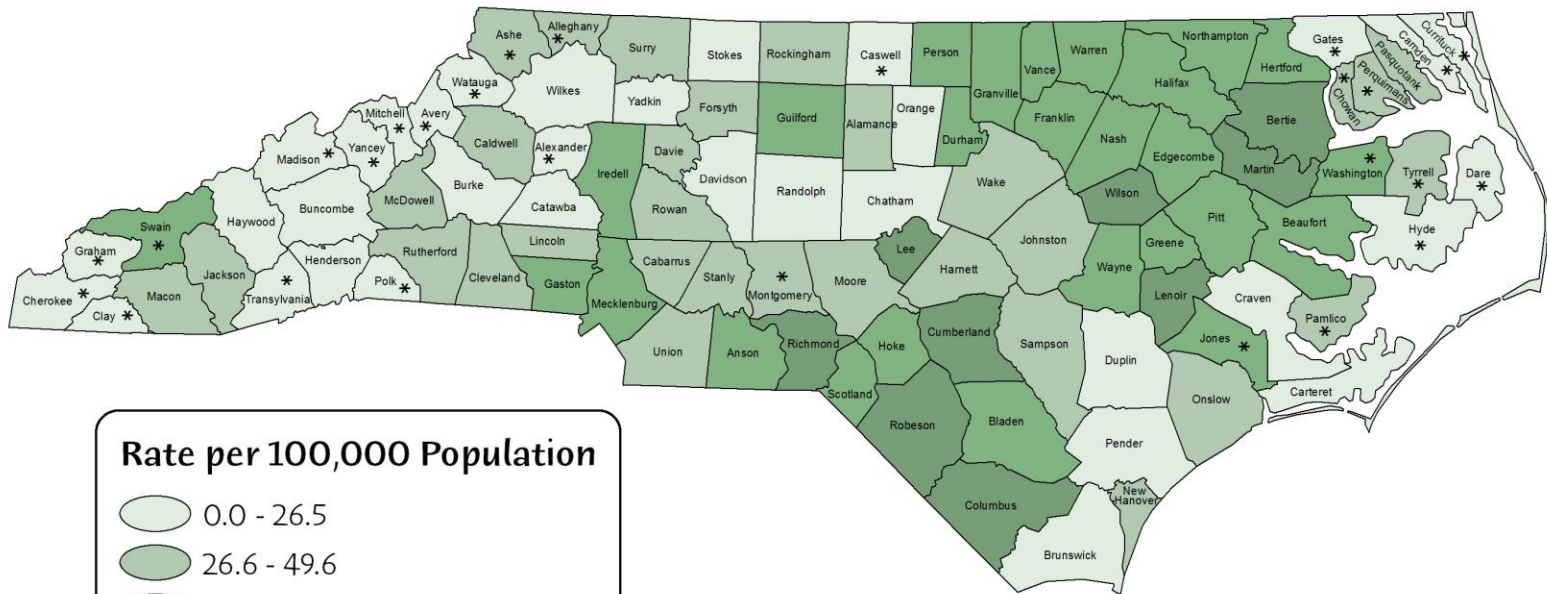


2017 NC Resident Inpatient Hospitalizations for Asthma*

Total Hospital Discharges	4,954
Discharge Rate per 100,000 Population	48.2
Average Length of Stay (in days)	2.8
Total Charges	\$85,777,254
Average Charge per Day	\$6,116
Average Charge per Hospitalization	\$17,315

* Asthma as a Primary Diagnosis

North Carolina 2017 Hospital Discharge Rates with the Primary Diagnosis of Asthma, by County

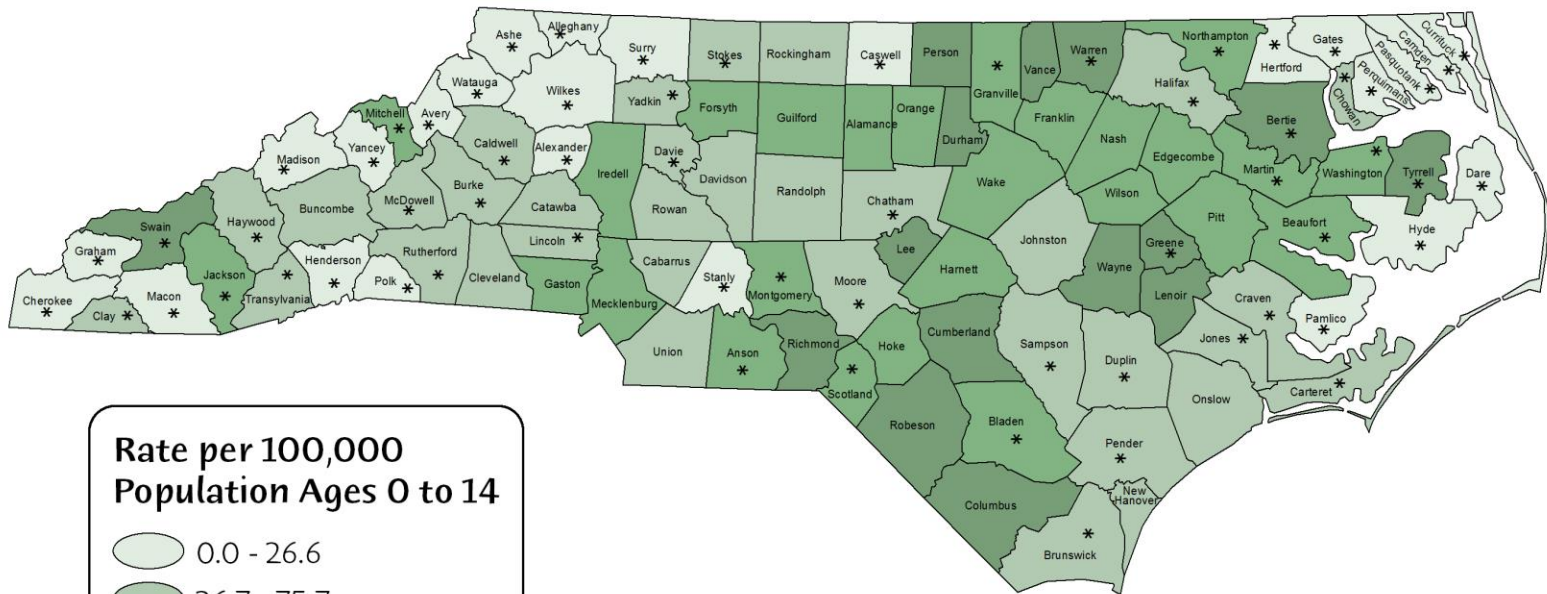


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are unstable and should be interpreted with caution.





Asthma Mortality

2016 NC Resident Deaths Due to Asthma*

Total Asthma Deaths	94
Crude (unadjusted) Mortality Rate	9.3
Age-adjusted Mortality Rate	8.9

* Asthma as a Primary Cause of Death

2017 NC Resident Deaths Due to Asthma*

Total Asthma Deaths	102
Crude (unadjusted) Mortality Rate	9.9
Age-adjusted Mortality Rate	9.6

* Asthma as a Primary Cause of Death



Emergency Department Visits for Asthma

NC Emergency Visits for Asthma (as a Primary Diagnosis) by Age Group, 2016

Age Group	Total Discharges	Crude Rate per 10,000 population
Ages 0-4	5,159	85.1
Ages 5-64	42,208	52.9
Ages 65+	2,357	15.0
Total	49,724	49.0

Source: State Center for Health Statistics Emergency Department Data

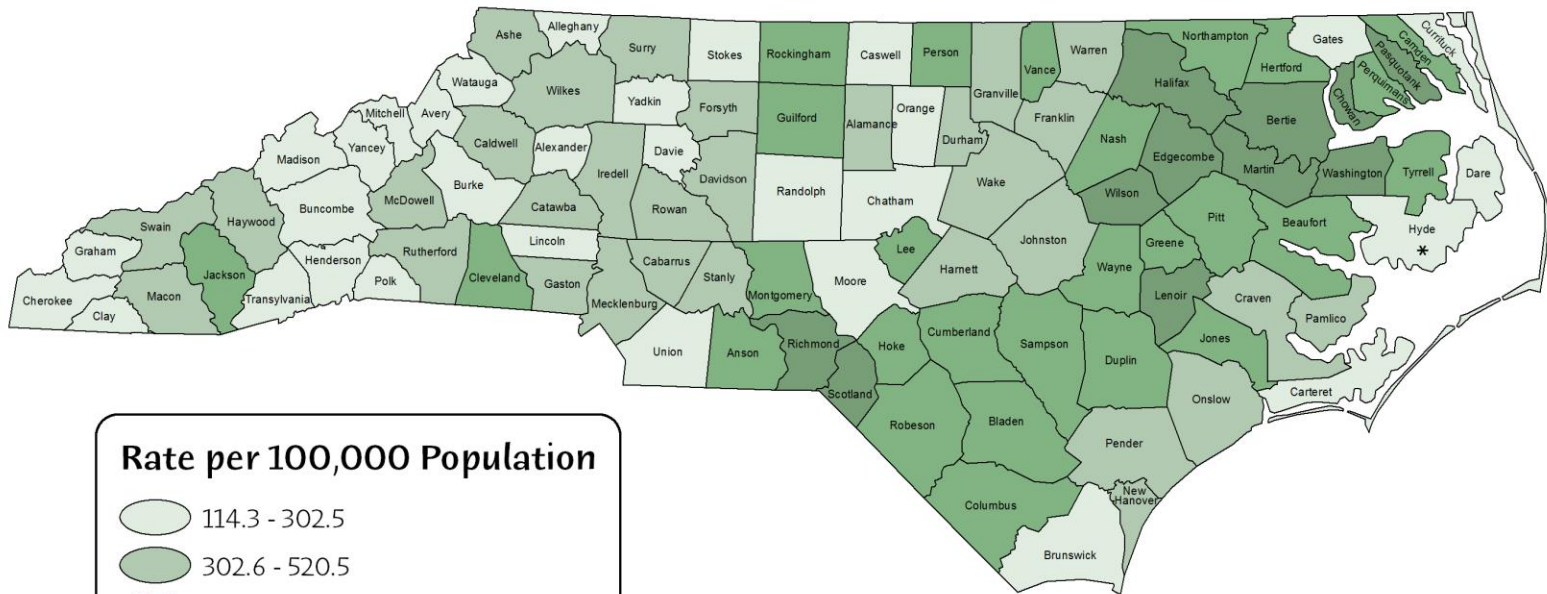
NC Emergency Visits for Asthma (as a Primary Diagnosis) by Age Group, 2017

Age Group	Total Discharges	Crude Rate per 10,000 population
Ages 0-4	4,629	75.9
Ages 5-64	40,267	50.1
Ages 65+	2,503	15.4
Total	47,399	46.1

Source: State Center for Health Statistics Emergency Department Data

North Carolina

2017 Emergency Department Visits with the Primary Diagnosis of Asthma, by County



Rate per 100,000 Population

- 114.3 - 302.5
- 302.6 - 520.5
- 520.6 - 848.2
- 848.3 - 1219.9

Source: North Carolina Hospital Discharge Data
 Data includes only North Carolina resident data, served in North Carolina hospitals. It is provisional data and is subject to change.

*Rates based on small numbers (fewer than 10 cases) are unstable and should be interpreted with caution.





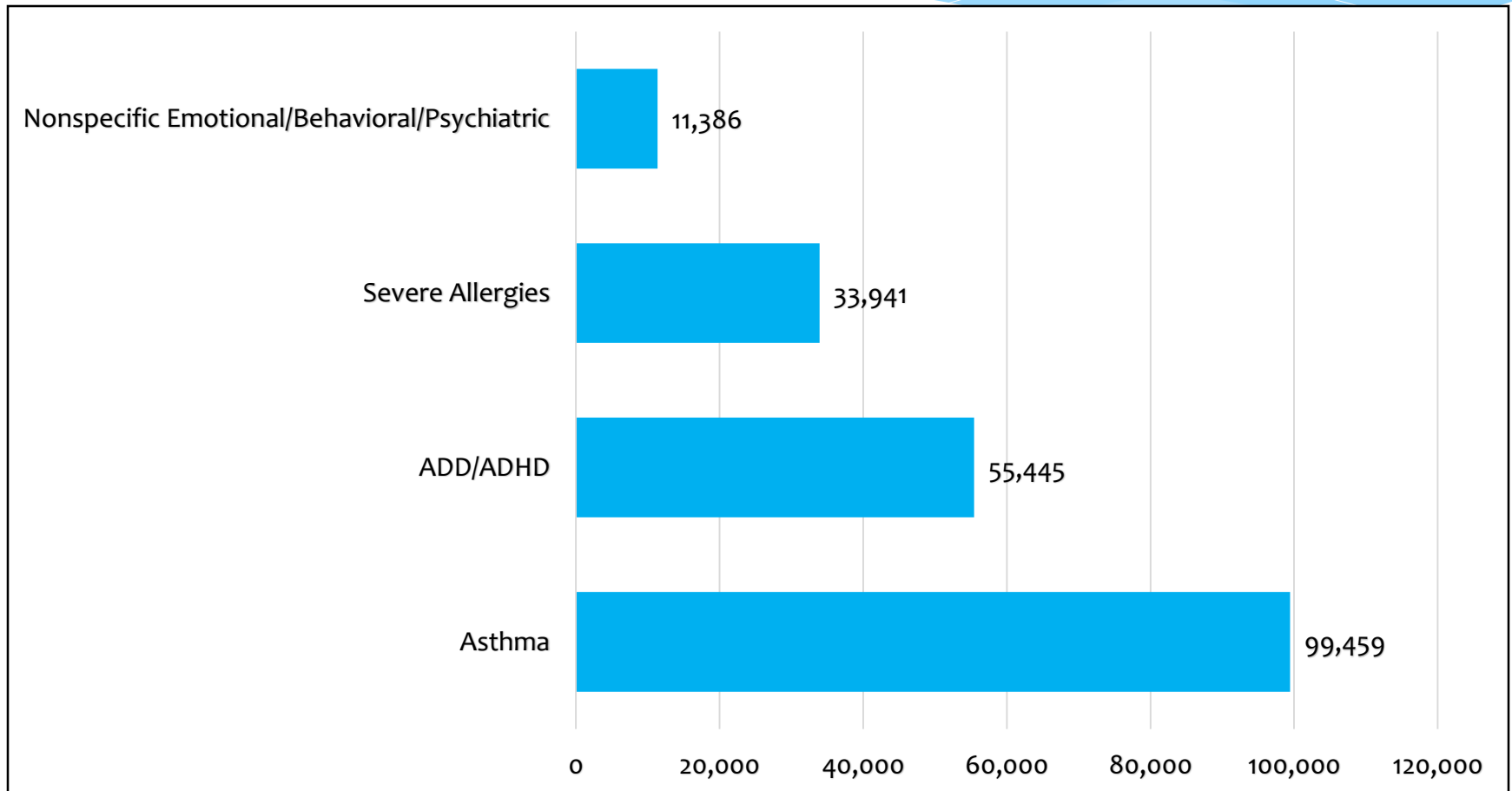
Asthma & NC Children

Prevalence of Asthma Among NC Children, 2016-17

	Ever Asthma	Current Asthma
Total	15.1%	8.2%
Male	18.4%	8.4%
Female	12.0%	8.1%
White	13.0%	5.8%
African American/Black	14.7%	12.2%
Other Minorities	*	13.2%
Hispanic	*	*

* Statistically unreliable estimate.

Most Common Chronic Health Conditions Reported to School Nurses, 2016-17



School Nurse Asthma Case Management

Asthma	Consistently verbalized accurate knowledge of the pathophysiology of their condition	81%
	Consistently demonstrated correct use of asthma inhaler and/or spacer	85%
	Accurately listed his/her asthma triggers	84%
	Remained within peak flow/pulse oximeter plan goals	73%
	Improved amount and/or quality of regular physical activity	80%
	Improved grades	67%
	Decreased number of absences	28%

Source: 2015-2016 NC Annual School Health Services Report

Contact Information

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- * www.schs.state.nc.us

CPSTF Recommendation:



The [Community Preventive Services Task Force \(CPSTF\)](#) recommends the use of home-based multi-trigger, multicomponent interventions with an environmental focus for children and adolescents with asthma based on strong evidence of effectiveness in improving overall quality of life and productivity, specifically:

- * Improving asthma symptoms
- * Reducing the number of school days missed due to asthma

EVIDENCE SUMMARY

Control Asthma



Evidence-based Interventions: Payers

- * Use the 2007 [National Asthma Education and Prevention Program \(NAEPP Guidelines\)](#) as part of evidence-based clinical practice and medical management guidelines.
- * Promote strategies that improve access and adherence to asthma medications and devices.
- * Expand access to intensive self-management education by licensed professionals or qualified lay health workers for patients whose asthma is not well-controlled with the medical management approach outlined in the NAEPP Guidelines.
- * Expand access to home visits by licensed professionals or qualified lay health workers to provide both targeted, intensive self-management education and the reduction of home asthma triggers for patients whose asthma is not well controlled through use of both NAEPP Guidelines' medical management and asthma self-management education.

Community Care of Wake and Johnston Counties Success Story

As part of a comprehensive approach to asthma management, Community Care of Wake and Johnston Counties, in partnership with Wake County Human Services and Wake County Environmental Services, conduct in-home multi-trigger, multi-component interventions for pediatric patients with asthma.

Results

- * Data base tracks costs 1-year pre/and 1-year post intervention for patients receiving in-home environmental assessments– on average, >\$700 decreased cost per patient
- * Overall Network Asthma rates have declined from 2003 to 2012
 - * Asthma ED rate decreased from 40 visits/1000MM to 17 visits/1000MM
 - * Asthma Inpatient rates decreased from 8.3 hospitalizations/1000MM to 1.9 hospitalizations/1000MM



Piloting Asthma & Healthy Homes Assessment Initiatives

**NC Public Health Leaders Conference
January 24, 2019**

Neasha B. Graves, MPA
Community Outreach And Engagement Core
UNC Center For Environmental Health And Susceptibility

Environmental Asthma Home Checklist

Revised by EPA, HUD and CDC

Guidance for home visitors

Assessment of home systems and individual rooms

Low-cost steps for remediation



Common Environmental Asthma Triggers

Home Characteristics and Asthma Triggers

Checklist for Home Visitors

Using this Home Assessment Can Help Make Homes Healthier.

A trained home visitor can help find common asthma triggers in homes and discuss ways to reduce and remove triggers. Removing asthma triggers in the home, along with proper medical care can improve health.

The checklist is organized into a Core Assessment plus two appendices (Dust Mite Module and Mold and Moisture Module). The Core Assessment can be used for all types of housing and climates, but the additional modules can be used if dust mites or mold/moisture issues are suspected by the trained home visitor. The suggested action items in this checklist are generally simple and low cost.



Glossary of Asthma Triggers Commonly Found in Homes

Combustion by-products
Triggers: Particles and gases that are formed when fuel is burned.
Where Found: Gas cooking appliances, fireplaces, woodstoves, candles, incense, cigarettes, and unvented kerosene and gas space heaters.

Dust Mites
Triggers: Body parts and droppings.
Where Found: Mattresses, bedding, carpeting, curtains, upholstered furniture, and stuffed toys. Dust mites are too small to be seen with the naked eye. They can survive in a range of climates, but they prefer high humidity.

Mold
Triggers: Mold spores, fragments, and odors.
Where Found: Indoor mold growth is often found in areas with more moisture such as kitchens, bathrooms, and basements, or areas where water damage has occurred. There are many types of mold and they can be found in any climate.

Pests
Triggers: Cockroaches—Body parts and droppings. Rodents—Fur, skin flakes, and urine.
Where Found: Areas with food and water such as kitchens, bathrooms, and basements.

Pets with fur
Triggers: Fur, skin flakes, and saliva.
Where Found: Throughout entire home.

Secondhand Smoke
Triggers: Mix of smoke from the burning end of a cigarette, pipe, or cigar and the smoke exhaled by a smoker.
Where Found: Anywhere that smoking is allowed.

Volatile organic compounds (VOCs)
Triggers: Chemical vapors that come from household items.
Where Found: Products such as cleaning agents, deodorizers, air fresheners, perfumes, paints, nail polish, and nail polish remover.



Heating/Cooling systems

Gas appliances

Smoking/E-cigarettes

Animal dander

Pests and pesticides

Moisture and mold

Volatile organic compounds (VOCs)

Examining home systems



CORE ASSESSMENT

Building Information

Checklist Questions

Are your living quarters in a:

- One-unit building, detached from any other building?
- One-unit building, attached to one or more buildings?
- Building with two or more apartments?
- Manufactured/Mobile Home?

Is your home:

- Owned?
- Rented?
- Occupied without payment of rent?

Potential Action Steps

- If you live in a rental home, you might need to ask permission to make any changes, even minor repairs to the home. Renters often are protected under tenant's rights laws. Contact local social services agencies if you need their help.

How many stories are there in your home including attics and basements?

No. of Stories: _____

Home Interior

HEATING and COOLING

Checklist Questions

During the winter, what is the primary way your home is heated?

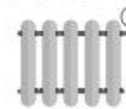
- Radiators
- Baseboard heater
- Forced hot air (vents)
- Space heater
- Fireplace/wood-burning stove
- Other: _____
- N/A

In addition to the main source of heat, do you use any other source(s)?

- Radiators
- Baseboard heater
- Forced hot air (vents)
- Space heater
- Fireplace/wood-burning stove
- Other: _____
- N/A

Potential Action Steps

- Properly ventilate the room where a fuel-burning appliance is used and consider using appliances that vent to the outside whenever possible.
- Never use a gas-cooking appliance as a heating source.
- If using a fireplace, make sure it is properly vented to help ensure smoke escapes through the chimney.
- If using a wood-burning stove, make sure that doors are tight-fitting. Use aged or cured wood only and follow the manufacturer's instructions for starting, stoking, and putting out the fire.
- If using an unvented kerosene or gas space heater, follow the manufacturer's instructions for proper fuel to use and keep the heater properly adjusted.



Radiator



Space Heater



Baseboard Heater

MOLD AND MOISTURE MODULE

Answers in a **red checkbox** (first column) are associated with moisture and potentially mold. A **yellow checkbox** (second column) indicates medium potential for concern, and a **green checkbox** (third column) indicates low potential for concern.

The more checkmarks you have in **red checkboxes**, the more likely it is that you have moisture and mold in your home. You can take actions shown at the end of this list.

Building

Is there a crawlspace under the building? Yes No Don't know

Are any of the bedrooms in the basement? Yes No

NOTE: Many crawl spaces and basements are damp and may have mold that can enter the home.

Heating, Ventilation and Cooling

In the bathroom where you shower or bathe, does the exhaust fan work? No Don't know Yes
 N/A

If YES, how frequently do you use it when showering or bathing? Never Sometimes All the time N/A

Does your kitchen vent exhaust outdoors? No Don't know Yes
 N/A

Does your clothes dryer exhaust outdoors? No Don't know Yes N/A

NOTE: Properly maintained exhaust fans that vent to the outdoors can reduce humidity levels. If there are no exhaust fans or the exhaust fans do not work or do not vent outside, high humidity can develop in the home and can lead to mold growth.

Carpet

Do you have wall-to-wall carpeting in your kitchen or bathrooms? Yes No

What kind of floor covering is in the bedroom? Wall-to-wall carpeting Some carpeting All smooth floor

NOTE: Carpeting in areas that are prone to water spills can be hard to dry. Damp carpeting can lead to mold growth and create a place where dust mites can thrive.

Dampness

In the last 12 months, have you noticed condensation on windows in your home? Yes No

NOTE: Condensation (water droplets) on windows is a sign that moisture you may not see is forming on other surfaces. Even though you can't see this moisture, it can lead to mold growth.

Have any of your furnishings, clothes, possessions been in a building that had water damage? Yes Don't know No

NOTE: Anything that was water-damaged could have mold. Bringing those items into a new home could lead to more mold in the new home.

Hazards in individual rooms

Kitchen

Bathroom

Bedroom

Conducting an assessment

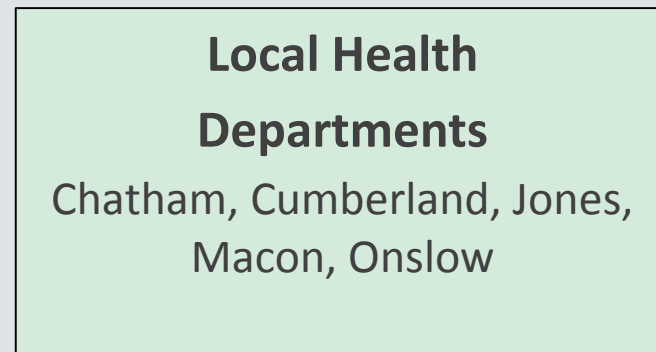
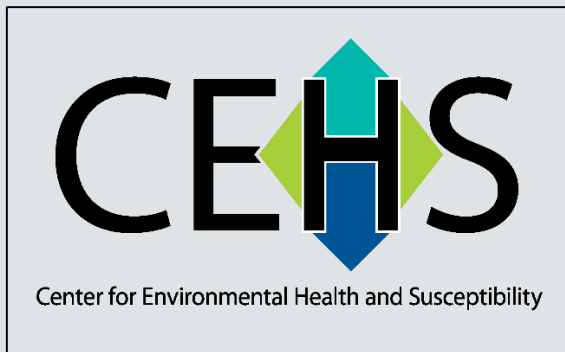
Identify the environmental health hazard

Observe/Ask questions

Recommend corrective action steps

Core Assessment <i>(continued)</i>	
SMOKING	
Checklist Questions	Potential Action Steps
<p>In the last 12 months, how often has secondhand tobacco smoke entered inside your home from somewhere else in or around the building?</p> <p><input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> A few times a year <input type="checkbox"/> Never</p>	<ul style="list-style-type: none">• Work with the building owner/manager and other occupants to start a smoke-free policy throughout the building.• Use a portable air cleaner that is rated to remove tobacco smoke.
PETS	
Checklist Questions	Potential Action Steps
<p>Do you have any pets in your home?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, please check all that apply:</p> <p><input type="checkbox"/> Cat(s) <input type="checkbox"/> Dog(s) <input type="checkbox"/> Bird(s) <input type="checkbox"/> Other furry pets (e.g., rabbits, guinea pigs, hamsters, mice) <input type="checkbox"/> Other non-furry pets</p>	<p>Talk to your healthcare provider to see if testing for allergy to your pets might be helpful for you.</p> <ul style="list-style-type: none">• If you are allergic to pets, the best way to decrease asthma symptoms is to remove the pet from the home and thoroughly clean all surfaces in the home.• If you are allergic, and cannot remove the pet from your home, you can decrease exposure, but it might not be enough to decrease symptoms. The best way to decrease symptoms is to do all of these things:<ul style="list-style-type: none">» Keep pets out of your bedroom,» Wash your furry pets,» Use an air cleaner with HEPA filter,» Use allergen-proof mattress & pillow covers.
PESTS	
Checklist Questions	Potential Action Steps
<p>In the last 12 months, have you seen cockroaches inside your home?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know</p>	<p>Use integrated pest management (IPM) described below. For those with asthma, especially avoid the use of sprays and foggers.</p> <p>IPM concepts include:</p> <ul style="list-style-type: none">• Keep counters, sinks, tables, and floors clean and free of clutter.• Clean dishes, crumbs, and spills right away.• Store food in airtight containers. This also applies to pet food.• Seal cracks or openings in cabinets, walls, baseboards, and around plumbing.• Keep trash in a closed container.• Use pesticide baits and traps in areas away from children and pets. Follow manufacturer's instructions for correct use.

Forging a partnership to establish local home assessment initiatives



Preparing public health professionals to engage with asthma patients



5-hour EH training

- Asthma as a chronic lung disease*
- Peer-reviewed research on asthma triggers*
- Communication skills*

33 PH professionals from 7 counties

85% increased pre/post training scores

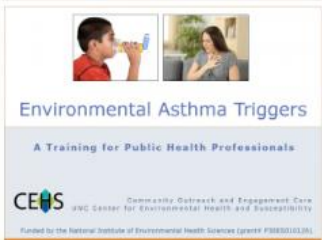
94% felt more prepared to share information with patients

Intervention tools provided on-site



Providing resources and technical assistance

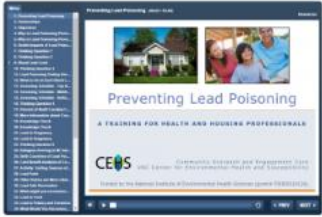
- Resources website for participating counties
- Webinars on relevant subject matter



Environmental Asthma Triggers
A Training for Public Health Professionals

CEHS Community Outreach and Engagement Core
UNC Center for Environmental Health and Resiliability
Funded by the National Institute of Environmental Health Sciences (grants P30ES013101)

***NEW* Environmental Asthma Triggers Online Module**
Learn about environmental exposures that worsen asthma and some evidence-based strategies to reduce those exposures.



Preventing Lead Poisoning
A Training for Health and Housing Professionals

CEHS Community Outreach and Engagement Core
UNC Center for Environmental Health and Resiliability
Funded by the National Institute of Environmental Health Sciences (grants P30ES013101)

Preventing Lead Poisoning Online Module
Learn about the main causes of lead exposure and poisoning, testing recommendations for children, and prevention methods.



UNC INSTITUTE FOR THE ENVIRONMENT

Home: Environmental Resource Program / NC Disaster Response and Recovery

OUTREACH

- About ERP
- Focus Areas
- Get Involved
- Resources
- ERP News
- NC Disaster Response and Recovery

NC Disaster Response and Recovery

In recent years, hurricanes and tropical storms have devastated parts of North Carolina. The UNC Center for Environmental Health and Susceptibility has compiled a list of environmental health resources as part of the UNC community's effort to provide relief and recovery to impacted communities.

This compilation of resources is funded in part by NIEHS grant # P30 ES013101 and NC DEHS contract # 37746.

Environmental Health Resources


- Moisture and Mold Cleanup
- Safe Drinking Water and Food
- Mosquito and Insect Control
- Air Quality Hazards
- Child Care Needs
- Additional Env Health Resources

- Time sensitive EH resources (e.g., disaster response)
- Educational materials for varying literacy levels

Implementing local assessment initiatives

- Development of recruitment and referral materials
- Referrals from providers
- 30-90 day follow-up assessments

Breathing Should Be Easy!
 Asthma Coalition of Eastern Carolina
 Jones County Health Department 252 448-9111



Asthma Management Referral

Patient		Physician's Office Chart Number	
Parent or Guardian		Email	
Street Address			
City, State, Zip			
Telephone Number		Home	Day
Best Time to Contact:			
DOB:	Gender:	Insurance:	Race:
	<input type="checkbox"/> Male <input type="checkbox"/> Female	<input type="checkbox"/> Private <input type="checkbox"/> Medicaid <input type="checkbox"/> Health Choice <input type="checkbox"/> None	<input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Other <input type="checkbox"/> Hispanic <input type="checkbox"/> Asian <input type="checkbox"/> Multi
Age:			
<p>I give permission for my child to participate in the Asthma Coalition Program and to allow medical information concerning my child's asthma to be shared with the Asthma Coalition of Eastern Carolina. I understand that a representative from the Jones County Health Department may contact me to conduct an environmental assessment of my home.</p>			
Patient / Guardian Signature		✘	
Health Care Provider			

Asthma Home Assessment Pilot Project - CHECKLIST AND FOLLOW-UP

Three Month Follow-Up Questionnaire (occurs within 60 to 90 days)

1. What actions have you taken as a result of the Asthma Home Assessment?
2. Do you feel that your knowledge about maintaining a healthy home has increased? Yes No DK
3. Have there been any barriers/challenges to implementing any of the actions? Yes; if yes, why: Cost
No Time
DK Where to go for info
Other: _____
4. Do you feel that your child's health has improved? Yes No DK
 - a. How has your child's health improved?
5. Do you feel your child's asthma is more controlled at home as a result of the assessment? Yes No DK N/A
6. Has your child visited the emergency room or been hospitalized since the initial assessment due to asthma? Yes No N/A
7. What referral agencies did you take advantage of? (Review recommended referrals and check all that apply):

<input type="checkbox"/> Health Care Provider (asthma or allergy testing)	<input type="checkbox"/> NC Division of Public Health, Communicable Diseases Branch (to address pests)
<input type="checkbox"/> Local Health Department (assessment agency)	<input type="checkbox"/> Landlord and/or Local Housing Code Enforcement * (for renters)
<input type="checkbox"/> Asthma Alliance of North Carolina	<input type="checkbox"/> NC Healthy Homes
<input type="checkbox"/> QuilLine NC	<input type="checkbox"/> UNC Center for Environmental Health and Susceptibility
<input type="checkbox"/> Local Cooperative Extension Program	<input type="checkbox"/> Other resources:

Additional notes:

Lessons learned

- Long-term persistence
- Natural events that affect implementation (e.g. hurricanes)
- Creative recruitment

NC Healthy Homes Outreach Task Force: Support to improve homes and public health

Funded in part by
NIEHS grant #P30ES010126 and
NC DHHS contract #37748



Additional Resources

- Join the Task Force
- News You Can Use
- Request a Free Training
- NC Disaster Response and Recovery

RECENT POSTS

- Partner Spotlight | Alamance County
- Cities of Durham and Greenville Awarded HUD Grants for Healthy Housing

NC Healthy Homes

Welcome to the North Carolina Healthy Homes website! This site provides general information to the public on healthy homes issues and is designed to provide health, housing, and community organization professionals access to resources for their work in educating North Carolina residents about maintaining a healthy home and in improving health outcomes.



PARTNER SPOTLIGHT

Alamance County



Kenneth Greene and Elizabeth Ellmore are Registered Environmental Health Specialists with the Alamance County Health Department. Kenneth earned his Bachelor of Science degrees in geography and environmental health and his Master of Science degree in occupational health and safety from East Carolina University. He has been working in the

- Coordinated by NC DHHS & UNC IE
- Membership of state and local health and housing agencies
- Exchange ideas, address challenges
- Engage with subject matter experts
- Forge collaborations
- Develop educational materials

<http://nchealthyhomes.com>

Contact information

Neasha Graves, MPA

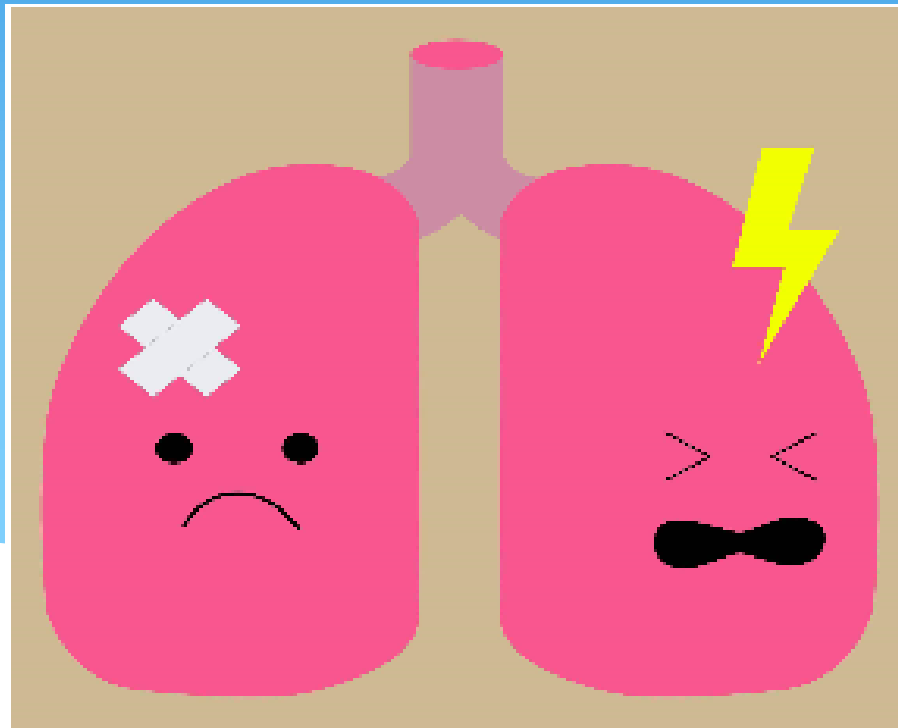
neasha_graves@unc.edu

(919)966-3746

**To join the NC Healthy Homes Outreach Task Force listserv
contact Megan Rodgers at merodgers@unc.edu**



Chatham County Asthma Intervention Program



Asthma Intervention Team



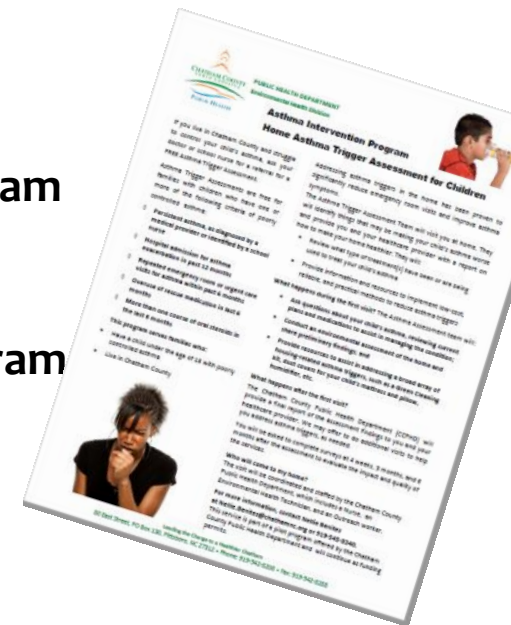
Nellie Benitez- Community Outreach Worker

Elizabeth Fridley- Public Health Nurse

Roxana Sandria – Environmental Health Technician

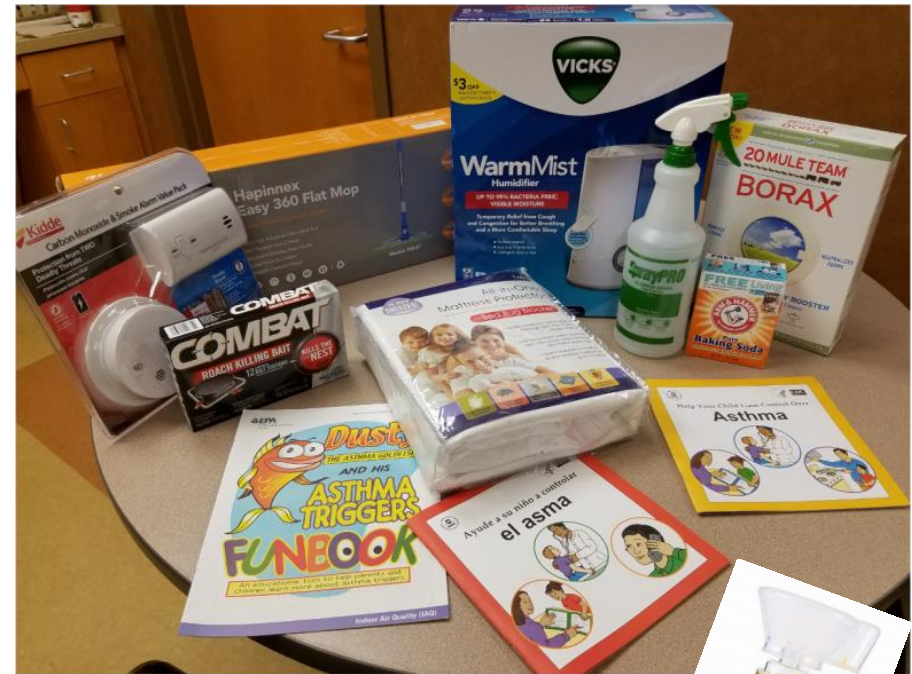
Starting an Asthma Program

- July 2017–CCPHD invited to participate in EPA grant funded Asthma Intervention program
- Attended Health Homes Training provided by UNC Center for Environmental Health and Susceptibility
- Developed Asthma Intervention Program Policy
- Developed Referral sources with local medical providers, Chatham County schools, and UNC Hospital
- Developed informational flier about Asthma Intervention Program
- Purchased outreach items for asthma program



Outreach Items

- Allergen pillow cases and mattress covers
- Green Cleaning Supplies
- Roach Baits
- Spacers
- CO detectors
- Dehumidifier



Chatham County Year 1 Results

- * Received **7** referrals for children with poorly controlled asthma
- * Conducted **3** Asthma Trigger Assessments
 - * Identified asthma triggers – mold, carpeting, pets, air fresheners
- * Completed initial follow up visits for **3** children –
 - * Parents report improved asthma control for children
 - * Additional follow up visits to take place in the months to come
- * Refusal from **4** parents/guardians due to
 - * smoking in home,
 - * moving from home,
 - * new born baby

Chatham County Asthma Program Next Steps

- * Advertise Asthma Program on Facebook
- * Continue medical provider office visits to talk about asthma program
- * Partner with school nurses to host Asthma Event in school
- * Develop program that removes barriers to conducting a home visit –



Questions & Comments

Ideas

