

2013

WAKE COUNTY COMMUNITY HEALTH NEEDS ASSESSMENT



Challenges and Opportunities

Wake County, North Carolina



2013 WAKE COUNTY COMMUNITY HEALTH NEEDS ASSESSMENT “CHALLENGES AND OPPORTUNITIES”

This report is available at the Wake County Government website at:
www.wakegov.com/humanservices/data

June 2013

Dear Wake County Citizens,

In March 2013, Wake County was ranked as the healthiest county in North Carolina for the fourth consecutive year. This is due to the work and partnership of public health, the community, government, hospital partners and most importantly our Wake County citizens. This accomplishment underscores the importance of our Community Health Assessment, because it helps us identify and address factors that affect the health of our community. As our County continues to evolve and grow we must make sure that we take the necessary steps to ensure that the needs of all our citizens are being addressed. We realize that when it comes to public health, the community itself is the patient and the health of the community must be assessed by focusing on key areas such as behavioral and social health, the economy, education, environmental health, physical health and safety.

Every three - four years, Wake County conducts a comprehensive community examination through a process known as the Community Health Needs Assessment (CHNA). This year, the assessment process was a collaborative effort between WakeMed Health and Hospitals, Duke Raleigh Hospital, Rex UNC Health care, Wake County Human Services, Wake Health Services, United Way of the Greater Triangle, Wake County Medical Society Community Health Foundation and Urban Ministries. Additionally, guidance was provided through a Steering Committee of more than 60 non-profit, government, faith-based, education, media, and business organizations. The many hours volunteered by the Steering Committee and the input provided by Wake County residents has been invaluable to this process.

Working with the UNC Gillings School of Global Public Health, the assessment included collecting information from citizen opinion surveys, focus groups, and statistical data to identify community health needs and resources. We hope the findings of this CHNA will be used to develop strategies that address our community's priorities and promote the health of residents across Wake County.

We know that with all of us working together, we can create a healthier, safer community while having a better idea of where we need to focus our resources over the next few years.

Warm Regards,



Susan Q. Davis

Susan Davis
Executive Director,
Wake County Medical Society-Community Health Foundation



Joe Bryan

Joe Bryan
Chairman,
Wake County Board of Commissioners

Co-Chairs of the Wake County CHNA Steering Committee

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ACKNOWLEDGEMENTS

We would like to thank all of the community members who agreed to participate in the community health needs assessment process and help prioritize issues that are most important to us.

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EXECUTIVE SUMMARY



Health is affected by where and how we live, work, play, and learn. To improve the health of our community, it is important that we understand how different factors can influence our health. Part of a larger health planning process is to identify the health status, disparities, gaps and unmet needs of the community in balance with community resources, strengths and perceptions. Understanding the factors that affect our health in a larger context helps us develop action plans to address those needs. To accomplish this planning process, Wake County Human Services in collaboration with WakeMed Health and Hospitals, Duke Raleigh Hospital, Rex Healthcare, Wake Health Services, and the United Way of the Greater Triangle are leading a comprehensive community health planning effort to measurably improve the health of Wake County, NC residents.

From January-June 2013, over 60 agency and community partners in Wake County came together to conduct the collaborative Community Health Needs Assessment. Based on the assessment findings and a community priority-setting process, the priority areas that will be addressed in community health improvement planning over the next 3 years are:

- Poverty and unemployment
- Health care access and utilization
- Mental health and substance use

What is a Community Health Needs Assessment (CHNA)?

Community Health Needs Assessment is the foundation for improving and promoting the health of community members. The role of a CHNA is to identify factors that affect the health of a population and determine the availability of resources within the community to adequately address these factors. It is a "systematic collection, assembly, analysis, and dissemination of information about the health of the community".

Who Participates in Community Health Needs Assessments?

Through collaborative efforts forged among community leaders, public health agencies, businesses, hospitals, private practitioners, and academic centers, an assessment team works to identify, collect, analyze, and disseminate information on community assets, strengths, resources, and needs. A CHNA usually culminates in a report or a presentation that includes information about the health of the community as it is today and about the community's capacity to improve the lives of residents. By providing the basis for discussion and action, a CHNA is the foundation for improving and promoting the health of community members.

There are 8 phases in the CHNA process:

- | | |
|---|--|
| 1. Establish a community health assessment team | 5. Determine health priorities |
| 2. Collect primary data | 6. Create the CHNA document |
| 3. Collect secondary data | 7. Disseminate CHNA document |
| 4. Analyze and interpret county data | 8. Develop community health action plans |

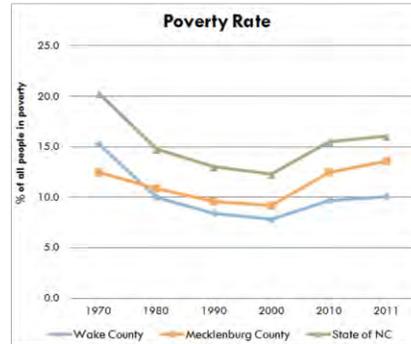
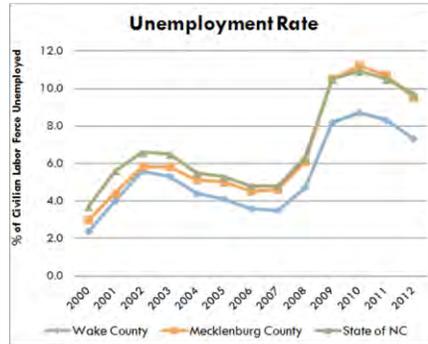
For more information about the Community Health Needs Assessment process, visit:
<http://publichealth.nc.gov/lhd/cha/>

To view the 2013 Wake County Community Health Needs Assessment report, visit:
www.wakegov.com/humanservices/data/

Priority #1: Poverty and Unemployment

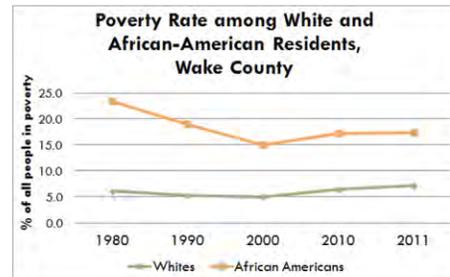
- People in poverty are more likely to engage in risky health behaviors, and are also less likely to have affordable housing
- Racial and ethnic minorities are more likely to live in poverty than Non-Hispanic whites

Source: NC Institute of Medicine. Healthy North Carolina 2020: A Better State of Health. Morrisville, NC: NC Institute of Medicine; 2011.



Log Into North Carolina (LINC) Database, Topic Group Unemployment and Income

- In 2012, there were 4,547 reported lay-offs in Wake County (NC Employment Security Commission, Labor Market Information, Workforce Information, Employed, Unemployed and Unemployment Rates, Labor Force Statistics)
- The poverty rate in Wake County is 37% lower than the rate in North Carolina (Log Into North Carolina (LINC) Database, Topic Group Employment and Income)
- The percent of African-American residents who live in poverty is 2.4 times higher than their white peers (Log Into North Carolina (LINC) Database, Topic Group Employment and Income)
- Unemployment rated #1 community concern in Wake County and poverty rated #4 (2013 Wake County Community Health Opinion Survey)



Log Into North Carolina (LINC) Database, Topic Group Unemployment and Income

"It's hard for them [felons] to get a job. There's jobs out here but they can't get it because they have a criminal record. And I don't think that's fair."

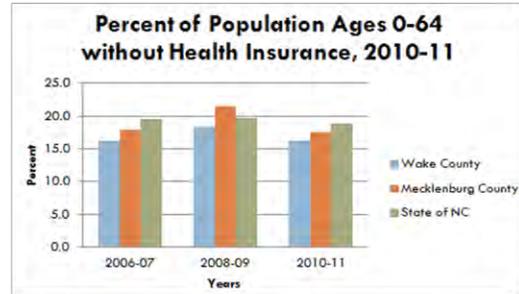
- Community member

"There's a lot of teenagers who want a job but they can't get one because adults, and it's not their fault, got laid off at their job. We're not getting opportunities for jobs, it's just in the way its set up."

- Community member

Priority #2: Health Care Access and Utilization

- Health insurance coverage helps patients get into the health care system
- Uninsured people are:
 - Less likely to receive medical care
 - More likely to die early
 - More likely to have poor health status
- Access to comprehensive, quality health care services is important for:
 - The achievement of health equity
 - Increasing the quality of a healthy life for everyone



North Carolina Institute of Medicine, NC Health Data, Uninsured Snapshots

Source: U.S. Department of Health and Human Services. Healthy People 2020.

Active Health Professionals per 10,000 Population in 2011 (Cecil G. Sheps Center for Health Services Research)					
	Medical Doctors	Primary Care Medical Doctors	Dentists	Registered Nurses	Pharmacists
Wake County	23.85	8.72	6.96	105.04	12.14
Mecklenburg County	27.71	9.46	6.3	116.12	10.67
State of NC	22.07	7.78	4.35	98.60	9.61

- For every 1,000 hospital stays in Wake County, 50 are considered preventable (Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees, 2010, Dartmouth Atlas of Health Care)
- 6% of residents in Wake County reported that they use the Emergency Room as a place they most often go to when sick (2013 Wake County Community Health Opinion Survey)
- 70% of Wake County residents reported that they got a routine health check up in the past year (2013 Wake County Community Health Opinion Survey)

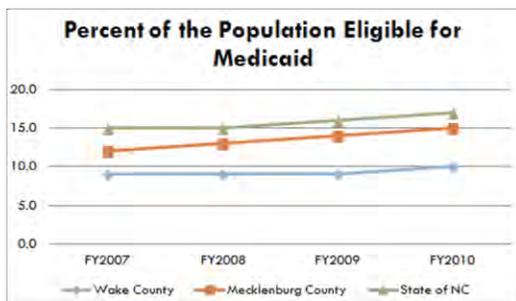
"I think we have wonderful resources and opportunities for those who can afford them. I don't think all of us are able to have access to them though."
- Community member

"I've had a lot of recent experience with it and continue to, and that is that a lot of the health care delivery is in silos, it's not linked. What happens is that you get one provider who knows one piece of you, another provider knows another piece, and never do they communicate."

- Community member

"If people can't get basic health care which is a crime really and they always fall back on 'yeah but they can always go to the emergency room' and that's not the answer. We need to take care of our people – even the people who don't have money."

- Community member

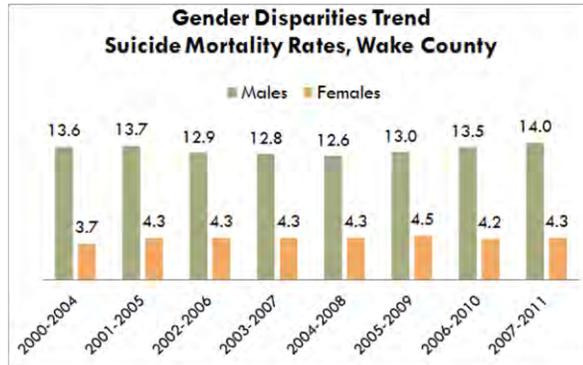
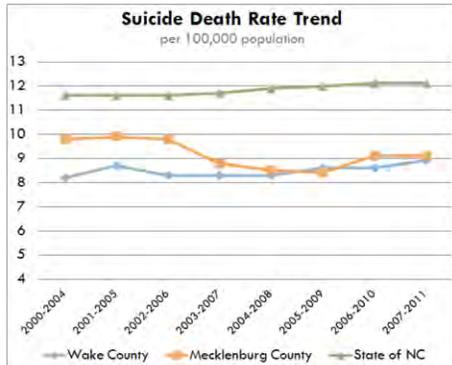


NC Division of Medical Assistance, Statistics and Reports, Medicaid Data, County-Specific Snapshots for NC Medicaid Services, 2006-2010

Priority #3: Mental Health and Substance Abuse

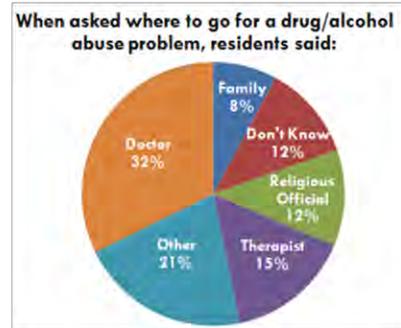
- Individuals with poor mental health may have difficulties with interpersonal relationships, productivity in school or the workplace, and overall sense of well-being
- Substance use and abuse are major contributors to death and disability in North Carolina

Source: NC Institute of Medicine. Healthy North Carolina 2020: A Better State of Health. Morrisville, NC: NC Institute of Medicine; 2011.



NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2011 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County

- 17% of Wake County adults reported being diagnosed with depression at some point in their lives (2013 Wake County Community Health Opinion Survey)
- 15% of Wake County residents binge drink (*males having five or more drinks on one occasion OR females having four or more drinks on one occasion*) (County Health Rankings and Roadmaps, 2013)
- The number of Wake County residents being served in state drug and alcohol treatment centers has increased, from 30 in 2005 to 140 in 2010 (Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health)
- Drug and alcohol abuse rated #4 community concern (2013 Wake County Community Health Opinion Survey)



2013 Wake County Community Health Opinion Survey

"Mental health care is not covered on most insurance plans. And so, I feel like it's very difficult for people to access mental health care resources."

- Community member

"Now, right now, North Carolina's facing a huge influx of veterans coming home with PTSD and brain injury who are likely to get into substance abuse issues, to get into behavioral issues, and so forth, and their families are going to be victims of all of that. And so those kids of those families are also going to need supports. So we have to have a system that's capable not only of serving the needs and providing support to now, but also monitoring and anticipating what's going to be needed down the road. You can't just stop at one point; you've got to be looking."

- Community member

What's Next?

Community priority setting represents marks the beginning of the community health improvement process. An important use of the community priorities and assessment findings is to develop effective community health improvement strategies. The next step in this process is to develop plans of action and improvement for addressing the community priorities. Within their organizations, CHNA partners will be developing measurable objectives to address these priorities, using evidence-based strategies to address the priorities, and planning realistic evaluation methods.

Get Involved!

1. Pick an area or issue that interests you and let us know that you want to help. You may want to volunteer your time and expertise to help determine an improvement plan or plan of action, link us to other communities and organizations that are interested in the issue, or help us find the resources to address the issue.
2. Tell your family, neighbors, co-workers, faith groups, community organizations, and business associates about the Community Health Needs Assessment. Encourage them to read the information and get involved.
3. Stay involved and informed. Check the wakegov.com website for updates on progress of the Community Health Needs Assessment action planning process.

Call (919) 431-4034 or (919) 250-4643 for more information.



CHAPTER 1: INTRODUCTION



CHAPTER 1 | INTRODUCTION

Health is affected by where and how we live, work, play, and learn. To improve the health of our community, it is important that we understand how different factors can influence our health. Part of a larger health planning process is to identify the health status, disparities, gaps and unmet needs of the community in balance with community resources, strengths and perceptions. Understanding the factors that affect our health in a larger context helps us develop action plans to address those needs.



Image Source: Wake County Government

To accomplish this planning process, Wake County Human Services in collaboration with WakeMed Health and Hospitals, Duke Raleigh Hospital, Rex Healthcare, Wake Health Services, and the United Way of the Greater Triangle are leading a comprehensive community health planning effort to measurably improve the health of Wake County, NC residents.

This report discusses the findings from the Community Health Needs Assessment process which was conducted January – June 2013, in collaboration with over 60 agency and community partners.

Project Purpose and Background

Understanding health as physical, mental, economic, and environmental well-being, the overarching goals of the 2013 Wake County Community Health Needs Assessment (CHNA) are to:

- Identify health status, concerns and resources in Wake County.
- Report findings to residents, hospitals, community agencies, and the North Carolina Department of Health and Human Services.
- Work with the community to determine the priority issues to be addressed.
- Develop a community-based action plan to address identified concerns.

Although community needs are identified in a Community Health Needs Assessment, community strengths and resources are also identified as assets that can help address factors that influence Wake County's health.

Starting in March 2012, the Affordable Care Act (ACA) requires tax exempt hospitals to conduct a Community Health Needs Assessment at least every 3 years. Along with hospitals, CHNAs are required by local health departments every 3-4 years for the public health accreditation process.

What is a Community Health Needs Assessment?

A community health needs assessment is a process that helps to identify factors affecting our county, determine resources needed to address these factors, and develop a plan of action to address community needs. This is done by identifying and collecting information that identifies the community's strengths, resources, and needs.

Additionally, the Federally Qualified Healthcare Center (Wake Health Services) and the United Way of the Greater Triangle need a community assessment to document population needs for service and grant provision. All of these assessments require partnerships among hospitals, public health, and the community with the intention of collecting information to inform community health improvement. To avoid multiple community health needs assessments in Wake County and the duplication of efforts among agencies, Wake County Human Services established a partnership with three local hospitals (WakeMed Health and Hospitals, Duke Raleigh, and Rex Healthcare), Wake Health Services, United Way of the Greater Triangle, and the Community Care Collaborative of Wake and Johnston Counties to complete its first joint Community Health Needs Assessment.

Community Health Needs Assessment Team

The Community Health Needs Assessment Team consisted of Wake County staff, representatives from the three local hospitals, Wake Health Services, United Way of the Greater Triangle, the Community Care Collaborative of Wake and Johnston Counties, and other community partners. During CHNA project, the CHNA Team met monthly to provide feedback to the CHNA process, ensure the CHNA was completed, and provide support for data collection and community engagement.

There are 8 phases in the CHNA process. The CHNA Team provided oversight throughout the process to ensure timeliness and completion:

1. Establish a community health needs assessment team
2. Collect primary data
3. Collect secondary data
4. Analyze and interpret county data
5. Determine health priorities
6. Create the CHNA document
7. Disseminate CHNA document
8. Develop community health action plans

Community Health Needs Assessment Steering Committee

The Community Health Needs Assessment Steering Committee consisted of more than 60 dedicated community members and representatives from various agencies throughout Wake County, including the following groups:

- Non-profit organizations
- Media
- County and town government
- Institutes of higher education
- Faith-based organizations
- Providers
- Public - private partnerships

The Steering Committee met monthly to serve as a positive voice to:

- Represent various community stakeholders.
- Educate the community about the CHNA process to help increase community engagement and participation.
- Provide feedback on the CHNA process.

Community Engagement

Throughout the CHNA process, Wake County community members provided input on the community's strengths, resources, and needs by participating in data collection and prioritization efforts, including:

- Community Health Opinion Survey: 281
- Focus groups: 76
- Community forum: 95

A total of 452 community members were engaged in the 2013 CHNA process.

Methods

The community health needs assessment was created using both existing data and data that was collected directly from the community.

Existing Statistics

The health of a community depends on many different factors, including the environment, education and jobs, access to quality health care, and individual behavior. Thus, data from a variety of sources needed to be collected to get an overall picture of Wake County's health.

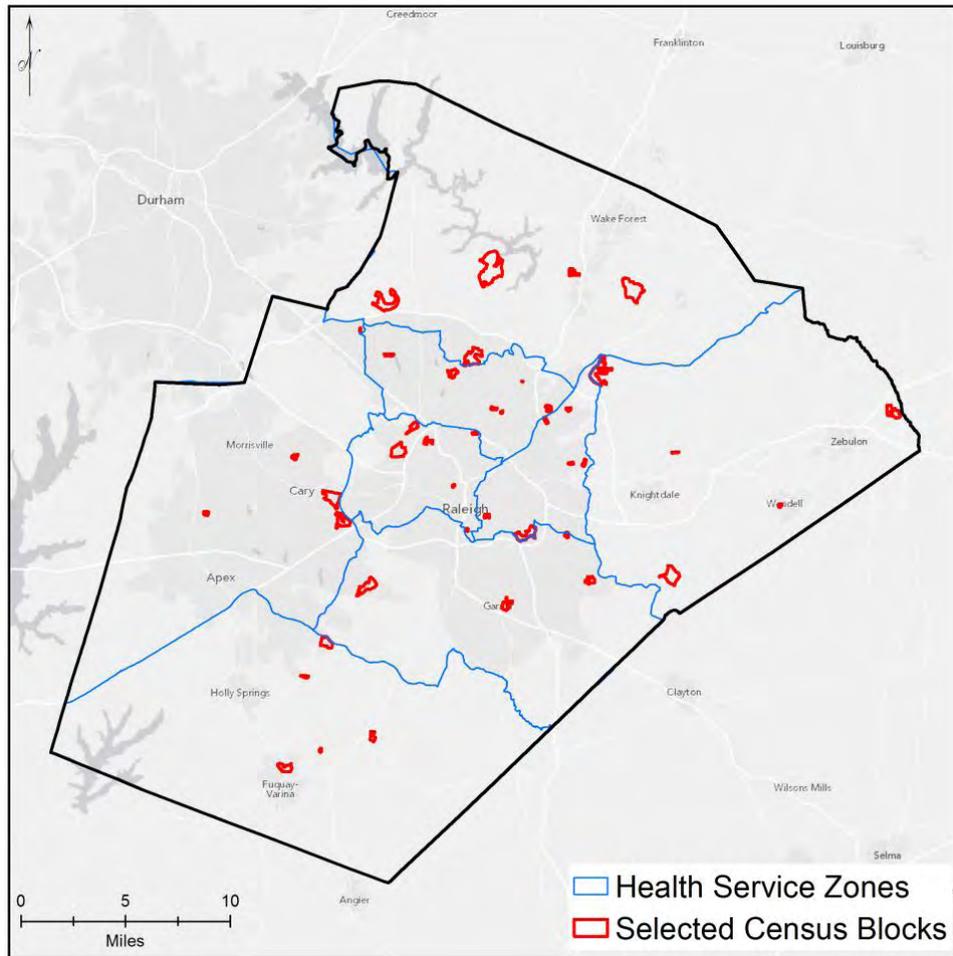
The assessment process included collecting existing statistics from state, county, and local sources. The collection of data from existing sources helped create a snapshot of the social, economic, and health status of Wake County residents. Sources of statistical data included, but were not limited to:

- Behavioral Risk Factor Surveillance System (BRFSS)
- *County Health Rankings*
- *Healthy NC 2020*
- NC Department of Health and Human Services
- NC State Center for Health Statistics
- U.S. Census Bureau
- Wake County Government
- Local service providers

Health Opinion Survey

Data was also collected directly from the community through surveys and focus groups. The 2013 Community Health Opinion Survey consisted of 59 questions about various community and health topics, including issues that concern residents the most, services needing improvement, topics the community needs more information about, and health care access. A two-stage cluster sampling method was used to randomly select 5 census blocks within each of the eight Wake County Health Service Zones for a total of 40 census blocks, shown outlined in red. In March 2013, the NC Institute of Health, in collaboration with volunteers, completed 281 door-to-door household surveys in each of the 40 randomly selected census blocks.

Map of Selected Census Blocks for the 2013 Community Health Opinion Survey



Source: NC Institute for Public Health

Focus Groups

Focus groups explored participants’ perceptions of their communities, key health concerns, health care services, and suggestions for improving services.

The Community Health Needs Assessment Steering Committee selected the focus group populations, which included:

- Youth
- Seniors
- Homeless
- Hispanics/Latinos
- Service providers in Wake County
- Persons living with mental health or substance abuse illness and parents of children with intellectual/developmental disabilities
- Persons living with chronic health conditions
- Persons living with physical disabilities

Nine focus groups (including 2 in Spanish) were conducted in March and April 2013, reaching 76 participants. On average, the focus group sessions lasted one hour and included 5-12 participants. Participants were recruited by community and social service agencies located throughout Wake County and received a small gift incentive for participation. The focus group sessions were recorded and transcribed for analyzing and coding into major themes.

Comparisons, Targets, and Benchmarks

Throughout this report, Wake County data is compared to two peer jurisdictions: Mecklenburg County, NC and the state of North Carolina. Mecklenburg County was chosen because of its similar population size to Wake County.

Data that was collected was also compared to *Healthy NC 2020* which serves as the state's health improvement plan. *Healthy NC 2020* encompasses 13 focus areas with 40 measurable objectives developed by the Governor's Task Force for Healthy Carolinians.

In addition, Wake County data was compared to the national benchmarks from the University of Wisconsin Population Health Institute's *County Health Rankings and Roadmap*. National benchmarks are the 90th percentile or 10th percentile of all counties in the country, depending on whether the measure is framed positively.

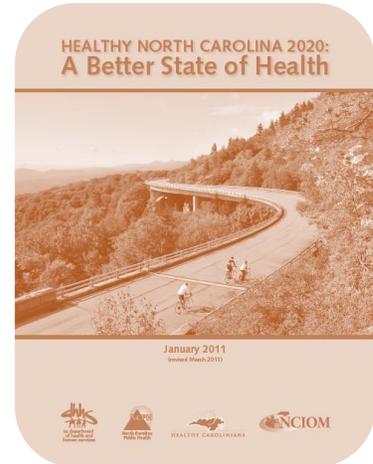


Image Source: Healthy NC 2020

Prioritization of Health Issues

Five community forums were held throughout Wake County where residents were invited to hear the main findings from the assessment, which included nine focus areas identified by looking at the intersection of the Community Health Opinion Survey results, focus group themes, and existing health statistics:

- Mental health and substance use
- Disability and care-giving
- Education and lifelong learning
- Health care access and utilization
- Housing and homelessness
- Nutrition, physical activity, and obesity prevention
- Population growth
- Poverty and unemployment
- Risky youth behavior

Ninety-five residents voted on the priority areas that will be addressed over the next 3 years:

- Poverty and unemployment
- Health care access and utilization
- Mental health and substance use

More detailed information about the community prioritization process can be found in Chapter 10.

More detailed information about the data collection methodology and limitations can be found in Appendix D: Community Health Opinion Survey Data Methodology and Appendix G: Focus Group Methodology.

Report Organization

This assessment examines the major health outcomes of Wake County residents, but also the factors that influence health, such as health behavior, access to health care, social and economic influences, and the physical environment.

Within each chapter statistics, trends, and disparities are presented for the various health outcomes or factors. This information is then balanced by equally important community perceptions to gain an overall sense of which outcomes and factors are affecting the community and what resources are needed to address community health improvement.

Throughout this report, some existing community resources and initiatives are highlighted, although programs and services listed are not comprehensive.

CHAPTER 2: COMMUNITY PROFILES



CHAPTER 2 | COMMUNITY PROFILES

Wake County consists of 12 municipalities, including Raleigh, which is the county seat and also the state capital. Wake County is also home to NC State University, Shaw University, Meredith College, Saint Augustine's College, William Peace University, and the Research Triangle Park.

A unique mix of urban and rural small towns distinguishes Wake County from other counties. Wake County is the second-most populous County in North Carolina. In 2012, Wake County was home to an estimated 952,151 residents, an increase of approximately 50,000 since the 2010 Census.

Quick Facts

- Wake County's population: 952,151.
- Wake County is the 2nd most populous County in NC.
- Wake County's population has increased by more than 40% each decade since 1980.

Sources:

- Wake County Government. Retrieved from <http://www.wakegov.com/about/facts>.
- U.S. Census Bureau: State and County QuickFacts.
- NCpedia. Government and Heritage Library, State Library of North Carolina.

Wake County History

Early inhabitants of the Wake County area included the Sissipahaw and Occaneechi Indians with English and Scots-Irish settlers later populating the region. Wake County was formed in 1771 from Johnston, Cumberland, and Orange counties and was named after Margaret Wake Tryon, wife of the royal governor William Tyron. In 1792 the city of Raleigh, named in honor of Sir Walter Raleigh, became the capital of North Carolina.

Wake County Geography

Located in the Piedmont region of North Carolina, Wake County is approximately 549,000 acres or 860 square miles.

The geographic center of Wake County is Raleigh. The highest point in the County is 540 feet above sea level, which is one-quarter of a mile north of Leesville. The lowest point in the County is 160 feet above sea level and is one-half mile southeast of Shotwell.

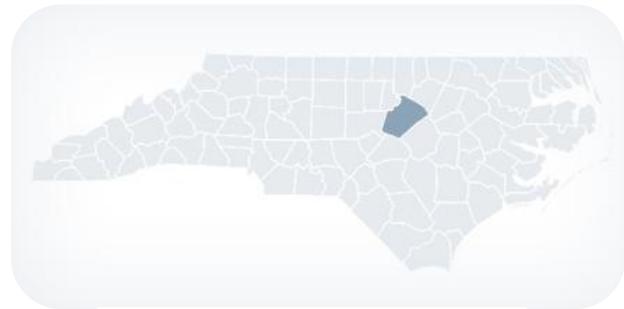


Image Source: Digital NC <http://digitalnc.org>.

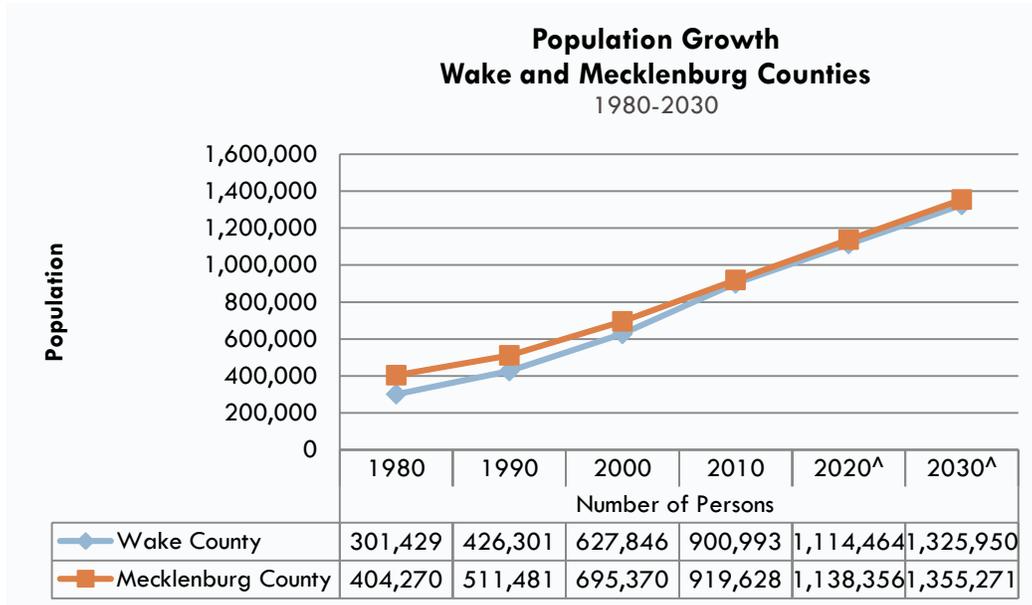
The bodies of water in Wake County include Crabtree Creek, the Neuse River, Lake Crabtree, Lake Johnson, and portions of Falls Lake and Jordan Lake.

Wake County Demographics

Population

In 2011, Wake County was home to an estimated 929,780 residents, an increase of approximately 30,000 since the 2010 Census. Wake County is almost seven times as densely populated as NC as a whole.

The population growth seen in Wake County is dramatic, increasing by more than 40% each decade since 1980. This population growth is predicted to slow down over the next two decades.

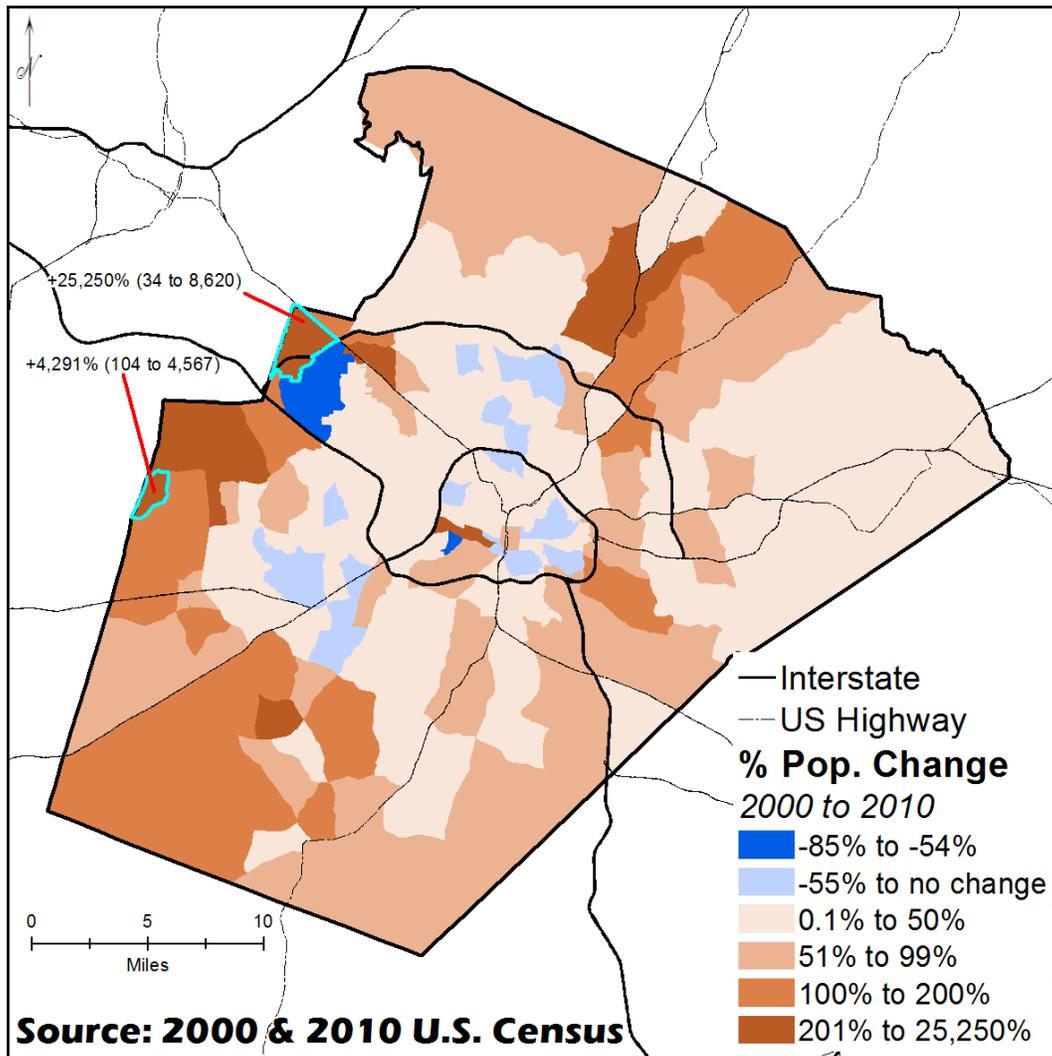


Sources: Log into North Carolina (LINC) Database. [^]North Carolina Office of State Budget and Management . Projected Annual County Population Totals, 2030-2033. April 18,2013.

On the whole, Wake County is a young county, with three-quarters of the county under the age of 50 (75%). In 2010, the population over the age of 65 represented 8.6% of the total population of Wake County. The age group 35-39 year olds represented 8.2% of the population. The overall median age of Wake County residents is 34.4 years.

Below is a map of the percent of population change in Wake County from 2000 to 2010 by census tract. Areas that experienced large increases in population include the far western part of the county near Morrisville, the central northern part of the county near Wake Forest and Rolesville, and the southern part of the county near Holly Springs.

Map of Wake County Percent Population Change, 2000-2010



Note: In 2000 Wake County had 105 census tracts. In 2010, primarily due to population growth, several large 2000 census tracts were subdivided to conform to 2010 Census Bureau defined tract maximum population thresholds, totaling to 187. In addition, some 2000 tracts were reconfigured to follow natural or major transportation features.

General Demographic Characteristics

Location	Total Population (2011 estimate)	Total Population (2010)	Percent Male	Percent Female	Overall Median Age
Wake County	929,780	900,993	48.7%	51.3%	34.4
Mecklenburg County	944,373	919,628	48.4%	51.6%	33.9
State of NC	9,656,401	9,535,483	48.7%	51.3%	37.4

Source: US Census Bureau, American Fact Finder, 2010 Census, Summary File DP-1, 2010 Demographic Profile Data, Profile of General Population and Housing Characteristics: 2010.

Diversity

According to the 2010 U.S. Census Bureau, Wake County is 66.3% White or Caucasian, 20.7% Black or African American, and 5.4% Asian. A larger percentage of the Wake County population identifies as Asian, Native Hawaiian, and Other Pacific Islander compared with Mecklenburg County or NC as a whole.

Population Distribution by Race

Location	Total Population	White	Black or African-American	American Indian and Alaskan Native	Asian, Native Hawaiian, Other Pacific Islander	Some Other Race	Two or More Races
Wake County	900,993	66.3%	20.7%	0.5%	5.4%	4.5%	2.5%
Mecklenburg County	919,628	55.3%	30.8%	0.5%	4.7%	6.2%	2.6%
State of NC	9,535,483	68.5%	21.5%	1.3%	2.3%	4.3%	2.2%

Source: US Census Bureau, American Fact Finder, 2010 Census, Summary File DP-1, 2010 Demographic Profile Data, Profile of General Population and Housing Characteristics: 2010.

Notes: Percentages were calculated.

According to the 2010 U.S. Census Bureau, 9.8% of Wake County residents are Hispanic or Latino, compared to 12.2% in Mecklenburg County and 8.4% statewide.

Population Distribution by Ethnicity

Location	Total Population	Hispanic or Latino of Any Race
Wake County	900,993	9.8%
Mecklenburg County	919,628	12.2%
State of NC	9,535,483	8.4%

Source: US Census Bureau, American Fact Finder, 2010 Census, Summary File DP-1, 2010 Demographic Profile Data, Profile of General Population and Housing Characteristics: 2010.

Notes: Percentages were calculated.

According to the U.S. Census Bureau, 64,743 foreign-born persons came to Wake County between 2000 and 2010. In 2010, of the 51,973 non-English speaking households in Wake County, 12,686 were linguistically isolated (24%). A greater number of Spanish-speaking households were linguistically isolated than households speaking other languages.

Household Language by Linguistic Isolation
2010 American Community Survey (5 Year Estimate)

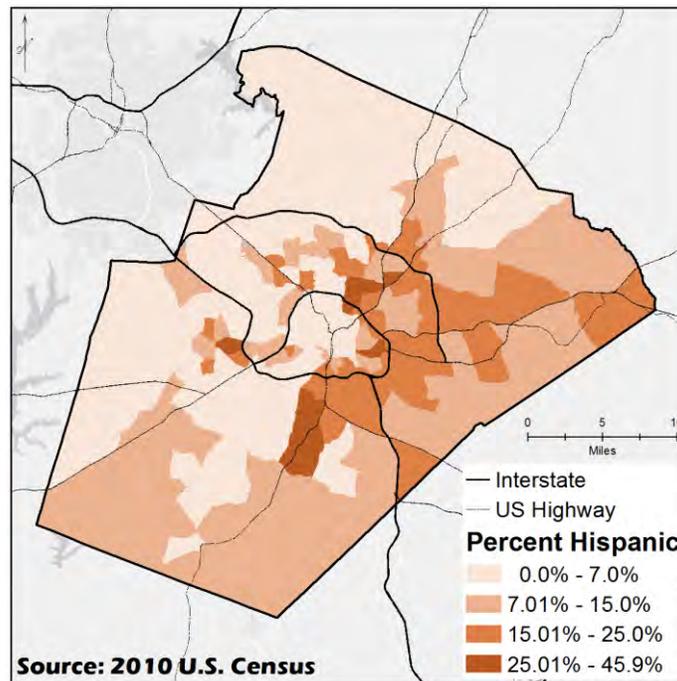
Location	Total Households	Number of Households								
		English-Speaking	Spanish-Speaking		Other Indo-European Languages		Asian or Pacific Island Languages		Other Languages	
			Isolated	Not isolated	Isolated	Not isolated	Isolated	Not isolated	Isolated	Not isolated
Wake County	325,486	273,513	8,523	15,923	1,353	12,02	2,192	7,730	618	3,613
Mecklenburg County	350,392	293,769	11,558	18,516	2,019	11,578	2,541	6,885	530	2,996
State of NC	3,262,179	3,253,431	77,558	150,348	7,770	69,662	11,304	39,025	2,449	14,632

Source: US Census Bureau, American Fact Finder, Table B16002: Household Language by Linguistic Isolation, 2006-2010 American Community Survey 5-Year Estimates.

Note: A linguistically isolated household is one in which no member 14 years and over (1) speaks only English, or (2) speaks a non-English language and speaks English "very well". In other words, all members 14 years old and over have at least some difficulty with English.

- Hispanics accounted for 20% of the county’s growth in the last decade.
- The Hispanic population in Wake County grew by 53,937 from 2000 to 2010. In 2010 the areas of Wake County where the Hispanic population is more than 15% includes the eastern part of the county, North Raleigh, and southeast Raleigh near Garner.

Map of Percent of Hispanic or Latino Population by Census Tract, Wake County, 2010

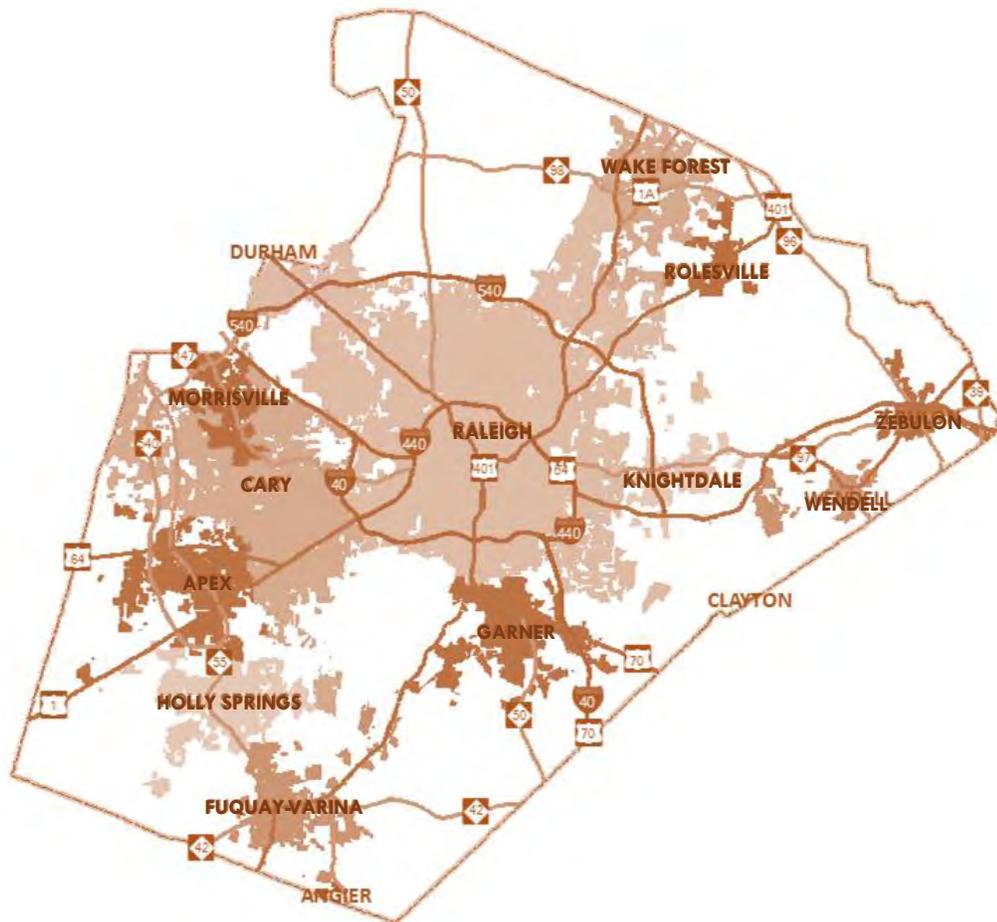


Community Profiles

This section contains profiles on population, household, and economic characteristics for Wake County and each of Wake County's 12 core municipalities. To develop each jurisdiction's profile, socio-economic data was used from the 2000 and 2010 U.S. Census, including the 10 year percent change to compare growth for each town.

Additional estimates about each town's median age, educational attainment, and median household income were sourced from the 2007-2011 U.S. Census Bureau American Community Survey (ACS). ACS estimates are also published annually for single year and three year average releases for geographies with minimum population of 65,000 and 20,000 residents respectively. Several of the smaller towns in Wake County do not meet the 20,000 population threshold; therefore, five year average estimates were used.

Map of Core Municipalities in Wake County



Source: Wake County Community Services Department.

Note: Map also displays 3 municipalities from adjacent counties that have annexed into Wake County: Angier, Clayton, and Durham.



Image: Wake County

Wake County was formed in 1771 from Johnston, Cumberland, and Orange counties and was named after Margaret Wake Tryon, wife of the royal governor William Tryon. 2012, Wake County was home to an estimated 929,780 residents, an increase of approximately 30,000 since the 2010 Census. Wake County is almost seven times as densely populated as NC as a whole.

Quick Facts

- Total population¹: 929,780
- Median age²: 34.4
- Percent high school graduate or higher²: 91.8%
- Median household income (dollars)²: \$65,929

Sources: ¹ U.S. Census Bureau: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2011. ²U.S. Census Bureau, 2007-2011 American Community Survey.

Contact Information

Town Hall: P.O. Box 550
 Raleigh, NC 27602
 Phone: (919) 856-6160
 Website: <http://www.wakegov.com>

Demographic Profile: Wake County, NC

	2010 Census		2000 Census		2000-2010 Change	
	Counts	Percent	Counts	Percent	Counts	Percent
Total Population	900,993	100%	627,846	100%	273,147	44%
<i>Population by Race</i>						
American Indian/Alaska native	4,503	1%	2,152	0%	2,351	109%
Asian	48,553	5%	21,249	3%	27,304	129%
Black or African American	186,510	21%	123,820	20%	62,690	51%
Native Hawaiian/Other Pacific	387	0%	212	0%	175	83%
Some other race	40,928	5%	15,548	2%	25,380	163%
Two or more races	22,566	3%	10,321	2%	12,245	119%
White	597,546	66%	454,544	72%	143,002	31%
<i>Population by Hispanic or Latino Origin (of any race)</i>						
Hispanic or Latino Origin	87,922	10%	33,985	5%	53,937	159%
<i>Population by Gender</i>						
Male	438,792	49%	311,436	50%	127,356	41%
Female	462,201	51%	316,410	50%	145,791	46%
<i>Population by Age</i>						
Persons 0 to 4 years	65,495	7%	45,142	7%	20,353	45%
Persons 5 to 17 years	169,118	19%	112,455	18%	56,663	50%
Persons 18 to 64 years	589,831	65%	423,877	68%	165,954	39%
Persons 65 years and over	76,549	9%	46,372	7%	30,177	65%

Sources: U.S. Census Bureau, American Fact Finder, 2010 and 2000 Census.
 Note: Percentages were rounded.



Image: Town of Apex website

Apex is located in the southwestern part of Wake County, approximately 20 minutes from Raleigh. Incorporated in 1873, Apex was named for its location as the highest point on the Chatham Railroad that extended between Richmond, Virginia and Jacksonville, Florida. In 1911, a fire destroyed a large portion of the downtown business district; however, the town rebuilt and restored its railroad heritage, maintaining over 60 buildings on the National Register of Historic Places.

Contact Information

Town Hall: 73 Hunter Street
 Apex, NC 27502
 Phone: (919) 249-3400
 Website: <http://www.apexnc.org>

Quick Facts

- Total population¹: 38,702
- Median age²: 34.1
- Percent high school graduate or higher²: 96.6%
- Median household income (dollars)²: \$86,782

Sources: ¹ U.S. Census Bureau: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2011. ²U.S. Census Bureau, 2007-2011 American Community Survey.

Demographic Profile: Apex, NC

	2010 Census		2000 Census		2000-2010 Change	
	Counts	Percent	Counts	Percent	Counts	Percent
Total Population	37,476	100%	20,212	100%	17,264	85%
<i>Population by Race</i>						
American Indian/Alaska native	106	0%	58	0%	48	83%
Asian	2,652	7%	863	4%	1,789	207%
Black or African American	2,862	8%	1,526	8%	1,336	88%
Native Hawaiian/Other Pacific	31	0%	12	0%	19	158%
Some other race	1,075	3%	224	1%	851	380%
Two or more races	954	3%	337	2%	617	183%
White	29,796	80%	17,192	85%	12,604	73%
<i>Population by Hispanic or Latino Origin (of any race)</i>						
Hispanic or Latino Origin	2,655	7%	648	3%	2,007	310%
<i>Population by Gender</i>						
Male	18,232	49%	9,993	49%	8,239	82%
Female	19,244	51%	10,219	51%	9,025	88%
<i>Population by Age</i>						
Persons 0 to 4 years	3,191	9%	2,104	10%	1,087	52%
Persons 5 to 17 years	9,168	24%	4,126	20%	5,042	122%
Persons 18 to 64 years	22,997	61%	13,174	65%	9,823	75%
Persons 65 years and over	2,120	6%	808	4%	1,312	162%

Sources: U.S. Census Bureau, American Fact Finder, 2010 and 2000 Census.
 Note: Percentages were rounded.



At the Town of Cary we focus every day on enriching the lives of our citizens by creating an exceptional environment and providing exemplary services that enable our community to thrive and prosper

Image: Town of Cary website

Incorporated in 1871, Cary is located west of Raleigh and is named after Samuel Fenton Cary, former Ohio Senator and temperance movement leader. Settlers of English decent lived in the area now known as Cary since the 1750s. Cary is the fastest growing city in North Carolina and the 12th fastest growing city in the nation (U.S. Census Bureau, Annual Estimates of Resident Population for Cities over 50,000, April 1, 2010 to July 1, 2012). The population of Cary has continued to grow due to its proximity to the Research Triangle Park, home to more than 170 global companies and research and development organizations.

Quick Facts

- Total population¹: 139,633
- Median age²: 36.4
- Percent high school graduate or higher²: 95.1%
- Median household income (dollars)²: \$91,997

Sources: ¹ U.S. Census Bureau: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2011. ²U.S. Census Bureau, 2007-2011 American Community Survey.

Contact Information

Town Hall: 316 North Academy Street
 Cary, NC 27513
 Phone: (919) 469-4000
 Website: <http://www.townofcary.org>

Demographic Profile: Cary, NC

	2010 Census		2000 Census		2000-2010 Change	
	Counts	Percent	Counts	Percent	Counts	Percent
Total Population	135,234	100%	94,536	100%	40,698	43%
<i>Population by Race</i>						
American Indian/Alaska native	559	0%	251	0%	308	123%
Asian	17,668	13%	7,643	8%	10,025	131%
Black or African American	10,787	8%	5,813	6%	4,974	86%
Native Hawaiian/Other Pacific	46	0%	28	0%	18	64%
Some other race	3,760	3%	1,392	1%	2,368	170%
Two or more races	3,507	3%	1,726	2%	1,781	103%
White	98,907	73%	77,683	82%	21,224	27%
<i>Population by Hispanic or Latino Origin (of any race)</i>						
Hispanic or Latino Origin	10,364	8%	4,047	4%	6,317	156%
<i>Population by Gender</i>						
Male	65,819	49%	47,075	50%	18,744	40%
Female	69,415	51%	47,461	50%	21,954	46%
<i>Population by Age</i>						
Persons 0 to 4 years	9,444	7%	7,619	8%	1,825	24%
Persons 5 to 17 years	28,066	21%	19,855	21%	8,211	41%
Persons 18 to 64 years	86,040	64%	61,993	66%	24,047	39%
Persons 65 years and over	11,684	9%	5,069	5%	6,615	131%

Sources: U.S. Census Bureau, American Fact Finder, 2010 and 2000 Census.
 Note: Percentages were rounded.



Image: Town of Fuquay-Varina website

In the early 1900's tobacco farmers, fleeing the tobacco blight in Granville County, began migrating into Southern Wake County. Their "golden weed" fostered a large commercial tobacco market. Railroads flourished and traffic flowed along Main Street in Fuquay Springs and around the Broad Street station, now known simply as Varina. Fuquay Springs, incorporated in 1909, joined the neighboring community of Varina in 1964 as one municipality.

Quick Facts

- Total population¹: 18,528
- Median age²: 34.1
- Percent high school graduate or higher²: 92.3%
- Median household income (dollars)²: \$70,744

Sources: ¹ U.S. Census Bureau: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2011. ²U.S. Census Bureau, 2007-2011 American Community Survey.

Contact Information

Town Hall: 410 Honeycutt Road
 Fuquay-Varina, NC 27526
 Phone: (919) 552-1400
 Website: <http://www.fuquay-varina.org>

Demographic Profile: Fuquay-Varina, NC

	2010 Census		2000 Census		2000-2010 Change	
	Counts	Percent	Counts	Percent	Counts	Percent
Total Population	17,937	100%	7,898	100%	10,039	127%
<i>Population by Race</i>						
American Indian/Alaska native	110	1%	32	0%	78	244%
Asian	361	2%	38	0%	323	850%
Black or African American	3,527	20%	1,927	24%	1,600	83%
Native Hawaiian/Other Pacific	5	0%	0	0%	5	0%
Some other race	475	3%	232	3%	243	105%
Two or more races	492	3%	91	1%	401	441%
White	12,967	72%	5,578	71%	7,389	132%
<i>Population by Hispanic or Latino Origin (of any race)</i>						
Hispanic or Latino Origin	1,738	10%	583	7%	1,155	198%
<i>Population by Gender</i>						
Male	8,486	47%	3,719	47%	4,767	128%
Female	9,451	53%	4,179	53%	5,272	126%
<i>Population by Age</i>						
Persons 0 to 4 years	1,698	9%	694	9%	1,004	145%
Persons 5 to 17 years	3,687	21%	1,460	18%	2,227	153%
Persons 18 to 64 years	10,545	59%	4,717	60%	5,828	124%
Persons 65 years and over	2,007	11%	1,027	13%	980	95%

Sources: U.S. Census Bureau, American Fact Finder, 2010 and 2000 Census.
 Note: Percentages were rounded.



Image: Town of Garner website

Located at the intersection of U.S. 70 and I-40, Garner is approximately 8 miles south of Raleigh. Incorporated in 1883, Garner began as the location of the North Carolina railroad station between Goldsboro and Charlotte. With the increased population and residential growth, Garner has burgeoned in business and service establishments, both within the corporation limits and the extraterritorial jurisdiction of the town. Town officials predict the town will continue to grow at a rapid rate.

Contact Information

Town Hall: 900 7th Avenue
Garner, NC 27529
Phone: (919) 773-4407
Website: <http://www.garnernc.gov>

Quick Facts

- Total population¹: 26,589
- Median age²: 35.9
- Percent high school graduate or higher²: 90.9%
- Median household income (dollars)²: \$60,894

Sources: ¹ U.S. Census Bureau: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2011. ²U.S. Census Bureau, 2007-2011 American Community Survey.

Demographic Profile: Garner, NC

	2010 Census		2000 Census		2000-2010 Change	
	Counts	Percent	Counts	Percent	Counts	Percent
Total Population	25,745	100%	17,757	100%	7,988	45%
<i>Population by Race</i>						
American Indian/Alaska native	140	1%	73	0%	67	92%
Asian	474	2%	197	1%	277	141%
Black or African American	8,468	33%	4,817	27%	3,651	76%
Native Hawaiian/Other Pacific	12	0%	4	0%	8	200%
Some other race	1,173	5%	492	3%	681	138%
Two or more races	590	2%	273	2%	317	116%
White	14,888	58%	11,901	67%	2,987	25%
<i>Population by Hispanic or Latino Origin (of any race)</i>						
Hispanic or Latino Origin	2,561	10%	843	5%	1,718	204%
<i>Population by Gender</i>						
Male	12,231	48%	8,581	48%	3,650	43%
Female	13,514	52%	9,176	52%	4,338	47%
<i>Population by Age</i>						
Persons 0 to 4 years	1,819	7%	1,198	7%	621	52%
Persons 5 to 17 years	4,458	17%	3,244	18%	1,214	37%
Persons 18 to 64 years	16,440	64%	11,381	64%	5,059	44%
Persons 65 years and over	3,028	12%	1,934	11%	1,094	57%

Sources: U.S. Census Bureau, American Fact Finder, 2010 and 2000 Census.
Note: Percentages were rounded.



Image: Town of Holly Springs website

Holly Springs is located in the southwest corner of Wake County. In colonial times, a small cluster of homes and businesses formed in Tuscarora Indian hunting around near a freshwater springs surrounded by 40-foot holly trees. Incorporated in 1877, the Town of less than 1,000 in 1990 has grown to more than 25,000.

Contact Information

Town Hall: 128 South Main Street
 Holly Springs, NC 27540
 Phone: (919) 552-6221
 Website: <http://www.hollyspringsnc.us>

Quick Facts

- Total population¹: 25,468
- Median age²: 33.2
- Percent high school graduate or higher²: 96.3%
- Median household income (dollars)²: \$89,421

Sources: ¹ U.S. Census Bureau: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2011. ²U.S. Census Bureau, 2007-2011 American Community Survey.

Demographic Profile: Holly Springs, NC

	2010 Census		2000 Census		2000-2010 Change	
	Counts	Percent	Counts	Percent	Counts	Percent
Total Population	24,661	100%	9,192	100%	15,469	168%
<i>Population by Race</i>						
American Indian/Alaska native	103	0%	39	0%	64	164%
Asian	724	3%	113	1%	611	541%
Black or African American	3,101	13%	1,714	19%	1,387	81%
Native Hawaiian/Other Pacific	13	0%	1	0%	12	1200%
Some other race	432	2%	103	1%	329	319%
Two or more races	614	2%	131	1%	483	369%
White	19,674	80%	7,091	77%	12,583	177%
<i>Population by Hispanic or Latino Origin (of any race)</i>						
Hispanic or Latino Origin	1,544	6%	278	3%	1,266	455%
<i>Population by Gender</i>						
Male	11,996	49%	4,533	49%	7,463	165%
Female	12,665	51%	4,659	51%	8,006	172%
<i>Population by Age</i>						
Persons 0 to 4 years	2,507	10%	1,058	12%	1,449	137%
Persons 5 to 17 years	6,206	25%	1,822	20%	4,384	241%
Persons 18 to 64 years	14,742	60%	6,053	66%	8,689	144%
Persons 65 years and over	1,206	5%	259	3%	947	366%

Sources: U.S. Census Bureau, American Fact Finder, 2010 and 2000 Census.
 Note: Percentages were rounded.

TOWN OF KNIGHTDALE *North Carolina*

Image: Town of Knightdale website

Located along US 64, Knightdale was incorporated in 1927 and borders east of Raleigh at the Neuse River. Early inhabitants of Knightdale included the Tuscarora Indians. In 1730, John Hinton settled in the Knightdale area and established seven plantations, including The Oaks, Midway, and Beaver Dam. For many years the Knightdale area was a crossroads served only by a post office. By the end of the 19th century, locals decided there was a need to establish a town. Knightdale is named after Henry Haywood Knight, who donated land holdings to the Norfolk and Southern Railroad Company in order to entice the company to build a railroad that would provide freight and passenger service.

Quick Facts

- Total population¹: 11,776
- Median age²: 31.6
- Percent high school graduate or higher²: 93%
- Median household income (dollars)²: \$75,285

Sources: ¹ U.S. Census Bureau: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2011. ²U.S. Census Bureau, 2007-2011 American Community Survey.

Contact Information

Town Hall: 950 Steeple Square Court
 Knightdale, NC 27545
 Phone: (919) 217-2220
 Website: <http://www.knightdalenc.gov>

Demographic Profile: Knightdale, NC

	2010 Census		2000 Census		2000-2010 Change	
	Counts	Percent	Counts	Percent	Counts	Percent
Total Population	11,401	100%	5,958	100%	5,443	91%
<i>Population by Race</i>						
American Indian/Alaska native	66	1%	21	0%	45	214%
Asian	193	2%	87	1%	106	122%
Black or African American	4,368	38%	1,599	27%	2,769	173%
Native Hawaiian/Other Pacific	6	0%	2	0%	4	200%
Some other race	670	6%	121	2%	549	454%
Two or more races	400	4%	85	1%	315	371%
White	5,698	50%	4,043	68%	1,655	41%
<i>Population by Hispanic or Latino Origin (of any race)</i>						
Hispanic or Latino Origin	1,299	11%	220	4%	1,079	490%
<i>Population by Gender</i>						
Male	5,315	47%	2,783	47%	2,532	91%
Female	6,086	53%	3,175	53%	2,911	92%
<i>Population by Age</i>						
Persons 0 to 4 years	891	8%	561	9%	330	59%
Persons 5 to 17 years	2,458	22%	1,327	22%	1,131	85%
Persons 18 to 64 years	7,321	64%	3,767	63%	3,554	94%
Persons 65 years and over	731	6%	303	5%	428	141%

Sources: U.S. Census Bureau, American Fact Finder, 2010 and 2000 Census.
 Note: Percentages were rounded.



Image: Town of Morrisville website

Morrisville is equal distance from Raleigh and Durham and is located in western Wake County near the Research Triangle Park and Raleigh-Durham International Airport. Morrisville was named for Jeremiah Morris who donated three acres of land to the North Carolina Railroad in 1852 for a water station, woodshed, and other buildings in support of the railroad. The deed transaction is believed to be on November 30, 1852, which references Crabtree Creek. The town was officially chartered in 1875 but was disincorporated in 1933. Eventually the town charter was restored in 1947.

Quick Facts

- Total population¹: 19,184
- Median age²: 33.5
- Percent high school graduate or higher²: 97.9%
- Median household income (dollars)²: \$78,088

Sources: ¹ U.S. Census Bureau: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2011. ²U.S. Census Bureau, 2007-2011 American Community Survey.

Contact Information

Town Hall: 100 Town Hall Drive
 Morrisville, NC 27560
 Phone: (919) 463-6200
 Website: <http://www.ci.morrisville.nc.us>

Demographic Profile: Morrisville, NC

	2010 Census		2000 Census		2000-2010 Change	
	Counts	Percent	Counts	Percent	Counts	Percent
Total Population	18,576	100%	5,208	100%	13,368	257%
<i>Population by Race</i>						
American Indian/Alaska native	75	0%	23	0%	52	226%
Asian	5,058	27%	472	9%	4,586	972%
Black or African American	2,402	13%	573	11%	1,829	319%
Native Hawaiian/Other Pacific	12	0%	0	0%	12	0%
Some other race	375	2%	61	1%	314	515%
Two or more races	624	3%	97	2%	527	543%
White	10,030	54%	3,982	76%	6,048	152%
<i>Population by Hispanic or Latino Origin (of any race)</i>						
Hispanic or Latino Origin	1,092	6%	170	3%	922	542%
<i>Population by Gender</i>						
Male	9,132	49%	2,686	52%	6,446	240%
Female	9,444	51%	2,522	48%	6,922	274%
<i>Population by Age</i>						
Persons 0 to 4 years	1,669	9%	379	7%	1,290	340%
Persons 5 to 17 years	3,338	18%	696	13%	2,642	380%
Persons 18 to 64 years	12,766	69%	3,924	75%	8,842	225%
Persons 65 years and over	803	4%	209	4%	594	284%

Sources: U.S. Census Bureau, American Fact Finder, 2010 and 2000 Census.
 Note: Percentages were rounded.



Image: Town of Raleigh website

Raleigh is second largest city in North Carolina. Within North Carolina, Raleigh is the 4th fastest growing city, following Cary, Charlotte, and Durham (U.S. Census Bureau, Annual Estimates of Resident Population for Cities over 50,000, April 1, 2010 to July 1, 2012). In 1792 the City of Raleigh, named in honor of Sir Walter Raleigh, became the capital of North Carolina. Raleigh is known as the "City of Oaks" for its many oak trees, which line the streets in the heart of the city.

Contact Information

Town Hall: 222 West Hargett Street
Raleigh, NC 27601
Phone: (919) 996-3000
Website: <http://www.raleighnc.gov>

Quick Facts

- Total population¹: 416,468
- Median age²: 31.8
- Percent high school graduate or higher²: 90.7%
- Median household income (dollars)²: \$52,819

Sources: ¹ U.S. Census Bureau: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2011. ²U.S. Census Bureau, 2007-2011 American Community Survey.

Demographic Profile: Raleigh, NC

	2010 Census		2000 Census		2000-2010 Change	
	Counts	Percent	Counts	Percent	Counts	Percent
Total Population	403,892	100%	276,093	100%	127,799	46%
<i>Population by Race</i>						
American Indian/Alaska native	1,963	0%	981	0%	982	100%
Asian	17,434	4%	9,327	3%	8,107	87%
Black or African American	118,471	29%	76,756	28%	41,715	54%
Native Hawaiian/Other Pacific	173	0%	118	0%	55	47%
Some other race	22,942	6%	8,946	3%	13,996	156%
Two or more races	10,532	3%	5,179	2%	5,353	103%
White	232,377	58%	174,786	63%	57,591	33%
<i>Population by Hispanic or Latino Origin (of any race)</i>						
Hispanic or Latino Origin	45,868	11%	19,308	7%	26,560	138%
<i>Population by Gender</i>						
Male	195,143	48%	136,648	49%	58,495	43%
Female	208,749	52%	139,445	51%	69,304	50%
<i>Population by Age</i>						
Persons 0 to 4 years	29,027	7%	17,461	6%	11,566	66%
Persons 5 to 17 years	64,209	16%	40,145	15%	24,064	60%
Persons 18 to 64 years	277,518	69%	195,492	71%	82,026	42%
Persons 65 years and over	33,138	8%	22,995	8%	10,143	44%

Sources: U.S. Census Bureau, American Fact Finder, 2010 and 2000 Census.
Note: Percentages were rounded.

Town of Rolesville, NC

Celebrating our past,
Embracing our future

Image: Town of Rolesville website

Rolesville is located in northeastern Wake County and is the second oldest town in Wake County. Incorporated in 1837, the town began as a farming community and was named after William H. Roles, who was a local land owner, merchant, cotton broker, cotton gin owner, and postmaster.

Contact Information

Town Hall: 502 Southtown Circle
Rolesville, NC 27571
Phone: (919) 556-3506
Website: <http://rolesvillenc.gov>

Quick Facts

- Total population¹: 3,911
- Median age²: 34.2 years
- Percent high school graduate or higher²: 83.8%
- Median household income (dollars)²: \$67,273

Sources: ¹ U.S. Census Bureau: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2011. ²U.S. Census Bureau, 2007-2011 American Community Survey.

Demographic Profile: Rolesville, NC

	2010 Census		2000 Census		2000-2010 Change	
	Counts	Percent	Counts	Percent	Counts	Percent
Total Population	3,786	100%	907	100%	2,879	317%
<i>Population by Race</i>						
American Indian/Alaska native	15	0%	2	0%	13	650%
Asian	119	3%	4	0%	115	2875%
Black or African American	673	18%	77	8%	596	774%
Native Hawaiian/Other Pacific	0	0%	0	0%	0	0%
Some other race	94	2%	52	6%	42	81%
Two or more races	79	2%	10	1%	69	690%
White	2,806	74%	762	84%	2,044	268%
<i>Population by Hispanic or Latino Origin (of any race)</i>						
Hispanic or Latino Origin	233	6%	63	7%	170	270%
<i>Population by Gender</i>						
Male	1,911	50%	466	51%	1,445	310%
Female	1,875	50%	441	49%	1,434	325%
<i>Population by Age</i>						
Persons 0 to 4 years	331	9%	56	6%	275	491%
Persons 5 to 17 years	929	25%	174	19%	755	434%
Persons 18 to 64 years	2,254	60%	574	63%	1,680	293%
Persons 65 years and over	272	7%	103	11%	169	164%

Sources: U.S. Census Bureau, American Fact Finder, 2010 and 2000 Census.
Note: Percentages were rounded.



Image: Town of Wake Forest website

Located north of Raleigh, Wake Forest was originally incorporated as the “Town of Wake Forest College” in 1880. The college, now known as Wake Forest University, moved to Winston-Salem in 1956. Wake Forest is now home to the Southeastern Baptist Theological Seminary. Falls Lake State Recreation Area is also located in Wake Forest.

Contact Information

Town Hall: 301 S. Brooks Street
Wake Forest, NC 27587
Phone: (919) 435-9400
Website: <http://www.wakeforestnc.gov>

Quick Facts

- Total population¹: 31,073
- Median age²: 33.4 years
- Percent high school graduate or higher²: 94.8%
- Median household income (dollars)²: \$72,155

Sources: ¹ U.S. Census Bureau: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2011. ²U.S. Census Bureau, 2007-2011 American Community Survey.

Demographic Profile: Wake Forest, NC

	2010 Census		2000 Census		2000-2010 Change	
	Counts	Percent	Counts	Percent	Counts	Percent
Total Population	30,117	100%	12,588	100%	17,529	139%
<i>Population by Race</i>						
American Indian/Alaska native	125	0%	26	0%	99	381%
Asian	887	3%	256	2%	631	246%
Black or African American	4,594	15%	1,987	16%	2,607	131%
Native Hawaiian/Other Pacific	12	0%	1	0%	11	1100%
Some other race	471	2%	98	1%	373	381%
Two or more races	737	2%	196	2%	541	276%
White	23,291	77%	10,024	80%	13,267	132%
<i>Population by Hispanic or Latino Origin (of any race)</i>						
Hispanic or Latino Origin	1,681	6%	262	2%	1,419	542%
<i>Population by Gender</i>						
Male	14,484	48%	6,024	48%	8,460	140%
Female	15,633	52%	6,564	52%	9,069	138%
<i>Population by Age</i>						
Persons 0 to 4 years	2,756	9%	1,229	10%	1,527	124%
Persons 5 to 17 years	7,008	23%	2,507	20%	4,501	180%
Persons 18 to 64 years	17,901	59%	7,858	62%	10,043	128%
Persons 65 years and over	2,452	8%	994	8%	1,458	147%

Sources: U.S. Census Bureau, American Fact Finder, 2010 and 2000 Census.
Note: Percentages were rounded.



Image: Town of Wendell website

Wendell, incorporated in 1903, is located in eastern Wake County, approximately 12 miles from Raleigh. Wendell started in the 1850s when tobacco farmers in Granville County were victims of a blight (known as the Granville County wilt), where farmers chose to move to a new location after their crops failed. Wendell started to experience increased growth and expansion due to the town’s close proximity to Raleigh via Highway US 64.

Contact Information

Town Hall: 15 E. Fourth Street
 Wendell, NC 27591
 Phone: (919) 365-4450
 Website: www.townofwendell.com

Quick Facts

- Total population¹: 6,035
- Median age²: 38.1 years
- Percent high school graduate or higher²: 84.8%
- Median household income (dollars)²: \$35,864

Sources: ¹ U.S. Census Bureau: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2011. ²U.S. Census Bureau, 2007-2011 American Community Survey.

Demographic Profile: Wendell, NC

	2010 Census		2000 Census		2000-2010 Change	
	Counts	Percent	Counts	Percent	Counts	Percent
Total Population	5,845	100%	4,247	100%	1,598	38%
<i>Population by Race</i>						
American Indian/Alaska native	46	1%	18	0.4%	28	156%
Asian	52	1%	17	0.4%	35	206%
Black or African American	1,768	30%	1,022	24%	746	73%
Native Hawaiian/Other Pacific native	0	0%	2	0.1%	-2	-100%
Some other race	395	7%	140	3%	255	182%
Two or more races	189	3%	57	1%	132	232%
White	3,395	58%	2,991	70%	404	14%
<i>Population by Hispanic or Latino Origin (of any race)</i>						
Hispanic or Latino Origin	673	12%	251	6%	422	168%
<i>Population by Gender</i>						
Male	2,690	46%	1,934	46%	756	39%
Female	3,155	54%	2,313	55%	842	36%
<i>Population by Age</i>						
Persons 0 to 4 years	468	8%	339	8%	129	38%
Persons 5 to 17 years	1,258	22%	908	21%	350	39%
Persons 18 to 64 years	3,443	59%	2,470	58%	973	39%
Persons 65 years and over	676	12%	530	13%	146	28%

Sources: U.S. Census Bureau, American Fact Finder, 2010 and 2000 Census.
 Note: Percentages were rounded.



Zebulon
North Carolina

The Town of *Friendly People*

Image: Town of Zebulon website

Zebulon, located along US Highways 64 and 264, is the easternmost municipality in Wake County and is approximately 20 miles from Raleigh. Zebulon was incorporated in 1907 and was named after Governor Zebulon B. Vance. Zebulon is known as the site of the Five Counties Stadium, a regional attraction that is the home to the Carolina Mudcats (a minor baseball league affiliate of the Cincinnati Reds).

Contact Information

Town Hall: 1003 N. Arendell Avenue
Zebulon, NC 27597
Phone: (919) 269-7455
Website: www.townofzebulon.org

Quick Facts

- Total population¹: 4,574
- Median age²: 39.4 years
- Percent high school graduate or higher²: 70.6%
- Median household income (dollars)²: \$45,625

Sources: ¹ U.S. Census Bureau: Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2011. ²U.S. Census Bureau, 2007-2011 American Community Survey.

Demographic Profile: Zebulon, NC

	2010 Census		2000 Census		2000-2010 Change	
	Counts	Percent	Counts	Percent	Counts	Percent
Total Population	4,433	100%	4,046	100%	387	10%
<i>Population by Race</i>						
American Indian/Alaska native	22	1%	23	1%	-1	-4%
Asian	46	1%	41	1%	5	12%
Black or African American	1,713	39%	1,608	40%	105	7%
Native Hawaiian/Other Pacific native	1	0%	0	0%	1	0%
Some other race	393	9%	162	4%	231	143%
Two or more races	159	4%	41	1%	118	288%
White	2,099	47%	2,171	54%	-72	-3%
<i>Population by Hispanic or Latino Origin (of any race)</i>						
Hispanic or Latino Origin	706	16%	348	9%	358	103%
<i>Population by Gender</i>						
Male	2,032	46%	1,860	46%	172	9%
Female	2,401	54%	2,186	54%	215	10%
<i>Population by Age</i>						
Persons 0 to 4 years	346	8%	342	9%	4	1%
Persons 5 to 17 years	904	20%	803	20%	101	13%
Persons 18 to 64 years	2,603	59%	2,400	59%	203	9%
Persons 65 years and over	580	13%	501	12%	79	16%

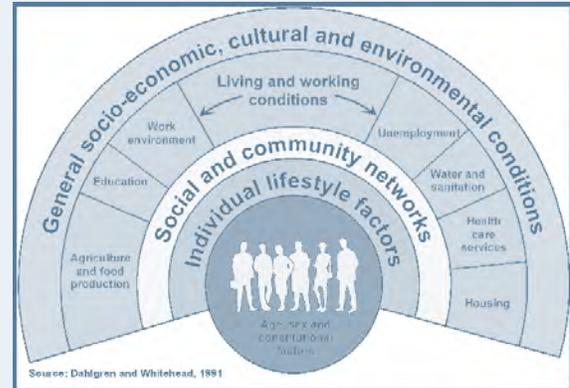
Sources: U.S. Census Bureau, American Fact Finder, 2010 and 2000 Census.
Note: Percentages were rounded.

CHAPTER 3: SOCIAL AND ECONOMIC DETERMINANTS OF HEALTH



CHAPTER 3 | SOCIAL AND ECONOMIC DETERMINANTS OF HEALTH

Health starts in our homes, schools, workplaces, neighborhoods, and communities. Health is influenced by behavior and access to care, but health can also be determined by social and economic characteristics (Healthy People 2020). These characteristics are defined as social determinants of health; and are the circumstances in which people are born, grow up, live, work, and age; as well as the systems put into place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics (World Health Organization, Social Determinants of Health). Social determinants of health can explain in part why some residents are healthier than others and why some residents are more generally not as healthy as they could be.



Poverty, education level, and housing are three important social determinants of health. These factors are strongly tied to individual health. Residents with higher incomes, more years of education, and a healthy and safe environment to live in have better health outcomes and generally have longer life expectancies (NC Institute of Medicine. *Healthy North Carolina 2020: A Better State of Health*. Morrisville, NC: NC Institute of Medicine; 2011).

Quick Facts

Positive Trends:

- The high school drop-out rate in Wake County has been on a general decline since the 2006-07 school year. In 2011-12, the rate dropped to 2.83% reached—the lowest point since the 2004-05 school year.
- In 2012, the Raleigh-Durham area was ranked the #1 least congested metro city with a population of 1-3 million in the U.S.
- The Index, Violent, and Property crime rates in Wake County have been below the comparable rates in Mecklenburg County and NC since 2006.

Areas for Improvement:

- Wake County graduation rates among students classified as economically disadvantaged and those with limited English proficiency are lower compared to both Mecklenburg County and North Carolina.

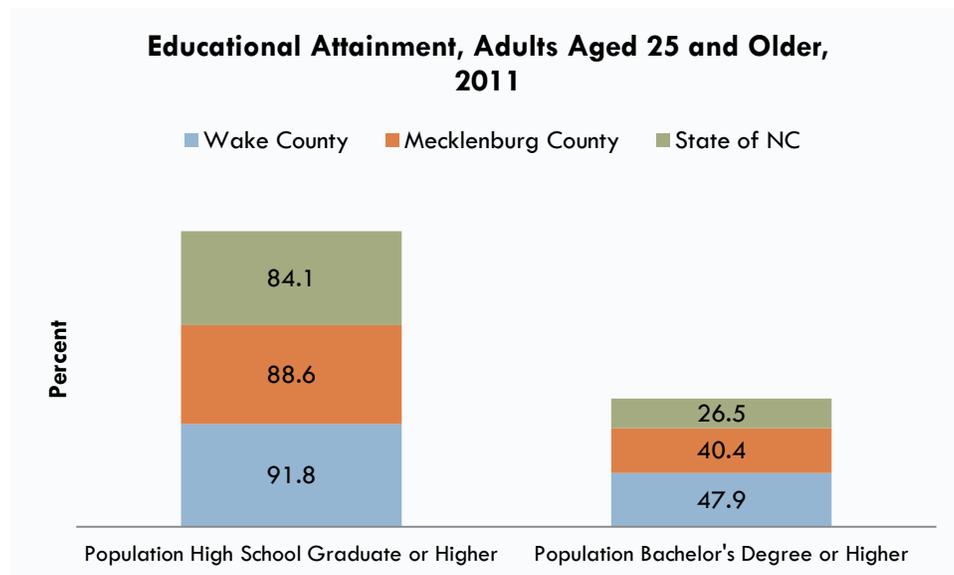
Education and Lifelong Learning

Adults who did not graduate from high school are more likely to suffer from health conditions such as heart disease, high blood pressure, stroke, high cholesterol, and diabetes. Additionally, individuals with less education are also more likely to engage in risky health behaviors, such as smoking and being physically inactive (NC Institute of Medicine. *Healthy North Carolina 2020: A Better State of Health*. Morrisville, NC: NC Institute of Medicine; 2011).

Statistics, Targets, and Disparities

EDUCATION ATTAINMENT

According to 2011 U.S. Census estimates, 91.8% of residents in Wake County are high school graduates or higher. Approximately 48% of residents in Wake County has earned a bachelor's degree or higher, compared to approximately 40% in Mecklenburg County and 27% statewide.



Source: US Census Bureau, American Fact Finder, American Community Survey, 2005-2009 American Community Survey (ACS) 5-Year Estimates.

During the 2011-2012 school year, Wake County schools graduated 80.6% of the freshman class who entered high school four years prior.

- The *Healthy NC 2020* target is to increase the four-year high school graduation rate to 94.6%.

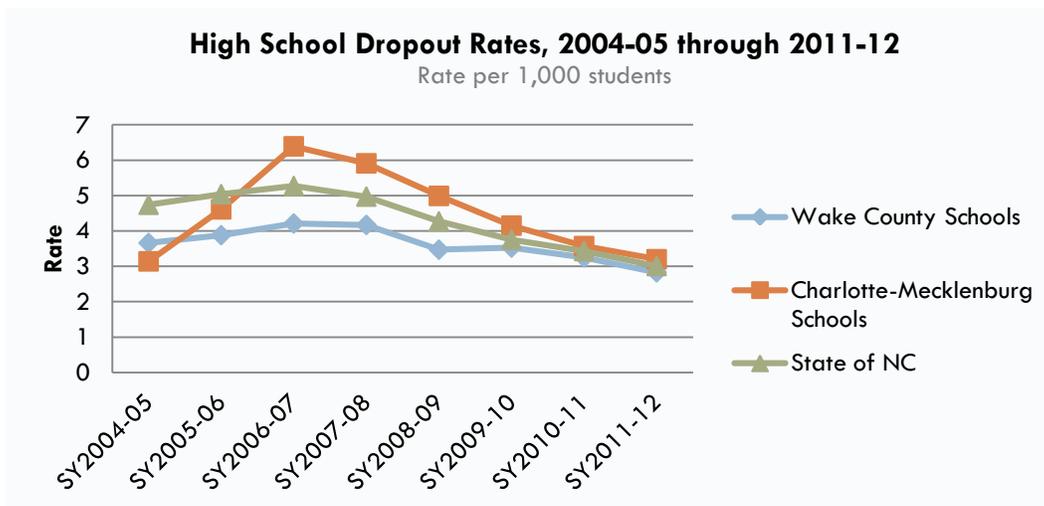
Female students demonstrated a higher graduation rate compared to males. Among students classified as economically disadvantaged and those with limited English proficiency, Wake County graduation rates are lower compared to both Mecklenburg County and North Carolina. While they represent a small number of students throughout the school districts presented, fewer than half of the students with limited English proficiency graduate from high school within four years.

Percent of Students Graduating by School System by Cohort, 2011-2012

School System	All Students	Male	Female	Economically Disadvantaged	Limited English Proficiency
Wake County Schools	80.6%	76.8%	84.7%	65.1%	34.6%
Charlotte-Mecklenburg Schools	76.4%	70.8%	82.1%	69.7%	46.1%
State of NC	80.4%	76.5%	84.6%	74.7%	50%

Source: Public Schools of North Carolina, Cohort Graduation Rate. 4-Year Cohort Graduation Rate Report, 2008-09 Entering 9th Graders Graduating in 2011-12 or Earlier.

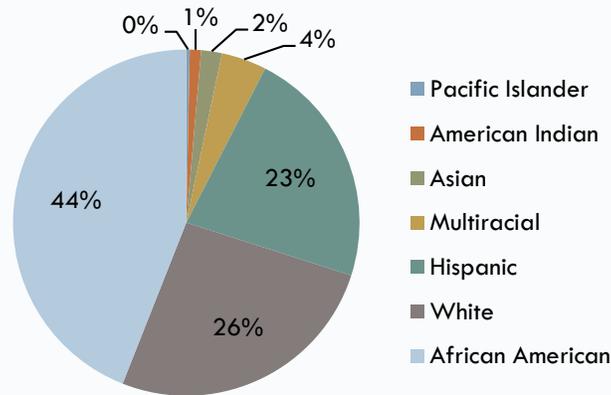
The high school drop-out rate has been on a general decline since the 2006-2007 school year in Wake County and in 2011-2012 was at the lowest point since 2004-05, at 2.83%.



Source: NC Dept of Public Instruction, Research and Evaluation, Dropout Data and Collection Process, Annual Dropout Reports.
 Note: A "dropout" is any student who leaves school for any reason before graduation or completion of a program of studies without transferring to another elementary or secondary school. For reporting purposes, a dropout is a student who was enrolled at some time during the previous school year, but who was not enrolled (and who does not meet reporting exclusions) on day 20 of the current school year.

In the 2011-2012 school year, there were 1,236 high school dropout events. Of those events, 44% are among African American students, compared to 26% among white students and 23% among Hispanic students.

High School Dropouts Events by Race or Ethnicity, Wake County, 2011-12 School Year



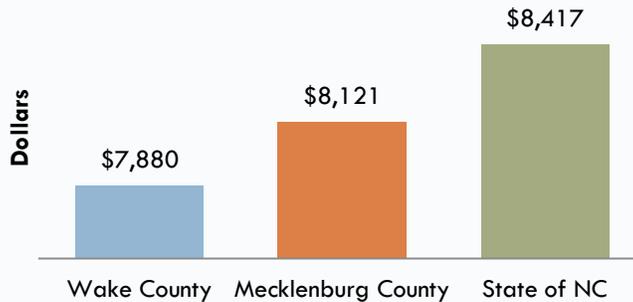
Source: NC Dept of Public Instruction, Consolidated Data Report, 2011-2012.
 Note: Race and ethnicity are considered exclusive categories.

CURRENT TRENDS AND STUDENT ACHIEVEMENT

In Wake County there are 173 public schools with approximately 151,000 students enrolled in the 2011-2012 school year; the largest public school system in the state, Wake County represents 10% of all public school students in North Carolina. The number of students enrolled in Wake County Schools in the 2011-12 school year has increased 27.6% since 2004-05 (NC Department of Public Instruction, Data and Statistics, Education Data: NC Statistical Profile).

For the 2011-2012 school year, the per pupil expenditure for Wake County students from state, federal and local funds was \$7,880, the lowest compared with Mecklenburg and North Carolina overall.

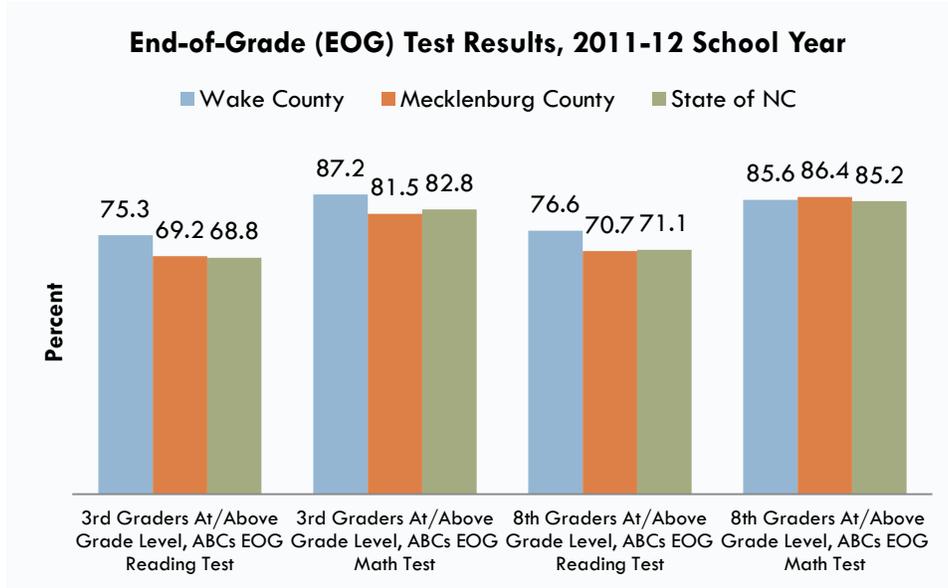
Per Pupil Expenditure State, Federal and Local, 2011-2012 School Year



Source: NC Department of Public Instruction, Data and Statistics, Education Data, NC School Report Cards.

For the 2011-2012 school year, a higher percentage of 3rd graders in Wake County were performing at or above grade level in both reading and math compared to Mecklenburg County and North Carolina. A higher percentage of Wake County 8th graders performed at or above grade

level in reading, while Mecklenburg County 8th graders performed slightly higher on the math End of Grade (EOG) test.



Source: NC Department of Public Instruction, Data and Statistics, Education Data, NC School Report Cards. District Profile.

There are currently 72 private schools in Wake County with 16,135 students. Forty of the private schools are categorized as religiously affiliated and 32 are independent schools (NC Department of Administration, Conventional Non-Public Schools, 2011-2012 Directory).

COMMUNITY ENRICHMENT AND EDUCATION

Wake County Public Libraries is a division of Wake County Government’s Community Services Department. The library provides services to children, promotes recreational reading, encourages lifelong learning, serves as a community center, and works to bridge the technology gap.

With 210 staff members, the system operates 6 regional libraries, 13 community libraries, and the Olivia Raney Local History Library. In 2011-2012, Wake County Public Libraries renovated and reopened three libraries.

Wake County Public Libraries provided the following services in 2011-2012:

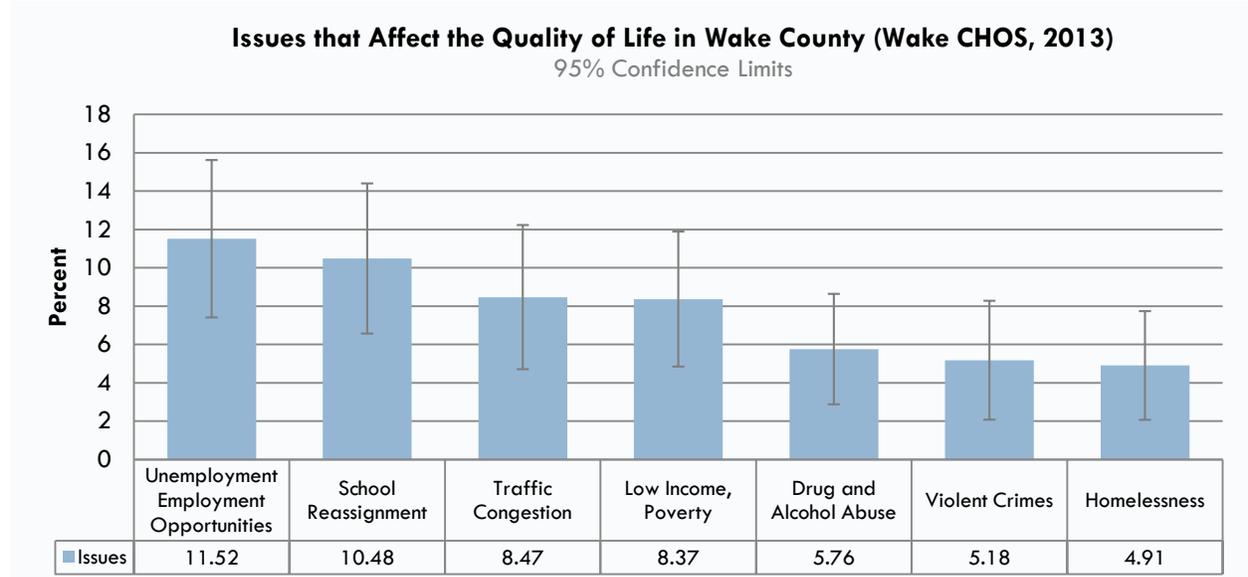
- Circulated more than 12 million books in both traditional and electronic format.
- Hosted more than one million public computer sessions.
- Provided more than 9,000 programs that educated 285,000 individuals.
- Answered more than two million reference questions.

In addition, 8 million people visited the library and another four million utilized the library remotely through the library website.

Source: Wake County Public Libraries. Explore the possibilities: 2011 -2012 report.

Community Perceptions

According to the 2013 Community Health Opinion Survey, residents identified school reassignment as the #2 community concern.



Source: 2013 Wake County Community Health Opinion Survey.

The Wake County education system was identified as a community asset according to two focus groups.



Heritage High holds first graduation in 2013.
Image Source: Wake County Public School System.

Resources

Lifelong Learning with Community Schools offer enrichment classes to adults in the evenings in community schools, usually located in public high schools around the county. The Online Learning with Community Schools program offers online courses for those with a computer and internet connection.

To promote the love of reading and to foster the pursuit of knowledge for the residents of Wake County, the Wake County Public Library system provides services to children, offers recreational reading, acts as a community center, and works to bridge the technology gap.

However, the youth focus group voiced concern over school crowding and the distance to school from their home.

“There’s so many people that are going to school and it’s hard to - I mean, where are you going to put everyone? You can’t have classes that are 50, 60 people...teachers can’t manage that.”

- Community member

Additionally, the Hispanic focus group noted that a major change in Wake County in the past 5 years has been the overburdening of the school bus system.

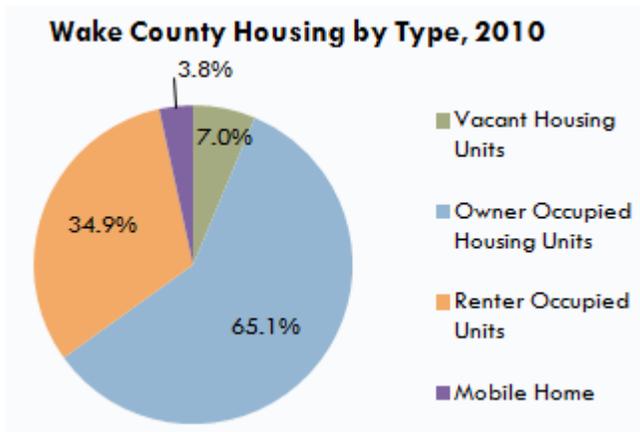
Housing and Homelessness

Families with difficulties paying rent and utilities are more likely to report barriers to accessing health care, higher use of the emergency department, and more hospitalizations (NC Institute of Medicine. Healthy North Carolina 2020: A Better State of Health. Morrisville, NC: NC Institute of Medicine; 2011).

Statistics, Targets, and Disparities

HOUSING

According to the U.S. Census Bureau, housing units in Wake County increased by 112,883 from 2000 to 2010. The percent of the all housing units classified as vacant increased slightly, while the percent of owner occupied units decreased slightly. The percent of housing units occupied by renters increased between 2000 and 2010, despite the higher median gross rental costs in Wake County, where the median monthly rent is 18% higher in Wake County compared with the state.



Source: US Census Bureau, American FactFinder, 2000 US Census, Summary File 1 (SF-1).

In 2010, the median monthly housing cost for homes with mortgages in Wake County at \$1,580 was 27% higher than the state at \$1,244.

In both 2010 and 2011, approximately 46% of the housing units that were rented in Wake County used more than 30% of the householder’s income, a lower percentage than in Mecklenburg County and a higher percentage than North Carolina as a whole. However, the Healthy NC 2020 target is to decrease the percentage to 36.1%.

Housing Costs

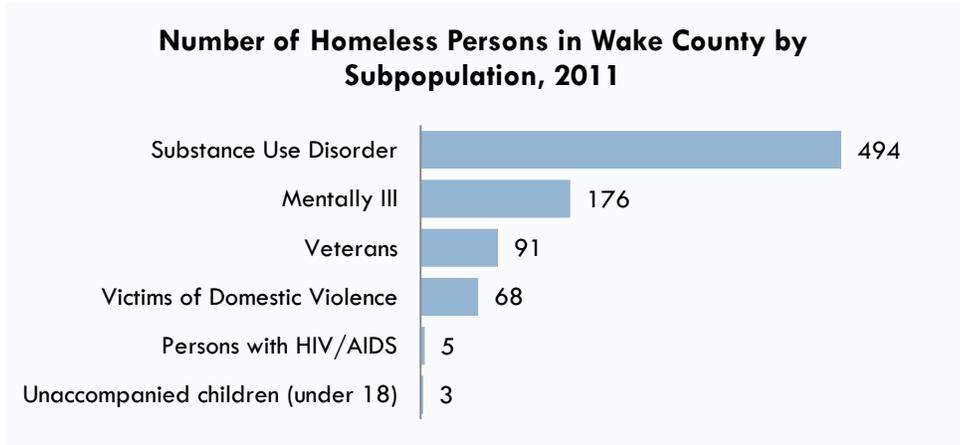
- Median monthly housing cost:
 - Wake County: \$1,580
 - NC: \$1,244
- Median monthly rent:
 - Wake County: \$845
 - NC: \$715

Source: U.S. Census Bureau, American Fact Finder, 2010 ACS 5- Year Estimates.

HOMELESSNESS

Homelessness is defined by the U.S. Department of Housing and Urban Development, as persons living in emergency shelters (including domestic violence shelters), transitional housing for the homeless, or persons living in places not meant for human habitation, such as cars, parks, sidewalks, abandoned buildings, or on the street.

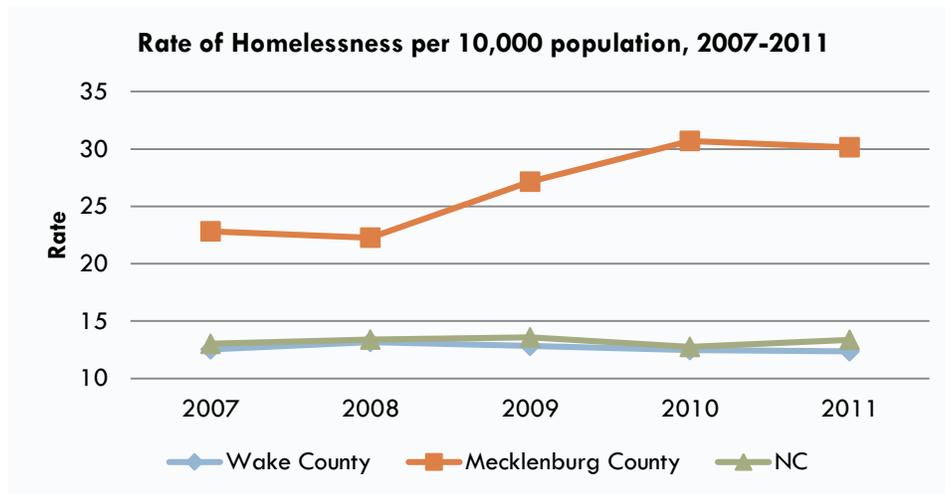
According to the N.C. Interagency Council for Coordinating Homeless Program, an organization that sponsors annual point-in-time surveys each January, there were 1,150 homeless persons living in shelters or going unsheltered in Wake County in 2011. Among homeless persons in Wake County (sheltered or unsheltered), those with a substance use disorder, the mentally ill, veterans, and victims of domestic violence were the leading subpopulations.



Source: North Carolina Coalition to End Homelessness. North Carolina Point-in-Time Count Reporting Form, January 26, 2011.

Additionally, 8% of household residents in Wake County reported in the 2013 Community Health Opinion Survey that they had someone living with them in the past year due to homelessness.

From 2007 to 2011, the Wake County rates of homelessness have been consistent with the overall state rates, and significantly lower than rates in Mecklenburg County.



Source: North Carolina Coalition to End Homelessness. North Carolina Point-in-Time Count Totals 2007 through 2012.
 Note: Rates per 10,000 population were calculated using population estimates from the NC State Center for Health Statistics, NCHS Bridged Population Data.

Community Perceptions

According to the 2013 Community Health Opinion Survey, residents identified homelessness as the #7 community concern.

In the focus groups among homeless residents, one concern was the need for places for the homeless to go during the day to avoid getting citations for loitering in public areas. Another concern identified from this focus group was the mental health needs for the homeless, who often do not get treated and end up being incarcerated. Focus group participants also identified the need for a mobile health clinic to reach homeless camps.

“For about three months in a row I was getting citations for being homeless. And the last two times I got tickets for being homeless, my caseworker went with me to court and she told the DA, she said, ‘The reason why she homeless is because she don’t have nowhere to go’. And so they asked me where I was living and I said, ‘I’m living in the woods.’”

- Community member

“I saw a homeless girl yesterday. I can tell she has some mental issues and she’s pregnant. And she’s still homeless. And probably because of whatever her dysfunctional habit she has, she might not never go and see a doctor. Somebody should be giving her prenatal advice or things like that. There has to be some [mobile health clinic] service to go into the woods and talk to people and see if they have any health problems. That is necessary because some of these people are so addicted to whatever they are addicted to. If it doesn’t hurt, they’re not going to go check it.”

- Community member

Resources

Affordable housing is a priority and the county is working with community partners to bring more low-cost options to Wake County. In 2012, Commissioners approved loans for 271 units in Raleigh, Cary, Rolesville, Holly Springs, Garner and Wendell. Several of the projects are designed for tenants who frequently have trouble finding housing including senior citizens, disabled veterans and handicapped adults. The Commissioners also approved funding for 15 single family homes in Apex, to be built by Habitat for Humanity for low income, first time home buyers.



Image Source: 2012 Wake County Annual Report

County financing in prior years helped to support several rental communities that opened in the last year, including:

- *Meadow Creek Commons Apartments: 48-units for seniors in Raleigh, completed in April 2012*
- *Highland Terrace Apartments: 80-units for seniors in Cary, completed in March 2011*
- *Sandy Ridge Apartments: 45-units for families in Wendell, completed in May 2011*
- *Mingo Creek Apartments: 76-units for families in Knightdale, completed in December 2011*

Project Homeless Connect, an annual event that helps homeless people with basic needs, was streamlined in 2012 to better meet the needs of the community. The event provides haircuts, coats and blankets, hygiene kits and ID cards; services like behavioral health care, employment, housing and legal assistance; and access to benefits including Medicaid, WIC and food stamps.

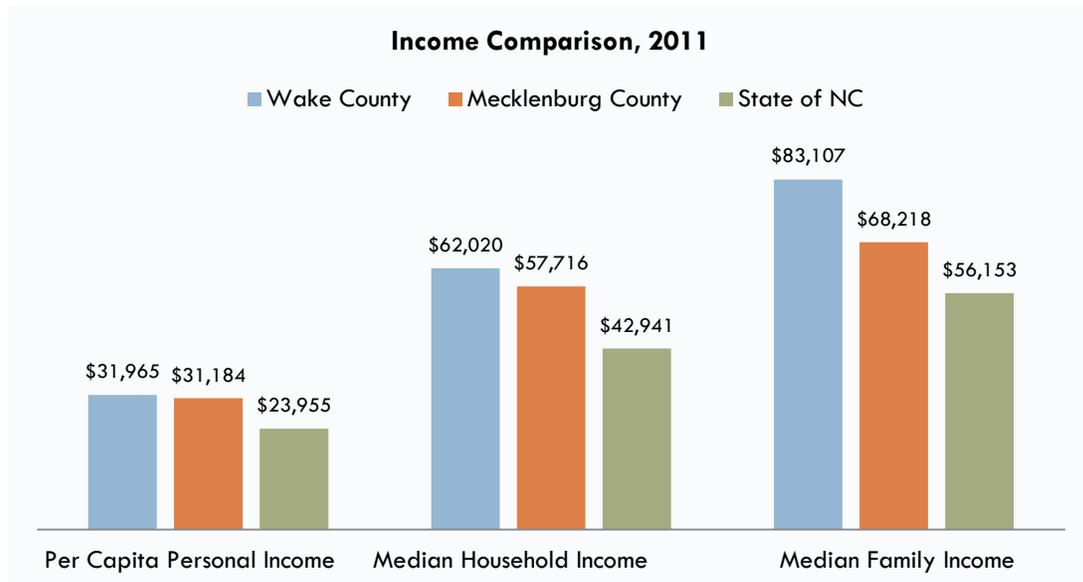
The Second Chance Housing program at Brookridge Apartments received a National Association of Counties Achievement Award. The program provides housing to people who are working to move beyond problems including bad credit, a history of evictions, criminal history or disability. In 2011, half of the tenants in the apartment complex were Second Chance tenants, with 65% reporting to have been formerly homeless.

Income and Poverty

In general, increasing income levels correspond with gains in health outcomes. People in poverty have the worst health, compared to people at higher income levels (NC Institute of Medicine. Healthy North Carolina 2020: A Better State of Health. Morrisville, NC: NC Institute of Medicine; 2011).

Statistics, Targets, and Disparities

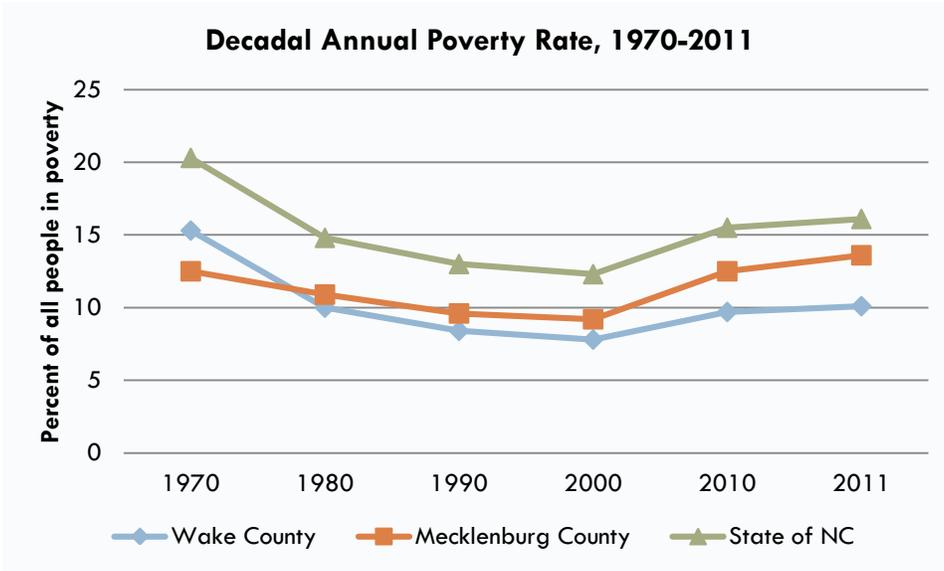
In 2011, the personal per capita income for a Wake County resident was \$34,965. The median household income in Wake County was \$62,020, which is more than \$20,000 higher than the average North Carolina household income.



Source: NC Dept of Commerce, AccessNC, Community Demographics, County Report, County Profile.

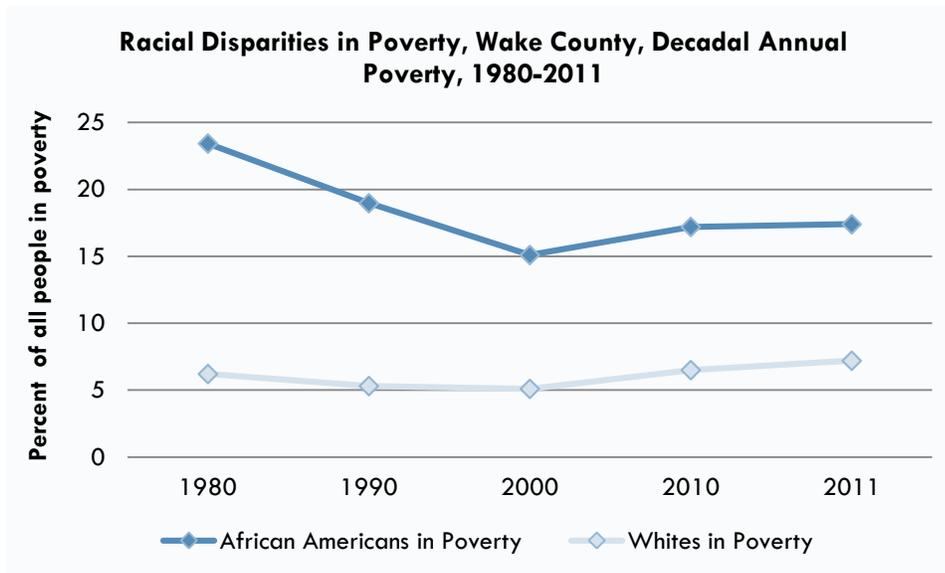
Notes: *Per capita personal income* is the income earned per person 15 years of age or older in the reference population. *Median household income* pertains to the incomes of all the people 15 years of age or older living in the same household (i.e., occupying the same housing unit) regardless of relationship. For example, two roommates sharing an apartment would be a household, but not a family. *Median family income* pertains to the income of all the people 15 years of age or older living in the same household who are related either through marriage or bloodline. For example, in the case of a married couple who rent out a room in their house to a non-relative, the household would include all three people, but the family would be just the couple.

Since 1980, the percent of all people living in poverty in Wake County has been consistently lower than Mecklenburg County or North Carolina as a whole. In 2011, the percent of people living in poverty in Wake County was 37% lower than North Carolina.



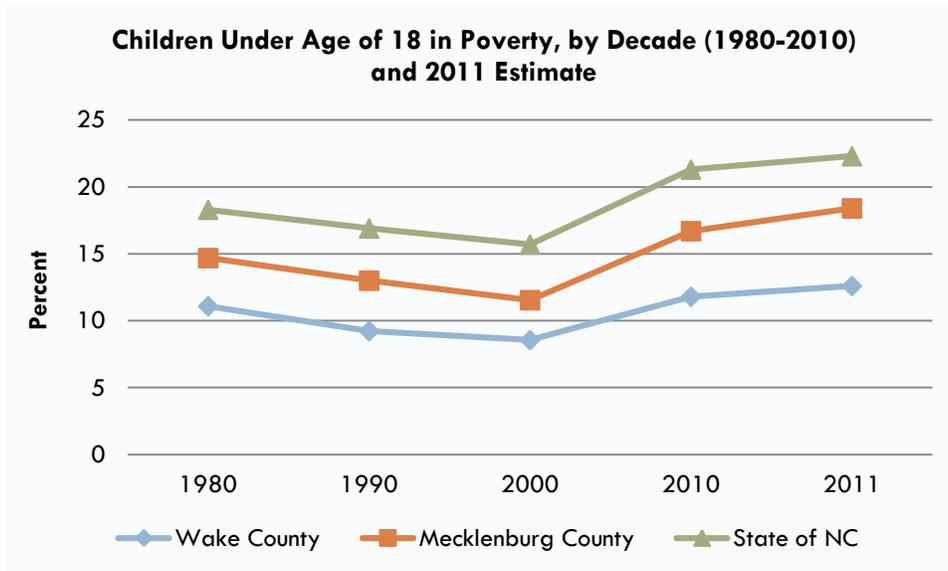
Sources: Log Into North Carolina (LINC) Database, Topic Group Employment and Income (Data Item 6094); U.S. Census Bureau, American Fact Finder, American Community Survey, 2010 American Community Survey 5-Year Estimates; U.S. Census Bureau, American Fact Finder, American Community Survey, 2011 American Community Survey 5-Year Estimates.
 Note: The poverty rate is the percent of the population (individuals and families) whose money income (including job earnings, unemployment compensation, social security income, public assistance, pension/retirement, royalties, child support, etc.) is below the threshold established by the Census Bureau.

In Wake County, the percent of African-American residents in 2011 who live in poverty (17.4 %) is 2.4 times higher than their white peers (7.2%).



Sources: Log Into North Carolina (LINC) Database, Topic Group Employment and Income (Data Item 6094); U.S. Census Bureau, American Fact Finder, American Community Survey, 2010 American Community Survey 5-Year Estimates; U.S. Census Bureau, American Fact Finder, American Community Survey, 2011 American Community Survey 5-Year Estimates.
 Note: The poverty rate is the percent of the population (individuals and families) whose money income (including job earnings, unemployment compensation, social security income, public assistance, pension/retirement, royalties, child support, etc.) is below the threshold established by the Census Bureau.

Although it has increased since a low point in 2000, the percent of children under the age of 18 in Wake County living in poverty has remained below the comparable proportions in both Mecklenburg County and North Carolina. In 2011, the percent of children living in poverty (12.6%) was 1.8 times lower than the state (22.3%).

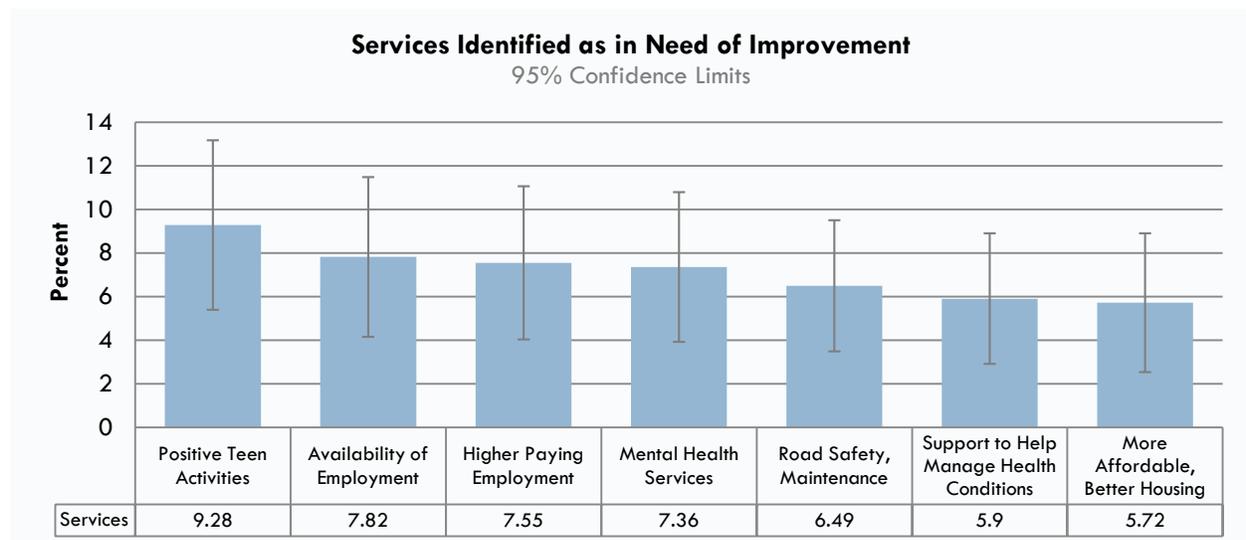


Sources: Log Into North Carolina (LINC) Database, Topic Group Employment and Income (Data Items 6094, 6100, 6102, 6104); U.S. Census Bureau, American Fact Finder, American Community Survey, 2010 American Community Survey 5-Year Estimates; U.S. Census Bureau, American Fact Finder, American Community Survey, 2011 American Community Survey 5-Year Estimates.

Community Perceptions

According to the 2013 Community Health Opinion Survey, residents identified poverty as the #4 community concern.

Additionally, residents identified “higher paying employment” as the #3 service in need of improvement in Wake County.



Source: 2013 Wake County Community Health Opinion Survey

In the focus groups, the ability to pay increasing medications and co-pays was identified as barriers to receiving health care. In addition to affordability of health care, focus group participants were concerned about the accessibility of recreation and youth activities because of cost.

Resources

- *The Warmth for Wake heating assistance program raised more than \$34,000 in 2012 and delivered 153 loads of firewood and 52 space heaters to families who were in danger of being without heat during the winter.*
- *United Way 2-1-1 is a single source for information about community services and for referrals to health and human service programs. Call 2-1-1 throughout most of the counties in North Carolina, 24 hours a day, 365 days a year to get connected. Bilingual caseworkers are available during regular business hours.*

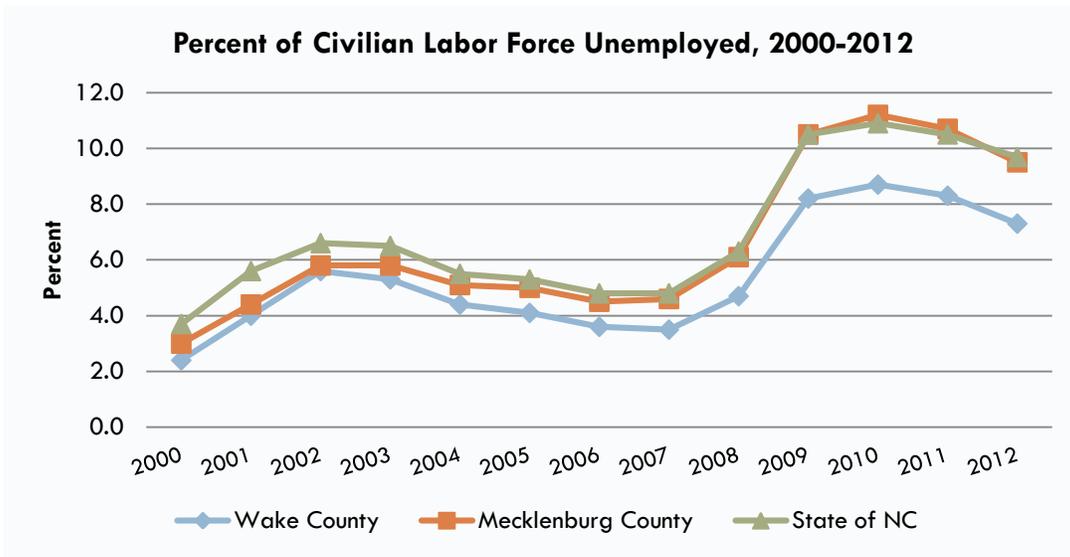
Employment

The 2007-2009 U.S. economic recession was the longest and deepest recession since the Great Depression, and the economy is still recovering. Health insurance is a major determinant of access to both preventive and acute health care. Most Americans rely on employer-provided insurance, and unemployment affects their access to health services, due to both loss of employer-sponsored health insurance and reduced income. According to the 2009 and 2010 National Health Interview Survey (NHIS), unemployed adults aged 18-64 years had poorer mental and physical health than employed adults and were less likely to receive needed medical care and prescriptions due to cost than those who were employed (Centers for Disease Control and Prevention, health and access to care among employed and unemployed adults: U.S., 2009-2010).

Statistics, Targets, and Disparities

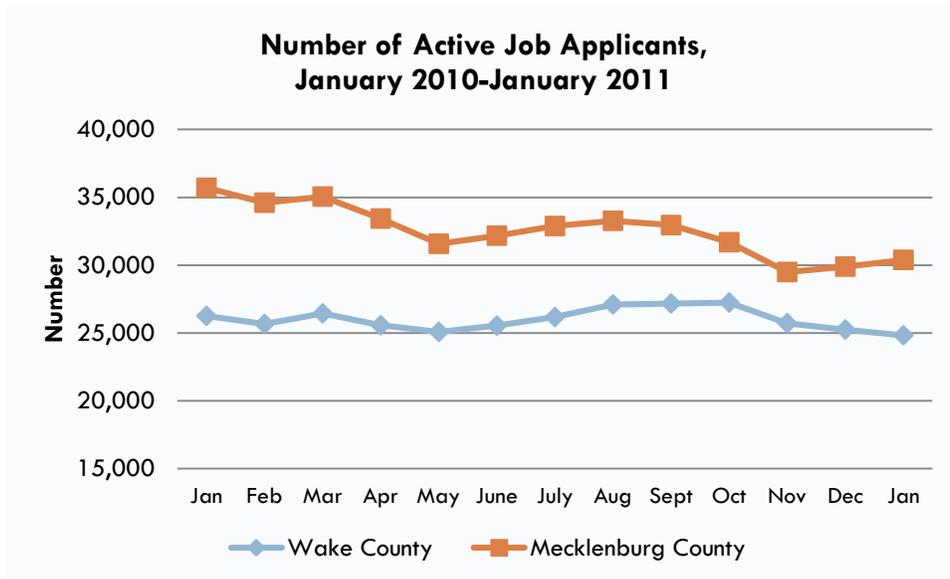
Nearly 360,000 workers, or around 81% of the available workforce, worked in Wake County in 2011. In 2011, approximately 19% of Wake County workers traveled out of the county for work, higher than Mecklenburg (12%) and lower than statewide (28%) (U.S. Census Bureau, American Fact Finder, 2011 ACS 5-Year Estimate).

Since 2000, the percent of the civilian labor force in Wake County that was unemployed has been consistently lower than Mecklenburg County and North Carolina. While the percent of unemployed has increased in all locations since 2007, the percent in Wake County has declined since 2010.



Source: NC Employment Security Commission, Labor Market Information, Workforce Information, Employed, Unemployed and Unemployment Rates, Labor Force Statistics.
 Notes: The unemployment rate is calculated by dividing the number of unemployed by the civilian labor force. The civilian labor force is the total employed plus the unemployed. 2012 figures represent the average monthly rate from January through September.

Between January 2010 and January 2011, the number of active job applicants in Wake County remained relatively stable, with the numbers decreasing in the last months of 2010. Compared to Mecklenburg County, Wake County had fewer job applicants, which supports the lower prevalence of the unemployed Wake County.



Source: NC Employment Security Commission, Labor Market Information, Workforce Information, Job Applicants Registered for Work with ESC Offices.

Community Perceptions

According to the 2013 Community Health Opinion Survey, 72% of residents thought there is enough economic opportunity in Wake County (compared to 53.7% in 2010). However, residents identified unemployment as the #1 community concern. Additionally, residents identified availability of employment as the #2 service in need of improvement in Wake County.

In two focus groups, there was discussion about the need for increasing employment in Wake County, including job assistance for persons with felonies and providing more opportunities for young people to get jobs.

“It’s hard for them [felons] to get a job. There’s jobs out here but they can’t get it because they have a criminal record. And I don’t think that’s fair.

- Community member

“There’s a lot of teenagers who want a job but they can’t get one because adults, and it’s not their fault, got laid off at their job. We’re not getting opportunities for jobs; it’s just in the way its set up.”

- Community member

Resources

The JobLink Career Center at the Millbrook Human Services Center was honored in 2012 at the Enable America's Governor's Reception for improving employment opportunities for persons living with disabilities. JobLink Career Centers served 70,000 job seeking customers workforce related support and services across Wake County.

Child Welfare and Financial Assistance

Statistics, Targets, and Disparities

CHILD PROTECTIVE SERVICES

The Wake County Child Protective Services program receives reports from the community of suspected child abuse, neglect, and dependence. In fiscal year 2011-2012, there were 339 children entering child welfare custody in Wake County, where 65.2% of the children remained in their initial placement after 540 days, compared to 48% at the state level. In addition, 8.3% of children were placed in non-family settings including emergency shelters, hospitals, or jail or detention centers, compared to 14% statewide.

Children Entering Child Welfare Custody, 2007-2012

	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY2011-12
Wake County					
Number of Children	218	233	267	307	339
Median # of Days in Custody	217	662	577	593	n/a
% Initially Placed with a relative	32.1	25.3	35.2	41.7	31.0
% Initially placed in a Foster Home	44.5	51.1	44.2	33.9	45.7
State of NC					
Number of Children	5,048	4,707	4,574	4,700	4,535
Median # of Days in Custody	417	454	452.5	434.5	n/a
% Initially Placed with a relative	25.0	27.0	29.0	32.0	30.0
% Initially placed in a Foster Home	44.0	43.0	43.0	43.0	43.0

Source: Wake County Child Welfare, February 20, 2013.

WORK FIRST

North Carolina's Temporary Assistance for Needy Families (TANF) program, called Work First, provides parents short-term training, child care assistance, and other services to help them become employed and self-sufficient.

The total number of Work First Family Assistance (WFFA) cases served by the Wake County Department of Social Services has declined, by about 12%, from 1,680 cases in 2009 to 1,472 cases in 2012. The vast majority of households receiving WFFA has decreased overall, from 3,536 in 2009 to 3,130 in 2012. In 2012, the average WFFA grant amount was \$201 per month.

Wake County Work First Family Assistance, 2009-2012

	2009	2010	2011	2012
<i>Total Number of WFFA Cases at end of year</i>	1,680	1,531	1,547	1,472
<i>Avg. Monthly Number of Households Receiving WFFA</i>				
One-parent household	571	451	490	558
Two-parent household	5	15	17	19
<i>Avg. Monthly Number of Individuals Receiving WFFA</i>	3,536	3,167	3,056	3,130
<i>Avg. Monthly WFFA Grant</i>	\$233	\$185	\$184	\$201

Source: ¹Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., Vaughn, J., Bauer, R., and You, A. (2012). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina. Retrieved February 20, 2013, from University of North Carolina at Chapel Hill Jordan Institute for Families website.

In 2010, child care assistance from the WFFA program was provided to less than half as many Wake County children (2,398) compared to Mecklenburg County (6,425) (Annie E. Casey Foundation, Kids Count Data Center).

FOOD AND NUTRITION SERVICES

Food and Nutrition Services (FNS) is a federal food assistance program for low-income families with the goal to increase food security and reduce hunger. The program assists eligible low-income households buy food needed for a nutritionally adequate diet. The number of FNS applications in Wake County has increased each year since 2007. Nearly twice as many applications were received in 2012 compared to 2007. The median monthly FNS benefits issued fluctuates yearly, with the most recent amount being around \$120 a month.

Wake County Food and Nutrition Services (FNS), 2007-2012

	2007	2008	2009	2010	2011	2012
Total Number of FNS Applications ²	1,687	2,015	2,392	2,678	2,861	3,032
Avg. Monthly Number of Households Receiving FNS ¹	1,263	1,668	2,182	2,779	3,295	1,783
Avg. Monthly Number of Individuals Receiving FNS ¹	4,704	4,626	3,637	2,744	2,783	3,010
Number of Household Receiving benefits	18,872	19,539	22,237	28,697	34,334	37,720
Number of Individuals receiving benefits	43,580	45,177	51,966	65,101	77,068	83,256
Median Monthly Total FNS Benefits Issued (end of year) ¹	\$118	\$123	\$140	\$113	\$120	\$119.50

Sources: ¹Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., Vaughn, J., Bauer, R., and You, A. (2012). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina. Retrieved February 20, 2013, from University of North Carolina at Chapel Hill Jordan Institute for Families website.

² Workload Report by Worker/County/State, Report Number SLEM910-01.

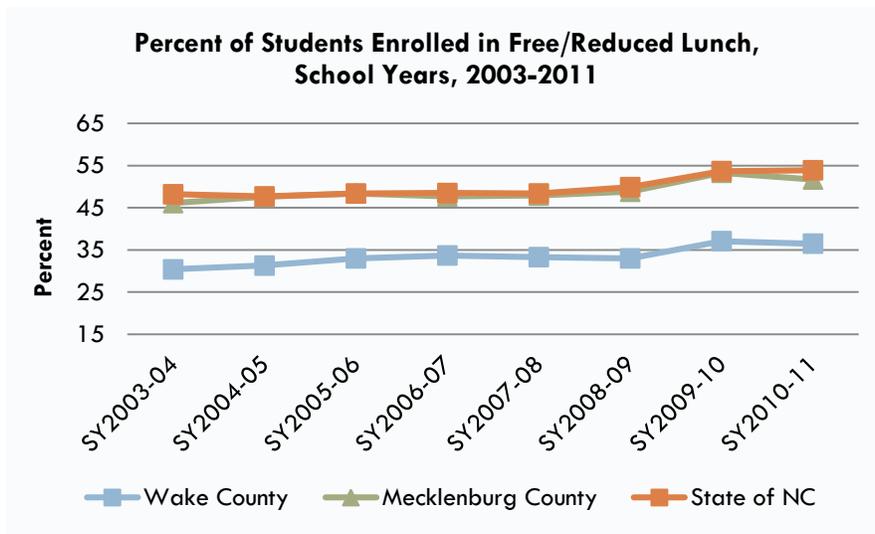
FREE OR REDUCED-PRICE LUNCH

To be eligible for free or reduced-price lunch in Wake County, students must live in households earning at or below 185 percent of the Federal poverty guidelines. In Wake County, the number of children who receive free or reduced-price lunch in the Wake County public school system has increased 31% since the 2006-2007 school year. However, the percentage of Wake County students receiving free or reduced-price lunches has been consistently lower than Mecklenburg County and North Carolina, where more than half of all students receive free or reduced-price lunch.

Reduced priced meals are \$.40 at lunch and “no cost” at breakfast.



Source: Wake County Public School System, Free and Reduced Meal Benefit Application, 2012-2013



Source: Annie E. Casey Foundation, Kids Count Data Center, Data by State, North Carolina.

Resources

- *There are a large number of nonprofit and faith-based organizations that provide food, clothing and financial assistance to eligible residents. More information can be found in the [2012 Wake County Human Resources Guide](#).*
- *If you suspect a child has been abused, neglected or become dependent, please call the Wake County Child Protective Services Report Line at 919-212-7990 (English) or 919-212-7963 (Spanish).*

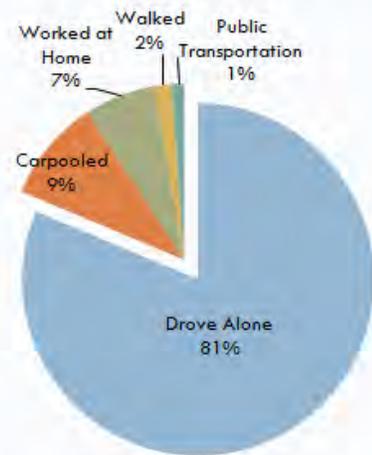
Transportation

Transportation in Wake County includes many local and state options such as state and federal highways, local bus transit systems, and air travel from the Raleigh-Durham International airport. Transportation reaches beyond the boundaries of traditional health care and public health sectors, but can be an important factor in improving population health. Access to affordable transportation can affect the ability of residents to access health care, as well as employment, schools, recreation, and food options.

Statistics, Targets, and Disparities

The growing population of Wake County has, naturally, increased the number of individuals driving to work. In 2011, 81% of workers over the age of 16 in Wake County drive alone, while 9% carpool. In 2011, approximately 6% of the workforce in Wake County was able to work from home.

Wake County Modes of Transportation to Work
2011 Estimates



Source: U.S. Census Bureau, American Fact Finder, 2011 Estimates.

According to the Texas A & M Transportation Institute's 2012 Urban Mobility Report, the Raleigh-Durham area was ranked the #1 least congested metro city with a population of 1-3 million in the U.S.

Community Perceptions



According to the 2013 Community Health Opinion Survey, traffic congestion was rated as the #3 community concern.

Of the 13% residents who reported that they had trouble getting the health care they needed, less than 1% said transportation was the main barrier. However, transportation was identified as one barrier for residents having trouble getting care for disabled friends or family and for residents unable to evacuate during a mandatory evacuation in Wake County.

Within all focus groups, accessible, reliable, and affordable transportation emerged as one of the common cross-cutting themes affecting the health of a community. Many residents felt that Wake County's public transportation options were a key asset to the community and indicated that transportation access was not an issue in their community. However, other residents described transportation in Wake County as car-dependent and voiced concern about accessing transportation options for seniors, youth, persons living with disabilities, Hispanics, and those with little or no financial resources. Two focus groups were concerned about the limited options of the transit systems, including the share-ride van for seniors, and an overall reduction in public transit routes. In addition, some residents linked traffic in Wake County to the overall growth and development of Wake County.

“This place has really evolved. I think they have to accommodate the new people who come here because it wasn’t like this when I came here. There are a lot of new things, new roads, that’s been added. I’ve seen even where I live the road has been expanded because there’s more traffic. The traffic is amazing. I mean, it’s truly amazing. When I first came here, you just went through and okay. Now, no matter what time you go out there, it reminds me of New York, Manhattan.”

- Community member

Resources

Compared to other counties in North Carolina, Wake County is fortunate to have several transportation service providers available. The transit systems in Wake County include:

- Capital Area Transit (CAT): provides bus service throughout Raleigh as well as R-LINE service in Downtown Raleigh
- Triangle Transit Authority (TTA): operates regional bus and shuttle service, paratransit services, ridematching, vanpools, provides commuter resources, and an emergency ride home program for the Raleigh-Durham-Chapel Hill area.
- CTran (Town of Cary transit service): offers inexpensive and reliable transportation around Cary for anyone any day except Sunday. The Town of Cary provides two types of service: fixed route and door-to-door service.
- Wake Coordinated Transportation Service (WCTS): a county agency which coordinates transportation services for a variety of Wake County agencies. MV Transit is the private transportation company which is their primary transportation provider. WCTS, using MV Transit, provides medical transportation for Medicaid, Resources for Seniors' medical/ grocery/ nutrition transportation, and dialysis transportation.
- Wolfline (NCSU Campus Bus Service): NC State University's bus service which is tailored to student class schedules, but also serves the general public fare-free. Wolfline buses operate every day classes are in session, serving all three campuses, two park & ride lots, official NC State University housing and privately-owned apartment complexes located on city streets traveled by Wolfline buses on the way to or from these areas.
- Amtrak: offers two train routes for travelers in North Carolina. The Piedmont travels between the commercial center of Charlotte and the state capital of Raleigh. The Carolinian covers the same route, with service extending up the East Coast to New York City.
- Greyhound: largest provider of intercity bus transportation, serving more than 3,800 destinations with 13,000 daily departures across North America.

Wake County Human Services Transportation Services provides a variety of transportation for agency-eligible participants. Eligibility is based on sponsorship by participating agencies/programs such as Medicaid, Public Health, Mental Health, Work First and other programs. In 2012, Wake County leaders were joined by the U.S. Department of Transportation secretary to announce a \$600,000 grant to expand the Wake Coordinated Transportation Service call center. The Veterans Transportation and Community Living Initiative grant will provide a 24/7 telephone system to:

- Access automated transportation, Veterans Services, and Human Services information.
- Retrieve real-time "where is my ride?" customer ride status information.
- Schedule trip reservation requests.
- Speak with a live Wake County Human Services Transportation Services customer service agent during business hours.

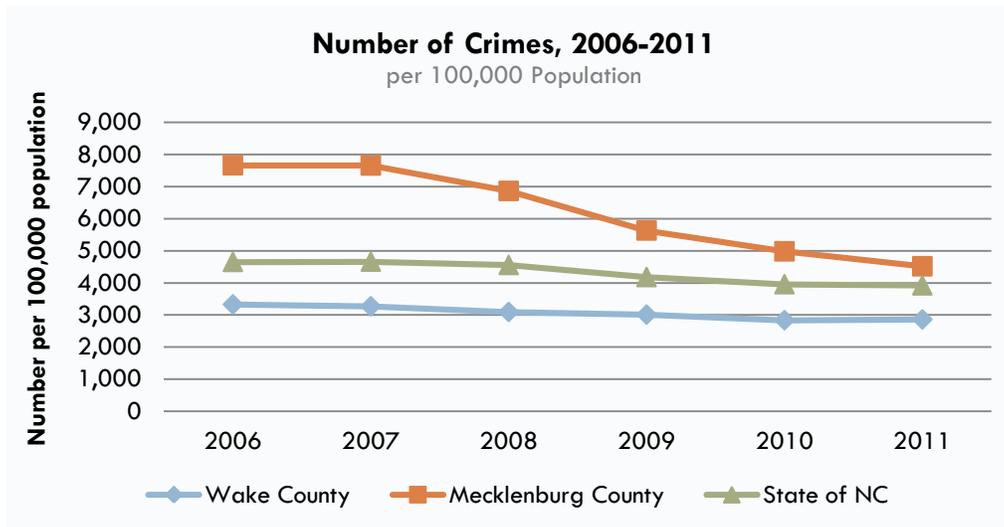
Crime and Safety

The safety of a community has both direct and indirect effects on health. Victims of violent crimes can experience post-traumatic stress disorder and psychological distress felt by those who are routinely exposed to unsafe communities. Other health factors and outcomes that are affected by community safety include birth weight, nutrition, physical activity, and family and social support (County Health Rankings and Roadmaps, 2012. Community Safety, University of Wisconsin Population Health Institute).

Statistics, Targets, and Disparities

INDEX CRIMES

Index crimes include the total number of murders, rapes, robberies, aggravated assaults, burglaries, larcenies, and motor vehicle thefts. A total of 25,939 index crimes were committed in Wake County in 2011. Of those, 91% were property crimes and 9% were violent crimes. The index crime rates in Wake County have been below the comparable rates in Mecklenburg County and in North Carolina since 2006. Over the past 6 years, overall crime has been on the decline in all three jurisdictions.



Source: NC Department of Justice, State Bureau of Investigation, Crime, View Crime Statistics, Crime Statistics.

Note: Index crimes include the total number of murders, rapes, robberies, aggravated assaults, burglaries, larcenies, and motor vehicle thefts. While arson is considered an Index Crime, the number of arsons is not included in the Crime Index.

JUNVENILE JUSTICE

A juvenile justice complaint is a formal allegation that a juvenile committed an offense. It is reviewed by a counselor who decides whether to approve or not approve the complaint. If the complaint is approved, it is then heard in juvenile court. In 2011, the rate of juvenile complaints (for both undisciplined and delinquent complaints) in Wake County was lower than both the rates in Mecklenburg County and North Carolina as a whole.

Juvenile Justice Complaints and Outcomes in Wake County, 2010 and 2011

Location	Complaints				Outcomes					
	Rate Undisciplined (Complaints per 1,000 Ages 6 to 17)		Rate Delinquent (Complaints per 1,000 Age 6 to 15)		No. Sent to Secure Detention		No. Sent to Youth Development Center		No. Transferred to Superior Court	
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
Wake County	2.22	0.35	18.76	15.53	359	286	14	14	6	5
Mecklenburg County	1.43	1.12	25.19	29.72	401	403	33	33	3	1
State of NC	2.94	2.34	27.55	26.08	4,297	3,558	357	307	30	28

Source: NC Department of Juvenile Justice and Delinquency Prevention, Statistics and Legislative Reports, County Databooks.
 Notes: Undisciplined :Juvenile between 6 and 16, who is unlawfully absent from school, or regularly disobedient and beyond disciplinary control of parent/guardian, or is regularly found where it is unlawful for juveniles to be, or has run away from home for more than 24 hours. It also includes 16-17 year olds who have done any of the above except being absent from school. Delinquent: Any juvenile between 6 and not yet 16 who commits an offense that would be a crime under state or local law if committed by an adult. Transfer to Superior Court: A juvenile who is 13, 14 or 15 who is alleged to have committed a felony may be transferred to Superior Court and tried and sentenced as an adult. If a juvenile is over 13 and charged with first degree murder, the judge must transfer the case to Superior Court if probably cause is found.

Ninety-four percent of court-involved youth in Wake County were age 12 or older at the time their first delinquent offense was alleged. Additionally, 61% of juvenile offenders in Wake County have moderate to serious school behavior problems defined by unexcused absences and short or long-term suspensions (Wake County Juvenile Crime Prevention Council, Juvenile Crime Prevention Council Annual Plan, 2012-2013).

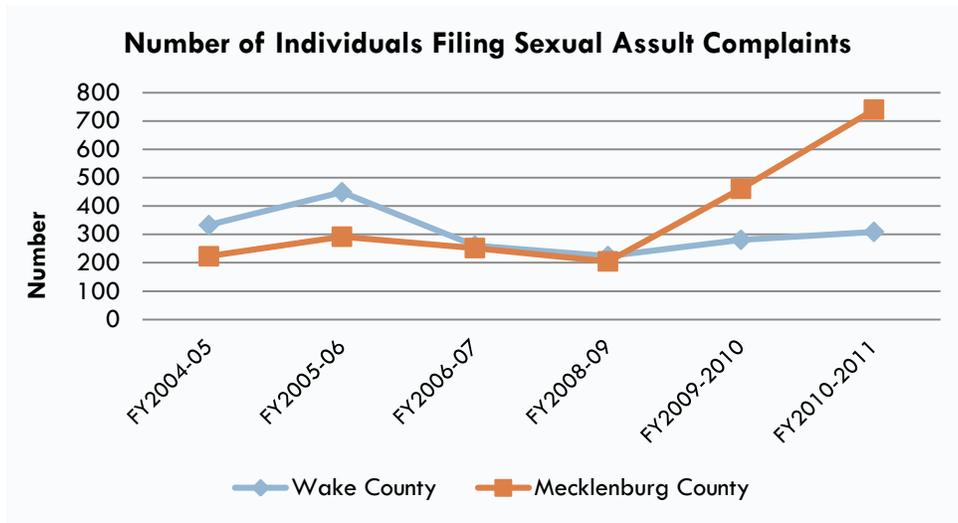
GANG ACTIVITY

In 2010, it was reported that there are 97 validated gangs in Wake County, compared to 160 gangs in Mecklenburg County (NC Department of Crime Control and Public Safety, Governor's Crime Commission, March 2010).

In 2010-2011, approximately 9% of juvenile offenders in Wake County assessed at intake were identified as gang members or having some gang association (Wake County Juvenile Crime Prevention Council, Juvenile Crime Prevention Council Annual Plan, 2012-2013). In 2010, the Wake County School Resource Officer program (covering 22 middle schools, 2 ninth-grade centers, and 1 high school in Wake County), responded to 192 gang-related incidents on school campuses (2010 Wake County Sheriff's Office Annual Report).

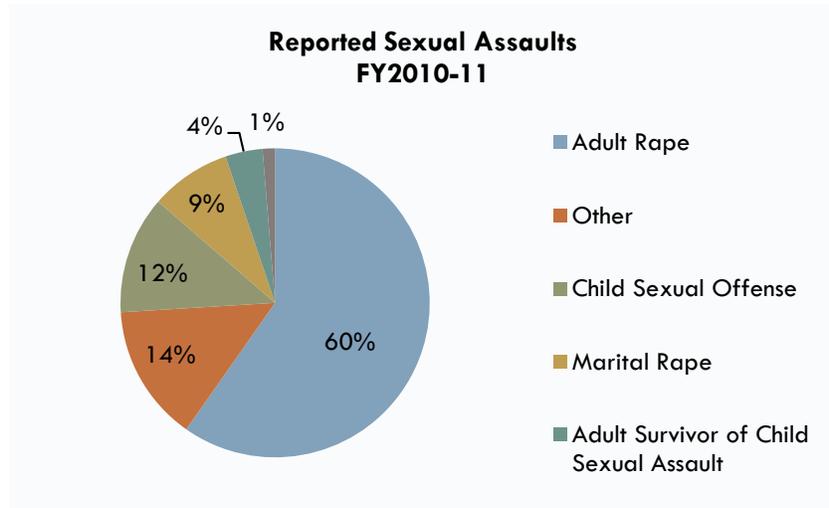
SEXUAL ASSAULT

In 2010-2011, there were 309 individuals who filed sexual assault complaints in Wake County. While the number of individuals in Wake County filing sexual assault complaints has declined overall since 2005-2006, there has been an increase in complaints since 2008-2009 (NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, 2010-2011).



Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, County Statistics.

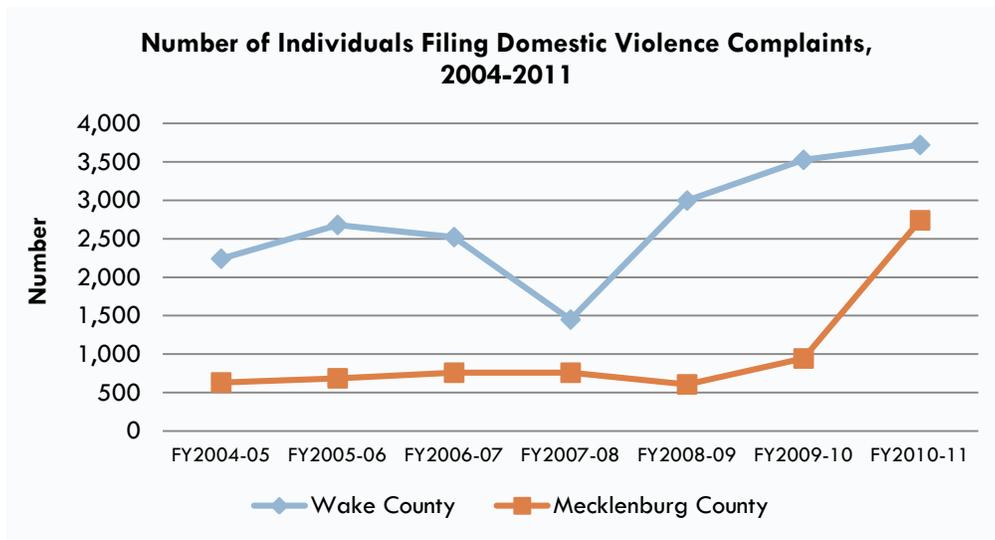
The most common type of sexual assault reported in Wake County in 2010-2011 was adult rape (distinct from date rape, marital rape, or rape with a minor), which accounted for approximately 60% of the sexual assault reports.



Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, 2010-2011.

DOMESTIC VIOLENCE

Compared to Mecklenburg County, Wake County has seen a consistently higher number of individuals filing domestic violence complaints. In 2010-2011, Wake County received 36% more domestic violence complaints filed by individuals than Mecklenburg County.



Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, 2010-2011.

In 2010-2011, there were 3,720 domestic violence victims in Wake County who received almost 14,000 services. Compared to Mecklenburg County, Wake County domestic violence victims received 3.5 times more services (NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, 2010-2011). The most common domestic violence service received was advocacy, followed by counseling.

CHILD ABUSE AND NEGLECT

In 2011-2012, there were 4,387 reports of child abuse, neglect, and dependency in Wake County. Of those reports, 6% were substantiated to be neglect, 0.8% were substantiated as abuse, and 1.3% were substantiated to be both abuse and neglect. Approximately 12% of those reports were unsubstantiated. Child protective services were recommended in 40% of the cases, needed in 13% of the cases, and not recommended for 25 of the total cases.

Wake County Reports of Child Abuse and Neglect, 2007-2012

Category	2007-08	2008-09	2009-10	2010-11	2011-12
Total No. of Reports of Abuse, Neglect, Dependency	5,398	4,883	4,806	4,504	4,387
No. Substantiated ¹ Findings of Abuse and Neglect	47	24	22	39	57
<i>No. Substantiated Findings of Abuse</i>	49	39	47	39	35
<i>No. Substantiated Findings of Neglect</i>	338	268	280	267	266
<i>No. Substantiated Findings of Dependency</i>	5	2	4	9	2
Services Needed	736	690	675	589	573
Services Provided, No Longer Needed	131	118	93	98	113
Services Recommended	1,851	1,749	1,784	1,926	1,756
No. Unsubstantiated Findings	780	735	638	579	507
Services Not Recommended	1,483	1,268	1,268	963	1,102

Source: Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., Vaughn, J., Bauer, R, and Reese, J. Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina, 2013.

Note: Under the investigative track, findings for abuse, neglect, or dependency are classified as either substantiated or unsubstantiated.¹A report is considered substantiated if it has a finding of abuse, neglect, abuse and neglect, dependency, or services needed. It does not include instances where the finding was services provided, child protective services no longer needed. For reports handled through the family assessment track, the findings can be services needed; services recommended; services provided, protective services no longer needed; and services not recommended. The finding of services needed is made when there are questions about the frequency and severity of maltreatment, current safety issues, if there is a risk of harm in the future, or if the child is in need of protective services. The finding of services provided, protective services no longer needed is used if, during the assessment, a determination was made that the threat to the child's safety or the risk of future harm were great enough to require the provision of involuntary services, but the problems were addressed and services no longer required at the end of the assessment period. Reports are not based on a unique count of children per year.

According to Point-in-Time findings of child abuse and neglect:

- White children under the age of 5 were the most common victims of neglect in Wake County in 2011-2012.
- A higher number of female children in Wake County (for all races) were victims of child abuse and neglect.

Source: Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., Vaughn, J., Bauer, R, and Reese, J. Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina, 2013.

FIRST AID AND EMERGENCY PREPAREDNESS

Like other communities, Wake County is exposed to many hazards, all of which have the potential to disrupt local communities, cause damage, create casualties, and impact communication and electrical networks.

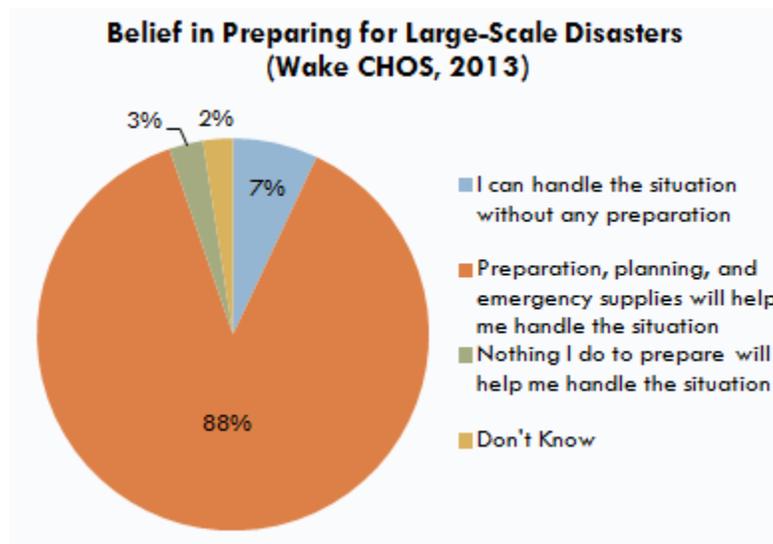
According to 2009 the Wake County Hazard Mitigation plan, natural threats that are moderate to high-hazard in Wake County include:

- Floods (often associated with hurricanes and coastal storms)
- High winds (severe storms/tornados and hurricanes/coastal storms)
- Wildfires
- Droughts and heat waves
- Winter storms and freezes

Other potential hazards in Wake County (man-made, technological, and national security) identified in the 2006 Wake County Emergency Operations Plan include:

- Nuclear threat/attack
- Fixed/licensed nuclear facilities (including Shearon Harris Nuclear Power Plant, research reactors at local universities, and medical and business facilities licensed to use various radioactive isotopes)
- Hazardous materials (chemicals used to manufacture textiles, petroleum products, pesticides, paints, dyes, metal plating, electrical components, fertilizers, and some pharmaceuticals)
- Transportation accidents
- Dam failures
- Civil disorders
- Large scale gatherings
- Terrorism

In the 2013 Community Health Opinion Survey, 45% of residents reported that someone in their household was certified in CPR (*Cardiopulmonary Resuscitation*). If a large-scale disaster were to occur in Wake County, 88% of residents felt that “preparation, planning, and emergency supplies will help me handle the situation”, while 7% reported that they can handle a large-scale disaster situation without any preparation.



Source: 2013 Wake County Community Health Opinion Survey.

Resources

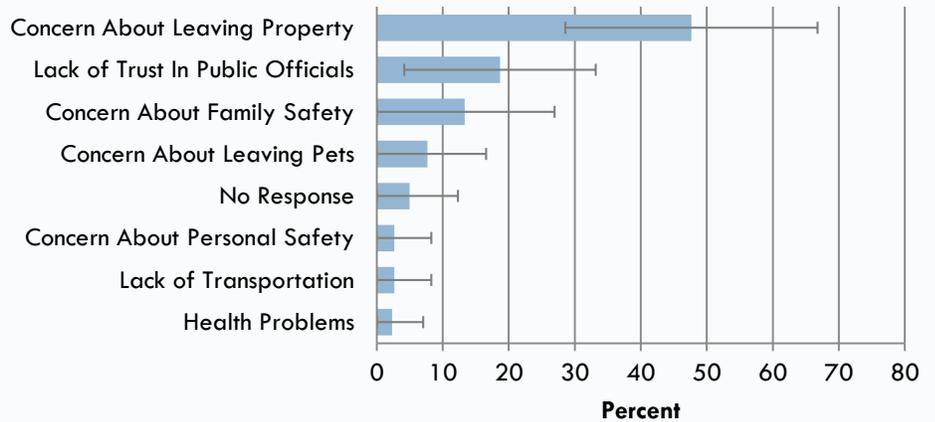
ReadyWake! is a joint information project of Wake County, city and town municipalities, and community partners. The ReadyWake! website contains information on potential hazards, instructions on how to make a family preparedness kit, and list of valuable phone numbers.



Assisted by the NC Division of Health and Human Services, local health departments in the Shearon Harris Nuclear Power Plant 10-mile Emergency Planning Zone for ensure the availability of free potassium iodide (KI) tablets for people within 10 miles of a nuclear facility, including public and private schools, residents, workers, and businesses.

If a mandatory evacuation order was issued for a large-scale disaster, 86.6% of residents surveyed in the 2013 Community Health Opinion Survey would evacuate, 5.9% would not evacuate, and 7.5% did not know if they would or would not evacuate. Approximately 8% of respondents reported that they have someone in their household with a disability that would make it more difficult to deal with an emergency like a hurricane or power outage. Of those who responded that they would not evacuate during a mandatory evacuation, the primary reason for not evacuating was concern about leaving property, followed by lack of trust in public officials, concern about family safety, and concern about leaving pets.

Reason for Not Evacuating in Mandatory Evacuation (Wake CHOS, 2013)



Source: 2013 Wake County Community Health Opinion Survey.
 Note: Includes responses from only the respondents who said they would not evacuate during a mandatory evacuation.

Community Perceptions

In the 2013 Community Health Opinion Survey, 84.3% of residents agreed that Wake County is a safe place to live, compared to 85.7% in 2010. Additionally, 82.8% of surveyed parents reported that they talk to their children about criminal activity, gangs, guns, and drug use. Approximately 7% of those same parents think their child or their child's friends are actually engaging in those activities.

In several focus groups, the importance of feeling safe and having a low crime was discussed as a key element for making a community healthy. Two groups identified the need for more after school and gang prevention activities with youth. However, crime and safety were not identified as cross-cutting themes.

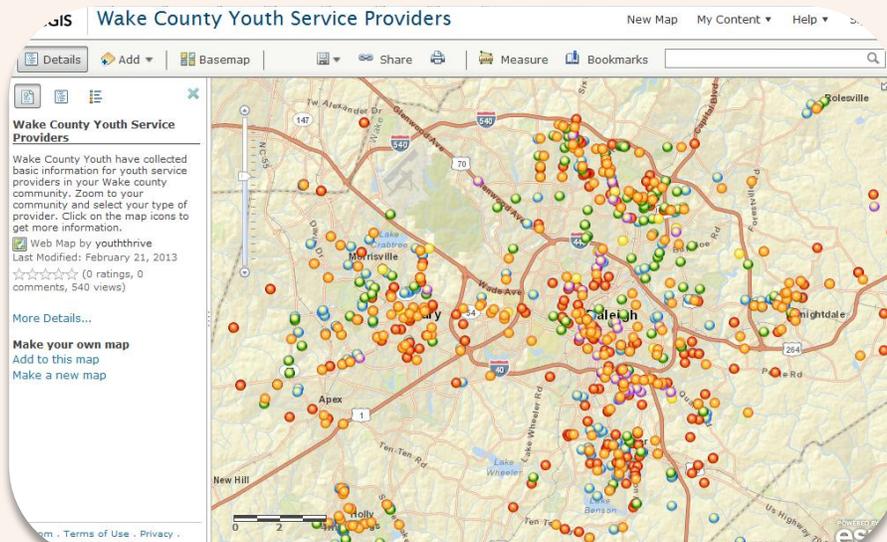
“The youth also need good programs for them for after school and about gang prevention. They don’t have any programs at the schools.”

- Community member

Wake County Youth Service Providers Map

Youth Thrive is a collaborative partnership in Wake County working together to support all youth in becoming productive adults by focusing on strengthening the positive attributes that enable youth to be fully prepared for success in school, work, and life.

In 2012, youth from Youth Thrive collected basic information for youth service providers throughout the Wake county community, called the [Wake County Youth Service Providers Map](#). Users can search by type of program or search by address to see what the closest available service providers are.



Government and Civic Participation

Based on social networks and civic engagement, a community's norms of reciprocity, interpersonal trust, solidarity, and cooperation are considered dimensions of social capital. Several research studies have shown the protective effects of social capital on health, including reducing stressful conditions, risky behaviors, mortality, and psychological distress (Viswanath K, Randolph Steele W, Finnegan JR. 2006. Social capital and health: civic engagement, community size, and recall of health messages. American Journal of Public Health, 96(8): 1456-1461).

Statistics, Targets, and Disparities

VOTER REGISTRATION AND TURNOUT

In 2012, a total of 92.3% of the estimated voting age population in Wake County was registered to vote, a percentage higher than North Carolina as a whole (90.1%) and lower than Mecklenburg County (97.2%). The percentage of registered voters by race and ethnicity closely follows the general racial composition of Wake County, with the exception of Hispanic residents. In Wake County, only 2.3% of Hispanics are registered to vote even though Hispanics represent 9.8% of Wake County's population.

Number and Percent of Voting Age Population Registered to Vote, 2012

Location	Estimated Voting Age Population (2012)	White		Black or African American		American Indian		Hispanic		Other	
		No.	%	No.	%	No.	%	No.	%	No.	%
Wake County	689,782	437,428	68.7	130,937	20.6	1,512	0.2	14,626	2.3	66,997	10.5
Mecklenburg County	699,885	401,889	59.1	217,921	32.0	1,923	0.3	18,819	2.8	58,520	8.6
State of NC	7,351,323	4,698,878	70.9	1,489,770	22.5	53,833	0.8	114,149	1.7	381,654	5.8

Sources: Log Into North Carolina (LINC) Database, Topic Group Government, Voters and Elections, Voting Age Population; NC State Board of Elections, Voter Registration, Voter Statistics, Voter Registration Statistics, By County.

Note: The total number of registered voters reported by the NC State Board of Elections is based on the sum of registrations by party affiliation, and does not necessarily equal the sum of registrations by race. Therefore, the sum of the percentages does not equal 100%.

In the 2012 election, almost 75% of registered voters actually voted in Wake County (3rd highest in the state), compared to approximately 67% in Mecklenburg County and 69% in North Carolina.

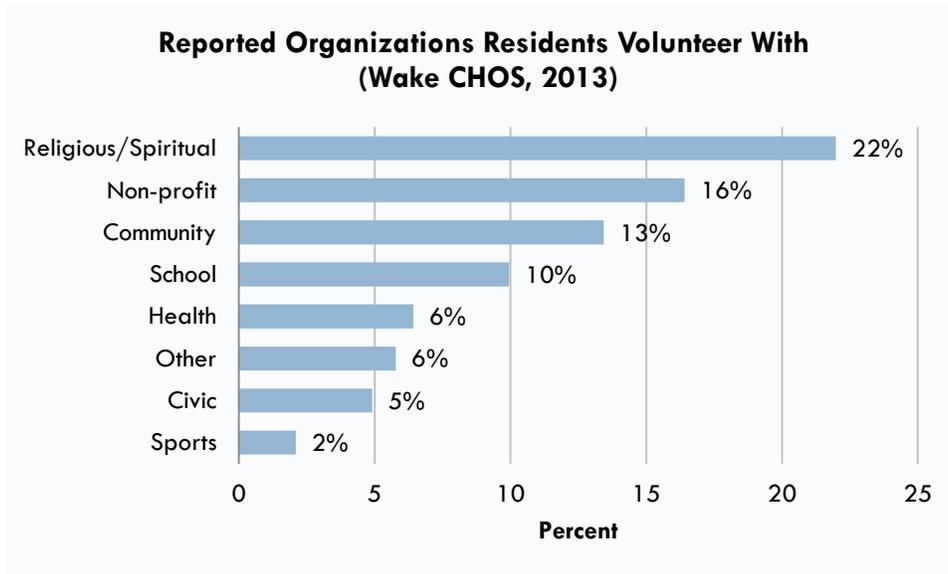
Percent of Registered Voters Who Voted, 2004-2012

Location	2004	2006	2008	2010	2012
Wake County	74%	41%	75%	48%	75%
Mecklenburg County	65%	30%	66%	38%	67%
State of NC	64%	37%	70%	44%	68%

Source: NC State Board of Elections, Elections Central, Elections Results Data, General Elections.

VOLUNTEERING

According to the 2013 Community Health Opinion Survey, over half of all respondents (52%) reported participating in volunteer activities (formal or informal) in the past year. Of those who volunteer, the majority reported that they volunteer with a religious or spiritual organization (22%), followed by non-profit (16%), community-based organization (13%), and school (10%).



Source: 2013 Wake County Community Health Opinion Survey.
 Note: Includes responses from only the respondents who said they volunteered in the past year.

Faith and Spirituality

Faith-based organizations in Wake play a critical role in areas such as health promotion and disease prevention programs (such as cardiovascular health, diabetes, substance abuse, HIV/AIDS, Sexually Transmitted Infections, health screenings, health fairs, and environmental and policy changes) in the areas of nutrition and physical activity, counseling/mental health, housing, unemployment, and many other social issues.

In addition to playing a role in health promotion and disease prevention programs, the faith community in Wake County provides a great deal of assistance and services to the community, including food banks, soup kitchens, clothing and linen closets, financial assistance, counseling, mentoring, exercise classes and walking programs, camps, and after school programs. Faith-based organizations also provide health care, housing/shelter for the homeless and seniors, substance abuse prevention counseling, and resources related to faith and meditation.

In Wake County, there are a variety of religions and religious institutions that mirror the County's diversity. According to the 2010 U.S. Religion Census conducted by the Association of Statisticians of American Religious Bodies, there are 712 religious congregations in Wake County with approximately 418,000 members and others who regularly attend services. The following are estimates of congregations by tradition/religion:

- Protestant: 638
- Catholic: 17
- Orthodox: 5
- Church of Jesus Christ of Latter-day Saints: 22
- Hindu: 9
- Jehovah Witnesses: 9
- Buddhism: 7
- Judaism: 7
- Islam: 7
- Baha'i: 3
- Association of Unity Churches: 2
- Church of Christ Scientist: 2
- Unitarian Universalist: 2
- New Apostolic Church of North America: 1
- Jain: 1

Source: 2010 U.S. Religion Census: Religious Congregations & Membership Study. Collected by the Association of Statisticians of American Religious Bodies and distributed by the Association of Religion Data Archives.

Community Perceptions

According to the 2013 Community Health Opinion Survey, the faith community was considered a resource for Wake County residents to go for mental health, drug, or alcohol abuse counseling (12%) as well as a resource for current smokers to go to quit smoking (2.5% of current smokers).

CHAPTER 4: HEALTH STATUS



CHAPTER 4 | HEALTH STATUS

Measures of general health status provide key information about the health of a population. These measures can be used to monitor progress toward promoting health, preventing disease and disability, eliminating disparities, and improving quality of life.

This chapter provides an overview of the health status of Wake County residents, including the following:

- Self-reported health status
- Maternal and infant health
- Life expectancy
- Leading causes of death
 - Cancer
 - Heart disease
 - Stroke
 - Chronic lower respiratory disease
 - Asthma
 - Diabetes
- Communicable diseases and immunization
- Disability and care-giving

In the past four years, Wake County was ranked as the #1 healthiest county in North Carolina, leading the state with healthy behaviors and low disease mortality and morbidity rates. However, there are still opportunities to improve health outcomes. Even though Wake County is the #1 healthiest county in the state, North Carolina was ranked 33 out of 50 states in health according to the 2012 America's Health Rankings. Additionally in Wake County, as in other parts of the state and country, there are significant racial, ethnic, and socioeconomic disparities, where African Americans, Hispanics, and residents with lower income or education experience disproportionately higher disease mortality and morbidity rates.

Home to 3 major hospital systems, an established public health structure, a large health care provider community, multiple health clinics, and a strong network of community-based and non-profit organizations, Wake County is equipped with the assets and resources needed to improve the health status of its residents and address health disparity challenges.

Sources:

- U.S. Department of Health and Human Services. *Healthy People 2020*.
- County Health Rankings and Roadmaps, 2010-2013. University of Wisconsin Population Health Institute.
- United Health Foundation, 2012. *America's Health Rankings*.

Quick Facts

Positive Trends:

- Wake County is ranked the #1 healthiest county in North Carolina.

Life expectancy

- The average life expectancy of a Wake County resident is 81.3 years, higher than the *Healthy NC 2020* target of 79.5 years.

Maternal and infant health

- Teen pregnancy rate among females aged 15-19 has declined 36% since 2007.

Leading causes of death

- The heart disease death rate in Wake County has decreased 30%.

Communicable diseases

- Since 2010, TB rates in Wake County have declined more than 50%.

Areas for Improvement:

Self-reported health status

- 18.6% of residents reported fair or poor health. Wake County residents with higher income and education are more likely to report good health.

Leading causes of death

- The 3 leading causes of death in Wake County are cancer, heart disease, and stroke. Promoting healthy lifestyles (tobacco cessation, physical activity, and nutrition) greatly reduces the risk of developing those diseases.
- African Americans and Hispanics in Wake County experience disproportionately higher mortality rates from cancer, heart disease, stroke, and diabetes.

Communicable diseases

- The number of confirmed cases of pertussis has increased in Wake County.
- More than half of all Chlamydia and gonorrhea cases in Wake County occur among 15-24 year olds.

Rankings

The 2013 County Health Rankings ranks North Carolina counties according to their summary measures of health outcomes and health factors. Counties also receive a rank for mortality, morbidity, health behaviors, clinical care, social and economic factors, and the physical environment.

- Out of the 100 counties in North Carolina, Wake County was ranked by County Health Rankings as the #1 healthiest county in 2013.
- Wake County ranks #1 for health outcomes (including mortality and morbidity).
- Wake County also ranks high for positive health behaviors, clinical care, and social and economic factors.
- The only factor for which Wake County does not rank highly is Physical Environment, where Wake County places 10 out of 100.

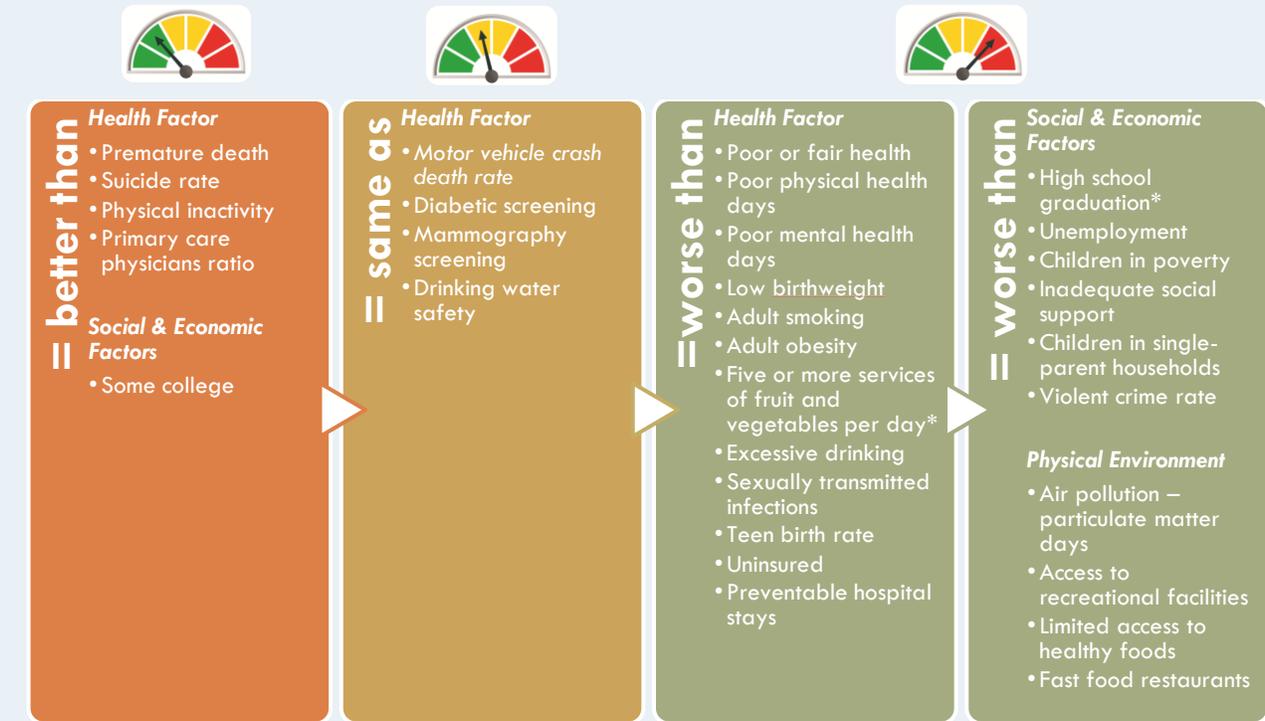
County Health Rankings, 2013

Location	County Rank (Out of 100) ¹					
	Health Outcomes		Health Factors			
	Mortality	Morbidity	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment
Wake County	1	1	2	3	4	10
Mecklenburg County	9	15	3	8	36	27

Source: County Health Rankings and Roadmaps, 2013. University of Wisconsin Population Health Institute.
Note: ¹ Rank of 1 equals "best".

When comparing various Wake County health factors, social and economic factors, and physical environment factors with National Benchmarks, or the tenth percentile nationally, Wake County is better than the national or *Healthy NC 2020* benchmarks for premature death, suicides, physical inactivity, primary care physicians' ratio, and residents with "some college".

Wake County Comparisons with National Benchmarks
 (*or Healthy NC 2020 if National Benchmark not available)



Source: County Health Rankings and Roadmaps, 2013. University of Wisconsin Population Health Institute. National benchmarks are the 90th percentile or 10th percentile, depending on whether the measure is framed positively.

Below is a table showing the 2013 County Health Rankings summary measures of health outcomes and factors for Wake County, Mecklenburg County, North Carolina, national benchmarks, and Healthy NC 2020 benchmarks if available. Additional measures, such as suicide rate, fruit and vegetable intake, and Chlamydia infections were also included.

County Health Rankings Details, 2013

Health Factor	Wake County	Mecklenburg County	NC	National Benchmark	Healthy NC 2020
Health Outcomes: Mortality					
Premature death per 100,000	4,954	6,039	7,480	5,317	N/A
Suicide rate per 100,000 ¹	8.9	9.1	12.1	10.2	8.3
Health Outcomes: Morbidity					
Poor or fair health	12%	15%	18%	10%	9.9%
Poor physical health days	2.7%	3.0%	3.6%	2.6%	N/A
Poor mental health days	2.6%	3.3%	3.4%	2.3%	2.8%
Low birth weight ¹	7.9%	9.0%	9.1%	6.0%	N/A
Health Factors: Health Behaviors					
Adult smoking	14%	15%	21%	13%	13%
Adult obesity	26%	26%	29%	25%	N/A
Physical inactivity	18%	20%	25%	21%	N/A
Five or more servings of fruit and vegetables per day ²	25.9%	21.7%	20.6%	N/A	29.3%
Excessive drinking, 2005-2011	15%	16%	13%	7%	N/A
Motor vehicle crash death rate per 100,000 ¹	8.7	8.4	15.5	12	N/A
Chlamydia infections per 100,000 ³	527	810.8	564.8	92	N/A
Teen birth rate per 1,000	28	42	46	21	N/A
Health Factors: Clinical Care					
Uninsured	16%	18%	19%	11%	8%
Primary Care physicians ratio*	1240:1	1,148:1	1,480:1	1,067:1	N/A
Preventable hospital stays per 1,000	50	47	63	47	N/A
Diabetic screening	90%	87%	88%	90%	N/A
Mammography screening	73%	65%	69%	73%	N/A
Social & Economic Factors					
High school graduation*	81%	76%	80%	N/A	94.6%
Some college	77%	72%	62%	70%	N/A
Unemployment	8.3%	10.7%	10.5%	5.0%	N/A
Children in poverty	16%	24%	25%	14%	N/A
Inadequate social support	18%	18%	21%	14%	N/A
Children in single-parent households	27%	35%	35%	20%	N/A
Violent crime rate per 100,000	301	679	411	66	N/A
Physical Environment					
Air pollution-particulate matter days	12.6	13.2	12.9	8.8	N/A
Drinking water safety	0%	0%	3%	0%	N/A
Access to recreational facilities per 100,000	15	16	11	16	N/A
Limited access to healthy foods*	4%	7%	7%	1%	N/A
Fast food restaurants	51%	46%	49%	27%	N/A

Sources: County Health Rankings and Roadmaps, 2013. University of Wisconsin Population Health Institute.
¹NC State Center for Health Statistics, County Data Book, 2007-2011.
²NC State Center for Health Statistics, Behavioral Risk Factor Surveillance Data, 2009.
³NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch. Facts and Figures, Annual Reports. North Carolina 2011. Chlamydia rates per 100,000.
 Notes: Data presented as county average. *Data should not be compared with prior years due to changes in definition. National benchmarks are the 90th percentile of all counties in the country, depending on whether the measure is framed positively.

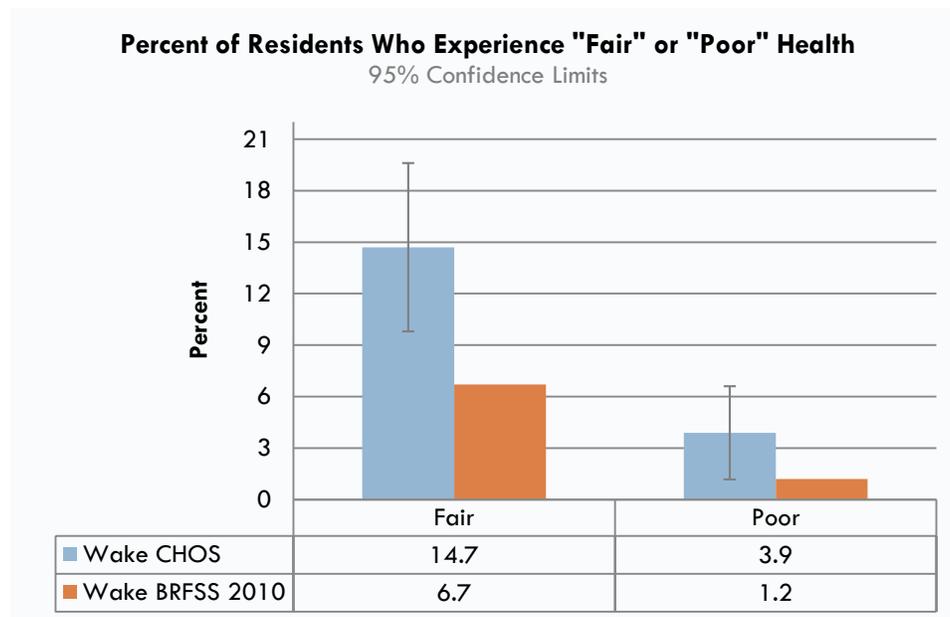
Self-Reported Health Status

Self-assessed health status is a measure of how an individual perceives his or her health, rating it as excellent, very good, good, fair, or poor. Self-assessed health status has been validated as a useful indicator of health for a variety of populations and allows for broad comparisons across different conditions and populations (U.S. Department of Health and Human Services., Healthy People 2020).

Statistics, Targets, and Disparities

According to the 2013 Community Health Opinion Survey, 18.6% of residents reported their health to be fair or poor, compared to 7.9% in the 2010 Behavioral Risk Factor Surveillance Survey.

- The *Healthy NC 2020* target is to reduce the percentage of adults reporting fair or poor health to 9.9%.



Sources: 2013 Wake County Community Health Opinion Survey.
NC State Center for Health Statistics, Behavioral Risk Factor Surveillance Data, 2010.

Wake County residents with higher incomes and more education are more likely to report having good health. Additionally, non-whites in Wake County are less likely than whites to report good health.

- Wake County residents with household incomes less than \$50,000 were 3.3 times more likely to report fair or poor health.
- Wake County Residents with a high school education or less were 2.2 times more likely to report fair or poor health compared to those with some college.
- In Wake County, 11.3% of non-whites reported fair or poor health compared to 6.1% for whites.

Source: NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2010.

Community Perceptions

Within all focus groups, residents discussed what does being healthy personally mean to them. In addition to identifying being healthy as the absence of sickness and engaging in healthy behaviors, residents also felt that personal health meant physical, mental, spiritual, and financial well-being. Other residents associated personal health with self-sufficiency and independence and the ability to continue to help others. Lastly, some residents felt that personal health was closely linked to access to resources, such as a secure place to live, access to regular and affordable health care, and equal mobility access to health and recreation facilities.

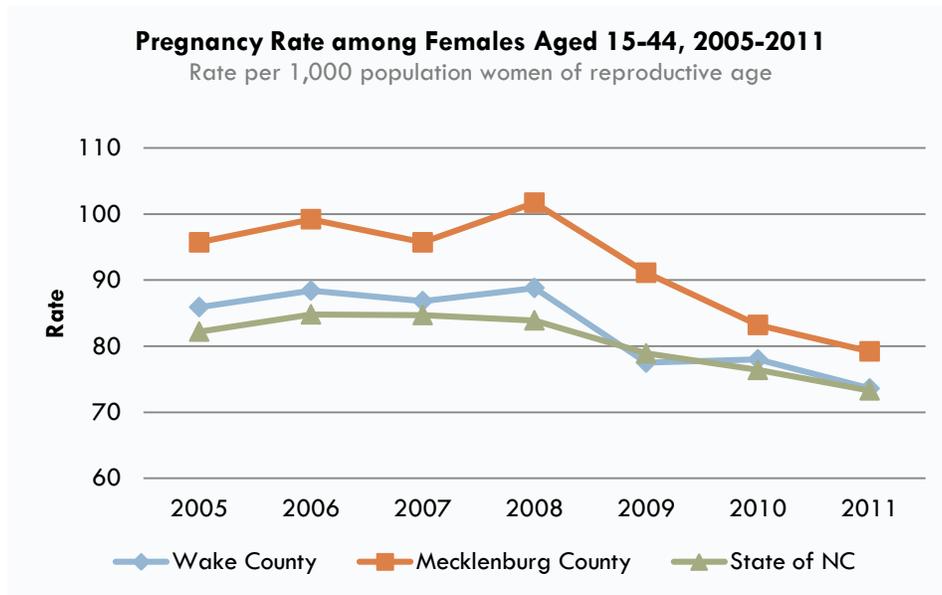
Maternal and Infant Health

The well-being of mothers, infants, and children determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system (U.S. Department of Health and Human Services., Healthy People 2020).

Statistics, Targets, and Disparities

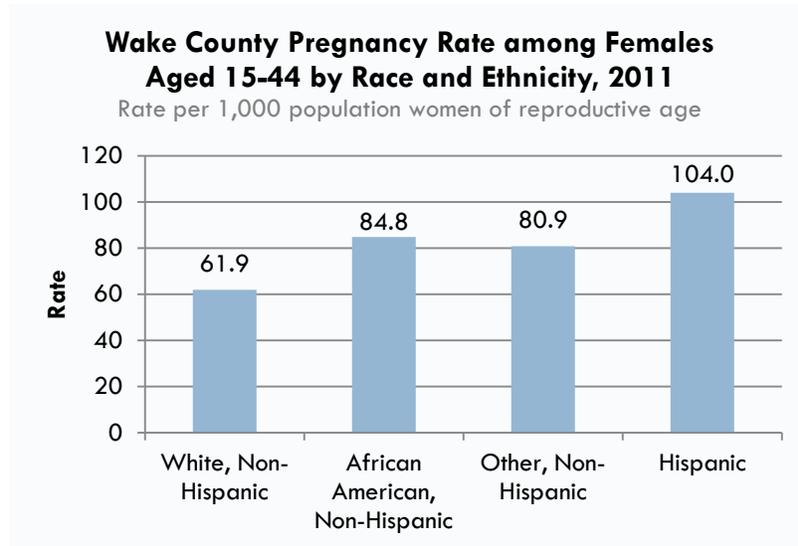
PREGNANCIES AND BIRTHS

Among all women in Wake County of child-bearing age (ages 15-44), the pregnancy rate is declining in Wake County, from a high point of 88.8 per in 2008 to a rate of 73.6 in 2011 (a decrease of 17%).



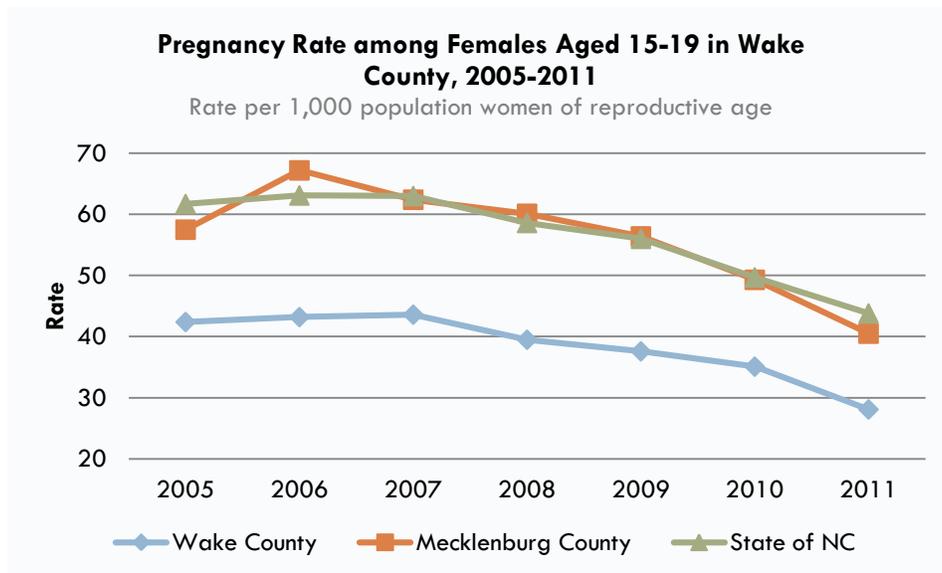
Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2013).

The pregnancy rate is highest among Hispanic women in Wake County. In 2011, the pregnancy rate among Hispanic women (104.0 per 1,000 women of reproductive age) was 41% higher than the overall pregnancy rate (73.6 per 1,000 women of reproductive age).



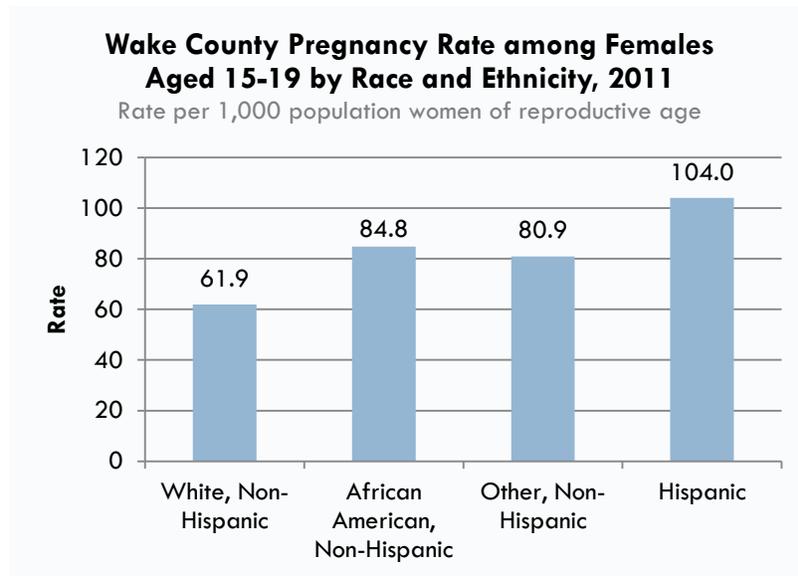
Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2013).
 Note: Race and ethnicity data collected by the NC Center for Health Statistics is reported as two separate dimensions. Other races include American Indian and Asian races. Ethnicity is defined as Hispanic and Non-Hispanic. Thus, persons of Hispanic ethnicity may be of any race.

The pregnancy rate for teenagers in Wake County (females aged 15-19) has been declining in Wake County, from 43.6 per 1,000 population of women of reproductive age in 2007 to 28.1 in 2011 (a 36% decrease).



Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2013).

Among those pregnant teens ages 15-19, the pregnancy rate is highest among Hispanic females, where the rate (104 per 1,000 population of females aged 15-19) was more than triple the overall teen pregnancy rate (28.1 per 1,000 population of females aged 15-19) in 2011.

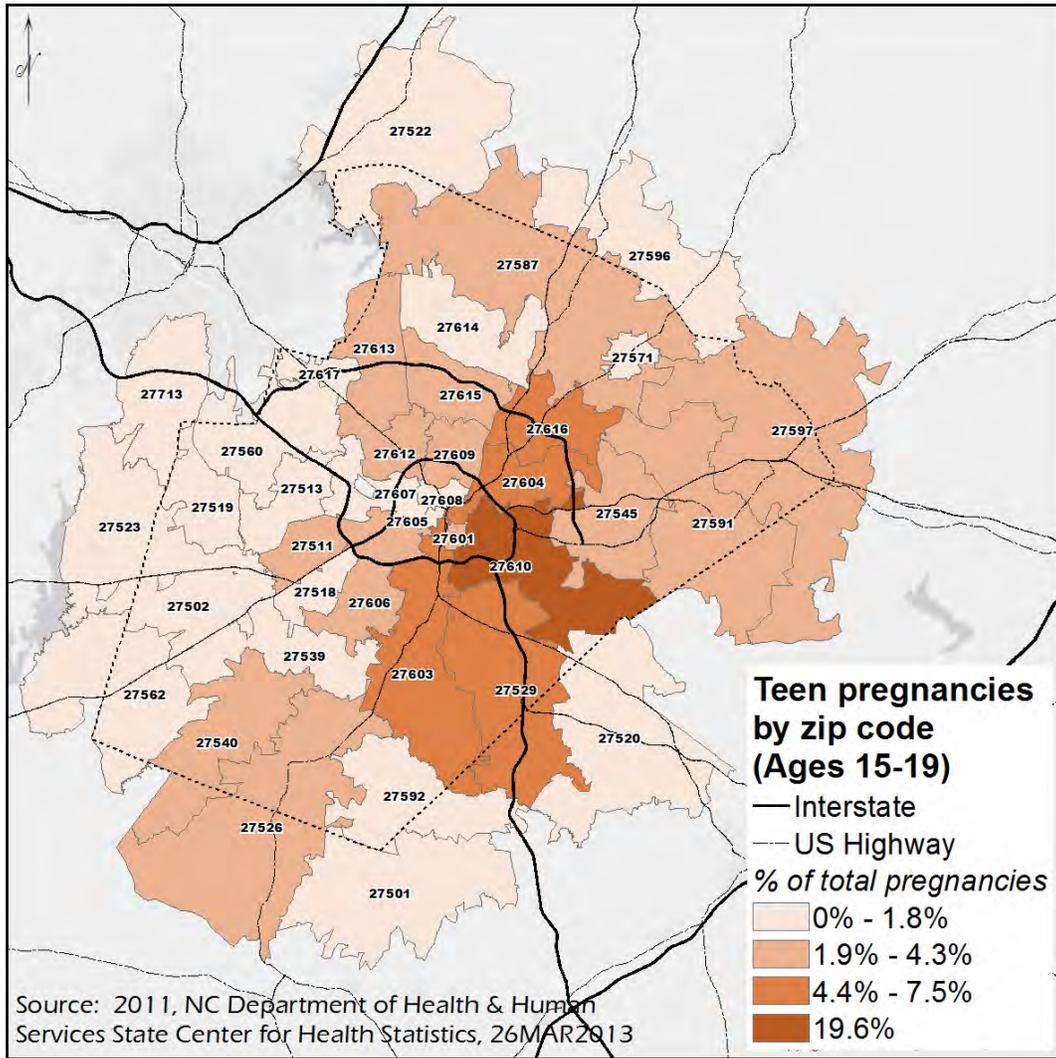


Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2013).

Note: Race and ethnicity data collected by the NC Center for Health Statistics is reported as two separate dimensions. Other races include American Indian and Asian races. Ethnicity is defined as Hispanic and Non-Hispanic. Thus, persons of Hispanic ethnicity may be of any race.

The percent of teen pregnancies by zip code in Wake County shows that the concentration of teen pregnancies in 2011 is in east Raleigh and the eastern part of the county, with zip codes east of Highway 401 having a higher prevalence of teen pregnancy compared with other zip codes in the County. The zip code 27610 had the highest percent of teen pregnancies in 2011, with 19.6%.

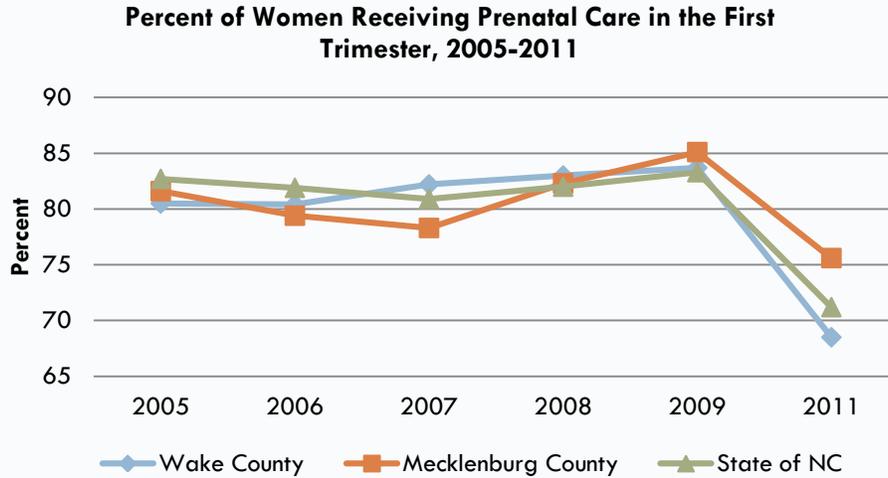
Map of Teen Pregnancies among Females Aged 15-19 by Zip Code in Wake County, 2011



Notes: Percentages calculated based on total births in zip code. 131 teen pregnancies were missing zip code in 2011.

PRENATAL CARE AND PREGNANCY RISK FACTORS

After an increase between 2006 and 2009, the percent of women in Wake County who received prenatal care in the first trimester has declined to 68.5% in 2011, an 18% decrease since 2009.

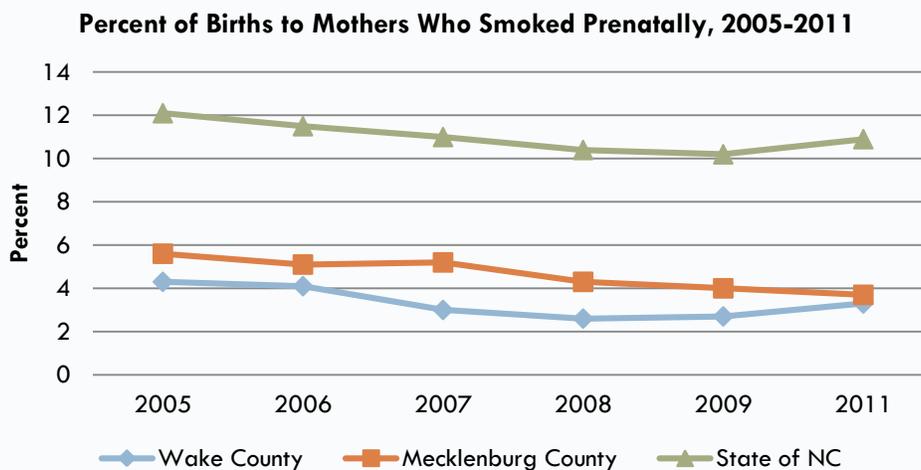


Source: NC State Center for Health Statistics, Basic Automated Birth Yearbook (BABY Book).
 Note: Due to NC adapting the revision of the U.S. Standard Certificate of Live Birth in August of 2010, data on prenatal care initiation are not considered comparable between the two certificates and are excluded from the tables for 2010.

Smoking during pregnancy is associated with multiple adverse birth outcomes, including low birth weight and pre-term deliveries. Women who smoke during pregnancy are more likely to have a baby who is premature, who has a low birth weight, or who dies of Sudden Infant Death Syndrome (NC Institute of Medicine. *Healthy North Carolina 2020: A Better State of Health*. Morrisville, NC: NC Institute of Medicine; 2011).

While the percent of births to mothers who reported that they smoked during pregnancy has been consistently lower in Wake County than in Mecklenburg County or statewide, the percentage increased, from 2.6% in 2008 to 3.3% in 2011.

- The *Healthy NC 2020* target is to reduce the percentage of women who smoke during pregnancy to 6.8%.



Source: NC State Center for Health Statistics, Vital Statistics, Volume 1.
 Note: Due to NC adapting the revision of the U.S. Standard Certificate of Live Birth in August of 2010, data on tobacco use are not considered comparable between the two certificates and are excluded from the tables for 2010.

High Parity is an indicator that identifies the number of live births to women with five or more previous live births as a percent of all live births in a given place and time. Wake County had a lower rate of high parity births (among mothers under 30 and aged 30 and over) and a lower rate of short interval births (with interval from last delivery to conception of 6 months or less) compared to Mecklenburg County and North Carolina in 2007-2011.

High Parity and Short Interval Births in Wake County, Aggregate Period, 2007-2011

Location	High Parity Births				Short Interval Births	
	Mothers < 30		Mothers ≥ 30		No. ³	% ⁴
	No. ¹	% ²	No. ¹	% ²		
Wake County	4,475	14.3	6,779	20.2	4,931	11.5
Mecklenburg County	6,371	16.5	6,778	20.5	5,662	12.0
State of NC	70,404	17.2	47,110	21.2	52,600	12.6

Source: NC State Center for Health Statistics, County-level Data, County Health Data Book, 2013.
 Notes: ¹ Number at risk due to due to high parity. ² Percent of all births with age of mother in category indicated. ³ Number with interval from last delivery to conception of six months or less. ⁴ Percent of all births excluding 1st pregnancies.

A low birth weight birth is defined as a live born infant weighing 2500 grams or less (≤5 pounds, 8 ounces). The percent of low birth weight births among all racial groups in Wake County remained relatively unchanged (and lower than comparable Mecklenburg County and state rates) between 2006-2010 and 2007-2011. The highest percent of low birth weight births occurred among the African American population.

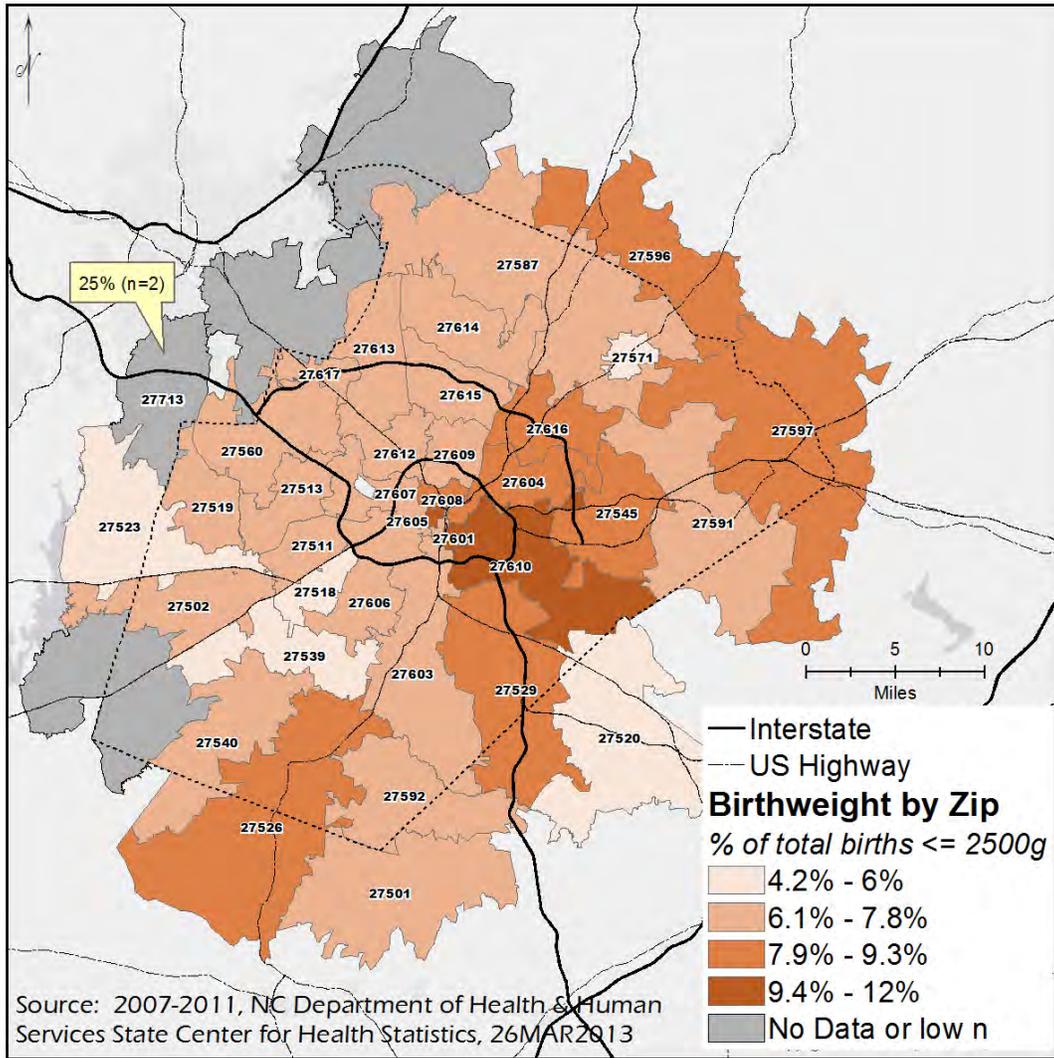
Low (< 2,500 Grams) Birth Weight Births Trend, by Race and Ethnicity, Aggregate Periods, 2006-2010 and 2007-2011

Location	Percent of Low Birth Weight (≤ 2,500 Gram) Births									
	2006-2010					2007-2011				
	Total	White, Non-Hispanic	Black, Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White, Non-Hispanic	Black, Non-Hispanic	Other Non-Hispanic	Hispanic
Wake County	7.8	6.4	13.1	7.3	6.0	7.9	6.4	13.1	7.6	6.2
Mecklenburg County	9.3	6.8	14.3	9.9	6.7	9.4	6.7	14.5	10.2	6.9
State of NC	9.1	7.7	14.4	9.3	6.3	9.1	7.7	14.3	9.4	6.5

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books.
 Note: Race and ethnicity data collected by the NC Center for Health Statistics is reported as two separate dimensions. Other races include American Indian and Asian races. Ethnicity is defined as Hispanic and Non-Hispanic. Thus, persons of Hispanic ethnicity may be of any race.

The percent of low birth weight births by zip code in Wake County shows a concentration in eastern Raleigh and the eastern part of the county. The zip code 27610 had the highest percent (11.1%) of low birth weight births in 2007-2011.

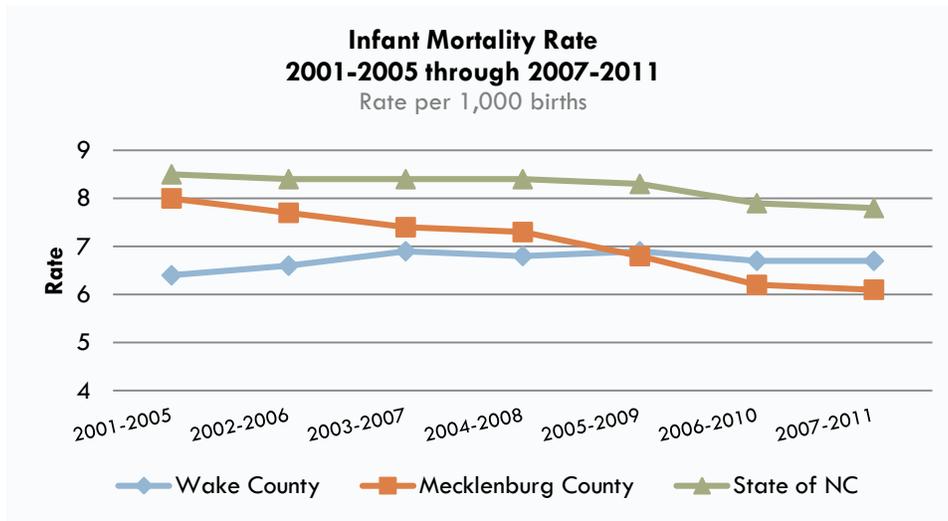
Map of Low Birth Weight Births by Zip Code in Wake County, 2007-2011



Notes: Percentages calculated based on total births in zip code. Grey areas indicate missing data or low total number of births.

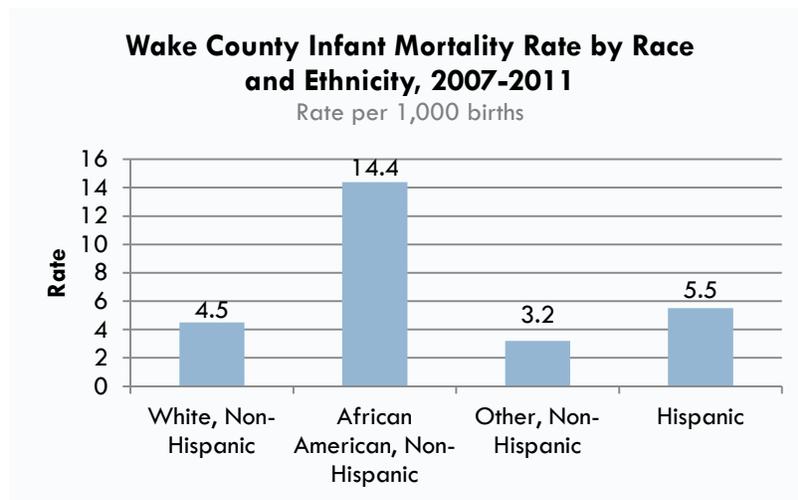
INFANT MORTALITY

In Wake County, 437 babies under the age of 1 died in Wake County during 2007-2011. The most prevalent causes of infant mortality are birth defects, prematurity, low birth weight, and Sudden Infant Death Syndrome (NC Institute of Medicine. Healthy North Carolina 2020: A Better State of Health. Morrisville, NC: NC Institute of Medicine; 2011). The infant mortality rate increased in Wake County between 2001-2005 and 2005-2009 and has since decreased slightly since that time. Since 2005-2009, the infant mortality rate in Wake County has exceeded the Mecklenburg County rate.



Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2013).

The greatest disparity in infant mortality exists among African Americans in Wake County, where African Americans suffer from a disproportionately higher infant mortality rate compared to all other groups. In 2011, the infant mortality rate among African Americans is 3.2 times higher than among whites.



Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2013).

Note: Race and ethnicity data collected by the NC Center for Health Statistics is reported as two separate dimensions. Other races include American Indian and Asian races. Ethnicity is defined as Hispanic and Non-Hispanic. Thus, persons of Hispanic ethnicity may be of any race.

Community Perceptions

In the 2013 Community Health Opinion Survey, 90.8% of residents agreed that Wake County is a good place to raise children, compared to 84% in 2010. In the focus groups, maternal and infant health was not a cross-cutting theme identified as affecting the health of the community; however, the service provider focus group discussed that there are not enough resources for low and no-income residents in Wake County, especially for prenatal care.

Approximately 20% of surveyed parents reported that they talk to their children about sexual activity, and 5.2% of parents think their child or their child's friends are actually engaging in sexual activity.

Resources

- In 2012, [Wake County Human Services](#) provided maternal health services to 4,844 clients.
- Services for low-risk pregnancies are provided at county clinics, while services for high-risk pregnancies are provided at WakeMed.



Life Expectancy, Leading Causes of Death, and Chronic Disease

Life expectancy is the average number of additional years that someone at a given age would be expected to live if he/she were to experience throughout life the age-specific death rates observed in a specified reference period.

Statistics, Targets, and Disparities

According to data from the NC State Center for Health Statistics, the life expectancy at birth for a Wake County resident using the 2009-2011 reference period is 81.3 years (an increase of 4.4 years from the 1990-1992 reference period), compared to 80 years for Mecklenburg County residents, and 78.2 years statewide.

The life expectancy at birth using the 2009-2011 reference period for African Americans in Wake County is 77.3 years, which is 6% lower than the life expectancy for white residents during that same time period (82.1 years).

- The *Healthy NC 2020* target is to increase the average life expectancy to 79.5 years.

The leading cause of death in Wake County, Mecklenburg County, and North Carolina is cancer, in contrast with heart disease as the national leading cause of death. Compared to the United States, Wake County has lower mortality rates for every presented cause of death except cerebrovascular disease (stroke), where Wake County's mortality rate is 15% higher than the national rate.

Overall Age-Adjusted Mortality Rates for the 15 Leading Causes of Death, Aggregate Period, 2007-2011, Except as Noted

Rank / Cause of Death	Wake County	Mecklenburg County	State of NC	United States (2011)
1. Cancer	157.3	166.0	179.7	168.6
<i>Trachea, Bronchus and Lung</i>	41.7	45.9	54.5	45.9
<i>Prostate</i>	24.0	25.6	24.3	8.3 ²
<i>Breast</i>	23.4	23.4	23.0	12.0 ²
<i>Colon, Rectum, and Anus</i>	12.0	14.8	15.5	15.3
<i>Pancreas</i>	9.9	9.8	10.5	10.9
2. Diseases of the Heart	137.5	142.6	179.3	173.7
3. Cerebrovascular Disease	43.6	40.6	46.0	37.9
4. Chronic Lower Respiratory Disease	31.6	34.9	46.6	42.7
5. Alzheimer's Disease	20.0	43.6	29.0	24.6
6. All Other Unintentional Injuries	19.0	20.0	29.2	38.0
7. Diabetes Mellitus	18.1	17.5	22.0	21.5
8. Nephritis, Nephrotic Syndrome, and Nephrosis	14.6	19.1	18.6	13.4
9. Pneumonia and Influenza	10.5	14.1	17.9	15.7
10. Septicemia	10.0	12.3	13.6	10.5
11. Suicide	8.9	9.1	12.1	12.0
12. Unintentional Motor Vehicle Injuries	8.7	8.4	15.5	10.9
13. Chronic Liver Disease and Cirrhosis	5.1	7.1	9.3	9.7
14. Homicide	3.1	7.2	6.3	3.6
15. Acquired Immune Deficiency Syndrome	2.6	6.3	3.5	2.4
Total Deaths All Causes (<i>some causes are not listed above</i>)	648.8	716.7	808.4	740.6

Source: Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2011 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County.

U.S. data from the National Center for Health Statistics, National Vital Statistics Reports, Volume 61, Number 6 (October 10, 2012).

Note: Rate equals the number of events per 100,000 population; standard year is the 2000 U.S. population.

- Compared to white non-Hispanic residents in Mecklenburg County, white non-Hispanic residents of Wake County had lower mortality rates for all leading causes of death except: Cerebrovascular Disease (13.5% higher) and Diabetes (10% higher).
- Compared to Mecklenburg County, African-American residents of Wake County have lower mortality rates for all leading causes of death except Cerebrovascular Disease (7% higher), Diabetes (20% higher) and Unintentional Motor Vehicle Injuries (11.2% higher).
- Among Hispanics, Wake County mortality rates for Cancer (4.8% higher), Heart Disease (10%), Unintentional Injuries (34.7% higher), and Motor Vehicle Injuries (33% higher) are higher compared to Mecklenburg County.

Race-Specific Age-Adjusted Death Rates for the 15 Leading Causes of Death, Aggregate Data, 2007-2011

Cause of Death	Wake County				Mecklenburg County			
	White	African-American	Other Races	Hispanic	White	African-American	Other Races	Hispanic
1. Cancer	155.9	192.1	85.0	72.6	156.9	219.2	76.6	69.3
2. Diseases of the Heart	134.1	177.5	67.0	47.3	134.4	189.5	52.3	43.0
3. Cerebrovascular Diseases	41.0	61.2	22.4	N/A	36.0	57.2	30.1	21.6
4. Chronic Lower Respiratory Disease	35.2	21.3	N/A	N/A	38.0	30.5	N/A	N/A
5. Alzheimer's Disease	21.1	17.4	N/A	N/A	44.1	51.8	N/A	N/A
6. Unintentional Non-Motor Vehicle Injury	20.5	15.5	N/A	12.4	22.0	18.5	N/A	9.2
7. Diabetes Mellitus	13.7	43.6	N/A	N/A	12.4	36.3	N/A	N/A
8. Nephritis, Nephrotic Syndrome and Nephrosis	11.8	30.7	N/A	N/A	13.2	41.7	N/A	N/A
9. Pneumonia and Influenza	10.5	11.7	N/A	N/A	14.5	15.1	N/A	N/A
10. Septicemia	8.7	17.1	N/A	N/A	11.3	17.7	N/A	N/A
11. Suicide	11.0	3.6	N/A	N/A	12.3	4.5	N/A	N/A
12. Unintentional Motor Vehicle Injuries	7.4	10.9	N/A	14.1	7.5	9.8	N/A	10.6
13. Chronic Liver Disease and Cirrhosis	5.7	3.6	N/A	N/A	7.8	5.9	N/A	N/A
14. Homicide	1.2	8.1	N/A	4.4	2.1	15.2	N/A	8.1
15. Acquired Immune Deficiency Syndrome	0.7	9.6	N/A	N/A	1.5	18.3	N/A	N/A
Total Deaths All Causes (Some causes are not listed above)	630.5	832.8	317.5	292.5	668.7	959.2	297.8	264.4

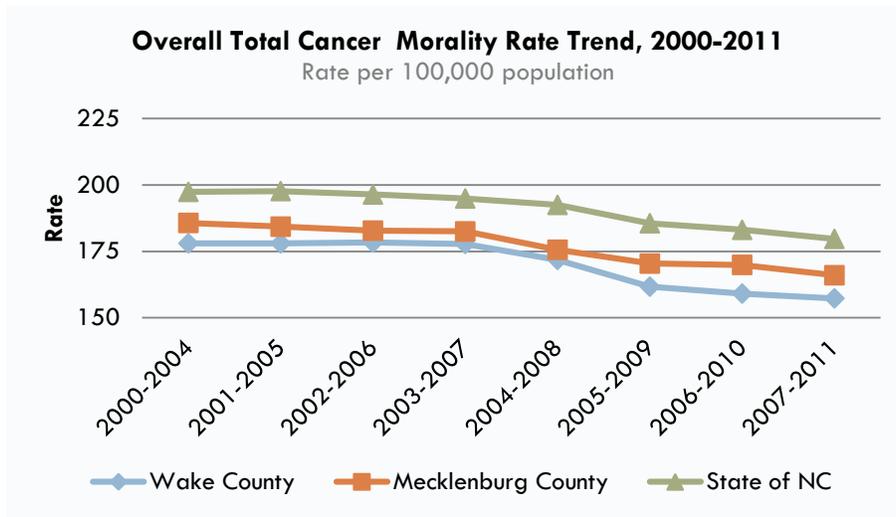
Source: NC State Center for Health Statistics, County Health Data Book (2013), Mortality, 2007-2011 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County.

Notes: Rate equals the number of events per 100,000 population; standard year is the 2000 U.S. population. "N/A" indicates a likely unstable rate based on a small (fewer than 20) number of cases. Race and ethnicity data collected by the NC Center for Health Statistics is reported as two separate dimensions. Other races include American Indian and Asian races. Ethnicity is defined as Hispanic and Non-Hispanic. Thus, persons of Hispanic ethnicity may be of any race.

CANCER

Cancer is the leading cause of death in Wake County. According to the Centers for Disease Control and Prevention, a person's cancer risk can be reduced by receiving regular medical care, avoiding tobacco, limiting alcohol use, avoiding excessive exposure to ultraviolet rays from the sun and tanning beds, eating a diet rich in fruits and vegetables, maintaining a healthy weight, and being physically active. In addition, screening for cervical, colorectal, and breast cancers helps find these diseases at an early, often highly treatable stage (Centers for Disease Control and Prevention, Cancer Prevention and Control website).

The overall cancer mortality rate in Wake County has declined 11% from 178.3 per 100,000 population in 2002-2004 to 157.3 in 2007-2011. The Wake County cancer mortality rate is 12.5% lower than the state rate (179.7).



Source: NC State Center for Health Statistics, County Health Data Books (2006-2013), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County.

In 2007-2011, Wake County had lower (or same) mortality rates for colon, lung, female breast, and prostate cancers when compared to Mecklenburg County or North Carolina.

- The *Healthy NC 2020* target is to reduce the colon cancer mortality rate (per 100,000) population to 10.1.

Cancer Mortality Rates for Selected Sites, 2007-2011

Location	Colon/Rectum	Lung/Bronchus	Female Breast	Prostate	All Cancers
Wake County	11.7	14.9	22.8	24.3	157.2
Mecklenburg County	14.7	46.4	23.1	25.6	166.5
State of NC	15.3	54.6	22.8	24.4	179.9

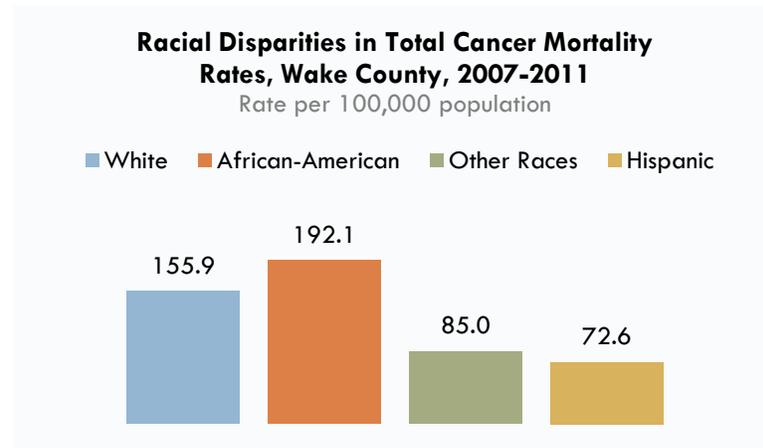
Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Mortality Rates for All Counties by Specified Site.
 Note: Rate per 100,000 population.

Screenings

According to the 2013 Community Health Opinion Survey, approximately 3 out of 4 residents aged 50 or older (78%) reported that they had a colonoscopy. For males aged 40 or older, 59% have annual prostate exams. Approximately 61% of females aged 40 and over have a mammogram every year, and 78% of females over 21 have a pap smear at least every other year.

Disparities

In 2007-2011, African Americans in Wake County had the highest mortality rate from cancer (192.1 per 100,000 population) than other races in the County.



Source: NC State Center for Health Statistics, County Health Data Books (2006-2013), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County.

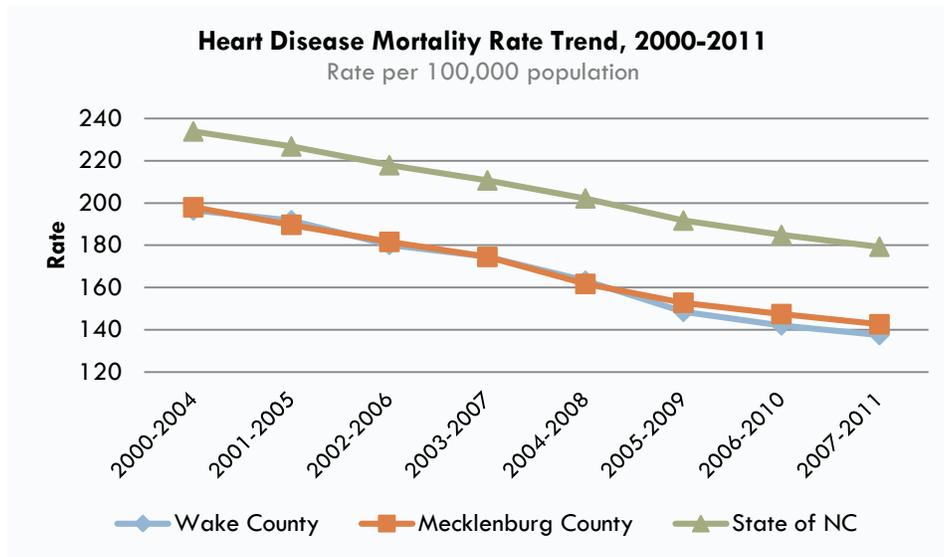
Note: Race and ethnicity data collected by the NC Center for Health Statistics is reported as two separate dimensions. Other races include American Indian and Asian races. Ethnicity is defined as Hispanic and Non-Hispanic. Thus, persons of Hispanic ethnicity may be of any race.

HEART DISEASE

Heart disease is the second leading cause of death for residents in Wake County. The risk for heart disease also increases as a person ages. In addition to behavioral risk factors, obesity, high blood pressure, high cholesterol, and diabetes are other known risk factors for heart disease (NC Institute of Medicine. *Healthy North Carolina 2020: A Better State of Health*. Morrisville, NC: NC Institute of Medicine; 2011).

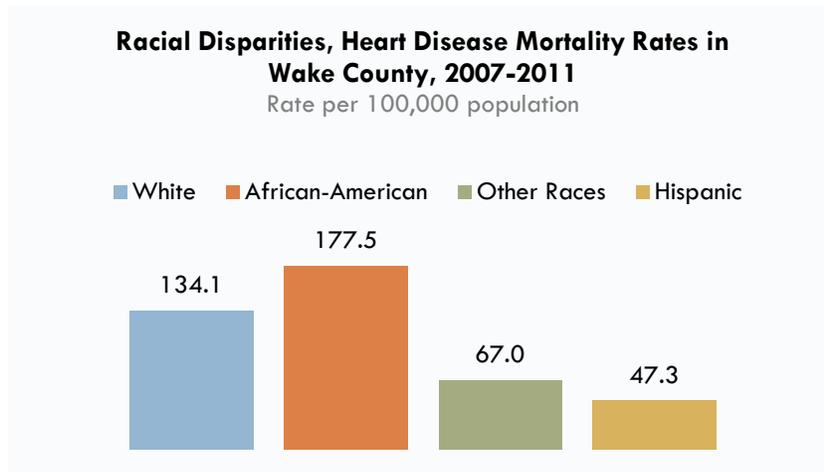
The heart disease mortality rate decreased dramatically in Wake County, 30% from 195.6 per 100,000 population in 2000-2004 to 137.5 per 100,000 population in 2007-2011. The 2007-2011 heart disease mortality rate in Wake County is 23% lower than the state rate (179.3 per 100,000 population).

- The *Healthy NC 2020* target is to reduce the cardiovascular disease mortality rate (per 100,000) population to 161.5.



Source: NC State Center for Health Statistics, County Health Data Books (2006-2013), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County.

In 2007-2011, African Americans in Wake County also had the highest mortality rate from heart disease (177.5 per 100,000 population), where the mortality rate was 32% higher than white non-Hispanics in the County (134.1 per 100,000 population).



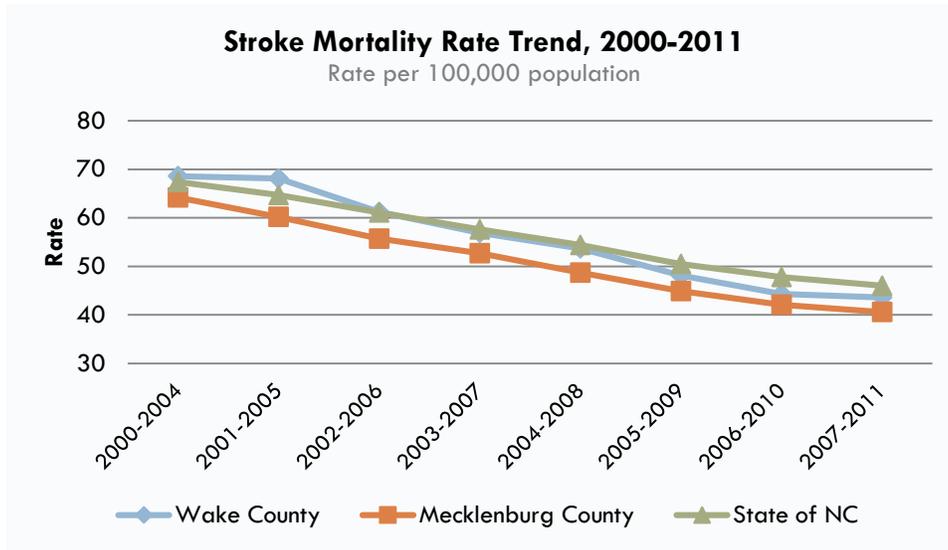
Source: NC State Center for Health Statistics, County Health Data Books (2006-2013), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County.

Note: Race and ethnicity data collected by the NC Center for Health Statistics is reported as two separate dimensions. Other races include American Indian and Asian races. Ethnicity is defined as Hispanic and Non-Hispanic. Thus, persons of Hispanic ethnicity may be of any race.

CEREBROVASCULAR DISEASE (STROKE)

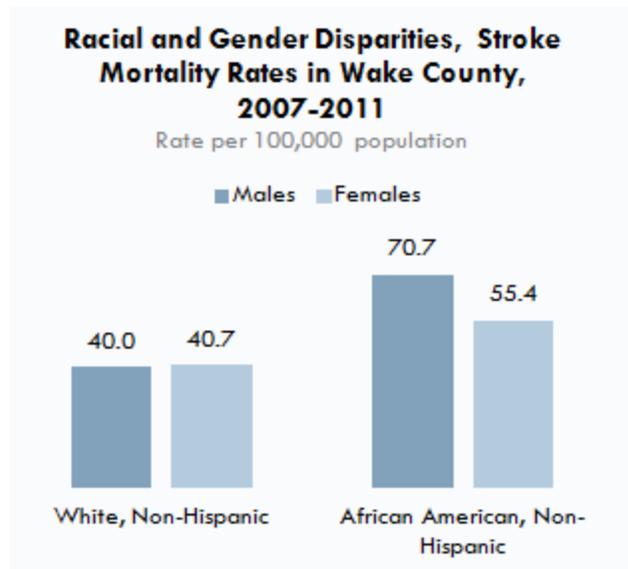
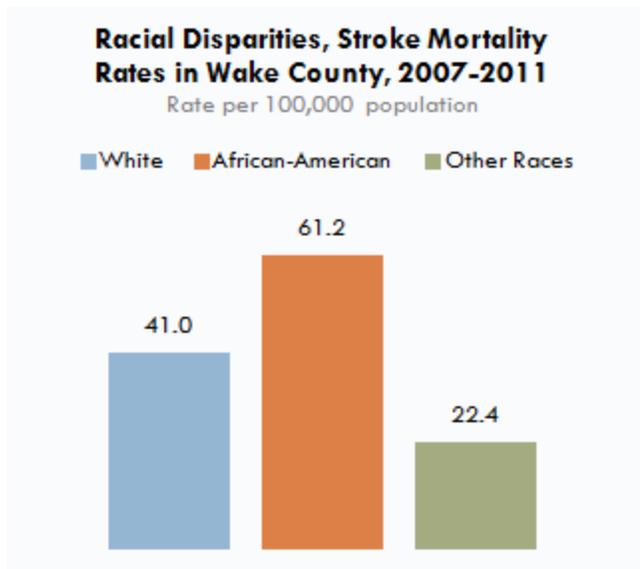
Stroke is the 3rd leading cause of death in Wake County. A stroke occurs when a clot blocks the blood supply to the brain or when a blood vessel in the brain bursts. The risk for stroke can be greatly reduced through lifestyle changes and, in some cases, medication.

The stroke mortality rate in Wake County declined 37% from 68.6 per 100,000 population in 2000-2004 to 43.6 per 100,000 population in 2007-2011.



Source: NC State Center for Health Statistics, County Health Data Books (2006-2013), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County.

In 2007-2011, the stroke mortality rate was higher among African-Americans in Wake County compared to whites. The stroke mortality rate among African-American males (70.7 per 100,000 population) was 77% higher than the rate among white males (40 per 100,000 population), and the mortality rate among African American females (55.4 per 100,000 population) was 36% higher than white females (40.7 per 100,000 population).



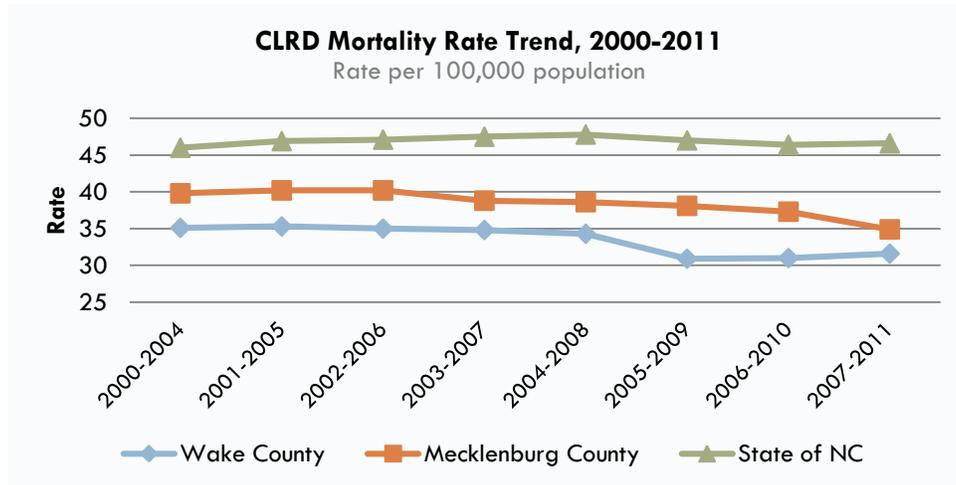
Source: NC State Center for Health Statistics, County-level Data, County Health Data Book (2013), Mortality, 2007-2011 NC Resident Race/Ethnicity and Sex-Specific Age-Adjusted Death Rates, by County.

Note: Race and ethnicity data collected by the NC Center for Health Statistics is reported as two separate dimensions. Other races include American Indian and Asian races. Ethnicity is defined as Hispanic and Non-Hispanic. Thus, persons of Hispanic ethnicity may be of any race.

CHRONIC LOWER RESPIRATORY DISEASE

Chronic lower respiratory disease (CLRD) comprises three major diseases: chronic bronchitis, emphysema, and asthma. The most important modifiable risk factors for CLRD are: tobacco use, other exposures to indoor and outdoor air pollutants, allergens, occupational exposure, and to a lesser extent than for other chronic diseases, unhealthy diet, obesity and overweight, and physical inactivity (World Health Organization, Risk Factors for Chronic Respiratory Diseases, 2007).

CLRD is the 4th leading cause of death in Wake County. In 2007-2011, the CLRD mortality rate in Wake County is 32% lower than the statewide rate and 9.5% lower than the Mecklenburg County rate.



Source: NC State Center for Health Statistics, County Health Data Books (2006-2013), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County.

While there were not enough deaths attributable to CLRD to compute stable rates among “Other Races” and Hispanics in 2007-2011, the mortality rate among white non-Hispanics (35.2 per 100,000 population) is 65.3% higher than the rate among African-Americans (21.3 per 100,000 population).

ASTHMA

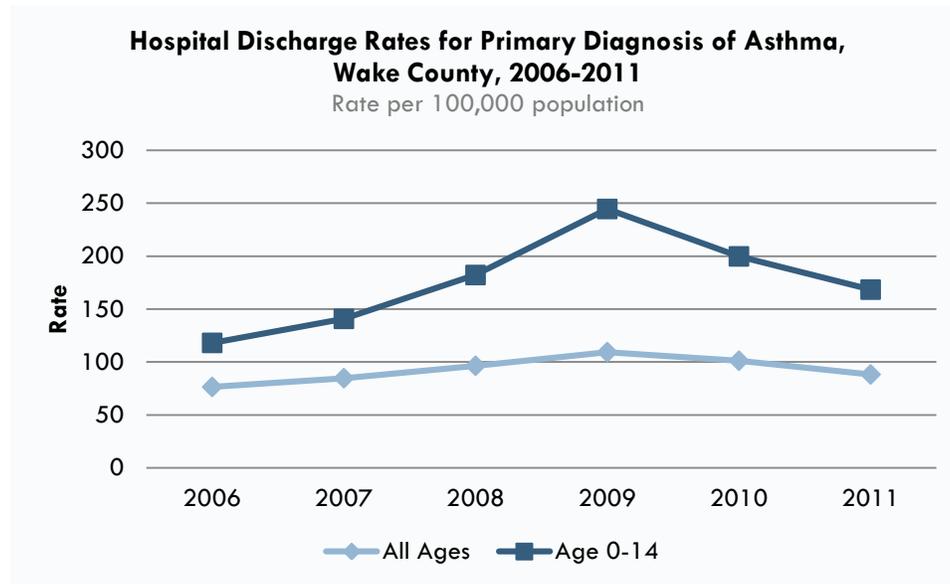
Asthma is a chronic inflammatory disorder of the airways characterized by episodes of reversible breathing problems due to airway narrowing and obstruction. These episodes can range in severity from mild to life threatening. Daily preventive treatment can prevent symptoms and attacks and enable individuals who have asthma to lead active lives (*U.S. Department of Health and Human Services. Healthy People 2020*).

- Approximately 1 out of every 10 adults (10.2%) in Wake County reported in 2010 that they have ever had asthma, compared to 12.5% in Mecklenburg County and 12.6% statewide.
- Non-whites in Wake County are 1.8 times more likely to have been diagnosed with asthma (14.5%) than whites (8.1%).

Source: NC State Center for Health Statistics, Behavioral Risk Factor Surveillance Data, 2010.

In Wake County, the hospital discharge rate of individuals of all ages with a primary diagnosis of asthma increased between 2006 and 2009.

The discharge rate of children aged 0-14 diagnosed with asthma increased steeply between 2006 and 2009. Though it has since declined, the 2011 discharge rate (168.4 per 100,000 population) was 43% higher than the 2006 rate of 118.1 per 100,000 population.



Source: NC State Center for Health Statistics, County-level Data, County Health Data Book (2008-2013), Morbidity, Asthma Hospital Discharges (Total and Age 10-14) per 100,000 Population.

During the 2011-2012 school year, the Wake County Public School System's School Nurse program provided interventions for asthma for 3,642 students (Wake County Human Services, Quarterly Report Workbook, 2011-2012).

DIABETES

The majority (90-95%) of all people diagnosed with diabetes have type 2 diabetes. Diabetes can lead to serious and costly health problems such as heart disease, stroke, and kidney failure. Being overweight, obese and older are risk factors for diabetes (NC Institute of Medicine. *Healthy North Carolina 2020: A Better State of Health*. Morrisville, NC: NC Institute of Medicine; 2011).

- Approximately 5.2% of Wake County residents reported that they have ever had diabetes, compared to 8.8% in Mecklenburg County and 9.8% statewide.
 - The *Healthy NC 2020* target is to reduce the percentage of adults with diabetes to 8.6%.
- Wake County residents with a household income of \$50,000 or more were 2.2 times less likely (4%) to have ever been diagnosed with diabetes than those with household incomes less than \$50,000 (9%).
- Approximately 7.1% of non-whites reported that they ever had diabetes compared to 4.1% for whites.

Source: NC State Center for Health Statistics, Behavioral Risk Factor Surveillance Data, 2010.

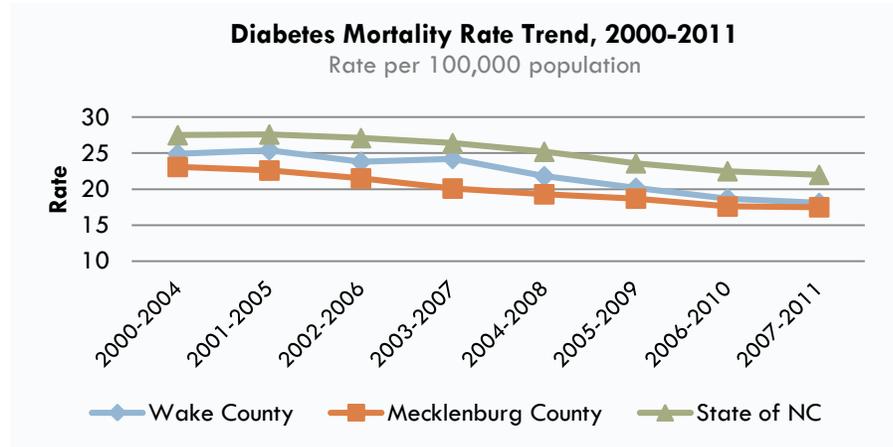
According to hospital data for Wake County residents, an increasing number of patients have been discharged from Wake County Emergency Departments with diabetes-related diagnoses. In the 2012 fiscal year, more than 1,700 Wake County patients were seen in Wake County Emergency Departments for diabetes (types 1 and 2) related issues, a 17% increase since 2010 (1,478 patients) (Truven Health Analytics, prepared by WakeMed Health and Hospitals, 2013).

Resource

Community Care of Wake and Johnston Counties offers [Living Healthy and Living Healthy with Diabetes](#) workshops, which are 6 week long workshops that meet for 2.5 hours each week.

Those who have participated in the program, when compared to those who did not, demonstrated significant improvements in: exercise, cognitive symptom management, communication with physician, self-reported general health, health distress, fatigue, disability, social/role activities limitations. They also spent fewer days in the hospital and tended to have fewer hospitalizations.

Diabetes is the 7th leading cause of death for residents in Wake County. The Wake County diabetes mortality rate has decreased 29%, from a high point of 25.4 per 100,000 population in 2001-2005 to 18.1 per 100,000 population in 2007-2011.



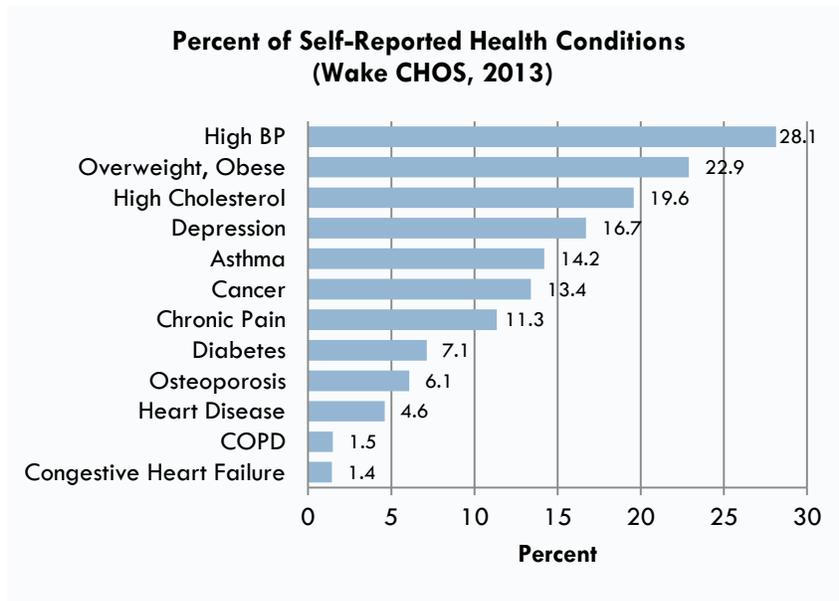
Source: NC State Center for Health Statistics, County Health Data Books (2006-2013), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County.

In 2007-2011, there were too few deaths attributed to diabetes among “Other Races” and Hispanic residents in Wake County to compute stable mortality rates. However, the rate among African Americans (43.6 per 100,000 population) is more than 3 times the rate among whites (13.7 per 100,000 population).

The diabetes mortality rate among African American males (52.1 per 100,000 population) is nearly 3 times higher than the rate among white males (18.1 per 100,000 population). The mortality rate among African American females (37.7 per 100,000 population) is 3.5 times the rate among white females (10.1 per 100,000 population).

Community Perceptions

In the 2013 Community Health Opinion Survey, respondents were asked if a health professional had ever diagnosed them with a list of health conditions. The top 3 leading conditions that residents self-reported was high blood pressure (BP), overweight/obesity, and high cholesterol.



Source: 2013 Wake County Community Health Opinion Survey.

In three focus groups, diabetes was identified as a health concern for Wake County, and in one focus group there was discussion among persons about the challenges of managing diabetes with limited Medicare resources. The Hispanic focus group identified additional health concerns, including cancer, high blood pressure, and high cholesterol.

“There are [diabetic] medications that Medicare will not cover and there have been some that I needed and for a monthly supply, it’s more than \$100. I’m too embarrassed to tell anyone in my family or whatever. I just don’t take it. I just wait and hold and maybe something better will happen.”

- Community member

Communicable Diseases and Immunization

Statistics, Targets, and Disparities

The prevention of communicable diseases is part of the historic foundation of public health practice. Fortunately, many communicable diseases such as chicken pox, measles, influenza, and hepatitis B can be prevented through immunizations. Foodborne illnesses are among the most common of communicable diseases, and they can lead to illness, hospitalizations, and even deaths. Foodborne illnesses are not vaccine preventable, but are potentially preventable through hand hygiene, safe food preparation, and proper storage (NC Institute of Medicine. Healthy North Carolina 2020: A Better State of Health. Morrisville, NC: NC Institute of Medicine; 2011).

Certain communicable diseases are required by law to be reported to local health departments by physicians, school administrators, child care operators, medical facilities, and operators of restaurants and other food or drink establishments.

- There are 71 “reportable” diseases specified in the N.C. Administrative Code rule.
- After initial notification about a case or cases of a communicable disease occurs in Wake County, Wake County Human Services begins an investigation, collecting details such as demographic, clinical, and epidemiological information.
- After verifying that a reported case meets the reporting requirements in the standardized case definitions, it is reported electronically to the N.C. Division of Public Health via the North Carolina Electronic Disease Surveillance System (NC EDSS) and then to the Centers for Disease Control and Prevention’s National Notifiable Diseases Surveillance System.

Source: Wake County Human Services, Public Health Division, Public Health Quarterly Report, Jan.-Mar. 2013.

Resources

The Wake County communicable disease program works to prevent and control the spread of communicable diseases and vector-borne illness among people who work, eat, play, and live in Wake County. The program works to do the following:

- Describe disease trends.
- Identify and control the sources of infection.
- Educate the public.
- Take measures to prevent disease.
- Plan for and respond to public health emergencies.

Handwashing is one of the most effective ways to prevent the spread of many types of infection and illness in all settings including home, workplace, child care facilities, and hospitals).

GENERAL COMMUNICABLE DISEASES

In 2012, there were 48 cases of general communicable diseases reported in Wake County. Approximately 30% of those cases were Streptococcal infection, Group A, invasive and 25% were Haemophilus influenzae, invasive disease.

General Communicable Diseases in Wake County, 2008-2012

Disease	2008		2009		2010		2011		2012	
	Case Count	Rate								
Brucellosis	0	0	0	0	0	0	0	0	1	*
Creutzfeldt-Jakob Disease	0	0	4	*	1	*	1	*	2	*
Cryptosporidiosis	6	*	5	*	2	*	0	0	4	*
Dengue	1	*	0	0	2	*	2	*	1	*
Haemophilus influenzae, invasive disease	10	*	12	*	11	*	9	*	12	*
Hemolytic-uremic syndrome (HUS)	1	*	2	*	1	*	0	0	0	0
Hepatitis A	15	*	2	*	2	*	2	*	2	*
Hepatitis C, acute	1	*	1	*	1	*	1	*	3	*
Influenza (NOVEL virus infection)	0	0	144	16.0	0	0	0	0	0	0
Legionellosis	3	*	3	*	4	*	8	*	3	*
Meningococcal disease	0	0	0	0	1	*	3	*	1	*
Q Fever	0	0	0	0	0	0	1	*	1	*
S. aureus with reduced susceptibility to vancomycin	2	*	0	0	0	0	0	0	1	*
Streptococcal infection, Group A, invasive	8	*	10	*	13	*	27	2.9	15	*
Toxic shock syndrome, streptococcal	1	*	0	*	2	*	2	*	0	*
Tularemia	1	*	0	0	0	0	0	0	0	0
Vibrio infection, other	0	*	1	*	1	*	1	*	2	*

Source: NC Electronic Disease Surveillance System, accessed 3/19/13. Note: counts include all cases meeting the suspect, probable, and confirmed North Carolina communicable disease case definitions.

Notes: Rates per 100,000 population. *Rates based on fewer than 20 cases are unreliable and not displayed.

Reportable communicable diseases with NO reported cases in the period 2008-2012 were not included in the above table. Because cases are routinely updated, case numbers may change. (Data was extracted 3/19/2013. Case definitions for these diseases are available at http://epi.publichealth.nc.gov/cd/lhds/manuals/cd/case_defs.html.)

- Group A *Streptococcus* is a bacterium often found in the throat and on the skin. People may carry group A streptococci in the throat or on the skin and have no symptoms of illness. Most Group A *Streptococcus* infections are relatively mild illnesses such as "strep throat," or impetigo. Occasionally these bacteria can cause severe and even life-threatening diseases when bacteria get into parts of the body where bacteria usually are not found, such as the blood, muscle, or the lungs. These infections are termed "invasive Group A *Streptococcus* disease."
- *Haemophilus influenzae*, invasive disease can cause serious invasive illness such as meningitis, bacteremia, epiglottitis, and pneumonia. Hib infection is spread primarily by respiratory droplets (droplet spread) produced when an infected person coughs or sneezes.

Source: Centers for Disease Control and Prevention website.

VACCINE PREVENTABLE DISEASES

For vaccine preventable diseases in Wake County, there were 161 cases reported in 2012. Of those cases, 71% were chronic Hepatitis B cases, 3% acute Hepatitis B cases, 25% were pertussis or whooping cough cases, and 2% were adult influenza deaths. The number of confirmed cases of pertussis reported in Wake County during January through December 12, 2012 increased more than 3 times the average number reported over the last ten years.

Vaccine Preventable Diseases in Wake County, 2008-2012

Disease	2008		2009		2010		2011		2012	
	Case Count	Rate								
Hepatitis B, acute	5	*	7	*	4	*	4	*	4	*
Hepatitis B-chronic	100	11.5	104	11.6	180	19.9	202	21.7	114	12.3
Influenza, pediatric death (< 18 years of age)	0	0	1	*	0	0	1	*	0	0
Influenza, adult death (18 years of age)	0	0	0	0	0	0	7	*	3	*
Mumps	1	*	0	0	0	0	0	0	0	0
Pertussis (whooping cough)	12	*	10	*	19	*	6	*	40	4.30
Poliomyelitis, paralytic	0	0	0	0	0	0	0	0	0	0
Rubella	0	0	0	0	0	0	0	0	0	0
Rubella, congenital syndrome	0	0	0	0	0	0	0	0	0	0

Source: NC Electronic Disease Surveillance System, accessed 3/19/13. Note: counts include all cases meeting the suspect, probable, and confirmed North Carolina communicable disease case definitions.

Notes: Rates per 100,000 population. *Rates based on fewer than 20 cases are unreliable and not displayed.

Reportable communicable diseases with NO reported cases in the period 2008-2012 were not included in the above table. Because cases are routinely updated, case numbers may change. (Data was extracted 3/19/2013. Case definitions for these diseases are available at http://epi.publichealth.nc.gov/cd/lhds/manuals/cd/case_defs.html)

- Hepatitis B is a liver disease that results from infection with the Hepatitis B virus. Hepatitis B is usually spread when blood, semen, or another body fluid from a person infected with the Hepatitis B virus enters the body of someone who is not infected. This can happen through sexual contact with an infected person or sharing needles, syringes, or other drug-injection equipment. Hepatitis B can also be passed from an infected mother to her baby at birth.

 - Acute Hepatitis B virus infection is a short-term illness that occurs within the first 6 months after someone is exposed to the Hepatitis B virus.
 - Chronic Hepatitis B virus infection is a long-term illness that occurs when the Hepatitis B virus remains in a person’s body. Chronic Hepatitis B is a serious disease that can result in long-term health problems, and even death.

- Pertussis, also known as whooping cough, is a highly contagious respiratory disease. It is caused by the bacterium *Bordetella pertussis*. Pertussis is known for uncontrollable, violent coughing which often makes it hard to breathe. Pertussis most commonly affects infants and young children and can be fatal, especially in babies less than 1 year of age.

Source: Centers for Disease Control and Prevention website.

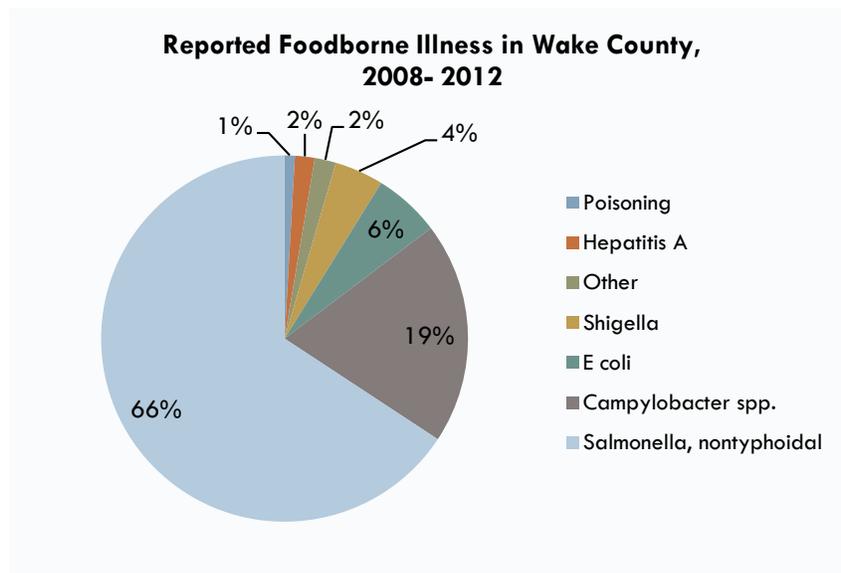
PNEUMONIA AND INFLUENZA

The mortality rate due to pneumonia and influenza decreased 31.8% in Wake County, from 15.4 per 100,000 population in 2000-2004 to 10.5 per 100,000 population in 2007-2011. In 2007-2011, the pneumonia and influenza mortality rate in Wake County was 41.3% lower than the rate for NC (17.9) and 25.5% lower than the Mecklenburg County rate (14.1).

- The *Healthy NC 2020* target is to reduce the pneumonia and influenza mortality rate (per 100,000 population) to 13.5.

FOODBORNE ILLNESSES

During 2008 through 2012, the three most commonly reported foodborne illnesses in Wake County were salmonellosis, campylobacteriosis, and shigellosis. Cases of some foodborne diseases caused by other microorganisms are not required to be reported under NC communicable disease law. However, all foodborne outbreaks are required to be reported to local health departments and the NC Division of Public Health.



Source: North Carolina Electronic Disease Surveillance System.

Notes: Counts include all cases meeting the suspect, probable, and confirmed North Carolina communicable disease case definitions. Poisoning includes ciguatera, mushroom, and scombroid fish. Other includes Cyclosporiasis, Q fever, Staphylococcus aureus, typhoid, Vibrio vulnificus and vibrio infection other than cholera and vulnificus and listeriosis.

SEXUALLY TRANSMITTED INFECTIONS

Sexually transmitted infections (STIs) refer to more than 25 infectious organisms that are transmitted primarily through sexual activity. STI prevention is an essential primary care strategy for improving reproductive health. Despite their burdens, costs, and complications, and the fact that they are largely preventable, STIs remain a significant public health problem in the United States.

- Untreated STIs can lead to serious long-term health consequences, especially for adolescent girls and young women.
- The Centers for Disease Control and Prevention estimates that undiagnosed and untreated STIs cause at least 24,000 women in the United States each year to become infertile.

- Because many cases of STIs go undiagnosed and some common viral infections, such as human papillomavirus (HPV) and genital herpes are not reported, the reported cases of chlamydia, gonorrhea, and syphilis represent only a fraction of the true burden of STIs in the United States.

Source: U.S. Department of Health and Human Services. Healthy People 2020.

In 2012, there were 4,468 cases of Chlamydia reported in Wake County, 1,336 cases of Gonorrhea, and 742 cases of non-gonococcal urethritis.

Sexually Transmitted Infections in Wake County, 2008-2012

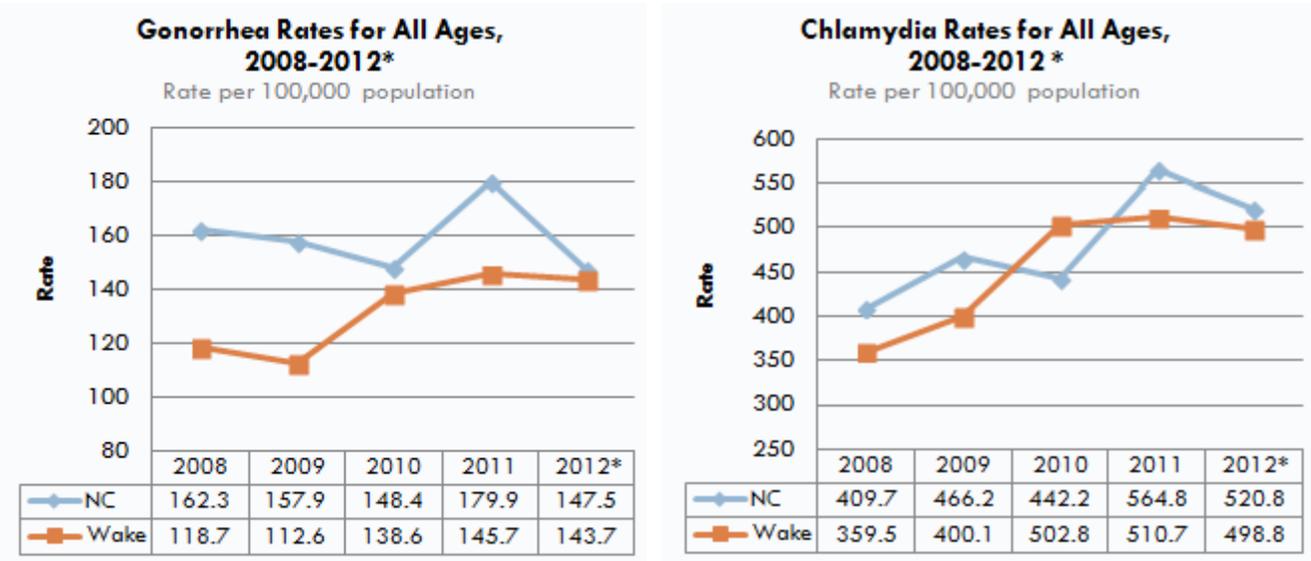
Disease	2008		2009		2010		2011		2012	
	Case Count	Rate	Case Count	Rate						
AIDS	120	13.8	109	12.1	84	9.3	76	8.4	data not available	
Chancroid	0	0	0	0	1	*	0	0	0	0
Chlamydia	3,121	359.5	3,590	400.1	4,530	502.8	4,748	510.7	4,638	498.8
Gonorrhea	1,030	118.7	1,010	112.6	1,249	138.6	1,355	145.7	1,336	143.7
Granuloma inguinale	1		0	0	0	0	0	0	0	0
HIV	203	23.4	186	20.7	170	18.9	153	17	data not available	
Non-gonococcal urethritis	351	40.4	292	32.6	372	41.0	514	55.3	742	79.8
PID	138	15.9	115	12.8	192	21.2	273	29.4	246	26.5
Syphilis , primary	7	*	14	*	3	*	13	*	7	*
Syphilis, secondary	25	2.9	58	6.5	38	4.2	31	3.3	45	4.9
Syphilis, early latent	13	*	44	4.9	42	4.6	32	3.4	27	2.9
Syphilis, latent, unknown duration	8	*	18	*	17	*	8	*	14	*
Syphilis, late latent	38	4.5	48	5.4	35	3.9	56	6.0	36	3.9
Syphilis, late with symptoms	1	*	1	*	0	0	0	0	0	0
Syphilis, neurosyphilis	3	*	3	*	0	0	0	0	0	0
Syphilis, congenital	0	0	0	0	1	*	1	*	0	0

Source: NC Electronic Disease Surveillance System, accessed 3/19/13.

Note: counts include all cases meeting the suspect, probable, and confirmed North Carolina communicable disease case definitions. Rates per 100,000.

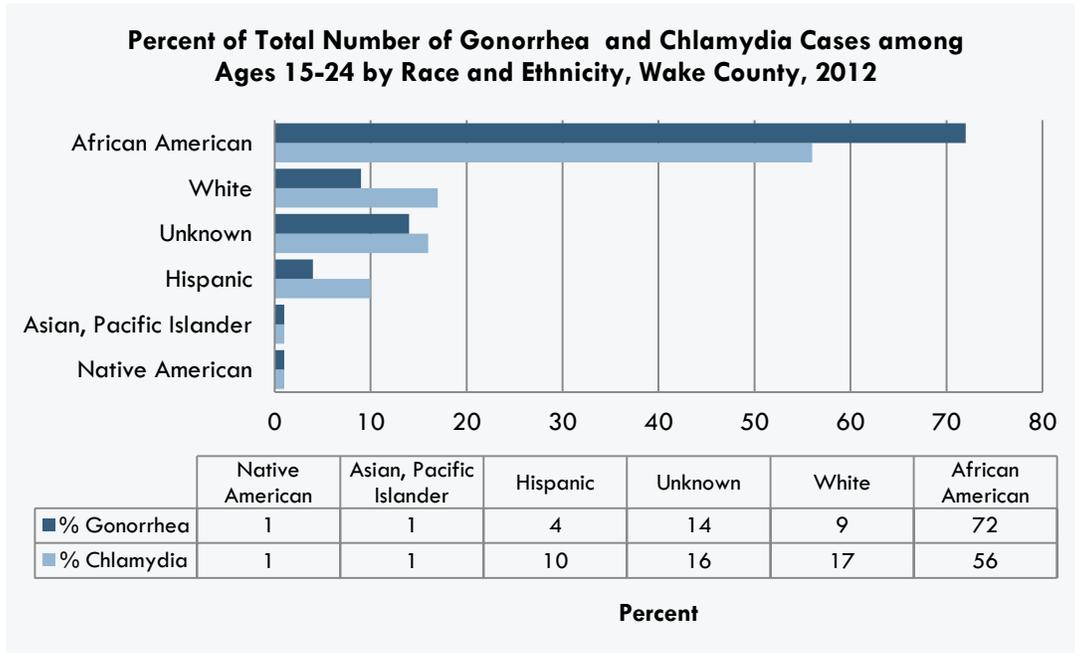
*Rates based on fewer than 20 cases are unreliable and not displayed. HIV and AIDS data was not available for 2012. Sexually transmitted diseases with NO reported cases in the period 2008-2012 were not included.

The rates for chlamydia and gonorrhea in Wake County have increased steadily from 2008 through 2011, but have declined slightly from 2011 to 2012. Both the chlamydia and gonorrhea rates for Wake County are generally lower than the overall rates in North Carolina. However, both North Carolina and Wake County rates are higher than national rates.



Source: NC Electronic Disease Surveillance System.
 Note: *2012 rate for NC is preliminary.

In Wake County, more than half of all reported cases of chlamydia (66%) and gonorrhea (51%) occur among 15-24 year olds. The highest percent of chlamydia and gonorrhea cases are among African American youth.



Source: NC Division of Public Health Communicable Disease Branch.

Resource

For prevention, early identification and treatment of sexually transmitted infections, Wake County Human Services integrated its testing services for HIV, syphilis, chlamydia, gonorrhea, hepatitis, and TB in 2012 by offering simultaneously testing to clients at community and clinical testing sites. Integrated testing of high risk populations increases detection and treatment of sexually transmitted infections and TB. This enhanced testing is made possible through the Center for Disease Control (CDC) Program Collaboration and Service Integration (PCSI) and other grant funding.

Source: Wake County 2012 State of the County Health Report.

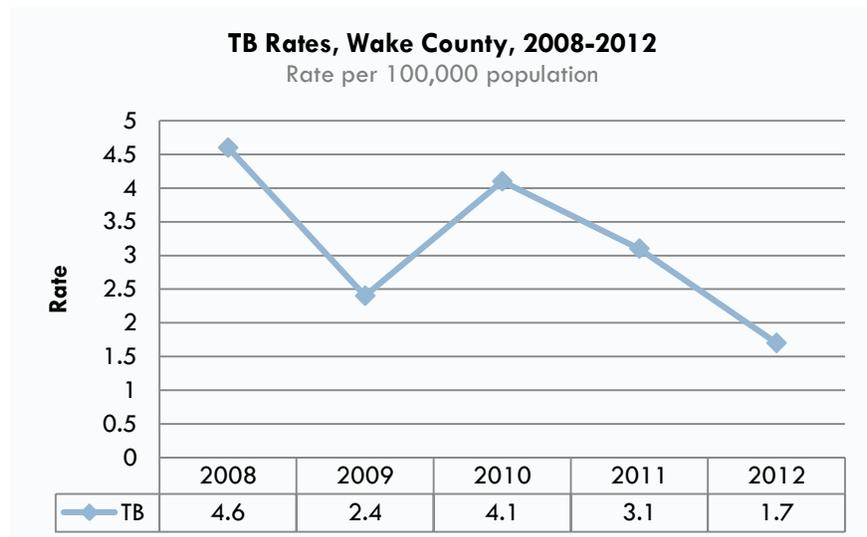
HIV/AIDS

In 2011, the HIV incidence rate (or the number of newly diagnosed individuals per 100,000 population) in Wake County (17) was 30% lower than the 2007 rate (24.4). As of December 31, 2011, there were 2,721 individuals who had been diagnosed with HIV/AIDS living in Wake County (NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch. 2011 HIV/STD Surveillance Report).

The AIDS mortality rate in Wake County decreased 41%, from 4.4 per 100,000 population in 2000-2004 to 2.6 per 100,000 population in 2007-2011. When compared to Mecklenburg County and NC, Wake County has had consistently lower AIDS mortality rates, where the 2007-2011 rate in Mecklenburg County (6.3 per 100,000 population) was more than twice the rate of Wake County (2.6 per 100,000 population) (NC State Center for Health Statistics, County-level Data, County Health Data Books, 2007-2013).

TUBERCULOSIS

Since 2010, TB rates per 100,000 population in Wake County have declined more than 50%. While the numbers may be small, TB is a highly contagious disease and left untreated can cause outbreaks and severe disease. Surveillance, prevention, and treatment of TB and other communicable disease remains crucial for the health of our residents. In 2012, Wake County Human Services staff provided 2,177 TB-related home visits to ensure treatment compliance; provide medical follow up, and distribute preventive medications to those exposed to Latent TB infections.



Source: NC Electronic Disease Surveillance System.

IMMUNIZATION

The increase in life expectancy during the 20th century is largely due to improvements in child survival; this increase is associated with reductions in infectious disease mortality, due largely to immunization. However, communicable diseases remain a major cause of illness, disability, and death. Immunization recommendations in the United States currently target 17 vaccine-preventable diseases across the lifespan (*U.S. Department of Health and Human Services. Healthy People 2020*).

For every dollar spent on the U.S. childhood immunization program, 5 dollars in direct costs and 11 dollars in additional costs to society are saved (NC Institute of Medicine. *Healthy North Carolina 2020: A Better State of Health*. Morrisville, NC: NC Institute of Medicine; 2011).

In 2011, approximately 65% of children between the age of 19-35 months had received the recommended vaccination series, with an overall NC rank of 70 out of 100.

- The *Healthy NC 2020* target is to increase the percentage of children aged 19-35 months who receive the recommended vaccines to 91.3%.

Percent and Rank of Children Aged 19-35 Months with Recommended Vaccination Series, 2011

Location	Percent	Rank
Wake County	65%	70
Mecklenburg County	63%	74
State of NC	65%	N/A

Source: NC Immunization Program. Annual Immunization Assessment and Ranking, 2011.

Notes: Rank of 1 equals "best". County rates include all children in the NC Immunization Registry who have that county recorded as their county of residence. Data does not necessarily represent true immunization 'coverage', but rather compliance with immunization data entry. The recommended vaccination series is 431331, i.e. 4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 HepB and 1 VAR, and is assessed at 24 months of age. The assessment was conducted on October 2, 2011 and included children within the birth date range from October 2, 2008 to October 2, 2009.

Improving Tdap Immunizations for Wake County Residents and First Responders

To improve immunization rates, the NC Immunization Program (NCIP) provided Tdap (Tetanus, Diphtheria, and Pertussis) vaccine at no cost to local health departments and private provider practices beginning in the spring 2012. Wake County Human Services partnered with Wake County EMS to improve Tdap immunizations rates with special emphasis on Wake County residents, employees and first responder personnel. During the period from May through September 2012, over 5,400 doses of Tdap were administered by WCHS and EMS, including doses administered to nearly 2,200 Wake County staff and first responder personnel immunized through this partnership in targeted clinics throughout the county. First responder personnel, including local Police and Fire department staff, were visited by EMS personnel at their work sites to receive their Tdap vaccination, and additional clinics were offered at a variety of locations serving State of NC and Wake County government staff.

Source: Wake County 2012 Annual Report.

Disability and Care-giving

People living with disabilities play an important and valued role in every community. The U.S. Census in 2000 counted 49.7 million people with some type of long-lasting condition or disability. Disability is part of human life, and an impairment or condition does not define individuals, their health, or their talents and abilities. Compared with people without disabilities, people with disabilities are more likely to experience difficulties or delays in getting the health care they need. (U.S. Department of Health and Human Services. Healthy People 2020).

Statistics, Targets, and Disparities

In 2010, 1 in 4 Wake County adults (24.9%) reported disability status, either being limited in activities because of physical, mental, or emotional problems; or having a health problem that requires special equipment such as a wheelchair (NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2010).

Wake County is home to 1,348 blind or visually impaired individuals, which is 6.4% of all blind or visually impaired individuals in the state of NC (Log into North Carolina (LINC) Database, Topic Group Vital Statistics and Health).

There are currently three state developmental centers providing services for persons with developmental disabilities in North Carolina:

- Caswell Developmental Center in Kinston (capacity of 429 serving 38 counties in the Eastern region of the state).
- Murcoch Developmental Center in Butner (capacity of 575 serving the 25 counties in the Central Region).
- J. Iverson Riddle Developmental Center in Morganton (capacity of 350 serving the 37 counties in the Western Region).

The number of Wake County residents served in state-run developmental disability centers has declined 55% since 2007.

Persons Served in NC State Developmental Centers (2005-2010)

Location	Number of Persons Served					
	2005	2006	2007	2008	2009	2010
Wake County	77	80	83	21	26	37
Mecklenburg County	98	68	68	64	68	68
State of NC	2,172	1,690	1,713	1,409	1,404	1,375

Source: NC Division of Mental Health, Developmental Disabilities and Substance Abuse Services, Statistics and Publications, Reports and Publications, Statistical Reports, Developmental Centers (FY2005-FY2010).

According to the 2013 Community Health Opinion Survey, 26% of residents reported that they provide some care for a family member or friend with a disability or long-term illness.

Resources

The Children with Special Health Care Needs helpline is a toll-free referral help line for those living with, caring for, and concerned about a child with special health care needs. The helpline provides information about programs and funding resources available to NC residents.

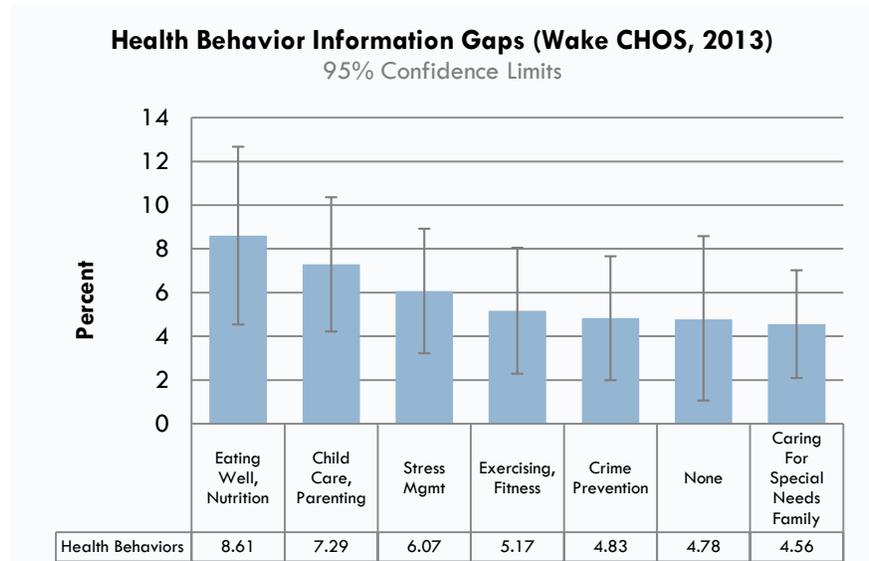
1-800-737-3028

The Arc of Wake County offers advocacy, information, and referral services for individuals with intellectual and other disabilities and/or families who need assistance in negotiating the often complex system of services.

Alliance of Disability Advocates is committed to assisting people with disabilities to live independently and become productive full participants in society.

Community Perceptions

Caring for a special needs family member was the #7 issue that residents wanted more information about.



Source: 2013 Wake County Community Health Opinion Survey.

In focus groups with persons living with physical or developmental disabilities or their caregivers, equal mobility access to health and recreation facilities was identified as a key element to personal health. Like accessing mental health services, there was a socioeconomic divide of knowing how, when, and in what ways individuals and caregivers can access (and navigate) disability services. A few focus group participants were concerned about the few resources available for survivors of Traumatic Brain Injury, and the difficulty of navigating the system with those needs. Parents of children living with disabilities were concerned about their ability to adequately provide care as they grow older and felt that services need to respond to the aging of the client and caregiver population.

Additionally, the competency of health care providers who interact with persons living with disabilities was identified as a key improvement needed in the health care system.

“Unless you have a sighted guide or a companion to help you interact with the medical system, then you're shunted off to the side, such as the nurse may not talk to you. You're the patient. She should talk to you. They're talking to this visual person next to you. They give instructions to the visual person next to you instead of giving it to you, the blind person.”

- Community member

CHAPTER 5: MENTAL HEALTH AND SUBSTANCE USE



CHAPTER 5 | MENTAL HEALTH AND SUBSTANCE USE

Mental health, an integral part of individual health, is important throughout the lifespan. Individuals with poor mental health may have difficulties with interpersonal relationships, productivity in school or the workplace, and in their overall sense of well-being.

Substance use and abuse are major contributors to death and disability in North Carolina. Addition to drugs or alcohol is a chronic health problem, and people who suffer from abuse or dependence are at risk for premature death, comorbid health conditions, injuries, and disability.

Source:

- NC Institute of Medicine. *Healthy North Carolina 2020: A Better State of Health*. Morrisville, NC: NC Institute of Medicine; 2011.

Quick Facts

Positive Trends:

- 3.2% of Wake County residents reported poor mental health days within the past month, compared to 5.9% statewide.

Areas for Improvement:

- 12% of Wake County residents reported that they are not sure where to seek help for a mental health or drug/alcohol abuse problem.
- Wake County Emergency Departments have seen an increase in the number of patients seen for mental and behavioral health disorders.
- Access to mental health and substance use services is a growing concern for residents and there is a socioeconomic divide of knowing how, when, and in what ways one can access services.

Mental Health

Statistics, Targets, and Disparities

MENTAL HEALTH DAYS

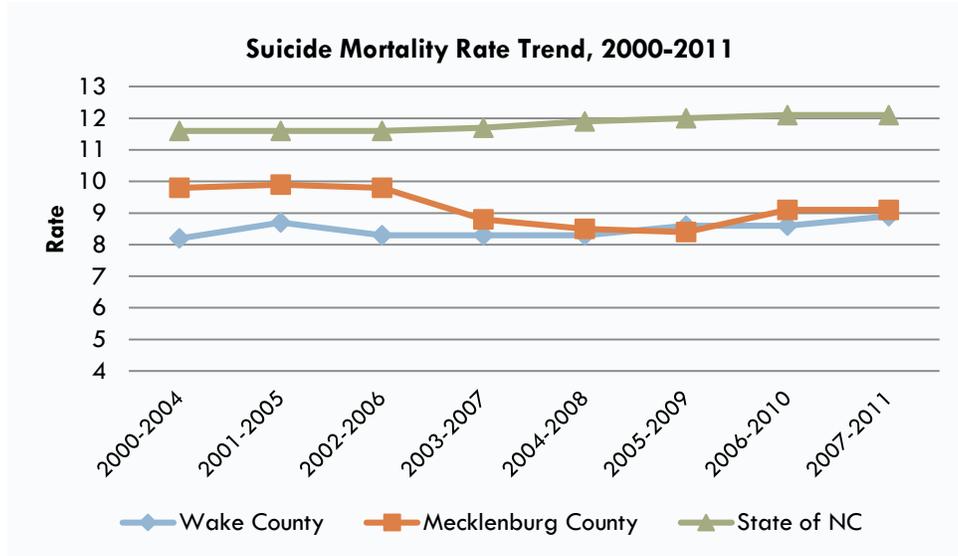
The number of poor mental health days within the past 30 days is used as one measurement of a person's health-related quality of life. Poor mental health includes stress, depression, and other emotional problems that can prevent a person from successfully engaging in daily activities. In 2010, 3.2% of Wake County adults reported poor mental health days in the past 30 days, compared to 5.4% in Mecklenburg County and 5.9% statewide (NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2010).

- The *Healthy NC 2020* target is to decrease the average number of poor mental health days among adults in the past 30 days to 2.8.

SUICIDE

The 2007-2011 suicide mortality rate in Wake County (8.9 per 100,000 population), was 26% lower than the state rate (12.1 per 100,000 population) and 2% lower than the Mecklenburg County rate (9.1 per 100,000 population).

- The *Healthy NC 2020* target is to reduce the suicide rate (per 100,000 population) to 8.3.



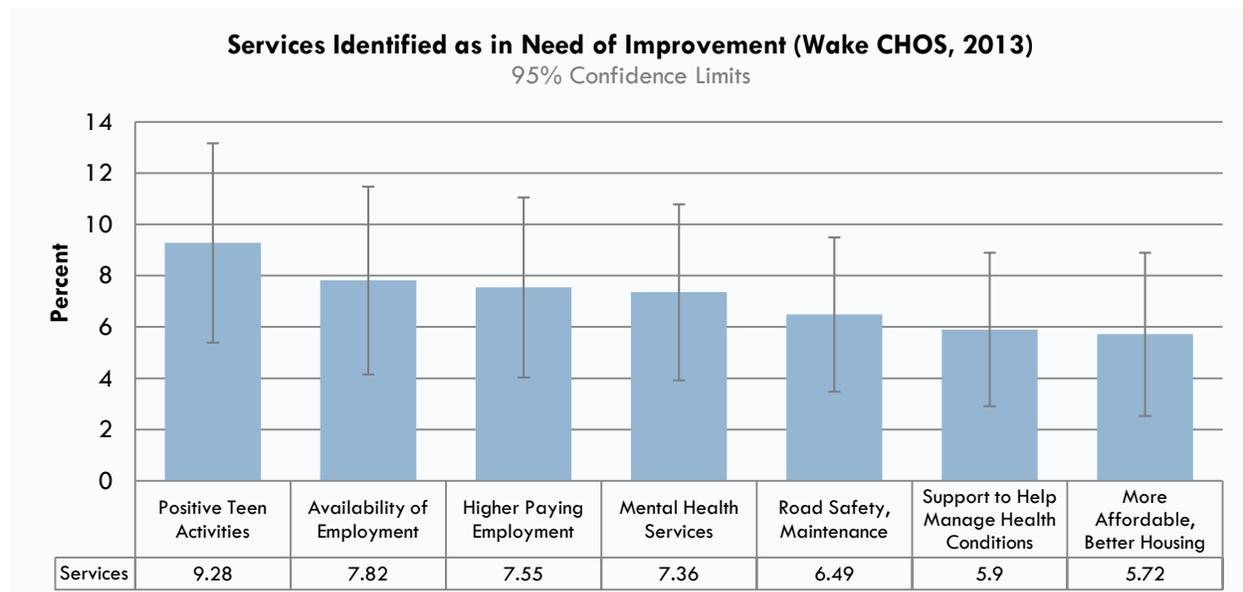
Source: NC State Center for Health Statistics, County Health Data Books (2006-2013), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County.

The 2007-2011 suicide rate among whites in Wake County (11 per 100,000 population), was more than triple the rate among African Americans (3.6 per 100,000 population). Additionally, the suicide mortality rate among males in Wake County (14 per 100,000 population) was approximately 3 times higher than the female rate (4.3 per 100,000 population).

Community Perceptions

According to the 2013 Community Health Opinion Survey, 17% of Wake County adults reported being diagnosed with depression at some point in their lives. Residents identified stress management as the #3 issue they wanted more information about.

Additionally, mental health services were identified as the #4 service needing improvement in Wake County.



Source: 2013 Wake County Community Health Opinion Survey.

Resources

Alliance Behavioral Health care
manages the public mental health, intellectual/developmental disability and substance abuse services for the citizens of Durham, Wake, Cumberland and Johnston counties. These services are delivered by a network of private providers who contract with Alliance.

Wake Crisis and Assessment Services
are available to anyone in need of help in a crisis related to a mental illness, a developmental disability or an addiction.

(919) 250-1260



When asked where to go for a mental health or drug/alcohol abuse problem, almost 1 in 3 residents surveyed by the 2013 Community Health Opinion Survey said a doctor, followed by other (21%), therapist (15%), religious official or minister (12%), and family (8%). Twelve percent of respondents said they are not sure where to seek help, compared to 16% reported in 2010.

Within all focus groups, mental and spiritual well-being was identified as a key element of personal health. Mental health was considered a growing concern among focus group participants, where insurance and cost are major barriers to accessing mental health services. The socioeconomic divide of knowing how, when, and in what ways one can access mental health services surfaced as a cross-cutting theme.

Mental health care is not covered on most insurance plans. And so, I feel like it's very difficult for people to access mental health care resources."

- Community member

Many participants voiced concern over homelessness and how that disproportionately affects those living with mental health issues. Additionally, some residents felt that the mental health services will need to adapt to meet future demand.

"Now, right now, North Carolina's facing a huge influx of veterans coming home with PTSD and brain injury who are likely to get into substance abuse issues, to get into behavioral issues, and so forth, and their families are going to be victims of all of that. And so those kids of those families are also going to need supports. So we have to have a system that's capable not only of serving the needs and providing support to now, but also monitoring and anticipating what's going to be needed down the road. You can't just stop at one point; you've got to be looking."

- Community member

MENTAL HEALTH SERVICES AND FACILITIES

The NC Department of Health and Human Services reports the number of licensed mental health facilities by county.

- As of April 2013, Wake County had 299 licensed facilities with a capacity of 1,167.
- Facilities range from supervised living facilities for adults and minors, day treatment and activity programs for adults, residential and day treatment programs for Substance Abuse (SA), Intellectual/Developmental Disabilities (I/DD) and Mental Health (MH), detoxification programs, psychosocial rehabilitation, inpatient and outpatient substance abuse treatment, respite services for caregivers, and outpatient methadone clinics.

Despite some fluctuation, the number of individuals served by local mental health programs in Wake County has increased 28% from 15,476 in 2005 to 19,771 in 2010.

Persons Served by Area Mental Health Programs, 2005-2010

Location	Number of Persons Served					
	2005	2006	2007	2008	2009	2010
Wake County	15,476	14,811	16,720	17,179	17,157	19,771
Mecklenburg County	40,712	33,956	29,415	38,559	37,481	38,944
State of NC	337,676	322,397	315,338	306,907	309,155	332,796

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health.

Note: All clients of a community-based Area Program for mental health, developmental disabilities, and drug and alcohol abuse active at the beginning of the state fiscal year plus all admissions during the year. Also included are persons served in three regional mental health facilities. Multiple admissions of the same client are counted multiple times. County of residence is reported at the time of admission. North Carolina data include clients reported to reside out-of-state and sometimes contains individuals of unknown county of residence.

According to hospital data Wake County emergency departments have experienced an increase in the number of patients seen for mental, behavioral, and neurodevelopmental disorders. In the 2012 fiscal year, 4,715 patients were discharged from Wake County emergency departments with diagnoses within this category, with the most frequent principal diagnosis being “Anxiety State Not Otherwise Specified” with 837 patients. Excluding drug and alcohol related diagnoses; patients are also seen in the emergency department for panic disorder, depressive disorder, and psychosis (Truven Health Analytics, prepared by WakeMed Health and Hospitals, 2013).

Wake County's Local Management Entity (LME) is Alliance Behavioral Healthcare, which also serves as the LME for Durham, Cumberland, and Johnston counties.

- The LME exists to refer patients needing mental health, substance abuse and developmental disability services to the appropriate providers.
- Wake County has a wide range of service providers, with an emphasis on residential and in-home-based service providers and on services for those with developmental disabilities.

Alliance currently lists 559 mental health, substance abuse, and developmental disability providers in the mental health local management entity/area program network, though this list may include duplicates of those providing services in multiple categories.

**Available Services and Providers in the Mental Health Local Management
Entity/Area Program Network (Medicaid), 2013**

Service	Number of Providers in Wake County
Assertive Community Treatment Team	5
Child Day Treatment	10
Community Support Team	25
Facility-Based Crisis	1
Intellectual/Developmental Disabilities Residential Supports Level 1	70
Intellectual/Developmental Disabilities Residential Supports Level 2	71
Intellectual/Developmental Disabilities Residential Supports Level 3	78
Intellectual/Developmental Disabilities Residential Supports Level 4	69
Intermediate care facilities for individuals with mental retardation	22
Innovations-In Home Intensive Supports	32
Innovations-In Home Skill Building	50
PATH	1
Personal Care	74
Level 3 Residential	17
Mobile Crisis	8
Supported Employment	33
Level 2 Placing Agencies (Family type)	14
Level 4 Residential	0
Non-Hospital Detoxification	1
Substance Abuse - Intensive Outpatient	16
Psychosocial Rehabilitation	11
Substance Abuse - Comprehensive Outpatient Inpatient	5
Child Mental Health/Substance Abuse Intensive In-Home	1
Innovations Intellectual/Developmental Disability Day Supports	28
Multi-Systemic Therapy	2
Psychiatric Residential Treatment Facility	6
Level 2 Residential (Program type)	4
Innovations Intellectual/Developmental Disability Community Guide	12
Total	559

Source: Alliance Behavioral Health care, Quality Management Department, 4/4/13.

Substance Use

Statistics, Targets, and Disparities

- In Wake County, 15% of residents binge drink (*males having five or more drinks on one occasion OR females having four or more drinks on one occasion*), which is more than twice the national benchmark of 7% (County Health Rankings and Roadmaps, 2013).
- The number of methamphetamine labs discovered in Wake County in 2012: 6 (NC Department of Justice, State Bureau of Investigation).

There are currently three Alcohol and Drug Abuse Treatment Centers in North Carolina: Julian F. Keith in Black Mountain, R.J. Blackley in Butner, and Walter B. Jones in Greenville. The number of Wake County residents being served in state Alcohol and Drug Abuse Treatment Centers has increased, from 30 in 2005 to 140 in 2010.

Persons Served in NC State Alcohol and Drug Treatment Centers, 2005-2010

Location	2005	2006	2007	2008	2009	2010
Wake County	30	50	97	70	122	140
Mecklenburg County	155	195	210	239	180	196
State of NC	3,732	4,003	3,733	4,284	4,812	4,483

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 518).

Note: Sometimes referred to as "episodes of care", these counts reflect the total number of persons who were active (or resident population) at the start of the state fiscal year plus the total of first admissions, readmissions, and transfers-in which occurred during the fiscal year at the three state alcohol and drug treatment centers. Excluded are visiting patients and outpatients. Multiple admissions of the same client are counted multiple times. County of residence is reported at the time of admission. North Carolina data include clients reported to reside out-of-state.

Resources

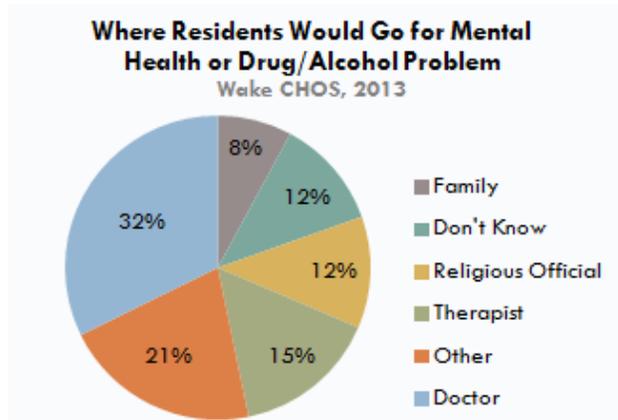
Community Care of Wake and Johnston Counties (CCWJC) provides a [resource list](#) of substance abuse resources in Wake County, including service types, payor source, and specialties.

[WakeBrook Recovery Center](#) is operated by UNC Hospital and is a dual-diagnosis substance abuse treatment hospital for men, women and families. High-priority populations include pregnant, IV, and HIV-positive drug users.



Community Perceptions

According to the 2013 Community Health Opinion Survey, residents identified drug and alcohol abuse as the #4 community concern. When asked where to go for a mental health or drug/alcohol abuse problem, almost 1 in 3 residents said a doctor, followed by other (21%), therapist (15%), religious official or minister (12%), family (8%). Twelve percent of respondents said they are not sure where to seek help.



Source: 2013 Wake County Community Health Opinion Survey.

Wake County Mental Health, Substance Abuse, and Developmental Disability Crisis and Provider Contacts

Locating Service Providers Online:

www.AllianceBHC.org

Alliance Behavioral

Health care Access Line (24/7):

1-800 510-9132

Crisis Response

Mobile Crisis Assistance (24/7): 1-877-626-1772

Emergency:

If calling 911 in response to a mental health emergency, request a Crisis Intervention Team (CIT) Officer

CHAPTER 6: MODIFIABLE HEALTH RISKS



CHAPTER 6 | MODIFIABLE HEALTH RISKS

The leading causes of death in Wake County (cancer, heart disease, and stroke) are chronic diseases. Chronic diseases are among the most common, costly, and preventable of all health problems in the U.S. People who suffer from chronic diseases such as heart disease, stroke, diabetes, cancer, obesity, and arthritis experience limitations in function, health, activity, and work, affecting the quality of their lives as well as the lives of their families. Underlying these diseases and conditions are modifiable health behaviors such as:

- Poor nutrition
- Lack of physical activity
- Tobacco use
- Excessive alcohol consumption

Increasing access to healthy and affordable food, recreation, tobacco cessation services, and substance abuse treatment can help Wake County residents reduce their risk for illness and death due to chronic diseases.

Sources:

- Centers for Disease Control and Prevention. (2009). *The Power of Prevention: Chronic disease...the public health challenge of the 21st century.*
- Centers for Disease Control and Prevention. (2008). *North Carolina: Burden of chronic diseases.*

Quick Facts

Positive Trends:

- Since 2008, there has been an overall decrease in overweight and obese adults in Wake County.
- The percent of current smokers in Wake County has dropped 26% drop from 2001.
- The Wake County homicide mortality rate per 100,000 population (3.1) is half of the state rate (6.3).

Areas for Improvement:

- 3 out of 4 residents do not eat enough fruits and vegetables.
- 10% of residents do not participate in any exercise.
- Wake County residents with a household income of \$50k or more are 1.6 times more likely to have visited a dentist, dental hygienist, or a dental clinic than those earning less than \$50k.

Nutrition

Good nutrition is essential to good health and a healthy weight. Fruits and vegetables have been shown to guard against many chronic diseases, including cardiovascular disease, type 2 diabetes, and some cancers (U.S. Dept of Health and Human Services, Dietary Guidelines for Americans, 2005).

Statistics, Targets, and Disparities

Almost 3 out of 4 residents (74.1%) in Wake County do not eat enough fruits and vegetables (NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2009). The *Healthy NC 2020* target is to decrease that number to 70.7% by 2020.

- The percent of residents who eat five fruits and vegetables a day is 24% higher among whites in Wake County than non-whites.
- Residents in Wake County with a household income of \$50k or more are 1.8 times more likely to eat 5 fruits and vegetables than those earning less than \$50k.

Source: NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2009.

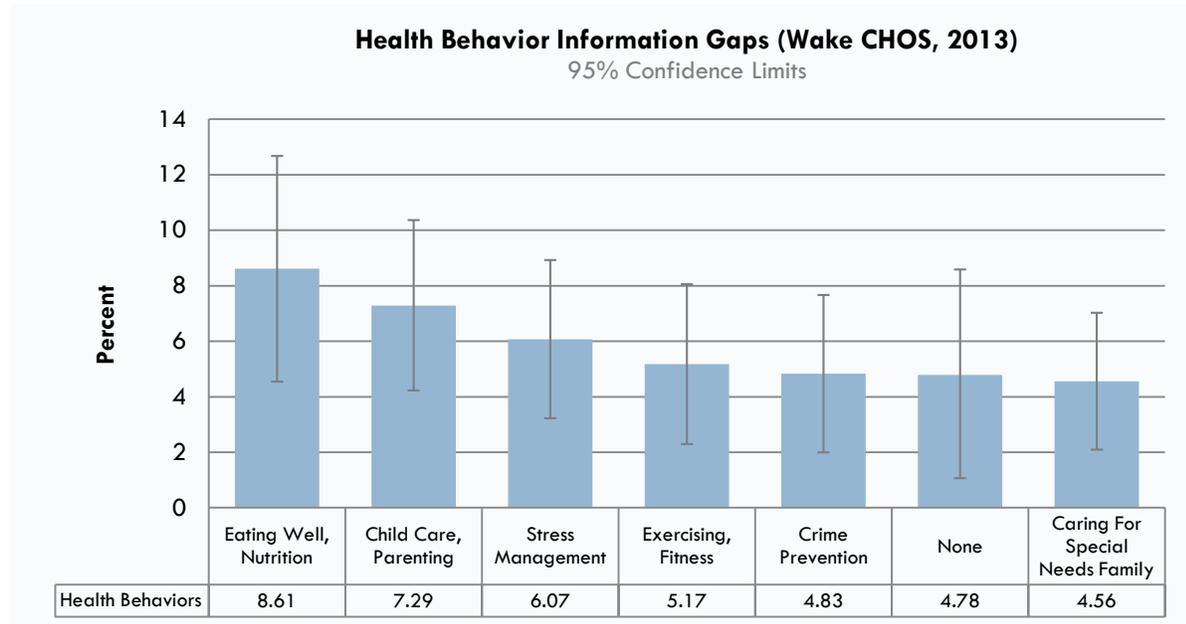
Access to Healthy Food

- Percent of all restaurants in Wake County that are fast-food: 51%.
- Source: County Health Rankings and Roadmaps, 2013. University of Wisconsin Population Health Institute).
- 6% of low-income residents in Wake County do not live close to a grocery store.

Source: 2012, USDA Food Environment Atlas.

Community Perceptions

In the 2013 Community Health Opinion Survey (CHOS), 8.4% of residents did not think that they could “easily access healthy, affordable food.” In addition, residents identified eating well/nutrition as the top issue they wanted more information about.



Source: 2013 Wake County Community Health Opinion Survey.

Within all focus groups, access to healthy, affordable food in school and community settings was identified as a key element of a healthy community. Many residents voiced concern over access to healthy foods, particularly in communities where grocery stores and transportation options are limited.

“That’s why in the Southeast Raleigh area, the low populated areas and low economic rates, they’re suffering from chronic illnesses. Why? Because it’s -- they’re obese because of the food options that we have. Just recently, they shut down two of the Kroger’s that are in the Southeast Raleigh area. A lot of the people that lived over there, that was their only source to get some type of healthy food. The closest market is -- it’s not even close, actually. It’s at least 20, 30 minutes away.”

- Community member

Physical Activity

Physical activity is a key factor in affecting overall health as well as body weight. Regular physical activity reduces the risk of heart disease, stroke, hypertension, and type 2 diabetes (CDC, Overweight and Obesity: Childhood overweight and obesity, 2009).

Statistics, Targets, and Disparities

In Wake County, 82.9% of adults reported that they participated in physical activities in the past month (NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2010).

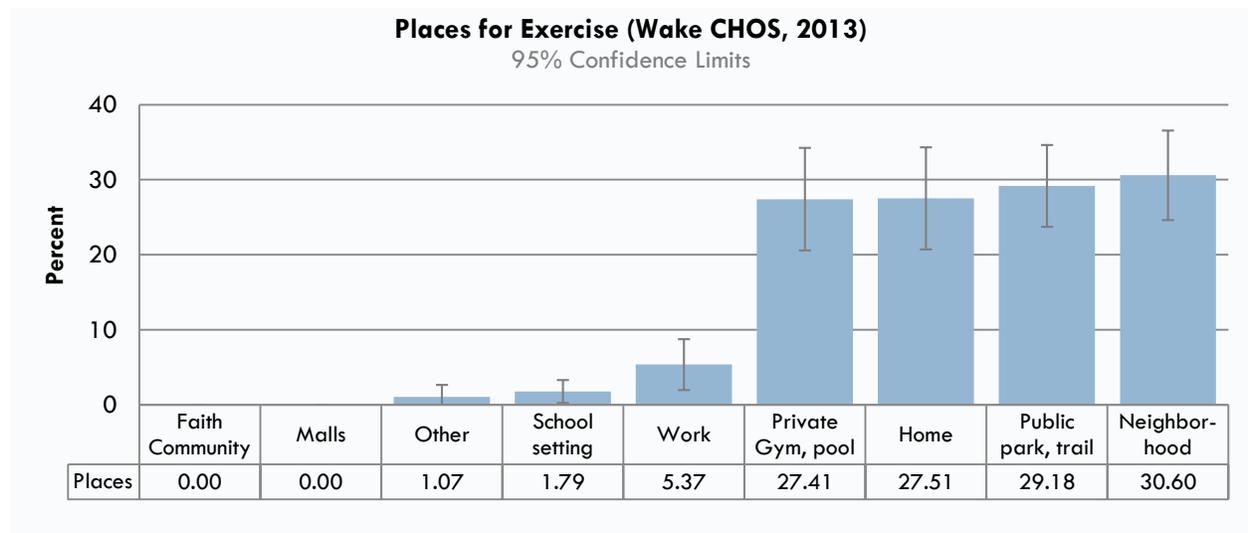
- Males in Wake County are more likely than females to participate in physical activities (88.1% versus 77.9%).
- Income and education are also related to physical activity: residents in Wake County with some college and household income over \$50k are more likely to exercise.

Source: NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2010.

The *Healthy NC 2020* target is to increase the percentage of adults getting the recommended amount of physical activity (at least 30 minutes of moderate activity 5 or more days a week or vigorous activity for at least 20 minutes 3 or more days a week) to 60.6%.

Community Perceptions

According to the 2013 Community Health Opinion Survey, the majority of residents exercise in their neighborhood (30.6%), followed by residents who exercise at public parks or trails, home, or private gyms. Only 5% of residents reported that they exercise at work or at a school setting.



Source: 2013 Wake County Community Health Opinion Survey.

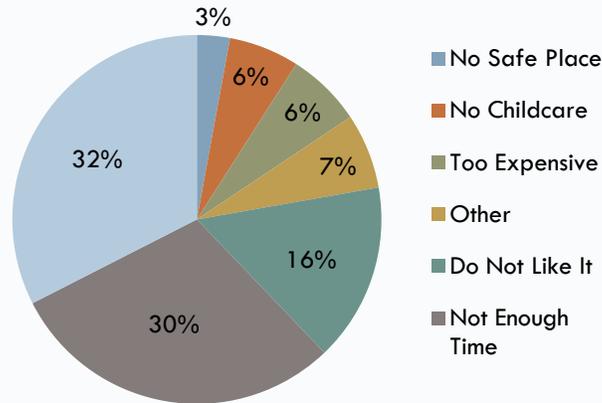
Additionally, 10% of Wake County residents reported that they do not engage in any physical activity. Of the 10% who said they do not exercise, the reasons why they do not exercise included the following: physically unable, not enough time, do not like it, too expensive, no childcare, no safe place, and other.

Current Initiatives

In 2011, the Wake County "Farm to Family" Food Finder was developed. This service markets the availability and access points of local foods in Wake County through an online, interactive Google map that was created through the collaborative efforts of Wake County Cooperative Extension and the community health-focused collaborative, Advocates for Health in Action (AHA).

The City of Raleigh Parks and Recreation staff maintained 78 miles of paved and unpaved trails. On September 24, 2012 an additional trail, "The House Creek Greenway Trail," was dedicated connecting completed bicycle/pedestrian routes in the county.

Reasons Residents Do Not Exercise
Wake CHOS, 2013



Source: 2013 Wake County Community Health Opinion Survey.
Note: Includes responses from only the respondents who said they do not exercise.

From the focus groups, some focus group participants felt that Wake County’s recreation resources were an asset to the community.

“I didn’t realize how many -- and even in my own neighborhood that I’ve lived in for seven years, I never really noticed that there was this much stuff to do, like outside activities. There’s like biking and then you can have camp areas. And I had no clue of that, which I think it’s amazing.”

- Community member

However, other focus groups identified needs for safer, more affordable, and more accessible recreation facilities in Wake County.

“I would like [to see improvements in] other services for children and youth, maybe recreational centers. I have to go to Apex because there is not that much here, and if there is, it’s expensive.”

- Community member

Overweight and Obesity

Overweight and obesity pose significant health concerns for both children and adults. Excess weight increases an individual's risk of developing type 2 diabetes, high blood pressure, heart disease, certain cancers, and stroke (NC Institute of Medicine. *Healthy North Carolina 2020: A Better State of Health*. Morrisville, NC: NC Institute of Medicine; 2011).

Measuring Obesity

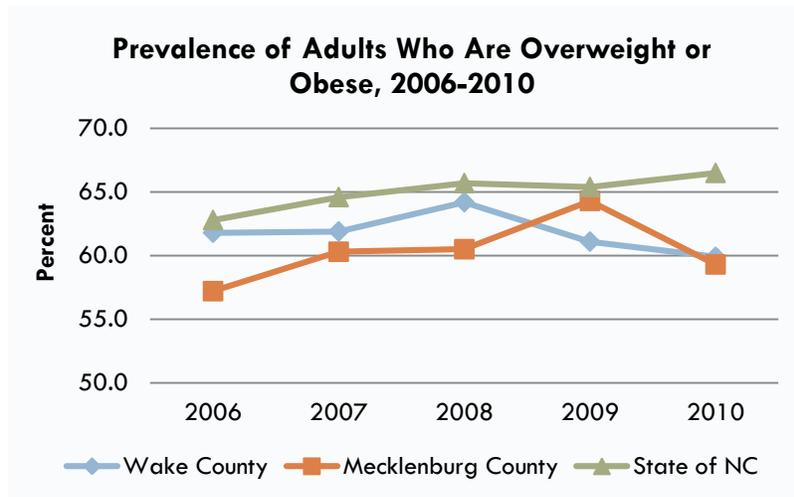
BMI = Body Mass Index

Relationship between height and weight that is associated with body fat

- Overweight = BMI of 25 to 29
- Obese = BMI of 30 or more

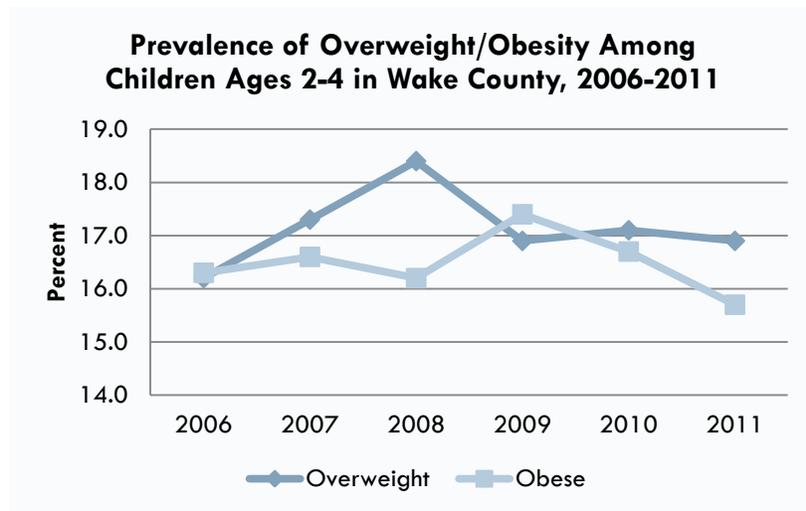
Statistics, Targets, and Disparities

In Wake County, almost 2 out of 3 adults (59.9%) is either overweight or obese (NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2009). Even though the percent of adults who are overweight or obese continues to steadily increase across the state, there has been an overall decrease in overweight or obese adults in Wake County since 2008. The *Healthy NC 2020* target is to reduce the percent of overweight or obese adults to 61.9%.



Source: NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System.

After increasing from 16.2% in 2006 to 18.4% in 2008, the percentage of children aged 2-4 in Wake County who are overweight has since decreased to 16.9%.



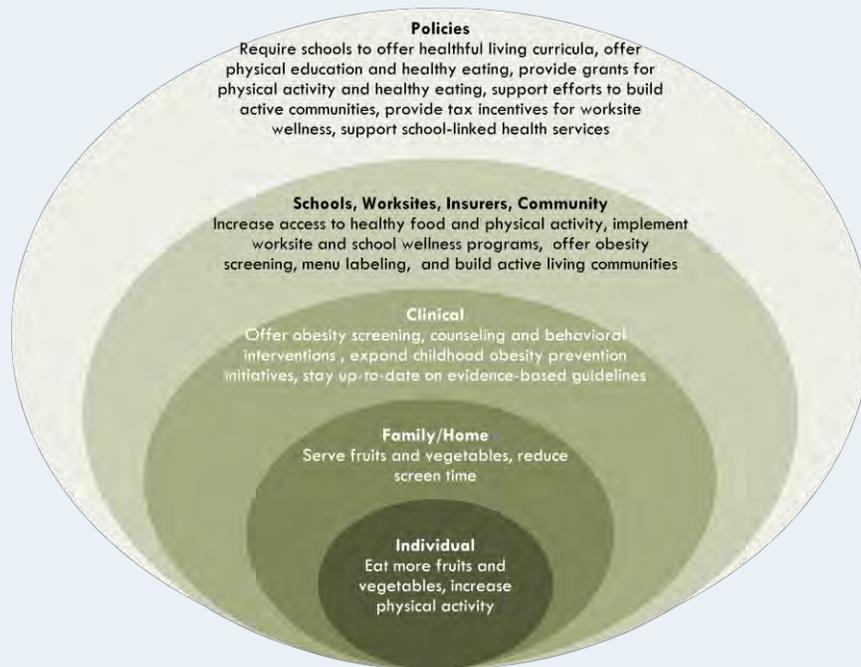
Source: Eat Smart, Move More, Data on Children and Youth in NC, North Carolina Nutrition and Physical Activity Surveillance System (NC-NPASS), NC-NPASS Data (2006-2011).

Community Perceptions

According to the 2013 Community Health Opinion Survey, only 23% of adults said they have ever been told by a health care provider that they had issues with overweight or obesity.

In the focus groups among service providers, one need identified was early childhood education (in both nutrition and physical activity) to help prevent obesity.

Strategies to Prevent and Reduce Obesity by Promoting Healthy Eating and Physical Activity



Source: NC Institute of Medicine. Healthy North Carolina 2020: A Better State of Health. Morrisville, NC: NC Institute of Medicine; 2011.

Resources

QuitlineNC provides free cessation services to any North Carolina resident who needs help quitting tobacco use. Quit Coaching is available in different forms, which can be used separately or together, to help any tobacco user give up tobacco.



Telephone Service is available 24/7 toll-free at:

1-800-QUIT-NOW (1-800-784-8669).

Quit coaching is available by phone in English and Spanish, with translation service available for other languages.

WebCoach is available 24 hours a day online. You can use it in addition to your telephone coaching, or you can choose to quit entirely online.

Visit:

www.quitlinenc.com

Tobacco

Tobacco use is the leading cause of preventable death in North Carolina. Approximately 30% of all cancer deaths and almost 90% of lung cancer deaths are caused by smoking (NC Institute of Medicine. Healthy North Carolina 2020: A Better State of Health. Morrisville, NC: NC Institute of Medicine; 2011).

Statistics, Targets, and Disparities

In Wake County, 16.2% of adults are current smokers, a 26% drop from 2001(NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2010).

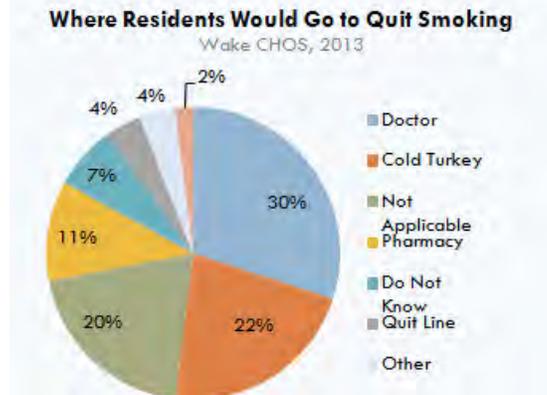
- In Wake County, the percent non-white residents who are current smokers is 1.7 higher than whites.
- Residents with a high school education or less are 2.6 times as likely to smoke as college graduates in Wake County.

Source: NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2010.

The *Healthy NC 2020* target is to decrease the percentage of adults who are current smokers to 13%. Additionally, in 2010, 4.4% of Wake County residents reported that they were exposed to secondhand smoke in the workplace in the past seven days (NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2010). The *Healthy NC 2020* goal is to decrease the percentage of people exposed to secondhand smoke in the workplace to 0%.

Community Perceptions

Residents who identified as smokers were asked in the 2013 Community Health Opinion Survey where they would go for help in order to quit. Of those respondents, the majority (30%) reported that they would seek help from their doctor, followed by quitting “cold turkey” (abruptly giving up the habit) (22%), and pharmacy (11%). Twenty percent of those respondents were not interested in quitting and 7% did not know where to go for help quitting.



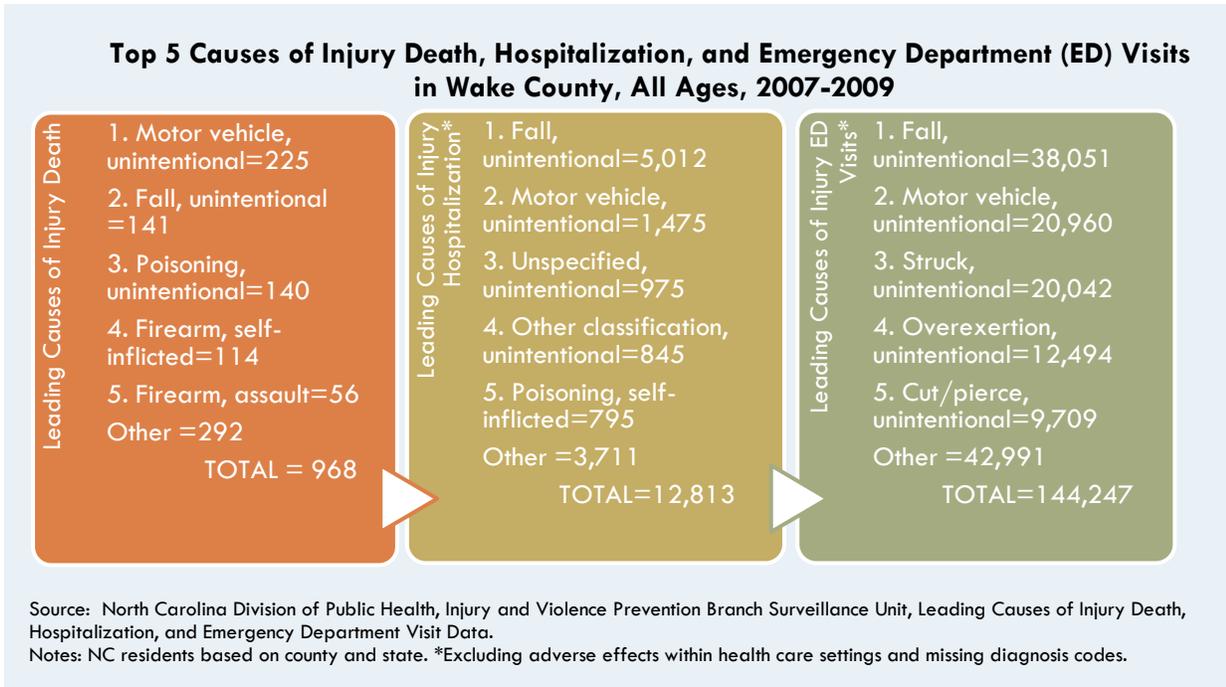
Source: 2013 Wake County Community Health Opinion Survey. Note: Includes responses from only the respondents who said they smoke (16%).

Injury and Violence

Injury is a leading cause of death and disability in North Carolina. In 2010, among the 4,405,739 civilian visits to the Emergency Department in North Carolina, 24.8% of those visits received an injury diagnosis (UNC Department of Emergency Medicine Carolina Center for Health Informatics Report, Overview and Analysis of NC DETECT Emergency Department Visit Data for Injuries, 2010).

Statistics, Targets, and Disparities

From 2007-2009, there were 968 deaths from injuries in Wake County, with the leading causes from motor vehicle injuries, falls, poisoning, and firearms.



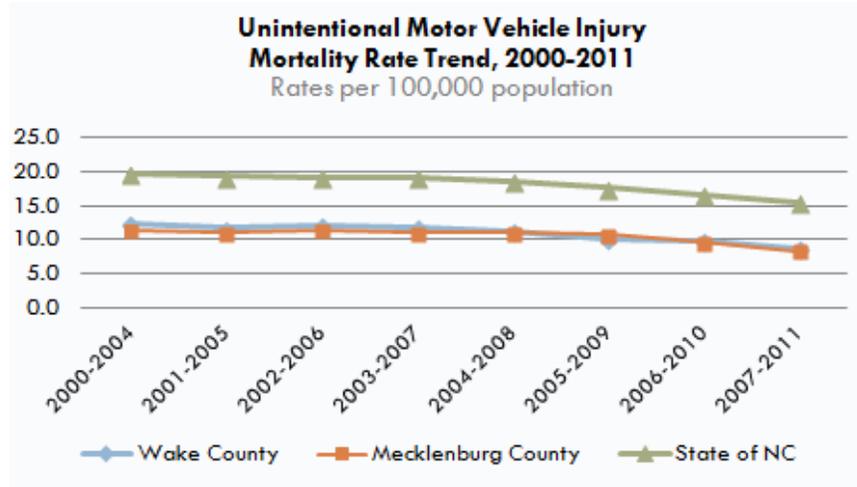
MOTOR VEHICLE INJURIES

In 2011, there were 22,454 reportable traffic crashes in Wake County, where 26.7% resulted in non-fatal injuries and 60 reportable crashes (2.7%) resulted in fatalities (UNC Chapel Hill, Highway Safety Research Center, 2011). Additionally, 843 (3.8%) of those crashes in 2011 were alcohol-related.

Motor vehicle injuries and other intentional injuries are the leading causes of death for Wake County residents aged 20 to 39 years.

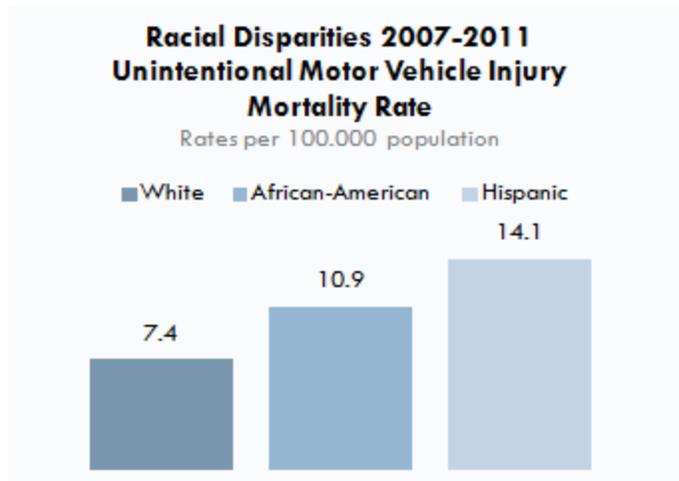
From 2007-2011, of the 379 deaths due to motor vehicle injuries in Wake County, 42% (160) were aged 20-39. Thirty-two percent of the deaths were among 40-64 year olds.

The unintentional motor vehicle death rate has decreased 29.3% in Wake County from 12.3 per 100,000 population in 2000-2004 to 8.7 in 2007-2011.



Source: NC State Center for Health Statistics, County Health Data Books (2006-2013).

For Hispanic residents in Wake County, the unintentional motor vehicle death rate (14.2 per 100,000 population) was higher than the rate among white non-Hispanic residents (7.4) and African-American non-Hispanic residents in 2007-2011.



Source: NC State Center for Health Statistics, County-level Data, County Health Data Book (2013), Mortality, 2007-2011 NC Resident Race/Ethnicity and Sex-Specific Age-Adjusted Death Rates, by County.

UNINTENTIONAL FALLS

In Wake County, unintentional falls are the second leading cause of injury-related deaths. More than 75% of falls in North Carolina occur in adults aged more than 65 years and fall-related deaths are expected to increase as the population increases and ages (NC Institute of Medicine. Healthy North Carolina 2020: A Better State of Health. Morrisville, NC: NC Institute of Medicine; 2011).

From 2007-2011, the unintentional falls death rate in Wake County was 7.7 per 100,000 population (Death Certificate Database, State Center for Health Statistics NCHS Bridged Population Estimates).

The *Healthy NC 2020* target is to reduce the unintentional falls mortality rate to 5.3 per 100,000 population.

UNINTENTIONAL POISONING

The majority of unintentional poisoning deaths are the results of misuse of prescription narcotics. From 2000-2007, North Carolina experienced a dramatic increase (139%) in unintentional poisoning deaths (NC Institute of Medicine. Healthy North Carolina 2020: A Better State of Health. Morrisville, NC: NC Institute of Medicine; 2011).

From 2007-2011, the unintentional poisoning death rate for Wake County was 5.2 per 100,000 population (Death Certificate Database, State Center for Health Statistics NCHS Bridged Population Estimates).

The *Healthy NC 2020* target is to reduce the unintentional poisoning mortality rate to 9.9 per 100,000 population.

VIOLENT DEATHS

- In 2010, there were 103 deaths (11.4 per 100,000 population) as a result of violence in Wake County.
- In 2010, one Wake County resident died from an unintentional firearm injury.

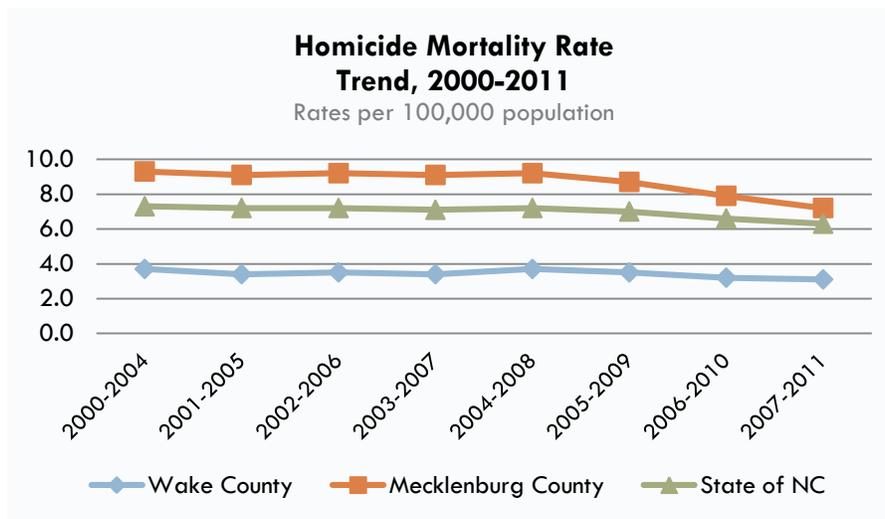
Source: NC Violent Death Reporting System Annual Report, 2010, NC DPH Injury and Violence Prevention Branch.

HOMICIDE

Homicide is a completely preventable cause of death. Arguments (abuse or conflict), intimate partner violence, drug involvement, and serious crimes are the most common event circumstances for homicides (NC Institute of Medicine. *Healthy North Carolina 2020: A Better State of Health*. Morrisville, NC: NC Institute of Medicine; 2011).

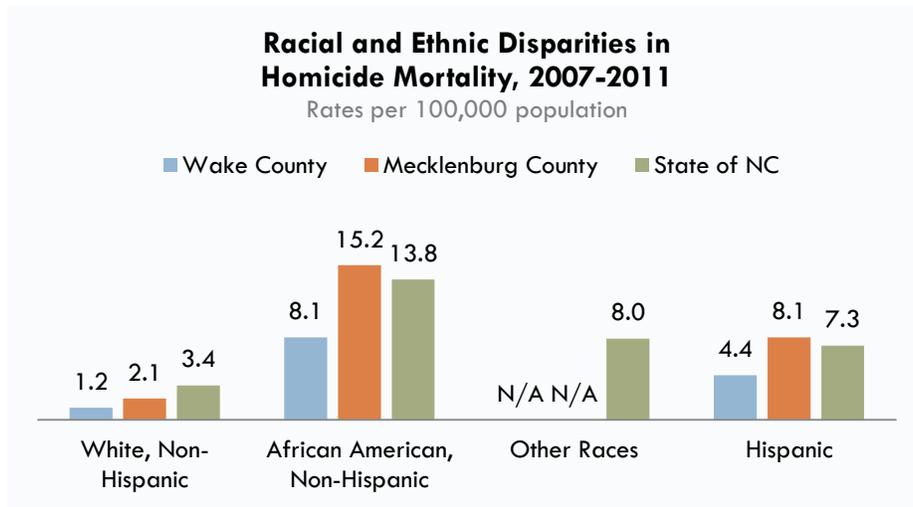
The Wake County homicide mortality rate has been consistently lower than the state rate, where the Wake County rate is half of the state rate. The homicide mortality rate in Wake County has decreased, from 3.7 per 100,000 population to 3.1 in 2007-2011.

The *Healthy NC 2020* target is to reduce the homicide mortality rate to 6.7 per 100,000 population.



Source: NC State Center for Health Statistics, County Health Data Books (2006-2013).

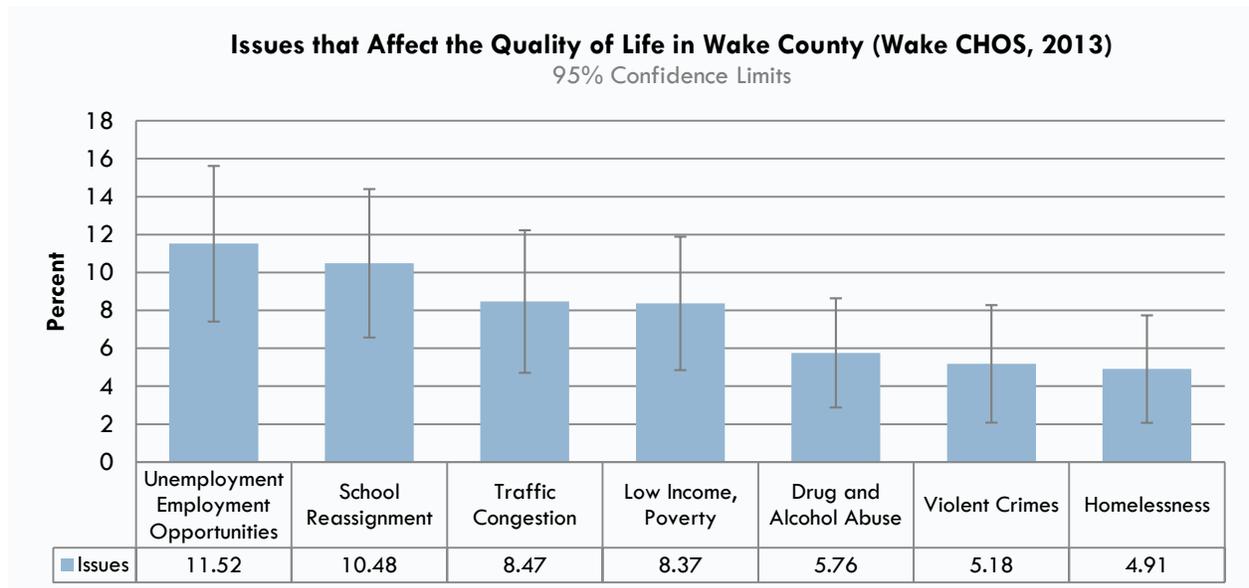
Although no stable rate could be calculated for Other Races in Wake County, the homicide death rate among Wake County African-American non-Hispanics (8.1 per 100,000 population) was double the rate among Hispanic residents (4.4) and nearly seven times higher than the rate among white non-Hispanics (1.2).



Source: NC State Center for Health Statistics, County Health Data Books (2006-2013).

Community perceptions

In the majority of focus groups, safety was identified as a key element of a healthy community. According to the 2013 Community Health Opinion Survey, residents identified violent crimes as the #6 community concern.



Source: 2013 Wake County Community Health Opinion Survey.

Additionally, residents identified crime prevention as the #5 issue they wanted more information about.

Oral Health

Studies have shown direct links between oral infections and other conditions, such as diabetes, heart disease, stroke, and poor pregnancy outcomes (NC Institute of Medicine. Healthy North Carolina 2020: A Better State of Health. Morrisville, NC: NC Institute of Medicine; 2011).

Although there is some data available on oral health and dental services in Wake County, this Community Health Needs Assessment does not provide an in-depth review of oral health for the county, a limitation that can be addressed in future assessments.

Statistics, Targets, and Disparities

Three out of 4 residents (75%) in Wake County reported visiting a dentist, dental hygienist, or dental clinic within the past year.

- The percent of residents who have visited a dentist, dental hygienist, or a dental clinic in the past year is 43% higher among whites in Wake County than non-whites.
- Residents in Wake County with a household income of \$50k or more are 1.6 times more likely to have visited a dentist, dental hygienist, or a dental clinic in the past year than those earning less than \$50k.

Source: NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2010.

According to hospital data for Wake County residents, an increasing number of discharges have been made from Wake County Emergency Departments with dental/oral health-related diagnoses, where more than 4,800 patients have been seen for dental/oral health issues in the 2012 fiscal year (Truven Health Analytics, prepared by WakeMed Health and Hospitals, 2013).

Among the youngest Medicaid recipients, a higher percentage of 1-5 year olds in Wake County received dental services in 2010 (56.5%), compared to Mecklenburg County (48%) or North Carolina (31.6%).

Medicaid Recipients Utilizing Dental Services in the Past 12 Months, Ages 1-5, 2010

Location	Number Eligible for Services*	Number Receiving Services**	Percent Eligibles Receiving Services
Wake County	24,148	13,637	56.5
Mecklenburg County	34,638	16,624	48.0
State of NC	679,139	214,786	31.6

Source: NC State Center for Health Statistics, HealthStats. Children Enrolled in Medicaid Who Received Any Dental Service During the Previous 12 Months 2010.

Notes: *NC SCHS HealthStats calculated the denominator (# Eligible for Services) as: all North Carolina resident children aged 1-5 years who were eligible three or more continuous months during the same federal fiscal year. ** NC SCHS HealthStats calculated the numerator (# Receiving Services) as: children aged 1 to 5 years that received any dental services during the federal fiscal year (Oct 1st - Sept 30th).

Wake County Human Services provides dental services for children ages 0-18 years and pregnant women including exams, cleanings, fluoride applications, sealants, restorations, extractions, space maintenance, and education. In the 2012 fiscal year, Wake County Human Services performed over 1,200 adult dental procedures for 535 patients, and more than 32,000 child health dental procedures for nearly 4,000 patients.

Wake County Human Services Dental Services Utilization, Fiscal Year 2010-2012

	FY2010	FY2011	FY2012
Adult Dental			
Unduplicated patient count	529	598	535
Number of Visits	702	809	674
Number of procedures	1,289	1,540	1,227
Dental Orthodontics			
Unduplicated patient count	182	143	141
Number of Visits	627	560	516
Number of procedures	1,162	1,075	944
Dental Child Health			
Unduplicated patient count	4,350	3,830	3,966
Number of Visits	7,935	6,844	7,437
Number of procedures	32,754	28,043	32,782
Dental Hygiene			
Unduplicated patient count	1,398	1,248	1,415
Number of Visits	916	794	866
Number of procedures	5,185	4,328	5,557

Source: Wake County Human Service Patient Management System.

In 2012, the John Rex Endowment made a gift of \$160,000 to Wake County to increase access to dental care for children, make the County's dental clinic more efficient, and upgrade to digital X-rays.

Community perceptions

In two of focus groups, some needs were identified in the area of oral health. The persons living with physical disabilities focus group identified the general need of dental coverage and access to low-cost dental care. Additionally, the senior focus group identified the needs of a list of dentists in Wake County who accept Medicare patients and how to access dental resources available through the State University system.

Resources

- The [North Carolina Medicaid and NC Health Choice Dental List](#) provides a referral list by county of dentists who are enrolled in the NC Medicaid Program and are willing to provide care to Medicaid recipients.



- The [North Carolina Safety Net Dental Clinics](#) are non-profit dental facilities where low income families or individuals can go for dental care. Most clinics accept insurance, N.C. Medicaid and N.C. Health Choice for Children. Many of these clinics also provide services on a sliding-fee scale to low-income patients who have no dental insurance.

CHAPTER 7: ACCESS TO HEALTH SERVICES



CHAPTER 7 | ACCESS TO HEALTH SERVICES

There are an estimated 1.7 million uninsured individuals less than age 65 living in North Carolina. There are disparities in access to care based on race/ethnicity, employment, gender, and income level.

The Patient Protection and Affordable Care Act (PPACA), passed by Congress in April 2010, requires that by 2014 most people have health insurance. The new laws can expand Medicaid coverage to all people under the age of 65, including childless adults, with incomes up to 133% of the Federal Poverty Level. Each state is tasked with implementation of the PPACA, which includes educating uninsured individuals about insurance options available to them and helping them enroll.

In North Carolina, a decision to participate in Medicaid expansion would provide insurance coverage to approximately 500,000 residents, according to the North Carolina Institute of Medicine. In 2013, the North Carolina legislature approved a bill prohibiting the Medicaid expansion.

In Wake County, the amount of health care providers and facilities is considered a community asset and draws new residents to the county. Community perceptions of health care access includes difficulty finding primary care providers and providers who accept Medicare and Medicaid patients, as well as difficulty for low/no-income residents accessing services, particularly prenatal care.

Increasing access to comprehensive, quality health care services is important for improving the overall quality of care and helping reduce costs, but it's also important for the achievement of health equity and increasing the quality of a healthy life for everyone.

Sources:

- NC Institute of Medicine. *Healthy North Carolina 2020: A Better State of Health*. Morrisville, NC: NC Institute of Medicine; 2011.
- U.S. Department of Health and Human Services. *Healthy People 2020*.
- *County Health Rankings and Roadmaps, 2013. Access to Care*. University of Wisconsin Population Health Institute.
- Wake County Human Services, *State of the County Health Report, 2012*.
- North Carolina Institute of Medicine. *Examining the impact of the Patient Protection and Affordable Care Act in North Carolina Medicaid expansion option issue brief, 2013*.

Quick Facts

Positive Trends:

- Wake County residents feel that the local health care system is a key community asset.
- The majority of residents (81.5%) felt that they could access good health care in Wake County.
- Raleigh-Wake Emergency Communications Center received over half a million 911 call in 2011. 86% of those calls were answered within 10 seconds.

Areas for Improvement:

- Wake County Emergency Departments have seen an increase in the number of patients seen for mental and behavioral health disorders.
- Wake County residents with household incomes of less than \$50,000 are 9.2 times more likely to be uninsured than residents with higher household incomes.
- Residents were concerned about the difficulty for low/no-income residents accessing health care services.

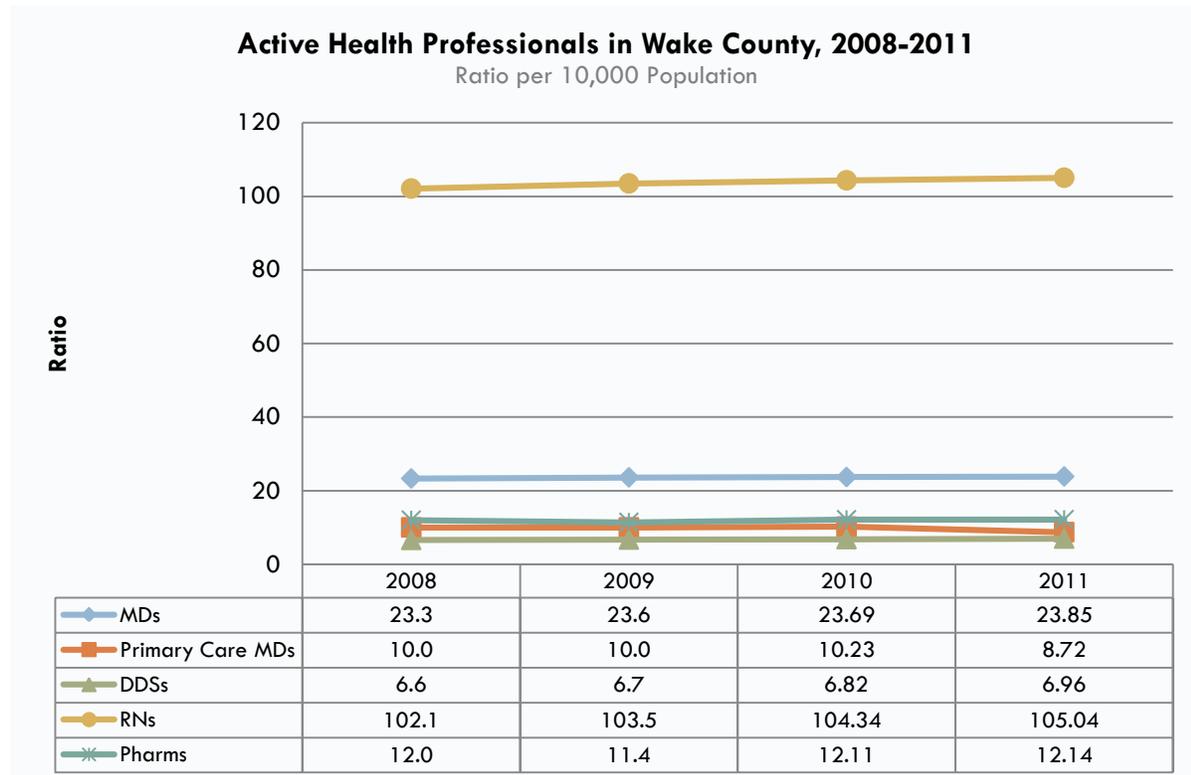
Health Professionals, Hospitals, and Health Care Facilities

Access to care requires not only financial coverage, but also access to providers and facilities. The sufficient availability of primary care physicians, and when needed, referrals to specialty care, is essential for preventive and primary care. One research study found that each increase of one primary care physician per 10,000 population is associated with a reduction in the average mortality by 5.3%. (County Health Rankings and Roadmaps, 2013. University of Wisconsin Population Health Institute).

Statistics, Targets, and Disparities

HEALTH PROFESSIONALS

For all four years presented, the ratios of each type of provider to the population have remained relatively unchanged in Wake County, indicating that the addition of health care providers to the community has kept pace with Wake County’s growing population.



Source: Cecil G. Sheps Center for Health Services Research, North Carolina Health Professions Data System, North Carolina Health Professions Data Books.

Notes: In 2011, there were changes in the data collection process for primary care physicians. Primary care physicians are those who report their primary specialty as family practice, general practice, internal medicine, pediatrics, or obstetrics/gynecology. Abbreviations used: MDs (Physicians), RNs (Registered Nurses), DDSs (Dentists), Pharms (Pharmacists).

In 2011, there were 23.9 actively practicing physicians for every 10,000 Wake County residents, a ratio higher than North Carolina, but lower than Mecklenburg County. Wake County also has the highest ratio of registered nurses to the population, with a ratio of 102.1 active nurses to 10,000 population, compared to 111.5 in Mecklenburg County and 95.1 statewide. When compared to

2010 data, the number of Wake County primary care physicians in 2011 dropped by 14%; however, this change reflects changes in the data collection process. The decrease in the number of primary care physicians should not be interpreted as primary care practitioners leaving active practice in Wake County.

Active Health Professionals per 10,000 Population, 2011

Location	MDs	Primary Care MDs	DDS	RNs	Pharms
Wake County	23.85	8.72	6.96	105.04	12.14
Mecklenburg County	27.71	9.46	6.3	116.12	10.67
State of NC	22.07	7.78	4.35	98.60	9.51

Source: Cecil G. Sheps Center for Health Services Research, North Carolina Health Professions Data System, North Carolina Health Professions Data Books. Note: Abbreviations used: MDs (Physicians), RNs (Registered Nurses), DDSs (Dentists), Pharms (Pharmacists). Primary Care Physicians are those who report their primary specialty as family practice, general practice, internal medicine, pediatrics, or obstetrics/gynecology.

LICENSED HOSPITALS, HOSPICES, AND HOME HEALTH FACILITIES

A key community asset for Wake County is that there are 4 hospitals located within the county, offering the following services to residents:

- Level one trauma center
- Heart centers
- Critical care
- Children's emergency department (ED)
- Woman's pavilion and birth centers
- Cancer centers
- Medical helicopter services

Source: Wake County Department of Emergency Medical Services, 2012.

The table below identifies the key characteristics of each hospital in Wake County, including the number of hospital beds, nursing home beds, operating rooms, and trauma designation.

Characteristics of Licensed Hospitals in Wake County, 2013

Name	Hospital Beds	Nursing Home Beds	Operating Room(s)	Trauma Designation
Duke Raleigh Hospital	General: 186	0	<ul style="list-style-type: none"> Shared Inpatient/Ambulatory Surgery: 15 Endoscopy: 3 	-
Rex Hospital	General: 433	120	<ul style="list-style-type: none"> C-Section: 3 Ambulatory Surgery: 3 Shared Inpatient/Ambulatory Surgery: 24 	-
WakeMed	General: 575 Rehab: 84	19	<ul style="list-style-type: none"> Open Heart Surgery: 4 C-Section: 3 Ambulatory Surgery: 4 Shared Inpatient/Ambulatory Surgery: 18 Endoscopy: 6 	Level I
WakeMed Cary Hospital	General: 156	36	<ul style="list-style-type: none"> C-Section: 2 Shared Inpatient/Ambulatory Surgery: 9 Endoscopy: 4 	-

Source: NC Department of Health and Human Services, Division of Health Service Regulation. Report as of May 2013.
 Note As of June 2013, there are 2 approved hospitals (WakeMed Women's Hospital and Holly Springs Hospital) that are not yet open in Wake County.

In 2010, there were 1,350 general hospital beds (designated for short-stay use) in Wake County. The rate of general hospital beds in Wake County per 10,000 population in 2010 (15.0) is 30% lower than the rate in Mecklenburg County (21.7) and the state (21.7).

General Hospital Beds per 10,000 population, 2004-2010

Location	2005	2006	2007	2008	2009	2010
Wake County	16.0	15.2	14.5	14.8	15.0	15.0
Mecklenburg County	24.7	23.7	22.8	22.2	21.9	21.7
State of NC	23.5	22.9	22.4	22.1	22.0	21.7

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health.
 Note: Defined as "general acute care beds" in hospitals; that is, beds which are designated for short-stay use. Excluded are beds in service for dedicated clinical research, substance abuse, psychiatry, rehabilitation, hospice, and long-term care. Also excluded are beds in all federal hospitals and state hospitals. Rates per 10,000 population were calculated using population estimates from the NC State Center for Health Statistics, NCHS Bridged Population Data.

The number of nursing facility beds in Wake County has remained relatively unchanged at around 2,300 since 2006. In 2010, the rate of nursing facility beds per 10,000 population in Wake County (26.1) is 23% lower than the rate in Mecklenburg County (33.7) and 45% lower than the state rate (47.3).

Nursing Facility Beds per 10,000 population, 2005-2010

Location	2005	2006	2007	2008	2009	2010
Wake County	29.0	29.5	28.1	26.9	26.5	26.1
Mecklenburg County	38.6	37.0	35.3	34.2	33.7	33.7
State of NC	50.7	49.9	48.8	47.8	47.2	47.3

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health.

Notes: Includes beds licensed as nursing facility beds, meaning those offering a level of care less than that offered in an acute care hospital, but providing licensed nursing coverage 24 hours a day, seven days a week. Rates per 10,000 population were calculated using population estimates from the NC State Center for Health Statistics, NCHS Bridged Population Data. As of June 2013, there are 200 approved nursing facility beds in Wake County that are not yet developed.

There are seven hospice/home health and hospice facilities in Wake County, with all but one currently accredited. During the 2011 fiscal year, 1,955 patients were admitted into Hospice in Wake County.

Licensed Hospice Facilities in Wake County, April 2013

Facility Name	Location	Accreditation Status
Amedisys Hospice	Garner	Accredited
Community Home Care & Hospice	Raleigh	Accredited
Continuum Home Care & Hospice of Wake County	Raleigh	
Duke Hospice	Raleigh	Accredited
Heartland Home Health Care & Hospice	Raleigh	Accredited
Hospice of Wake County, Inc.	Raleigh	Accredited
Liberty Home Care and Hospice	Raleigh	Accredited

Source: Source: NC Department of Health and Human Services, Division of Health Service Regulation. Report as of April 2013.

There are 13 home health-only facilities in Wake County, and 7 are currently accredited. During the 2011 fiscal year, 14,163 patients were admitted into home health in Wake County.

Licensed Home Health Only Facilities in Wake County, April 2013

Facility Name	Location	Accreditation Status
Bayada Home Health Care, Inc.	Raleigh	Accredited
Gentiva Health Services	Raleigh	
Heartland Home Health Care	Raleigh	Accredited
Horizons Home Care	Raleigh	
Intrepid USA Health care Services	Raleigh	
Liberty Home Care	Raleigh	Accredited
Medi Home Health Agency	Raleigh	
Pediatric Services of America	Raleigh	Accredited
Professional Nursing Service and Home Health	Garner	
Rex Home Services	Raleigh	Accredited
UniHealth Home Health	Raleigh	
WakeMed Home Health	Raleigh	Accredited
Well Care Home Health, Inc.	Raleigh	Accredited

Source: Source: NC Department of Health and Human Services, Division of Health Service Regulation. Report as of April 2013.

HOSPITAL EMERGENCY DEPARTMENT AND HOSPITALIZATION USE

The total number of patients treated in Wake County emergency departments has increased each of the past three fiscal years. Since 2010, the number of patients seen in Wake County emergency departments has increased 7.3%. While the number of people from other counties being treated in Wake County's emergency departments has fluctuated, the number of Wake County residents being treated outside of Wake County over the same period has also grown.

Around 60,000 Wake County residents are hospitalized each year. The total number of Wake County residents seen as inpatients (in Wake County facilities or outside of Wake County) has decreased each year since 2010. Approximately 25,000 residents from other counties were treated as inpatients in Wake County facilities.

Of the 134,307 surgeries performed in Wake County facilities in the 2010 fiscal year, 82% were inpatient procedures and 18% were outpatient procedures.

**Summary of Hospital Emergency Department, Inpatient Discharges, and Surgery Data,
Wake County Residents and Facilities, 2010-2012 Fiscal Years**

	FY2010	FY2011	FY2012
EMERGENCY DEPARTMENTS			
Wake County Residents Treated in any NC Facility	234,644	244,970	264,919
Wake County Residents Treated in Wake County Facilities	212,685	219,868	229,478
Wake County Residents Treated Outside Wake County	21,979	25,102	35,441
Residents of Other Counties Treated in Wake County Facilities	38,381	37,697	39,982
Total Number of Patients Treated in Wake County Facilities	251,066	257,565	269,460
INPATIENT DISCHARGES			
Wake County Residents Discharged from Wake County Facilities	61,567	60,322	59,167
Residents of Other Counties Discharged from Wake County Facilities	25,143	25,266	25,179
Wake County Patients Leaving Wake County for Inpatient Care	11,450	12,274	12,557
Total Wake County Inpatients	73,017	72,596	71,724
SURGERIES			
Total Inpatient Surgery Cases	-	-	109,638
Total Outpatient Surgery Cases	-	-	24,669
Inpatient Surgery Cases among Wake County Residents	-	-	83,440
Outpatient Surgery Cases among Wake County Residents	-	-	16,571
Inpatient Surgery Cases among non-Wake Residents	-	-	26,198
Outpatient Surgery Cases among non-Wake Residents	-	-	8,098
Wake County Residents leaving the County for Inpatient surgery	-	-	14,689
Wake County Residents leaving the County for Outpatient surgery	-	-	4,925
Wake County Residents who were Inpatient Surgery Patients (both in-county+out of county)			98,129
Wake County Residents who were Outpatient Surgery Patients (both in-county+out of county)			21,496
Residents of Other Counties who had Surgery performed in Wake County (inpatient or outpatient)			34,296

Source: Truven Health Analytics, prepared by WakeMed Health and Hospitals, 2013.

Note: Data based on July 1 to June 30th fiscal year. All Emergency Department data excludes admits. Normal newborns excluded (mother is already included).

According to the 2010 U.S. Census, Wake County's population is 49% male and 51% female. However, during the 2012 fiscal year, 57% of emergency department patients who live in Wake County were female. Similarly, among Wake County residents being treated as inpatients during the 2012 fiscal year, approximately 62% were female. Fifty-eight percent of inpatient or outpatient surgical patients in Wake County during the 2012 fiscal year were female.

One in four Wake County residents receiving care in any NC emergency department is children under the age of 18. One in three Wake County residents undergoing inpatient treatment in NC facilities is over the age of 65. Additionally, 41% of all Wake County surgical patients in NC facilities are adults aged 45-64.

Percent of Wake County Residents Receiving Emergency Department Care, Inpatient Treatment, or Surgery by Age Group, 2012 Fiscal Year

Age Group	Emergency Department		Inpatient		Surgery	
	No.	%	No.	%	No.	%
Under the age of 18	64,997	24%	6,437	9%	9,242	7%
Aged 18-44	118,632	42%	24,341	34%	29,779	25%
Aged 45-64	54,504	18%	17,858	25%	49,280	41%
Aged 65 and over	26,786	10%	23,088	32%	31,324	26%

Source: Truven Health Analytics, prepared by WakeMed Health and Hospitals, 2013.
 Note: Data based on July 1 to June 30th fiscal year. All Emergency Department data excludes admits. Normal newborns excluded (mother is already included).

For Wake County residents treated in NC emergency departments in the 2012 fiscal year, the largest payor category (34%) was commercial insurance programs, Blue Cross and Blue Shield (BCBS), or managed care programs. For Wake County inpatients treated in any NC facility, those covered by commercial insurance programs, BCBS, or managed care programs represented the largest group (40%), followed by Medicare (35%). Among Wake County surgical patients, the majority (64%) are commercial insurance programs, BCBS, or managed care programs.

Percent of Wake County Residents Receiving Emergency Department Care, Inpatient Treatment, or Surgery by Payor Category, 2012 Fiscal Year

Payor Category	Emergency Department		Inpatient		Surgery	
	No.	%	No.	%	No.	%
Unassigned	816	0%	173	0%	152	0%
Commercial, BCBS, or Managed	90,119	34%	28,662	40%	76,977	64%
Medicaid	63,118	24%	11,479	16%	6,976	6%
Medicare	34,697	13%	25,168	35%	29,415	25%
Workers Comp	2,473	1%	182	0%	1,070	1%
Self-pay or charity	69,414	26%	3,795	5%	2,964	2%
Other	4,282	2%	2,265	3%	2,029	2%

Source: Truven Health Analytics, prepared by WakeMed Health and Hospitals, 2013.
 Note: Data based on July 1 to June 30th fiscal year. All Emergency Department data excludes admits. Normal newborns excluded (mother is already included).

In the 2012 fiscal year, the leading principal diagnosis for emergency department patients (both Wake County residents and others) treated in Wake County facilities is chest pain.

**Top 10 Principal Diagnoses for Emergency Department Patients
in Wake County Facilities in 2012 Fiscal Year**

ICD 9/10 Code	Description	FY2012
786.59	Other chest pain	10,391
784.0	Headache	6,837
780.60	Fever, unspecified	5,326
599.0	Urinary tract infection, site not specified	4,886
789.09	Abdominal pain, other specified site	4,863
724.2	Low back pain	4,473
465.9	Acute upper respiratory infections of unspecified site	4,263
959.01	Head injury, unspecified	4,208
847.0	Neck sprain	3,752
787.01	Nausea with vomiting	3,728

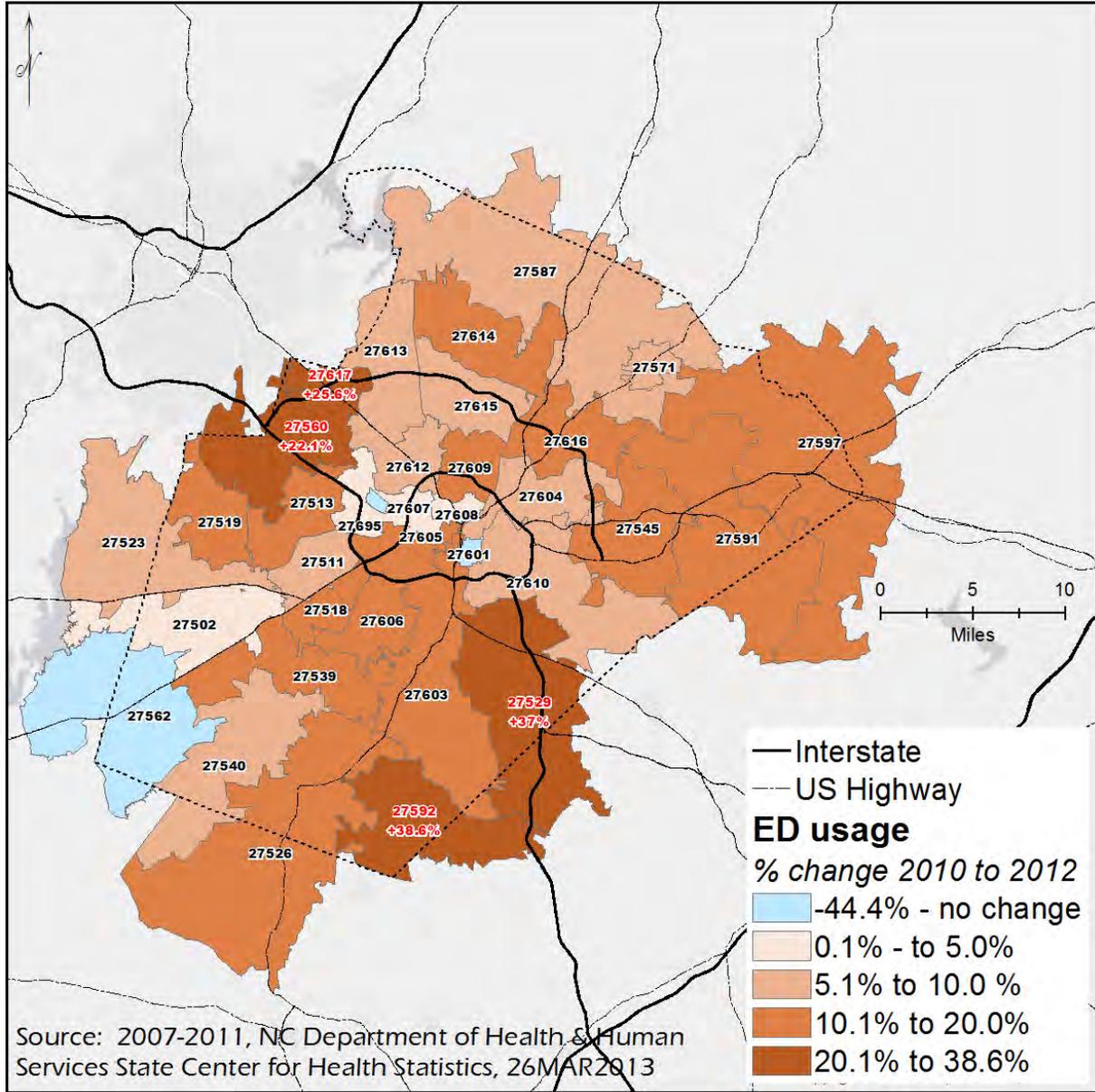
Source: Truven Health Analytics, prepared by WakeMed Health and Hospitals, 2013.

Note: Data based on July 1 to June 30th fiscal year. All Emergency Department data excludes admits. Normal newborns excluded (mother is already included).

When examining the changes in geographic distribution of Wake County residents treated in any NC emergency department, the zip codes that saw the largest percent increases in ED patients from the 2010 to 2012 fiscal year were:

- 27592: 38.6%
- 27529: 37%
- 27617: 25.6%
- 27560: 22.1%

Map of Percent Change of Emergency Department Patients from Wake County Treated at Any NC Facility, 2010 to 2012 Fiscal Year



Note: Data based on July 1 to June 30th fiscal year. All Emergency Department data excludes admits. Normal newborns excluded (mother is already included). Several of the 276* zip codes reported as Wake County zip codes but did not correspond to assigned Wake County zip codes were excluded.

During the 2012 fiscal year, the major diagnostic category (MDC) for Wake County inpatients treated in NC hospitals was pregnancy, child birth and the puerperium (the state of a woman during childbirth or immediately thereafter), followed by diseases and disorders of the circulatory system.

Top 10 Major Diagnostic Categories (MDC) for Wake County Inpatients in NC Hospitals, 2012 Fiscal Year

MDC	Description	FY2012
014	Pregnancy, Childbirth, and the Puerperium	13,434
005	Diseases & Disorders Of The Circulatory System	8,968
008	Diseases & Disorders Of The Musculoskeletal System	6,707
006	Diseases & Disorders Of The Digestive System	6,417
004	Diseases & Disorders Of The Respiratory System	5,802
001	Diseases & Disorders Of The Nervous System	4,893
019	Mental Diseases & Disorders	4,050
011	Diseases & Disorders Of The Kidney And Urinary Tract	3,043
018	Infectious And Parasitic Diseases	2,961
010	Endocrine, Nutritional And Metabolic Diseases And Disorders	2,605

Source: Truven Health Analytics, prepared by WakeMed Health and Hospitals, 2013.

Note: Data based on July 1 to June 30th fiscal year. Normal newborns excluded (mother is already included).

In general, hospitals receive Medicare payment on a per-discharge or per case basis for Medicare beneficiaries with inpatient hospital stays. During the 2012 fiscal year, the most frequent Medicare Severity Diagnosis Related Group (MS-DRG) of Wake County inpatients seen at any NC hospital were childbirth-related (vaginal or Cesarean, with or without complications), with over 7,000 patients. The second most frequent MS-DRG was psychoses, with more than 3,000 inpatient diagnoses in the 2012 fiscal year. The vast majority of Wake County residents treated as inpatients for psychoses were not treated in Wake County facilities.

Preventable Hospital Stays

- For every 1,000 hospital stays in Wake County, 50 are considered preventable.

Source: Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees, 2010, Dartmouth Atlas of Health Care.

The most frequently performed inpatient surgery for Wake County residents in the 2012 fiscal year was low cervical C-section (3,659), followed by total knee replacements (1,522) and total hip replacements (753).

Three of the five most frequently performed outpatient surgeries for Wake County residents in the 2012 fiscal year were colonoscopy-related. Diagnostic colonoscopies accounted for 9,393 surgeries, while procedures with biopsies accounted for another 9,714 cases, and lesion removal procedures accounted for an additional 7,343 surgeries, for a total of 26,450 surgeries. More than 7,500 outpatient cataract surgeries were performed in fiscal year 2012 and more than 7,200 upper gastrointestinal (GI) endoscopies with biopsy were performed.

Top Inpatient and Outpatient Surgical Procedures for Wake County Patients, 2012 Fiscal Year

Principal Procedure	FY2012
Inpatient	
Low cervical c-section	3,659
Total knee replacement	1,522
Total hip replacement	763
Laparoscopic cholecystectomy (gall bladder removal)	609
Lap gastroenterostomy (ulcer surgery)	472
Outpatient	
Colonoscopy and biopsy	9,714
Diagnostic colonoscopy	9,393
Cataract surgery w/iol 1 stage	7,562
Lesion removal colonoscopy	7,343
Upper GI endoscopy biopsy	7,216

Source: Truven Health Analytics, prepared by WakeMed Health and Hospitals, 2013.
 Note: Data based on July 1 to June 30th fiscal year. All Emergency Department data excludes admits. Normal newborns excluded (mother is already included).

FEDERALLY QUALIFIED HEALTH CARE CENTER UTILIZATION

Federally-Qualified Health Centers (FQHC) are private, nonprofit, community-directed organizations that remove common barriers to care by serving communities who otherwise confront financial, geographic, language, cultural, or other barriers.

Part of 34 FQHCs in North Carolina, Wake Health Services has 25,000 active patients in both medical and dental practices from both Wake and Franklin counties. In 2011, the leading service delivered by Wake Health Services was for high blood pressure, with 6,558 patients and over 20,000 service encounters.



Image Source: Wake Health Services

Services Delivered by Wake Health Services, Wake and Franklin Counties, 2008-2011

Diagnosis	Services Delivered by Primary Diagnosis							
	2008		2009		2010		2011	
	No. pts.	No. encounters	No. pts.	No. encounters	No. pts.	No. encounters	No. pts.	No. encounters
Alcoholism	149	425	164	391	386	1,067	1,504	3,308
Attention deficit disorder	342	753	354	758	436	1,011	1,076	2,264
Depression	381	646	262	487	1,818	4,160	2,043	4,722
Diabetes Types 1 and 2, child and adult	2,307	5,922	2,028	5,492	2,846	11,040	2,473	8,929
Heart disease	400	269	365	591	859	1,912	806	1,760
High blood pressure	4,674	10,712	4,049	8,760	6,228	18,774	6,558	20,029
Mental health disease	237	415	379	617	767	1,522	1,706	3,416
Stress/Post-traumatic stress disorder	203	287	297	468	833	1,629	1,076	2,264

Source: Wake Health Services. 2008-2011 Uniform Data System Reports.
 Note: Services based on primary diagnosis. Definitions by ICD-9 Codes used for Uniform Data System.

New Initiative

In June 2012, staff from Wake County's Health Promotion Chronic Disease Prevention Section partnered with Wake's EMS Advanced Practice Paramedics Program (APP). Staff accompanies APPs on site (home) visits to implement a health coaching model. Jointly, they complete environmental and physical assessments; provide navigational support and assist with securing medical care through multiple providers; and develop a personalized care plan for the patients with high frequency encounters.

EMERGENCY MEDICAL SERVICES UTILIZATION

In the 2010-2011 fiscal year, the Wake County Department of Emergency Medical Services answered nearly 90,000 calls. Around 12% of the calls were cancelled and approximately 61% resulted in the dispatching of emergency advanced life support services, a trend similar to previous years.

Summary of Services Delivered by County Emergency Medical Services, 2007-08 through 2010-11

Location	FY2007-08	FY2008-09	FY2009-10	FY2010-11
Advanced Life Support, Emergency	51,225	53,025	56,230	54,434
Calls Cancelled	10,958	11,826	12,588	11,214
Total Calls Answered*	69,549	72,392	92,219	89,361

Source: Wake County EMS PCR System.
 Wake EMS System is the primary 911 provider for Wake County. A medical record is generated for each patient – a call is an event – with zero to multiple patient records. Total Calls includes transports, non-transports and other responses (fire scene stand-by, etc.)

The Raleigh-Wake Emergency Communications Center provides communication support to law enforcement, fire, and EMS agencies to deliver appropriate, timely, and safe response to calls for service by dispatching 911 services to the 12 municipalities in Wake County.

In 2011, the Center received over half a million 911 calls, an average of almost 1,400 per day. Approximately 86% of those calls were answered within 10 seconds. Over 60% of the 911 calls resulted in dispatching law enforcement, nearly 16% resulted in EMP dispatches and around 12% resulted in fire dispatches (Raleigh-Wake Emergency Communications 2011 Annual Report).

LONG- TERM CARE FACILITIES

Wake County currently has 31 licensed adult care homes, with a capacity of 2,577.

- Sixteen of those facilities have a four-star rating from the NC Division of Health and Human Services.
- In Wake County there are 17 nursing homes, with 2,124 nursing facility beds and a total adult care capacity of 226.

Source: NC Department of Health and Human Services, Division of Health Services Regulation (DHSR), Licensed Facilities, Adult Care Homes, Family Care Homes, Nursing Facilities.

Definitions

- Nursing homes are facilities that provide nursing or convalescent care for three or more persons. A nursing home provides long term care of chronic conditions or short term convalescent or rehabilitative care. All nursing homes must be licensed in accordance with state law.
- Adult care homes are residences for aged and disabled adults who may require 24-hour supervision and assistance with personal care needs. Medical care may be provided on occasion but is not routinely needed.

Source: North Carolina Division of Aging and Adult Services.

MENTAL HEALTH SERVICES AND FACILITIES

The NC Department of Health and Human Services reports the number of licensed mental health facilities by county.

- As of April 2013, Wake County had 299 licensed facilities with a capacity of 1,167.
- Facilities range from supervised living facilities for adults and minors, day treatment and activity programs for adults, residential and day treatment programs for Substance Abuse (SA), Intellectual/Developmental Disabilities (I/DD) and Mental Health (MH), detoxification programs, psychosocial rehabilitation, inpatient and outpatient substance abuse treatment, respite services for caregivers, and outpatient methadone clinics.

Despite some fluctuation, the number of individuals served by local mental health programs in Wake County has increased 28% from 15,476 in 2005 to 19,771 in 2010.

Persons Served by Area Mental Health Programs, 2005-2010

Location	Number of Persons Served					
	2005	2006	2007	2008	2009	2010
Wake County	15,476	14,811	16,720	17,179	17,157	19,771
Mecklenburg County	40,712	33,956	29,415	38,559	37,481	38,944
State of NC	337,676	322,397	315,338	306,907	309,155	332,796

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health.
 Note: All clients of a community-based Area Program for mental health, developmental disabilities, and drug and alcohol abuse active at the beginning of the state fiscal year plus all admissions during the year. Also included are persons served in three regional mental health facilities. Multiple admissions of the same client are counted multiple times. County of residence is reported at the time of admission. North Carolina data include clients reported to reside out-of-state and sometimes contains individuals of unknown county of residence.

According to hospital data Wake County emergency departments have experienced an increase in the number of patients seen for mental, behavioral, and neurodevelopmental disorders. In the 2012 fiscal year, 4,715 patients were discharged from Wake County emergency departments with

diagnoses within this category, with the most frequent principal diagnosis being “Anxiety State Not Otherwise Specified” with 837 patients. Excluding drug and alcohol related diagnoses; patients are also seen in the emergency department for panic disorder, depressive disorder, and psychosis (Truven Health Analytics, prepared by WakeMed Health and Hospitals, 2013).

Wake County's Local Management Entity (LME) is Alliance Behavioral Healthcare, which also serves as the LME for Durham, Cumberland, and Johnston counties.

- The LME exists to refer patients needing mental health, substance abuse and developmental disability services to the appropriate providers.
- Wake County has a wide range of service providers, with an emphasis on residential and in-home-based service providers and on services for those with developmental disabilities.

Alliance currently lists 559 mental health, substance abuse, and developmental disability providers in the mental health local management entity/area program network, though this list may include duplicates of those providing services in multiple categories.

Available Services and Providers in the Mental Health Local Management Entity/Area Program Network (Medicaid), 2013

Service	Number of Providers in Wake County
Assertive Community Treatment Team	5
Child Day Treatment	10
Community Support Team	25
Facility-Based Crisis	1
Intellectual/Developmental Disabilities Residential Supports Level 1	70
Intellectual/Developmental Disabilities Residential Supports Level 2	71
Intellectual/Developmental Disabilities Residential Supports Level 3	78
Intellectual/Developmental Disabilities Residential Supports Level 4	69
Intermediate care facilities for individuals with mental retardation	22
Innovations-In Home Intensive Supports	32
Innovations-In Home Skill Building	50
PATH	1
Personal Care	74
Level 3 Residential	17
Mobile Crisis	8
Supported Employment	33
Level 2 Placing Agencies (Family type)	14
Level 4 Residential	0
Non-Hospital Detoxification	1
Substance Abuse - Intensive Outpatient	16
Psychosocial Rehabilitation	11
Substance Abuse - Comprehensive Outpatient	5
Inpatient	1
Child Mental Health/Substance Abuse Intensive In-Home	28
Innovations Intellectual/Developmental Disability Day Supports	28
Multi-Systemic Therapy	2
Psychiatric Residential Treatment Facility	6
Level 2 Residential (Program type)	4
Innovations Intellectual/Developmental Disability Community Guide	12
Total	559

Source: Alliance Behavioral Health care, Quality Management Department, 4/4/13.

SCHOOL HEALTH

The Wake County Human Services department provides the school nurses who work in the Wake County Public School System. School nurse staff address issues from the dispensing and administering of medication (including insulin injections, epinephrine shots for allergic reactions, and pain reliever for headaches), to assisting with medical procedures (e.g. catheterizations), and providing counseling and case management services.

- During the 2011-2012 school year, the School Nurse program provided 17,925 screenings to students in Wake County, the majority being vision (7,763) and dental (6,277).
- 3,158 individual counseling sessions were conducted, with 885 sessions involving bullying or violent behavior, 829 sessions related to depression, psychological problems or suicidal thoughts, and 716 sessions related to hygiene or puberty.
- 11,753 individual interventions were conducted for chronic illnesses suffered by students (not including asthma or diabetes treatments).
- 53,694 conferences were held, 42% with parents, 39% with teachers, and 17% with other professionals.
- 2,045 presentations were given by school nurses to the majority of school staff.

Source: Wake County Human Services. Quarterly Report Workbook 2011-2012.

Resources

The **Capital Care Collaborative**, a program of the Wake County Medical Society, allows members to provide medical care in a coordinated fashion for the low-income community. Wake County Human Services and three major Wake County hospitals are part of the collaborative.

Alliance Medical Ministry is a faith-led non-profit organization whose mission is to serve working uninsured adults of Wake County in need of affordable health care.

Wake Health Services is a private, nonprofit Community Health Center offering primary care and support services to more than 25,000 patients who are medically underserved or who have limited access to health care.

Health Insurance Coverage and Access

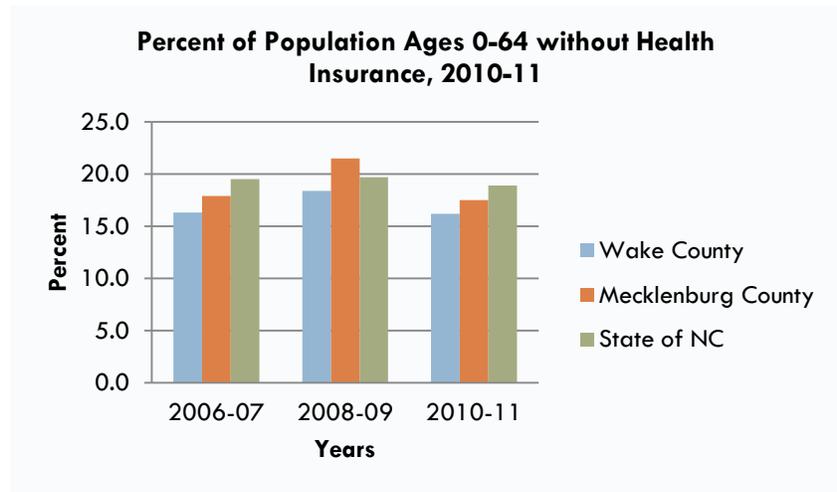
Health insurance coverage helps patients get into the health care system and receive preventive health services. Uninsured people are less likely to receive medical care, more likely to die early, and more likely to have poor health status (U.S. Department of Health and Human Services. Healthy People 2020).

Statistics, Targets, and Disparities

UNINSURED

In 2010-2011, approximately 16% of the non-elderly population (under the age of 64) lacked health insurance, compared to 17.5% in Mecklenburg County and 18.9% statewide.

- The *Healthy NC 2020* target is to reduce the percentage of non-elderly uninsured individuals to 8%.



Source: North Carolina Institute of Medicine, NC Health Data, Uninsured Snapshots, North Carolina County-Level Estimates of the Uninsured.

According to the 2010 Behavioral Risk Factor Surveillance survey, non-elderly Wake County residents with household incomes of less than \$50,000 are 9.2 times more likely to be uninsured (43.4%) than residents with higher household incomes (4.7%).

- Similarly, residents with a high school education or less are 4.5 times more likely to be uninsured than those with some college or higher.
- Non-white residents in Wake County are 6.3 times more likely to be uninsured than whites.
- Men are also 2.3 times more likely to be uninsured than women in Wake County.

Source: NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System, 2009.

HEALTH COVERAGE AND CHILDREN

According to the NC Institute of Medicine estimates of the uninsured for 2010-2011, approximately 8% of children under the age of 18 in Wake County lacked health insurance.

NC Health Choice is a health insurance program for children whose families make too much money to qualify for Medicaid, but don't make enough money to afford private health insurance. The number of children in Wake County who are eligible for NC Health Choice has increased each year since the 2007 fiscal year. In 2010, 10,311 children in Wake County were eligible for NC Health Choice and 71% of those eligible were enrolled in the program.

NC Health Choice (NCHC) Enrollment, 2007-2012

Location	FY2007		FY2008		FY2009		FY2010	
	No. Children Eligible	% Eligibles Enrolled						
Wake County	7,976	15%	8,929	44%	10,131	54%	10,311	71%
Mecklenburg County	9,284	10%	10,420	36%	11,396	51%	11,668	72%
State of NC	12,2837	22%	13,1446	66%	14,0141	74%	14,3022	86%

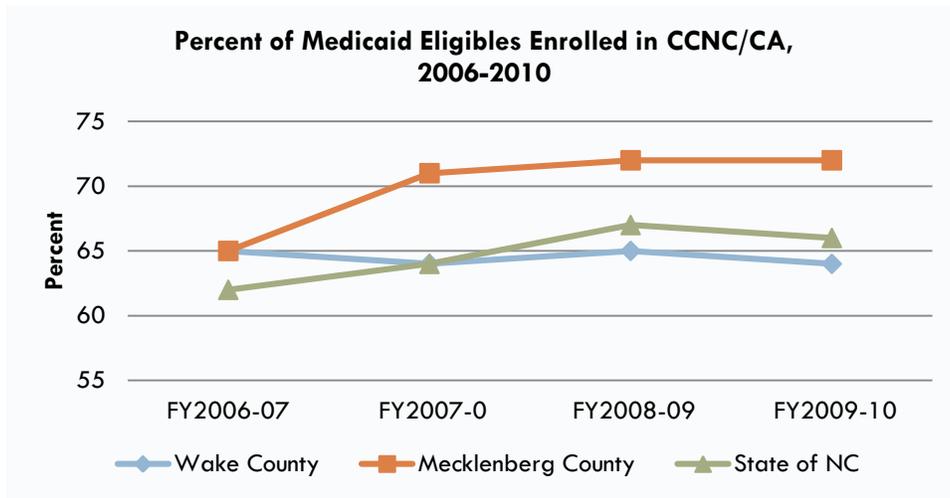
Source: NC Division of Medical Assistance, Statistics and Reports, Medicaid Data, County-Specific Snapshots for NC Medicaid Services, 2008-2010.

MEDICAID

Medicaid is a health insurance program that serves children, adults, and families. Family and Children's Medicaid covers children, parents, pregnant women, and family planning services. Adult Medicaid covers aged, blind and disabled individuals.

The percent of the Wake County population that is eligible for Medicaid remained steady at 9% for 2007-2009 and increased to 10% in the 2010 fiscal year, where 88,470 residents were considered eligible for Medicaid. The average cost per adult enrolled in Medicaid increased each fiscal year from 2007-2009, but declined from \$7,707 to \$7,371 between 2009 and 2010 (NC Division of Medical Assistance, Statistics and Reports, Medicaid Data, County-Specific Snapshots for NC Medicaid Services, 2006-2010).

Community Care of North Carolina/Carolina ACCESS (CCNC/CA) is a primary care case management health care plan for a majority of Medicaid recipients. The percentage of Medicaid eligibles enrolled in CCNC/CA has remained almost unchanged in Wake County between 2008 and 2010, holding steady between 64% and 65%.

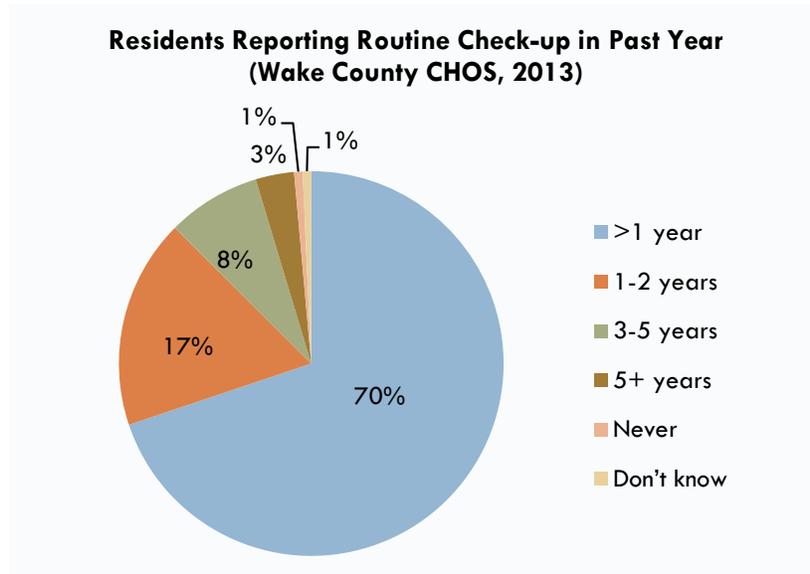


Source: NC Division of Medical Assistance, Statistics and Reports, Medicaid Data, County-Specific Snapshots for NC Medicaid Services, 2006-2010.

PREVENTIVE SERVICES

Clinical preventive services are very effective in preventing disease or detecting disease early, when treatment is more effective.

According to the 2013 Community Health Opinion Survey, 70% of Wake County residents reported that they received a routine health check up in the past year.



Source: 2013 Wake County Community Health Opinion Survey.

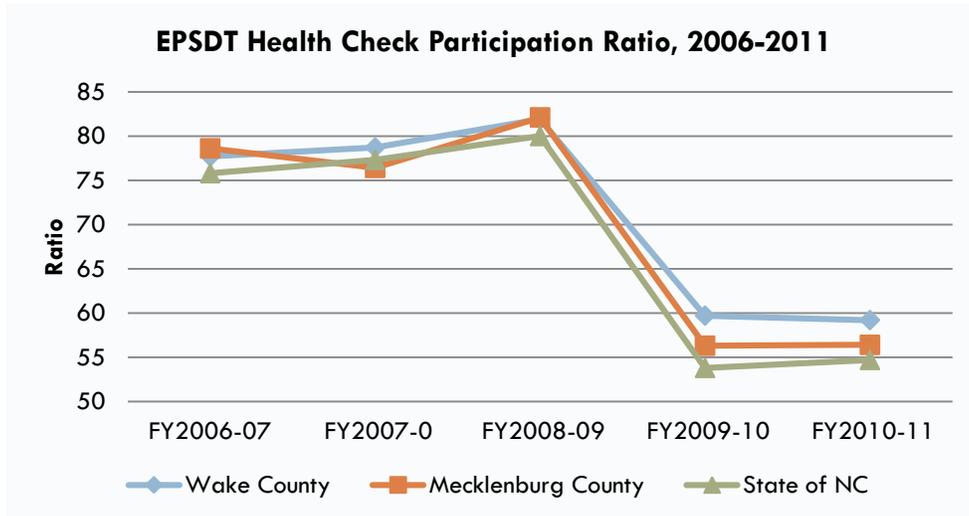
Residents also reported receiving the following health care screenings:

- Colonoscopy (persons aged 50 and older): 78%
- Annual prostate exam (males aged 40 and older): 59%
- Annual mammogram (females aged 40 and older): 61%
- Pap smear every other year (females over 21): 78%

Source: 2013 Wake County Community Health Opinion Survey.

The Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit provides comprehensive and preventive health care services for children under age 21 who are enrolled in Medicaid. EPSDT is key to ensuring that children and adolescents receive appropriate preventive, dental, mental health, and developmental, and specialty services.

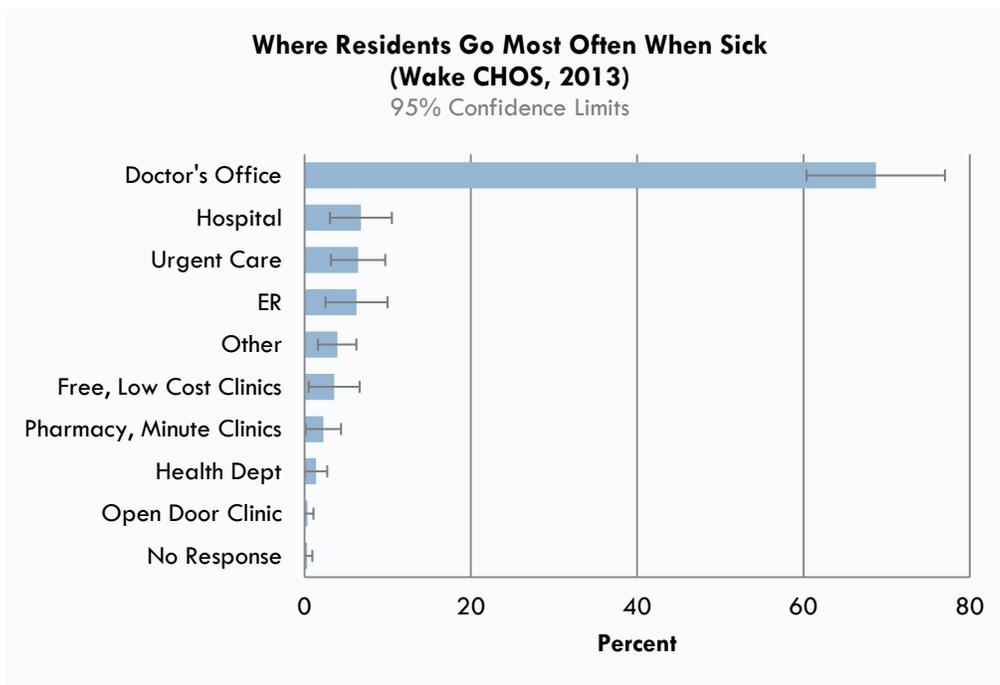
- After increasing from the 2006-2007 through 2008-2009, the percent of those eligible for Health Check services who actually receive those services had decreased by 28% in fiscal year 2009-2010 from the high point in 2008-2009 for all jurisdictions. In Wake County it, continued fall, slightly, during the 2010-2011 fiscal year.



Source: NC Division of Medical Assistance, Statistics and Reports, Health Check Participation Data.
 Note: The participation ratio is calculated by dividing the number of eligibles receiving at least one initial screening service by the number of eligibles who should receive at least 1 initial or period screenings (not shown in the table).

Community Perceptions

According to the 2013 Community Health Opinion Survey, 2 out of 3 residents go to a doctor's office most often when sick (68.7%), followed by hospital (7%), urgent care (6%), and ER (6%). In 2010, 65% of residents reported that they go to a doctor's office most often when sick.



Source: 2013 Wake County Community Health Opinion Survey.

The majority of residents reported that they receive their care when they are sick in Raleigh (63%) followed by Cary (14%), Knightdale (5%), Fuquay-Varina (4%), Durham (3%), and other towns (7%). Four percent refused to respond to the question. Alternative medicine also was being used by residents, where almost 1 out of 5 residents (19%) report alternative medicine use, including visiting a chiropractor, acupuncturist, and taking home remedies.

As far as health care access, the majority of residents (81.5%) felt that they could access good health care in Wake County. When asked what the top 3 community issues were in Wake County, 4.5% said lack of or inadequate health insurance. Of survey respondents who are insured, the majority are covered by the following plans:

- Blue Cross and Blue Shield of North Carolina: 33.5%
- Medicare: 14.6%
- United Healthcare: 9.7%
- CIGNA: 7.8%
- Medicaid/Carolina ACCESS/Health Choice: 4.6%

In the past year, more than one in ten (13%) of the 2013 Community Health Opinion Survey respondents reported they had trouble getting the health care they needed, which was the same as reported in 2010. Of those, the most common barriers to accessing health care in 2013 are:

- No insurance (7%)
- Out-of-pocket costs (4%)
- Could not get appointment (4%)
- No separate dental (2%)
- Didn't know where to go (2%)
- Insurance not accepted (2%)

In the focus groups, several themes emerged with health care access. The increasing amount of health care providers and facilities in Wake County was considered a community asset and draws new residents to the county. However, many participants mentioned that these options are available only to those who can afford, get to, or navigate the system, including accessing mental health services.

I think we have wonderful resources and opportunities for those who can afford them. I don't think all of us are able to have access to them though."

- Community member

Almost all focus groups discussed the difficulty finding primary care providers and providers who accept Medicare and Medicaid patients. Residents were concerned about the difficulty for low/no-income residents accessing services, particularly with prenatal care. Many residents felt that this access gap is causing residents to use the emergency department for primary care.

"If people can't get basic health care which is a crime really and they always fall back on 'yeah but they can always go to the emergency room' and that's not the answer. We need to take care of our people – even the people who don't have money."

- Community member

"I'm looking at it from the perspective of the people that are legislating right now who do not want to expand the health care to the uninsured which guarantees much more people in North Carolina if they are homeless will not have access to proper health care. And unless it is remedied, people are going to be basically living on the edge like they're doing. They might not be having any kind of preventive care. They'll only go to hospitals only when they're about to die or something is really wrong. So then things could be done to actually prevent people from getting sick in the first place..."

- Community member

To improve health care access, focus group participants suggested increasing the number of clinics that run outside of normal (9-5) business hours, increase transportation options to Triangle area-hospitals, and ensure that culturally and linguistically appropriate services are provided (in particular, training professionals on how to work with the Spanish-speaking community and persons living with disabilities).



Image Source: Rex Health care. Community Health Day where all Wake County hospitals participated.

CHAPTER 8: HEALTH OF THE ENVIRONMENT



CHAPTER 8 | HEALTH OF THE ENVIRONMENT

Humans interact with the environment constantly. These interactions affect quality of life, years of healthy life lived, and health disparities.

The World Health Organization (WHO) defines environment, as it relates to health, as “all the physical, chemical, and biological factors external to a person, and all the related behaviors.”

Adequate environmental quality in terms of clean air and water are prerequisites for health. Additionally, the built environment, which refers to human-made resources and infrastructure designed to support human activity (such as buildings, roads, parks, restaurants, and grocery stores) can also have an impact health.

Sources:

- U.S. Department of Health and Human Services. *Healthy People 2020*.
- World Health Organization (WHO). Preventing disease through healthy environments. Geneva, Switzerland: WHO; 2006.
- County Health Rankings and Roadmaps, 2010-2013. University of Wisconsin Population Health Institute.

Quick Facts

Positive Trends:

- 99% Air Quality Index days were moderate to good air quality in Wake County.
- No health-based violations have occurred in any of the large community water systems since 2010.
- Local parks account for another 13,665 acres of land and Wake County is ranked 3rd in the state with only 2 other counties with more local park land in North Carolina.

Areas for Improvement:

- In Wake County, 38,115 residents have limited access to healthy foods.
- Many residents voiced concern over access to healthy foods, particularly in communities where grocery stores and transportation options are limited.
- Some residents identified the needs for safer, more affordable, and more accessible recreation facilities in Wake County.

Environmental Rankings

The 2013 County Health Rankings ranks North Carolina counties according to their summary measures of health outcomes and health factors. Counties also receive a rank for mortality, morbidity, health behaviors, clinical care, social and economic factors, and the physical environment. Although Wake County was ranked by County Health Rankings as the #1 healthiest county in 2013, the summary measure for which Wake County does not rank highly is physical environment, where Wake County places 10th out of 100. The physical environment measures included:

- Air pollution-particulate matter days
- Drinking water safety
- Access to recreational facilities per 100,000
- Limited access to healthy foods
- Fast food restaurants

County Health Rankings, Physical Environment Measure Details, 2013

Health Factor	Wake County	Mecklenburg County	NC	National Benchmark	Healthy NC 2020
Air pollution-particulate matter days	12.6	13.2	12.9	8.8	N/A
Drinking water safety	0%	0%	3%	0%	N/A
Access to recreational facilities per 100,000	15	16	11	16	N/A
Limited access to healthy foods*	4%	7%	7%	1%	N/A
Fast food restaurants	51%	46%	49%	27%	N/A

Source: County Health Rankings and Roadmaps, 2013. University of Wisconsin Population Health Institute. Data presented as county average.
Note: *Data should not be compared with prior years due to changes in definition.

Environmental Health

Statistics, Targets, and Disparities

AIR QUALITY

Poor air quality is linked to premature death, cancer, and long-term damage to respiratory and cardiovascular systems. Progress has been made to reduce unhealthy air emissions, but, in 2008, approximately 127 million people lived in U.S. counties that exceeded national air quality standards. Decreasing air pollution is an important step in creating a healthy environment (U.S. Department of Health and Human Services. Healthy People 2020).

The two main air quality issues in North Carolina are ground-level ozone, the main ingredient in "smog" and particle pollution. Both of these pollutants are mainly caused by emissions from automobiles and from the coal-burning power plants that supply most of our electricity. In addition, smoke from outdoor burning and wildfires significantly contribute to ozone and particle pollution.

According to the 2012 Air Quality Index (AQI) summary, 99% of days had moderate to good air quality in Wake County. Four days in 2012 were unhealthy for sensitive groups in Wake County.

Air Quality Days, 2012

Metro Area or County	No. Days with AQI	Number of Days When Air Quality Was:				
		Good	Moderate	Unhealthy for Sensitive Groups	Unhealthy	Very Unhealthy
Raleigh-Cary	366	262	99	4	1	n/a
Wake County	366	267	95	4	n/a	n/a
Charlotte-Gastonia-Concord	366	230	125	10	1	n/a
Mecklenburg County	366	239	118	9	n/a	n/a

Source: U.S. Environmental Protection Agency. Air Quality Index Reports, 2011. Retrieved on May 23, 2012.

Note: "Unhealthy for sensitive groups": When air quality is in this range, people that are included in a sensitive group, whether the sensitivity is due to medical conditions, exposure conditions, or inherent susceptibility, may experience respiratory effects when engaged in outdoor activities. For ozone, the sensitive group includes children; people with lung diseases, such as asthma, chronic bronchitis, and emphysema; older adults; and active people who work or exercise outdoors. "Unhealthy": When air quality is in this range, any individual who is active outdoors may experience respiratory effects. "Very Unhealthy": when air quality is in this range, it is expected that there will be widespread effects among the general population and more serious effects in members of sensitive groups.

A daily index value is calculated for each air pollutant measured. The highest of those index values is the AQI value, and the pollutant responsible for the highest index value is the "Main Pollutant." In 2012, particulate matter was measured as the main pollutant for 217 days in Wake County and Ozone was measured as the main pollutant for 149 days. Particulate matter is usually categorized on the basis of size, and includes dust, dirt, soot, smoke, and liquid droplets emitted directly into the air by factories, power plants, construction activity, fires and vehicles. Ozone, the major component of smog, is not usually emitted directly but rather formed through chemical reactions in the atmosphere. Precursor compounds like volatile organic compounds (VOC) and oxides of nitrogen (NO_x) react to form O₃ when stimulated by ultraviolet radiation and temperature, so peak O₃ levels typically occur during the warmer and sunnier times of the day and year. VOCs are chemicals that play a role in forming ozone and are emitted from a variety of sources, including automobiles, chemical and paint manufacturing plants, dry cleaners, and other facilities that use solvents and paint.

Primary Air Pollutants, 2012

Metro Area or County	No. Days with AQI	CO	NO2	O3	SO2	PM2.5	PM10
Raleigh-Cary	366	n/a	n/a	155	n/a	211	n/a
Wake County	366	n/a	n/a	149	n/a	217	n/a
Charlotte-Gastonia-Concord	366	n/a	1	145	n/a	220	n/a
Mecklenburg County	366	n/a	2	154	n/a	210	n/a

Source: U.S. Environmental Protection Agency. Air Quality Index Reports, 2011. Retrieved on May 23, 2012.

Note: Criteria air pollutants (CAPS) are six chemicals that can injure human health, harm the environment, or cause property damage: carbon monoxide, lead, nitrogen oxides, particulate matter, ozone, and sulfur dioxide. The EPA has established National Ambient Air Quality Standards (NAAQS) that define the maximum legally allowable concentration for each CAP, above which human health may suffer adverse effects.

WATER SYSTEMS

Surface and groundwater quality applies to both drinking water and recreational waters. Contamination by infectious agents or chemicals can cause mild to severe illness. Protecting water sources and minimizing exposure to contaminated water sources are important parts of environmental health (U.S. Department of Health and Human Services. Healthy People 2020).

The majority of Wake County residents are served by Community Water Systems, the largest water system is the City of Raleigh, serving approximately 486,000 people from a primarily surface water source. While most of the community water systems use groundwater, the largest community water systems (City of Raleigh and the Town of Cary) within the county used purchased surface water.

No health-based violations (the amount of contaminant exceeded safety standard or water has not been treated properly) have occurred in any of the large community water systems since 2010.

Active Water Systems, 2013

County	Number Community Water Systems	Population Served by CWSs	Number NonTransient/ NonCommunity Water Systems	Population Served by NonTransient/ NonCommunity Water Systems	Number Transient Non-Community Water Systems	Population Served by T-NC WSs
Wake County	306	805,836	10	2,446	147	23,769

Source: U.S Environmental Protection Agency Safe Drinking Water Information System. Safe Drinking Water Search for the State of North Carolina.

Note: Total population served contains some duplicated persons, since both businesses and residences are included.

Since the majority of the Wake County population is served by community water systems (primarily run by municipalities), there is not much well-related activity in the county. In 2012, 267 new well permits were issued in Wake County. Environmental Health also evaluated approximately 500 wells and provided consultative visits to 214 wells.

Wake County Environmental Health Well Activity, 2011-2012

Activity	2011	2012
Well Sites Evaluated	498	496
Well Site Consultative Visits	112	214
Well Construction Permits Issued		
New	270	267
Repair	102	116
Bacteriological Samples Collected	665	648
Other Samples Collected	308	427

Source: Eric Green, DWQ Coordinator Wake County Department of Environmental Services, January 31, 2013.

Most of Wake County residents are on public sewer systems. There was an increase between 2011 and 2012 in the number of sites visited, evaluated, and permits issued for the installation of septic tanks. There are eight wastewater collection systems that carry sewage to a waste water treatment plant in Wake County.

Wake County Environmental Health On-Site Wastewater Activity, 2010-2011

Activity	2011	2012
Site Visits (all OSWW Field Activities not listed below)	1098	1412
Sites Evaluated (or Re-evaluated)	467	669
Operation Permits Issued	830	932
Improvement Permits Issued - Repair or replace malfunctioning system	-	-
Construction Authorizations		
New, Revision or Relocation	458	535
Repair/Replacement of Malfunctioning System	143	111
Sewage Complaints Investigated	379	371

Source: Eric Green, DWQ Coordinator Wake County Department of Environmental Services, January 31, 2013.

Groundwater Contamination in Northern Wake County

In 2012, the U.S. Environmental Protection Agency (EPA) responded to health concerns in northern Wake County related to groundwater contamination. The chemical TCE (trichloroethylene) had been detected in approximately 34 wells tested by the EPA and NC Department of Environmental and Natural Resources (DENR). An additional 149 wells in this area have been tested and found to have no contaminants. The EPA responded with federally funded waterline extensions, well filters, and bottled water to mitigate the concerns. The State Division of Public Health is the lead health responder and is working with residents to advise them on health related issues. DENR is working with EPA in the ongoing testing of water sources. Wake County is playing a supportive role in coordination of activities, seeking ongoing federal and state resources, and collaborating with federal and state authorities.

Source: 2012 Wake County State of the County Health Report.

Resource

Household hazardous materials cannot be disposed in the landfill because of their caustic properties and potential for environmental contamination.

Wake County has established a [hazardous waste collection program](#) where residents can drop off these materials for proper disposal by a certified Household Hazardous Waste contractor.



Image Source: Wake County

WASTE AND RECYCLING

The health effects of toxic substances and hazardous wastes are not yet fully understood. Research to better understand how these exposures may impact health is ongoing. Meanwhile, efforts to reduce exposures continue. Reducing exposure to toxic substances and hazardous wastes is fundamental to environmental health (U.S. Department of Health and Human Services. Healthy People 2020).

The Wake County Solid Waste Management is a division of the Environmental Services department. The Solid Waste Management Division provides various services to generators from both the municipalities and the unincorporated areas of the County. Wake County Solid Waste provides an array of solid waste services including disposal and recycling facilities and operations, litter and illegal dumping enforcement as well as outreach and education programs. The Solid Waste Management Division manages 17 waste facilities:

- 11 Convenience Centers
- 2 Household Hazardous Waste Facilities
- 2 Multi-Material Recycling Facilities
- 2 municipal solid waste disposal facilities.

According to the Wake County Solid Waste Management Plan:

- From the 2008-2011, the total amount of waste generated in Wake County and disposed in a landfill has declined by 20%.
 - The decrease in the amount of waste disposed in a landfill coupled with the increase in population has resulted in a per capita waste disposal rate decline of 30%, from 1.44 to 1.00 tons per person per year.
 - All municipalities in Wake County have begun to phase in roll-out recycling carts in place of the 18 gallon bin and have expanded the types of recyclable materials collected curbside. Overall, 24% of residential waste was recycled in the 2011 fiscal year, an increase of 4% since 2008.

Source: Wake County Solid Waste Management Plan, July 2012.

The U.S. Environmental Protection Agency (EPA) maintains information in a national database called the Toxics Release Inventory (TRI) that contains detailed information on nearly 650 chemicals and chemical categories that over 23,000 industrial and other facilities manage through disposal or other releases, recycling, energy recovery, or treatment. The data are collected from industries including manufacturing, metal and coal mining, electric utilities, commercial hazardous waste treatment, and other industrial sectors. Section 313 of the Emergency Planning and Community Right to Know Act (EPCRA) of 1986 was enacted to facilitate emergency planning, to minimize the effects of potential toxic chemical accidents, and to provide the public with information on releases of toxic chemicals in their communities. The Pollution Prevention Act (PPA) of 1990 mandates collection of data on toxic chemicals that are treated, recycled, and combusted for energy recovery. Together, these laws require facilities in certain industries, which manufacture, process, or use toxic chemicals above specified amounts, to report annually on disposal or other releases and other waste management activities related to these chemicals.

In 2011, there were four facilities in Wake County that reported chemical disposal or other releases in Wake County, with approximately 345,000 total releases in pounds. The North Carolina average is 58,992 pounds. This information does not reflect whether or not the public has been exposed to those chemicals and estimates are not sufficient to determine exposure or calculate potential adverse health effects.

Reported Chemical Disposal or Other Releases in Wake County (in pounds), 2011

County	Total On- and Off-Site Disposal or Other Releases, In Pounds	Compounds Released in Greatest Quantity	Quantity Released, In Pounds	Releasing Facility
Wake County	344,795	Ammonia	150,392	Kellog's Snacks, Cary Baker
		Ammonia	112,783	Ajinomoto North America
		Nitrate Compounds	32,480	Mallinckrodt, LLC
		N-Hexane	16,600	Cargill, Inc

Source: U.S. Environmental Protection Agency. Toxic Release Inventory Reports: Chemical Reports, 2011. Retrieved on November 6, 2012 from US EPA TRI Explorer, Release Reports by Facility, Chemical Reports.

Note: reporting year (RY) 2011 is the most recent TRI data available. Facilities reporting to TRI were required to submit RY 2011 data to EPA by July 1, 2012. This dataset includes revisions processed by EPA as of February 28, 2013 for the years 1988 to 2011. Revisions submitted to EPA after this time are not reflected in TRI Explorer reports. Users of TRI information should be aware that TRI data reflect releases and other waste management activities of chemicals, not whether (or to what degree) the public has been exposed to those chemicals. Release estimates alone are not sufficient to determine exposure or to calculate potential adverse effects on human health and the environment.

The North Carolina Childhood Lead Poisoning Prevention Program (CLPPP) currently coordinates clinical and environmental services aimed at eliminating childhood lead poisoning. Using data that is most currently available, there were approximately 12,000 children aged 6 months to 6 years tested for blood lead poisoning in 2010. Of those children tested, 6 had lead blood levels of 10-19 micrograms per deciliter ($\mu\text{g}/\text{dL}$). In 2012, the Centers for Disease Control and Prevention (CDC) changed the recommendation to begin diagnostic testing for all children who have an initial blood test result of 5 or greater micrograms per deciliter ($\mu\text{g}/\text{dL}$); however, environmental investigations guidelines remain unchanged.

Childhood Blood Surveillance Data, 2010

Location	Ages 1 and 2 Years Tested for Lead Poisoning						Ages 6 Months to 6 Years		
	Target pop.	No. tested	% tested	Tested Among Medicaid	Lead ≥ 10	% ≥ 10	No. tested	≥ 10 -19	≥ 20
Wake County	26,552	10,441	39.3	78.9	27	0.3	12,254	6	-
Mecklenburg County	29,355	9,618	32.8	67	24	0.2	12,176	8	-
State of NC	257,543	132,014	51.3	81.1	519	0.4	162,06	146	24

Source: North Carolina Childhood Blood Lead Surveillance Data, NC Environmental Health Section, Children's Environmental Health Branch, 2010. Note: Target population is based on the number of live births in 2008 and 2009. *Includes ages 9-11 months.

"Target Population" is based on the number of live births in preceding years. "Number Tested" is an unduplicated count of children tested for lead poisoning within the calendar year. "Percent Tested" is the number of children tested divided by the target population. Children are counted as being tested for lead poisoning in successive years until they are confirmed to have a lead level >10 micrograms per deciliter ($\mu\text{g}/\text{dL}$). Confirmation is based on a child receiving two consecutive blood lead test results >10 $\mu\text{g}/\text{dL}$ within a six-month period. "Confirmed" lead levels are based on the confirmation date and are classified according to the highest level confirmed during the calendar year. The categories "Confirmed 10-19" and "Confirmed >20 " are mutually exclusive. "Percent Tested Among Medicaid" is based on a data match of blood lead tests with Medicaid encounter data and includes ages 9-35 months. This larger 9-35 months category reflects Health Check visits and blood lead testing for children around their first and second birthdays and up to age three.

RABIES AND VECTOR-BORNE DISEASES

From 2008-2012, there were no reports of human rabies in Wake County. In 2012, there were 16 reported cases of animal rabies in Wake County.

Animal Rabies Cases, 2008-2012

County	Total Number of Animal Rabies Cases			
	2008	2009	2010	2012
Wake County	14	14	23	16
Mecklenburg County	14	32	29	34
State of NC	452	473	397	429

Source: NC Division of Public Health, Epidemiology. Rabies. Facts and Figures. Rabies by County, Tables by Year.

Vector-borne diseases are illnesses caused by an infectious microbe that are transmitted most commonly by ticks, mosquitoes, and fleas. Vector-borne diseases are among the most complex of all infectious diseases to prevent and control.

The vector-borne diseases that occur most often in Wake County are caused by ticks. For tickborne diseases (ehrlichiosis, Lyme disease, and Rocky Mountain spotted fever), many more cases are suspected and investigated than can be confirmed, likely due to the difficulty of getting clinical and/or laboratory information needed to meet the confirmed case definition.

Tickborne Diseases in Wake County, 2008-2012

Disease	2008		2009		2010		2011		2012	
	Confirmed	Suspect, Probable, and Confirmed								
Ehrlichia	0	1	0	0	0	0	0	0	0	1
Ehrlichia, HE	0	1	0	0	0	5	0	14	0	10
Ehrlichia, HME	3	8	0	18	3	44	2	64	1	61
Lyme Disease	7	9	3	102	5	111	3	55	2	32
Rocky Mountain Spotted Fever	3	50	0	49	2	91	1	110	0	170

Source: NC Electronic Disease Surveillance System, accessed 3/19/13. Note: counts include all cases meeting the suspect, probable, and confirmed North Carolina communicable disease case definitions.

Notes: Case definitions for these diseases are available at http://epi.publichealth.nc.gov/cd/lhds/manuals/cd/case_defs.html

Community Perceptions

According to the 2013 Community Health Opinion Survey, the majority of residents (86.8%) think that the environment in Wake County is clean and safe. Only 2.8% of residents surveyed thought that clean water and pollution were top community issues in Wake County.

Clean air/water or exposure to environmental hazards did not come up in any of the focus groups.

Built Environment

Statistics, Targets, and Disparities

PARK AND RECREATION FACILITIES

Wake County contains nearly 9,500 acres of state or federal park land. Local parks account for another 13,665 acres of land and Wake County is ranked 3rd in the state with only 2 other counties with more local park land in North Carolina.

Based on the number of residents per unit, Wake County ranks in the top half of North Carolina counties for local residents' access to baseball fields, softball fields, soccer fields, multi-purpose fields, tennis courts, volleyball courts, picnic shelters, playgrounds, and trail miles.

Wake County ranks in the lower half of North Carolina counties for residents' access to football fields, basketball courts, and swimming pools.

Public Recreational Acreage and Facilities, 2010

	Number	State Rank
Baseball fields	129	48 th
Softball fields	81	45 th
Football fields	6	66 th
Soccer fields	91	41 st
Multi-Purpose fields	54	35 th
Basketball courts	95	55 th
Tennis courts	219	32 nd
Volleyball courts	35	36 th
Picnic Shelters	174	45 th
Playgrounds	169	36 th
Swimming Pools	7	60 th
Trail Miles (walking, biking, etc)	223	43 rd

Source: N.C. Division of Parks & Recreation. North Carolina Outdoor Recreation Plan 2009-2013.

Note: State Rankings are according to county residents per park acre or per recreational facility.

FOOD ACCESS

Although research on the food access is still in its early stages, there is some evidence showing that access to fast food restaurants and having limited access to healthy foods are associated with overweight, obesity, and premature death.

Limited access to healthy foods captures the percent of the population who are low income (family income less than or equal to 200% of the federal poverty threshold) and do not live close to a grocery store (defined as living less than 10 miles from a store in rural areas and less than 1 mile urban areas).

- In Wake County, 38,115 residents have limited access to healthy foods or 4% of the county population, compared to 7% in Mecklenburg County and 7% statewide (County Health Rankings and Roadmaps, 2013. University of Wisconsin Population Health Institute).

Among children, fast food restaurants are the second highest energy provider following grocery stores. Environments with a large proportion of fast food restaurants have been associated with higher obesity and diabetes levels (County Health Rankings and Roadmaps, 2013. University of Wisconsin Population Health Institute).

In Wake County, there are approximately 737 fast food restaurants. The rate of fast food restaurants per 1,000 population is slightly higher in Wake County compared to Mecklenburg County and North Carolina.

Fast Food Restaurants, 2007-2009

	2007		2009	
	No.	Rate	No.	Rate
Wake County	687	0.83	737	0.82
Mecklenburg County	685	0.80	723	0.79
State of NC	6,452	0.71	6,630	0.71

Source: U.S. Department of Agriculture, Food Environment Atlas
 Note: Includes the number of limited-service restaurants in the county. Limited-service restaurants include establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating.

Supermarkets traditionally provide healthier food options than convenience or corner stores. In Wake County, there are approximately 167 supermarkets and grocery stores. The rate of supermarkets and grocery stores per 1,000 population is about the same when compared to Mecklenburg County and North Carolina; however, there was a slight decrease for all jurisdictions from 2007 to 2009.

Supermarkets and Grocery Stores, 2007-2009

	2007		2009	
	No.	Rate	No.	Rate
Wake County	176	0.21	167	0.19
Mecklenburg County	185	0.21	187	0.20
State of NC	1,848	0.20	1,785	0.19

Source: U.S. Department of Agriculture, Food Environment Atlas.
 Note: Rate per 1,000 population. Grocery stores include establishments generally known as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Included in this industry are delicatessen-type establishments primarily engaged in retailing a general line of food. Convenience stores, with or without gasoline sales, are excluded. Large general merchandise stores that also retail food, such as supercenters and warehouse club stores, are excluded.

Community Perceptions

In the 2013 Community Health Opinion Survey, 84.9% of residents felt that they could “easily access healthy, affordable food” and 83.8% felt that they could find enough recreational and entertainment opportunities in Wake County. Only 3.4% of residents said that better or more recreational facilities are needed in Wake County, and 2.7% felt that food assistance services needed to be improved.

Within all focus groups, access to healthy, affordable food in school and community settings was identified as a key element of a healthy community. Many residents voiced concern over access to healthy foods, particularly in communities where grocery stores and transportation options are limited.

“I was really shocked with was the Kroger that closed their offices within the area. I mean they just left this entire community with no fresh foods or fruits or vegetables like they didn’t care.”

- Community member

“That’s why in the Southeast Raleigh area, the low populated areas and low economic rates, they’re suffering from chronic illnesses. Why? Because it’s -- they’re obese because of the food options that we have. Just recently, they shut down two of the Kroger’s that are in the Southeast Raleigh area. A lot of the people that lived over there, that was their only source to get some type of healthy food. The closest market is -- it’s not even close, actually. It’s at least 20, 30 minutes away.”

- Community member

For access to recreation, there was a mix of responses from residents. Some focus group participants felt that Wake County’s recreation resources were an asset to the community, while others identified the need for safer, more affordable, and more accessible recreation facilities in Wake County.

“I didn’t realize how many -- and even in my own neighborhood that I’ve lived in for seven years, I never really noticed that there was this much stuff to do, like outside activities. There’s like biking and then you can have camp areas. And I had no clue of that, which I think it’s amazing.”

- Community member

“I would like [to see improvements in] other services for children and youth, maybe recreational centers. I have to go to Apex because there is not that much here, and if there is, it’s expensive.”

- Community member

CHAPTER 9: PARTNERSHIPS AND RESOURCES FOR COMMUNITY HEALTH IMPROVEMENT



CHAPTER 9 | PARTNERSHIPS AND RESOURCES FOR COMMUNITY HEALTH IMPROVEMENT

The community health needs assessment process not only identifies the factors affecting the county's health, but also the resources available and needed to address those factors.

Home to 5 colleges and universities, 3 major hospital systems, the state capital, the Research Triangle Park, and a strong network of community-based and non-profit organizations, Wake County is a resource-rich community compared to the majority of other counties in North Carolina.

Wake County has also been consistently ranked as one of the best places in the United States to live, work, and raise a family. Over the past two years, the Wake County area has been recognized as:

#1 Healthiest County in NC
(Wake County, NC)
CountyHealthRankings.org
March 2013

#5 Best City for Raising a Family
(Raleigh, NC)
Forbes, April 2012

#7 Best Bang For Your Buck City
(Raleigh-Durham, NC)
TheFiscalTimes.com, June 2012

#1 Best Place to Live
(Raleigh-Wake County, NC)
Bloomberg-Businessweek.com
America's Best Cities January
2012

#5 Most Cost-Attractive Business
Location
(Raleigh, NC)
KPMG, March 2012

#8 Mid-Sized American City of
the Future for 2013-14
(Raleigh, NC)
fDi Intelligence, April 2013

#1 Real Estate Market to Watch
in 2012
(Raleigh-Cary, NC)
Inman News, February 2012

#5 America's New Tech Hot
Spots
(Raleigh-Cary, NC)
Forbes, March 2013

#8 Largest Increase in Jobs from
2011-2012
(Raleigh-Cary, NC)
U.S. Bureau of Labor Statistics,
May 2013

#1 Fastest Growing City in the
U.S.
(Raleigh, NC)
Forbes, March 2013

#5 Most Eco-Friendly City
(Raleigh, NC)
Thumbtack.com, July 2012

#11 Healthiest City for Women
(Raleigh, NC)
Women's Health, January 2013

Top 10 City for Business in 2013
(Raleigh-Durham, NC)
Thumbtrack.com, April 2013

#7 Metro with Most College-
Educated Residents
(Raleigh-Cary, NC)
Brookings Metropolitan Policy
Program, May 2012

The wealth of resources, services, and collaboratives working to improve the health of residents in Wake County are major community assets that should be celebrated and leveraged to help residents who are facing major health disparities, needs, and challenges.

Community Support for Health Improvement

In order to effectively meet the needs of Wake County residents, establishing effective partnerships is essential. With changes to the health care and mental health systems, increases in chronic and communicable diseases, and challenges of the economic climate, building partnerships with public health, hospitals and health care organizations, non-profits, and other non-traditional partners is essential for community health improvement.

These partnerships continue to make a difference in Wake County's ability to:

- Monitor and investigate the health needs and issues in the community
- Mobilize community partnerships to improve community health
- Educate and empower residents to live healthier lives
- Develop programs and policies that support community health improvement efforts
- Increase residents' access to health and mental health services

Some key partnerships that support community health improvement include:

- The [Capital Care Collaborative](#) includes Wake County Human Services, 3 major hospitals, and providers of care to the working poor and indigent in Wake County. The Collaborative focuses on data sharing to assure better access and outcomes for clients, and planning for more seamless health care delivery system in Wake County.
- A partnership network was established to address the issues of overweight and obesity in Wake County called [Advocates for Health in Action](#) (AHA). AHA is a group of more than 50 diverse organizations and community members who are shaping the environment throughout Wake County so that healthful eating and physical activity are the way of life. AHA works to achieve its mission by shaping policy and environments that ensure available and affordable access to healthful foods and physical activity for all community members.
- Wake County also has multiple groups that strive to increase youth health resources through partnership and collaboration, including:
 - Human Services Public Health
 - School Health Advisory Council (SHAC)
 - Wake County Public Schools and Wake County Human Service School Based Nursing Program
 - Wake County Collaborative, an advocacy group for child health
 - Youth Empowered Solutions (YES!)
 - Youth Thrive, collaborative partnership working together to support all youth so they can become productive adults

Resources, Initiatives, and Collaboratives

Resources including collaboratives, education, programs, and policies that address major health factors and concerns in Wake County are listed below. This listing of recent resources and initiatives does not include all resources in Wake County. For a more up-to-date and comprehensive listing of Wake County resources, visit:

- United Way of the Greater Triangle 2-1-1 resource and referral information line that uses the Triangle's most comprehensive database of human service resources to serve small business owners, Employee Assistance Programs (EAPs), nonprofit agencies, and government agencies: <http://www.unitedwaytriangle.org/211/>
- 2012 Wake County Human Resources Guide: http://www.wakegov.com/humanservices/social/senior_adult/documents/resguide2012.pdf
- 2013 Wake County Latino Resource Guide: <http://www.wakegov.com/humanservices/espanol/Documents/Latino%20Resources%20Guide%202013.pdf>

Addressing Economic Challenges

Strategies to address economic challenges in Wake County include increasing low-income housing options, streamlining services for the homeless, providing food and utility assistance, offering opportunities for residents to improve self-sufficiency, and linking residents to career resources.

- In 2012, Wake County Commissioners approved loans for 271 units in Raleigh, Cary, Rolesville, Holly Springs, Garner and Wendell. Several of the projects are designed for tenants who frequently have trouble finding housing, including senior citizens, disabled veterans and handicapped adults. The Commissioners also approved funding for 15 single family homes in Apex, to be built by Habitat for Humanity for low income, first time home buyers. County financing in prior years helped to support several rental communities that opened 2012, including: Meadow Creek Commons Apartments, Highland Terrace Apartments, Sandy Ridge Apartments, and Mingo Creek Apartments.
- The *Second Chance Housing* program at Brookridge Apartments received a National Association of Counties Achievement Award. The program provides housing to people who are working to move beyond problems including bad credit, a history of evictions, criminal history or disability. In 2011, half of the tenants in the apartment complex were Second Chance tenants, with 65% reporting to have been formerly homeless.
- [Project Homeless Connect](#), an annual event that helps homeless people with basic needs, was streamlined to better meet the needs of the community. The event provides haircuts, coats and blankets, hygiene kits and ID cards; services like behavioral health care, employment, housing and legal assistance; and access to benefits including Medicaid, WIC and food stamps.
- The [Warmth for Wake](#) heating assistance program experienced one of its best years yet, raising more than \$34,000 and delivering 153 loads of firewood and 52 space heaters to families who were in danger of being without heat during the winter.



- The food pantry at [Urban Ministries of Wake County](#) serves over 8,000 families and 9,000 children each year. With donated food and food from the Food Bank of North Carolina, clients receive a week's worth of groceries to sustain their family's food needs.
- The [Middle Class Express \(MCE\)](#) is an innovative approach to help low-income Wake County residents make progress towards economic and social self-sufficiency that ensures access to employment, educational, and financial development opportunities and other health and human service resources. This approach provides participants Life Coaching and Life Planning to achieve a Middle Class lifestyle in 5 years. It concentrates on strategies to help individuals and families fulfill their life goals as they gain new skills and knowledge, moving them closer to the fulfillment of their life plan. In 2012, 174 participants have enrolled and 74% of participants who have been in the program 12 months are employed. Less than 25% were employed when they started the program.
- Wake County Human Services partnered with a prominent faith community to host [Club Choice](#), a Human Capital Development initiative to help families move from use of multiple human services to self-sufficiency. Activities include health promotion and education as part of the program, as well as an emphasis on education, work, weight loss, and financial planning.
- The [JobLink Career Center at the Millbrook Human Services Center](#) was honored at the *Enable America* Governor's Reception for improving employment opportunities for people with disabilities. JobLink Career Centers served 70,000 job seeking customers with workforce related support and [services](#) across Wake County.
- In 2012, [Wake County Public Libraries](#) partnered with Raleigh's Parks and Recreation Department to offer a temporary computer lab and after school story time at Roberts Park and Community Center while Richard B. Harrison Library was being renovated. Hundreds of residents used the lab to search and apply for jobs during the three months it was open.



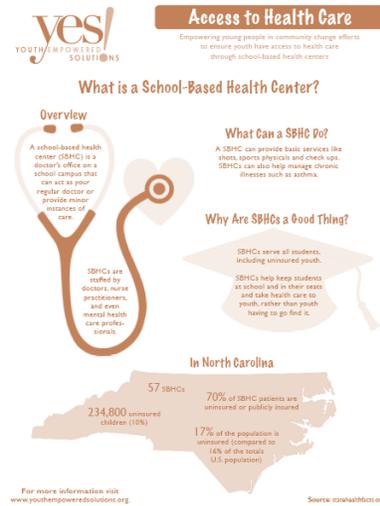
Increasing Access to Health Care and Mental Health

Increasing access to health care and mental health strategies include providing quality health care for uninsured adults living in Wake County, increasing enrollment in Medicaid, providing early and quality health care to first time mothers, advocating for school-based health centers, offering screening and testing services, and increasing the capacity of essential mental health services.

- To enhance community capacity to enroll eligible Medicaid recipients, a partnership was developed with WakeMed, Community Care of Wake and Johnston Counties, and Wake County Human Services. In 2012, 6 case manager positions were funded by WakeMed, which will add Medicaid staff to other WakeMed locations and to a physician practice.
- In 2012, free medication was dispensed through the Prescription Assistance Program equating to \$140,320 savings to patients.

- Youth Empowered Solutions (YES!) has been advocating for school-based health centers (SBHCs). YES! utilizes the Youth Empowerment Model to spearhead grassroots advocacy campaigns to engage the community in supporting the development of SBHCs within Wake County Public Schools.

- Work towards getting a school-based health center in Wake County has seen some great successes: the establishment of the Wake School-Based Health Center Task Force, the work of the Wake School Health Advisory Committee officially recommending the establishment of an SBHC, the establishment of partnerships between Wake County Human Services, Wake Health Services, Rex Hospital, and UNC Health Care.
- Unfortunately due to turnover in the Wake County Superintendent position in 2012, the project is being delayed. However, there are plans to maintain a relationship with Wake County Public School Staff and Board Members to be able to take advantage of this opportunity once a new Superintendent is hired.



- In 2012, 8 prenatal care providers in Wake County have enrolled as Pregnancy Medical Homes with the goal of improving the quality of perinatal care given to Medicaid recipients.
- Wake County Human Service clinics have implemented a Presumptive Eligibility program for pregnant women in all prenatal clinics including Sunnybrook and the Eastern, Northern, and Southern Regional Centers. NC Medicaid allows for presumptive eligibility for pregnant women under the State Plan.
- Wake County Health Services implemented business processes that enhance Medicaid access and utilization. “Medicaid is Everyone’s Business” training is ongoing and required for all staff.
- In June 2012, staff from Wake County’s Health Promotion Chronic Disease Prevention Section partnered with Wake’s EMS Advanced Practice Paramedics Program (APP). Staff accompanies APPs on site (home) visits to implement a health coaching model. Jointly, they complete environmental and physical assessments, provide navigational support and assist with securing medical care through multiple providers, and develop a personalized care plan for the patients with high frequency encounters.
- In 2012, the [John Rex Endowment](#) made a gift of \$160,000 to increase access to dental care for children, make the County's dental clinic more efficient, and upgrade to digital X-rays.
- For prevention, early identification, and treatment of sexually transmitted infections, Wake County Human Services [testing services](#) for HIV, syphilis, Chlamydia, gonorrhea, hepatitis, and TB were integrated in 2012 by offering them simultaneously to clients at community as well as clinical testing sites. Integrated testing of high risk populations increases detection and treatment of sexually transmitted infections and TB. This enhanced testing is made possible through the Center for Disease Control (CDC) Program Collaboration and Service Integration (PCSI) and other grant funding.

MENTAL HEALTH AND SUBSTANCE USE

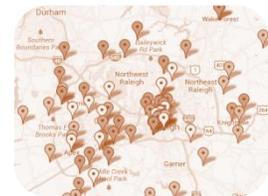
- Wake joined with Durham County to create [Alliance Behavioral Healthcare](#) to manage behavioral health services in Durham, Cumberland, Johnston, and Wake counties. The partners joined with UNC Health Care to work to improve behavioral health care for residents with mental health, intellectual/developmental disabilities, and substance abuse needs. The group seeks to strengthen essential services, address gaps, and optimize resources for efficient and effective delivery of services throughout the community, while ensuring continuity of service to consumers.
- In November 2010, the Wake County Board of Commissioners dedicated a new 19-acre mental health and addictions treatment campus, called [WakeBrook](#), to the citizens of Wake County. The two-building campus, part of Wake's Mental Health Continuum of Care, provides a range of services to citizens with mental health, developmental disabilities, and substance abuse needs. The new facilities provide more space for outpatient crisis and assessment needs, inpatient substance abuse services, non-hospital medical detox, and facility-based crisis services.



WakeBrook, Image Source: Wake County

Increasing Access to Healthy Foods

- Through collaborative efforts of Wake County Cooperative Extension and the community health-focused collaborative, Advocates for Health in Action (AHA), a ["Farm to Family" Food Finder](#) was developed to market the availability and access points of local foods in Wake County through an online, interactive Google map.
- In March 2013, Wake County residents participated with the annual "Dig In" event designed to educate about building, maintaining, and sustaining a community garden and strengthening the local food economy.
- In 2011-2012, a partnership between the Alice Aycock Poe Center for Health Education and Wake County Human Services' Food and Nutrition Service Program yielded monthly educational sessions for over 100 SNAP participants. Additional sessions, in English and Spanish, were held at Millbrook Regional Center for more than 50 participants.
- Color Me Healthy* is a program developed to reach children ages four and five with fun, interactive learning opportunities geared towards physical activity and healthy eating. In 2011-2012, the *Color Me Healthy* curriculum for providers was introduced, where 54 participants from 30 child care facilities serving approximately 1,600 children attended trainings in Wake County. In addition, the Wake County Cooperative Extension provided *Color Me Healthy* training to 67 Wake County child care providers.
- Of the 14 known farmers' markets in Wake County, four provide Electronic Benefits Transfer (EBT) for Supplemental Nutrition Assistance Program (SNAP) participants.



- In 2011, [Advocates for Health in Action](#) (AHA) was awarded a Farmers Market Promotion Program (FMPP) Grant through the U.S. Department of Agriculture to work with the Wendell and Fuquay-Varina Farmers' Markets. The grant helped both markets to become established with a part-time market manager, promotion, and the capacity to process EBT for SNAP participants.
- In 2012, Wake County Health Promotion Staff created bi-lingual signage promoting EBT acceptance at the Western Wake, Raleigh Downtown, Wendell, and Fuquay-Varina Farmers Markets and posted signage at the Wake County Sunnybrook, Swinburne, Eastern, and Southern Regional Center Buildings.
- The Wake County Cooperative Extension's Expanded Food and Nutrition Education Program (EFNEP) provides nutrition and cooking education to Supplemental Nutrition Assistance Program (SNAP)-eligible families. From October 2011 to August 2011, EFNEP reached 462 clients impacting 2005 people in households; 69% of clients have increased consumption of fruits as a result of program and 58% have increased consumption of vegetables as a result of program.
- In 2010-2011, the Wake County Cooperative Extension and Wake County Public School System's School Health Advisory Council (SHAC) partnered to advocate for improved healthful food choices and physical activities in schools and childcare centers.
- Community gardens in Wake County have grown from 10 to 33 via the efforts of the Advocates for Health in Action (AHA) network of partners who provide technical assistance and advocate for fresh, affordable produce. Extra produce is commonly donated to organizations such as the Inter-Faith Food Shuttle. Additionally, AHA has provided technical support to Wake County Smart Start and helped secure donations to start learning gardens at 16 Wake County daycare centers.



Image Source: AHA

Increasing Access to Recreation and Physical Activity

- The [City of Raleigh Parks and Recreation](#) staff maintained 78 miles of paved and unpaved trails. On September 24, 2012 an additional trail, "The House Creek Greenway Trail" was dedicated, connecting completed bicycle/pedestrian routes in the county.
- [Greenway](#), an iPhone application that integrates the City of Raleigh's GIS data, was created to make Raleigh's Greenway system more user-friendly. The "app" was the winner of the top prize at CityCamp Raleigh in 2012. Users can download the application to their iPhone from the Apple iTunes store.

- In 2012, the [American Tobacco Trail](#) was named the *Best Place to Run* and the *Best Place to Bike* by Cary Magazine for the third year in a row. The magazine also named [Lake Crabtree County Park](#) both the *Best Place to Ride a Bike* and the *Best Place to Go for a Run* in Morrisville.



Image Source: Wake County

- Over 6,000 copies of [Trails & Greenways of Wake County](#) pocket guides have been distributed via the following venues: parks and recreation departments, medical clinics, pediatrician offices, faith and community groups, schools and libraries, community coalitions, and businesses.
- Wake County Human Services' Health Promotion Chronic Disease Prevention (HPCDP) staff assisted with the completion of the New Bern Avenue Corridor Rapid Assessment on safe crosswalks, sidewalks, disability accessibility designs, walkability to schools, and access to healthy foods.

Improving Worksite Wellness

- In 2010, Wake County Human Service's Health Promotion Chronic Disease Prevention (HPCDP) program partnered with Sigma Electronics in Garner, NC to provide quarterly Lunch-N-Learn sessions, and mapped out a walking route on the property. Additionally, the Sigma Electronics wellness coordinator began an employee newsletter and annual employee wellness fair. In 2011-2012, HPCDP staff initiated discussion with the Department of Revenue (DOR) to establish a worksite wellness committee and programming for employees.
- In 2012, Wake County Government partnered with *Living Well at Work* to help county employees manage their diabetes and save on medical costs. The program, which received a National Association of Counties Award, had high attendance, improved the employees' health, and saved an estimated \$1,200 per participant per year in medical costs. In addition, *Know Your Numbers* is a new wellness initiative that is linked to the county's health insurance plan. County employees, retirees, and spouses are asked to get an annual biometric screening to identify health risk factors and prevent chronic medical conditions.

Increasing Transportation Options

- Wake County is collaborating with [municipal governments](#), Triangle Transit, regional transportation agencies, and the business community to begin discussions about long-term transportation needs. In 2011, Wake County worked with partners to develop a draft plan for providing efficient and effective modes of transportation for residents. The county prepared the plan in partnership with regional transit and planning organizations and all municipalities.
- Wake County leaders were joined by the U.S. Department of Transportation secretary to announce a \$600,000 grant to expand the Wake Coordinated Transportation Service (WCTS) call center. The Veterans Transportation and Community Living Initiative grant will provide a 24/7 telephone system to:
 - Access automated transportation, [Veterans Services](#) and Human Services information.
 - Retrieve real-time "where is my ride?" customer ride status information.
 - Schedule trip reservation requests.
 - Speak with a live WCTS customer service agent during business hours.

- The [Center for Volunteer Caregiving](#) is a non-profit, faith-based organization that provides volunteer services, including round trip transportation services, for Wake County seniors, family caregivers, and adults living with disabilities.

Improving Education and Lifelong Learning

- Libraries and Empire Properties partnered to have a modern mural dubbed the Fantastic Sky Race installed along two exterior walls of the Wake County parking deck in downtown Raleigh. The mural, designed by students from NC State University, has inspired library programs for all ages.
- The Wake County Board of Commissioners has worked with the Wake County Public School System and Wake Technical Community College to develop operating budget strategies that do not require increasing the property tax rate, yet sustain education as a priority in Wake County. Education funding comprises more than one-third of the county budget. The fiscal year 2012 budget increased the appropriation for the [Wake County Public School System](#) by \$908,000, for a total appropriation of \$314.4 million. Wake County's commitment to [Wake Tech Community College](#) was also maintained with \$16 million appropriated for FY2012.
- A capital program plan has been developed for Wake Technical Community College for 2012 to 2017. It will sustain the college as it grows to accommodate future students and allow Wake Tech to maintain its position as one of the best community colleges in the nation.
- [Wake Smart Start](#) ensures that Wake County children (birth to 5 years) are successful in school and in life. Wake County Smart Start convenes stakeholders to assess local needs, fund local programs, ensure accountability, and leverage resources to support young children and families.
- [Raleigh Promise](#) is a post-secondary success partnership supported by the Raleigh Colleges and Community Collaborative, which includes 6 colleges and universities in Raleigh. The Collaborative also includes the City of Raleigh, Wake County Public School System, Wake County Human Services, businesses, faith-based organizations, nonprofits, teens, and college students. The goal of Raleigh Promise is to double the number of low-income youth in Raleigh who achieve a post-secondary credential and living-wage employment by 2025.

Improving Environmental Health

- In 2012, the [Wake County Sustainability Task Force](#) completed its work and compiled a report examining water resources conservation and management, solid waste reduction and management, and energy conservation and management.
- [Stormwater](#) rules for new developments were updated to establish new nitrogen and phosphorous limits specific to Falls Lake and Jordan Lake. This is the first time the county has established phosphorous limits. The requirements are intended to improve ground water quality near the lakes.
- Wake's [Open Space Program](#), the first of its kind in North Carolina, is working with many partners to protect remaining open space in the county with the objective of protecting as much of the county's land area as permanent open space as possible. A new computer mapping system model was developed to evaluate open space properties. The model,



Image Source: Wake County

which received a national award, will be used as one of several tools to help prioritize the county's open space acquisitions.

- The Board of Commissioners approved changes to the [Animal Control](#) Ordinance to allow feral cats to be trapped, sterilized and vaccinated, and then released into their original location. The goal of the new policy - known as TNR for Trap, Neuter, Release - is to better manage the feral cat population.
- In 2011, to improve commercial recycling rates, the City of Raleigh expanded curbside recycling in the Central Business District. Over 150 businesses had joined the program. Similarly, other Towns have expanded recyclables collection programs, or are in the process of expanding them, to include some businesses. Fuquay-Varina is offering cardboard collection to the 214 businesses in its downtown area.

CHAPTER 10: COMMUNITY PRIORITIES



CHAPTER 10 | COMMUNITY PRIORITIES

Once all of the data was collected from the Community Health Opinion Survey, focus groups, and existing health statistics, the next step in the community health needs assessment process is to involve the community in choosing the priorities that will be addressed in the next 3 years.

Community engagement is important not only when choosing health priorities, but also for generating recommendations and strategies for community health improvement and garnering community support for later decisions and actions.

Eight Phases of Wake County's Community Health Needs Assessment (CHNA) Process

A community assessment is a process that helps to identify factors affecting our county, determine resources needed to address these factors, and develop a plan of action to address community needs. There are 8 phases in the process:

1. Establish a community health assessment team
2. Collect primary data
3. Collect secondary data
4. Analyze and interpret county data
5. Determine health priorities
6. Create the CHNA document
7. Disseminate CHNA document
8. Develop community health action plans

Community Forum

On May 16th, 2013, five community forums were held simultaneously across Wake County to discuss the results of the CHNA process. Residents were invited to hear the main findings from the assessment and prioritize the issues to be addressed over the next 3 years.

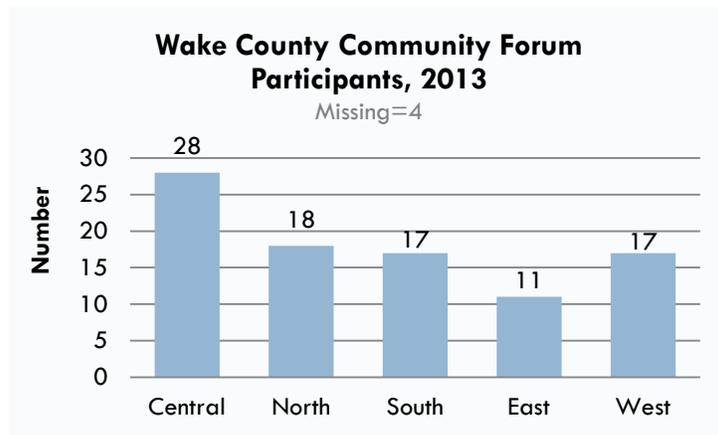
The forums were located in the central, north, south, east, and west areas of Wake County at the following locations:

- Central: WakeMed Andrews Center, Raleigh
- East: Wake County Human Services Eastern Regional Center, Zebulon
- North: New Bethel Baptist Church, Rolesville
- West: Senior Center, Cary
- South: Wake County Southern Regional Center, Fuquay-Varina

Email invitations and flyers (Appendix I) were distributed to promote the event and encourage residents to attend.

Forum Demographics

A total of 95 people participated in the forums. Of those, 91 completed demographic information. The majority of participants attended the central forum, followed by the north forum.



Source: NC Institute for Public Health

More females, African Americans, and persons with a Bachelor’s degree or higher attended the forum compared to Wake County’s general population. In addition, there was less representation at the forum among adults aged 18-29.

Demographic Characteristics of Wake County Community Forum Participants, 2013

Characteristic	Community Forum Participants	Wake Population (2010 Census)
Gender		
Male	25%	49%
Female	75%	51%
Race		
White	49%	66%
African American	41%	21%
Asian/Pacific Islander	3%	5%
Native American	3%	0.5%
Other	4%	5%
Two or more races	N/A	2.5%
Ethnicity		
Hispanic or Latino	9%	10%
Age Groups		
Aged 18-29	4%	17%
Aged 30-44	22%	24%
Aged 45-64	58%	24%
Aged 65 and older	15%	9%
Education		
Bachelor’s degree or higher	80%	48%

Source: NC Institute for Public Health, 2013. Race and ethnicity is reported as two separate dimensions. Ethnicity is defined as Hispanic and Non-Hispanic. Thus, persons of Hispanic ethnicity may be of any race.

Forum Overview

The community forum began with a presentation on nine focus areas that were identified from the assessment by looking at the intersection of the Community Health Opinion Survey results, focus group themes, and existing health statistics:

- Mental health and substance use
- Disability and care-giving
- Education and lifelong learning
- Health care access and utilization
- Housing and homelessness
- Nutrition, physical activity, and obesity prevention
- Population growth
- Poverty and unemployment
- Risky youth behavior

The presentation was followed by small group discussions and each participant was asked to rank the top 3 community topics by the following criteria:

- Impact: affects the largest number of people in the community
- Urgency: will have serious consequences if not addressed in next 3 years
- Community Concern: community is most concerned about this issue
- Realistic: community can realistically make progress over the next 3 years



Image Source: Wake County

After voting, small groups then discussed recommendations and next steps for improving community health.

Prioritization Method

A total of 95 ballots were completed. The ballot numbers by forum site are as follows:

- Central: 32 (34%)
- North: 17 (18%)
- South: 17 (18%)
- East: 12 (13%)
- West: 17 (18%)
- Total: 95

The prioritization method used for the 2013 community forums is a modified version of the *Hanlon Method for Prioritizing Health Problems*, which is a technique endorsed by the National Association of County and City Health Officials to determine priorities based on explicitly defined criteria and feasibility factors. Once completed, the ballot forms were entered by NC Institute for Public Health staff in to *Qualtrics* survey software, which produced means from the ranking of the focus areas within the identified criteria categories (a lower rank equals a higher priority).

A formula was applied to get an overall priority score for each topic area: where the overall priority score:

$$= [\text{IMPACT} + \text{CONCERN}^* + \text{URGENCY}] \times \text{REALISTIC}$$

Note: Concern was an additional criteria added and urgency was not weighted.

One limitation is statistical significance between overall scores was not able to be determined.

Community Priorities

Based on the prioritization method used, the 2013-2016 Wake County CHNA community priorities are:

- Poverty and unemployment
- Health care access and utilization
- Mental health and substance use

Wake County Community Forum Focus Areas by Priority Score, 2013

Priority	2013 Wake County CHNA Priorities	Overall Score
1	Poverty and unemployment	9.7336
2	Health care access and utilization	10.769
3	Mental health and substance use	10.9823
4	Nutrition, physical activity, and obesity prevention	11.9226
5	Education and lifelong learning	12.3336
6	Population growth	13.2496
7	Disability and care-giving	14.9184
8	Risky youth behavior	15.663
9	Housing and homelessness	16.8688

Source: NC Institute for Public Health, 2013.

Next Steps

Community priority setting represents marks the beginning of the community health improvement process.

An important use of the community priorities and assessment findings is to develop effective community health improvement strategies. The next step in this process is to develop plans of action and improvement for addressing the community priorities. Within their organizations, CHNA partners will be developing measurable objectives to address these priorities, using evidence-based strategies to address the priorities, and planning realistic evaluation methods.

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APPENDICES



APPENDIX A: GLOSSARY AND TERMS

ACA: Affordable Care Act

ACS: U.S. Census Bureau American Community Survey

AHA: Advocates for Health in Action

AQI: Air Quality Index

Binge drinking: Males having five or more drinks on one occasion OR females having four or more drinks on one occasion

BMI: Body Mass Index, the relationship between height and weight that is associated with body fat.

BRFSS: Behavioral Risk Factor Surveillance System

Built Environment: Refers to human-made (versus natural) resources and infrastructure designed to support human activity, such as buildings, roads, parks, restaurants, and grocery stores.

CCNC/CA: Community Care of North Carolina/Carolina ACCESS

CDC: Centers for Disease Control and Prevention

CHNA: Community Health Needs Assessment

CHOS: Community Health Opinion Survey

Community Health Needs Assessment: A systematic collection, assembly, analysis, and dissemination of information about the health of the community.

EOG: End of Grade test

ED: Emergency Department

EPA: Environmental Protection Agency

EPSDT: Early and Periodic Screening, Diagnosis and Treatment

FNS: Food and Nutrition Services

FQHC: Federally-Qualified Health Centers

Healthy NC 2020: Serves as the state's health improvement plan by encompassing 13 focus areas with 40 measurable objectives developed by the Governor's Task Force for Healthy Carolinians.

Incidence: The number of new cases of a disease that occur during a specified period of time divided by the number of persons at risk of developing the disease during that period of time.

LME: Local Management Entity

Medicaid: the United States health program for families and individuals with low income and resources.

Medicare: national social insurance program, administered by the U.S. federal government since 1965, that guarantees access to health insurance for Americans aged 65 and older and younger people with disabilities as well as people with end stage renal disease (Medicare.gov, 2012) and persons with Lou Gehrig's Disease.

NCIPH: North Carolina Institute for Public Health

NHIS: National Health Interview Survey

PPACA: The Patient Protection and Affordable Care Act

Prevalence: The proportion of people in population affected by a disease or condition during a specified period of time. Prevalence is calculated by dividing the number of affected persons in the population during a specified period of time by the number of people in the population during that period of time.

Rate: the number of cases (or deaths) divided by the number of people in the state and are usually expressed as the number of cases (or deaths) per 100,000 people. Rates are useful for comparing the cancer risk in different populations.

SCHS: State Center for Health Statistics

Social Determinants of Health: These characteristics are defined as social determinants of health, which are the circumstances people are born, grow up, live, work, and age, as well as the systems put into place to deal with illness.

TANF: Temporary Assistance for Needy Families program, also called Work First

TRI: Toxic Release Inventory

WCHS: Wake County Human Services

WCTS: Wake Coordinated Transportation Service

WFFA: Work First Family Assistance

WHO: World Health Organization

APPENDIX B: LOW COST PRIMARY CARE SERVICES IN WAKE COUNTY



CCC Partner Organization Resource and Eligibility Guide Low Cost Primary Care Health Services in Wake County				
Clinic Name	Phone Number(s)	Hours of Operation	Payment Options	General Information
Alliance Behavioral Health www.alliancebh.org	800-510-9132	24 Hours/Day; 365 Days/Year	Phone consultation is free	~Services available to residents of Wake County experiencing a mental health crisis ~Available to residents who are indigent, uninsured or under-insured needing mental health, development disability or substance abuse services. ~Calls are answered by qualified professional, referring to appropriate publicly funded resources.
Alliance Medical Ministry 101 Donald Ross Drive Raleigh, NC 27610 www.alliancemedicalministry.org	919-250-3320	Mon-Fri: 8-5 Closed 12-1 Sat: 9-12 (only currently enrolled patients are eligible for Sat. appts)	Patients cannot have insurance of any kind. Sliding scale fee is determined by household income.	~Patient or immediate family member in household must be employed. ~Services provided for Wake County adults ~Services not available for pregnant women or children. ~Urgent care available for minor, acute illness (i.e., cold, sore throat)
Mariam Clinic 3126 Blue Ridge Road Raleigh, NC 27607 www.mariamclinic.org	919-824-4672	Admin: Mon-Fri 9-4 Clinic: Sunday 1-5 by appt only. New patients must call Thursdays between 5-8 and leave a voicemail message	Patients cannot have insurance of any kind. Eligibility for service based on income (200% of FPL) There is no service fee; however, donations are welcome.	~Patient or immediate family member in household must be employed. ~Services provided for Wake County adults ~ Services not available for pregnant women or children.
Open Door Clinic (Urban Ministries of Wake County) 1390 Capital Blvd Raleigh, NC 27604 www.urbanmin.org	919-832-0820	Mon-Thur: 9-9 by appointment only Must call to schedule eligibility appointment.	Patients cannot have insurance of any kind. Eligibility for service based on income (185% of FPL) \$15 fee on all medical visits.	~Services provided for (non-pregnant) Wake County adults ~Specialty services include podiatry, ophthalmology for patients with diabetes ~Services include primary care, preventive services, laboratory services and on-site pharmacy for initial and on-going medications. ~Other diagnostic services are referred out.
People's Medical Care 720 Creedmoor Road, Suite 200 Raleigh, NC 27612 www.nciap.org	919-277-0345	Mon-Fri: 9-5 Walk-ins welcome; appointment recommended.	Patients cannot have insurance of any kind. Fee is on a sliding scale with most general visits being \$45 \$10/Basic Lab work \$75/Complete Physical	~Treatment and management for most chronic/acute diseases/ailments ~Preventative care including Women's Health, Geriatric, flu shots and more.
Shepherd's Care Medical Clinic 304 B Pony Road Zebulon, NC 27957 www.shepherdcareclinic.com	919-404-2474	Clinic Hours: Tuesdays 9:30am-1:30pm and 6:30pm-9pm Office Hours: Mon, Tue & Thurs 8am-3pm; Wed, 6am-noon	Services are free if within 200%FPL	~ Care for individuals 18 – 64 living in eastern Wake County, Johnston, Nash and Franklin Counties ~Target Chronic Diseases ~No GYN visits ~Diabetic Educator, Asthma/Allergy Specialist, Cardiologist ~Patient Prescription Assistance

<p>SouthLight, Inc. 3125 Poplarwood Court, Suite 203 Raleigh, NC 27604 www.southlight.org</p>	<p>919-787-6131 (Corporate Office)</p>	<p>Treatment Programs at various locations Mon-Fri: 6am-9pm Additional offerings on weekends.</p>	<p>Fees vary with a sliding scale available based upon need. Accepts private insurance, Medicaid, Medicare and self-pays.</p>	<p>~Services for substance abuse and/or mental health related issues for all Wake county residents, ages 12 and up. ~Outpatient treatment services available at the following locations: -1012 Oberlin Rd, Ste 300, Raleigh, NC 27605 -12 W. Martin St, Ste 809, Raleigh, NC 27601 -2101 Garner Rd, Raleigh, NC 27610</p>
<p>Wake County Human Services www.wakegov.com/humanservices.com</p>				
<p>Eastern Regional Center 1002 Dogwood Drive Zebulon, NC 27597 Northern Regional Center 320 E. Holding Avenue Wake Forest, NC 27587 Southern Regional Center 103 N. Judd Parkway NE Fuquay-Varina, NC 27526</p>	<p>919-404-4011 919-562-6338 919-557-2501</p>	<p>Monday: 8am-5:15pm Tues & Wed: 8am-7pm Thurs & Fri: 8am-5:15pm</p>	<p>Sliding scale fee based upon household income Accepts Medicaid</p>	<p>~Women's Health & STD Clinic ~ Serves uninsured women of childbearing age for family planning and women's wellness services. ~ Appointments are required; walk-ins depending upon provider availability. ~Teen Clinic: Walk-in clinic; must be present by 3PM to register.</p>
<p>Prenatal Clinic 10 Sunnybrook Road, Raleigh NC</p>	<p>Clinic G 919-250-4701</p>	<p>Mon-Thurs: 8am-8pm Fri: 8:30am-5:15pm 2nd & 4th Sat: 8:30am-1pm</p>	<p>Sliding scale fee based upon household income Accepts Medicaid</p>	<p>~Serves uninsured and underinsured pregnant women ~ Appointments are required; walk-ins depending upon provider availability. ~Prenatal services also available at Eastern, Southern and North Regional Centers. For appt, call 919-212-7000.</p>
<p>Raleigh 10 Sunnybrook Road, Raleigh, NC</p>	<p>Clinic A 919-250-4410</p>	<p>Mon, Thurs, Fri: 8:30am-5:15pm Tue: 9:30am-5:15pm Wed: 8:30am-7:30pm</p>	<p>No charge for services. Accepts Medicaid.</p>	<p>~Clinic A: STD's: Serves any individual above the age of 12 requesting STD services. ~Public Health Clinic A: HIV: Targets HIV infected residents of Wake County.</p>
<p>Wake Health Services, Inc www.wakehealth.org</p>				
<p>Apex Family Medicine 212 S. Salem Street Apex, NC</p>	<p>919-362-5201 Appointment Line</p>	<p>Mon-Fri 8am-5pm</p>	<p>Sliding fee based upon household size and income Accepts private insurance, Medicare & Medicaid, NC Health Choice, Uninsured</p>	<p>~ General primary care, newborns to seniors ~ Support services for behavioral health/substance abuse ~ Nutrition counseling and diabetes education ~ Provide discounts for uninsured, assistance program for prescriptions ~ On site lab</p>
<p>New Bern Ridge Pediatrics and Dental Center</p>	<p>Pediatrics: 919-231-3180 Dental: 919-250-2930</p>	<p>Pediatrics: 7:30 am-5 pm Dental Mon-Thur 8 am-6 pm</p>	<p>Sliding fee based upon household size and income Accepts private insurance, Medicare & Medicaid, NC Health Choice, Uninsured</p>	<p>~ General pediatric primary care for ages 0-18 ~ Children's dental care for ages 0-18 ~ Well-child visit services including: developmental screenings, diagnostic tests, family planning, immunizations, physicals ~ Provide discounts for uninsured, assistance program for prescriptions</p>
<p>Rock Quarry Family Medicine 1001 Rock Quarry Road Raleigh, NC</p>	<p>919-833-3111; option 1 Appointment Line</p>	<p>Mon-Fri 7 am-6 pm</p>	<p>Sliding fee based upon household size and income Accepts private insurance, Medicare & Medicaid ,NC</p>	<p>~ General primary care, primarily adults ~ Support services for behavioral health/substance abuse ~ Nutrition counseling and diabetes education ~ Provide discounts for uninsured, assistance program for prescriptions</p>

			Health Choice, Uninsured	~Horizon Healthcare for the Homeless program ~ On site lab
Southern Wake Family Medicine 130 N. Judd Parkway NE Fuquay-Varina, NC	919-557-1110 Appointment Line	Mon-Fri: 8:30am- 5pm	Sliding fee based upon household size and income Accepts private insurance, Medicare & Medicaid, NC Health Choice, Uninsured	~ General primary care, newborns to seniors ~ Referrals to other Wake Health Services sites for behavioral health/substance abuse, nutrition counseling, diabetes education ~ Provide discounts for uninsured, assistance program for prescriptions
Horizon Healthcare for the Homeless program Mon-Fri 7 am-6 pm 1001 Rock Quarry Road, Raleigh NC	919-833-3111	Mon-Fri 7 am-6 pm	Sliding fee based upon household size and income	~ General primary care, primarily adults ~ Support services for behavioral health/substance abuse ~ Nutrition counseling and diabetes education ~ Provide discounts for uninsured, assistance program for prescriptions ~ On site lab



Organizaciones asociadas con CCC y guía de elegibilidad				
Servicios de salud primaria de bajo costo en el condado de Wake				
Clinica	Numero de teléfono	Horas de operación	Opciones de pago	Información general
Alliance Behavioral Health www.alliancebhnc.org	800-510-9132	24 Horas al día; 365 Días al año	Consultas por teléfono son gratis	~Servicios disponibles a residentes del condado de Wake ~Disponible a residentes que son indigentes, sin seguro médico o con poco seguro médico con necesidades de ayuda de salud mental, incapacidad de crecimiento o abuso de sustancias ~Llamadas son atendidas por profesionales calificados y son referidos a recursos médicos públicos
Alliance Medical Ministry 101 Donald Ross Drive Raleigh, NC 27610 www.alliancemedicalministry.org	919-250-3320	Lunes- Viernes 8-5 Cerrado 12-1 Sábado: 9-12 (solo pacientes establecidos son elegibles para citas los Sábados).	Pacientes no pueden tener seguro médico de ningún tipo. Para determinar la cuota se utiliza una escala proporcional según ingresos del hogar	~El paciente / un familiar inmediato en el hogar debe de tener un empleo. ~Servicios son dados a adultos del condado de Wake. ~Servicios no son disponibles a mujeres embarazadas o niños. ~Cuidado urgente disponible para enfermedades menores (ej. resfriado, dolor de garganta)
Mariam Clinic 3128 Blue Ridge Road Raleigh, NC 27607 www.mariamclinic.org	919-824-4672	Admin: Lunes-Viernes 9-4 Clínica: Domingo 1-5 solo con cita. Nuevos pacientes deben llamar los Jueves entre 5-8pm y dejar un mensaje en la contestadora.	Pacientes no pueden tener seguro médico. Elegibilidad para servicios basada en ingresos (200% of FPL) No hay cargos por servicios; No obstante, donaciones son bienvenidas	~ El paciente / un familiar inmediato en el hogar debe de tener un empleo. ~Servicios son dados a adultos del condado de Wake. ~Servicios no son disponibles a mujeres embarazadas o niños.
Open Door Clinic (Urban Ministries of Wake County) 1390 Capital Blvd Raleigh, NC 27604 www.urbanmin.org	919-832-0820	Lunes- Jueves: 9-9 Solo con cita Deben llamar a hacer una cita de elegibilidad	Pacientes no pueden tener seguro médico de ningún tipo. Elegibilidad para servicios es basada en ingresos (185% of FPL) \$15 pago en todas las visitas médicas	~Servicios disponibles para adultos (no embarazados) en el condado de Wake ~Servicios de especialista incluyen podología, oftalmología para pacientes con diabetes. ~Servicios incluyen cuidado primario, preventivo, servicios de laboratorio y farmacia local para medicamento inicial y continuo. ~Otros servicios diagnósticos son referidos a otro lugar.
People's Medical Care 5720 Creedmoor Road, Suite 200 Raleigh, NC 27612 www.nciap.org	919-277-0345	Lunes- Viernes: 9-5 Pacientes sin cita son recibidos; pero hacer una cita es recomendado.	Pacientes no pueden tener seguro médico de ningún tipo. La mayoría de visitas regulares son \$45 \$10/ Laboratorio básico \$75/ Físico	~Tratamiento y manejo de la mayoría de enfermedades/maleas crónicas/grave ~Cuidado preventivo incluyendo cuidado para mujeres, geriátricas, vacunas para la influenza y más.
Shepherd's Care Medical Clinic 304 B Pony Road Zebulon, NC 27967 www.shepherdcareclinic.com	919-404-2474	Horas clínicas: Martes 9:30am-1:30pm y 6:30pm-9pm Horas de oficina: Lunes, martes y Jueves 8am-3pm; Miércoles. 8am-12pm	Servicios son gratis si cae dentro de 200% FPL	~ Cuidado para personas de 18-64 años residentes del área este del condado de Wake. También los condados de Johnston, Nash y Franklin ~Enfermedades crónicas ~No hay servicios de ginecología ~Educación de diabetes, especialista de asma/alergias y cardiólogos ~Asistencia de recetas para pacientes

<p>SouthLight, Inc. 3125 Poplarwood Court, Suite 203 Raleigh, NC 27604 www.southlight.org</p>	<p>919-787-6131 (Oficina corporativa)</p>	<p>Programas de tratamiento en varias locaciones Lunes- Viernes: 6am-9pm Horas adicionales los fines de semana.</p>	<p>Costo es basado en una escala proporcional según ingresos. Aceptan seguro médico privado, Medicaid y pagos privados.</p>	<p>~Servicios de abuso de sustancias y/o salud mental para todos los residentes del condado de Wake, de 12 años en adelante ~Servicio de tratamiento ambulatorio disponible en las siguientes locaciones: -1012 Oberlin Rd, Ste 300, Raleigh, NC 27605 -12 W. Martin St, Ste 809, Raleigh, NC 27601 -2101 Garner Rd, Raleigh, NC 27610</p>
<p>Wake County Human Services www.wakegov.com/humanservices.com</p>				
<p>Eastern Regional Center 1002 Dogwood Drive Zebulon, NC 27597 Northern Regional Center 320 E. Holding Avenue Wake Forest, NC 27587 Southern Regional Center 103 N. Judd Parkway NE Fuquay-Varina, NC 27526</p>	<p>919-404-4011 919-562-6338 919-557-2501</p>	<p>Lunes: 8am-5:15pm Martes y Miércoles: 8am-7pm Jueves y Viernes: 8am-5:15pm</p>	<p>Costo basado en una escala proporcional según ingresos del hogar Acepta Medicaid</p>	<p>~Servicios de salud para mujeres y clínica de ETS (enfermedades de Transmisión Sexual) ~ Servicios para mujeres sin seguro médico en edad reproductiva para planeo familiar y bienestar de salud. ~ Citas son requeridas: Sin cita depende en la disponibilidad del doctor. ~Clínica para jóvenes: Clínica sin cita; debe estar presente antes de las 3pm para registrarse.</p>
<p>Raleigh 10 Sunnybrook Road Raleigh, NC</p>	<p>Clínica A 919-250-4410</p>	<p>Lunes, Jueves, Viernes: 8:30am-5:15pm Martes: 9:30am-5:15pm Miércoles: 8:30am-7:30pm</p>	<p>No hay cargos por servicios. Acepta Medicaid.</p>	<p>~Clínica A: ETS: servicios para personas mayores de 12 años pidiendo servicios de ETS. ~Clínica A de salud pública: VIH: enfoque en residentes del condado de Wake con infección de VIH</p>
<p>Wake Health Services, Inc www.whsi.org</p>				
<p>Apex Family Medicine 212 S. Salem Street Apex, NC</p>	<p>919-362-5201 Línea de citas</p>	<p>Lunes, Martes, Jueves, Viernes: 8am-5:15pm Miércoles: 8am-6pm</p>	<p>Costo basado en una escala proporcional según ingresos del hogar Acepta seguro privado, Medicaid y Medicare</p>	<p>~ Servicios no disponibles a mujeres embarazadas.</p>
<p>Horizon Health Center (Clínica para indigentes) 1001 Rock Quarry Road, Raleigh, NC</p>	<p>919-743-3315 Línea de citas</p>	<p>Lunes, Miércoles, Jueves, Viernes: 8am-5pm Martes: 8am-6pm</p>	<p>Costo basado en una escala proporcional según ingresos del hogar Acepta seguro privado, Medicaid y Medicare</p>	<p>~Debe ser indigente para poder recibir servicios en esta clínica.</p>
<p>Rock Quarry Family Medicine 1001 Rock Quarry Road Raleigh, NC</p>	<p>919-833-3111; option 1 Línea de citas</p>	<p>Lunes, Miércoles, Jueves, Viernes: 7am-5pm Martes: 7am-6:15pm</p>	<p>Costo basado en una escala proporcional según ingresos del hogar Acepta seguro privado, Medicaid y Medicare</p>	<p>~ Servicios no disponibles a mujeres embarazadas.</p>
<p>Southern Wake Family Medicine 130 N. Judd Parkway NE Fuquay-Varina, NC</p>	<p>919-557-1110 Línea de citas</p>	<p>Lunes- Viernes: 8:30am-5:00pm</p>	<p>Costo basado en una escala proporcional según ingresos del hogar Acepta seguro privado, Medicaid y Medicare</p>	<p>~ Servicios no disponibles a mujeres embarazadas.</p>

APPENDIX C: EXISTING DATA SOURCES

2013 Wake County Community Health Assessment



Appendix C: Existing Data Sources and Indicators

- Source: North Carolina Institute of Public Health
 - For questions or methods, contact Kasey Decosimo at Kasey_Decosimo@unc.edu.
- For information about methods, see the [2013 Wake County Community Health Assessment report](#)



Category	Indicator	Data Measure, Year	Data Source
Demographic and Socioeconomic Data			
Population Characteristics	<ul style="list-style-type: none"> • General Population Characteristics • Race and Ethnicity • Age and Gender • Households • Older Adults • Non-Native Populations • Other Special Populations 	<ul style="list-style-type: none"> • General Demographic Characteristics (2010) • Decadal Population Growth (1980-2030 Projected) • Birth Rate Trend, Live Births per 1,000 Total Population (Five-year Aggregate Periods, 2002-2006 through 2006-2010) • Decadal Population Density (1980-2030 Projected) • Population by Township and Incorporated Municipalities (2010) • Population Distribution by Race/Ethnicity (2010) • Population by Race/Ethnicity, by Township (2010) • Population Distribution by Age and Gender, Number and Percent (2010) • Population by Age, by Township (2010) • Growth Trend for Elderly (Age 65 and Older) Population, by Decade, 2000 through 2030 • Growth of the Foreign-born Population (1980-2010) • Household Language by Linguistic Isolation (2009 5-Year estimate) • Latino/Hispanic and Overall Population: Distribution by Age (2010) • Veteran Status of Population (Five-Year Estimate, 	<ul style="list-style-type: none"> • US Census Bureau, American Fact Finder, 2010 Census, Summary File DP-1, 2010 Demographic Profile Data, Profile of General Population and Housing Characteristics: 2010 • Log Into North Carolina (LINC) Database, Topic Group Population and Housing, Total Population, Population (Data Item 5001) • NC State Center for Health Statistics, Health Data, County Level Data, County Health Databooks 2008, 2009, 2010, 2011, 2012, 2013 • Log Into North Carolina (LINC) Database, Topic Group Population and Housing, Total Population, Population Density (Data Item 5004) • US Census Bureau, American FactFinder. Profile of General Demographic Characteristics: 2000 (DP-1), SF1 • NC Office of State Budget and Management, County/State Population Projections. Age, Race, and Sex Projections, Age Groups - Total, July 1, 2020 County Total Age Groups – Standard • US Census Bureau, American Fact Finder, 2011 ACS 5-Year Estimates, Table B05005: Year of Entry by Citizenship Status in the United States • US Census Bureau, American Fact Finder, Table B16002: Household Language by Linguistic Isolation, 2009 American Community Survey 5-Year Estimates. • US Census Bureau, American Fact Finder. Veteran

		<ul style="list-style-type: none"> Special Populations (2011) 	<ul style="list-style-type: none"> Estimate. Table S2101: Veteran Status Log into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 520)
<p><i>Government and Civic Participation</i></p>	<ul style="list-style-type: none"> Local Government Civic Engagement 	<ul style="list-style-type: none"> Registered Voters, by Race/Ethnicity, Number and Percent (as of 12/29/2012) Voter Turnout in General Elections (2004-2012) 	<ul style="list-style-type: none"> Log into North Carolina (LINC) Database, Topic Group Government, Voters and Elections, Voting Age Population (Data Item 1714), 2012 NC State Board of Elections, Voter Registration, Voter Statistics, Voter Registration Statistics, By County NC State Board of Elections, Elections Central, Elections Results Data (2004-2012): General Elections
<p><i>Economic Climate</i></p>	<ul style="list-style-type: none"> Income Employment Unemployment Poverty Housing Homeless County Revenue Indicators 	<ul style="list-style-type: none"> Income (2011) Insured Employment and Wages by Sector: Regional Comparison (3rd Quarter, 2012) Top 25 Employers (3rd Quarter 2011) Place of Work for Resident Workers Age 18 and Older (2011) Modes of Transportation to Work (2000 and 2011 Estimates) Annual Unemployment Rate (2000-2012) Active Job Applicants Registered to Work with the NC Employment Security Commission (January 2010-January 2011) Announced Business Closings and Layoffs (2012) Decadal Annual Poverty Rate (1970-2011) Persons in Poverty, Number and Percent, by Race by Decade (1980-2010) and 2011 Estimate Persons in Poverty, by Percent, by Age by Decade (1980-2010) and 2011 Estimate Children Receiving Free or Reduced-price School Lunch (2006-2012) Number of Children Receiving WorkFirst Working Connections Child Care Subsidy (2005-2010) Housing by Type (US Census, 2000 and 2010) Housing Cost as Percentage of Household Income (Two 5-Year Estimates, 2005-2009 and 2006-2010) Household Characteristics (2010) 	<ul style="list-style-type: none"> NC Dept of Commerce, AccessNC, Community Demographics, County Report, County Profile NC Employment Security Commission, Labor Market Information, Industry Information. Employment and Wages Data by Industry, 2012 Quarter 3 NC Dept of Commerce, Economic Intelligence Development System (EDIS), Business Data, Top Employers, by County US Census Bureau, American Fact Finder, 2011 ACS 5-Year Estimate, Table B08007: Sex of Workers by Place of Work, State and County Level NC Employment Security Commission, Labor Market Information, Workforce Information, Employed, Unemployed and Unemployment Rates, Labor Force Statistics, Single Areas for All Years NC Employment Security Commission, Labor Market Information, Workforce Information, Job Applicants Registered for Work with ESC Offices NC Employment Security Commission, Labor Market Information Division, Workforce Information, Business Closings and Permanent Layoffs Log into North Carolina (LINC) Database, Topic Group Employment and Income (Data Item 6094) US Census Bureau, American Fact Finder, American Community Survey, 2011 American Community Survey 5-Year Estimates, Data Profiles, County, North Carolina NC Department of Instruction, Data & Statistics, Other Education Data: Select Financial Data, Free and Reduced Meals Application Data Annie E. Casey Foundation, Kids Count Data Center,

		<ul style="list-style-type: none"> • Economic Services Provided by Wake County Department of Social Services (2006-2012) • Results of Annual Point-in Time Census of Homeless (2007-2012) • County Revenue (2006-2012) 	<ul style="list-style-type: none"> • Community Level Data, North Carolina Indicators • US Census Bureau, American FactFinder, 2000 and 2010, US Census • US Census Bureau, American FactFinder, 2000 US Census, Summary File 3 (SF-3), 100-Percent Data, Table H091, Median Selected Monthly Owner Costs (Dollars) for Specified Owner-Occupied Housing Units by Mortgage Status • US Census Bureau, American FactFinder. 2009 ACS 5-Year Estimates. Table DP04: Selected Housing Characteristics • US Census Bureau, American FactFinder, 2010 Census, 2010 Demographic Profile Data, Summary File DP-1, Profile of General Population and Housing Characteristics • Duncan, D.F., Kum, H.C., Flair, K.A., Stewart, C.J., Vaughn, J., Bauer, R., and You, A. (2012). Management Assistance for Child Welfare, Work First, and Food & Nutrition Services in North Carolina. Retrieved February 20, 2013, from University of North Carolina at Chapel Hill Jordan Institute for Families website. • North Carolina Coalition to End Homelessness, Practice, Point-in-Time Count Data, Continuum of Care: Raleigh/Wake County 2012. • NC Department of Revenue, Information for Individuals, Tax Publications and Reports, State Sales and Use Tax Reports by Fiscal Year • Marcus Kinrade, Wake County Revenue Director, February 18, 2013.
<p><i>Children and Families</i></p>	<ul style="list-style-type: none"> • Single-Parent Families • Family Services Utilization • Child Care • Child Welfare 	<ul style="list-style-type: none"> • Single Parent Families (2000 and 2010) • Grandparents Responsible for Children (Five-Year Estimate, 2007-2011) • NC-Regulated Child Care Facilities (as of 3-7-2013) • Children Enrolled in NC-Regulated Child Care (2008-2011) 	<ul style="list-style-type: none"> • Log Into North Carolina (LINC) Database, Topic Group Population and Housing (Data Items 6044, 6046, 6048, 6049, 6050, 6051), 2000 and 2010 • US Census Bureau, American FactFinder, 2007-2011 American Community Survey 5-Year Estimates. Selected Social Characteristics in the United States (DP02) • NC Department of Health and Human Services, Division of Child Development, Child Care Facility Search Site • Annie E. Casey Foundation, Kids Count Data Center, Community Level Data, North Carolina Indicators

<p><i>Education</i></p>	<ul style="list-style-type: none"> • Schools and School Enrollment • Educational Attainment and Investment • High School Dropout Rate • Crime and Violence in Schools 	<ul style="list-style-type: none"> • K-12 Public School Enrollment (2004-2012) • Number of Schools (SY2011-12) • Educational Attainment and Investment (2011-2012) • High School (Grades 9-12) Drop-Out Rate (2004-2012) • Four-Year Cohort High School Graduation Rate (2008-09 Entering 9th Graders Graduating in 2011-12 or Earlier) • School Crime and Violence, All Grades (2004-2012) • School Disciplinary Activity, All Grades (2007-2012) 	<ul style="list-style-type: none"> • NC Department of Public Instruction, Data and Statistics, Education Data: NC Statistical Profile. NC Statistical Profile Online: Local Education Agencies Information, Pupil Accounting. Initial Enrollment. • NC Department of Administration, Conventional Non-Public Schools, 2011-12 Directory of Schools by County • US Census Bureau, American Fact Finder, American Community Survey, 2005-2009 American Community Survey (ACS) 5-Year Estimates, Data Profiles, Detailed Tables, Selected Social Characteristics, Educational Attainment, by State or County • NC Department of Public Instruction, Data and Statistics, Education Data, NC School Report Cards. District Profile. • NC Dept of Public Instruction, Research and Evaluation, Dropout Data and Collection Process, Annual Dropout Reports • Public Schools of North Carolina, Cohort Graduation Rate. 4-Year Cohort Graduation Rate Report, 2008-09 Entering 9th Graders Graduating in 2011-12 or Earlier. • NC Department of Public Instruction, Research and Evaluation, Discipline Data, Annual Reports, Annual Reports of School Crime and Violence • NC Department of Public Instruction, Research and Evaluation, Discipline Data, Consolidated Data Reports
<p><i>Crime and Safety</i></p>	<ul style="list-style-type: none"> • Crime Rates • Other Criminal Activity • Juvenile Crime • Sexual Assault and Domestic Violence • Child Abuse, Neglect and Exploitation • Adult Abuse, Neglect and 	<ul style="list-style-type: none"> • Crime Rates (2006-2011) • Index Crimes Reported, Wake County (2006-2010) • Other Criminal Activity (2006-2012) • Juvenile Justice Complaints and Outcomes (2010 and 2011) • Sexual Assault Trend (FY2004-05 through FY2010-11) • Sexual Assault Complaint Details (FY2010-11) • Domestic Violence Trend (FY2004-05 through FY2010-11) • Domestic Violence Complaint Details, by Services Received (FY2010-11) 	<ul style="list-style-type: none"> • NC Department of Justice, State Bureau of Investigation, Crime, View Crime Statistics, Crime Statistics (by Year) • NC State Bureau of Investigation, Crime in North Carolina, North Carolina Crime Statistics, Crime Statistics in Detailed Reports (By Year), 2011 Annual Reports, County Offenses Ten Year Trend • NC Department of Justice, Sex Offender Statistics, Offender Statistics • NC Department of Justice, State Bureau of Investigation, Crime, Enforce Drug Laws, Meth Focus, Meth Lab Busts • NC Department of Juvenile Justice and Delinquency Prevention, Statistics and Legislative Reports, County Databooks

	Exploitation	<ul style="list-style-type: none"> Wake County Reports of Child Abuse and Neglect (FY2004-05 through FY2011-12) Point in Time Findings of Child Abuse and Neglect (FY2011-12) Children Entering Child Welfare Custody (2007-2012) County DSS Adult Protective Services Data on Adult Abuse, Neglect or Exploitation (2004-2011) 	<ul style="list-style-type: none"> NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, County Statistics Child Welfare, Reports of Abuse and Neglect section, Reports of Abuse and Neglect Type of Finding/Decision Tina Hudson, Data Analyst for Wake County, February 20, 2013. Wake County Department of Human Services, Senior and Adult Services. Accessed February 21, 2013.
Health Care and Health Promotion Resources and Access			
<i>Medical Insurance</i>	<ul style="list-style-type: none"> Health Care Coverage (under 65) Medically Indigent Population Medicaid Medicare 	<ul style="list-style-type: none"> Percent of Population without Health Insurance, by Age Group (2006-2007 through 2010-2011) NC Health Choice (NHC) Enrollment (2007-2012) Medicaid Eligibility and Expenditures (FY2007-FY2010) Participation in Health Check (EPSDT) (FY2006-07 through FY2010-11) Community Care of NC/Carolina ACCESS Enrollment, Biennial Counts (2007-2011) Medicare/Medicaid Dual Enrollment (2007 - 2008) 	<ul style="list-style-type: none"> North Carolina Institute of Medicine, NC Health Data, Uninsured Snapshots, North Carolina County-Level Estimates of the Uninsured NC Division of Medical Assistance, Statistics and Reports, Medicaid Data, County-Specific Snapshots for NC Medicaid Services, (2008-2010) NC Division of Medical Assistance, Statistics and Reports, Medicaid Data, County-Specific Snapshots for NC Medicaid Services, (2006-2010) NC Division of Medical Assistance, Statistics and Reports, Health Check Participation Data NC Division of Medical Assistance, Statistics and Reports, Medicaid Data, County-Specific Snapshots for NC Medicaid Services, (2006-2010) NC Division of Medical Assistance, Statistics and Reports, Medicaid Data, County Specific Snapshots for NC Medicaid Services
<i>Practitioners</i>	<ul style="list-style-type: none"> Provider per Population Ratios Health Professional Census and Comparison to Target Provider "Benchmarks" 	<ul style="list-style-type: none"> Active Health Professionals per 10,000 Population (2008 through 2011) Active Health Professionals (2011) Dentists Who Accept Medicaid/Health Choice Clients (List as of March 12, 2013) Number of General Hospital Beds (2004-2010) Number of Nursing Facility Beds (2005-2011) 	<ul style="list-style-type: none"> Cecil G. Sheps Center for Health Services Research, North Carolina Health Professions Data System, North Carolina Health Professions Data Books, Table 14 (2008, 2009, 2010) Cecil G. Sheps Center for Health Services Research, North Carolina Health Professions Data System. Publications. 2011 North Carolina Health Professions Databook NC Division of Medical Assistance, Medicaid, Find a Doctor, NC Medicaid and NC Health Choice Dental Provider Lists Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health

<i>Hospitals</i>	<ul style="list-style-type: none"> Hospital Utilization Data (inpatient, surgery) Emergency Department Utilization 	<ul style="list-style-type: none"> Number Emergency Department Patients by Race, Gender, and Age Groups (2010-2012) Number In-Patient Discharges by Race, Gender, and Age Groups (2010-2012) Number of Surgery Cases by Race, Gender, and Age Groups (2010-2012) 	<ul style="list-style-type: none"> Truven Health Analytics, prepared by WakeMed Health and Hospitals, 2013.
<i>Emergency Medical Services Utilization</i>	<ul style="list-style-type: none"> Annual Calls/Services Summary 	<ul style="list-style-type: none"> Fire and Rescue Departments Summary of Services Delivered By County Emergency Medical Services (FY2007-08 through FY2010-11) Summary of Services Delivered by Raleigh-Wake Emergency Communications Center (2010, 2011) 	<ul style="list-style-type: none"> Wake County Fire Services, Contact list Wake County EMS PCR System Raleigh-Wake Emergency Communications 2011 Annual Report
<i>County Department of Public Health</i>	<ul style="list-style-type: none"> Service Utilization Data Description of Programs and Services 	<ul style="list-style-type: none"> County Health Department Outcomes and Services, FY2010-2012 	<ul style="list-style-type: none"> Wake County Human Service Patient Management System Laboratory Program Tracking Database Health Service Information System (HSIS)
<i>Other Health Care Facilities (including Federally-Qualified Health Centers)</i>	<ul style="list-style-type: none"> Description of Programs and Services 	<ul style="list-style-type: none"> Federally Qualified Health Centers in Wake County Utilization/Data Services Delivered by Wake Health Services, Inc. (2008-2011) Licensed Hospitals, Hospices and Home Health Facilities (April 2013) Licensed Hospice Facilities in Wake County (April 2013) Licensed Home Health Only Facilities in Wake County (April 2013) Wake County Home Health and Hospice Service Utilization Data, FY2005-2011 	<ul style="list-style-type: none"> North Carolina Community Health Center Association. Wake Health Services, Inc. 2008, 2009, 2010, 2011 Uniform Data System reports. NC Department of Health and Human Services, Division of Health Services Regulation (DHRS), Licensed Facilities, Hospitals (by County) Projected Needs for home health and hospice are based on the state medical facilities planning section need methodology and published in the annual State Medical Facilities Plan, chapters 12 and 13.
<i>School Health</i>	<ul style="list-style-type: none"> Student to School Nurse Ratio School Nurse Activity Summary 	<ul style="list-style-type: none"> School Student to Nurse Ratio (SY2009-10 & SY2010-2011) School Based Public Health 2011-2012 Data 	<ul style="list-style-type: none"> NC DHHS, DPH, Women's and Children's Health, Facts & Figures, Data Reports & Publications. Annual School Health Services Reports, End-of-Year-Reports Wake County Human Services. Quarterly Report Workbook 2011-2012
<i>Long-Term Care Facilities (list of facilities, numbers of beds/capacities,</i>	<ul style="list-style-type: none"> Nursing Homes Adult Care Homes Adult Day Care/Adult Day Health Centers 	<ul style="list-style-type: none"> NC-Licensed Adult Care Facilities (As of April 2013) In-Home Aide Services Provided by County Department of Social Services (2008-2012) 	<ul style="list-style-type: none"> NC Department of Health and Human Services, Division of Health Services Regulation (DHRS), Licensed Facilities, Adult Care Homes, Family Care Homes, Nursing Facilities (by County)

certifications)	<ul style="list-style-type: none"> • Alternatives to Institutional Care 		<ul style="list-style-type: none"> • Resources for Seniors
Health Statistics			
<i>Health Rankings</i>	<ul style="list-style-type: none"> • County health rankings compared to NC, Mecklenburg, HP 2020 	<ul style="list-style-type: none"> • America's Health Rankings (2011) • County Health Rankings (2012) 	<ul style="list-style-type: none"> • United Health Foundation (2011). America's Health Rankings • County Health Rankings and Roadmaps (2012). University of Wisconsin Population Health Institute
<i>Maternal and Infant Health</i>	<ul style="list-style-type: none"> • Pregnancy and Birth Rates • Teen Pregnancy • Pregnancy Risk Factors • Pregnancy Outcomes • Infant Mortality and Low Birthweight • Access to Prenatal Care 	<ul style="list-style-type: none"> • Pregnancy, Fertility and Abortion Rate Trend (2005-2011) • Adolescent (Age 14 and Younger) Pregnancies Trend (Single Years, 2003-2011) • Teen (Ages 15-19) Pregnancies Trend (Single Years, 2003-2011) • High Parity/Short Interval Births (Single Five-Year Aggregate Period, 2007-2011) • Smoking During Pregnancy Trend (Single Years, 2005-2011) • Prenatal Care Trend (Single Years, 2005-2011) • Low (< 2,500 Grams) Birth Weight Births Trend, by Race/Ethnicity (Five-Year Aggregate Periods, 2006-2010 and 2007-2011) • Very Low (≤ 1,500 Grams) Birth Weight Births Trend, by Race/Ethnicity (Five-Year Aggregate Periods, 2006-2010 and 2007-2011) • Infant Mortality Trend (Five-Year Aggregate Periods, 2001-2005 through 2007-2011) • Infant Mortality Rates by Zipcode (2007-2011) 	<ul style="list-style-type: none"> • NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2013): Pregnancy and Live Births • NC State Center for Health Statistics, North Carolina health Data Query System. Pregnancy Data (2003-2011). North Carolina Reported Pregnancy Data • NC State Center for Health Statistics, County-level Data, County Health Data Book (2013): Pregnancy and Births, 2007-2011 • NC State Center for Health Statistics, Vital Statistics, Volume 1 (2005, 2006, 2007,-2008, 2009, 2010, and 2011): Population, Births, Deaths, Marriages, Divorces, Mother Smoked • NC State Center for Health Statistics, Basic Automated Birth Yearbook (BABY Book), North Carolina Residents (2005, 2006, 2007,-2008, 2009, 2010, and 2011): County Resident Births by Month Prenatal Care Began, All Women • NC State Center for Health Statistics, County-level Data, County Health Data Books (2012 and 2013), Pregnancy and Births, Low and Very Low Weight Births, Black Births • NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2013), Mortality, Infant Death Rates per 1,000 Live Births • NC State Center for Health Statistics
<i>Leading Causes of Death</i>	<ul style="list-style-type: none"> • Mortality Rate Comparisons • Gender, Racial, and Age Disparities in Mortality 	<ul style="list-style-type: none"> • Overall Age-Adjusted Mortality Rates for the 15 Leading Causes of Death (Single Five-Year Aggregate Period, 2007-2011) • Sex-Specific Age-Adjusted Death Rates for the 15 Leading Causes of Death (Five-Year Aggregate Data, 2007-2011) • Race-Specific Age-Adjusted Death Rates for the 15 	<ul style="list-style-type: none"> • NC State Center for Health Statistics, County Health Data Book (2013), Mortality (2007-2011): Race-Sex-Specific Age- Adjusted Death Rates by County • National Center for Health Statistics, National Vital Statistics Reports, Volume 61, Number 6 (October 10, 2012): Deaths, Preliminary data for 2011 • NC State Center for Health Statistics, County Health

	<ul style="list-style-type: none"> • Cancer • Heart Disease • Pneumonia and Influenza • Cerebrovascular Disease • Chronic Lower Respiratory Disease • Unintentional Non-Motor Vehicle Injury • Alzheimer's Disease • Diabetes Mellitus • Kidney Disease • Septicemia • Suicide • Unintentional Motor Vehicle Injury • Chronic Liver Disease and Cirrhosis 	<p>Leading Causes of Death (Five-Year Aggregate Data, 2007-2011)</p> <ul style="list-style-type: none"> • Three Leading Causes of Death by Age Group, Number of Deaths and Unadjusted Death Rates (Five-Year Aggregate Data, 2007-2011) <p>Cancer</p> <ul style="list-style-type: none"> • Malignant Neoplasms Discharge Rate Trend (Single Years, 2005-2011) • Total Cancer Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) • Overall Total Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) • Gender and Racial Disparities in Total Cancer Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) • Gender Disparity Trend in Total Cancer Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) • Mortality Rate for Total Cancer and the Five Major Site-Specific Cancers, Cases and Rate (Single Five Year Aggregate Period, 2007-2011) • Incidence of Total Cancer and the Five Major Site-Specific Cancers, Cases and Rate (Single Five Year Aggregate Period, 2006-2010) • Total Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1995-1999 through 2006-2010) • Trachea, Bronchus, Lung Neoplasms Discharge Rate Trend (Single Years, 2005-2011) • Lung Cancer Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) • Lung Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) • Gender and Racial Disparities in Lung Cancer Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) • Gender Disparity Trend in Lung Cancer Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) • Lung Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1995-1999 through 2006-2010) • Prostate Neoplasm Discharge Rate Trend (Single Years, 2005-2011) • Prostate Cancer Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) • Prostate Cancer Mortality Rate Trend (Five-Year 	<p>Data Book (2013), Mortality (2007-2011): Race-Specific and Sex-Specific Age-Adjusted Death Rates by County</p> <ul style="list-style-type: none"> • NC State Center for Health Statistics, County Health Data Book (2013), Mortality (2007-2011): Race-Specific and Sex-Specific Age-Adjusted Death Rates by County • NC State Center for Health Statistics, County Health Data Book (2013), Mortality, Death Counts and Crude Death Rates per 100,000 for Leading Causes of Death, by Age Groups, NC (2007-2011) • NC State Center for Health Statistics, County-level Data, County Health Data Book (2013), Mortality (2007-2011): NC • NC State Center for Health Statistics, County Health Data Books (2006-2013), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County • NC State Center for Health Statistics, County-level Data, County Health Data Book (2013), (2007-2011): NC Resident Race/Ethnicity and Sex-Specific Age-Adjusted Death Rates • NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013): Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence • NC State Center for Health Statistics, County Health Data Books (2006-2013): Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County <p>Cancer</p> <ul style="list-style-type: none"> • NC State Center for Health Statistics, County-level Data, County Health Data Book (2013), (2006-2010): NC Cancer Incidence Rates per 100,000 Population Age-Adjusted to the 2000 US Population • NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site • NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013): Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of
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		<p>Aggregate Periods, 2000-2004 through 2007-2011)</p> <ul style="list-style-type: none"> • Racial Disparities in Prostate Cancer Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) • Prostate Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1995-1999 through 2006-2010) • Breast Neoplasm Discharge Rate Trend (Single Years, 2005-2011) • Breast Cancer Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) • Breast Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) • Racial Disparities in Breast Cancer Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) • Breast Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1995-1999 through 2006-2010) • Colon, Rectum, Anus Neoplasms Discharge Rate Trend (Single Years, 2005-2011) • Colon, Rectum, Anus Cancer Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) • Colon, Rectum, Anus Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) • Gender and Racial Disparities in Colon, Rectum, Anus Cancer Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) • Gender Disparity Trend in Colon, Rectum, Anus Cancer Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) • Colon, Rectum, Anus Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1995-1999 through 2006-2010) • Pancreas Cancer Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) • Pancreas Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) • Gender and Racial Disparities in Pancreas Cancer Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) • Gender Disparity Trend in Pancreas Cancer Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) 	<p>Residence</p> <ul style="list-style-type: none"> • NC State Center for Health Statistics, County-level Data, County Health Data Book (2013), Mortality (2007-2011): NC Resident Race/Ethnicity and Sex-Specific Age-Adjusted Death Rates, by County • NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2013): Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County • NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site <p>Heart Disease</p> <ul style="list-style-type: none"> • NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013): Morbidity, Inpatient • NC State Center for Health Statistics, County Health Data Book (2013), Mortality (2007-2011): Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County • NC State Center for Health Statistics, County Health Data Books (2006-2013): Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County <p>Cerebrovascular Disease</p> <ul style="list-style-type: none"> • NC State Center for Health Statistics, County Health Data Books (2006-2013): Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County • NC State Center for Health Statistics, County-level Data, County Health Data Book (2013), Mortality, (2007-2011): NC Resident Race/Ethnicity and Sex-Specific Age-Adjusted Death Rates, by County <p>CLRD/COPD</p> <ul style="list-style-type: none"> • NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013): Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence • NC State Center for Health Statistics, County Health Data Book (2013), Mortality, (2007-2011): Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County
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		<p><i>Heart Disease</i></p> <ul style="list-style-type: none"> Heart Disease Discharge Rate Trend (Single Years, 2005-2011) Heart Disease Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) Overall Heart Disease Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) Gender and Racial Disparities in Heart Disease Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) Gender Disparity Trend in Heart Disease Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) <p><i>Cerebrovascular Disease</i></p> <ul style="list-style-type: none"> Cerebrovascular Disease Discharge Rate Trend (Single Years, 2005-2011) Cerebrovascular Disease Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) Cerebrovascular Disease Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) Gender and Racial Disparities in Cerebrovascular Disease Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) Gender Disparity Trend in Cerebrovascular Disease Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) <p><i>CLRD/COPD</i></p> <ul style="list-style-type: none"> CLRD/COPD Discharge Rate Trend (Single Years, 2005-2011) CLRD/COPD Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) CLRD/COPD Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) Gender and Racial Disparities in CLRD/COPD Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) Gender Disparity Trend in CLRD/COPD Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) <p><i>Alzheimer's Disease</i></p> <ul style="list-style-type: none"> Alzheimer's Disease Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) 	<ul style="list-style-type: none"> NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2013): Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County <p><i>Alzheimer's Disease</i></p> <ul style="list-style-type: none"> NC State Center for Health Statistics, County Health Data Book (2013), Mortality, (2007-2011): Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County NC State Center for Health Statistics, County Health Data Books (2006-2013): Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County NC State Center for Health Statistics, County-level Data, County Health Data Book (2013), Mortality, (2007-2011): NC Resident Race/Ethnicity and Sex-Specific Age-Adjusted Death Rates, by County <p><i>Unintentional Injuries</i></p> <ul style="list-style-type: none"> NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013): Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence NC State Center for Health Statistics, County Health Data Book (2013), Mortality, (2007-2011): Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2013): Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County <p><i>Diabetes</i></p> <ul style="list-style-type: none"> NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013): Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence NC State Center for Health Statistics, County Health Data Book (2013), Mortality, (2007-2011): Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2013): Mortality, NC Resident Race-Specific and Sex-
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		<p>Mortality Rate (Single Five-Year Aggregate Period, 2007-2011)</p> <ul style="list-style-type: none"> Gender Disparity Trend in Kidney Disease Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) <p><i>Pneumonia and Influenza</i></p> <ul style="list-style-type: none"> Pneumonia and Influenza Discharge Rate Trend (Single Years, 2005-2011) Pneumonia and Influenza Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) Pneumonia and Influenza Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) Gender and Racial Disparities in Pneumonia and Influenza Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) Gender Disparity Trend in Pneumonia and Influenza Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) <p><i>Septicemia</i></p> <ul style="list-style-type: none"> Septicemia Discharge Rate Trend (Single Years, 2005-2011) Septicemia Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) Septicemia Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) Gender and Racial Disparities in Septicemia Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) Gender Disparity Trend in Septicemia Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) <p><i>Suicide</i></p> <ul style="list-style-type: none"> Suicide Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) Suicide Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) Gender and Racial Disparities in Suicide Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) Gender Disparity Trend in Suicide Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) 	<ul style="list-style-type: none"> NC State Center for Health Statistics, County Health Data Book (2013), Mortality, (2007-2011): Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2013): Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County <p><i>Unintentional Motor Vehicle Injury</i></p> <ul style="list-style-type: none"> NC State Center for Health Statistics, County Health Data Book (2013), Mortality, (2007-2011): Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2013): Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County NC State Center for Health Statistics, County Health Databook (2013), Death Counts and Crude Death Rates per 100,000 Population for Leading Causes of Death, by Age Groups, NC(2007-2011) UNC Chapel Hill, Highway Safety Research Center. North Carolina Alcohol Facts (2006-2011) UNC Chapel Hill, Highway Safety Research Center. North Carolina Alcohol Facts, 2011 <p><i>Chronic Liver Disease/Cirrhosis</i></p> <ul style="list-style-type: none"> NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013): Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence NC State Center for Health Statistics, County Health Data Book (2013), Mortality, (2007-2011): Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2013): Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County <p><i>Homicide</i></p> <ul style="list-style-type: none"> NC State Center for Health Statistics, County Health Data Book (2013), Mortality, (2007-2011): Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County
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		<p><i>Unintentional Motor Vehicle Injury</i></p> <ul style="list-style-type: none"> • Unintentional Motor Vehicle Injury Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) • Unintentional Motor Vehicle Injury Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) • Gender and Racial Disparities in Unintentional Motor Vehicle Injury Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) • Gender Disparity Trend in Unintentional Motor Vehicle Injury Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) • Motor Vehicle Injury Mortality, Numbers and Rates, by Age (Five-Year Aggregate Period, 2007-2011) • Alcohol-Related Traffic Crashes Trend (Single Years, 2006-2011) • Outcomes of Alcohol-Related Traffic Crashes (2011) <p><i>Chronic Liver Disease/Cirrhosis</i></p> <ul style="list-style-type: none"> • Chronic Liver Disease/Cirrhosis Discharge Rate Trend (Single Years, 2005-2011) • Liver Disease Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) • Liver Disease Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) • Gender and Racial Disparities in Liver Disease Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) • Gender Disparity Trend in Liver Disease Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) <p><i>Homicide</i></p> <ul style="list-style-type: none"> • Homicide Mortality, by Race/Ethnicity and Sex (Single Five-Year Aggregate Period, 2007-2011) • Homicide Mortality Rate Trend (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) • Gender and Racial Disparities in Homicide Mortality Rate (Single Five-Year Aggregate Period, 2007-2011) • Gender Disparity Trend in Homicide Mortality Rate (Five-Year Aggregate Periods, 2000-2004 through 2007-2011) <p><i>AIDS Mortality</i></p> <ul style="list-style-type: none"> • AIDS Discharge Rate Trend (Single Years, 2005-2011) 	<ul style="list-style-type: none"> • NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2013): Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County <p><i>AIDS Mortality</i></p> <ul style="list-style-type: none"> • NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2013): Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence • NC State Center for Health Statistics, County Health Data Book (2013), Mortality, (2007-2011): Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County • NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2013): Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County
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Morbidity	<ul style="list-style-type: none"> Communicable Diseases and Sexually Transmitted Infections Chronic Disease 	<p><i>Communicable Diseases and Sexually Transmitted Infections</i></p> <ul style="list-style-type: none"> Notifiable Communicable Diseases, Wake County(2008-2012) Sexually Transmitted Infections, Wake County (2008-2012) Vaccine-Preventable Illnesses, Wake County (2008-2012) Foodborne Illnesses, Wake County (2008-2012) Tuberculosis, Wake County (2008-2012) Chlamydia Rates All Ages, Wake County (2008-2012) Gonorrhea Rates All Ages, Wake County (2008-2012) Percent of Total Number of Gonorrhea and Chlamydia Cases Among Ages 15-24 by Race/Ethnicity in Wake County (2012) HIV Disease Incidence Trend, by County of First Diagnosis (Five Single Years, 2007 through 2011) HIV Disease (HIV and AIDS) Cases Living as of 2011 by County of Residence at Diagnosis <p><i>Chronic Diseases: Asthma and Diabetes</i></p> <ul style="list-style-type: none"> NC Hospital Discharges with a Primary Diagnosis of Asthma, Numbers and Rates per 100,000 (2006-2010) Have you ever been told by a doctor, nurse, or other health professional that you had asthma? (2006-2010) Adult* Diagnosed Diabetes Prevalence Estimate Trend (Five Single Years, 2005 through 2009) Have you ever been told by a doctor, nurse, or other health professional that you had diabetes? (2006-2010) 	<ul style="list-style-type: none"> North Carolina Electronic Disease Surveillance System (NC EDSS), accessed 3/19/13 NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch. Facts and Figures, Annual Reports. North Carolina 2011 HIV/STD Surveillance Report <p><i>Chronic Disease: Asthma and Diabetes</i></p> <ul style="list-style-type: none"> NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System (2006-2010) NC State Center for Health Statistics, County-level Data, County Health Data Book (2008-2013): Morbidity, Asthma Hospital Discharges (Total and Age 10-14) per 100,000 Population Centers for Disease Control and Prevention, Diabetes Data and Trends, County Level Estimates of Diagnosed Diabetes - of Adults in North Carolina, (2005-2010)
Oral Health	<ul style="list-style-type: none"> Adult Oral Health 	<ul style="list-style-type: none"> How long has it been since you last visited a dentist or a dental clinic for any reason? (2008, 2010) How long has it been since you had your teeth cleaned by a dentist or dental hygienist? (2008, 	<ul style="list-style-type: none"> NC State Center for Health Statistics, Behavioral Risk Factor Surveillance System (2006-2010) Wake County Human Service Patient Management System NC Discharge Data: Inpatient, Ambulatory Surgery, and Emergency Department (2010-2012): Cecil G.

		<ul style="list-style-type: none"> 2010) Wake County Department of Health Dental Services Utilization (2010-2012) Emergency Department Discharges from Wake County Facilities (excludes Admits) (2010-2012) Medicaid Recipients Utilizing Dental Services, by Age Group (2009 and 2010) Medicaid Recipients Utilizing Dental Services in the Past 12 Months, Ages 1-5 (2010) 	<ul style="list-style-type: none"> Sheps Center for Health Services Research NC DHHS, NC Division of Medical Assistance, Statistics and Reports, County Specific Snapshots for NC Medicaid Services (2008 and 2011) NC State Center for Health Statistics, HealthStats. Children Enrolled in Medicaid Who Received Any Dental Service During the Previous 12 Months (2010)
Obesity	<ul style="list-style-type: none"> Adult Obesity Childhood Obesity 	<ul style="list-style-type: none"> Adult Diagnosed Obesity Prevalence Estimate Trend (Five Single Years, 2005 through 2009) Prevalence of Overweight and Obesity in Children and Youth (2006-2011) 	<ul style="list-style-type: none"> Centers for Disease Control and Prevention, Obesity Data and Trends, County Level Estimates of Diagnosed Obesity - of Adults in North Carolina, (2005-2010) Eat Smart, Move More, Data on Children and Youth in NC, North Carolina Nutrition and Physical Activity Surveillance System (NC-NPASS), NC-NPASS Data (2006-2011)
Mental Health Conditions (including Substance Abuse)	<ul style="list-style-type: none"> Mental Health Service Utilization Developmental Disabilities Service Utilization Substance Abuse Service Utilization 	<ul style="list-style-type: none"> Persons Served by Area Mental Health Programs (2005-2010) Services and Providers the Mental Health Local Management Entity/Area Program Network (Medicaid) Emergency Department Discharges from Wake County Facilities (excludes Admits) (2010-2012) Persons Served in NC State Psychiatric Hospitals (2005-2010) Persons Served in NC State Developmental Centers (2005-2010) Persons Served in NC State Alcohol and Drug Treatment Centers (2005-2010) 	<ul style="list-style-type: none"> Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 519) Alliance Behavioral Healthcare, Quality Management Department, 4/4/13. NC Discharge Data: Inpatient, Ambulatory Surgery, and Emergency Department (2010-2012): Cecil G. Sheps Center for Health Services Research NC Division of Mental Health, Developmental Disabilities and Substance Abuse Services, Statistics and Publications, Reports and Publications, Statistical Reports, Developmental Centers (FY2005-FY2010) Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 518)
Environmental Topics			
Air Quality	<ul style="list-style-type: none"> Air Quality Index 	<ul style="list-style-type: none"> Air Quality Days, 2012 Primary Air Pollutants, 2012 	<ul style="list-style-type: none"> U.S. Environmental Protection Agency. Air Quality Index Reports, 2011. Retrieved on May 23, 2012
Water Quality	<ul style="list-style-type: none"> Drinking Water: Community Water Systems NPDES Permits 	<ul style="list-style-type: none"> Wake County Environmental Health Well Activity, 2011-2012 	<ul style="list-style-type: none"> Eric Green, DWQ Coordinator Wake County Department of Environmental Services, January 31, 2013
Wastewater	<ul style="list-style-type: none"> Central and On-Site Wastewater Systems 	<ul style="list-style-type: none"> Wake County Environmental Health On-Site 	<ul style="list-style-type: none"> Eric Green, DWQ Coordinator Wake County Department of Environmental Services, January 31,

		Wastewater Activity, 2010-2011	2013
<i>Solid and Hazardous Wastes</i>	<ul style="list-style-type: none"> Toxic Release Inventory 	<ul style="list-style-type: none"> Reported Chemical Disposal or Other Releases in Wake County (in pounds) (2011) 	<ul style="list-style-type: none"> U.S. Environmental Protection Agency. TRI Release Reports: Chemical Reports, 2011. Retrieved on November 6, 2012 from US EPA TRI Explorer, Release Reports by Facility, Chemical Reports
<i>Lead</i>	<ul style="list-style-type: none"> Blood-lead Monitoring Levels 	<ul style="list-style-type: none"> Childhood Blood Lead Surveillance Data (2010) 	<ul style="list-style-type: none"> North Carolina Childhood Blood Lead Surveillance Data, NC Environmental Health Section, Children's Environmental Health Branch, 2010
<i>Rabies and Vector-Borne Diseases</i>	<ul style="list-style-type: none"> Cases of rabies and vector-borne diseases 	<ul style="list-style-type: none"> Animal Rabies Cases, 2008-2012 Vector-borne Illnesses, Wake County (2008-2012) 	<ul style="list-style-type: none"> NC Division of Public Health, Epidemiology. Rabies. Facts and Figures. Rabies by County, Tables by Year North Carolina Electronic Disease Surveillance System (NC EDSS), accessed 3/19/13
<i>Built Environment</i>	<ul style="list-style-type: none"> Availability of Recreational Facilities Availability of Parks Availability of Fast Food Restaurants 	<ul style="list-style-type: none"> Public Recreational Acreage and Facilities Restaurants that are fast-food establishments (2007-2010) Supermarkets and Grocery Stores (2007-2009) 	<ul style="list-style-type: none"> N.C. Division of Parks & Recreation. North Carolina Outdoor Recreation Plan 2009-2013 U.S. Department of Agriculture, Food Environment Atlas.

APPENDIX D: COMMUNITY HEALTH OPINION SURVEY METHODS

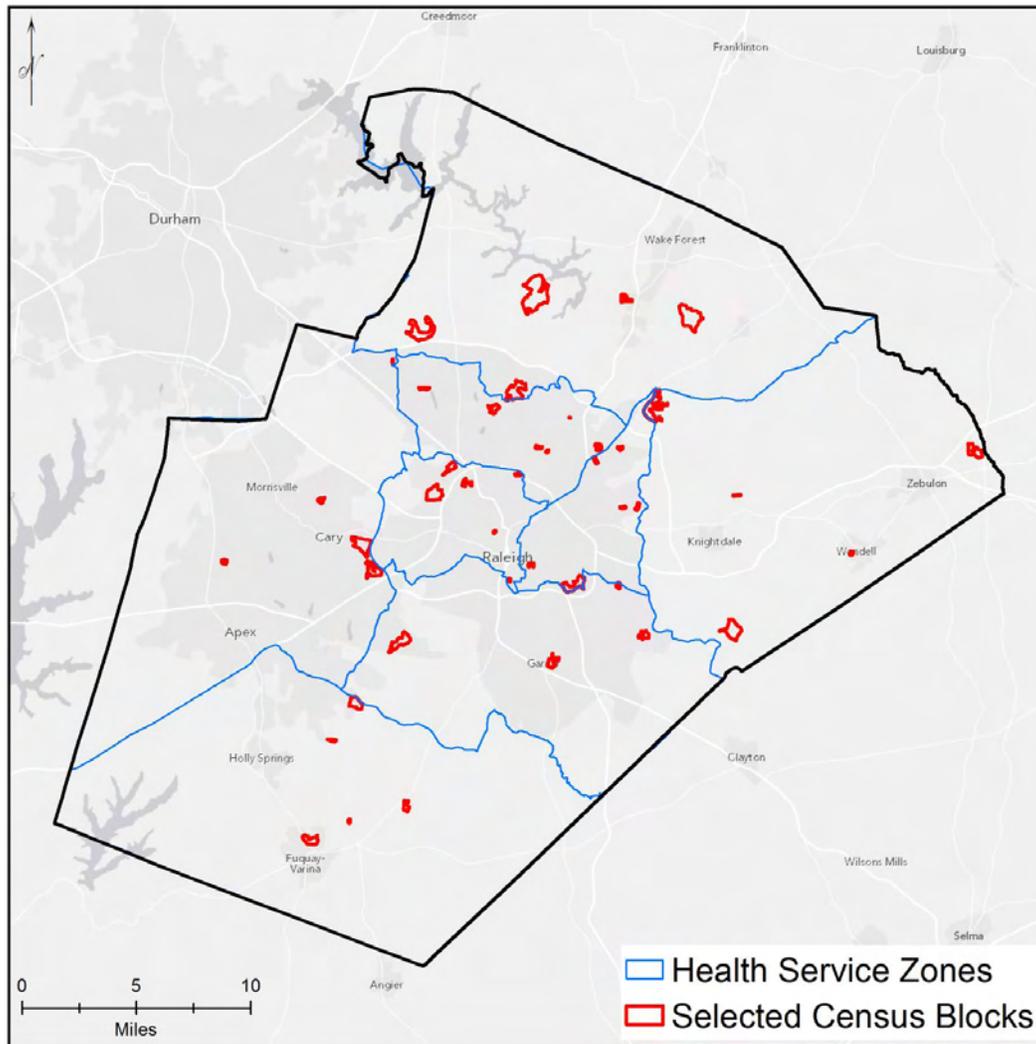
Interview locations were determined using a two-stage cluster sampling method developed by the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) to assess public health needs following disasters. This method utilizes population-based sampling weights from each census block and allows for generalizability of the collected data to the population of Wake County.

The two-stage cluster sampling method is used to carry out Community Assessment for Public Health Emergency Response (CASPER). This method was first developed in the 1960s as a tool for local health departments to conduct rapid assessments of immunization coverage (Serfling & Sherman, 1965). The sampling method was adopted by the World Health Organization's Expanded Program on Immunization and later by the Centers for Disease Control and Prevention for use in responses to natural disasters (Henderson & Sundaresan, 1982; Malilay, Flanders, & Brogan, 1996, CDC 2012). This efficient sampling scheme has been validated and used effectively for rapid assessment and estimation of a variety of population-level public health needs (Frerichs & Shaheen, 2001; Henderson & Sundaresan, 1982).

A typical two-stage cluster sample is a 30/7, where 30 clusters and 7 survey locations per cluster are selected for a total of 210 interviews. This method provides reasonably valid and precise estimates of the true population when the estimated proportion in the target population with the event of interest is between 10% to 90% (Binkin, Sullivan, Staehling, & Nlieburg, 1992).

To balance the need for reasonably accurate results and efficient data collection a 40/7 two-stage cluster sample with 5 census blocks selected with a probability proportionate to size in each of the county's eight health service zones was implemented. This ensured that each zone was represented in the sample with 35 interviews in each zone for a total sample size of 280. In the second stage of sampling, seven random interview locations within each selected block were identified.

Selected Census Blocks and Health Zones



The selection process was automated using a GIS-based survey site selection toolkit developed by the CDC that operates within ESRI's mapping software ArcGIS. In the first stage of sampling, 40 census blocks were randomly selected with a probability proportionate to the population size with the most populated census blocks more likely to be selected. Five census blocks were selected from each of the 8 health zones to ensure adequate representation.

In the second stage of sampling, seven random interview locations were selected in each census block. Interview teams attempted to conduct interviews at the selected addresses. If no one was home at the selected address or the resident refused to participate, then teams approached the next closest residence. This procedure was repeated until an interview was completed and then teams moved on to the next randomly selected address.

The survey was administered in March 2013. Interviewers obtained oral consent in English or Spanish before interviewing potential survey participants. Interviewers obtained oral informed consent before

interviewing potential study participants, and were given a small thank-you gift (equivalent to \$2-\$3 dollars). Eligible participants were at least 18 years of age and residents of the selected household.

Interview teams were guided to the random survey locations using car GPS units (Garmin), handheld GPS units (Magellan MobileMapper) and field maps with current aerial photography (Google or Bing Maps). Responses were recorded at the time of the interview on hard copy surveys or electronically using the handheld GPS units.

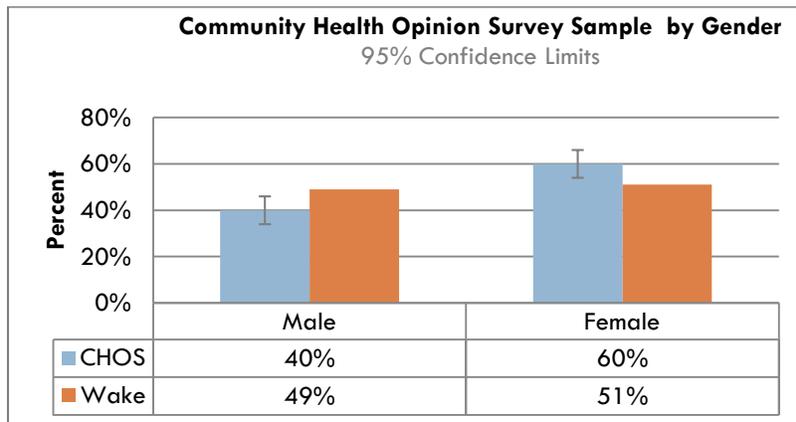
Analyzing Primary Data

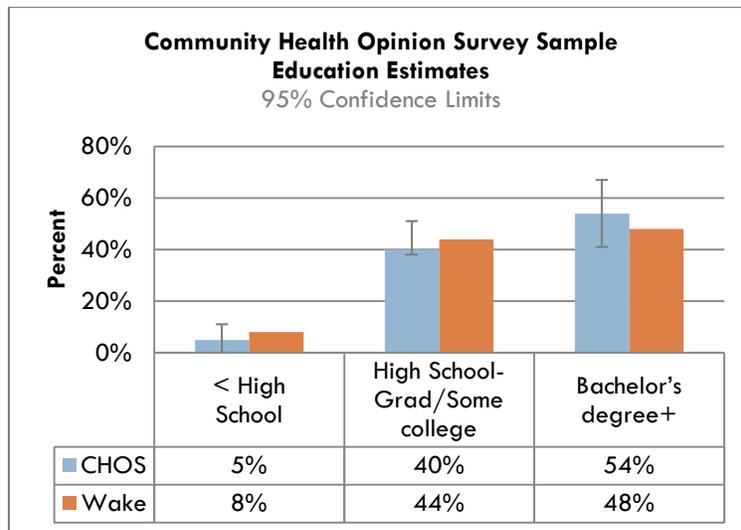
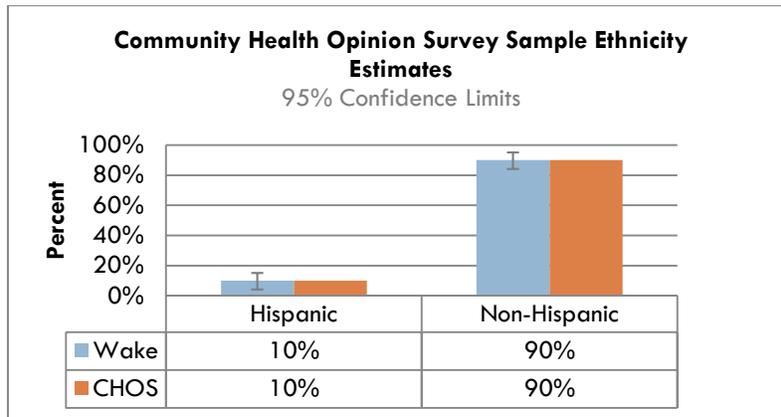
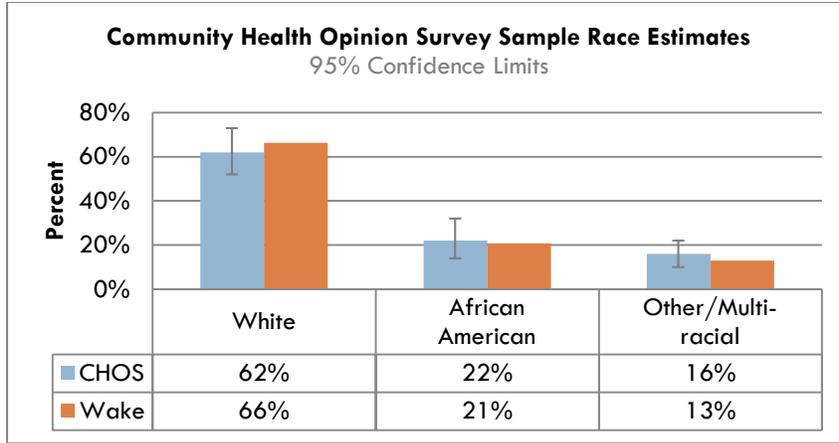
Data was analyzed in SAS 9.2 (Cary, NC), with weighted frequencies and 95% confidence intervals (CI) for each question in the community health opinion survey. Unlike a simple random sample of the entire county, households selected in cluster sampling have an unequal probability of selection. To avoid biased estimates, all data analyses include a mathematical weight for probability of selection. Survey weights were calculated using methods described in the CDC’s Community Assessment for Public Health Emergency Response (CASPER) toolkit (CDC, 2012). The weights incorporate the total number of households in the sampling frame, the number of households in the census block, and the number of interviews collected in each census block. These weights were calculated with a standard error for each frequency, from which 95% CIs were derived. Qualitative data was summarized into categorical variables where appropriate. Interpretations of these data are generalizable at the county level, as the sampling methods collects responses from residents throughout the county in weighted census blocks. These weights allow for the calculation of 95% CIs, which should be interpreted as the interval which contains the true value in 95% of repeated samples.

Demographic Results

A total of 281 surveys were collected over an 11-day period by 37 teams of trained interviewers.

When the demographics from survey respondents are compared to those in the Wake County Census 2010 estimates it is clear that data are representative of county residents. Race and ethnicity were asked as one question; therefore, total race/ethnicity numbers add up to more than 100% because the categories are not mutually exclusive.





Limitations

While the quality of the data from the community health opinion survey is high and likely some of the best survey data collected on the health of Wake County residents, there are some limitations as with any door-to-door survey. These limitations can include the following:

- We relied on volunteer interviewers to collect the data, some of whom were new to public health survey methods and using handheld GPS-enabled computers. Many of the volunteers participated for one day; those who participated for two or more days were most likely to be comfortable with the survey and technology.
- We were more likely to capture data from people at home during the day (i.e. women, elderly, unemployed/work from home, and persons living with a disability). However, we were able to balance this by surveying in the evenings and on Saturdays.
- In some instances, residents may over- or under-report behaviors and illnesses based on fear or social stigma or misunderstanding of the question being asked. In addition, respondents may be affected by recall bias, where they attempt to answer accurately but remember incorrectly.
- Throughout the report, the 95% Confidence Limits for this data are indicated where appropriate. The 95% Confidence Interval is a range above and below the observed estimate, where we would expect the “true” estimate to be 95% of the time, since observation is influenced by random error.

The Community Health Opinion Survey results are generalizable at the County-level. Results are not able to be broken down into racial/ethnic, gender, education, or income categories. However, the data is representative of Wake County as a whole.

APPENDIX E: COMMUNITY HEALTH OPINION SURVEY

Cluster _____ Survey _____



Wake County Community Health Opinion Survey - 2013

Hello, I am ___ and this is ___ and we are volunteers working with the Wake County health department, hospitals and community partners. We are talking with people throughout the community today about their opinions on healthcare and other health-related issues in the County. (Show badges/CHOS flyer). All the opinions you share with us will be completely confidential and will be reported as a group summary. The results will help to address the major health and community issues in our county.

The survey is completely voluntary. It should take no longer than 20-30 minutes to complete. We are only interviewing adults 18 and older.

Are you 18 years old or older? (if "yes")

Would you like to participate? Yes No

(If no, stop the survey here and thank the person for his or her time.)

Eligibility

Do you live at this address? Yes No

(If no, ask if you can speak with someone who lives there or ask if the person lives nearby. If no one is available, stop the survey here and thank the person for his or her time.)

PART 1: Community

These initial questions are about how you see certain parts of Wake County life. Please tell us whether you “strongly disagree”, “disagree”, “don’t know (neutral)”, “agree” or “strongly agree” with each of the next 7 statements.

Statements	Circle the number that best represents the person’s opinion of each statement below.				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. How do you feel about this statement, “I can access good healthcare in Wake County”? (Consider the cost and quality, number of options, and availability of healthcare in the county).	1	2	3	4	5
2. How about this statement, “I think Wake County is a good place to raise children”? (Consider the quality and safety of schools and child care programs, after school programs, and places to play in this county).	1	2	3	4	5
3. ...and this one, “I think Wake County is a good place to grow old”? (Consider the county’s elder-friendly housing, transportation to medical services, recreation, and services for the elderly).	1	2	3	4	5
4. “I can find enough economic opportunity in Wake County”? (Consider the number and quality of jobs, job training/higher education opportunities, and availability of affordable housing in the county).	1	2	3	4	5
5. “I feel safe living in Wake County.” (Consider how safe you feel at home, in the workplace, in schools, at playgrounds, parks, and shopping centers in the county).	1	2	3	4	5
6. “I think there’s enough help for people during times of need in Wake County”? (Consider social support in this county: neighbors, support groups, faith community outreach, community organizations, and emergency monetary assistance).	1	2	3	4	5

Statements	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree				Agree
7. "I think the environment in Wake County is clean and safe". (Consider clean air, safe drinking water, free from polluted sites, safe food supply, sufficient garbage collection and disposal, access to recycling, control of animals (domestic and wild) and control of insects/rodents).	1	2	3	4	5
8. "I can find enough recreational and entertainment opportunities in Wake County". (Consider parks, museums, restaurants, movie theaters, sports, nature trails).	1	2	3	4	5
9. And finally, "I can easily access healthy, affordable food?"	1	2	3	4	5

The next set of questions will ask about community problems, issues, and services that are important to you. Remember your choices will not be linked to you in any way.

10. Please look at this list of community issues. *(Give person the sheet of community issues.)* **In your opinion, what are the TOP THREE (3) issues that most affect the quality of life in Wake County?** If there is a community problem that you consider the most important and it is not on this list, please let me know and I will write it in. If you would like, I can read these out loud as you think about them. *(Read health problems if they prefer to have them read.)*

- | | |
|--|--|
| <input type="checkbox"/> Low income/poverty | <input type="checkbox"/> Lack of/inadequate health insurance |
| <input type="checkbox"/> Unemployment/employment opportunities | <input type="checkbox"/> Lack of access to primary care physicians |
| <input type="checkbox"/> Violent crime (murder, assault, etc.) | <input type="checkbox"/> Dropping out of school |
| <input type="checkbox"/> Gun violence/ accidents | <input type="checkbox"/> School suspensions or expulsions |
| <input type="checkbox"/> Drug and alcohol abuse | <input type="checkbox"/> Access to educational opportunities |
| <input type="checkbox"/> Elder abuse | <input type="checkbox"/> Pollution (air, water, land) |
| <input type="checkbox"/> Child abuse | <input type="checkbox"/> Animal/pest control |
| <input type="checkbox"/> Rape/sexual assault | <input type="checkbox"/> Clean water |
| <input type="checkbox"/> Domestic violence | <input type="checkbox"/> Traffic congestion |
| <input type="checkbox"/> Homelessness | <input type="checkbox"/> Affordable/safe transportation |
| <input type="checkbox"/> Discrimination/racism | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Access to quality education | <input type="checkbox"/> None |
| <input type="checkbox"/> School reassignment | <input type="checkbox"/> <i>Refused/No Response</i> |

11. *(Give the person a list of services.) In your opinion, which THREE (3) of the following services need the most improvement in your neighborhood or community? If there is a service that you think needs improvement that is not on this list, please let me know and I will write it in. If you would like, I can read these out loud as you think about them. (Read health problems aloud if they prefer.)*

- | | |
|--|---|
| <input type="checkbox"/> Better/more healthy food choices | <input type="checkbox"/> Elder care options |
| <input type="checkbox"/> Access to assistance for food | <input type="checkbox"/> Animal/pest control |
| <input type="checkbox"/> Positive teen activities | <input type="checkbox"/> More affordable health services |
| <input type="checkbox"/> More affordable/better housing | <input type="checkbox"/> Mental health services |
| <input type="checkbox"/> Culturally sensitive health services | <input type="checkbox"/> Support to help me manage my health conditions |
| <input type="checkbox"/> Child care options | <input type="checkbox"/> Better educational opportunities |
| <input type="checkbox"/> Number of health care providers | <input type="checkbox"/> Transportation options |
| <input type="checkbox"/> Healthy family activities | <input type="checkbox"/> Road safety/maintenance |
| <input type="checkbox"/> Services for disabled people | <input type="checkbox"/> Better law enforcement |
| <input type="checkbox"/> Higher paying employment | <input type="checkbox"/> Gun safety |
| <input type="checkbox"/> Availability of employment | <input type="checkbox"/> Emergency preparedness and response |
| <input type="checkbox"/> Better/more recreational facilities
(parks, trails, comm. centers, etc.) | <input type="checkbox"/> Clean water |
| <input type="checkbox"/> Counseling/mental health/support groups | <input type="checkbox"/> Other: _____ |
| | <input type="checkbox"/> None |
| | <input type="checkbox"/> <i>Refused/No Response</i> |

12. *In your opinion, which THREE (3) health behaviors do people in your own community need more information about? (Do not read choices. Choose "Other" and write in the suggestions if they cannot decide on only one.)*

- | | | |
|--|---|---|
| <input type="checkbox"/> Child care/parenting | <input type="checkbox"/> Safe driving skills/behavior | <input type="checkbox"/> How to prepare for an emergency/disaster |
| <input type="checkbox"/> Caring for family members with special needs/disabilities | <input type="checkbox"/> Exercising/fitness | <input type="checkbox"/> Substance abuse prevention (ex: drugs and alcohol) |
| <input type="checkbox"/> Going to a dentist for check-ups/preventive care | <input type="checkbox"/> Managing weight | <input type="checkbox"/> Getting flu shots and other vaccines |
| <input type="checkbox"/> Anger management | <input type="checkbox"/> Managing chronic conditions (diabetes, COPD, etc.) | <input type="checkbox"/> Using child safety seats |
| <input type="checkbox"/> Going to the doctor for periodic check-ups and screenings | <input type="checkbox"/> Crime prevention | <input type="checkbox"/> Preventing sexually transmitted disease (safe sex) |
| <input type="checkbox"/> Getting prenatal care during pregnancy | <input type="checkbox"/> Gun safety training | <input type="checkbox"/> Domestic violence prevention |
| <input type="checkbox"/> Eating well/nutrition | <input type="checkbox"/> Rape/sexual abuse prevention | <input type="checkbox"/> Preventing unwanted pregnancy |
| <input type="checkbox"/> Using seat belts | <input type="checkbox"/> Elder care | <input type="checkbox"/> Suicide prevention |
| | <input type="checkbox"/> Quitting smoking/tobacco use prevention | <input type="checkbox"/> Driving safely |
| | <input type="checkbox"/> Stress management | <input type="checkbox"/> Other: _____ |
| | | <input type="checkbox"/> None |
| | | <input type="checkbox"/> <i>Refused/No Response</i> |

13. Since this time last year, have you done any volunteer activities through or for an organization?

- Yes
 No
 Don't know/Not sure
 Refused/No Response

(If Yes), which types of organizations did you work with? (*Do not read. Select all that apply*)

- | | |
|--|--|
| <input type="checkbox"/> School (PTA, etc.) | <input type="checkbox"/> Community (helping neighbors, neighborhood associations, community centers) |
| <input type="checkbox"/> Non-profit (Red Cross, food bank, etc.) | <input type="checkbox"/> Sports (coaching, etc.) |
| <input type="checkbox"/> Civic (examples: Rotary/Lions Club, etc.) | <input type="checkbox"/> Other (<i>specify</i>): _____ |
| <input type="checkbox"/> Health (hospitals, clinics, etc.) | <input type="checkbox"/> <i>Refused to answer</i> |
| <input type="checkbox"/> Religious/Spiritual | |

PART 2: Health

This next section of questions will focus on your health. Again, all the opinions you share with us will be completely confidential and will be reported as a group summary.

14. In general, would you say that your health is...

(Read choices and ask them to choose only one.)

- Excellent
 Good
 Fair
 Poor
 Don't know/Not sure
 Refused/No Response

(If the person being interviewed starts talking about a family member's health problems... "I am sorry to hear about that. Maybe some of the answers you give today will help us and our community leaders address some of these types of issues. Right now we'd like to focus just on your own health".)

15. During the past 12 months, was there any time when you did not have any health insurance coverage? (This includes private insurance purchased through work or individually, military health benefits (Tricare, VA, etc.), Medicare, Medicaid, or any other program that assists with providing health services at a reduced cost.)

- Yes
 No
 Don't know/Not sure
 Refused/No Response

16. If you have health insurance, what is your primary health insurance plan? This is the plan which pays the medical bills first or pays most of the medical bills. *(DO NOT read the options. Mark only the one they say. If they cannot think of one... Here are some possibilities. Read responses and select only one)*

[Note: The State Employee Health Plan is also called the "North Carolina Teacher's and Employee Health Plan." Medicare is a federal health insurance program for people 65 and older or some younger people with disabilities. Medicaid is a state health insurance program for families and individuals with limited financial resources or special circumstances.]

- | | |
|--|---|
| <input type="radio"/> The State Employee Health Plan | <input type="radio"/> Medicare |
| <input type="radio"/> Blue Cross and Blue Shield of North Carolina | <input type="radio"/> Medicare supplement plan |
| <input type="radio"/> United Healthcare | <input type="radio"/> Medicaid or Carolina ACCESS or Health Choice 55 |
| <input type="radio"/> CIGNA | <input type="radio"/> The military, Tricare, CHAMPUS, or the VA |
| <input type="radio"/> Aetna | <input type="radio"/> The Indian Health Service |
| <input type="radio"/> Wellpath/Coventry | <input type="radio"/> Other (government plan) |
| <input type="radio"/> Other private health insurance plan purchased from employer or workplace | <input type="radio"/> No health plan of any kind |
| <input type="radio"/> Other private health insurance plan purchased directly from an insurance company | <input type="radio"/> Don't know/Not sure |
| | <input type="radio"/> <i>Refused/No Response</i> |

17. Where do you go most often when you are sick? *(DO NOT read the options. Mark only the one they say. If they cannot think of one... Here are some possibilities. Read responses and select only one).*

- | | |
|--|--|
| <input type="radio"/> Doctor's office | <input type="radio"/> Emergency Room |
| <input type="radio"/> Free/Low Cost clinics (Alliance or Open Door) | <input type="radio"/> Open door clinic |
| <input type="radio"/> School nurses | <input type="radio"/> Pharmacy/Retail minute clinics |
| <input type="radio"/> Wake County Health Dept. Wake Health Services (Community Health Centers) | <input type="radio"/> Workplace nurse |
| <input type="radio"/> Family/friend | <input type="radio"/> Urgent care |
| <input type="radio"/> Hospital | <input type="radio"/> Therapist/counselor |
| | <input type="radio"/> Other: _____ |
| | <input type="radio"/> <i>Refused/No Response</i> |

17b. In which city or town is it answer from Q17 located? _____
(If it is not an immediately recognizable city, ask for the county the city is in).

18. About how long has it been since you last visited a doctor for a routine checkup? This does not include any times you visited the doctor because you were sick, pregnant or for chronic disease. (DO NOT read the options. Mark only the one they say. If they cannot think of how long... Here are the possibilities. Read responses. Which one do you think best fits you?)

- Within the past year
- 1-2 years ago
- 3-5 years ago
- More than 5 years ago
- I have never had a routine checkup
- Don't know/Not sure
- Refused/No Response*

[Note: A routine checkup is when the doctor or nurse checks you all over, checks your blood pressure, looks in your ears, listens to your breathing, taps your abdomen, checks your reflexes, and usually checks your cholesterol. This could also include routine OB/GYN check-ups.]

19. In the past 12 months, did you ever have a problem getting the health care you needed? Please include any problems you had filling a prescription or getting mental, disability or dental care? (If "no", go to question #21).

- Yes
- No (Skip to #21)
- Refused/No Response (Skip to #21)*

20. Which of these problems did you have? I have a list of different type of problems that you may have encountered. As I read this list, please tell me "yes" or "no" if this was a problem that you had. I can also write-in any additional problems that aren't on my list. (Read choices and allow time for yes or no for each).

- | | |
|---|---|
| <input type="checkbox"/> I didn't have health insurance | <input type="checkbox"/> I <u>can</u> afford it, but I don't want to pay that much |
| <input type="checkbox"/> I didn't have transportation | <input type="checkbox"/> I couldn't get an appointment |
| <input type="checkbox"/> I didn't have separate dental insurance | <input type="checkbox"/> Interpreter who speaks my language was not available |
| <input type="checkbox"/> I didn't have child care | <input type="checkbox"/> My insurance was not accepted by my health care provider (doctor, pharmacy, dentist, etc.) |
| <input type="checkbox"/> My insurance didn't cover what I needed | <input type="checkbox"/> I had problems with Medicare D |
| <input type="checkbox"/> I didn't know where to go for care /difficulty navigating system | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Could not afford out-of-pocket cost (whole cost/deductible/co-pay) | <input type="checkbox"/> <i>Refused/No Response</i> |

21. About how long has it been since you last visited a dentist for a routine checkup? Do not include times you visited the dentist because of pain or an emergency. *(Let them answer and repeat the category checked in the list).*

- Within the past year
- 1-2 years ago
- 3-5 years ago
- More than 5 years ago
- I have never been to a dentist for a routine checkup
- Refused/No Response*

22. In the past 12 months, have you used any kind of complementary and alternative medicine? Some examples might include acupuncture, chiropractic treatments, natural products, or medicinal herbs.

- Yes
- No
- Don't know/Not sure
- Refused/No Response*

23. How often do you have someone like a family member, friend, hospital/clinic worker, or caregiver help you read and understand health related materials? *(Read choices, select one).*

- Always
- Frequently
- Occasionally
- Never
- Refused/No Response*

24. How often do you have problems learning about your medical condition because of difficulty understanding written information? *(Read choices, select one).*

- Always
- Frequently
- Occasionally
- Never
- Refused/No Response*

25. If a friend or family member needed counseling for a mental health or a drug/alcohol abuse problem, who is the first person you would you tell them to call or talk to? *(DO NOT read the options. If they can't think of anywhere... Here are some possibilities. Read responses. Select one.)*

- | | |
|--|--|
| <input type="radio"/> Doctor | <input type="radio"/> Crisis and Assessment/CAS (UNC WakeBrook) |
| <input type="radio"/> Family member | <input type="radio"/> Alliance Behavioral Healthcare (Managed Care Organization/MCO behavioral health for Wake County) |
| <input type="radio"/> Support group (e.g. AA, Al-Anon) | <input type="radio"/> Other: _____ |
| <input type="radio"/> Private counselor or therapist | <input type="radio"/> I Don't know/Not sure |
| <input type="radio"/> Hotline | <input type="radio"/> <i>Refused/No Response</i> |
| <input type="radio"/> Minister/religious official/church | |

26. Where do you engage in exercise or physical activities? *(check all that apply then skip to #28 unless the response is "I don't exercise." Continue on to #27 if respondent does NOT exercise)*

- | | |
|--|---|
| <input type="checkbox"/> I don't exercise | <input type="checkbox"/> Faith community |
| <input type="checkbox"/> Public rec center, parks, or trails | <input type="checkbox"/> Malls |
| <input type="checkbox"/> Home | <input type="checkbox"/> School setting |
| <input type="checkbox"/> Neighborhood | <input type="checkbox"/> Other (specify): _____ |
| <input type="checkbox"/> Private gym/pool | <input type="checkbox"/> <i>Refused/No Response</i> |
| <input type="checkbox"/> Work | |

27. Are there any reasons why you don't exercise? You can give as many reasons as you need. *(Let them answer and repeat the category checked in the list. Select all that apply.)*

- | | |
|--|---|
| <input type="checkbox"/> I don't like to exercise | <input type="checkbox"/> I don't have access to a facility that has the things I need, like a pool, track, etc. |
| <input type="checkbox"/> I would need child care and I don't have it | <input type="checkbox"/> There is no safe place to exercise |
| <input type="checkbox"/> It costs too much to exercise (equipment, shoes, gym) | <input type="checkbox"/> I don't have enough time to exercise |
| <input type="checkbox"/> I'm physically unable | <input type="checkbox"/> I don't need to exercise |
| <input type="checkbox"/> I'm too tired to exercise | <input type="checkbox"/> Other (specify): _____ |
| | <input type="checkbox"/> <i>Refused/No Response</i> |

28. If you smoke cigarettes, where would you go for help in order to quit? *(Let them answer and repeat the category checked in the list. Select all that apply.)*

- | | |
|---|---|
| <input type="checkbox"/> I do not smoke | <input type="checkbox"/> Health insurance company |
| <input type="checkbox"/> Not applicable
(I don't want to quit) | <input type="checkbox"/> Work |
| <input type="checkbox"/> Doctor | <input type="checkbox"/> Quit line |
| <input type="checkbox"/> Pharmacy | <input type="checkbox"/> Just quit ("cold turkey")/ I don't need help
(I can quit on my own) |
| <input type="checkbox"/> Church | <input type="checkbox"/> Other (specify): _____ |
| <input type="checkbox"/> Private counselor/
therapist | <input type="checkbox"/> Don't know/Not sure |
| <input type="checkbox"/> Health department | <input type="checkbox"/> <i>Refused/No Response</i> |

29. Has a doctor, nurse, or other health professional EVER told you that you had any of the following health issues? For each, tell me "Yes", "No" or you're "Not sure."
(Read each answer and circle the correct response):

Cancer	Yes	No	Not sure	<i>NR</i>
Asthma	Yes	No	Not sure	<i>NR</i>
Heart disease	Yes	No	Not sure	<i>NR</i>
Congestive heart Failure	Yes	No	Not sure	<i>NR</i>
Chronic Obstructive Pulmonary Disease (COPD)	Yes	No	Not sure	<i>NR</i>
Depression	Yes	No	Not sure	<i>NR</i>
High blood pressure	Yes	No	Not sure	<i>NR</i>
High cholesterol	Yes	No	Not sure	<i>NR</i>
Overweight/obesity	Yes	No	Not sure	<i>NR</i>
Osteoporosis	Yes	No	Not sure	<i>NR</i>
Chronic pain	Yes	No	Not sure	<i>NR</i>
Diabetes not during pregnancy	Yes	No	Not sure	<i>NR</i>

30. Have you ever been tested for HIV?

- | | |
|---------------------------|--|
| <input type="radio"/> Yes | <input type="radio"/> Don't know/Not sure |
| <input type="radio"/> No | <input type="radio"/> <i>Refused/No Response</i> |

AGE/GENDER SPECIFIC HEALTH QUESTIONS.

These next questions are gender- and age- specific. In order for us to make sure we are asking you the right questions, I need to verify your age and gender. Certain age/gender categories may skip these questions altogether. As always, all of your answers will be completely confidential and will only be reported as a group summary.

31. What year were you were born? _____ (enter year)

Refused/No Response

[NOTE: <1973 = over 40 years old, <1963 = over 50 years old]

32. What is your gender? *(In most cases, this question can be answered by the interviewer without asking)*

- Male
 Female
 Transgender/Other

(If respondent answers transgender, say the following: Some people are born with body parts that aren't consistent with the gender they identify as. We have a few sex-specific health questions and need to know: were you born with male or female body parts? Use this sex in the skip patterns below)

If over 50 years old, proceed to Q33 (and disregard following skip patterns).

If male and over 40, skip to Q34. (i.e. ♂ > 40)

If male and 40 or under, skip to Q37. (i.e. ♂ ≤ 40)

If female and over 40, skip to Q35. (i.e. ♀ > 40)

If female and over 21 but 40 or under, skip to Q37 (i.e. 21 < ♀ ≤ 40)

If female and 21 or under, skip to Q37. (i.e. ♀ ≤ 21)

33. *(Only for people over 50):* Have you ever had a colonoscopy?

- Yes Don't know/Not sure
 No Refused/No Response

If male, proceed to Q34.

If female, skip to Q35.

34. *(Only for males over 40):* Do you have an annual prostate exam?

- Yes Don't know/Not sure
 No Refused/No Response

35. *(Only for females over 40):* Do you have a mammogram every year?

- Yes
- No
- Don't know/Not sure
- Refused/No Response*

36. *(Only for females over 21):* Do you have a pap smear at least every other year?

- Yes
- No
- Don't know/Not sure
- Refused/No Response*

Now I'm going to ask you a few questions about the people you provide care for.

37. Some people provide help to a family member or friend who has a long-term illness or disability. This may include help with things they can no longer do for themselves. During the past 12 months, did you provide any such help to a family member or friend, and if so, what was your relationship to that person?

(If response is yes, read the list and ask them to choose all that apply. If no, mark NONE and skip to #40.)

- Elderly or disabled parent/grandparent
- Disabled child
- Grandchild
- Foster child(ren)
- Disabled spouse/partner
- Friend with chronic illness
- None *(skip to #40)*
- Other *(specify)* _____
- Refused/No Response (skip to #40)*

38. In the past 12 months, did you have a difficult time finding additional care or support for the person or people indicated above?

- Yes
- No *(skip to #40)*
- Don't know/Not sure
- Refused/No Response*

39. If yes, what was the main reason you, the caregiver, had this problem? *(Let them answer and repeat the category checked in the list. Choose one).*

- Access to services
- Transportation
- I don't know where services are available
- Caregiver illness
- Work responsibilities
- Can't pay for services
- Couldn't find a suitable long-term care facility
- Other *(specify)*: _____
- Refused/No Response*

40. Do you have any children age 18 or under? *(If no, go to #45)*

- Yes
- No *(skip to #45)*
- Refused/No Response *(skip to #45)*

41. What are the ages of your children? *(Only record number of children in each age category listed below)*

- 0-4 5-9 10-14 15-18
 Refused/No Response

42. During the past 12 months, was there any time that your child(ren) did not have health insurance or coverage?

- Yes
- No
- Don't know/Not sure
- Refused/No Response

[Note: Public/Government insurance counts as insurance].

43. Do you talk to your children about any of the following topics? *(Read list and check all that apply).*

- | | |
|--|--|
| <input type="checkbox"/> Alcohol use | <input type="checkbox"/> Exposure to negative/risky internet content |
| <input type="checkbox"/> Tobacco use | <input type="checkbox"/> Eating disorders |
| <input type="checkbox"/> Drug use, including prescriptions | <input type="checkbox"/> Bullying |
| <input type="checkbox"/> Guns | <input type="checkbox"/> Texting while driving |
| <input type="checkbox"/> Sexual activity | <input type="checkbox"/> Other |
| <input type="checkbox"/> Reckless driving/speeding | <input type="checkbox"/> (specify): _____ |
| <input type="checkbox"/> Truancy (skipping school) | <input type="checkbox"/> I don't think my child is engaging in any risky behaviors |
| <input type="checkbox"/> Gangs | <input type="checkbox"/> Refused/No Response |
| <input type="checkbox"/> Criminal activities | |

44. Do you think any of your children or your children's friends are engaging in any of the following risky behaviors I am about to read? *(Read list and check all that apply).*

- | | |
|--|--|
| <input type="checkbox"/> Alcohol use | <input type="checkbox"/> Exposure to negative/risky internet content |
| <input type="checkbox"/> Tobacco use | <input type="checkbox"/> Eating disorders |
| <input type="checkbox"/> Drug use, including prescriptions | <input type="checkbox"/> Bullying |
| <input type="checkbox"/> Guns | <input type="checkbox"/> Texting while driving |
| <input type="checkbox"/> Sexual activity | <input type="checkbox"/> Other _____
<i>(specify):</i> |
| <input type="checkbox"/> Reckless driving/speeding | <input type="checkbox"/> I don't think my child is engaging in any risky behaviors |
| <input type="checkbox"/> Truancy (skipping school) | <input type="checkbox"/> <i>I Don't Know/Not Sure</i> |
| <input type="checkbox"/> Gangs | <input type="checkbox"/> <i>Refused/No Response</i> |
| <input type="checkbox"/> Criminal activities | |

PART 3: Emergency Preparedness

Now I'm going to ask you questions about emergency preparedness, or preparing for a disaster or emergency.

45. Is anyone in your household certified in CPR (a.k.a. Cardiopulmonary Resuscitation)?

- | | |
|---------------------------|--|
| <input type="radio"/> Yes | <input type="radio"/> Don't know/Not sure |
| <input type="radio"/> No | <input type="radio"/> <i>Refused/No Response</i> |

46. In a disaster, what source would you first turn to for information? *(Let them answer and repeat the category checked in the list. Choose one).*

- | | |
|--|---|
| <input type="radio"/> Television | <input type="radio"/> 211 |
| <input type="radio"/> Radio | <input type="radio"/> 911 |
| <input type="radio"/> Internet | <input type="radio"/> Other <i>(specify):</i> _____ |
| <input type="radio"/> Smartphone | <input type="radio"/> Don't know/Not sure |
| <input type="radio"/> Print media | <input type="radio"/> <i>Refused/No Response</i> |
| <input type="radio"/> Neighbors or word of mouth | |

[Note: 211 is a community hotline that provides callers with information about and referrals to human services for every day needs and in times of crisis].

47. Does anyone in your household have a disability that would make it more difficult to deal with an emergency like a hurricane, power outage, etc.?

- | | |
|---------------------------|--|
| <input type="radio"/> Yes | <input type="radio"/> Don't know/Not sure |
| <input type="radio"/> No | <input type="radio"/> <i>Refused/No Response</i> |

48. In the event of a large-scale disaster, which of the following statements best represents your belief? Would you say... *(Read choices below)*

- I can handle the situation without any preparation
- Preparation, planning and emergency supplies will help me handle the situation
- Nothing I do to prepare will help me handle the situation
- Don't know/Not sure*
- Refused/No Response*

49. In the first 72 hours following a disaster, whom would you rely on the most for assistance? *(Read only if necessary. Choose one.)*

- Household members
- Other friends or family
- People in my neighborhood
- Non-profit organizations, such as the American Red Cross or the Salvation Army
- My faith community, such as a congregation
- Fire, police, emergency personnel
- State and Federal Government agencies, including FEMA
- Refused/No Response*

50. If public authorities announced a mandatory evacuation from your community due to a large-scale disaster or emergency, would you evacuate?

- Yes
- No *(Skip to #52)*
- Don't know/Not sure
- Refused/No Response*

51. What would be the main reason you might not evacuate if asked to do so? *(Read only if necessary. Choose one.)*

- Lack of transportation
- Lack of trust in public officials
- Concern about personal safety
- Concern about leaving pets
- Concern about traffic jams and inability to get out
- Health problems (could not be moved)
- Concern about leaving property behind
- Concern about family safety
- Other *(specify):* _____
- Don't know/Not sure
- Refused/No Response*

PART 4: Demographics

We are almost finished! We just need to know a little more about who you are. Just to remind you, all the information you give us will be completely confidential. It will be reported only as a group summary.

52. How do you identify your race or ethnicity? *(If they do not respond immediately, read the categories. If they are a multiracial check "multiracial" and add in what races they are. Select all that apply.)*

- | | |
|--|---|
| <input type="checkbox"/> White/Caucasian | <input type="checkbox"/> Native American |
| <input type="checkbox"/> Black or African American | <input type="checkbox"/> Multiracial |
| <input type="checkbox"/> Hispanic | <input type="checkbox"/> <i>Refused/No Response</i> |
| <input type="checkbox"/> Asian/Pacific Islander | <input type="checkbox"/> Other (specify): _____ |

53. What language(s) do you speak at home? *(Let them answer and repeat the category checked in the list.)*

- English
 Spanish
 Other (specify): _____

54. What is your marital status? Are you....? *(Read categories. Mark only one.)*

- Married
 Divorced
 Widowed
 Separated
 Never married (Single)
 OR
 A member of an unmarried couple.
 Refused/No Response

55. What is the highest level of school, college or training that you have completed? *(Read only if necessary. Mark only one.)*

- Never attended school or only attended kindergarten
 Grades 1 through 8 (elementary)
 Grades 9 through 11 (some high school)
 Grades 12 or GED (high school graduate)
 College 1 year to 3 years (some college or technical school)
 College 4 years or more (college graduate)
 Graduate school or higher
 Prefer not to answer (*Refused/No Response*)

56. Including yourself, how many people live in your household?

(Include those that you claim as a dependent or that live with you at least ½ of the year)
 _____ (Enter #)

- Refused/No Response*

57. Does this number include anyone who has had to move in because they didn't have a place to live? *(This might include a friend or relative who needed a place to stay due to financial or medical reasons, or was recently homeless. This does NOT include college students who may have recently moved back home.)*

- Yes
- No
- Don't know/Not sure
- Refused/No Response

58. Is your annual household income GREATER than \$XX,XXX before taxes? *(Based on answer to question # 56 and the table below.)*

- Yes, income is above threshold
- No, income is at or below threshold
- Don't know/Not sure
- Refused/No Response

Family size	Annual	Monthly	Weekly
1	\$22,000	\$1,900	\$ 430
2	\$30,000	\$2,500	\$ 580
3	\$38,000	\$3,200	\$ 730
4	\$46,000	\$3,800	\$ 890
5	\$54,000	\$4,500	\$1,040
6	\$62,000	\$5,200	\$1,190
7	\$70,000	\$5,800	\$1,340
8	\$78,000	\$6,500	\$1,500

(Add \$8,000 per/year per individual for households greater than 8)

[Note: If you are asked about child support: If you are paying child support but your child is not living with you, this still counts as someone living on your income. Count a member of the household if they live with you for at least half the year.]

59. What is your employment status? *(Let them answer and repeat the category checked in the list. Check all that apply).*

- Employed full-time
- Employed part-time
- Retired
- Student
- Unemployed short-term (less than 27 weeks)
- Unemployed long-term (27 weeks or more)
- Disabled
- Homemaker
- More than one job
- Refused/No Response

That's the end! Thank you very much for completing the Community Health Survey. The results will be available on the WakeGov website by July 2013. *(Hand participant gift bag)*. As a token of our appreciation for participating, please accept this gift bag. *(Hand participant flyer if you haven't already and point to phone number)*. If you have any questions or concerns about the survey you can call the number on this flyer or send an email.

APPENDIX F: COMMUNITY HEALTH OPINION SURVEY RESULTS

- Source: North Carolina Institute of Public Health
- For information about methods, see the [2013 Wake County Community Health Needs Assessment report](#)

PART 1: Community

1. How do you feel about this statement, “I can access good health care in Wake County”?

(Consider the cost and quality, number of options, and availability of health care in the county).

Q1 Quality of Life Health care Access				
	Frequency	Percent	95% Confidence Limits	
Strongly Disagree	6	2.0982	0.4783	3.7181
Disagree	17	6.0714	3.3561	8.7867
Neutral	28	9.9107	5.9163	13.9052
Agree	113	40.1339	33.8008	46.4670
Strongly Agree	116	41.4286	34.5277	48.3294
No Response	1	0.3571	0.0000	1.0795

2. “I think Wake County is a good place to raise children”?

(Consider the quality and safety of schools and child care programs, after school programs, and places to play in this county).

Q2 Quality of Life: Raising Children				
	Frequency	Percent	95% Confidence Limits	
Strongly Disagree	2	0.7143	0.0000	1.7227
Disagree	6	2.1429	0.1935	4.0922
Neutral	16	5.6696	2.9851	8.3542
Agree	136	48.3036	42.6205	53.9866
Strongly Agree	119	42.5000	36.2974	48.7026
No Response	2	0.6696	0.0000	1.6173

3. “I think Wake County is a good place to grow old”?

(Consider the county’s elder-friendly housing, transportation to medical services, recreation, and services for the elderly).

Q3 Quality of Life: Growing Old				
	Frequency	Percent	95% Confidence Limits	
Strongly Disagree	2	0.7143	0.0000	1.7227
Disagree	10	3.5268	1.0645	5.9891
Neutral	51	17.9911	13.3345	22.6476
Agree	138	49.1667	42.7052	55.6282
Strongly Agree	78	27.8869	22.3113	33.4625
No Response	2	0.7143	0.0000	1.7227

4. **“I can find enough economic opportunity in Wake County”?** (Consider the number and quality of jobs, job training/higher education opportunities, and availability of affordable housing in the county).

Q4 Quality of Life: Economic Opportunity				
	Frequency	Percent	95% Confidence Limits	
Strongly Disagree	4	1.4286	0.0405	2.8167
Disagree	26	9.1964	5.1261	13.2668
Neutral	49	17.3810	12.4042	22.3577
Agree	141	50.2381	43.9192	56.5570
Strongly Agree	61	21.7560	15.9898	27.5222

5. **“I feel safe living in Wake County.”** (Consider how safe you feel at home, in the workplace, in schools, at playgrounds, parks, and shopping centers in the county).

Q5 Quality of Life: Safety				
	Frequency	Percent	95% Confidence Limits	
Strongly Disagree	1	0.3571	0.0000	1.0795
Disagree	15	5.3571	2.3076	8.4067
Neutral	28	9.9107	6.3408	13.4806
Agree	163	57.9315	51.9263	63.9368
Strongly Agree	74	26.4435	20.4519	32.4350

6. **“I think there’s enough help for people during times of need in Wake County”?** (Consider social support in this county: neighbors, support groups, faith community outreach, community organizations, and emergency monetary assistance).

Q6 Quality of Life: Help in Times of Need				
	Frequency	Percent	95% Confidence Limits	
Strongly Disagree	12	4.2857	1.7095	6.8619
Disagree	32	11.2054	7.0447	15.3660
Neutral	65	23.1250	17.5670	28.6830
Agree	126	44.9256	38.7902	51.0609
Strongly Agree	45	16.1012	11.1846	21.0177
No Response	1	0.3571	0.0000	1.0795

7. **“I think the environment in Wake County is clean and safe”.**
 (Consider clean air, safe drinking water, free from polluted sites, safe food supply, sufficient garbage collection and disposal, access to recycling, control of animals (domestic and wild) and control of insects/rodents).

Q7 Quality of Life: Environment				
	Frequency	Percent	95% Confidence Limits	
Strongly Disagree	2	0.7143	0.0000	1.7227
Disagree	11	3.8839	1.3699	6.3980
Neutral	24	8.5714	5.0174	12.1255
Agree	198	70.4315	63.6934	77.1697
Strongly Agree	46	16.3988	11.8193	20.9784

8. “I can find enough recreational and entertainment opportunities in Wake County”.

(Consider parks, museums, restaurants, movie theaters, sports, nature trails).

Q8 Quality of Life: Recreation and Entertainment				
	Frequency	Percent	95% Confidence Limits	
Strongly Disagree	4	1.3839	0.0369	2.7310
Disagree	18	6.3839	3.6684	9.0995
Neutral	24	8.4821	5.1327	11.8316
Agree	142	50.3571	43.1562	57.5581
Strongly Agree	93	33.3929	25.8715	40.9142

9. “I can easily access healthy, affordable food?”

Q9 Quality of Life: Health, Affordable Food				
	Frequency	Percent	95% Confidence Limits	
Strongly Disagree	5	1.7411	0.2469	3.2353
Disagree	19	6.6964	3.4458	9.9471
Neutral	19	6.6964	3.4846	9.9082
Agree	170	60.5506	54.4490	66.6522
Strongly Agree	68	24.3155	18.3440	30.2870

10. In your opinion, what are the TOP THREE (3) issues that most affect the quality of life in Wake County?

Q10 Community Issues: 1				
	Frequency	Percent	95% Confidence Limits	
Unemployment/Employment Opportunities	92	11.52	7.41	15.62
School Reassignment	84	10.48	6.57	14.40
Low Income/Poverty	67	8.37	4.85	11.89
Traffic Congestion	67	8.47	4.71	12.23
Drug and Alcohol Abuse	45	5.76	2.88	8.64
Violent Crimes	40	5.18	2.08	8.28
Homelessness	38	4.91	2.07	7.74
Gun Violence/Accidents	35	4.54	1.95	7.12
Access to Quality Education	35	4.39	1.91	6.87
Lack of/Inadequate Health Insurance	35	4.46	1.91	7.01
Affordable/Safe Transportation	26	3.36	0.96	5.76
Discrimination/Racism	23	2.94	0.74	5.13
Dropping Out of School	23	2.95	0.95	5.00
Access to Educational Opportunities	19	2.37	0.54	4.26
Domestic Violence	18	2.31	0.36	4.29
Lack of Access to Primary Care Physicians	18	2.29	0.46	4.14
Clean Water	12	1.51	0.35	2.68
Pollution	10	1.33	0.20	2.45
Rape/Sexual Assault	9	1.17	0.10	2.46
Elder Abuse	7	0.92	0.02	2.05
Child Abuse	7	0.93	0.10	1.87
School Suspensions of Expulsions	5	0.65	0.00	1.62
Animal/Pest Control	5	0.66	0.09	1.23
Other	34	4.35	1.34	7.36
None	30	3.70	0.92	6.47
Frequency Missing = 1				

11. In your opinion, which THREE (3) of the following services need the most improvement in your neighborhood or community?

Q11 Services In Need of Improvement:				
	Frequency	Percent	95% Confidence Limits	
Positive Teen Activities	74	9.28	5.39	13.17
Availability of Employment	62	7.82	4.15	11.48
Higher Paying Employment	59	7.55	4.03	11.06
Mental Health Services	57	7.36	3.92	10.79
Road Safety/Maintenance	51	6.49	3.48	9.50
Support to Help Me Manage My Health Conditions	46	5.90	2.91	8.90
More Affordable/Better Housing	45	5.72	2.53	8.90
Counseling/Mental Health/Support Groups	31	3.97	1.74	6.21
Services For Disabled People	29	3.66	1.37	5.94
None	29	3.81	1.46	6.40
No Response	29	3.57	1.12	6.14
Child Care Options	28	3.55	1.24	5.85
Better Law Enforcement	28	3.62	1.17	6.08
Better/More Recreational Facilities	27	3.42	1.10	5.75
Access to Assistance For Food	21	2.72	0.75	4.74
Animal/Pest Control	21	2.73	0.86	4.64
Emergency Preparedness and Response	21	2.72	0.75	4.70
Transportation Options	18	2.33	0.54	4.11
Better/More Healthy Food Choices	16	1.95	0.38	3.64
Healthy Family Activities	15	1.97	0.49	3.54
Other	15	2.01	0.41	3.75
Number of Health Care Providers	12	1.49	0.06	3.14
Culturally Sensitive Health Services	11	1.34	0.24	2.64
Clean Water	10	1.30	0.17	2.62
Gun Safety	9	1.17	0.02	2.48
More Affordable Health Services	8	1.01	0.02	2.22
Elder Care Options	7	0.88	0.00	2.01
Better Educational Opportunities	5	0.65	0.00	1.65

12. In your opinion, which THREE (3) health behaviors do people in your own community need more information about?

Q12 Health Behaviors: 1				
	Frequency	Percent	95% Confidence Limits	
Eating Well/Nutrition	68	8.61	4.54	12.67
Child Care/Parenting	59	7.29	4.22	10.36
Stress Management	46	6.07	3.22	8.92
Exercising/Fitness	40	5.17	2.29	8.05
None	39	4.78	1.06	8.58
Crime Prevention	38	4.83	1.99	7.66
Caring For Family Members with Special Needs/Disabilities	37	4.56	2.09	7.02
Anger Management	37	4.68	2.12	7.24
Driving Safely	36	4.59	1.85	7.33
Safe Driving Skills/Behavior	35	4.44	1.74	7.14
Managing Weight	33	4.21	1.74	6.68
Going to the Doctor For Periodic Check-ups and Screening	28	3.54	1.07	6.00
Managing Chronic Conditions	26	3.32	1.36	5.28
Gun Safety Training	26	3.37	1.10	5.64
Substance Abuse Prevention	26	3.34	1.00	5.69
Domestic Violence Prevention	25	3.29	1.18	5.50
How to Prepare for an Emergency/Disaster	24	3.13	1.06	5.21
Quitting Smoking/Tobacco Use Prevention	21	2.63	0.71	4.55
Going to a Dentist For Check-ups/Preventative Care	20	2.52	0.62	4.43
Elder Care	20	2.48	0.70	4.31
Getting Flu Shots and Other Vaccines	19	2.49	0.43	4.60
Other	17	2.16	0.47	3.96
Preventing Unwanted Pregnancies	14	1.85	0.49	3.38
Suicide Prevention	12	1.57	0.28	2.98
Preventing Sexually Transmitted Diseases	9	1.16	0.02	2.46
Getting Prenatal Care During Pregnancy	8	1.03	0.01	2.42
Rape/Sexual Abuse Prevention	8	1.05	0.00	2.27
Using Child Safety Seats	7	0.86	0.00	1.97
Using Seat Belts	5	0.63	0.00	1.61
No Response	3	0.36	0.00	0.89
Frequency Missing = 1				

13. Since this time last year, have you done any volunteer activities through or for an organization?

Q13 Any Volunteer Activity In Past Year				
	Frequency	Percent	95% Confidence Limits	
No	132	46.7560	38.7991	54.7128
Yes	148	52.8869	44.8488	60.9250
No Response	1	0.3571	0.0000	1.0795

(If Yes), which types of organizations did you work with?

Q13B Which types of organizations did you work with?					
Type of Organization		Frequency	Percent	95% Confidence Limits	
School					
	Yes	28	9.9554	5.6682	14.2425
	No	253	90.0446	85.7575	94.3318
Non-Profit					
	Yes	46	16.4137	11.5903	21.2371
	No	235	83.5863	78.7629	88.4097
Civic					
	Yes	14	4.9107	2.0958	7.7257
	No	267	95.0893	92.2743	97.9042
Health					
	Yes	18	6.4286	3.1650	9.6922
	No	263	93.5714	90.3078	96.8350
Religious/Spiritual					
	Yes	61	21.9792	15.6072	28.3511
	No	220	78.0208	71.6489	84.3928
Community					
	Yes	38	13.4375	8.5060	18.3689
	No	243	86.5625	81.6311	91.4940
Sports					
	Yes	6	2.0982	0.4783	3.7181
	No	275	97.9018	96.2819	99.5217
Other					
	Yes	16	5.7738	2.5162	9.0314
	No	265	94.2262	90.9686	97.4838

PART 2: Health

14. In general, would you say that your health is...

Q14 Personal Health Rating				
	Frequency	Percent	95% Confidence Limits	
Excellent	72	25.6399	19.7717	31.5081
Good	157	55.7738	50.0974	61.4502
Fair	41	14.7024	9.7951	19.6097
Poor	11	3.8839	1.1653	6.6026

15. During the past 12 months, was there any time when you did not have any health insurance coverage? (This includes private insurance purchased through work or individually, military health benefits (Tricare, VA, etc.), Medicare, Medicaid, or any other program that assists with providing health services at a reduced cost.)

Q15 Did Not Have Health Insurance In Past 12 Months				
	Frequency	Percent	95% Confidence Limits	
No	228	81.2798	73.5173	89.0422
Yes	51	18.0059	10.1359	25.8760
Don't Know	2	0.7143	0.0000	1.7227

If you have health insurance, what is your primary health insurance plan? This is the plan which pays the medical bills first or pays most of the medical bills.

Q16 Primary Health Insurance Plan				
	Frequency	Percent	95% Confidence Limits	
The State Employee Health Plan	10	3.6440	1.3502	5.9377
Blue Cross and Blue Shield of North Carolina	94	33.5275	26.3421	40.7129
United Health care	27	9.6924	5.8968	13.4879
CIGNA	22	7.8405	4.4185	11.2625
Aetna	6	2.2103	0.5035	3.9171
Wellpath/Coventry	3	1.0753	0.0000	2.2980
Other Private Plan Purchased From Employer/Workplace	7	2.5090	0.7458	4.2721
Other Private Plan Purchased Directly From Insurance Company	3	1.0753	0.0000	2.2980
Medicare	41	14.5609	8.0523	21.0696
Medicare Supplement Plan	1	0.3584	0.0000	1.0833
Medicaid/Carolina ACCESS/Health Choice 55	13	4.6147	1.7922	7.4372
The Military, Tricare, CHAMPUS, or VA	6	2.1505	0.4934	3.8077
No Health Plan of Any Kind	42	14.9343	7.9333	21.9353
Other (Government Plan)	3	1.0902	0.0000	2.3392
Don't Know/Not Sure	2	0.7168	0.0000	1.7287
Frequency Missing = 1				

16. Where do you go most often when you are sick?

Q17 Where Goes When Sick				
	Frequency	Percent	95% Confidence Limits	
Doctor's Office	193	68.7054	60.3820	77.0287
Free/Low Cost Clinics	10	3.5714	0.5110	6.6319
Wake County Health Dept. Wake Health Services	4	1.3839	0.0369	2.7310
Hospital	19	6.7857	3.0571	10.5143
Emergency Room	18	6.2500	2.5196	9.9804
Open Door Clinic	1	0.3571	0.0000	1.0795
Pharmacy/Retail Minute Clinics	6	2.2619	0.1363	4.3875
Urgent Care	18	6.4435	3.1726	9.7143
Other	11	3.9286	1.6180	6.2392
No Response	1	0.3125	0.0000	0.9446

17b. In which city or town is it [answer from Q17] located?

Q17B City Where Destination of Choice Located When Sick				
	Frequency	Percent	95% Confidence Limits	
Apex	2	0.6739	0.0000	1.6330
Carrboro	1	0.3594	0.0000	1.0862
Cary	39	13.9263	5.1239	22.7288
Chapel Hill	1	0.3145	0.0000	0.9545
Clayton	3	1.0782	0.0000	2.3040
Durham	8	2.8751	1.0152	4.7350
Fuquay-Varina	11	3.9084	0.0000	8.7859
Garner	2	0.7188	0.0000	2.1724
Holly Springs	3	1.0332	0.0000	2.6102
Knightdale	13	4.8518	0.4565	9.2470
Other	1	0.3594	0.0000	1.0862
Raleigh	177	63.3124	51.4889	75.1358
Refused/No Res	5	1.7969	0.2583	3.3356
Wake Forest	3	1.0782	0.0000	2.6865
Wendell	3	1.0782	0.0000	3.2587
Zebulon	1	0.4193	0.0000	1.2673
Frequency Missing = 2				

17. About how long has it been since you last visited a doctor for a routine checkup? This does not include any times you visited the doctor because you were sick, pregnant or for chronic disease.

Q18 How Long Since Last Visit To Doctor For Routine Checkup				
	Frequency	Percent	95% Confidence Limits	
Within Past Year	196	69.8363	64.0149	75.6578
1-2 Years Ago	50	17.6339	13.7623	21.5056
3-5 Years Ago	22	7.8720	4.6018	11.1422
More Than 5 Years Ago	9	3.2292	1.0243	5.4340
I have never had a routine checkup	2	0.7143	0.0000	1.7227
Don't Know/Not Sure	2	0.7143	0.0000	1.7227

18. In the past 12 months, did you ever have a problem getting the health care you needed? Please include any problems you had filling a prescription or getting mental, disability or dental care?

Q19 Problem Getting Needed Health Care in Past 12 Months				
	Frequency	Percent	95% Confidence Limits	
No	244	86.7708	81.7647	91.7770
Yes	37	13.2292	8.2230	18.2353

19. Which of these problems did you have? I have a list of different type of problems that you may have encountered.

Type of Problem	Q20 Problem Getting Health Care				
		Frequency	Percent	95% Confidence Limits	
No Insurance					
	Yes	19	6.7857	3.3562	10.2152
	No	262	93.2143	89.7848	96.6438
No Transportation					
	Yes	1	0.3571	0.0000	1.0795
	No	280	99.6429	98.9205	100.000
No Separate Dental					
	Yes	5	1.7857	0.2555	3.3160
	No	276	98.2143	96.6840	99.7445
No Child Care					
	Yes	1	0.3571	0.0000	1.0795
	No	280	99.6429	98.9205	100.000
Insurance Did Not Cover needed					
	Yes	3	1.0714	0.0000	2.2901
	No	278	98.9286	97.7099	100.000
Did not Know Where to Go					
	Yes	5	1.8452	0.2602	3.4302
	No	276	98.1548	96.5698	99.7398
Could Not Afford out-of-pocket cost					
	Yes	12	4.2411	2.1410	6.3412
	No	269	95.7589	93.6588	97.8590
Can Afford, but I don't Want to Pay Cost					
	Yes	1	0.3571	0.0000	1.0795
	No	280	99.6429	98.9205	100.000
Could not Get Appointment					
	Yes	10	3.5714	1.3165	5.8263
	No	271	96.4286	94.1737	98.6835
Language barrier					
	Yes	0	0	0.0000	0.000
	No	281	100.000	100.000	100.000
Insurance not Accepted					
	Yes	2	0.7143	0.0000	1.7227
	No	279	99.2857	98.2773	100.000
Problems with Medicare D					
	Yes	1	0.3571	0.0000	1.0795
	No	280	99.6429	98.9205	100.000
Other Problem					
	Yes	12	4.3452	1.7421	6.9484
	No	269	95.6548	93.0516	98.2579

20. About how long has it been since you last visited a dentist for a routine checkup? Do not include times you visited the dentist because of pain or an emergency.

Q21 How Long Since Last Visit To Dentist For Routine Checkup				
	Frequency	Percent	95% Confidence Limits	
Within Past Year	193	68.7500	61.1306	76.3694
1-2 Years Ago	46	16.4137	10.7720	22.0554
3-5 Years Ago	21	7.4256	4.2836	10.5676
More Than 5 Years Ago	17	5.9821	2.5885	9.3758
I have never had a routine checkup	4	1.4286	0.0405	2.8167

21. In the past 12 months, have you used any kind of complementary and alternative medicine? Some examples might include acupuncture, chiropractic treatments, natural products, or medicinal herbs.

Q22 Used Alternative/Complementary Medicine In Past 12 Months				
	Frequency	Percent	95% Confidence Limits	
No	226	80.5357	75.7387	85.3327
Yes	54	19.1071	14.3269	23.8874
No Response	1	0.3571	0.0000	1.0795

22. How often do you have someone like a family member, friend, hospital/clinic worker, or caregiver help you read and understand health related materials?

Q23 How Often Someone Helps Read/Understand Health Related Materials				
	Frequency	Percent	95% Confidence Limits	
Always	15	5.3571	2.6816	8.0327
Frequently	11	3.7946	1.5992	5.9901
Occasionally	49	17.4702	12.3454	22.5951
Never	206	73.3780	66.9415	79.8144

23. How often do you have problems learning about your medical condition because of difficulty understanding written information?

Q24 How Often Problems Learning About Medical Condition Due to Difficulty Understanding Written Material				
	Frequency	Percent	95% Confidence Limits	
Always	8	2.8571	0.7368	4.9775
Frequently	5	1.8006	0.2502	3.3510
Occasionally	32	11.3393	7.0821	15.5964
Never	235	83.6458	77.8009	89.4908
No Response	1	0.3571	0.0000	1.0795

24. If a friend or family member needed counseling for a mental health or a drug/alcohol abuse problem, who is the first person you would tell them to call or talk to?

Q25 Who To Talk To For Mental Health/Drug or Alcohol Abuse Counseling				
	Frequency	Percent	95% Confidence Limits	
Doctor	91	32.2917	26.1320	38.4513
Family Member	22	7.8720	4.4420	11.3020
Support Group	10	3.5714	0.6911	6.4517
Private Counselor/Therapist	43	15.3571	9.1161	21.5982
Hotline	6	2.0536	0.0000	4.1531
Minister/Religious Official/Church	33	11.8452	7.2263	16.4642
Crisis and Assessment/CAS	5	1.7857	0.0000	3.6329
Alliance Behavioral Health care	5	1.7411	0.2469	3.2353
Other	33	11.7857	7.4099	16.1615
Don't Know/Not Sure	33	11.6964	6.3704	17.0224

25. Where do you engage in exercise or physical activities?

Q26 Engage in Exercise: Do Not Exercise				
	Frequency	Percent	95% Confidence Limits	
Yes	29	10.0893	5.5433	14.6352
No	252	89.9107	85.3648	94.4567

Q26 Where do you Engage in Exercise?				
	Frequency	Percent	95% Confidence Limits	
Neighborhood	86	30.5952	24.6271	36.5633
Public Canter/Park/Trail	82	29.1815	23.7317	34.6314
Home	77	27.5149	20.7094	34.3204
Private Gym/Pool	77	27.4107	20.5764	34.2450
Work	15	5.3720	1.9821	8.7619
School Setting	5	1.7857	0.2555	3.3160
Other	3	1.0714	0.0000	2.6701
Faith Community	0	0	-	-
Malls	0	0	-	-

26. Are there any reasons why you don't exercise?

Q27 Reasons For No Exercise:				
	Frequency	Percent	95% Confidence Limits	
Physically Unable	10	3.5268	1.5464	5.5072
Not Enough Time	9	3.2143	1.0226	5.4060
Do Not Like It	5	1.6964	0.0000	3.4119
No Childcare	2	0.6696	0.0000	1.6173
Too Expensive	2	0.7143	0.0000	1.7227
Other	2	0.7143	0.0000	1.7227
No Safe Place	1	0.3125	0.0000	0.9446
No Access to Facility	0	0	-	-
Do Not Need To	0	0	-	-
Too Tired	0	0	-	-

27. If you smoke cigarettes, where would you go for help in order to quit?

Q28 Where To Go To Quit Smoking: Do Not Smoke				
	Frequency	Percent	95% Confidence Limits	
Yes	235	83.7351	79.3784	88.0918
No	46	16.2649	11.9082	20.6216

Q28 Where To Go To Quit Smoking?					
	Frequency	Percent Just Smokers	Percent	95% Confidence Limits	
Doctor	14	30%	4.9107	2.1407	7.6807
Cold Turkey	10	22%	3.6310	1.5907	5.6712
Not Applicable	9	20%	3.1250	1.0366	5.2134
Pharmacy	5	11%	1.7857	0.2555	3.3160
Do Not Know	3	7%	1.0714	0.0000	2.2901
Quit Line	2	4%	0.7143	0.0000	1.7227
Other	2	4%	0.6696	0.0000	1.6173
Church	1	2%	0.3571	0.0000	1.0795
Health Department	0	0	0	-	-
Work	0	0	0	-	-
Health Insurance Company	0	0	0	-	-
Private Counselor/Therapist	0	0	0	-	-

28. Has a doctor, nurse, or other health professional EVER told you that you had any of the following health issues?

Q29 Health Issues (Missing=5)				
	Frequency	Percent	95% Confidence Limits	
High BP	79	28.1399	22.3337	33.9461
Overweight/Obesity	64	22.8869	17.3229	28.4509
High Cholesterol	55	19.5685	14.3851	24.7519
Depression	47	16.7115	12.0574	21.3655
Asthma	40	14.1964	9.4800	18.9128
Cancer	38	13.3929	9.4872	17.2985
Chronic Pain	32	11.3393	7.4777	15.2009
Diabetes	20	7.1237	3.3925	10.8548
Osteoporosis	17	6.0863	3.3620	8.8106
Heart Disease	13	4.5982	1.9991	7.1973
Congestive Heart Failure	4	1.4286	0.0000	3.6953
COPD	4	1.4881	0.0383	2.9379

29. Have you ever been tested for HIV?

Q30 Ever Been Tested For HIV				
	Frequency	Percent	95% Confidence Limits	
No	112	39.5982	31.2229	47.9735
Yes	159	56.8750	48.5561	65.1939
Don't Know	7	2.4554	0.7266	4.1841
No Response	3	1.0714	0.0000	2.2901

AGE/GENDER SPECIFIC HEALTH QUESTIONS

30. What year were you were born?

Q31 Age				
	Mean	SD	Min	Max
Age	47.15	15.86	19.00	89.00

31. What is your gender?

Q32 Gender				
	Frequency	Percent	95% Confidence Limits	
Male	112	40.1190	34.0325	46.2056
Female	169	59.8810	53.7944	65.9675

32. (Only for people over 50): Have you ever had a colonoscopy?

Ever Had Colonoscopy				
	Frequency	Percent	95% Confidence Limits	
No	23	21.1382	14.4766	27.7998
Yes	84	77.9326	71.2768	84.5885
No Response	1	0.9292	0.0000	2.7446
Frequency Missing = 173				

33. (Only for males over 40): Do you have an annual prostate exam?

Q34 Annual Prostate Exam				
	Frequency	Percent	95% Confidence Limits	
No	27	39.7444	25.3657	54.1230
Yes	40	58.7949	43.8652	73.7246
No Response	1	1.4607	0.0000	4.3851
Frequency Missing = 213				

34. (Only for females over 40): Do you have a mammogram every year?

Q35 Annual Mammogram				
	Frequency	Percent	95% Confidence Limits	
No	41	38.4035	26.9303	49.8767
Yes	64	60.6434	49.3026	71.9841
No Response	1	0.9531	0.0000	2.8419
Frequency Missing = 175				

35. (Only for females over 21): Do you have a pap smear at least every other year?

Q36 Pap Smear At Least Every Other Year				
	Frequency	Percent	95% Confidence Limits	
No	36	21.6004	15.0396	28.1612
Yes	129	77.8678	71.0471	84.6885
Don't Know	1	0.5318	0.0000	1.6072
Frequency Missing = 115				

36. Some people provide help to a family member or friend who has a long-term illness or disability. This may include help with things they can no longer do for themselves. During the past 12 months, did you provide any such help to a family member or friend, and if so, what was your relationship to that person?

Q37 Provide Care Due To Long Term Illness/Disability:				
	Frequency	Percent	95% Confidence Limits	
None	208	73.8542	67.0625	80.6458
Elderly/Disabled Parent/Grandparent	33	11.8750	7.6297	16.1203
Other	23	8.2887	4.7996	11.7777
Disabled child	14	4.9107	2.3412	7.4803
Friend w/ Chronic Illness	8	2.8571	0.7368	4.9775
Disabled Spouse/partner	5	1.8452	0.2602	3.4302
Disabled grandchild	1	0.3125	0.0000	0.9446
Foster Child	0	0	0	0

37. In the past 12 months, did you have a difficult time finding additional care or support for the person or people indicated above?

Q38 Trouble Finding Support When Caring For Disabled Friend/Family				
	Frequency	Percent	95% Confidence Limits	
No	48	72.1017	59.4167	84.7867
Yes	17	24.9225	13.3090	36.5360
Don't Know	2	2.9758	0.0000	7.3193
Frequency Missing = 214				

38. If yes, what was the main reason you, the caregiver, had this problem?

Q39 Reason Had Trouble Finding Care For Disabled Friend/Family				
	Frequency	Percent	95% Confidence Limits	
Access to Services	2	11.9403	0.0000	30.2212
Transportation	1	5.9702	0.0000	19.1277
I don't know where services are available	2	11.9403	0.0000	30.2212
Work Responsibilities	1	5.9702	0.0000	17.3868
Can't Pay For Services	2	11.9403	0.0000	27.7082
Couldn't Find Suitable Long-Term Care Facility	2	11.9403	0.0000	30.2212
Other	7	40.2985	14.0016	66.5954
Frequency Missing = 264				

39. Do you have any children age 18 or under?

Q40 Children Under 18 In Household				
	Frequency	Percent	95% Confidence Limits	
No	161	57.1280	48.5479	65.7080
Yes	120	42.8720	34.2920	51.4521

40. What are the ages of your children?

Q41 Number of Children Age 0-4 In Household				
	Frequency	Percent	95% Confidence Limits	
0	82	67.8485	57.8978	77.7992
1	24	19.7246	11.4185	28.0307
2	11	9.0878	3.9195	14.2560
3	3	2.5129	0.0000	5.3218
5	1	0.8262	0.0000	2.5451
Frequency Missing = 160				

Q41 Number of Children Age 5-9 In Household				
	Frequency	Percent	95% Confidence Limits	
0	82	67.6420	56.8555	78.4285
1	30	24.7849	14.8855	34.6842
2	9	7.5731	3.2448	11.9015
Frequency Missing = 160				

Q41 Number of Children Age 10-14 In Household				
	Frequency	Percent	95% Confidence Limits	
0	81	66.7814	56.7850	76.7778
1	31	25.7831	17.1852	34.3810
2	9	7.4355	3.0075	11.8634
Frequency Missing = 160				

Q41 Number of Children Age 15-18 In Household				
	Frequency	Percent	95% Confidence Limits	
0	85	70.3270	61.7579	78.8961
1	25	20.6885	13.9618	27.4152
2	9	7.3322	2.6734	11.9909
3	2	1.6523	0.0000	4.0254
Frequency Missing = 160				

41. During the past 12 months, was there any time that your child(ren) did not have health insurance or coverage?

Q42 Children Did Not Have Health Insurance In Past 12 Months				
	Frequency	Percent	95% Confidence Limits	
No	102	85.9293	79.0588	92.7998
Yes	17	14.0707	7.2002	20.9412
Frequency Missing = 162				

42. Do you talk to your children about any of the following topics?

Q43 Talk To Children Regarding:				
	Frequency	Percent	95% Confidence Limits	
Bullying	70	25.1786	18.6763	31.6809
Tobacco Use	68	24.4048	18.3406	30.4690
Guns	67	24.0476	18.0548	30.0404
Drug Use	67	24.0030	17.8261	30.1799
Risky Internet Content	66	23.7500	17.3431	30.1569
Alcohol Use	64	22.9316	17.0723	28.7908
Sexual Activity	56	20.1191	14.0814	26.1567
Testing while Driving	53	19.0476	12.8687	25.2266
Reckless Driving	49	17.6191	12.4666	22.7715
Criminal Activities	49	17.6191	12.6788	22.5593
Truancy	48	17.2619	12.0352	22.4887
Gangs	48	17.1577	12.0666	22.2488
Eating Disorders	43	15.4762	10.5413	20.4111
I don't think my child engages in risky behaviors	14	4.9702	1.9911	7.9493
No Response	4	1.4286	0.0000	3.1598
Other	3	1.0268	0.0000	2.1971

43. Do you think any of your children or your children's friends are engaging in any of the following risky behaviors I am about to read?

Q43 Talk To Children Regarding:				
	Frequency	Percent	95% Confidence Limits	
Bullying	13	4.7024	2.0618	7.3429
Tobacco Use	9	3.2738	1.0475	5.5001
Guns	2	0.7143	0.0000	1.7227
Drug Use	11	3.9435	1.1984	6.6885
Risky Internet Content	16	5.8333	2.6633	9.0033
Alcohol Use	14	5.0000	2.1571	7.8429
Sexual Activity	15	5.4167	2.1769	8.6564
Texting while Driving	12	4.2857	1.1475	7.4239
Reckless Driving	6	2.1429	0.4907	3.7950
Criminal Activities	1	0.3571	0.0000	1.0795
Truancy	6	2.1429	0.4907	3.7950
Gangs	5	1.8452	0.0000	3.7380
Eating Disorders	6	2.1429	0.1935	4.0922
I don't think my child engages in risky behaviors	80	28.5565	21.1859	35.9272
No Response	2	0.6696	0.0000	1.6173
Other	1	0.3571	0.0000	1.0795

PART 3: Emergency Preparedness

44. Is anyone in your household certified in CPR (a.k.a. Cardiopulmonary Resuscitation)?

Q45 Anyone In Household Certified In CPR				
	Frequency	Percent	95% Confidence Limits	
No	151	53.7798	45.7921	61.7674
Yes	126	44.7917	36.8888	52.6946
Don't Know	3	1.0714	0.0000	2.2901
No Response	1	0.3571	0.0000	1.0795

45. In a disaster, what source would you first turn to for information?

Q46 Source For Information In a Disaster				
	Frequency	Percent	95% Confidence Limits	
Television	137	48.6905	41.8270	55.5540
Radio	36	12.8571	8.8769	16.8374
Internet	46	16.3988	11.8467	20.9509
Smartphone	22	7.8125	4.7257	10.8993
Neighbors/Word of Mouth	2	0.6696	0.0000	1.6173
911	21	7.5000	3.4946	11.5054
Other	11	3.9286	1.0045	6.8527
Don't Know	6	2.1429	0.4907	3.7950

46. Does anyone in your household have a disability that would make it more difficult to deal with an emergency like a hurricane, power outage, etc.?

Q47 Anyone In Household Have Disability Making It Difficult To Deal With Disaster				
	Frequency	Percent	95% Confidence Limits	
No	260	92.4851	89.5535	95.4168
Yes	21	7.5149	4.5832	10.4465

47. In the event of a large-scale disaster, which of the following statements best represents your belief?

Q48 Belief In Preparing For Large-Scale Disasters				
	Frequency	Percent	95% Confidence Limits	
I can handle the situation without any preparation	20	7.0238	4.0658	9.9818
Preparation, planning, and emergency supplies will help me handle the situation	246	87.7083	83.1014	92.3153
Nothing I do to prepare will help me handle the situation	8	2.8125	0.9886	4.6364
Don't Know	7	2.4554	0.4406	4.4701

48. In the first 72 hours following a disaster, whom would you rely on the most for assistance?

Q49 Who To Rely On In First 24hrs Following Disaster				
	Frequency	Percent	95% Confidence Limits	
Household Members	91	32.2768	25.4746	39.0790
Other Family and Friends	80	28.3929	22.8155	33.9702
People In My Neighborhood	25	8.9435	5.5552	12.3317
Non-Profit Organization	19	6.8006	3.8686	9.7326
My Faith Community	7	2.5000	0.7419	4.2581
Fire, Police, Emergency Personnel	45	16.1310	11.1497	21.1123
State and Federal Government Agencies	7	2.4554	0.4406	4.4701
No Response	7	2.5000	0.4601	4.5400

49. If public authorities announced a mandatory evacuation from your community due to a large-scale disaster or emergency, would you evacuate?

Q50 Would Evacuate In Mandatory Evacuation				
	Frequency	Percent	95% Confidence Limits	
No	17	5.9375	2.5075	9.3675
Yes	243	86.6071	82.1872	91.0271
Don't Know	21	7.4554	4.1941	10.7166

50. What would be the main reason you might not evacuate if asked to do so?

Q51 Reason For Not Evacuating In Mandatory Evacuation				
	Frequency	Percent	95% Confidence Limits	
Lack of Transportation	1	2.6667	0.0000	8.2772
Lack of Trust In Public Officials	7	18.6667	4.1883	33.1450
Concern About Personal Safety	1	2.6667	0.0000	8.2772
Concern About Leaving Pets	3	7.6667	0.0000	16.5978
Health Problems	1	2.3333	0.0000	7.0244
Concern About Leaving Property	18	47.6667	28.5871	66.7462
Concern About Family Safety	5	13.3333	0.0000	26.9473
No Response	2	5.0000	0.0000	12.2551
Frequency Missing = 243				

PART 4: Demographics

51. How do you identify your race or ethnicity?

Q52 How do you identify your race or ethnicity				
	Frequency	Percent	95% Confidence Limits	
White	173	61.44	51.15	71.74
Black	61	21.30	12.96	30.64
Hispanic	26	9.29	3.57	15.00
Asian	6	2.14	0.49	3.80
American Indian	1	0.36	0.00	1.08
Multi Racial	5	1.79	0.00	3.63
Other	8	2.85	0.78	4.88
No response	1	0.3571	0.00	1.08

52. What language(s) do you speak at home?

Q59 Languages Spoken In Home				
	Frequency	Percent	95% Confidence Limits	
English	268	95.3571	90.1441	100.000
Spanish	24	8.6905	2.9934	14.3876
Other	22	7.7827	4.2500	11.3154

53. What is your marital status?

Q54 Marital Status				
	Frequency	Percent	95% Confidence Limits	
Married	160	56.9494	47.4371	66.4617
Divorced	31	10.9821	7.0818	14.8825
Widowed	12	4.3452	1.9566	6.7339
Separated	7	2.5000	0.4601	4.5400
Never Married	60	21.2946	14.2794	28.3099
Member of Non-married Couple	11	3.9286	0.6588	7.1983

54. What is the highest level of school, college or training that you have completed?

Q55 Highest Level of Education				
	Frequency	Percent	95% Confidence Limits	
Never Attended/Only Attended Kindergarten	1	0.3571	0.0000	1.0795
Elementary	7	2.4554	0.0000	4.9453
Some High School	9	3.1696	0.3555	5.9838
High School Graduate	36	12.6339	7.1175	18.1503
Some College/Technical School	75	26.6815	20.7809	32.5822
College Graduate	106	37.9464	29.7816	46.1113
Graduate School or Higher	45	16.0417	10.9738	21.1095
No Response	2	0.7143	0.0000	1.7227

55. Including yourself, how many people live in your household?

Q56 Household Size				
	Frequency	Percent	95% Confidence Limits	
1	41	14.6131	8.8045	20.4217
2	88	31.1161	23.1564	39.0757
3	46	16.4137	11.8725	20.9549
4	59	21.1012	15.9159	26.2865
5	30	10.6845	7.0230	14.3460
6	11	3.9286	0.8268	7.0303
7	4	1.4286	0.0405	2.8167
8	1	0.3571	0.0000	1.0795
9	1	0.3571	0.0000	1.0795

56. Does this number include anyone who has had to move in because they didn't have a place to live?

Q57 Anyone Have To Move Into Household Due To Homelessness				
	Frequency	Percent	95% Confidence Limits	
No	257	91.8907	88.5305	95.2509
Yes	22	7.7509	4.3816	11.1202
Don't Know	1	0.3584	0.0000	1.0833
Frequency Missing = 1				

57. Is your annual household income GREATER than \$XX,XXX before taxes?

Family size	Annual	Monthly	Weekly
1	\$22,000	\$1,900	\$ 430
2	\$30,000	\$2,500	\$ 580
3	\$38,000	\$3,200	\$ 730
4	\$46,000	\$3,800	\$ 890
5	\$54,000	\$4,500	\$1,040
6	\$62,000	\$5,200	\$1,190
7	\$70,000	\$5,800	\$1,340
8	\$78,000	\$6,500	\$1,500

(Add \$8,000 per/year per individual for households greater than 8)

Q58 Income Greater Than Poverty Threshold				
	Frequency	Percent	95% Confidence Limits	
No	77	27.3214	18.0980	36.5448
Yes	186	66.2500	57.1126	75.3874
Don't Know	7	2.5000	0.7419	4.2581
No Response	11	3.9286	1.1936	6.6635

58. What is your employment status?

Q59 Employment Status				
	Frequency	Percent	95% Confidence Limits	
Full time	131	46.7857	40.2881	53.2834
Part time	33	11.7857	7.1718	16.3997
Retired	52	18.6161	12.5764	24.6557
Homemaker	25	8.7946	5.3114	12.2778
Student	12	4.2857	1.7095	6.8619
Unemployed long term	19	6.6071	3.6292	9.5851
Unemployed Short Term	17	5.9821	2.9614	9.0029
Disabled	5	1.7411	0.2469	3.2353
More than 1 job	1	0.3571	0.0000	1.0795

APPENDIX G: FOCUS GROUP METHODS

To complement the quantitative data collected, the NCIPH project team gathered qualitative data by conducting 9 hour-long focus groups, each made up of 5-12 participants. Conducting focus groups captures rich information about the attitudes and beliefs of the participants, which helps to highlight gaps and specific concerns and add to the understanding of the quantitative results.

Homogenous sampling was used to recruit participants based on the results of the secondary data analysis and stakeholder input on high-risk groups and health disparities in Wake County. Identified populations were recruited in-person and via email with the assistance of the Community Health Needs Assessment Steering Committee. Participants were required to be Wake County residents.

Focus group participants were informed about the general purpose of the assessment, the details of participation, the measures to be taken to ensure confidentiality, and their rights as participants. Focus group participants were asked to provide verbal consent to participate and to give permission to have the session audio recorded. Additionally, for the youth focus group parents provided written consent. Focus group participants were offered a small incentive (the equivalent of \$8-\$10) in compensation for their time.

The discussion guide was developed to explore important aspects of health, community strengths, and barriers to health, including access to health care and health information. Follow-up questions and prompts were tailored for each focus group. A discussion moderator and notetaker participated in all focus group sessions. After each session, the audio recording was transcribed and analyzed for key themes.

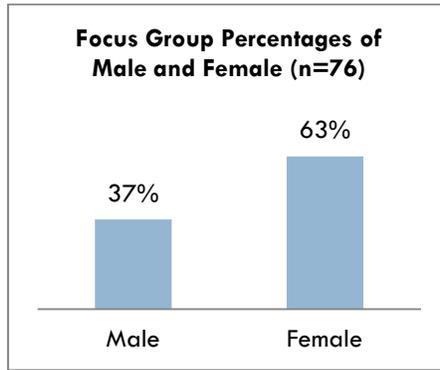
Limitations

While focus groups conducted for this assessment provide valuable insights and rich information, results are not statistically representative of Wake County as a result of non-random recruiting methods and small sample size. Recruitment for focus groups was conducted by member organizations of the Community Health Needs Assessment Steering Committee as well as other community-based organizations, where staff and clients are already involved in community programming and initiatives. It is possible that the responses received only provide one perspective on the issues discussed. Additionally, data was collected at one point in time (March-April 2013); therefore, while directional and descriptive, focus group data should not be interpreted as definitive.

Demographic Results

There were 9 total focus groups conducted for the 2013 Wake County Community Health Needs Assessment, including:

- Youth
 - 6 attendees, mean age 16
- Seniors
 - 12 attendees, mean age 68
- Homeless
 - 10 attendees, mean age 40
- Hispanics/Latinos
 - 2 focus groups conducted
 - 19 attendees, mean age 38
- Service Providers in Wake County
 - 10 attendees, mean age 46
- Persons living with mental health or substance abuse illness and parents of children with intellectual/developmental disabilities
 - 5 attendees, mean age 58
- Persons Living with Chronic Health Conditions
 - 6 attendees, mean age 73
- Persons living with physical disabilities
 - 8 attendees, mean age 55

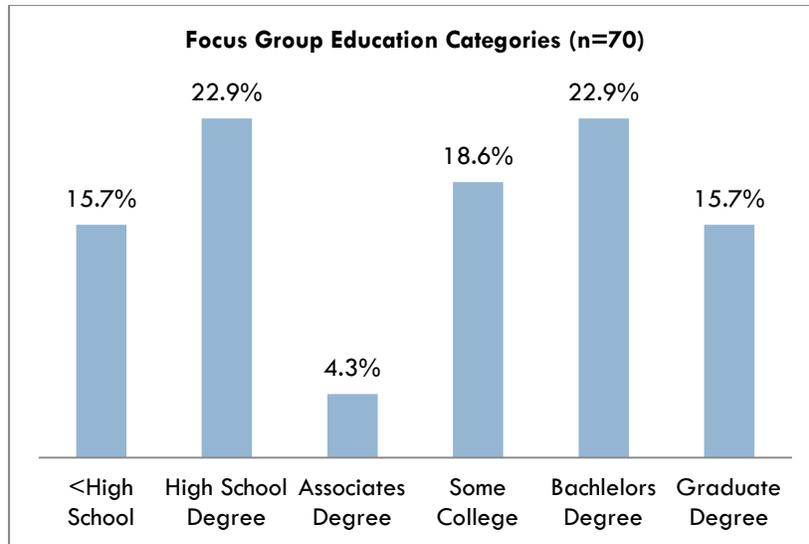


Focus Group Participant Race Distribution

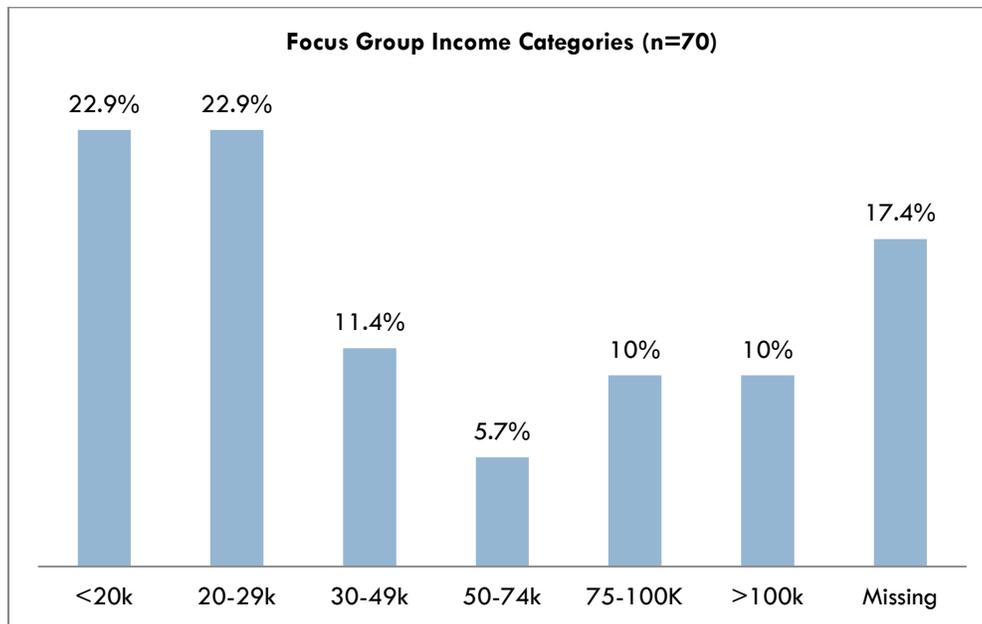
Total	White		Black		Asian/Pacific Islander		Native American		Other/Mixed	
76	38	50%	19	25%	1	1.3%	0	0%	17	22.4%

Focus Group Participant Ethnicity Distribution

Total	Hispanic		Non-Hispanic	
76	25	32.9%	51	67.1%



Note: 6 missing.



Note: 6 missing.

APPENDIX H: FOCUS GROUP QUESTIONS AND DEMOGRAPHIC FORM

- Source: North Carolina Institute of Public Health
- For information about methods, see the [2013 Wake County Community Health Needs Assessment report](#)

1. *One at a time, please tell us how long you have lived in Wake County.*
2. *Since we'll be talking about health, what does being healthy mean to you, personally?*
3. *When you hear the words "healthy community", what comes to mind? To you, what would a healthy community look like?*
4. *What is it like living or working in this community?*
5. *How has your community changed over the past five years?*
 - 5a. *Why do you think it has changed?*
 - 5b. *How have these changes influenced your health and the health of your neighbors?*
6. *Where do you go if you have health problems or need health services?*
7. *Where do you and others in your community get most of your health information?*
8. *What things concern you the most about the health of Wake County?*
9. *Are there groups of people within your community whose health issues seem to be overlooked, or whose health needs are not met?*
10. *Think back over all the topics we've discussed. If you were in charge, what specific things would you do to improve the health of the community?*
 - 10b. *Are there any resources or activities you would like to see in Wake County that's not here now?*
11. *Of all the issues we have talked about today, what are the most important issues for your community to address?*
12. *Is there anything that we have not asked or that you would like to add?*
13. *Do you have any questions about the community health assessment process?*

Focus Group Demographic Information Form

Questions will only be reported as a summary of answers given by all focus group participants in the Wake County Community Health Assessment. Your answers will remain anonymous.

1. How old are you? _____ years old

2. Are you Male or Female?
 - Male
 - Female

3. What is your race? Please check all that apply.
 - White/Caucasian
 - Black or African American
 - Asian/Pacific Islander
 - Native American
 - Other: _____

4. Are you of Hispanic or Latino origin?
 - Yes
 - No

5. What is the highest level of school, college or vocational training that you have finished?
 - Less than High School
 - High School Graduate (or GED/ Equivalent)
 - Associate's Degree or Vocational Training
 - Some College (No Degree)
 - College Degree
 - Graduate or Professional Degree
 - Other: _____

6. What was your total household income last year, before taxes?
 - Less than \$20,000
 - \$20-\$29,999
 - \$30,000-\$49,999
 - \$50,000-\$74,999
 - \$75,000-\$100,000
 - Over \$100,000
 - Prefer not to answer

7. What is your zip code? _____

APPENDIX I: FOCUS GROUP SUMMARIES

- Source: North Carolina Institute of Public Health
- For information about methods, see the [2013 Wake County Community Health Needs Assessment report](#)

Order of Summaries by Group:

- Persons Living with Chronic Health Conditions
- Homeless
- Hispanics/Latinos
- Persons Living with Mental Health or Substance Abuse Illness and Parents of Children with Intellectual and Developmental Disabilities
- Persons Living with Physical Disabilities
- Seniors
- Service Providers in Wake County
- Youth

Persons Living with Chronic Health Conditions

Who: Chronic disease support group

No. of attendees: 7

Mean age: 73

Summary of focus group: While all the individuals had chronic diseases, they were 7 middle class individuals living in a 55+ independent living facility. They have access to a 40-hr/week social worker, who arranges appointments, gives advice, and even helps them with their taxes. Most had moved to Wake County for the sole purpose of moving into this specific community, which is in the middle of a shopping center with a medical facility in walking distance. They had all the resources they need to have appropriate care. However, they brought up similar issues as the seniors group about not being able to find doctors who take Medicare, high costs of medications, and the difficulty of exercising safely and for a reasonable price. They mentioned missing nature; a few wanted more local gardens.

Table 1. Length of time in Wake County

< 1 year	1-4 years	5-9 years	>10 years
1	2	3	1

What does being healthy mean to you?

- Being able to maintain self-sufficiency and independence
- Feeling good the majority of the time
- Being able to get around
- Being able to help others

Elements of a healthy community:

- Active people and availability of activities
- Shared understanding of experiences
- Community engagement
- Involvement in other people's lives
- Absence of stress

What is it like living in this community?

- Similar age range
- Both private and common areas available
- Sense of community and shared experience
- Ability to walk to doctor's appointments and grocery store
- Easily accessible free public transportation (bus)
- Nice, professional staff

Facility provided social worker:

- Assists with Medicaid, Medicare, Social Security, and other administrative needs
- Checks blood pressure, insulin levels, and heart rate
- Provides group health education

Doctors:

- Rex Hospital
- Wake Med
- Veteran's Hospital in Durham
- Senior Health Center
- Clinic

Challenges with finding a doctor:

- Finding a doctor who takes Medicare
- Refusal of treatment due to Medicare
- Insurance coverage

Things you like about Raleigh/the community:

- Inexpensive
- Quiet
- Diversity
- Nice people

Community Needs:

- Accessible parks
- Garden
- Walking trails
- Guidance for living arrangements for wheelchair bound and home-bound individuals
 - Safety concerns regarding higher-floor accommodations.

Health Information:

- Social worker
- Doctor
- Health channels
- Senior Center
- Health fairs
- AARP
- Active Adult Center classes

Resources:

- Resources for Seniors Directory
- National Alliance on Mental Illness
- YMCA

Wake County Health Concerns

- Lack of access to transportation
- Limited access to food and medical care
- Diabetes
- Medicare coverage
- Decrease in services
- Fear of loss of self-sufficiency
- Cost of medications
- Lack of access to safe and affordable exercise activities
- Mental health issues in the elderly

Who do you talk to about health issues?

- People in the community
- Family

Are there things you wish organizations would do to help you get health care?

- Assess community needs by talking to the community
- Accessible clinics outside of normal business hours
- Chair fitness classes for wheelchair-bound individuals and others with limited mobility

Vulnerable Groups:

- People living with mental illness
- Home-bound and wheelchair bound individuals

Homeless

Who: Individuals who are homeless in Wake County

No. of attendees: 10

Mean age: 40 years

Summary of focus group: The focus group discussed what being homeless in Wake County was like. There was a large amount of distrust and disdain for shelters in general. They also felt that health care for the homeless was only provided in emergency situations. Like other groups, those in this group had seen a decrease in services available over the past several years. They also felt that there was an increase in the homeless population, had gotten younger, and had that mental health issues were more prevalent. The group expressed the need for more places like Love Wins, which provides shelter during the day, phones, volunteer activities, shower, bathrooms, health information, available food, washer/dryer, medical care, and a general sense of community.

Table 1. How long have you worked in Wake County?

< 1 year	1-4 years	5-9 years	10-14 years	> 20 years
3	2	1	2	2

What does being healthy mean to you?

- Eating right
- Exercise
- Being happy, peace of mind
- Having a place to live, to sleep

Being homeless in Wake County:

- Many organizations provide food and clothing

- Good area for panhandling
- Some mistrust of shelters
- Shelters often require people to be out during the day
- Difficult to get work without a permanent address or shelter address
- Many people sleep in cars and in the woods
- City and County government doesn't care about the homeless
- Lots of red tape
- Fears of being arrested if you go to a shelter
- Police harassment
- Segregation
- Discrimination

Health services in Wake County:

- Only treat emergency situations
- Ignored by Wake Health Services
- Providers harass relatives for payment

Changes in the homeless situation in Wake County over the last 5 years

- Decrease in available services
- Increase in homeless people in general
- Increase in younger homeless population
- Migration of people to the state
- Increased police harassment
- Increase in mental health issues

Other Wake County Health Concerns

- Difficulty getting on disability
- Inability to get Medicare or Medicaid without disability
- Cannot get needed health care unless in jail

Important health issues for the homeless

- Mental health
- Safety
- Preventative care
- Access to services
- The elements (heat and cold)

Needed changes in Wake County

- Mobile health clinic
- Bring health care to the homeless (woods, parks, etc.)
- Have services close to where the homeless are (Moore's square)
- Have all services in one location (Job Link, health care, therapy, food stamps, resting area, showers, bathrooms, washer/dry, etc.)
- Free health clinics
- More places to go during the day
- More facilities like Love Wins
- Job assistance for people with felonies
- Increase in available social workers and mental health professionals

Health Information

- Jane and Tara (Public health nurses)
- Love Wins
- Internet

- VA

Resources

- Churches
- Salvation Army
- Love Wins

What makes a good shelter (Love Wins)?

- A comfortable place to get out of the elements all day long
- Available phone
- Safety
- People who care
- Available food
- Activities
- Volunteer opportunities for homeless
- Sense of community
- Freedom
- Medical care

Hispanic/Latinos (2 groups total)

Who: Wake County Latino residents (non-English speaking) over the age of 18 (2 focus groups)

No. of attendees: 19

Mean age: 38

Summary of focus groups: Two focus groups were conducted with this population. Both groups had similar observations, though the second group provided a little more detail. Participants felt that more culturally-relevant materials were needed in Spanish and that more bilingual physicians should be available. Many felt discriminated against or mistreated when accessing services. In both focus groups, people felt that transportation was a big issue. They had noticed a reduction in routes over the past several years, and felt that timeliness was a big problem. Others talked about the need for more accessible and affordable activities and recreation. They felt that the most vulnerable populations in their community were the elderly and men. There are very limited services for both these sub-groups within the community.

Table 1. Length of time in Wake County

<1 year	1-4 years	5-9 years	10-14 years	15+ years
1	0	1	15	2

What does being healthy mean to you?

- Not getting sick
- Healthy diet
- Exercising
- Have the desire to live
- Physical, mental, spiritual, and financial well-being
- Regular medical care

Elements of a healthy community:

- Healthy and well individuals in the community
- Information in your native language
- Active
- Minimal fast food availability
- Shared understanding of experiences
- Community engagement

- Access to recreation and exercise
- Culturally relevant health information
- Preventative care for adults and children
- Involvement in other people's lives (children, elderly, community members)
- Physical, mental, spiritual, and financial well-being

Best things about Wake County:

- Peace and quiet
- Proximity of work and shopping

Changes in Wake County over the past 5 years

- Reduction in services
- Reduction in transportation
- Cuts to programs
- Increase of other minorities to their communities
- Increase in drug use in neighborhoods
- Overburdened school bus system

Wake County health care issues:

- Not enough health services for all Hispanics (most available services are for women of reproductive age)
- Discrimination and maltreatment
- High cost of care
- Raleigh is less safe than more rural areas in the County
- Lack of reliable, timely public transportation
- Lack of preventative care
- Limited access to care
- Limited availability of resources and education in Spanish
- Limited health care professionals who speak Spanish
- Inconsistent information regarding Pap Smears
- Long waitlists for services
- Limited access to Facebook, Twitter, email, etc. (not a good mode of communication)
- Difficult to afford healthy food
- Poor nutrition in schools

Health concerns:

- Stress
- Diabetes
- High blood pressure
- High cholesterol
- HIV/AIDS
- Cancer
- Depression and other mental health issues
- Drugs and alcohol

Resources and needs to improve health in Wake County

- More information in Spanish
- Accessible and affordable recreation and exercise
 - Library, recreational centers, sports, parks
- Resources on where to find services and activities
- More affordable, easily accessible health services in Spanish
- Less wait time
- Culturally competent providers
- Chronic illness care

- Culturally relevant nutrition materials
- Resources for elderly Hispanics
- Health information advertisement on buses
- Opportunities for Hispanics to share their culture and be a part of the larger community
- Access to WIC
- Mental health support
- DUI prevention
- Gang prevention
- Health education, lay health advisors and other outreach on health concerns
- Preventive care
- Services that are close to the community
- Develop partnerships with the community
- Transportation
 - Individual clinic transportation
 - Increase in public buses and routes

Where do you get health care?

- | | |
|------------------------|-------------------|
| • Private doctor | • Alliance Clinic |
| • Urgent care | • UNC |
| • Wake Health Services | • Red Clinic |
| • Moncure | |

Health Information

- | | |
|--|-------------------------------------|
| • Newspapers: La Conexión, Que Pasa, Noticia | • Community events and health fairs |
| • Family | • Community organizations |
| • Children’s schools | • Internet |
| • Spanish language TV & radio | |

Vulnerable populations

- Elderly
- Men
- People without transportation

Persons Living with Mental Health/Substance Abuse Illness and Parents of Children with Intellectual and Developmental Disabilities

Who: Individuals with mental health and/or substance abuse issues and parents of children with intellectual and developmental disabilities

No. of attendees: 5

Mean age: 58

Summary of focus group: The focus group brought up similar issues to other groups, 1) not being able to find doctors who take Medicaid 2) high costs of medications, and 3) the lack of primary care. They also expressed that while there are an abundance of services, they were very fragmented and difficult to access. Current cuts to Medicaid and mental health and intellectual and developmental disabilities services are making it difficult for this population. With the current under-supply of available services, attendees expressed that now was not a good time for people with mental health or developmental disabilities to move to NC.

Table 1. Length of time in Wake County*

23 years	37 years	63 years
1	1	1

***2 people not included**

What does being healthy mean to you?

- Physical, mental, and spiritual well-being
- Feeling good the majority of the time
- Being able to get around
- Being able to maintain self-sufficiency and independence

Elements of a healthy community:

- Availability of nutritious food
- Safety
- Access to safe areas to exercise (parks and recreation)
- Access to health care
- Availability of appropriate mental health and disability services

Best things about Wake County:

- Available resources
- Locally grown foods
- Schools

Wake County health care issues:

- Services are fragmented and hard to access
- Siloed care/separation between primary care and hospital care
- Difficult to find appropriate providers that accept insurance
- Negative effect of cuts to mental health and disability services
- Reduction of services
- No coordinated follow-up
- Reduced coverage for brain injuries
- Loss of case managers
- Shift to care coordinators located in Durham
- Lack of long-term care options for developmentally disabled
- Lack of primary care
- High cost of care
- High cost of medication

Changes to health services over the past few years:

- Rising cost of medication
- Shrinking Medicaid coverage
- Emergency care only

Where do you get health care?

- Private physicians
- Hospital

Health Information:

- Family

Vulnerable populations

- Low income
- Elderly
- Persons with developmental disabilities

- Persons with brain injuries

Acceptance of people with development disabilities:

- Excluded due to their appearance
- More accepted now due to increase in survival and war-related injuries
- Poor quality of life

Wake County needs

- Assistance for those that are sick and in need
- Physicians with skills to deal with mentally ill and developmentally disabled
- Increased Medicaid coverage
- Expanded and improved insurance coverage
- Appropriate housing/group homes for those with mental disabilities
- Connection/linkage of services available in the Triangle
- Medical homes for all individual to connect to services
- Health policy that address the current situation

Resources

- Arc of Wake County, Arc of NC

Persons Living with Physical Disabilities

Who: Individuals living with physical disabilities (physical impairment that substantially limits one or more major life activities).

No. of attendees: 8

Mean age: 55

Summary of focus group: The main points of the group centered on access. A large part of the time was spent discussing transit for adults with disabilities, and how the system exists but is inefficient, biased, and inadequate. There were 4 people who are blind/vision impaired, and 3 in wheelchairs, and they discussed how the drivers of the transit buses and shuttles are not trained on the needs of the disabled, from not being able to work the wheelchair lifts, to not guiding the people with visual impairments to their final destination. In addition, several mentioned the high and increasing costs of medical care. Others talked about the need for more inclusivity in physical activities, from children in schools who have mobility limitations, to adults needing accessible facilities at gyms and recreation facilities.

Table 1. Length of time in Wake County

1-9 years	10-19 years	20-29 years	30-39 years	>40 years
1	2	3	1	1

What does being healthy mean to you?

- Access to health care
- Being able to get around
- Being able to maintain self-sufficiency and independence
- Being able to afford health care
- Healthy diet
- Access to recreation and exercise
- Equal access to facilities
- Physical, mental, and spiritual well-being

Elements of a healthy community:

- Accessible transportation

- Affordable and accessible healthy foods
- Ability to participate in the community: politically, culturally, recreationally
- Safety and security
- Sense of community

Best things about Wake County

- Availability of public transportation
- Safety
- Sense of community
- Centralized location of needs

Wake County health care issues:

- Stress of trying to maneuver the transportation and health care system
- Services of fragmented and hard to access
- Decentralized medical care
- Difficult to find appropriate providers that accept insurance (Medicare, Medicaid)
- Reduction of transportation services
- Cost of care
- Cost of medication
- Discrimination
- Lack of enough detailed information to access the health system
- Limited immediate access to primary care physicians for acute needs
- No assistance in filling out medical forms
- Limited coverage of dental care, eye care, and hearing aids
- Red tape involved with getting services and assistance for the blind
- Barriers to finding a job and being independent
- Inaccessibility of many locations

Where do you get health care?

- Primary care physicians

Health Information:

- Family and friends
- Internet
- Hospital websites, WebMD
- Primary care physician
- Radio and Television
- Community health fairs

Vulnerable populations

- Senior citizens
- Homebound
- Youth
- Working poor

Wake County needs:

- Transportation:
 - Reliable, personalized to needs of individuals, and affordable
 - Trustworthy staff who are sensitive to the needs and issues of the disabled and trained in the equipment used in transportation of the disabled (chair lifts)
 - Access to transportation for immediate needs
 - Access to transportation in all of Wake County and Triangle-area hospitals
- Companion or sighted guide to help maneuver the medical system

- Sensitivity training for health professionals on the needs and issues of the disabled
- Help navigating the medical system
- ADA compliant restrooms in all health care facilities
- Accessible gyms trained in needs and issues of the disabled
- Dental coverage or access to low-cost dental care
- Affordable health care and medications
- More available doctors
- Better access to recreation and events
- Affordable means of communication and access to information (phones, TV)

Seniors

Who: Seniors living in Wake County

No. of Attendees: 12

Mean age: 68

Summary of Focus Group: The mean age was lower than we expected. The focus group attendees feel that there are not enough providers who accept Medicare and that currently there is no directory of providers that accept Medicare and take seniors. They feel that transportation is an issue for many seniors; and that the share-ride van for older adults is unpredictable, under-resourced, and not frequent enough. Many felt that health fairs were an excellent resource for health information. They loved the senior center, and felt that the quality of life in the area is bringing more people here all the time.

Table 1. Length of time in Wake County

< 1 year	1-9 years	10-19 years	>20 years
1	4	4	3

What does being healthy mean to you?

- Physical, mental, emotional and spiritual well-being
- Being able to get around
- Being able to maintain self-sufficiency and independence
- Access to health care

Elements of a healthy community:

- Access to good practitioners and health care
- Access to health information and education
- Access to reliable transportation

Changes to the County over the last 5 years:

- General growth
- Increase in traffic
- Increase in population
- Increase in development
- Increase in health care and hospital facilities
- Improved public transportation (though more needed)

Things you like about Wake County:

- Weather
- Nature
- Inexpensive

- Access to social groups and activities

Wake County health care issues:

- Inability to find a new doctor once you are 65+
- Difficulty finding a general practitioner (GP)
- Limited hours of doctors' offices
- Limited amount of doctors (both GP and specialists) who accept Medicare and Medicaid
- Use of the VA is an option for some, but the cost is prohibitive
- Referrals limited to specific groups (Duke Services refer to Duke Providers, WakeMed to WakeMed providers, etc.)
- Difficulty making appointments with specialists (can take months to be seen)
- Increase in automated services when contacting doctor's offices
- Limited time with doctors during visits

Wake County needs for individuals 65+

- Information/resources on GPs who accept new patients with Medicare

Finding Doctors

- Recommendations from friends
- Urgent care for immediate needs

Health Information:

- Internet
- TV
- Pamphlets from doctors
- Health fairs

Wake County Health Concerns

- Lack of access to reliable transportation to doctors
- Joint replacement
- Falls
- Diabetes

Vulnerable populations:

- Homebound
- Homeless
- Low income

Resources:

- Meals on Wheels
- Health fairs
- Senior Centers
- Clinics

Needed Resources:

- Directory of general practitioners, urgent cares, specialists and dentists who take Medicare
- Reliable transportation
- Increase in doctors who take Medicare
- Increase in homecare services
- Tapping into the medical and dental resources available through the State University system

Service Providers in Wake County

Who: Service providers in Wake County (persons in direct contact with clients in areas of behavioral health, physical health issues, and working with youth)

No. of attendees: 8

Mean age: 46 years

Summary of focus group: The service providers in attendance feel that there are not enough resources for low and no-income residents, especially for prenatal care. They also feel that there is a serious lack of cultural and linguistic competency among the medical professionals, and there are many Spanish speakers who are not getting adequate services. Health literacy is also a problem. Service providers expressed the need for early education on nutrition and physical activity. Despite these problems, they feel there is a wealth of human resources for health care in the area, and this is because of the hospitals, the universities, and the general quality of life in the Triangle. They feel that an effort to increase collaboration and synergy across the field would improve health outcomes for Wake County.

Table 1. How long have you worked in Wake County?*

1-4 years	5-9 years	10-14 years	15-19 years	> 20 years
1	1	1	1	3

*One person not included

What does being healthy mean to you?

- No restrictions on activities
- Seeing a physician less than once every 3 months
- Physical, emotional, mental and spiritual well-being

Elements of a healthy community:

- Access to care for all
- Green spaces
- Safety/low crime
- Community engagement
- Opportunity
- Knowing your neighbors
- Emotional well-being

Wake County's health:

- Good overall for those who can afford it
- Challenging for those with little or no financial resources and transportation

Best things about Wake County:

- Safe outdoor activities
- Good educational systems
- Better mental health resources than surrounding areas
- Good amount of community, faith and cultural-based organizations
- A lot of providers and hospitals/a lot of good quality options for care available
- Lots of medical and health research being done in the community
- Diversity

Changes in the County over the past 5 years

- Health care has moved away from small general practices to big organizations
- Health/ insurance system is too complex
- High taxes on non-profits makes sustainability difficult
- Inability of patients to afford services or prescriptions

Where do clients go for immediate care?

- Student health clinics
- Acute care clinic
- Avoid primary care physicians unless very sick

Biggest health concerns:

- Mental health
- Access to care
- Communication barriers/bilingual physicians
- Nutrition and access to nutritious foods.
- Obesity
- Uninsured and underinsured
- Preventive care
- STIs
- Caring for elderly and aging populations
- Medicare/Medicaid
- Prenatal care
- Health Literacy
- Management of chronic diseases
- Cost of care

Vulnerable Populations (groups whose needs are not getting met)

- Immigrants
- Under-educated

Where do people get health information?

- Websites
- TV
- Health educators
- Friends
- Community organizations
- Advertising
- Health fairs

Needed Changes:

- Expand Medicaid
- Make basic health care and prenatal care more accessible
- Reverse cuts to mental health
- Make medications more affordable
- Early childhood education to stop obesity
- Transparency in costs between providers, insurance and patients
- Mobilize available resources in the community

Youth

Who: Teenagers involved in youth advocacy issues

No. of attendees: 6

Mean age: 16

Summary of focus group: The 6 youth we talked with all work on youth advocacy issues. Their advocacy work may have colored their view, but they seemed to be able to contextualize their feelings in their own experiences. They all go to public schools (a few to a magnet school in Raleigh), and had lots to say. The teens felt like school-based health centers (SBHC) need to be a priority for the wellness of students and making the playing field even for youth without insurance. The SBHCs would also be an important access point to non-judgmental, no-repercussions mental health care. The issue that resonated most with the group was that school is stressful, life is stressful. Several felt that they couldn't go to their guidance counselors with their problems, since they are also required to get college recommendation letters from the same guidance counselor. Another issue was food in the cafeterias- it's unhealthy and terrible quality, with Little Caesar's pizza being offered every day. Options outside the school are either fast food or too expensive. There was some discussion of drugs and alcohol, mostly as coping mechanisms for the stress and in reaction to having "nothing to do" outside of going to the mall or movies. One student gave a nice analysis of the troubles of easy access to alcohol and how that's inducing youth to drink more.

Table 1. Length of time in Wake County

1-9 years	10-19 years
3	3

Elements of a health community:

- Access to healthy food
- Access to hospitals and medical care

Physical activity:

- School sports teams
- Dance class during the school day

Things you like about Wake County:

- Good for enjoying nature
- Quiet area

Things you dislike about Wake County:

- Suburban environment makes it necessary to drive everywhere.
- Distance between school and home
- Current economy makes it difficult for high school students to get a job
- Lack of things to do

Wake County school issues:

- Overcrowding in high schools
- Division in magnet schools between local students and magnet students (like 2 schools within one)

Wake County community health issues:

- Access to “healthy foods” and grocery store access varies by area; some areas do not have adequate grocery stores
- Access to hospitals or medical care varies by area too –some areas have more people who are uninsured
- Easy access of alcohol and tobacco for teenagers

Health Issues:

- | | |
|--|---|
| <ul style="list-style-type: none"> • Stress • Early school start • Lack of sleep • Overworked • Lack of mental health services (available guidance counselors are also tasked with providing student letters of recommendation for college) | <ul style="list-style-type: none"> • Peer pressure • Alcohol and marijuana use • Smoking • Overuse of stimulants to improve school performance • Lack of time for exercise • Lack of transportation and money to join school sports teams |
|--|---|

Other concerns:

- Financial stress related to cost of attending university
- Supporting families financially
- Pressure to succeed in school

Wake County School health needs:

- School-based health centers which provide primary care, including vaccines, physicals, basic health services, sports physicals for all students
- Access to healthy foods, particularly for students who receive free or reduced lunch
- Access to improved mental health services to help deal with stress from work overload, lack of sleep, etc.

APPENDIX J: COMMUNITY FORUM FLYER

SHARE YOUR VOICE

Wake County Community Health Needs Assessment Forum



Thursday, May 16th, 2013

5:30 – 8:00 p.m. (Refreshments will be provided)

Locations:

- ❖ **Central:** WakeMed Andrews Center, 3000 New Bern Ave, Raleigh, NC*
Spanish language and American Sign Language interpretation services available. *central location only
- ❖ **East:** Wake County Human Services East Regional Center, 1002 Dogwood Drive, Zebulon, NC
- ❖ **North:** New Bethel Baptist Church, 605 Young St. Rolesville, NC 2757
- ❖ **West:** Senior Center in Cary. 120 Maury O'Dell Place, Cary, NC 27513
- ❖ **South:** Wake County Southern Regional Center 130 N. Judd Parkway NE, Fuquay-Varina, NC 27526

Wake County partners need your help in setting priorities for the county. Important issues for our community concerning physical, behavioral, mental, economic, education, and environmental health have been identified using information collected through surveys, focus groups, and existing statistics.

It's time for the next step - for our communities to identify priority issues and resources that may help address those issues. Please join us to learn more about the Community Health Needs Assessment and to provide your input on our community's priority areas. Your participation is vital!

**Community Participant
On-Line Registration
at www.WakeGov.com**

Or

**For more information
call 919-250-4558**



APPENDIX K: COMMUNITY FORUM FACILITATOR GUIDE AND DEMOGRAPHIC FORM

Source: North Carolina Institute of Public Health

Wake County Community Health Needs Assessment
Forum Facilitator Guide
May 16th, 2013
5:30 PM to 8:00 PM

Small Group Session

- Participants enter into breakouts

Facilitator Welcome

- Welcome everyone to our small group! My name is _____ and our notetaker this evening is _____.
- We recognize that your time is valuable and we appreciate your participation as Wake County residents
- The purpose of this part of the agenda is to give residents the opportunity to set priorities for the county
- Your input in the county's priority areas will help us plan future programs that better meet the needs of residents in Wake County
- We'll start the session with some discussion. We will then instruct you on the voting process and you'll be given a chance to vote individually on what you believe the priorities should be for your community over the next few years. Once the voting is complete, we'll wrap up the session with some follow up discussion.
- My job here is to make sure everyone has an opportunity to speak, guide you through the voting process, and keep the session on time. Before we get started, share just a couple of ground rules:
 - There are no right or wrong answers
 - Your votes today will remain confidential and no names will be attached to any of the information we collect. [IF NOTETAKER BROUGHT OWN RECORDER]: The notetaker may record the conversation in order to make sure that they accurately capture what is talked about during the session. Is there anyone here who would prefer not to be recorded? Remember to respect each other's privacy and not share any information outside of this discussion
 - Does anybody have any questions?
- Great, let's get started!

Pre-Vote Discussion

First, I'd like to ask you a few questions that will hopefully give you an opportunity to provide your thoughts on the 9 topic areas presented earlier this evening and your community's health..

- Questions for Pre-Vote Discussion:
 - Given what you've learned tonight about the 9 topic areas, was there anything new you learned or anything surprising about the results?
 - Do you think your community is healthy? Why or why not?
 - Have you seen examples of any of the topic areas in your community? Does anyone want to share?

Voting Instructions

- Thank you for sharing your thoughts on your community's health and the topic areas.
- Now, here is your opportunity to set priorities for your community
- We have provided each of you with a voting ballot. The 9 community topics are listed on the top of the ballot
- You are being asked to list what you believe are the top 3 community topics for you and your friends and family, for each of the following categories:
 - IMPACT: Top 3 topics that affect the largest number of people in the community
 - REALISTIC: Top 3 topics the community can realistically make progress in over the next 3 years
 - URGENCY: Top 3 topics that will have serious consequences if we do not address in the next 3 years
 - CONCERN: Top 3 topics your community is most concerned about
- Please enter the issue name in the blank spaces provided
- How the process works:
 - Each person attending the forum, picks the top 3 topics in each of the categories
 - For each of the 4 criteria, we are asking that they rank their top 3 priorities in order (#1, 2, 3, etc.). Order will affect the priority score. Participants can also use topics more than once.
 - You are also allowed to write- in a topic area if you feel the need to do so
 - We'll tally up the votes for each of the topics within the categories
 - Then we'll apply a formula that will generate an overall score for each community topic
- Topics will be ranked based on their overall score and we'll pick the top 3 as the community priority areas
- Please remember that your perspective should take into consideration the people in your community
- Keep in mind, that just because you are selecting the top 3, it doesn't mean that the other issues aren't important to the community. After voting is complete across all county forums, the topics selected will be monitored through the community health needs assessment process over the next 3 years

- If you need any assistance completing the voting, please let me know. When you have completed the voting ballot, please hand in your ballot to the notetaker [NOTETAKER WILL SHARE WITH SITE MANAGER].

Post-Voting Discussion

- Thank you for voting
- Now that you have voted, the next step is to tally the ballots from all 5 locations
- The results of the tally will be available through the 2013 community health needs assessment report which will be available this summer on the WakeGov.com website
- Before we end the session, we'd like to ask you a few more questions about addressing the topics you selected in the community
- Follow-Up Discussion Questions
 - What's the biggest change you would like to see in the community in the next 3-4 years?
 - What already exists in the community to address this priority?
 - What are the most logical steps for moving the priority forward?

Thank you so much for taking the time to join us this evening. Your input is extremely important to us and a critical part of this process. Once the topics have been selected, your involvement will continue to be important. I have a signup sheet up front. Please feel free to sign the sheet if you would like to be a part of the next steps to move the priority issues forward.

Now it's time for us to go back to the larger group for closing remarks.

Forum Participant Demographic Information Form

Questions will only be reported as a summary of answers given by all forum participants in the Wake County Community Health Assessment. You do not have to give us your name. Please fill out the information and tear off the number at the bottom if you want to be in the drawing for a door prize.

1. How old are you?

- 18-29 years old
- 30-44 years old
- 45-64 years old
- 65+ years old

2. Are you Male or Female?

- Male
- Female

3. What is your race? Please check all that apply.

- White/Caucasian
- Black or African American
- Asian/Pacific Islander
- Native American
- Other: _____

4. Are you of Hispanic or Latino origin?

- Yes
- No

5. What is the highest level of school, college or vocational training that you have finished?

- Less than High School
- High School Graduate (or GED/ Equivalent)
- Associate's Degree or Vocational Training
- Some College (No Degree)
- College Degree
- Graduate or Professional Degree
- Other: _____

6. What was your total household income last year, before taxes?

- Less than \$20,000
- \$20-\$29,999
- \$30,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$100,000
- Over \$100,000
- Prefer not to answer

7. What is your zip code? _____

APPENDIX L: REPORT LINKS

2012 Wake County Human Resources Guide:

http://www.wakegov.com/humanservices/social/senior_adult/documents/resguide2012.pdf

2013 Wake County Latino Resource Guide:

<http://www.wakegov.com/humanservices/espanol/Documents/Latino%20Resources%20Guide%202013.pdf>

Advocates for Health in Action: <http://www.advocatesforhealthinaction.org/>

Alliance Behavioral Health care: <http://www.alliancebhc.org/>

Alliance Medical Ministry: <http://www.alliancemedicalministry.org/>

Alliance of Disability Advocates: <http://www.alliancecil.org/aboutus.htm>

American Tobacco Trail: <http://www.wakegov.com/parks/att/Pages/default.aspx>

Amtrak:

http://www.amtrak.com/servlet/ContentServer?pagename=am/am2Station/Station_Page&code=RGH

Animal Control: <http://www.wakegov.com/pets/health/safety/Pages/default.aspx>

Arc of Wake County: <http://www.arcwake.org/advocacy.html>

Capital Area Soccer League: <http://www.casInc.com/>

Capital Area Transit (CAT):

<http://www.raleighnc.gov/services/content/PWksTransit/Articles/CapitalAreaTransit.html>

Capital Care Collaborative: <http://www.capitalcarecollaborative.com/>

Center for Volunteer Caregiving (transportation services):

<http://www.volunteercaregiving.org/transportation>

City of Raleigh Parks and Recreation Trail System:

<http://www.raleighnc.gov/arts/content/PRecDesignDevelop/Articles/CapitalAreaGreenwayTrailSystem.html>

Club Choice: <http://www.wakegov.com/humanservices/director/initiatives/pages/clubchoice.aspx>

Community Care of Wake and Johnston Counties (CCWJC) substance abuse resources:

<http://www.ccwjc.com/Forms/Behavioral%20Health/Substance%20Abuse%20Resources.pdf>

CTRAN (Town of Cary transit service):

http://www.townofcary.org/Departments/Planning_Department/Transportation/C-Tran.htm

"Farm to Family" Food Finder:

<https://maps.google.com/maps/ms?ie=UTF8&oe=UTF8&msa=0&msid=210292701217115466553.0004a4098f63fc11e6e07>

Greenway iPhone application: <http://rgreenway.com/>

Greyhound Raleigh: <http://www.greyhound.com/en/locations/terminal.aspx?city=340660>

Handwashing:

<http://www.wakegov.com/humanservices/publichealth/information/diseases/Pages/handwashing.aspx>

Hazardous waste collection program:

<http://www.wakegov.com/recycling/division/facilities/pages/hhw.aspx>

HIV, syphilis, Chlamydia testing services :

<http://www.wakegov.com/humanservices/publichealth/information/hiv/Pages/locations.aspx>

JobLink Career Center at the Millbrook Human Services Center:

<http://www.joblinkcc.com/centers/centerInfo.asp?ctrlID=51>

JobLink Career Center at the Millbrook Human Services Center:

<http://www.joblinkcc.com/centers/centerInfo.asp?ctrlID=51>

John Rex Endowment: <http://www.rexendowment.org/>

Lake Crabtree County Park: <http://www.wakegov.com/parks/lakecrabtree/Pages/default.aspx>

Lifelong Learning with Community Schools: <http://cs.wcpss.net/index.php?route=Illcontroller>

Living Healthy and Living Healthy with Diabetes: http://www.ccwjc.com/living_healthy.asp

Middle Class Express (MCE):

http://www.wakegov.com/humanservices/director/initiatives/hcd/pages/individuals_families.aspx

North Carolina Medicaid and NC Health Choice Dental List:

<http://www.ncdhhs.gov/dma/dental/dentalprov.htm>

North Carolina Safety Net Dental Clinics: <http://www.ncdhhs.gov/dph/oralhealth/services/safety-net.htm>

Open Space Program: <http://www.wakegov.com/parks/openspace/Pages/default.aspx>

Potassium iodide (KI) program, NC Division of Public Health: <http://epi.publichealth.nc.gov/phpr/ki/ki.html>

Project Homeless Connect: <https://www.facebook.com/phcraleigh>

Quitline: www.quitlinenc.com

Raleigh Promise: <http://raleighpromise.org/>

ReadyWake!: <http://www.readywake.com/>

Stormwater rules for new developments:

<http://www.wakegov.com/water/stormwater/management/Pages/default.aspx>

The Capital Care Collaborative: <http://www.capitalcarecollaborative.com/>

Trails & Greenways of Wake County:

<http://www.wakegov.com/parks/about/pages/trailsgreenways.aspx>

Transportation Projects Wake County: <http://www.wakegov.com/planning/transport/Pages/default.aspx>

Triangle Transit Authority (TTA): <http://www.triangletransit.org/>

United Way 2-1-1: <http://www.unitedwaytriangle.org/211/>

United Way of the Greater Triangle 2-1-1: <http://www.unitedwaytriangle.org/211/>

Urban Ministries of Wake County Food Assistance Program: <http://www.urbanmin.org/food-assistance/>

Veterans Services, Wake County: <http://www.wakegov.com/veterans/Pages/default.aspx>

Wake Coordinated Transportation Service: <http://www.resourcesforseniors.com/iris/rfs11798ab.html>

Wake County Communicable Disease Program:

<http://www.wakegov.com/humanservices/publichealth/information/diseases/Pages/default.aspx>

Wake County Community Health Needs Assessment Reports: www.wakegov.com/humanservices/data

Wake County Human Services provided maternal health services:

<http://www.wakegov.com/humanservices/Pages/default.aspx>

Wake County Human Services Transportation Services:

<http://www.wakegov.com/humanservices/social/transportation/Pages/default.aspx>

Wake County Public Library: <http://www.wakegov.com/libraries/Pages/default.aspx>

Wake County Public School System: <http://www.wcpss.net/>

Wake County Sustainability Task Force:

<http://www.wakegov.com/environment/admin/sustainability/Pages/default.aspx>

Wake County Youth Service Providers Map: http://youth-thrive.org/?page_id=154

Wake Crisis and Assessment Services:

<http://www.wakegov.com/humanservices/locations/wakebrook/Pages/default.aspx>

Wake Health Services: <http://www.whsi.org/>

Wake Smart Start: <http://wakesmartstart.org/index.php>

Wake Tech Community College: <http://www.waketech.edu/>

WakeBrook Recovery Center:

<http://www.wakegov.com/humanservices/locations/wakebrook/Pages/default.aspx>

Warmth for Wake: <http://www.wakegov.com/humanservices/social/energy/Pages/warmthforwake.aspx>

Wolfline (NCSU Campus Bus Service): <http://www2.acs.ncsu.edu/trans/transportation/wolfline/>