

**Agenda Item Number:**

**ORANGE COUNTY BOARD OF HEALTH  
AGENDA ITEM SUMMARY**

**Meeting Date:** March 23, 2016

**Agenda Item Subject:** 2015 Community Health Assessment Update and Document Review

**Attachment(s):** 2015 Orange County Community Health Assessment, 2015 Orange County Executive Summary, Community Health Assessment Presentation

**Staff or Board Member Reporting:** Ashley Mercer

**Purpose:**     \_\_\_ Action  
              \_\_\_ X Information only  
              \_\_\_ Information with possible action

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**Summary Information:** Every 4 years, the Health Department and Healthy Carolinians conducts a Community Health Assessment to enable public health officials to monitor trends in health status, determine priorities among health issues, and determine the availability or resources in Orange County.

With the overall goal to address health disparities and identify needs of populations who are most disadvantaged, 799 survey households were randomly selected from census blocks, 279 address were attempted and 166 door-to-door surveys were completed. New to this CHA, a health opinion survey was placed online and completed by 1,548 community residents. Combined, this created 1,714 total health opinion surveys answered, 5 focus groups conducted, and 4 community listening sessions held.

The results from the 4 community listening sessions were brought to HCOC's Annual Meeting where participants prioritized issues on the basis of importance and changeability. The chosen health priorities were 1) Social Determinants of Health with priority around Access and Poverty, 2) Mental Health & Substance Abuse, and 3) Physical Activity & Nutrition.

**Recommended Action:**   \_\_\_ Approve  
                                  \_\_\_ Approve & forward to Board of Commissioners for action  
                                  \_\_\_ Approve & forward to \_\_\_\_\_  
                                  \_\_\_ Accept as information  
                                  \_\_\_ Revise & schedule for future action  
                                  \_\_\_ Other (detail):

# 2015 ORANGE COUNTY COMMUNITY HEALTH ASSESSMENT

Chronic Disease

Physical Activity & Nutrition

Tobacco

Mental Health

Substance Abuse

Oral Health

Environmental Health

Injury & Violence

STD's & Unintended Pregnancy

Maternal & Infant Health

Social Determinants of Health

Infectious Disease

## FULL REPORT

Submitted to the Division of Public Health, North Carolina Department of Health and Human Services by the Orange County Health Department and Healthy Carolinians of Orange County.



2015

# Community Health Assessment

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*Orange County, NC*

Submitted to the North Carolina  
Department of Health and Human Services  
Division of Public Health

By the Orange County Health Department  
and Healthy Carolinians of Orange County



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## Acknowledgements

The Orange County Health Department and Healthy Carolinians of Orange County would like to say thank you to the many individuals and groups for their assistance during the course of the 2015 Community Health Assessment (CHA) process. Whether you answered a survey, volunteered to administer door-to-door surveys, attended a community listening session, was a participant in a focus group, helped spread the word of the process to those in your community or workplace, or responded to a CHA request, this assessment could not have been successful if it were not for you.

The goal of this document is to publish a report that is easy to navigate and enables the reader to quickly locate information on a topic of interest. In the electronic version, internal and external links are identified to ease movement through and beyond the document. Internal links are underlined in [green](#) font and external links are underlined in [blue](#) font.

Thank you to the volunteers who conducted the door-to-door CHA surveys and to Care Share Health Alliance for providing technical assistance and facilitation efforts for focus groups during the data collection process. Because of your help, the voices of community members were heard throughout the entire process.

The 2015 CHA assessment process and report document was coordinated and compiled by Ashley L. Mercer, MPH, Healthy Carolinians Coordinator and Senior Public Health Educator for the Orange County Health Department. The CHA was reviewed and or provided information by a number of committee members and public health professionals, such as:

- Alan Clapp, Orange County Health Department
- Allison Young, Orange County Health Department
- Brian Carson, Orange County Planning Department
- Carla Julian, Orange County Health Department
- Coby Jansen Austin, Orange County Health Department
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- Liska Lackey, Orange County Board of Health
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- Marni Holder, Piedmont Health Services
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- Mike Fliss, Orange County Resident
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- Stacy Shelp, Orange County Health Department
- Susan Clifford, Orange County Health Department

# Executive Summary

## Introduction

Every 4 years, the Orange County Health Department and Healthy Carolinians of Orange County (HCOC) conducts a Community Health Assessment (CHA). Regular assessment of Orange County's health enables public health officials to monitor trends in health status, determine priorities among health issues, and determine the availability of resources within Orange County to best protect and promote the public's health.

With the overall goal to address health disparities and identify needs of populations who are most disadvantaged, 799 survey households were randomly selected from census blocks, stratifying to ensure low-income communities were included. 279 addresses were attempted and 166 door-to-door surveys were completed. New to this CHA, a health opinion survey was placed online and was completed by 1,548 community residents. Combined, this created 1,714 total health opinion surveys answered, 5 focus groups conducted, and 4 community listening sessions held.

## Selected Priorities

The results from community listening sessions were brought to HCOC's Annual Meeting in December 2015 where participants prioritized issues on the basis of importance and changeability. The health priorities, as determined by Annual Meeting participants to be of greatest concern to the Orange County community, were 1) Social Determinants of Health with priority around Access and Poverty, 2) Mental Health & Substance Abuse, and 3) Physical Activity and Nutrition.

### Poverty

Orange County has the highest Gini Coefficient of Income Inequality in NC (0.52). This means our county experiences high income dispersion, where fewer people hold a lot of capital and many people hold little capital.

- While the median income for households in Orange County is \$57,261, 17% of residents are living in poverty, including 16% of children.
- Food insecurity and affordable housing are key areas of emphasis for mitigating the effects of poverty in Orange County.
- While Orange County's median gross rent is \$918 half of Orange County households (52.7%) who rent spend more than 30% of income on rent.
- 21% of children and 15.4% of the overall population (20,900 people) live in food insecure households in Orange County

### Access

- Approximately 21,000 Orange County residents, between 0-64 years of age are uninsured.
- Low income residents are twice as likely to be uninsured compared to the average county resident.
- In 2013 a higher percentage of low income youth under 19 years were uninsured in Orange County [15% (+/- 3.2%), and 31.8% of low income residents under 64 years were uninsured.
- Over 6,000 Orange County residents enrolled into the marketplace for 2015 coverage.

## **Transportation**

- 3,000 individuals in Orange County with no vehicle live outside of the walkable/ridable coverage area to medical clinics.

## **Mental Health and Substance Abuse**

Mental health refers to a wide range of conditions that affect one's mood, thinking and behavior. Broad classes of mental illness include mood disorders (depression, bipolar disorder), eating, personality, anxiety and psychotic disorders (schizophrenia), and addictive behaviors/substance abuse disorders.

- Orange County has a suicide rate of 10.4 per 100,000 people.
- Females (23%) are more likely to attempt suicide when compared to males (16%).
- 54% of female and 46% of male suicide victims had a mental health problem.
- 6% of Orange County motor vehicle crashes are alcohol related.
- 8% of Orange County adults and 9% of high schoolers drove after drinking in the past 30 days.
- Overall tobacco use is increasing, driven in large part by use of e-cigarettes and hookah.
- Almost 4 out of 10 high school students, in Orange County, have tried an e-cigarette and about 2 out of 10 of high school students currently use them.

## **Physical Activity and Nutrition**

- According to national surveys, adults show negative trends in both physical activity and nutrition.
- Student fruit and vegetable consumption is improving compared to previous years; however, Orange County still performs worse than the US.
- 45% of high schoolers do not eat one or more servings of fruits and vegetables a day. National recommendations far exceed one serving each of fruits and vegetables per day, meaning many more students likely still do not meet national recommendations.
- 75.4% of adults do not eat 5+ fruits or veggies per day.
- 43.2% of adults did not meet aerobic nor strengthening guidelines.
- 14% of low income preschool children are obese.
- 78% of high schoolers do not get 60 minutes of exercise per day.

## **Chronic Disease**

While chronic diseases are the leading causes of death in Orange County, lack of physical activity and not eating healthy contributes heavily to the incidence of chronic disease.

- While the number of deaths due to disease of the heart has increased in the past 3 years, the age-adjusted mortality rate has been declining; implying heart disease mortality is generally improving or stable. However, prevalence of chronic diseases, such as Cardiovascular Disease and Diabetes has increased in the last decade.
- More than half of all deaths in Orange County (52%) are caused by cancer, diseases of the heart, or chronic respiratory diseases.
- Nearly 50 million dollars was spent on cardiovascular and circulatory disease inpatient visits in Orange County in 2013, accounting for 16% of all condition costs.

## **Next Steps**

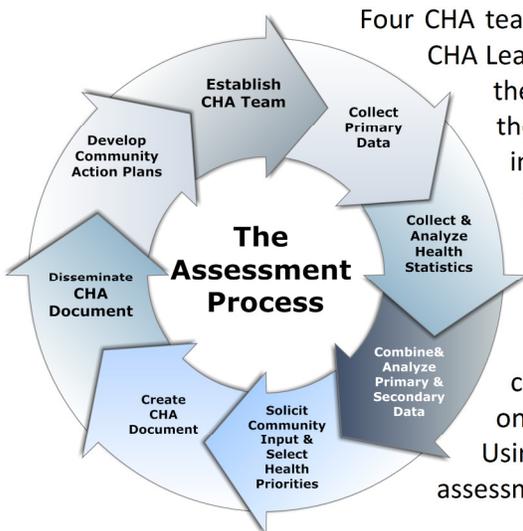
Findings from this CHA report will help influence strategic planning across the community. HCOC will assure broad dissemination of the full report so that entities contributing to the health of Orange County residents can develop new or modify existing programs, services, and resources to address the community health needs relevant to their stated missions.

It is hoped that this 2015 CHA report and its follow-up activities will be of use to community members and service providers alike, for all are working towards the common goal of making Orange County a healthy place to live, work, play and pray.

## Background & Introduction

Every 3-4 years, Local Health Departments conduct a Community Health Assessment (CHA). Regular assessment of a community's health enables local public health officials to monitor trends in health status, determine priorities among health issues, and determine the availability of resources within the community to best protect and promote the public's health. A primary goal of the assessment process is to involve the community in every phase of the assessment, including planning, data collection, evaluation, identification of health issues and community strengths, and the development of strategies to address identified problems.

### The Assessment Process



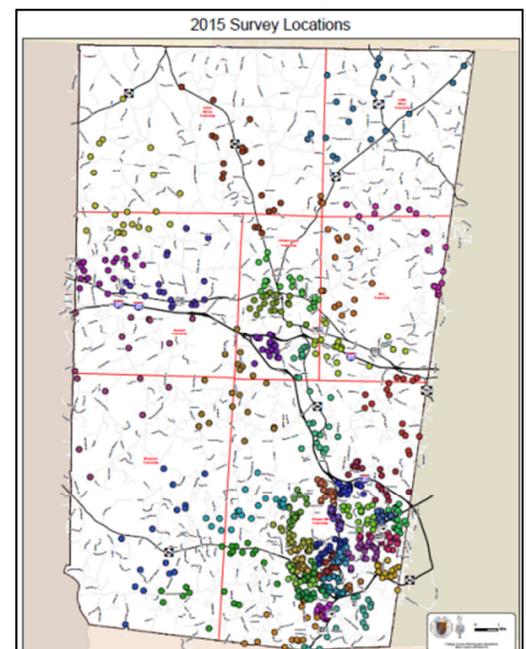
Four CHA teams were created to assist in the 2015 CHA process and included: 1) a CHA Leadership Team (CHALT), the governing body and final decision makers, 2) the Communication Team, 3) the Community Engagement Team, and 4) the Data Team. Community partners were key to the overall survey effort, including serving on CHALT, coordinating focus groups and publicizing the survey (see Appendix C: [Team Members](#))

### Data Collection and Analysis

This report was created using both primary (community input) and secondary (previously collected) data sources. Primary data was collected through community health opinion surveys (door-to-door and online), partner surveys, focus groups and community listening sessions. Using both primary and secondary data yields a more in-depth and reliable assessment of the specific factors that affect our community's health.

With the overall goal to address health disparities and identify needs of populations who are most disadvantaged, 799 survey households were randomly selected from census blocks, stratifying to ensure low-income communities were included. 279 addresses were attempted and 166 door-to-door surveys were completed, compared to 160 door-to-door surveys in 2011. New to this CHA, a health opinion survey was placed online and was completed by 1,548 community residents using a non-random, snowball approach of sharing the link with partner organizations and mailing lists. Combined, this created 1,714 total health opinion surveys answered.

Attempts to recruit selected households and administration of surveys were carried out by a team of [86 volunteers](#) over a course of three survey weekends (8 days) within two months. All volunteers participated in a mandatory training which covered safety plans and procedures for conducting surveys (e.g. techniques for conducting unbiased surveys, what to do if someone was not home or chose not to participate, procedures for non-English speaking residents, etc.). Volunteers conducted surveys in teams of two, and each team was assigned a specific



list of addresses grouped by proximity. Households were given the option to provide a phone number to complete the survey over the phone or given a link to complete the survey online at a later time if more convenient. All survey respondents who completed a door-to-door survey were given a small incentive for their participation.

A 50-question survey was developed and administered (door-to-door) based on standardized questions representing the 13 Healthy North Carolina 2020 focus areas: Tobacco, Physical Activity and Nutrition, Injury and Violence, Maternal and Infant Health, Sexually Transmitted Diseases and Unintended Pregnancies, Substance Abuse, Mental Health, Oral Health, Environmental Health, Infectious Disease and Foodborne Illness, Chronic Disease, and Social Determinants of Health. The survey was administered by hand and entered into EpiInfo version-7 software. A flash drive was used to merge the data from multiple input devices onto one computer and analyzed through Microsoft Access. Online health opinion and partner surveys were administered and analyzed through Survey Monkey. All data was combined and analyzed through custom formulas and reports, comparing all question responses against multiple categories of age, race/ethnicity, and gender. Community findings and responses are presented throughout the document under the *Survey Data* heading inserts.

### **Focus Groups**

Five focus groups (55 voices) were conducted between July and September among populations that are at-risk and/or under-represented to gain more in-depth understanding of what health concerns are experienced in Orange County. Focus group questions were broad and explored important aspects of good health, community strengths, and barriers to good health, with follow up questions and prompts tailored for each group. Focus groups were conducted in partnership with [Bridging the Gap CDC](#), the [Family Success Alliance](#), [Chapel Hill – Carrboro City Schools](#), [the Latino Health Coalition](#) and the [Refugee Health Coalition](#), and were conducted among older African Americans, Hispanic/Latino, Refugees from Burma, youth and low-income African Americans.

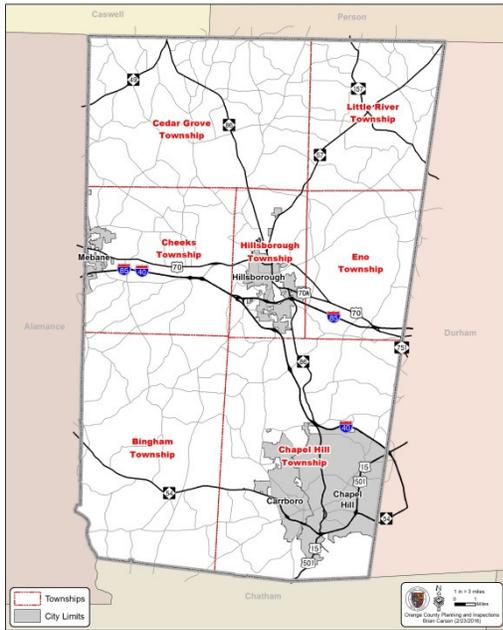
Focus group participation was recruited from existing networks and relationships with relevant agency providers. Each focus group was led by a trained facilitator and notes were taken by an informed notetaker. All focus groups were digitally recorded and transcribed, and all comments were helpful in highlighting gaps, specific concerns, and providing richness to the overall data results. Community findings and responses are presented throughout the document under the *Focus Group* heading inserts.

Spreading awareness of both online and door-to-door surveying and community listening sessions was created through: electronic emailing, address mailing, local media outlets (newspapers, radio), Healthy Carolinians of Orange County, community listserv's, Orange County Government, social media, Chapel Hill – Carrboro Chamber of Commerce, UNC Hospital, community newsletters, various community coalitions and partnerships, county agencies and organizations, CHA specific committees, Orange County Board of Health, and the Orange County Board of County Commissioners.

### **Subject Matter Experts**

Agency and subject matter partners completed a short survey on their experiences and expert opinions on the Healthy NC 2020 content areas. Twenty local partners completed the survey in response to how their agencies/organizations are addressing the needs of residents as they pertain to specific health concerns. In addition, they discussed any barriers and/or trends they have observed in their field of expertise. Partner findings and responses are presented throughout the document under *Subject Matter Expert* heading inserts.

## County Description



Orange County is a diverse vibrant community centrally located between the Research Triangle Park and the Triad (Greensboro, Winston-Salem and High Point) with Interstates 85 and 40 providing primary transit linkages. With a population of approximately 140,000 people, Orange County includes historic Hillsborough, the county seat; Chapel Hill, home of the University of North Carolina (the oldest state-supported university in the United States); Carrboro and parts of Mebane, both of which are former railroad and mill towns. The diversity of our people make the county interesting and lively - dairy farmers and professors; small business people and corporate executives; developers and horse breeders; resettled refugees and students.

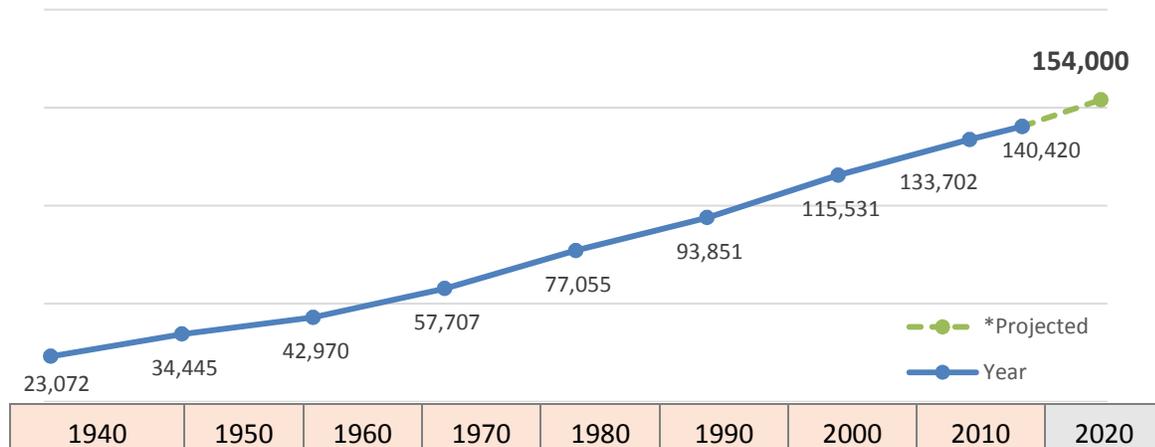
In 2015, we ranked number one in the state for the first time for both Health Outcomes and Health Factors according to the County Health Rankings. As in other parts of North Carolina (NC) and the United States (US),

health status depends in part on where one lives and their racial, ethnic, and economic status. Orange County is governed by a seven-member board of commissioners who are elected to four-year terms by district and at-large in partisan elections.

### General Population

The population of Orange County has more than doubled in the past four decades, with a population increase of 5% since 2010 and a 19% increase since 2000 (shown in figure 1).

**Figure 1: Orange County Population Growth 1940-2020\***



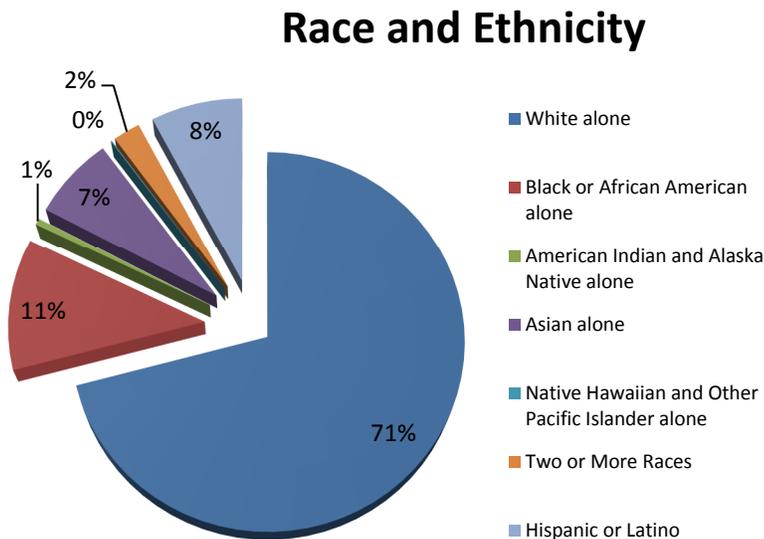
**Table 1: Orange County General Population Compared to Peer Counties and NC<sup>1</sup>**

People	Orange County	Brunswick County (Peer County)	New Hanover County (Peer County)	North Carolina
Population, 2014 estimate	140,420	118,836	216,298	9,943,964
Population, % change (April 2010 to July 2014)	5.0%	10.6%	6.7%	4.3%
Persons under 5 (2014)	4.7%	4.5%	5.3%	6.1%
Persons under 18 (2014)	20.4%	17.2%	19.4%	23.0%
Persons 65 and over (2014)	11.2%	27.0%	15.8%	14.7%
Female Persons (2014)	52.2%	51.4%	52.0	51.3%

In terms of where people reside, according to the [2010 Census](#), 71.5% of Orange County residents live in the southern “urban” areas of Chapel Hill and Carrboro, while the remaining 28.5% live throughout the rural areas of the County.<sup>2</sup>

The largest minorities differ in the three main municipalities. Black residents are the largest group of minorities in Hillsborough making up 30%; in Carrboro the largest group is Hispanic or Latino residents making up 14%; and in Chapel Hill the largest minority group is Asian making up 12%.<sup>3</sup> Figures 2 and 3 provide a representation of the county’s race and ethnicity, and age breakdown.

**Figure 2: Orange County Race & Ethnicity<sup>4</sup>**



**Figure 3: Orange County Age<sup>5</sup>**



### Immigrant and Refugee Populations

Orange County’s foreign born population (13%) continues to be concentrated in the southern part of the county, with Hispanic/Latino and Asian immigrants/refugees as the majority. The Hispanic/Latino immigrant population is mostly from Mexico, with smaller percentages from Central and South America; while the Asian immigrant population is mostly from China, followed by India, Korea and Burma. In Carrboro, where the foreign-born population is the largest (20.1%), there are higher concentrations of refugees from Burma, while Chapel Hill has higher concentrations of Asian Indian and Korean immigrants<sup>6</sup>. For many years, we have mostly resettled refugees from Burma, representing ethnic Burmese, Karen, Chin and additional ethnic groups of various cultures and languages (see table 2).

**Table 2: Direct Refugee Arrivals, Orange County, NC<sup>7</sup>**

Fiscal Year	New Direct Refugee Arrivals	Countries of Origin
2005-2006	19	14 Burma, 4 Cuba, 1 Iran
2006-2007	55	55 Burma
2007-2008	255	248 Burma, 4 Colombia, 3 Iran
2008-2009	194	181 Burma, 6 Bhutan, 4 Iran, 3 Iraq
2009-2010	57	54 Burma, 2 Congo, 1 Haiti
2010-2011	86	78 Burma, 8 Laos
2011-2012	53	53 Burma
2012-2013	83	78 Burma, 5 Congo
2013-2014	80	79 Burma, 1 Cameroon
2014-2015	54	44 Burma, 3 Congo, 3 Nepal, 3 Iraq, 1 Iran
TOTAL	936	Total from Burma: 884

With diverse ethnicities and countries of origin, Orange County also experiences linguistic diversity and varied levels of English proficiency within its residents. Over 16% of county residents speak a language other than English at home, with 37.4% of those speaking English “less than very well.” Most Limited English Proficient (LEP) residents live in Carrboro or Chapel Hill and are either Spanish-speakers or speakers of Asian languages (see table 3). Orange County anticipates several dozen Syrian refugees and potentially more refugees from the Democratic Republic of the Congo in the coming year.

**Table 3: Primary Languages Spoken by LEP Residents in Chapel Hill and Carrboro<sup>8</sup>**

Language Spoken at Home	% Carrboro LEP Residents	% Chapel Hill LEP Residents
Spanish	65.3%	34.0%
Asian Languages	29.0%	46.6%

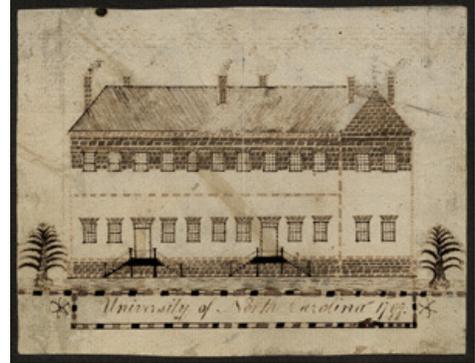
## Geography

Orange County covers nearly 400 square miles, or 254,720 acres of rolling farms and forest, urban centers and small towns, with an average 336 persons per square mile. The County is comprised of three incorporated municipalities: the Town of Chapel Hill is the largest with a population of 59,376; Carrboro, adjacent to Chapel Hill has a population of 20,984; Hillsborough, the county seat, has a population of 6,388; and a portion of the City of Mebane (which is mostly in Alamance County) has a population of 1,903.

## History

Originally home to a succession of Native American tribes that included the Haw, Eno, Occaneechi, and others, the area including what is now Orange County covered 3,500 square miles. This large area also included all of present day Alamance, Caswell, Person, Durham, and Chatham counties as well as parts of Wake, Lee, Randolph, Guilford and Rockingham counties.

On September 9, 1752, following English settlement, Orange County was founded and named after William V of Orange and King William III of England. County boundaries have changed considerably since the 1750s. The county seat for Orange is Hillsborough, founded in 1754 and first called Corbin Town, then Childsburgh, and in 1766 the town's final name became Hillsborough. Hillsborough is an old and interesting town located on land where the Great Indian Trading Path crossed the Eno River and was the center of much colonial activity. The County is divided into the seven townships of Bingham, Cedar Grove, Chapel Hill, Cheeks, Eno, Hillsborough, and Little River<sup>9</sup>.



## Land Use

Forest land is the predominant land use within the county, followed by farmland, though both are rapidly disappearing as low density residential land use continues to expand. According to recent [Commission for the Environment reports](#), urban sprawl is an increasing problem within Orange County and we are a part of the Triangle region of NC which has been rated as having the third highest incidence of urban sprawl in the nation.

## Faith and Spirituality

There are over 600 places of worship located in Orange County, to include churches, mosques, synagogues and other faith organizations. These institutions provide a source of spiritual nourishment, community support and resources to the residents of Orange County. As residents face the challenge of trying to stay connected to their community in an area where the population is growing and changing quickly, their spiritual homes become sources of social interaction, information exchange, and even health care.

## Community Priorities

### *Social Determinants of Health*

1) Social Determinants of Health, 2) Mental Health & Substance Abuse and 3) Physical Activity & Nutrition are Orange County's three chosen priority areas for 2015-2019. Access and poverty were the highest ranked social determinants and will be the focus of this section. You may find other social determinants in the [Social Determinants of Health](#) section.

### Poverty

According to income inequality measures, wealth in Orange County is not evenly distributed across resident populations, and health inequities persist due to differences in educational and economic opportunities.

- While the county's median household income (\$57,261) is above the state (\$46,693) and national average (\$53,482), this number hides pockets of poverty.
- The current 2014 poverty rate in Orange County is 16.8%—down from 17.4% in 2012, with child poverty at 15.7%.
- Adult poverty rates differ by ethnic group with Black (26.7%) and Hispanic (34.1%) residents being more likely to live in poverty than their White (14.8%) or Asian (11.7%) counterparts.

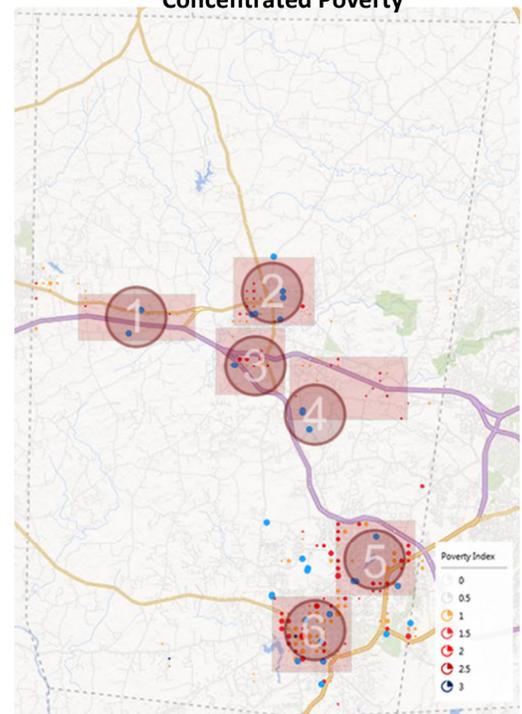
[Poverty guidelines](#) are identified based on family size and income to determine various purposes such as financial eligibility for federal programs. Programs that use poverty guidelines (or percentage multiples of the guidelines —125%, 150%, or 185% of the guidelines) in determining eligibility include but not limited to: Head Start, the Food Stamp Program, the National School Lunch Program, the Low-Income Home Energy Assistance Program, the Children's Health Insurance Program, and Community and Migrant Health Centers.

### Childhood Poverty

In January 2014, the Orange County Health Department (OCHD) responded to a question about the state of child poverty in Orange County. 17% of Orange County children are estimated to be below the federal poverty level as of 2013, representing a 7% increase from 2001. In particular, children who have adverse childhood experiences (ACEs) that are more common among families experiencing poverty are at higher risk of health outcomes like obesity, depression, and substance abuse.

Few publicly available sources exist to map poverty estimates at the neighborhood level, and many sources of poverty-related data are imperfect when taken individually. Therefore, OCHD staff identified pockets of low-income populations (see figure 4) using four different data sources that suggest low-income: (1) residential structure type from the Land Records/GIS, (2) active housing choice vouchers from Housing, (3) children on Medicaid

**Figure 4: Orange County Areas of Concentrated Poverty**



from the Department of Health and Human Services and (4) clinic patients from the health department.

OCHD staff developed an aggregate indicator measuring the likelihood of a neighborhood being low-income, scoring from 0 to 4 (most likely low-income neighborhood). This score is calculated for every 1/4 mile block in Orange County, for blocks with more than 30 residential addresses of any type. From this analysis, six poverty zones were identified based on 1) the concentration of areas scoring high on the Poverty Index and 2) proximity to schools.

The age and gender distribution of Orange County and NC populations living below the poverty level are considerably lower compared to data expressed from 2010. In all categories, except 18 to 64 years, Orange County shows the percent of the population living below the poverty level is lower than NC (see table 4).

Table 4: Orange County and NC Populations Living Below the Poverty Level	% Below Poverty Level	
	Orange County	North Carolina
Population for whom poverty status is determined	16.8%	17.6%
<b>Age</b>		
Under 18 years	15.7%	25%
18 to 64 years	19%	16.5%
65 years and over	5.9%	9.9%
<b>Gender</b>		
Male	14.9%	16.1%
Female	18.6%	18.9%

### Employment Rates

- 7.5% of residents in the civilian labor force are unemployed compared to 10.5% of the civilian labor force in NC.

### Poverty Mitigation

The Health Department, community leaders, and families know that health is not just what happens inside a clinic. A child’s health is linked directly to their earliest family and community experiences, how well they do in school, and their health and income decades after graduation.

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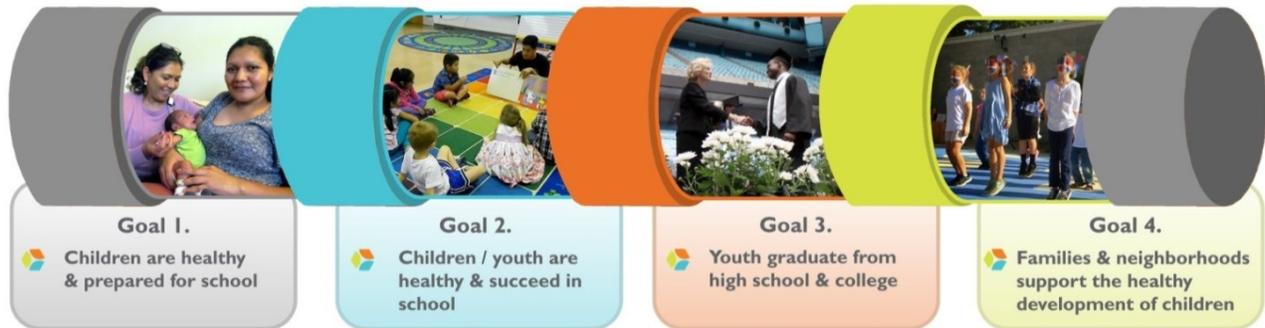
*“Children living in poverty are much more likely to experience adverse childhood events such as abuse, neglect, or a general category of household dysfunction.”*

- Dr. Colleen Bridger, Orange County Health Director

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Decades of research show that the more adverse events a child experiences in their earliest years, the more likely they are to experience chronic diseases, mental health issues, and behaviors that lead to teen pregnancy or the contraction of sexually transmitted diseases later in life<sup>10</sup>. Adverse experiences range from physical, emotional, or sexual abuse to parental divorce or substance abuse by a parent<sup>11</sup>. Over half of North Carolinians surveyed during the 2012 Behavioral Risk Factor Surveillance System Survey reported experiencing ACEs, and those who reported higher numbers of ACEs were more likely to be low-income, have less than a high-school education, and be unemployed<sup>12</sup>.

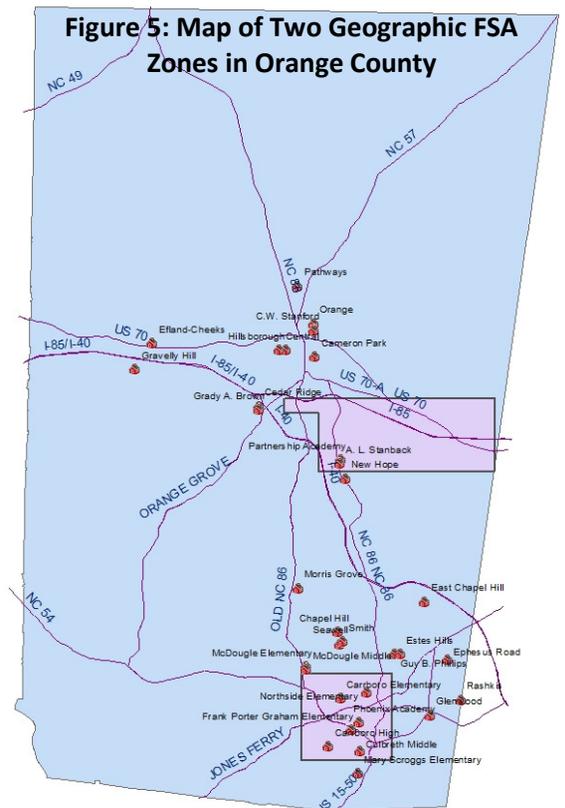
While poverty cannot be solved with a silver bullet, we can mitigate the effects of poverty on children with strategies that create a seamless pipeline of services and supports from cradle to college and career. To do this in Orange County, a collaborative group of local government, non-profits, schools, and community members called [the Family Success Alliance \(FSA\)](#) was formed in 2014 to work towards an Orange County where all children and families have the opportunity to succeed in school and in life.



Starting in two geographic “zones” in Orange County (figure 5), the FSA is working to strengthen the pipeline of high-quality, connected health, education, and family support systems to make sure all children are healthy and prepared for school, are healthy and succeed in school, graduate from high school and college, and that family and neighborhoods can support their healthy development. This work is based on national models such as the Harlem Children’s Zone and the Promise Neighborhoods.

In 2015 and 2016 FSA started a kindergarten readiness program and served 66 families in three zone elementary schools, developed a joint intake and referral system with partner organizations, and provided one-on-one family support from family coaches with lived experience in our zones, called Zone Navigators. Students in the kindergarten readiness program showed significant growth, with 9% of students assessed with a proficient level of readiness at the start of the program and 67% with a proficient level of readiness at the end of the program according to measures from the Kindergarten Readiness Assessment. Work with the FSA collaborative of agencies has also resulted in improvements in understanding, collaboration, and coordination between agencies serving children and families in the zones. This has included scheduling and location of programming, the content of services, and the communication between providers.

Moving forward into 2016, FSA will expand the kindergarten readiness program to include 90 incoming kindergarteners, continue support from Zone Navigators, and work with partners to strengthen programs and services.



# Poverty Mitigation

## Summary:

Orange County has the highest Gini Coefficient of Income Inequality in North Carolina (0.52). This means our county experiences high income dispersion, where fewer people hold a lot of capital and many people hold little capital. While the median income for households in Orange County is more than \$57,000, **17% of residents are living in poverty**, including **16% of children**. Food insecurity and affordable housing are key areas of emphasis for mitigating the effects of poverty in Orange County. The Family Success Alliance is one example of an initiative working in two neighborhood zones experiencing higher rates of poverty than the county as a whole. Up to **25%** of families in Family Success Alliance zones experience the negative effects of poverty on health and well-being.

- Performing better than four or more benchmarks
  - ▲ Performing better than two or three benchmarks
  - ◆ Performing better than one or no benchmarks
  - ↑↓ Positive trend
  - ↑↓ Negative trend
  - SAME No trend
  - Trend cannot be assessed
  - Significant change from previous
- Benchmarks include Target, Previous, Peer, NC, and US*

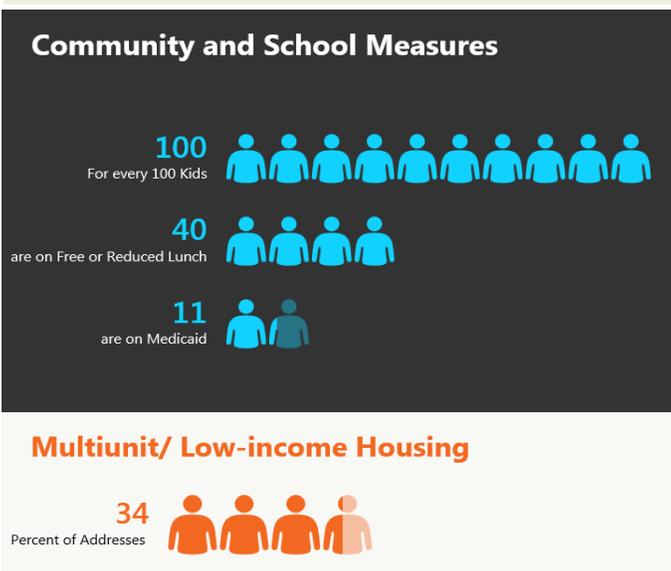
**Data Notes:** See the **Public Health Dashboard FAQ Document** for more on data methodology.

Social and Economic Determinants of Health	Progress	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
% Population living in Poverty	▲	17%	13%	18%	SAME	16%	18%	16%
% Children <18 living in Poverty	●	16%	NA	17%	SAME	23%	25%	22%
% Households on SNAP benefits	●	8%	NA	8%	SAME	12%	14%	13%
% Unemployed	●	8%	NA	8%	SAME	8%	11%	9%
% Population that is Food Insecure	▲	14%	6%	NA	-	16%	17%	15%
% Children Eligible for Free or Reduced Lunch	●	34%	NA	34%	SAME	49%	53%	48%
% Renters paying >30% Income on Rent	▲	53%	36%	54%	SAME	50%	57%	52%
4 year Graduation Rate (%)	●	88%	95%	83%	↑	85%	86%	81%
Gini Coefficient of Income Inequality (0= most equal, 1.0 = least equal)	◆	0.52	NA	0.53	SAME	0.45	0.47	0.48

**Sources:** ACS, UNC School of Government, NC Public Schools, NCES  
Data points are the most current measures from multiple sources (available on request).

## Family Success Alliance: Zone 4

**25%** of Families in Zone 4 experience Poverty



## Family Success Alliance: Zone 6

**22%** of Families in Zone 6 experience Poverty



## Access

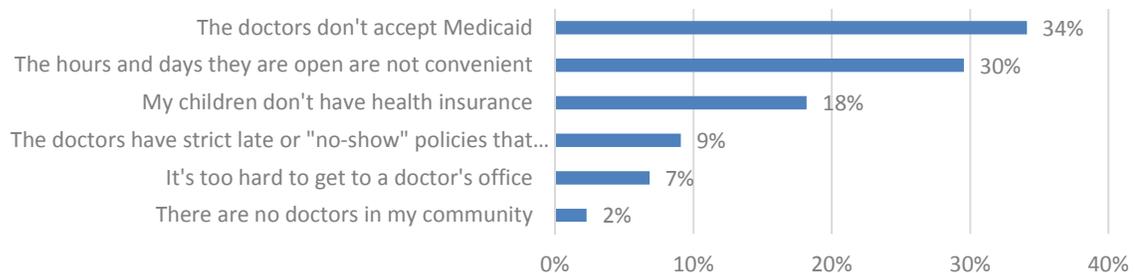
### Access to Health Care

The ability to access quality and affordable health care services is a key component in a person's overall health. According to [Healthy People 2020](#), health care access is defined as "...timely use of personal health services to achieve the best health outcomes."<sup>13</sup> Health care access impacts a person's quality and quantity of life as it dictates when and how often a person can use the health care system to obtain preventive, diagnostic, and treatment services.

Orange County has a strong health care community that includes a nationally-ranked hospital system, an accredited School of Public Health, a federally qualified health center, a local public health department, a medical and dental school and various private medical practices. In spite of these resources, residents report problems accessing health care services. In addition to medical insurance, factors contributing to a resident's inability to access health care services include the concentration of health care resources in the southern part of the county, inadequate transportation systems in the central and northern part of the county, language barriers, and perceived discrimination (or racism) within health care facilities.

- Orange County has a physician rate of 105.4 physicians (an increase from 93.6) per 10,000 people that far exceeds NC (22.7) and the US (22.5).
- As shown in figure 6, 18% of *survey respondents*, with children, report not having insurance for their children.

Figure 6: Reasons for Trouble Getting Medical Care for Child(ren)



### Immigrant and Refugee Populations

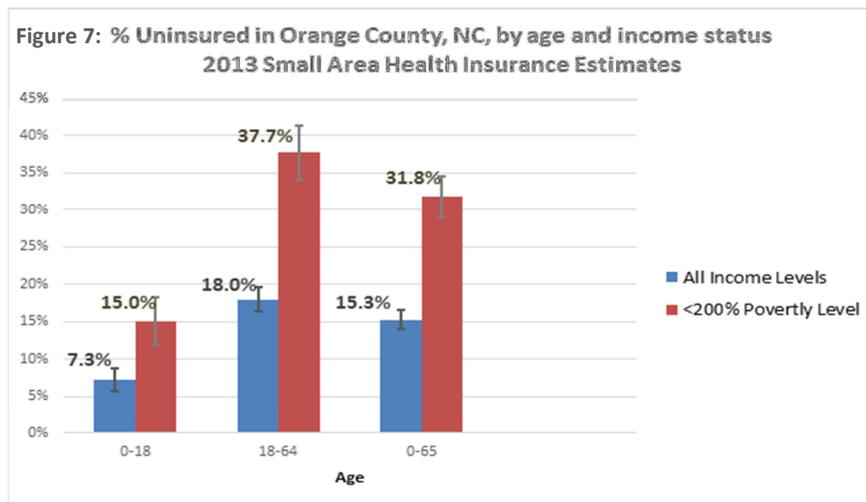
NC Minority Health data show that health disparities and inequities persist for immigrant and refugee children and adults alike. Compared to whites, NC Hispanic parents are more likely to report that their children have fair or poor general and dental health, are uninsured, don't have access to a regular dentist and are classified as overweight or obese.<sup>14</sup> Hispanics in NC also suffer disproportionately from late or no prenatal care, high teen birth and poverty rates, and a high uninsured percent compared to whites.<sup>15</sup> Unfortunately data specific to Asian populations are not available currently due to unreliable population estimates and data limitations.

- Immigrant and refugee *focus group respondents* experience barriers when it comes to access to care, in particular the inability to get timely access to affordable, high quality medical and dental care, which often results in self-medication or avoidance of the system.

- Latino immigrant *focus group respondents* experience a lack of appointments for men, frustration with lack of response and long wait times when seeking service.<sup>16</sup>

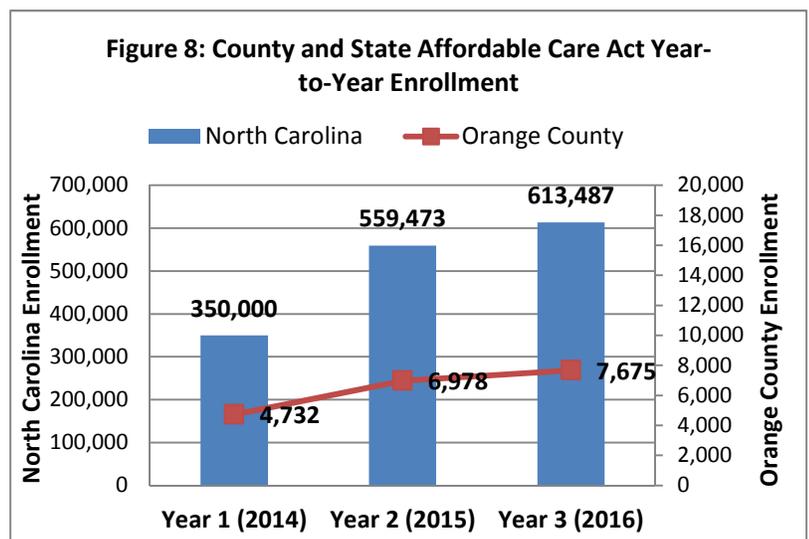
### Access to Health Insurance

- According to 2013 small area health insurance estimates (SAHIE) approximately 21,000 (15.3%) Orange County residents between 0-64 years of age were uninsured, a decrease from 2011 where 16.4% of residents were uninsured (see figure 7).
- Orange County generally has comparable rates of uninsured residents to the state; however in 2013, a higher percentage of low income youth under 19 were uninsured in Orange County (15% +/- 3.2%) as compared to NC (9.2% +/- 0.7%)<sup>17</sup>.



In 2010, the [Patient Protection and Affordable Care Act](#) were enacted by Congress to reduce the number of uninsured Americans by providing affordable, high-quality health insurance.<sup>18</sup> NC, a Federally-Facilitated Marketplace (FFM) state, enrolled 28% of new consumers and 72% of re-enrollees during the 2016 plan selection, which could account for the decrease in our uninsured rate.

- Over 6,000 Orange County residents enrolled into the Marketplace for 2015 coverage (see figure 8).
- Among the 38 states that used the healthcare.gov platform, NC is the fourth highest in total people who selected a plan with more than 11.2 million people (including all plan selections whether they use state or federal marketplace).
- 66% of NC plan selections live at or under 200% Federal Poverty Level; 88% of North Carolinians have received subsidies.



\*County level data was unavailable at time of report, Orange County's year three numbers is an estimate based on the statewide percent

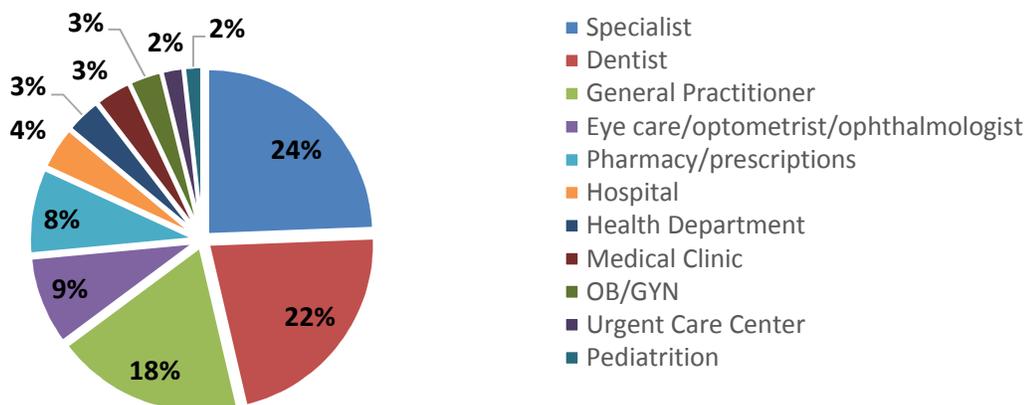
### Access to Dental Care

Oral health not only includes tooth and gum health, but other health conditions that may result from poor oral health (gum disease contributes to heart disease; tobacco use contributes to tooth decay). Issues in oral health include availability of affordable dental insurance, access to regular and preventive care, and population specific issues like children’s dental health, increasing refugee population needs, and language barriers.

According to American Academy of Periodontology, people with periodontal (gum) disease have an increased risk of heart disease and stroke<sup>19</sup>, while tooth decay is the most common childhood chronic disease. Oral health begins with an individual taking responsibility for his/her behavior including oral hygiene, home care practices, healthy diet and nutrition, avoidance of tobacco and alcohol, and periodic preventive dental visits.

- Orange County has a dentist rate of 9.9 per 100,000 people which is higher than NC (4.6) and the US (6.0). However, the rate has decreased from a rate of 10.4 and 22% of *survey respondents* report experiencing barriers to dental care (see figure 9).

Figure 9: Places Respondents Had Trouble Getting Medical Care



- The Orange County Health Department Dental Clinic, which is listed as Orange County’s oral health safety net provider, is seeing a steady increase in the number of adult and pediatric patients treated from 4,848 in 2014 to 5,280 in 2015.
- In 2015, with the expansion of dental services, due to the successful increase in patients seen, the Orange County Dental Clinic has expanded its services by increasing its physician number from 1 to 2.
- Piedmont Health Services, Inc.’s full-scope family dentistry practice at its Carrboro Community Health Center, another local safety net dental services provider, served 2,377 unduplicated individuals (48% children, 52% adults) with 5,360 dental visits in 2015. In an effort to better meet demand for care, the health center is currently planning a renovation to double the size of its dental clinic from three to six chairs.

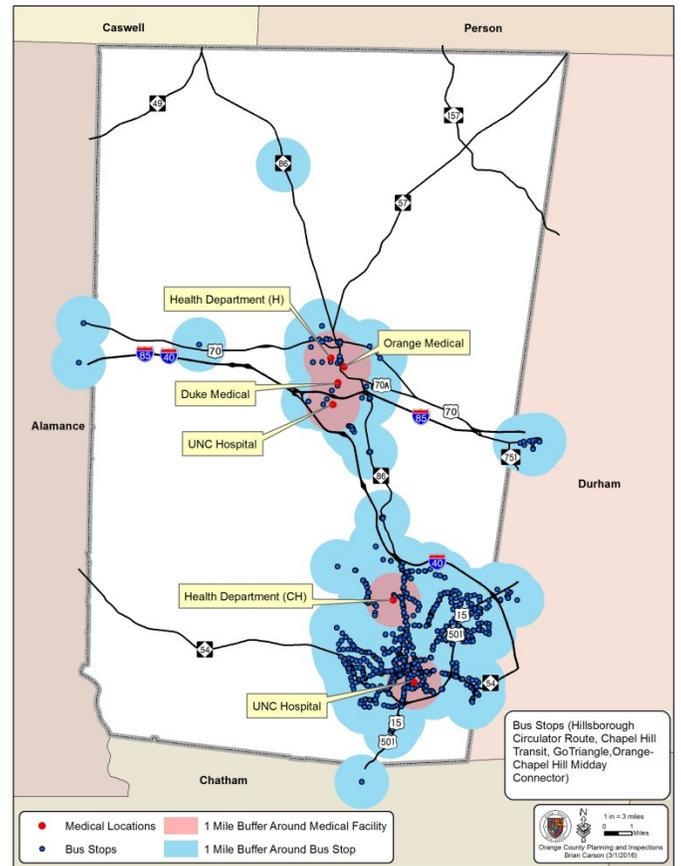
### Access to Transportation

Transportation was cited in the 2007, 2011 and 2015 Orange County Community Health Assessments as a barrier to accessing health care services, specifically for northern Orange and rural residents. See figure 10 for a map of those residents who live 1 mile within a medical facility and bus stop.

- 3,000 individuals in Orange County with no vehicle live outside of the walkable/ridable coverage area to medical clinics (shown in the white region of figure 10).
- In 2014, there were 66,130 Orange County residents, 16 years and over, commuting to work. 8% of that population (4,941) utilized public transportation, 68% drove alone, 9% carpooled, 5% walked and 3% utilized other means<sup>20</sup>.
- The disabled, elderly, and those on Medicaid qualify for free or reduced cost transportation in rural areas through Orange County Public Transportation (OPT). Those who do not qualify can request OPT pickup/drop-off for a one way charge of \$12.50.

OPT operates two midday/off peak fixed-route services Monday through Friday, excluding County Holidays through the Hillsborough Circulator and the Orange-Chapel Hill Midday Connector.

**Figure 10: Resident access to medical facilities and bus stops in Orange County.**

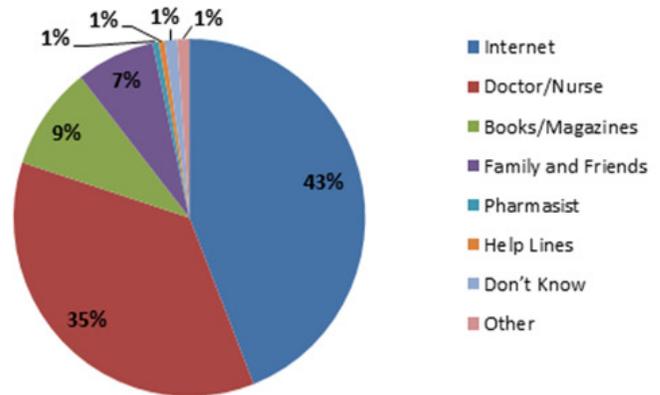


### Access to Health Information and Health Literacy

Health literacy is defined as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions”<sup>21</sup>.

- According to the Orange County Literacy Council, 12% (8,615) of Orange County residents have literacy needs and most of these individuals live in the county’s unincorporated areas.
- Almost half of Limited English Proficiency (LEP) adults have nine years or less of education, and 64% do not have a high school degree<sup>22</sup>.
- The majority of *survey respondents*, regardless of income status, have access to the internet (through a computer, smart phone, or tablet), whereas, only 1% of *survey respondents* stated that they did not have access to the internet (see figure 11).

**Figure 11: Where Survey Respondents Reported Getting Most of their Health Related Information**



In response to 2011 health literacy concerns, Healthy Carolinians of Orange County, in conjunction with the Orange County Board of Health hosted a health literacy training to educate providers on the importance of being health literate when it comes to servicing patients. UNC Healthcare employee trainers trained 46 participants in the areas of plain language, readability level when it comes to creating and using materials, and the teach back method.

The Social Determinants of Health population health dashboard (located on page 16) provides county level data on access to care as it relates to affordability and insurance, resources and prevention, and health literacy.

# Access to Care

## Summary:

Orange County generally has comparable rates of uninsured residents to North Carolina; however, low income residents are twice as likely to be uninsured, as compared to the average county resident. And in 2013, a higher percentage of low income youth under 19 were uninsured in Orange County [15% (+/- 3.2%)] as compared to North Carolina [9.2% (+/- 0.7%)]. However, across all populations Orange County has seen a decrease in uninsured rates from 2011 to 2013. In terms of resources, Orange County leads the state in physician density, and the supply of physicians grew from 2012 to 2013 (+176, +13.6%). While Orange County ranks first in dentist density, the county also showed the largest numerical decrease in the state in 2013 (-6, -4.2%).

- Performing better than four or more benchmarks
  - ▲ Performing better than two or three benchmarks
  - ◆ Performing better than one or no benchmarks
  - ↕ Positive trend
  - ↕ Negative trend
  - SAME No trend
  - Trend cannot be assessed
  - Significant change from previous
- Benchmarks include Target, Previous, Peer, NC, and US*

## Data Notes:

See the [Public Health Dashboard FAQ Document](#) for more on data methodology.

Affordability and Insurance	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
% Uninsured (<65 years old)	▲	15.3%	8.0%	16.4%	↕	18.6%	18.1%	13.4%
% Low-income Uninsured (<65 years old, <200% FPL)	▲	31.8%	NA	36.2%	↕	32.7%	32.7%	19.0%
% Children Uninsured (<19 years old)	◆	7.3%	NA	9.0%	↕	6.5%	6.9%	6.0%
% Low Income Children Uninsured (<19 years old, <200% FPL)	◆	15.0%	NA	20.0%	↕	9.2%	9.2%	8.0%

Resources and Prevention	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
Physicians Rate per 10,000	●	105.4	NA	93.6	↕	38.1	22.7	24.5
Primary Care Physician Rate per 10,000	●	24.9	NA	20.8	↕	14.6	8.6	7.6
Dentist Rate per 10,000	●	9.9	NA	10.4	↕	7.2	4.6	6.0

**Sources:** SAHIE, Sheps Center, Kaiser Family Foundation

Additional information from the 2014 Board of Health Access to Care Dashboard are re-printed below.

Health Literacy	Orange	Compare to		
	Current	Peer	NC	US
Basic prose illiteracy	9%	11%	14%	14%
Always understands doctor*	84%	-	83%	81%
Always understands discharge*	88%	-	86%	85%
Always understands medicine info*	69%	-	65%	64%

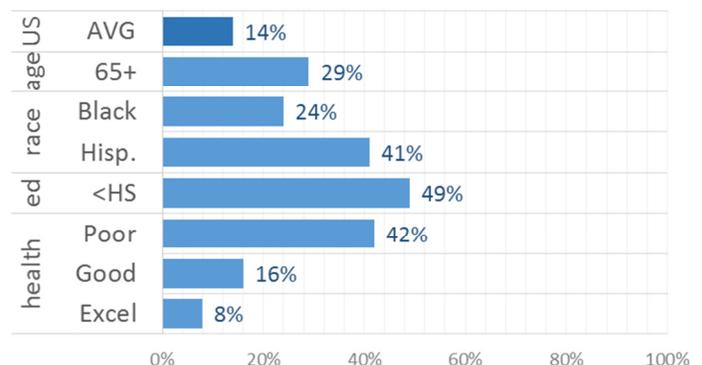
*\*Consider biases. Best used in comparison w/ other HCAHPS elements.*

Low Health Literacy is strongly tied with poorer health outcomes and increased cost. It is mediated by age, race, education and income.

**Basic HL** is rudimentary prose comprehension and quantitative abilities, insufficient for many interactions with health information. **Below basic HL** is extremely low or non-existent comprehension.

Increase HL by (1) increasing **patient** skills and abilities & (2) decreasing **provider** demand and complexity.

US % w Below Basic HL



Below you will find a list of (non-exhaustive) Orange County initiatives and activities as they relate to Social Determinants of Health with specificity around Access and Poverty.

Agency / Organization / Initiative	Advocacy / Community Support	Affordable Care Act Support	Care Coordination	Dental Care	Financial Assistance Programs / Support	Health / Medical Care	Health Literacy	Immigrant & Refugee Support	Pharmacy	Transportation
<a href="#">Chapel Hill Transit</a>	X									X
<a href="#">Carolina Health Net (CHN)</a>	X		X	X	X	X			X	
<a href="#">El Centro Hispano</a>	X							X		
<a href="#">EZ Rider</a>	X									X
<a href="#">Go Triangle</a>	X									X
<a href="#">Healthy Carolinians of Orange County</a>	X						X			
<a href="#">Immigrant and Refugee Community Partnership</a>	X							X		
<a href="#">Orange County Department of Social Services</a>	X				X			X		
<a href="#">Orange County Health Department</a>	X	X	X	X	X	X	X	X		
<a href="#">Orange County Literacy Council</a>	X						X			
<a href="#">Orange County Public Transportation (OPT)</a>	X									X
<a href="#">Piedmont Health Services</a>	X	X		X	X	X		X		
<a href="#">Planned Parenthood</a>	X					X			X	
<a href="#">Refugee Support Center</a>	X	X			X	X		X		X
<a href="#">The Family Success Alliance</a>	X							X		X
<a href="#">UNC Center for Latino Health</a>	X					X		X		
<a href="#">UNC Family Medicine</a>	X	X				X				
<a href="#">UNC Healthcare System</a>	X				X	X				
<a href="#">Durham - Chapel Hill - Carrboro Metropolitan Planning Organization</a>	X									X
<a href="#">Orange Unified Transportation Board</a>	X									X

## Mental Health & Substance Abuse

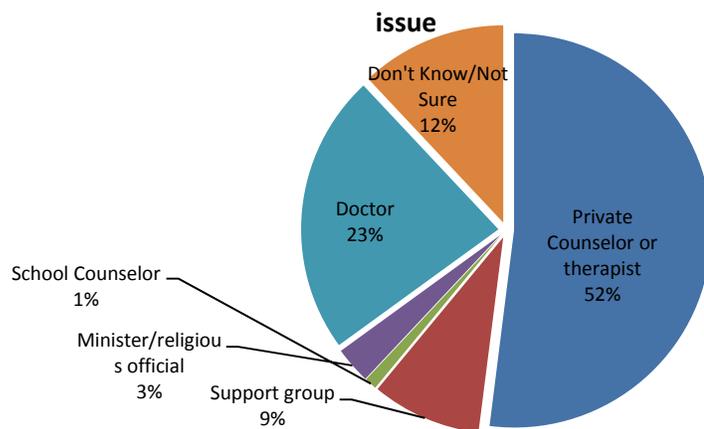
### Mental Health

Mental Health refers to a wide range of conditions that affect one's mood, thinking and behavior. Broad classes of mental illness include mood disorders (depression, bipolar disorder), anxiety disorders, psychotic disorders (schizophrenia), eating disorders, personality disorders, and addictive behaviors/substance abuse disorders. Many factors contribute to mental health problems, including genetics, biological factors, life experiences, and brain chemistry.

Mental and substance abuse disorders may be caused by a combination of factors which complicates efforts to understand prevention best practices. Undiagnosed and untreated conditions can have serious consequences leading to disrupted daily functioning, failure in school, unemployment, disability, social isolation, family conflicts, addiction, or suicide.

- As seen in figure 12, 12% of *survey respondents* are unsure as to where they would refer a friend or family member who had a mental health or substance abuse issue.
- Nearly 10% of all Emergency Department visits in NC list mental illness as a diagnosis; 31% of Emergency Department visits with mental illness diagnosis resulted in hospital admission<sup>23</sup>.
- *Subject matter experts* express that funding for mental health and substance abuse services has been cut repeatedly over the years.
- 1 in 6 *survey respondents* listed mental health, including mental health issues (13%) and suicide prevention (4%) as priority issues for needed for teens.

**Figure 12: Where survey respondents would refer a friend who had a mental health or substance abuse issue**



### Suicide

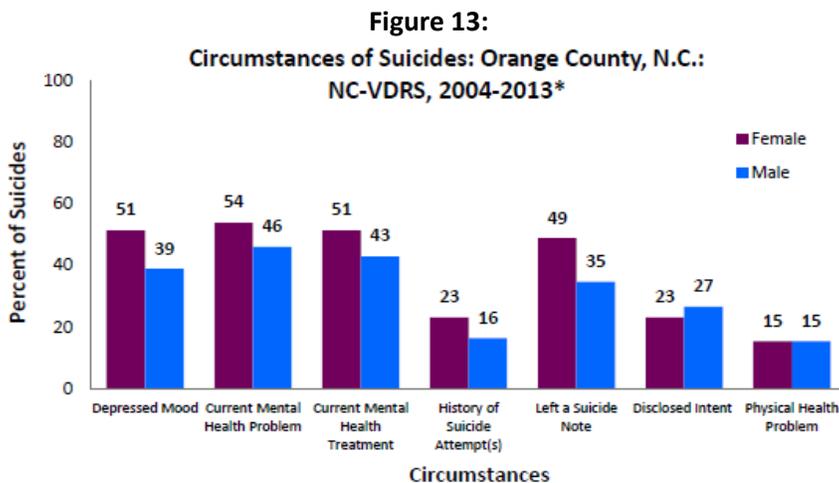
Suicide is a serious public health problem that affects many people. In Orange County, suicide is the second leading cause of death for individuals between the ages of 20 and 39 and is the fourth leading cause of death for individuals between the ages of 40 and 64, with the highest prevalence being among white males.

- Over the past 5 years on record, Orange has had an average of 17 suicide deaths per year (up from 13 suicide deaths per year from 2003 to 2007). Orange County's age-adjusted 5 year suicide rate is 10.4 suicides per 100,000 people, a decrease from 12.2 in 2013.

Suicides can be prevented by recognizing signs and symptoms, learning how to help, and taking steps to provide help to people in need. Risk factors for suicide include, but are not limited to: previous suicide

attempts, history of depression or other mental illness, alcohol or drug abuse, family history of suicide or violence, physical illness, and feeling alone<sup>24</sup>.

- 51% of female and 39% of male Orange County suicide victims were characterized as being currently depressed when they completed suicide, as shown in figure 13.



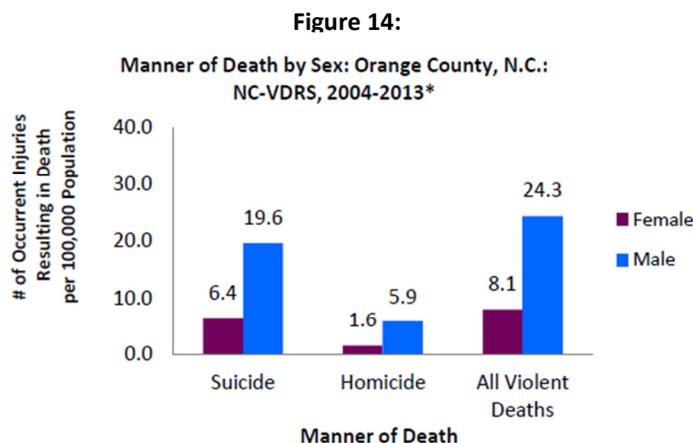
\*Based on the county of injury occurrence. 94.5% of cases had circumstance information. Zero females and eight males were missing circumstance information.

- Among *survey respondents* 3 out of 10 have been told by a doctor, nurse, or other health professional that they have had depression or anxiety.

- 54% of female and 46% of male suicide victims was characterized as having a current mental health problem.

- Females (23%) are more likely to attempt suicide when compared to males (16%); however, males are more likely to complete suicide than females, as shown by figure 14.

- 1 out of 8 *survey respondents* stated that there have been days in the past month when feeling sad or worried have kept them from going about their normal routine.



### Substance Use/Abuse

Fewer adolescents in Orange County are using alcohol products or smoking cigarettes; however, there is a marked increase in overall tobacco use among this group, primarily driven by the use of electronic cigarettes and other novel tobacco products. Adult smoking appears to be stable, but alcohol use is increasing.

**Alcohol** – Alcoholism is a medical disease that (1) involves periodic or constant impaired control over drinking; (2) preoccupation with alcohol; (3) use and abuse of alcohol in spite of adverse consequences; and (4) distorted thinking, especially denial. Alcoholism stems from genetic, environmental, and psychosocial factors. Alcohol abuse is the intentional overuse of alcohol (to the point of drunkenness) that includes occasional and celebratory over-drinking.

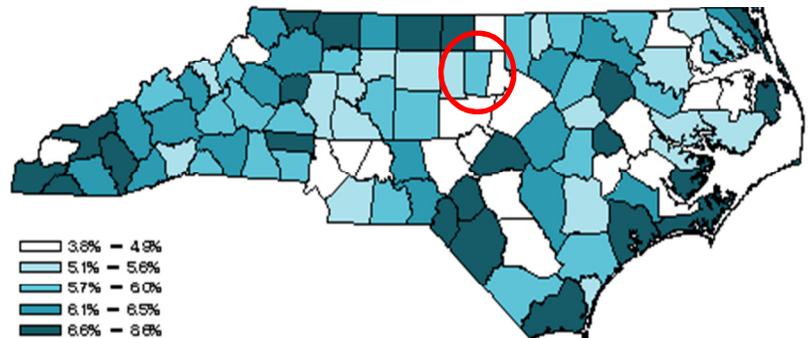
- Overuse of alcohol is considered to be more than 3-4 drinks per occasion for women and more than 4-5 drinks per occasion for men.

- One drink equals one (12-ounce) bottle of beer or wine cooler, one (5-ounce) glass of wine, or one and a half ounces of liquor.<sup>25</sup>

High-risk drinking is often cited as the single biggest issue negatively impacting universities and their communities. Orange County, especially the Town of Chapel Hill, is no exception.

- According to survey data, 8% of County adults drove after drinking in the past 30 days, which is worse than our peers (4%), NC (2%) and the US (2%).
- Based on data from Chapel Hill Carrboro City Schools, 9% of High Schoolers drove after drinking in the past 30 days.
- 5.7% of Orange County motor vehicle crashes are alcohol related, (shown in figure 15) which is a higher rate than our peers (5%) and NC (4%)<sup>26</sup>.

**Figure 15: Crashes that Involved Alcohol, 2009-2013**



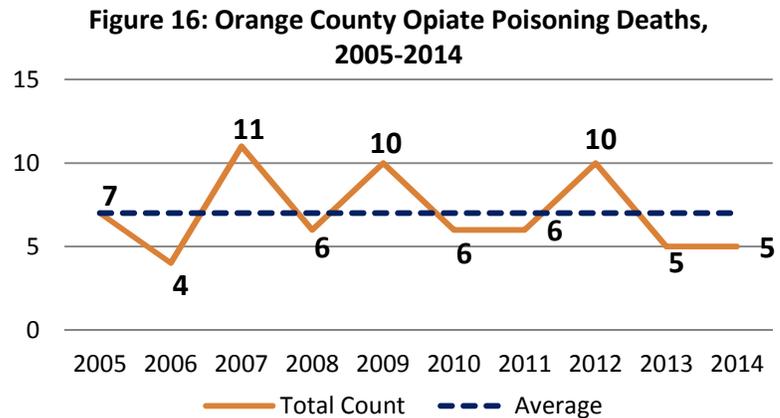
**Betel Nut** – [Betel Nut](#) is the seed of an areca palm that is commonly chewed by immigrants and refugees from South and Southeast Asia (e.g., Burma, Thailand, India, Bangladesh, Indonesia, Vietnam), parts of East Africa, and the tropical Pacific.

Providers in Orange County noticed that some local refugees from Burma use Betel Nut and were interested to learn more about the substance, which stains the teeth of the chewer. Prolonged use of betel nut or betel quid can cause serious adverse health effects, including oral cancer and periodontal disease. When used with tobacco, such as in the form of betel quid, the risk of cancer is greatly increased and may also be harmful to pregnant women.

**Poisonings** – A poison is any substance that is harmful to your body when ingested (eaten), inhaled (breathed), injected, or absorbed through the skin.

- In Orange County approximately 17 people, of all ages, die per year due to poisoning, and approximately 10 of those die from narcotic drug overdose.
- Abuse of prescription painkillers now ranks second as the Nation’s most widespread illegal drug problem.
- In 2011, 1,140 NC residents died as a result of unintentional poisonings; approximately 80% of those deaths were related to prescription drugs<sup>27</sup>.

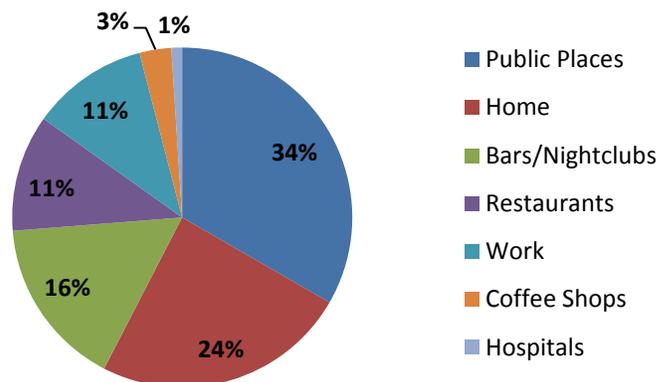
- Orange County has a drug overdose mortality rate of 5.7, which is lower than our peers (9.7), NC (12.3) and the US (14.6).
- As shown in figure 16, opiate poisoning deaths (including heroin, other opioids, methadone, and /or other synthetic opioids) account for an average of 7 deaths per year.
- Orange County's prescription opioid overdose mortality rate is 3.6 per 100,000 people, which is lower than NC (8.0) and the US (5.3).



**Tobacco** – Tobacco use and secondhand smoke remain the leading causes of preventable illness and death in both Orange County and NC.<sup>28</sup> Tobacco refers to a range of products, such as cigarettes, cigars, spit tobacco, hookah, and electronic cigarettes.

- Smoking rates are 2-3 times higher among those with behavioral health issues and are consistently higher among those with lower levels of income and educational attainment.<sup>29,30,31</sup>
- Smoking accounts for at least 30% of all cancer deaths and 87% of all lung cancer deaths.<sup>32</sup> Smoking is also a major cause of heart disease, cerebrovascular disease, chronic bronchitis, emphysema, and is associated with gastric ulcers.<sup>33</sup>
- Smokeless tobacco contains 28 cancer-causing chemicals and can cause oral and pancreatic cancers, tooth decay, and gum recession.<sup>34</sup>

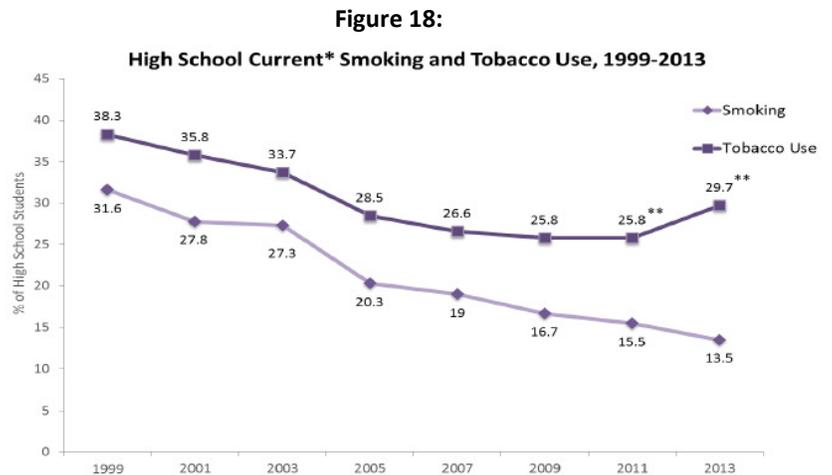
**Figure 17: Locations Survey Respondents are Exposed to Secondhand Smoke**



- Among *survey respondents* exposed to secondhand smoke, majority reported being exposed in public places (figure 17).
- Secondhand smoke can cause heart attacks and stroke and is especially harmful to infants and children who can experience asthma attacks, respiratory infections, ear infections, and sudden infant death syndrome (SIDS).<sup>35</sup>

- About half of all children between ages 3 and 18 years are exposed to cigarette smoke regularly.<sup>36</sup>

- While cigarette use is decreasing among NC youth, overall tobacco use is increasing, driven in large part by use of e-cigarettes and hookah (shown in figure 18).
- Almost 4 out of 10 high school students in Orange County have tried an e-cigarette, and about 2 out of 10 high school students currently use them.<sup>37</sup>



\*Current use is defined as using on one or more of the past 30 days. \*\*In 2011, N.C. YTS began tracking use of emerging tobacco products, including electronic cigarettes, clove cigars, dissolvable tobacco products, flavored cigarettes, flavored little cigars, hookahs or waterpipes, roll-your-own cigarettes, and snus. Data on emerging tobacco product use prior to 2011 are not available.

In 2014, more than two thirds of middle and high school students were exposed to e-cigarette ads in retail stores, on the Internet, in magazines or newspapers, and on TV or in the movies.<sup>38</sup> The tobacco industry spends almost \$10 billion each year on advertising, which is more than \$1 million per hour.<sup>39</sup>

The research is still evolving on the public health implications of e-cigarettes and other vapor products. The health risks from inhalation of nicotine, certain ingredients (such as flavors using diacetyls), and some by-products have been established in the scientific literature.<sup>40,41</sup> The nicotine poses dangers to pregnant women and fetuses, children, and adolescents. Nicotine use among adolescents can actually disrupt the formation of brain circuits that control attention, learning, and susceptibility to addiction.<sup>42</sup> Research is sparse, however, on the acute and chronic impacts of inhaling common aerosol and vapor components with as of yet unknown toxicity. Data suggest that e-cigarette use within a room could cause secondhand exposures.<sup>43,44</sup>

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*Unless we can dramatically reduce current smoking rates, one out of 13 children alive today will die a smoking-related death*  
 - U. S. Surgeon General

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The following Substance Abuse and Mental Health, and Tobacco and Respiratory population health dashboards provides county level data specific to mental health and substance abuse. Data on poisonings can be found on [the Injury and Violence population health dashboard](#).

# Substance Abuse and Mental Health

## Summary:

Behaviors associated with substance use show a decline in adolescent alcohol and cigarette use; however, indicators are needed at the county level to examine trends in emerging tobacco products such as e-cigarettes. There currently is no local measure to capture the use of these products by youth; however, North Carolina youth showed an uptick in tobacco use from **25.8%** in 2011 to **29.7%** in 2013, in part due to these emerging products. Adults show increases in these same behaviors. Indicators for the prevalence of smokers have increased in particular. Alcohol related vehicle crashes make up a greater percentage of crashes in Orange County than our peers or the state. Alzheimer's disease Mortality and ED visits are increasing compared to previous years and compared to our peers; however, Orange County performs better than the state on both of these indicators. While the county performs better than benchmarks on mental health emergencies and mortality, **30%** of Community Health Assessment survey respondents reported having been told by a doctor, nurse or health professional that they have either depression or anxiety. Access to mental health services is reported as a priority concern by residents and subject matter experts alike.

- Performing better than four or more benchmarks
  - ▲ Performing better than two or three benchmarks
  - ◆ Performing better than one or no benchmarks
  - ↕ Positive trend
  - ↕ Negative trend
  - SAME No trend
  - Trend cannot be assessed
  - Significant change from previous
- Benchmarks include Target, Previous, Peer, NC, and US*

## Data Notes:

\*Due to changes in survey methodology and overlapping confidence intervals, BRFSS data cannot be compared to previous years

\*\*Confidence intervals for YRBS trend data are unavailable to assess significance of trends over time

Rates are per 100,000 unless otherwise noted. See the **Public Health Dashboard FAQ Document** for more on data methodology.

Alcohol	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
% Adults who Drink Excessively*	◆	22.8%	24.4%	20.7%	-	18.0%	15.2%	24.6%
% High schoolers using alcohol products (CHCCS)**	●	32.0%	26.0%	35.0%	↓	35.0%	34.0%	38.0%
% Crashes that are Alcohol Related	▲	5.7%	4.7%	5.8%	SAME	4.5%	4.2%	9.0%
Illicit Drugs	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
% Illicit drug use self-report*	◆	9%	7%	7%	-	8%	9%	9%
% Providers registered in CSRS	NA	22%	NA	NA	-	53%	27%	NA
Drug Overdose Mortality Rate	●	5.7	NA	10.0	↓	9.7	12.3	14.6
Opioid Overdose Mortality Rate	●	3.6	NA	7.1	↓	4.4	8.0	5.3
Drug Overdose Crude ED Rate per 10,000 person-yrs	●	14.5	NA	12.7	↑	16.6	21.0	NA
Tobacco	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
% Adult Smokers*	▲	16.8%	13.0%	12.0%	-	17.0%	20.9%	21.0%
% High schoolers who smoked in past 30 days (CHCCS)**	●	9.0%	16.0%	11.0%	↓	17.0%	13.5%	19.5%
Tobacco Use Disorder Crude ED Rate per 10,000 person-yrs	▲	95.3	NA	91.7	↑	404.1	584.6	NA
Mental Health and Emergencies	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
Avg # Poor Mental Health Days / Month*	●	2.5	2.8	2.9	↓	3.3	3.7	NA
Suicide Mortality Rate	●	10.4	8.3	12.2	↓	14.3	12.4	13.0
Mental Health Crude ED Rate per 10,000 person-yrs	●	82.1	82.8	86.2	↓	94.3	104.6	NA
Substance Abuse Crude ED Rate per 10,000 person-yrs	●	121.2	NA	121.8	SAME	136.2	139.4	NA
Older Adult Mental Health	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
% Older Adults with Depression	◆	15.0%	NA	14.8%	SAME	11.9%	13.7%	13.6%
Alzheimer's Age-Adj Mortality Rate	●	26.5	NA	27.4	SAME	15.8	29.2	26.8
Alzheimer's Crude ED Rate per 10,000 person-yrs	▲	10.6	NA	7.5	↑	6.9	16.6	NA

**Sources:** BRFSS, YRBS, DHHS/Highway Research Center, NC DETEC, CSRS

Data points are the most current measures from multiple sources (available on request).

# Tobacco and Respiratory Diseases

## Summary:

Smoking prevalence in Orange County is lower than peers, NC, and the US. However, indicators are needed at the county level to examine trends in emerging tobacco products such as e-cigarettes. There currently is no local measure to capture the use of these products by youth; however, North Carolina youth showed an uptick in tobacco use from **25.8%** in 2011 to **29.7% in 2013**, in part due to these emerging products. Exposure to secondhand smoke is higher than targets established by the Healthy NC 2020 objectives, but trending in a positive direction. While Orange County rates for emergency department visits related to asthma are lower than peers, NC, and the US, they have increased compared to previous years. Lung cancer mortality is better than all benchmarks, but there is a higher rate of lung cancer in Orange County than the US as a whole.

- Performing better than four or more benchmarks
  - ▲ Performing better than two or three benchmarks
  - ◆ Performing better than one or no benchmarks
  - ↑↓ Positive trend
  - ↑↓ Negative trend
  - SAME No trend
  - Trend can not be assessed
  - Significant change from previous
- Benchmarks include Target, Previous, Peer, NC, and US*

## Data Notes:

\*Due to changes in survey methodology and overlapping confidence intervals, **BRFSS** data cannot be compared to previous years

\*\*Confidence intervals for **YRBS** trend data are unavailable to assess significance of trends over time

**Rates** are per 100,000 unless otherwise noted. See the **Public Health Dashboard FAQ Document** for more on data methodology.

Behaviors	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
% Adult Smokers*	▲	16.8%	13.0%	12.0%	-	17.0%	20.9%	21.0%
% High schoolers who smoked in past 30 days (CHCCS)**	●	9.0%	16.0%	11.0%	↓	17.0%	13.5%	19.5%
Tobacco Use Disorder Crude ED Rate per 10,000 person-yrs	▲	95.3	NA	91.7	↑	404.1	584.6	NA

Policies	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
% Exposed to Secondhand Smoke at Work*	▲	6.4%	0.0%	8.0%	-	3.0%	8.6%	NA

Asthma and Respiratory Disease	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
% Asthma Current Diagnosis*	▲	9.2%	NA	11.6%	-	14.2%	8.8%	7.3%
Asthma Crude ED Rate per 10,000 person-yrs	▲	37.8	NA	36.8	SAME	60.7	93.8	69.7
Hospital Discharge Rate for Asthma	●	45.6	NA	NA	-	79.3	91.6	143.0
Hospital Discharge Rate for Asthma, Age 0-14	●	76.0	NA	NA	-	113.8	148.9	NA
Chronic Lower Respiratory Disease Mortality	●	26.2	NA	28.4	↓	42.9	46.1	42.1

Lung Cancer (Rate/100,000)	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
Lung Cancer Incidence Rate	▲	56.9	NA	59.1	↓	66.4	70.9	58.7
Lung Cancer Mortality Rate	●	43.9	45.5	42.1	↑	46	50.6	47.2

**Sources:** BRFSS, YRBS, NC DETECT, NC SCHS

Data points are the most current measures from multiple sources (available on request).

Below you will find a list of (non-exhaustive) Orange County initiatives and activities as they relate to Mental Health and Substance Abuse.

Agency / Organization / Initiative	Advocacy / Community Support	Medical Provider	Immigrant & Refugee Support	Mental Health	Suicide Prevention	Substance Abuse Prevention
<a href="#">Cardinal Innovations</a>	X	X		X		X
<a href="#">Drug Treatment Court</a>	X					X
<a href="#">El Futuro</a>	X		X	X		X
<a href="#">Faith Connections on Mental Health</a>	X			X		
<a href="#">Freedom House Recovery Center</a>	X	X		X		X
<a href="#">Healthy Carolinians of Orange County</a>	X			X	X	X
<a href="#">Mental Health America of the Triangle</a>	X			X		X
<a href="#">National Suicide Prevention Hotline</a>	X				X	
<a href="#">Orange County Department of Social Services</a>	X					
<a href="#">Orange County Health Department</a>	X	X	X			X
<a href="#">Orange County National Alliance on Mental Illness (NAMI)</a>	X			X		
<a href="#">Orange County Town/Gown Collaborative</a>	X					
<a href="#">Orange Partnership for Alcohol and Drug Free Youth</a>	X					X
<a href="#">UNC Center for Excellence in Community Health</a>	X			X		
<a href="#">UNC Family Medicine</a>	X	X				X
<a href="#">UNC Healthcare's Alcohol and Substance Abuse Treatment Program (ASAP)</a>	X	X				X

## Physical Activity, Nutrition & Healthy Weight

### Physical Activity & Nutrition

Orange County has shown improvements in residents with a healthy weight. However, the percentage of adults meeting recommendations for exercise and fruit and vegetable consumption lags behind our peers.

According to national surveys, adults show negative trends in both physical activity and nutrition. Adults should receive at least 150 minutes of moderate-intense physical activity (PA) per week. Children and adolescents are recommended to receive one hour of PA daily.

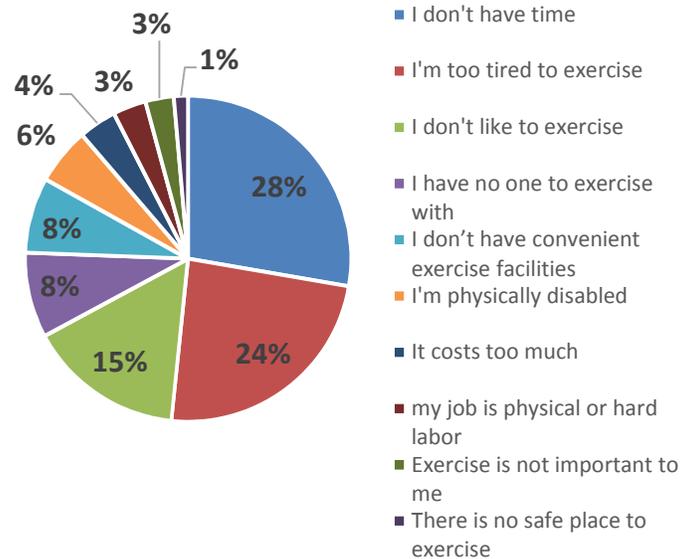
- 43.2% of adults did not meet aerobic nor strengthening guidelines.
- 78% of Orange County high schoolers do not get 60 minutes of exercise/day.

Future Public Health interventions should note that 5% of *survey respondents* feel that exercising is too expensive and that there are no safe places to exercise, as shown in figure 19.

The amount of fruit you need to consume depends on age, sex, and level of physical activity with the average being between 1 and 2 cups per day. For instance, children 2 -8 years should consume 1 to 1 ½ cups; girls 9-18 years should consume 1 ½ cups; boys 9-18 years should consume 1 ½ - 2 cups; women 19 and over should consume 1 ½ - 2 cups and men 19 and over should consume 2 cups.<sup>45</sup>

- Student fruit and vegetable consumption is improving compared to previous years; however, Orange County still performs worse than the US.
- 45% of high schoolers do not eat one or more servings of fruits and vegetables a day. National recommendations far exceed one serving each of fruits and vegetables per day, meaning many more students likely still do not meet national recommendations.
- 75.4% of Orange County adults do not eat 5+ fruits or veggies per day.

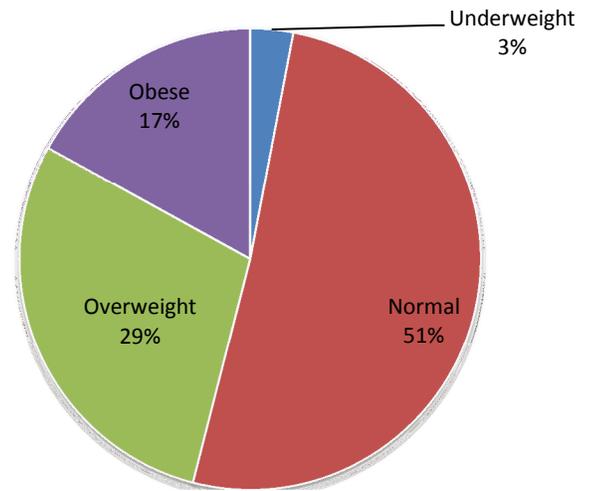
**Figure 19: Reasons why survey respondents don't exercise**



### Healthy Weight

- 1 in 5 adults are obese.
- 1 in 2 adults are a healthy weight.
- 14% of low-income preschool children are obese.
- According to *survey results* 47% of *survey respondents* would be considered overweight or obese based on their [Body Mass Index \(BMI\)](#), however, only 30% of *survey respondents* (shown in figure 20) reported having been told by a doctor that they are overweight or obese.

Figure 20: BMI among survey respondents



### Nutrition in our Schools

- The number and percent of students on free or reduced lunch has increased, both countywide and in both school districts.
- 34% of children in Orange County’s two districts receive free or reduced lunch, an increase from the 32% (6,177 students) in 2011-2012.

Table 5: Students receiving free or reduced lunch

Student Nutrition	Orange County
Percent of students in free and reduced school meal program.	34% (6,631)
Percent of children in free and reduced meal program actually getting free and reduced price school meals.	14% (901)

- According to *Subject Matter experts*:
  - School Nutrition in the last 4 years has changed dramatically in respect to [Healthy, Hunger-Free Kids Act of 2010](#) and the [Let's Move Campaign](#).
  - Both school districts in Orange County have seen improvements in school nutrition policies including one district’s requirement of fruits/veggies at breakfast and lunch; whole grain in breads and baked goods; and low fat and nonfat dairy products, and another districts’ policy to cut out any food outside of the school food service program.

The following Physical Activity and Nutrition population health dashboard provides county level data specific to physical activity, nutrition and healthy weight.

# Physical Activity and Nutrition

## Summary:

Orange County has shown some improvements in residents with a healthy weight according to national surveys. However, according to Community Health Assessment (CHA) results, **47%** of survey respondents would be considered overweight or obese based on their BMI. In contrast, only **30%** of survey respondents reported having been told by a doctor that they are overweight or obese. **Sixty-five percent** of CHA survey respondents reported meeting exercise recommendations, though the population who responded to the online portion of the survey were not randomly sampled. Adults show negative trends in both physical activity and healthy nutrition according to national surveys. Student fruit and vegetable consumption is improving compared to previous years; however, Orange County still performs worse than the US. In addition, national recommendations far exceed one serving each of fruits and vegetables per day, meaning many more students likely still do not meet national recommendations.

- Performing better than four or more benchmarks
  - ▲ Performing better than two or three benchmarks
  - ◆ Performing better than one or no benchmarks
  - ↕ Positive trend
  - ↕ Negative trend
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  - Significant change from previous
- Benchmarks include Target, Previous, Peer, NC, and US*

## Data Notes:

\*Due to changes in survey methodology and overlapping confidence intervals, BRFSS data cannot be compared to previous years  
\*\*Confidence intervals for YRBS trend data are unavailable to assess significance of trends over time

Rates are per 100,000 unless otherwise noted. See the **Public Health Dashboard FAQ Document** for more on data methodology.

Physical Activity, Nutrition, and Weight	Progress	Orange County		Trend		Compare to		
	Icon	Current	Target	Previous	Progress	Peer	NC	US
% Adults Getting Recommended Exercise*	▲	51.7%	60.6%	44.5%	-	52.7%	46.7%	51.7%
% High Schoolers getting 60 min exercise/day (CHCCS)**	▲	22.0%	50.0%	NA	-	NA	25.9%	27.1%
% Adults Eating 5+ Fruits or Veggies/Day*	▲	24.6%	29.3%	31.1%	-	17.0%	13.7%	NA
% High Schoolers eating Fruits and Veggies 1+/Day**	▲	55.0%	NA	53.0%	↑	NA	NA	62.0%
% Adults with Healthy Weight*	●	49.2%	33.9%	46.2%	-	51.8%	33.3%	29.5%
% High Schoolers not overweight or obese (CHCCS)**	●	78.0%	79.2%	77.0%	SAME	NA	71.4%	69.7%
% Low-income Preschool Children Obese	▲	14.1%	NA	17.4%	↓	14.1%	13.6%	12.2%
% Population that is Food Insecure	●	14.0%	6.0%	NA	-	16.0%	17.3%	14.5%
% Kids in Food Insecure Households	▲	20.7%	NA	NA	-	23.7%	25.0%	19.9%

Sources: BRFSS, YRBS, PedNSS, UNC School of Government Hunger Research

Data points are the most current measures from multiple sources (available on request).

Below you will find a list of (non-exhaustive) Orange County initiatives and activities as they relate to Physical Activity and Nutrition.

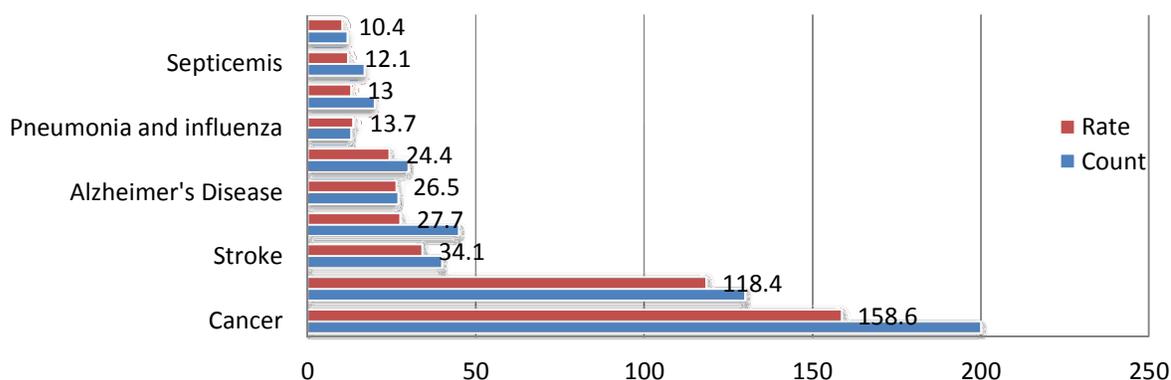
Agency / Organization / Initiative	Advocacy / Community Support	Education	Fitness	Nutrition Services / Support	School Nutrition	Swimming
<a href="#">Carolina Health Net (CHN)</a>	X			X		
<a href="#">Chapel Hill - Carrboro City School</a>	X	X	X		X	
<a href="#">Chapel Hill - Carrboro YMCA</a>	X	X	X			X
<a href="#">Chapel Hill Parks &amp; Recreation</a>	X	X	X			X
<a href="#">Department of Environment, Agriculture, Parks and Recreation (DEAPR)</a>	X	X	X			X
<a href="#">Eat Smart Move More North Carolina</a>	X	X	X	X		
<a href="#">Healthy Carolinians of Orange County</a>	X	X				
<a href="#">Mebane Recreation and Parks Department</a>	X		X			
<a href="#">Orange County Cooperative Extension</a>	X	X		X		
<a href="#">Orange County Department on Aging</a>	X	X	X			
<a href="#">Orange County Health Department</a>	X	X				
<a href="#">Orange county partnership for young children</a>	X	X	X	X		
<a href="#">Orange County Schools</a>	X	X	X		X	
<a href="#">UNC Healthcare</a>	X	X		X		
<a href="#">UNC Wellness Center</a>	X	X	X	X		X

## Leading Causes of Death and Disease

Orange County's top priority health issues predominantly encompass social determinants of health and health behaviors. These are actionable areas for public health intervention geared towards preventing death and disease. The top leading causes of death in Orange County are shown in figure 21.

### Leading Causes of Deaths

Figure 21: Leading Causes of Death, 2010 – 2014, Age-Adjusted Mortality Rates per 100,000<sup>46</sup>



The top leading causes of death vary by age group and table 6 lists the top 3 leading causes of death for each age group<sup>47</sup>.

Table 6: Leading Causes of Death by age group

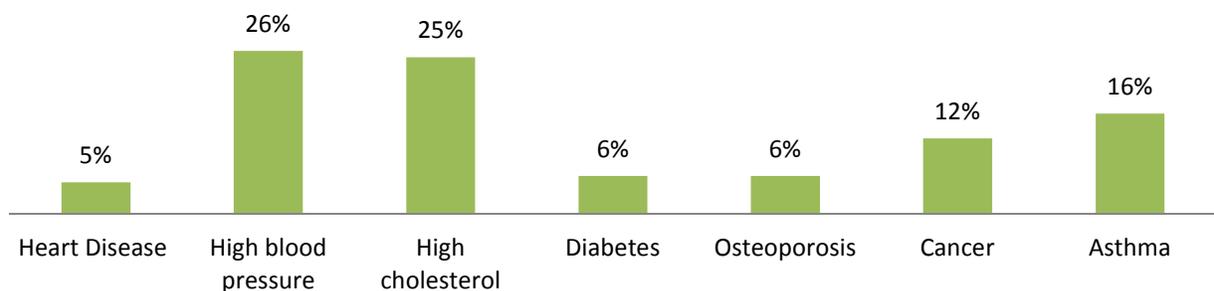
Age Group	Rank	Cause of Death	# of Deaths	Death Rate
All Ages	1	All Cancers	947	158.6
	2	Heart Disease	676	118.4
	3	Cerebrovascular	188	34.1
			<b># of Deaths</b>	<b>Death Rate</b>
0-19	1	Perinatal	15	8.2
	2	Motor Vehicle	9	4.9
	3	Birth Defects	7	3.8
			<b># of Deaths</b>	<b>Death Rate</b>
20-39	1	Unintentional Injuries	22	10.4
	2	Suicide	21	9.9
	3	All Cancers	17	8
			<b># of Deaths</b>	<b>Death Rate</b>
40-64	1	All Cancers	280	127.3
	2	Diseases of the Heart	143	65
	3	Unintentional Injuries	45	20.5
			<b># of Deaths</b>	<b>Death Rate</b>
65-84	1	All Cancers	482	767.6
	2	Diseases of the Heart	275	437.9
	3	Chronic Lower Respiratory Diseases	82	130.6
			<b># of Deaths</b>	<b>Death Rate</b>
85+	1	Diseases of the Heart	248	2872.4
	2	All Cancers	162	1876.3
	3	Alzheimer's Disease	107	1239.3

## Chronic Disease

Chronic disease refers to diseases that are long-lasting in nature (including cancer, type II diabetes, heart disease, and stroke) and is one of the biggest causes of poor health. Although genetics and other factors contribute to the development of chronic health conditions, individual behaviors play a major role.

- In 2013, nearly 50 million dollars was spent on cardiovascular and circulatory disease inpatient visits in Orange County.
- Figure 22 shows the percent of *survey respondents* who have been told by a health care provider that they have a chronic disease.

**Figure 22: I have been told by a doctor that I have.....**



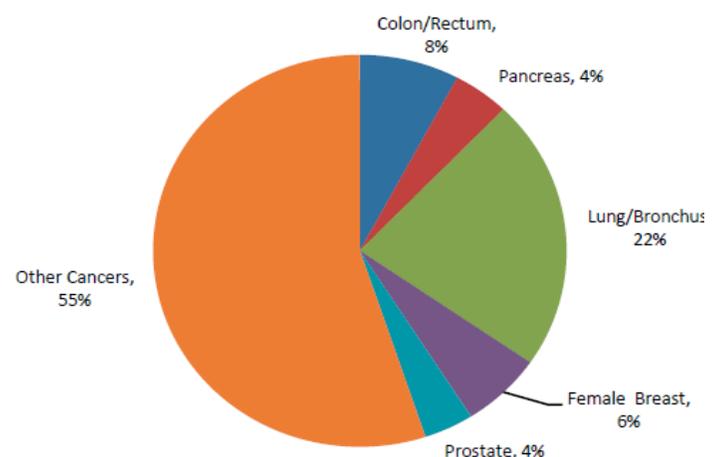
## Cancer

While there hasn't been a change in the overall cancer rate, Orange County has seen increases in prostate cancer, colorectal cancer, and female breast cancer. According to the National Cancer Institute, it is estimated that nearly 80% of cancers are due to factors that can potentially be controlled to reduce cancer risk. Controllable factors that contribute to the development of cancer include tobacco and alcohol use, poor nutrition, unhealthy weight, physical inactivity, and exposure to radiation.

- 52% of all deaths in Orange County are caused by cancer, diseases of the heart, or chronic respiratory diseases.
- Orange County has a lower age-adjusted cancer death rate than NC averages in all categories except for breast cancer (22.1 vs. 21.7 per 100,000 people)<sup>48</sup>.
- Cancer remains the top cause of death in the County. Trachea, bronchus, and lung cancers are the most common in both men and women.
- In 2012, 536 cancer cases were reported for Orange County residents.
- In 2013 Orange County had a cancer death rate of 27.7%, compared to 22.3% in NC with a breakdown shown in figure 23.

**Figure 23:**

**Orange County 2013 Cancer Deaths by Site**



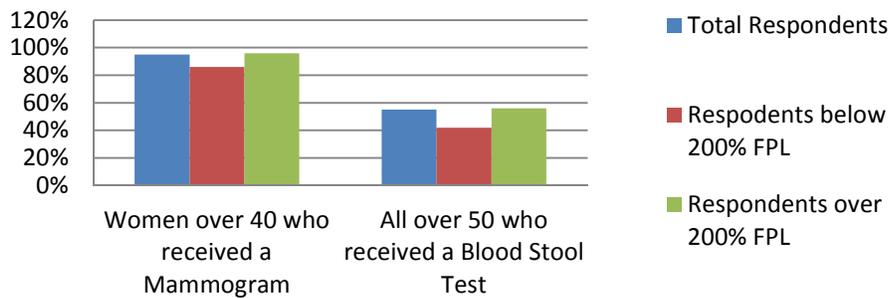
Percentages may not add up to 100 percent due to rounding.

### Controllable Factor – Health Screenings

Screenings refers to testing to find chronic diseases in individuals who do not experience symptoms. In men, prostate cancer can often be found early by testing the amount of [Prostate-Specific Antigen \(PSA\)](#) in a man’s blood or through a [Digital Rectal Exam \(DRE\)](#).

- 79% of men *survey respondents* over 45 years of age reported having had a PSA test or a DRE.
- Majority of *survey respondents*, both men and women, report having had a mammograms and/or blood stool tests as a preventative health measure towards cancer, as shown in figure 24.

**Figure 24: Survey respondents self reported health screenings**



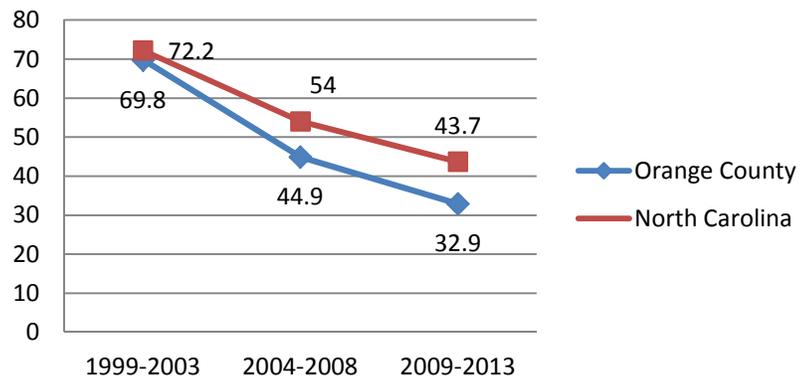
### Stroke

Cerebrovascular disease (often resulting in stroke) is the disease that affects the arteries (vessels that carry blood away from the heart) of the brain. A stroke occurs when blood can’t get to the brain because the vessels burst or are clogged<sup>49</sup>.

NC is part of the “Stroke Belt” - an 11-state region of the US where studies show that the risk of stroke is 34% higher for the general population than it is in other areas of the country. Other states include Mississippi, Tennessee, Louisiana, Kentucky, Georgia, Alabama, South Carolina, Arkansas, Indiana and Virginia<sup>50</sup>.

- Orange County has seen a constant decline in stroke deaths, as seen in figure 25.

**Figure 25: Age-Adjusted Stroke Death Rates per 100,000 Residents**



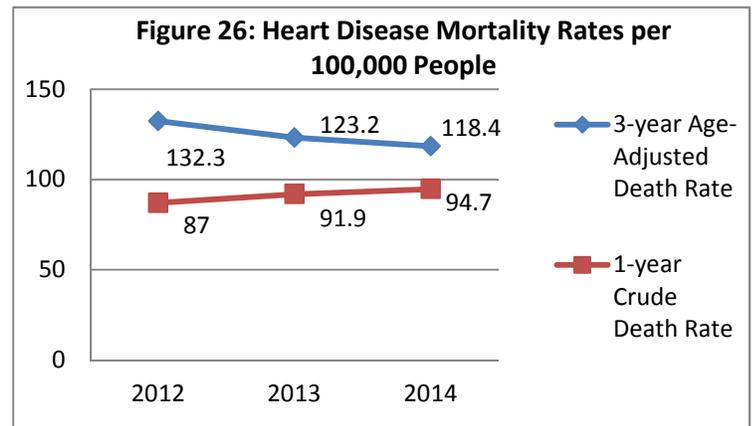
## Heart Disease

Heart disease is a term that describes several conditions that affect the heart and cardiovascular system. Types of heart disease include: coronary heart disease (the most common and the leading cause of heart attacks), heart failure, and heart arrhythmias (changes in the heart beat)<sup>51</sup>.

- In Orange County, the age-adjusted mortality rate for heart disease has declined in recent years (shown in figure 26) however, the crude mortality rate is increasing due to the county's aging population (shown in table 7).
- 5% of *survey respondents* reported having been diagnosed with heart disease.

**Table 7: Orange County Heart Disease Deaths from 2013 - 2014**

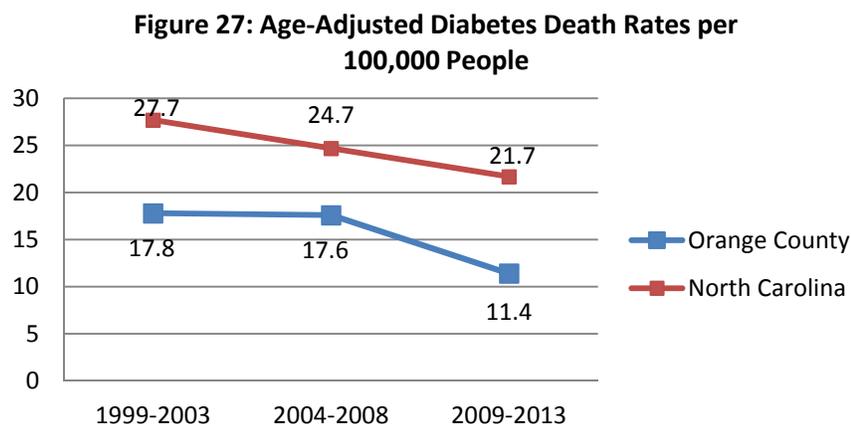
Year	Number of Heart Disease Deaths
2012	120
2013	129
2014	133



## Diabetes

Diabetes is a group of diseases marked by high levels of blood glucose, resulting from defects in insulin production, insulin action, or both. When food containing carbohydrates is consumed, the body breaks down this food into glucose (sugar), which is the basic fuel for the body. Insulin is the body's hormone that helps glucose get into the cells to be used for energy. In Type 1 diabetes, the body does not make insulin; and in the more common Type 2 diabetes, the body does not make or use insulin properly causing blood glucose to rise, leading to extensive damage to the body over time<sup>52</sup>.

- Orange County's 2010-2014 age-adjusted death rate for Diabetes Mellitus is 13.0, compared to 11.4 from 2009-2013, and NC has a rate of 22.1 per 100,000 people (shown in figure 27).



## Communicable Diseases

### Communicable Disease

Communicable diseases spread from one person to another or from animal to person. The spread often happens via airborne viruses or bacteria, but also through blood or other bodily fluid. The terms infectious and contagious are often used interchangeably to describe communicable disease<sup>53</sup>. Table 8 lists the reported communicable diseases and conditions from 2011 – 2014 among Orange County residents.

**Table 8: Reported Communicable Diseases and Conditions in Orange County by Year**

Disease/Condition	2011	2012	2013	2014
Campylobacter	18	31	25	21
CJD	1	0	0	0
Cryptosporidium	1	3	8	7
Dengue	1	0	0	0
E.coli (Shiga-toxin producing)	4	2	4	5
Ehrlichiosis	6	4	4	4
Encephalitis (arboviral)	0	0	0	2
Group A Strep (invasive)	2	1	5	5
Haemophilus influenza, invasive	0	0	1	2
Hemolytic Uremic Syndrome	0	0	1	0
Hepatitis A	0	1	1	0
Hepatitis B (Acute)	3	0	0	0
Hepatitis B (Chronic)*	32	24	17	12
Hepatitis B (Perinatal)	2	12	1	10
Influenza Death**	1	0	0	0
Legionellosis	0	0	1	2
Lyme	8	3	3	5
Malaria	0	2	1	3
Measles	0	0	8	0
Meningococcal Disease	1	0	0	1
Pertussis	4	23	4	10
Q Fever	0	0	0	1
Rocky Mtn. Spotted Fever	8	24	16	19
Rabies (Animal)	12	13	13	22
Possible Rabies Contacts	301	333	418	523
Salmonellosis	26	21	21	27
Shigellosis	0	0	4	1
TB	3	2	3	1
Toxic Shock Syndrome	1	0	1	0
Tularemia	0	1	0	0
Vibrio	1	0	1	0

### Influenza (flu) and pneumonia

The flu is a contagious respiratory illness caused by flu viruses. Adults age 65+ are at a greater risk of pneumonia and flu than the rest of the population, as are those with chronic lung disease, heart disease, and compromised immune systems. Health care workers and residents of nursing homes and long-term care facilities are also at greater risk. Seasonal flu vaccines change annually as the virus naturally changes over time. Flu season runs from September to March, with the number of cases peaking in January or February.

- There were 218 flu deaths reported in NC during the 2014-2015 flu season, with 0 deaths reported among Orange County residents.

### Vaccine Preventable Diseases

Vaccine-preventable diseases are diseases that can usually be prevented by obtaining required or recommended vaccinations prior to exposure to the illness. Vaccinations are widely recognized as one of the most important public health strategies ever employed. New immigrants are seen to be at greater risks of vaccine-preventable diseases, specifically if they have not received vaccinations in their home countries.

Children who have not been appropriately vaccinated are at risk of serious diseases. Vaccines required by North Carolina Immunization Law for daycare and school entry provide protection against the 10 diseases of:

- Diphtheria
- Tetanus
- Pertussis (whooping cough)
- Polio
- Measles, mumps, rubella
- Haemophilus
- Influenza
- Type B (Hib)
- Hepatitis B, and
- Varicella (chicken pox)

### Sexually Transmitted Diseases

Sexually transmitted diseases (STD's) including human immunodeficiency virus (HIV) falls strangely on disadvantaged populations, young people, and minorities and affects tens of thousands of North Carolinians every year. These preventable conditions can lead to reduced quality of life as well as premature death and disability. Table 9 shows the (preliminary) cases of STD's among Orange County residents over the past 3 years.

**Table 9: Sexually Transmitted Disease Cases among Orange County residents by year 2013-2015<sup>54</sup>**

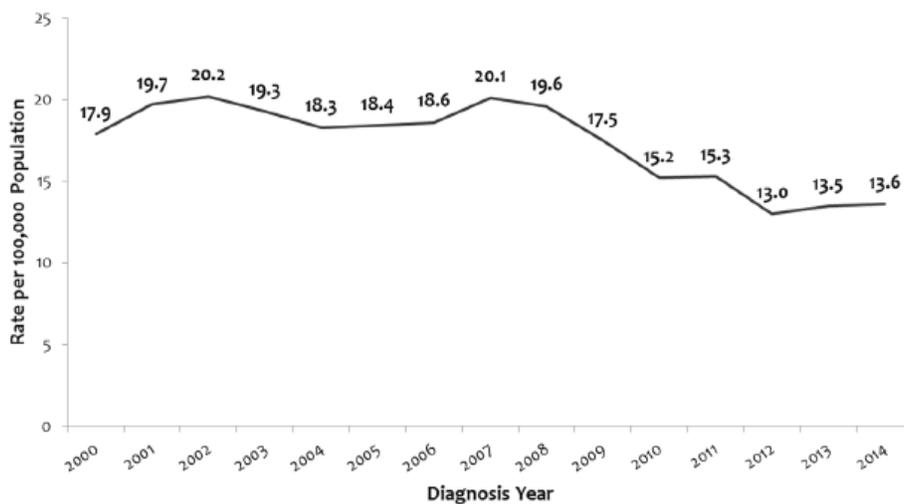
	2013	2014	2015
Gonorrhea cases	114	112	183
Chlamydia cases	470	472	684
Syphilis cases	3	17	13
Newly reported HIV infections among OC residents	16	14	12
Newly reported AIDS cases among OC residents	8	10	8

*\*The above numbers are preliminary and were obtained from the 2015 fourth quarter report, annual numbers were not available.*

Although Orange County data was not available, NC statistics on new HIV cases in 2014 are below<sup>55</sup>, (also expressed in figure 28):

- Nearly 40% were among young men (aged 13 to 29).
- Nearly 50% were among women over the age of 40.
- 64% were among men who report sex with men (MSM).
- 36% were among women who were exposed through heterosexual contact.
- 22% of men were diagnosed with AIDS within 6 months of their HIV diagnosis.
- 19% of women were diagnosed with AIDS within 6 months of their HIV diagnosis.
- Almost two-thirds of all new HIV infections are among Blacks.

Figure 28:  
North Carolina Newly Diagnosed HIV Infection Rates



Below you will find a list of (non-exhaustive) Orange County initiatives and activities as they relate to death and disease.

Agency / Organization / Initiative	Advocacy / Community Support	Education	Diabetes Mgmt.	Cancer Prevention / Support	Cardiac Rehab	Chronic Disease Prevention	Communicable / Infectious Disease	Nutrition Services / Support	Sexually Transmitted Diseases
<a href="#">American Heart Association of Eastern North Carolina</a>	X	X				X			
<a href="#">Carolina Well</a>	X	X		X		X			
<a href="#">Orange County Health Department</a>	X	X	X				X	X	X
<a href="#">Piedmont Health Services</a>	X	X	X			X	X	X	X
<a href="#">Planned Parenthood - Chapel Hill Health Center</a>	X	X							X
<a href="#">UNC Cardiac Rehab</a>	X	X			X	X			
<a href="#">UNC Comprehensive Cancer Support Program</a>	X	X		X		X			
<a href="#">UNC Health Care</a>	X								
<a href="#">UNC Wellness Center</a>	X	X			X	X		X	

## Social Determinants of Health

Social Determinants of Health includes the availability of health care services; affordability of services and health insurance; ability to navigate and understand the health system; physical access to services (including transportation and disability access); information about health care, human-made structures and community design (such as housing, recreational facilities, sidewalks, streets, businesses, schools, parks, playground); and socioeconomic conditions to include poverty and homelessness. Poverty, education level, and housing are three important social determinants of health.

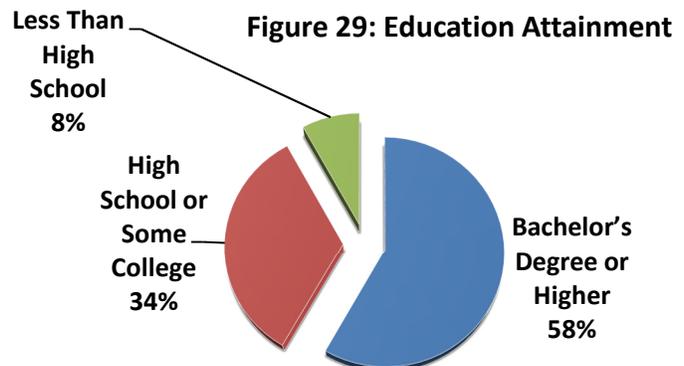
### Education

Figure 29 shows that 34% of Orange County’s residents have at least a high school diploma, while over half have a bachelor’s degree or a form of higher education.

According to Orange County’s Community Profile, [Chapel Hill Carrboro City Schools](#) (CHCCS) serves more than 11,000 students through three traditional high schools, four middle schools, ten elementary schools, a school for young people who are patients at UNC Hospital, and an alternative school.

[Orange County Schools](#) serves more than 7,000 students with seven elementary schools, three middle schools and two high schools, one of which (Cedar Ridge) offers an International Baccalaureate Diploma.

The CHCCS district has the highest average SAT scores (shown in table 10) in the state and its high schools have been sighted in Newsweek magazine’s list of top high schools<sup>56</sup>.



**Table 10: 2015 Average SAT Scores**

Chapel Hill-Carrboro Schools	1776
Orange County Schools	1539
North Carolina	1478
United States	1490

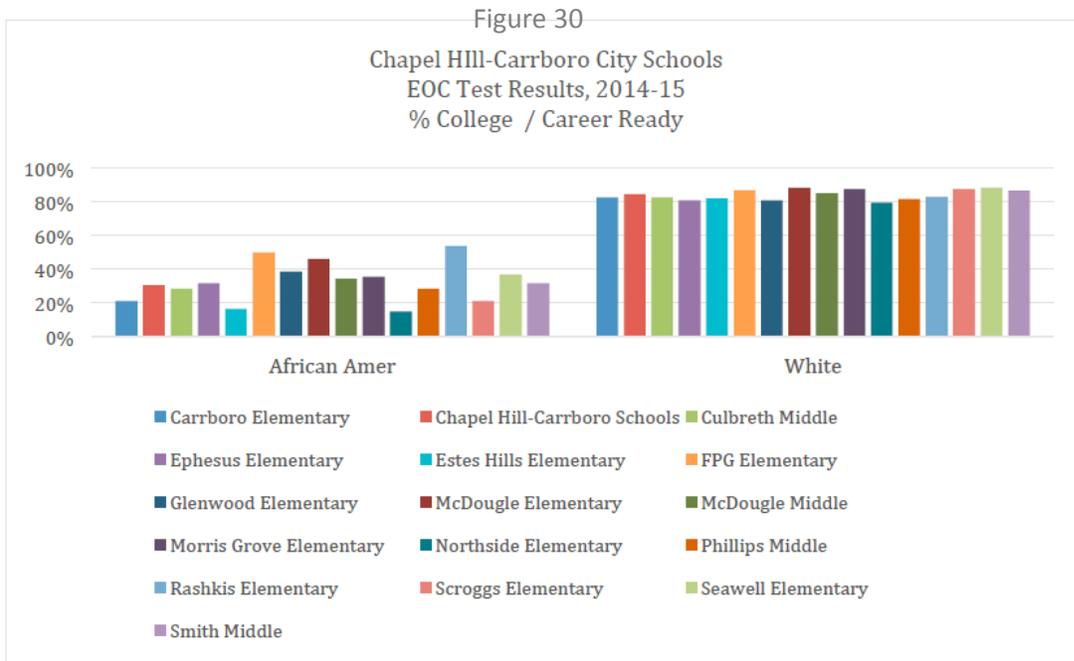
### Racial Equity

Racial equity is the condition that would be achieved if one’s racial identity is no longer predicted, in a statistical sense, how one fares.

Though CHCCS district is often applauded for its high scores and graduation rates, these figures obscure the reality of racial inequity, a reality that for most African American and Latino students means a substantial and persistent gap between educational goals and results. The mission of CHCCS is “to ensure that all students acquire the knowledge, skills, behaviors, and attitudes to achieve their learning potential.”

Within CHCCS:

- In 2014 – 2015, across all end of grade and end of course test results, 42% of African American students and 47% of Latino students achieved the bare minimum performance of grade level proficiency, compared to 90% proficiency of white students, shown in figure 30.
- Across all grades from 2013 to 2015, only 25% - 35% of students of color were considered on track to be college/career ready.
- In 2013 – 2014 school year, African Americans students were sent to the office 3 times more frequently than their white peers, and were suspended 8 times more often.
- White students and students of color are disciplined differently for the same infractions.
- In Chapel Hill-Carrboro City Schools access of African American and Latino students to gifted programming is limited. As of 2012 - 2013, African American and Latino students represented 12%-14% of students but only 5% of students participating in gifted programming<sup>57</sup>.
- To assist with the concerns of racial equity, CHCCS is one of only 3 school districts in NC to fund a full-time Director of Equity.



## Injury and Violence

Injury and violence is the main cause of death and disability for people under age 44 and may be unintentional like those resulting from motor vehicle crashes, falls, burns, poisonings, drowning, etc.; or violent and intentional including sexual assault, child abuse, partner violence, suicide, and homicide. Additional information on suicides can be found under [Mental Health and Substance Abuse](#).

➤ During the years of 2004-2013, there were 204 violent injury deaths sustained in Orange County. Of these 204 deaths, 200 were NC residents (98%) and 172 were Orange County residents (84%).

➤ From 2004-2013, (as shown in figure 31) Orange County experienced 145 suicides (71%), 47 homicides (23%), zero unintentional firearm deaths (0%), 1 death from legal interventions (<1%), and 11 deaths of undetermined intent (5%).

➤ The violent crime rate in Orange County is 151.1, which is higher than our peers (143.7) but lower than NC (333.0) and the US (365.5).

➤ Orange County has an assault rate of 95.7 and a rape rate of 15.6 per 100,000 people.

➤ 1 in 5 deaths for residents under the age of 19 are due to a motor vehicle injury.

➤ In contrast, blacks had 11.9 homicides per 100,000 people as opposed to whites who had 2.5 homicides per 100,000 people. All other racial groups combined had 1 homicide, shown in figure 32.

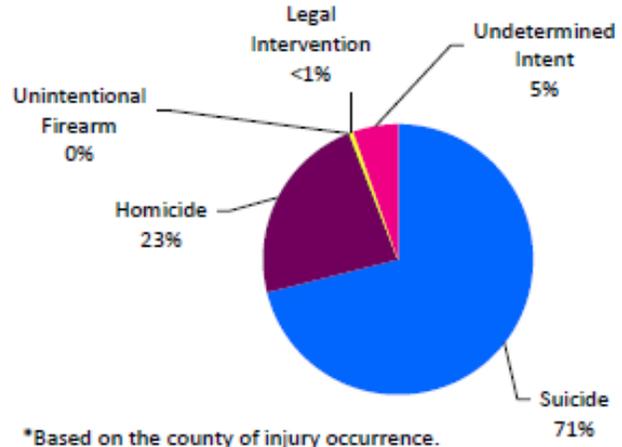
➤ 79% of County homicides and 42% of suicides were committed using firearms.

➤ Suspicion of intoxication was reported in 23% of homicides and 35% of suicides.

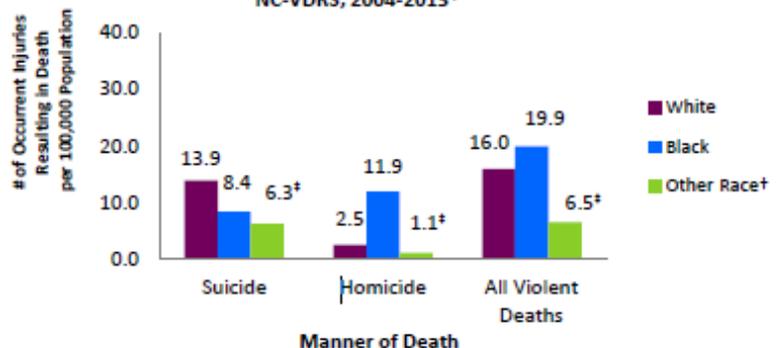
➤ In Orange County, the suicide ratio was 3.1 times higher in males than females, and the homicide ratio was 3.7 times higher in males than in females.

➤ Suicides and homicides displayed dissimilar age patterns. Homicides peaked among those 45 to 54 with 7.2 homicides per 100,000 people. Suicides (19.1 per 100,000 people) peaked among those 25 to 34 years old.

**Figure 31:**  
**Manner of Death: Orange County, N.C.: NC-VDRS, 2004-2013\***



**Figure 32:**  
**Manner of Death by Race: Orange County, N.C.: NC-VDRS, 2004-2013\***



## Food Insecurity and Financial Assistance

Food security is defined as access by all people at all times to have enough food for an active, healthy life. At minimum, this includes the availability of nutritionally adequate and safe foods in geographic proximity. The USDA uses one mile in an urban area and ten miles in a rural area as the threshold measure. That is, if a physical location in an urban setting is further than 1 mile from a grocery store, that location is considered to be in a food desert<sup>58</sup>. *Subject matter experts* have expanded this definition to include economically accessible food as well as encouraged consideration of other barriers to food access such as transportation.

➤ 21% of children and 15.4% of the overall population (20,900 people) live in food insecure households in Orange County.

➤ Figure 33 shows residents experiencing the highest levels of food insecurity (over 50%) reside in the southern part of the county.

➤ 26% of children in North Carolina live in food insecure households.

➤ In our neighboring (Durham) county, 20% of children and 18% of the overall population are food insecure<sup>59</sup>.

➤ NC ranked among the top ten states, from 2010 - 2015, with the highest percent of citizens experiencing food shortages.

➤ 28% of food pantries in NC turn clients away for lack of food.

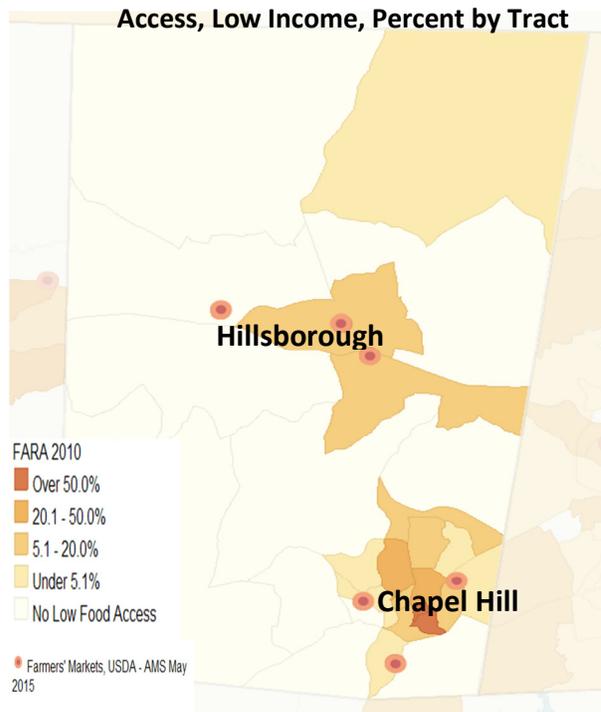
➤ While community residents feel that food insecurity is an issue, especially within our low income areas, *survey respondents* who are low income were nearly 10 times as likely to have cut the size of meals or skipped meals in the past 30 days compared to those of higher income.

➤ There are approximately 160 - 170,000 different people in NC receiving emergency food assistance in a given week. Many of these families are forced to choose between heating their homes, paying for housing and purchasing food for families.

➤ The number of families receiving food stamps has almost doubled over the past five years.

[The Food and Nutrition Services Program](#) (formerly Food Stamps) is a federal program that provides a monthly allotment of benefits issued via Electronic Benefit Transfer cards (EBT cards) that can be used to purchase most foods at participating stores.

**Figure 33: Population with Limited Food Access, Low Income, Percent by Tract**



Eligibility to qualify for the Food and Nutrition Services Program is determined by:

- Income
- Household composition
- Citizenship/Immigration Status, and
- Resources.

[The Supplemental Nutrition Assistance Program](#) (SNAP) helps to alleviate hunger by supplementing food budgets in low-income households. SNAP is used by children, working parents, elderly, and people with disabilities.

- 8.2% of county residents utilized SNAP/EBT benefits over the past 12 months, accounting for approximately 4,213 persons<sup>60</sup>.

### Affordable Housing

Housing that is priced so that households with low incomes can afford to purchase and very low incomes can afford to rent it is considered [affordable housing](#). Low income households should not pay more than 30% of their income for the rent and utilities or mortgage.

- Half of Orange County households (52.7%) who rent spend more than 30% of their income on rent.
- Hourly and income wages, for Orange County, are higher than NC when it comes to affording a 2-bedroom apartment (shown in table 11).
- 1 in 5 households, in Orange County, experience overcrowding, high housing costs or a lack of kitchen or plumbing facilities.
- Orange County’s median gross rent is \$918, compared to NC (\$790) and the US (\$920).<sup>61</sup>
- 60.5% of county residents own their homes, compared to 66.4% in NC<sup>62</sup>.

**Table 11: Income and Hourly Wage Needed to Afford a 2 Bedroom Apartment, 2014**

	Income Needed to Afford a 2-Bedroom Apartment	Hourly Wage Needed to Afford a 2-Bedroom Apartment
Orange County	\$33,720	\$16.21
North Carolina	\$29,897	\$14.37

## Homelessness

Directly related to housing is the problem of homelessness. According to [US Department of Housing and Urban Development \(HUD\)](#), a person is considered homeless if they reside in 1) a place not meant for human habitation such as a car, street, or abandoned building; or 2) an emergency shelter, transitional housing or supportive housing for homeless persons who originally came from the streets.

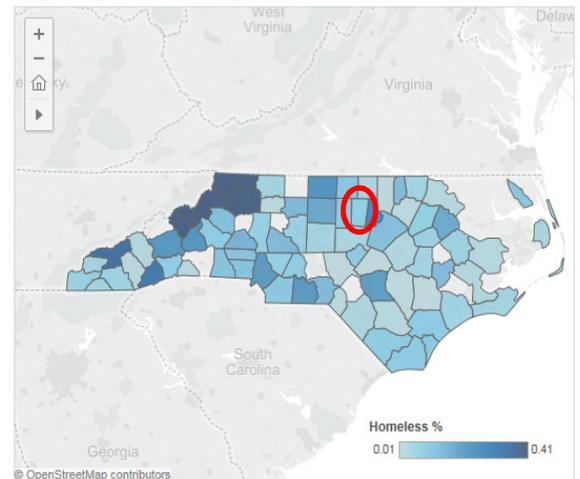
- Orange County represents 0.08% of North Carolina’s total homeless population (shown in figure 34).
- 24% of Orange County’s homeless population is made up of families (including children and adults) compared to 35% of families in NC (shown in table 12).
- Homeless single men in Orange County (58%) exceed single men in NC (47%), while homeless single women in Orange County (18%) slightly exceed single women in NC (17%).
- 12% of the homeless persons in the Orange County are veterans, compared to 10% in NC, and 17% in Durham County (which is the second highest veteran proportion in the state).<sup>63</sup>

**Table 12 : Orange County Homeless persons by Family Structure**

Total Homeless	108
Families with Children	24%
Children	16%
Adults	8%
Children in Child-Only Families	0%
Adults, no Dependent Children	76%
Men	58%
Women	18%

**Figure 34:**

North Carolina Homelessness, 2014



Below you will find a list of (non-exhaustive) Orange County initiatives and activities as they relate to Social Determinants of Health.

Agency / Organization / Initiative	Advocacy / Community Support	Education	Financial Assistance Programs / Support	Food Access	Homelessness	Housing Assistance / Shelters	Injury & Violence Prevention	Immigrant & Refugee Support	Legal / Career Counseling	Racial Equity	Senior Assistance	Parenting
<a href="#">Anathoth Farm &amp; Garden</a>	X			X								
<a href="#">Carrboro Farmers Market</a>	X		X	X								
<a href="#">Carrboro Police Department</a>	X						X					
<a href="#">Chapel Hill - Carrboro City Schools</a>	X	X					X			X		X
<a href="#">Chapel Hill - Carrboro NAACP</a>	X	X	X						X	X		
<a href="#">Chapel Hill Farmers Market</a>	X			X								
<a href="#">Chapel Hill Police Department</a>	X						X					
<a href="#">Compass Center</a>	X	X	X				X		X			
<a href="#">Eno Rivers Farmers Market</a>	X			X								
<a href="#">Habitat for Humanity</a>	X		X		X	X						
<a href="#">Hillsborough Farmers Market</a>	X			X								
<a href="#">Hillsborough Police Department</a>	X						X					
<a href="#">Housing for New Hope</a>	X		X		X	X						
<a href="#">Housing, Human Rights and Community Development</a>	X					X						
<a href="#">Immigrant &amp; Refugee Community Partnership</a>	X	X		X				X	X			
<a href="#">Inter Faith Council</a>	X			X	X	X						
<a href="#">Orange Congregations in Mission</a>	X		X	X								
<a href="#">Orange County Cooperative Extension</a>	X	X		X								
<a href="#">Orange County Department of Social Services</a>	X		X	X	X	X	X	X	X		X	X
<a href="#">Orange County Department on Aging</a>	X		X					X			X	
<a href="#">Orange County Food Council</a>	X			X								
<a href="#">Orange County Partnership to End Homelessness</a>	X				X							
<a href="#">Orange County Rape Crisis Center</a>	X						X					
<a href="#">Orange County Schools</a>	X	X										
<a href="#">Orange County Sheriff Department</a>	X						X					
<a href="#">Organizing Against Racism (OAR)</a>	X									X		
<a href="#">Refugee Support Center</a>	X	X	X			X		X	X			
<a href="#">Southern Village Farmers Market</a>	X			X								
<a href="#">Transplanting Traditions Community Farm</a>	X			X				X				
<a href="#">UNC Center for Health Promotion and Disease Prevention</a>	X	X	X	X								

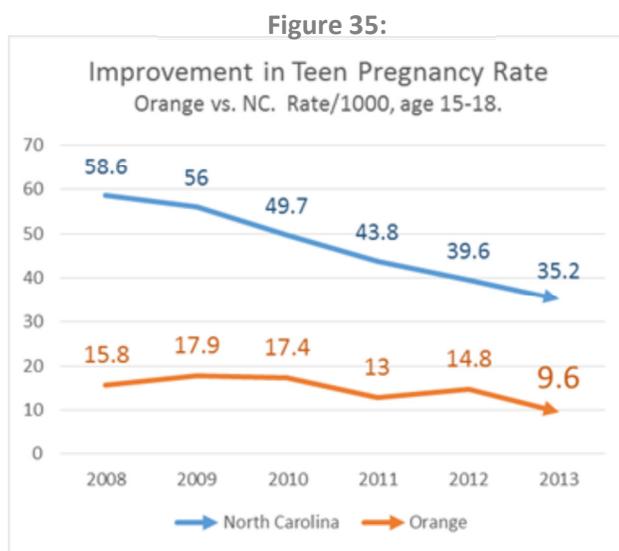
## Maternal and Infant Health

### Teenage Pregnancy

Unintended pregnancies are pregnancies that are mistimed, unplanned or unwanted at the time of conception. Unintended pregnancy is among the most troubling public health problems and a major reproductive health issue including accidental pregnancy and defined as a pregnancy that was undesired for one or both of the partners<sup>64</sup>.

- In 2013, NC reported a record low for the sixth consecutive year. Of the 75 counties with reportable rates, Orange County has the lowest with 9.6 per 1,000 people, which was a total of 68 pregnancies in 2013.
- Orange County's teen pregnancy rate dropped 35% from 2012. The rate moved from 14.8 pregnancies per 1,000 15 to 19-year-old women to 9.6 per 1,000 in 2013 (shown in figure 35). This number represents a total of 102 teen pregnancies in 2012 down to 68 in 2013.

Orange County has historically had one of the lowest rates in the state, but this large reduction year-to-year is notable and a positive step.



Even with this lowest and dropping overall rate, rate disparities exist by race and ethnicity similarly to many other counties. While rates among white, black, and Hispanic teens have continued to drop, the pregnancy rates among black and Hispanic teens are significantly higher than the rates of white teens on average from 2010 to 2013 (shown in table 13).

<b>Table 13: Teen Pregnancies within Orange County and NC, 2014</b>	<b>Orange County</b>	<b>North Carolina</b>
Number of pregnancies among 15-19-year-old girls:	69	10,328
Teen pregnancy rate per 1,000 15-19-year-old girls:	9.6	32.3
Teen Pregnancy rates by race/ethnicity		
Black:	31.9	44.0
Hispanic	*	52.8
White	4.3	23.1
Teen pregnancy rates by age		
15-17 year olds	9.1	15.5
18-19 year olds	9.8	56.5
Number of pregnancies among 15-17-year-old girls:	23	2,909
Number of pregnancies among 18-19-year-old girls:	46	7,419
Percent of Repeat Pregnancies:	8.7%	22.4%
Teen birth rate per 1,000 15-19-year-old girls:	4.4	25.9
Change since 2013:	-0%	-8.5%

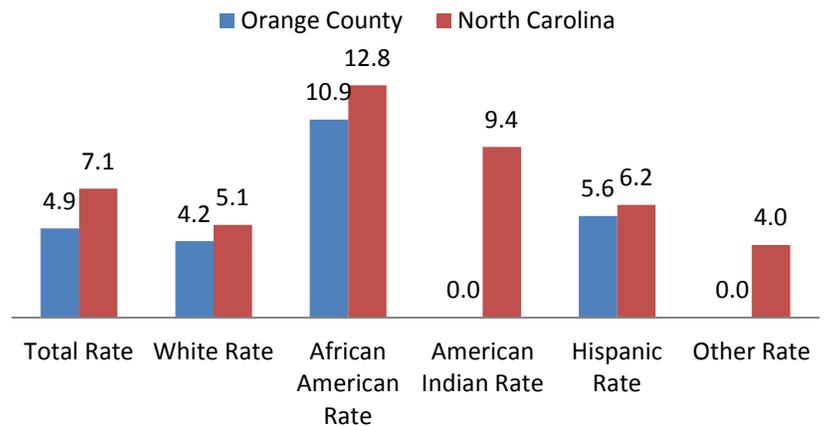
\*Rates based on small numbers (<20 pregnancies) are unstable and not provided.

## Infant Mortality

Infant mortality refers to the death of a baby in its first year of life. Risk factors that attribute to infant deaths include premature or low birth weight, smoking during pregnancy, exposure to secondhand smoke during pregnancy, and inadequate nutrition and insufficient intake of folic acid (a vitamin B) before and during pregnancy.

- In 2014 Orange County experienced 6 total infant deaths, an increase from 2013 where we experienced 4.
- Of those six deaths, 3 were white, 2 were African American, and 1 was Hispanic (shown in figure 36).
- Infant mortality racial disparity ratio between African Americans and whites, in Orange County, is 3.76 which is currently higher than both NC (2.39) and the US (2.21).

Figure 36: 2014 Infant Mortality (per 1,000 live births)



The county's infant mortality rates are unstable due to the numbers being smaller than 10. Although they are overall lower than NC's rates, we still see a concerning disparity along racial and ethnic lines<sup>65</sup>.

- Children born to mothers who smoke during pregnancy have an increased risk of Sudden Infant Death Syndrome (SIDS) by 20-30%<sup>66</sup>, increased risk of birth defects including cleft palate or cleft lip,<sup>67</sup> heart defects,<sup>68</sup> impaired neurological and intellectual development, long-term negative impacts on language and cognitive development<sup>69</sup>, lower scores on math and spelling achievement tests,<sup>70</sup> risk for mental retardation<sup>71</sup> and lower levels of "good" HDL cholesterol, which may increase their risk of heart attack and stroke later in life.<sup>72</sup>

## Infant Health

Preventive health services are available to children from birth to 21 years of age. A child's vision, speech, hearing, and development can be screened, they can be checked for anemia, lead poisoning and chronic diseases, and they can receive dietary counseling, which are provided through well child and pediatric primary care clinics.

- The robust system of lactation support throughout the county results in a breastfeeding rate among WIC clients, exclusively breastfeeding, (41.6%) that is 12% higher than the NC average (29.1%) and 17% higher than the average for southeastern US (24%).
- Two of the county's three municipalities are working to become "Breastfeeding Family Friendly Cities" by World Breastfeeding Week, 2016. This newly minted designation, developed by the Carolina Global Breastfeeding Institute includes community-wide policy and environmental changes to support breastfeeding.

Below you will find a list of (non-exhaustive) Orange County initiatives and activities as they relate to Maternal and Infant Health.

Agency / Organization / Initiative	Advocacy / Community Support	Breastfeeding Support	Care Coordination 4 Children (CC4C)	Education	Family Home Visiting	Family Planning / Contraception	Financial Assistance Programs / Support	Infant / Child Care	Immigrant & Refugee Support	Pregnancy Care Management / Maternal Care	Substance Abuse	Women, Infant, Children (WIC)
<a href="#">Adolescent Parenting Program</a>	X			X		X				X		
<a href="#">Chapel Hill - Carrboro YMCA</a>	X			X				X				
<a href="#">Chapel Hill Tubal Reversal Center</a>	X					X						
<a href="#">Head Start/Early Head Start</a>	X			X	X							
<a href="#">Kidscope</a>	X			X				X				
<a href="#">Orange County Department of Social Services</a>	X						X	X				X
<a href="#">Orange County Health Department</a>	X	X	X	X	X	X	X	X	X	X	X	X
<a href="#">Orange County Partnership for Young Children</a>	X			X				X				
<a href="#">Period of Purple Crying</a>	X			X								
<a href="#">Planned Parenthood</a>	X			X		X				X		X
<a href="#">Text4baby</a>	X			X								
<a href="#">UNC Health Care</a>	X	X		X		X	X	X	X	X		
<a href="#">UNC Horizons</a>	X				X	X		X		X	X	
<a href="#">Women's Birth and Wellness Center</a>	X	X		X				X		X		

## Environmental Health

Environmental Health includes air quality, drinking, and ground water quality; food safety and protection; sewer systems; solid waste management, and lead hazards.

### Air Quality

The [US Environmental Protection Agency \(EPA\)](#) calculates the [Air Quality Index \(AQI\)](#) for six major air pollutants regulated by the Clean Air Act: 1) ground-level ozone, 2) particle pollution (also known as particulate matter), 3) carbon monoxide, 4) sulfur dioxide, 5) nitrogen dioxide, and 6) lead<sup>73</sup>.

On days where AQI reaches higher than 100, persons sensitive to air pollutants may experience health effects due to ozone exposure. Such exposure can lead to respiratory symptoms, disruption in lung function, and inflammation of airways.<sup>74</sup>

- Ozone is one of the 6 major air pollutants measured in the AQI that has been linked to increased frequency of asthma attacks and use of health care services.
- Ozone exposure may also affect respiratory system development in very young children.<sup>75</sup>
- In Orange County, there were 28 days where the heat index was over 95 degrees in 2015, compared to 20 the year before. The average number of days for the 5 years prior to 2014 was 35 days.
- We have seen an increase in the rate of Melanoma (skin) cancer in the past 10 years from approximately 15 cases per 100,000 people in 2001 to 37 cases per 100,000 people in 2012. While also increasing, NC has not seen the steep increase that Orange County has seen, with a statewide rate of 23 per 100,000 people in 2012 (shown in figure 37).
- White non-Hispanic males show a higher incidence of melanoma than white non-Hispanic females. Numbers were too few to establish a rate for other races or ethnicities (shown in figure 38).

Figure 37:

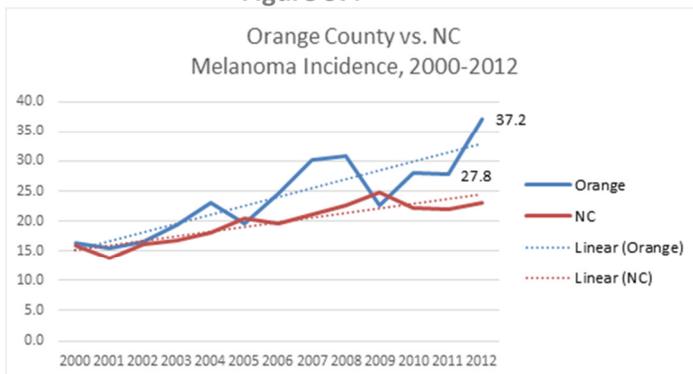
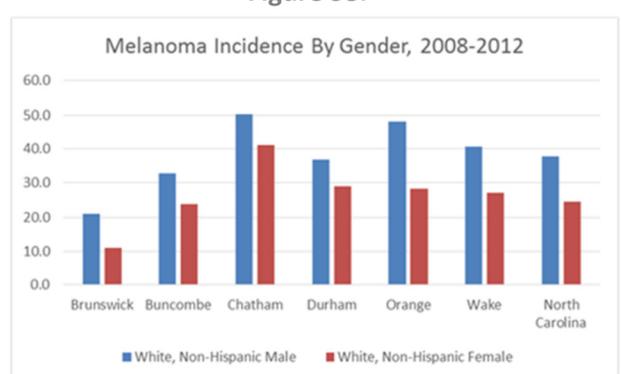


Figure 38:



## Drinking Water Quality

Contaminants in water and air can have adverse health consequences where both short-term and chronic exposure to pollution can present serious health risks. The [National Primary Drinking Water Regulations](#) (NPDWRs or primary standards) are legally enforceable standards that apply to public water systems.<sup>76</sup>

The safety of drinking water can be measured in terms of whether Maximum Contaminant Levels (MCL) are met for various pollutants present in water that could affect health. MCL standards for drinking water quality are set by EPA. An MCL is the legal threshold limit on the amount of a substance that is allowed in public water systems under the Safe Drinking Water Act.

- A group of *survey respondents* expressed concern with contaminated drinking water within their apartment complex.
- A group of *survey respondents* within the northern part of the county experience challenges with drinking water due to storm water runoff.

## Water Supplies

Citizens living in the municipal areas of Orange County and in some limited unincorporated areas are served by the following community public water systems:

- Orange Water and Sewer (OWASA)
  - Town of Hillsborough
  - Orange-Alamance Water (OAW)
  - Town of Mebane
  - City of Durham
- Of the Orange County populations served by community water systems, approximately 78% are served by the Orange Water and Sewer Authority (OWASA).

Water Supplies for residents that are not served by either a municipal public water supply or a public water supply well are served by a private drinking water well. Public Water Supplies whether a municipal system or public water supply well are regulated by the North Carolina Department of Environment and Natural Resources (NC DENR) and private drinking water wells are regulated by the Orange County Health Department. Well siting, permitting, inspections and water sampling are carried out by the Environmental Health staff and shown in table 14.

**Table 14: Number of New Wells and Water Samples Collected Over a 3-Year Period**

Year	New Wells Completed	Water Samples Collected for Analysis
2013	149	1,100
2014	133	1,219
2015	166	1,176

Water samples are sent to the NC State Laboratory of Public Health for analysis. The private well owner is provided a Health Risk evaluation of the water by Environmental Health staff after results are received. Recommendations in the Health Risk report are based on EPA MCL and NC Health based standards (2L) standards.

### Lead Hazards

- Approximately 250,000 children in America aged 1-5 years have blood lead levels greater than 10 micrograms of lead per deciliter of blood (ug/dL). This is the level at which the CDC recommends public health actions be initiated.
- Lead exposure is especially harmful to children under six years of age, because of their constant hand-to-mouth activity, where it affects their developing brains and nervous systems<sup>77</sup>.
- Ingesting or swallowing lead-contaminated materials is the primary way that children get lead poisoning at home.
- Lead exposure of women of child-bearing age can also adversely affect developing fetuses during pregnancy.

Children exposed to lead can have stunted growth, mental problems including low IQ or learning problems, and severe lead poisoning which can cause seizures, coma, and even death. Typical sources of lead exposure may include: painted or plastic toys, lead-based paint in older homes which can chip or form a harmful dust, soil, vinyl and plastic products, imported candy, lead-glazed pottery, fishing tackle, and drinking water pipes with lead-based solder.

The Childhood Lead Poisoning Prevention Program (CLPPP) tracks the number and rate of children in the target populations who are required to be screened for blood lead levels. Table 15 shows the number of children under age 6 with blood lead levels greater than 10ug/dL for Orange County compared to NC.

**Table 15: Number of Children under the Age of 6 with a Blood Lead > 10 ug/dL**

Year	NC		Orange County	
	Tested > 10 *	Confirmed > 10 **	Tested > 10	Confirmed > 10
2007	1,074	271	12	5
2008	932	216	11	2
2009	583	181	5	1
2010	519	170	2	0
2011	461	127	1	1

Below you will find a list of (non-exhaustive) Orange County initiatives and activities as they relate to Environmental Health.

Agency / Organization / Initiative	Advocacy / Community Support	Air	Drought	Ground water	Lead	Research	Reservoir	Septic / Sewer	Water (Drinking, Public, Storm, etc.)
<a href="#">H2Orange</a>	X		X	X			X		X
<a href="#">N.C. Childhood Lead Poisoning Prevention Program</a>	X				X				
<a href="#">N.C. Department of Environment and Natural Resources Division of Air Quality</a>	X	X				X			
<a href="#">Orange County Health Department</a>	X	X	X	X	X	X	X	X	X
<a href="#">Orange Soil and Water Conservation District</a>	X		X	X				X	
<a href="#">Orange Water and Sewer Authority</a>	X			X				X	X
<a href="#">Orange-Alamance Water System, Inc</a>	X						X		X
<a href="#">UNC Center for Environmental Health and Susceptibility</a>	X					X			

# Appendix

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**Appendix A: Orange County Population Health Dashboards**

# Chronic Disease

**Summary:** Orange County performs well on most Chronic Disease indicators compared to NC, the US, Peers, and available Target values. While the number of deaths due to diseases of the heart has increased in the past 3 years, the Age-Adjusted mortality rate has been declining, implying heart disease mortality is generally improving or stable. However, prevalence of chronic diseases, such as Cardiovascular Disease and Diabetes has increased in the last decade. Breast Cancer Incidence and Mortality in Orange County continues to be higher than all corresponding benchmarks. Preventative cancer screening rates are lower than peers and targets.

- Performing better than four or more benchmarks
  - ▲ Performing better than two or three benchmarks
  - ◆ Performing better than one or no benchmarks
  - ▲ Positive trend
  - ▼ Negative trend
  - No trend
  - Significant change from previous
- Benchmarks include Target, Previous, Peer, NC, and US*
- Trend cannot be assessed

**Data Notes:**

\*Due to changes in survey methodology and overlapping confidence intervals, **BRFSS** data cannot be compared to previous years

**Rates** are per 100,000 unless otherwise noted See the **Public Health Dashboard FAQ Document** for more on data methodology.

Diseases of the Heart	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
Cardiovascular Disease Prevalence	▲	7.6%	NA	5.1%	-	8.6%	9.2%	26.8%
Cardiovascular Disease Mortality Rate	▲	182.6	161.5	NA	-	210.2	235.7	NA
Diseases of the Heart Mortality Rate	▲	118.4	103.4	123.2	▼	148.7	165.9	105.4
Heart Disease Crude ED Rate per 10,000 person-yrs	●	235.2	NA	236.8	SAME	295.4	423.0	NA
Circulatory Crude ED Rate per 10,000 person-yrs	●	541.7	NA	566.8	▼	674.4	1073.4	NA
Hypertension Crude ED Rate per 10,000 person-yrs	●	352.0	NA	384.9	▼	399.7	759.4	NA

Stroke	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
Stroke Mortality Rate	●	34.1	34.8	32.9	SAME	34.9	43.0	40.8
Stroke Crude ED Rate per 10,000 person-yrs	▲	35.7	NA	38.9	▼	17.5	55.4	NA

Diabetes	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
Adult Diabetes Prevalence*	●	7.3%	8.6%	5.3%	-	8.6%	11.4%	9.3%
Diabetes Mortality Rate	▲	13.0	NA	11.4	▲	15.3	22.1	23.9

Cancer	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
Cancer Incidence Rate	▲	459.3	NA	407.5	SAME	432.4	483.4	454.8
Cancer Mortality Rate	●	158.6	161.4	156.0	SAME	161.1	171.8	171.2
Female Breast Cancer Incidence Rate	◆	157.9	NA	164.5	▼	131.2	157.9	124.8
Female Breast Cancer Mortality Rate	◆	22.1	20.7	23.3	SAME	17.8	21.6	21.9
Lung Cancer Mortality Rate	●	56.9	NA	59.1	▼	66.4	70.9	58.7
Lung Cancer Incidence Rate	●	43.9	45.5	42.1	▲	46.0	50.6	47.2
Colorectal Cancer Incidence Rate	▲	34.3	NA	32.6	SAME	31.7	38.5	42.4
Colorectal Cancer Mortality Rate	●	10.9	10.1	10.6	SAME	11.4	14.3	15.5
Prostate Cancer Mortality Rate	●	17.7	21.8	20.1	▼	18.1	21.4	21.4

Clinical Preventative Services	Progress Icon	Orange County		Trend		Compare to		
		Current	Target	Previous	Progress	Peer	NC	US
% Colorectal Cancer Screening*	◆	61.4%	70.5%	NA	-	71.0%	68.0%	65.0%
% Women who received Mamogram (50+)*	▲	80.9%	81.1%	NA	-	80.0%	81.5%	80.0%

**Sources:** NC SCHS, NC DETECT, BRFSS, SEER; Rates are per 100,000 unless otherwise noted  
Data points are the most current measures from multiple sources (available on request).

# Sexually Transmitted Diseases

Orange County, NC  
2014\* Population Health

## Summary:

Orange County performs well on most sexually transmitted disease (STD) indicators compared to NC, the US, Peers, and available Target values. However, the incidence of STDs has increased compared to previous years. Early Syphilis and HIV Rates in particular are higher for Orange County than our peers.

- Performing better than four or more benchmarks
- ▲ Performing better than two or three benchmarks
- ◆ Performing better than one or no benchmarks
- ↑↓ Positive trend
- ↑↓ Negative trend

Benchmarks include Target, Previous, Peer, NC, and US

## Data Notes:

\*Due to changes in the presentation of surveillance data in annual report tables (county of residence to county of diagnosis), current rates for many sexually transmitted diseases cannot be compared to historical data. Therefore, **this dashboard compares data from 2013 to the previous year, 2012**. Orange County cases from 2014, and preliminary 2015 case numbers can be found in lower table See the **Public Health Dashboard FAQ Document** for more information on data methodology.

Sexually Transmitted Infections (STIs)	Progress Icon	Orange County		Trend		Compare to		
		2013	Target	Previous	Progress	Peer	NC	US
% age 15-24 testing positive for Chlamydia	●	8.5%	8.7%	#N/A	-	10.0%	10.9%	15.6%
Chlamydia Incidence Rate (/100,000)	▲	340.7	#N/A	330.6	↑	367.6	496.5	446.6
Early Syphilis Rate (/100,000)	▲	3.6	#N/A	2.2	↑	2.7	6.9	10.9
Gonorrhea Incidence Rate (/100,000)	▲	82.6	#N/A	61.6	↑	109.1	140.1	106.1

HIV/AIDS	Progress Icon	Orange County		Trend		Compare to		
		2013	Target	Previous	Progress	Peer	NC	US
AIDS Incidence Rate (/100,000)	▲	5.1	12.4	1.4	↑	7.1	9.2	8.4
HIV Infection Rate (/100,000)	▲	12.3	22.2	10.9	↑	9.7	15.6	15.0

Source: 2013 DHHS HIV/STD Surveillance Report

## Sexually Transmitted Disease Cases among Orange County residents by year 2013-2015<sup>[1]</sup>

	2013	2014	2015
Gonorrhea cases	114	112	183
Chlamydia cases	470	472	684
Syphilis cases	3	17	13
Newly reported HIV infections among OC residents	16	14	12
Newly reported AIDS cases among OC residents	8	10	8

\*The above numbers are preliminary and were obtained from the 2015 fourth quarter report, annual numbers were not available.

# Injury and Violence

## Summary:

Injury and Violence statistics have remained generally stable in recent years. However, crime rates have decreased over the past decade. Alcohol related vehicle injuries are an area of concern for Orange County. Both alcohol related crash rates and reported drinking and driving behaviors are more prevalent than our peers, the state, and the US.

- Performing better than four or more benchmarks
  - ▲ Performing better than two or three benchmarks
  - ◆ Performing better than one or no benchmarks
  - ↕ Positive trend
  - ↕ Negative trend
  - SAME No trend
  - Trend cannot be assessed
  - Significant change from previous
- Benchmarks include Target, Previous, Peer, NC, and US*

## Data Notes:

\*Due to changes in survey methodology and overlapping confidence intervals, BRFSS data cannot be compared to previous years

\*\*Confidence intervals for YRBS trend data are unavailable to assess significance of trends over time.

Rates are per 100,000 unless otherwise noted. See the **Public Health Dashboard FAQ Document** for more on data methodology.

Unintentional Injuries		Progress	Orange County		Trend		Compare to		
		Icon	Current	Target	Previous	Progress	Peer	NC	US
Other Unintentional Mortality Rate (Age-Adj)		●	24.4	36.4	21.8	↑	32.2	29.6	39.1
% Adults 45+ experienced fall(s) in past 3 months*		◆	18.6%	NA	11.0%	-	16.8%	17.5%	NA
% Adults ever experienced traumatic brain injury*		▲	9.3%	NA	NA	-	16.8%	4.5%	8.5%

Drug Overdose and Poisoning		Progress	Orange County		Trend		Compare to		
		Icon	Current	Target	Previous	Progress	Peer	NC	US
Drug Overdose Mortality Rate		●	5.7	NA	10.0	↓	9.7	12.3	14.6
Opioid Overdose Mortality Rate		●	3.6	NA	7.1	↓	4.4	8.0	5.3
Drug Overdose Crude ED Rate per 10,000 person-yrs		●	14.5	NA	12.7	SAME	16.6	21.0	NA

Motor Vehicle Safety and Accidents		Progress	Orange County		Trend		Compare to		
		Icon	Current	Target	Previous	Progress	Peer	NC	US
Crash Injuries Per 1000 People		●	7.11	6.94	6.94	SAME	8.52	11.73	7.52
Unintentional Motor Vehicle Mortality Rate		●	8.0	NA	9.1	↓	9.7	13.5	10.3
% Crashes that are Alcohol Related		◆	5.7%	4.7%	5.8%	SAME	4.5%	4.2%	9.0%
% Adults who drove after drinking in past 30 days*		◆	7.7%	NA	1.8%	-	3.6%	2.4%	1.8%
% High schoolers who drove after drinking in past 30 days(CHCCS)**		●	9%	NA	9%	SAME	NA	6%	10%
% High schoolers who texted while driving in past 30 days(CHCCS)**		▲	23%	NA	NA	-	NA	34%	41%

Violence and Crime		Progress	Orange County		Trend		Compare to		
		Icon	Current	Target	Previous	Progress	Peer	NC	US
Violent Crime Rate per 100,000		●	151.1	NA	146.9	SAME	143.7	333.0	365.5
Assault Rate per 100,000		●	95.7	192.0	87.4	↑	102.0	221.6	232.1
Rape Rate per 100,000		●	15.6	NA	12.9	↑	23.8	18.1	38.5
Homicide Rate per 100,000		●	1.4	5.5	0.7	↑	1.8	5.5	4.5
% High schoolers who had been injured in a fight (CHCCS)**		▲	3.6%	NA	6.5%	↓	NA	3.0%	3.1%
% High schoolers who experienced dating violence (CHCCS)**		●	4.8%	NA	9.2%	↓	NA	9.4%	10.3%
% High schoolers who experienced forced intercourse (CHCCS)**		▲	6.8%	NA	6.7%	SAME	NA	8.9%	7.3%

Mental Health and Emergencies		Progress	Orange County		Trend		Compare to		
		Icon	Current	Target	Previous	Progress	Peer	NC	US
Avg # Poor Mental Health Days / Month*		●	2.5	2.8	2.9	↓	3.3	3.7	NA
Suicide Mortality Rate		●	10.4	8.3	12.2	↓	14.3	12.4	13.0
Mental Health Crude ED Rate per 10,000 person-yrs		●	82.1	82.8	86.2	↓	94.3	104.6	NA
Substance Abuse Crude ED Rate per 10,000 person-yrs		●	121.2	NA	121.8	SAME	136.2	139.4	NA

**Sources:** BRFSS, YRBS, NCDOT, NCSBI, NC SCHS, NC DETECT

Data points are the most current measures from multiple sources (available on request).

# Maternal and Infant Health

Orange County, NC  
2016 Population Health Dashboards

## Summary:

Orange County performs well on most indicators of Maternal and Infant Health, including having the lowest teen pregnancy rate in the state. However, many disparities exist for these indicators by race and ethnicity. Future dashboards will look into examining disaggregated data and these disparities in more detail.

- Performing better than four or more benchmarks
  - ▲ Performing better than two or three benchmarks
  - ◆ Performing better than one or no benchmarks
  - ↑↓ Positive trend
  - ↑↓ Negative trend
  - SAME No trend
  - Trend cannot be assessed
  - Significant change from previous
- Benchmarks include Target, Previous, Peer, NC, and US*

## Data Notes:

\*Low birth weight and preterm birth percentages calculated from 2014 birth data query. Official percentages will be available from the NC SCHS in the 2014 Pocket Guide, expected to be published in early 2016. See the **Public Health Dashboard FAQ Document** for more on data methodology.

Birth Outcomes	Progress	Orange County		Trend		Compare to		
		Icon	Current	Target	Previous	Progress	Peer	NC
Infant Mortality Rate (/1,000)	<span style="color: green;">●</span>	4.9	6.3	4.6	SAME	1.3	7.1	6.1
% Low Birthweight Babies (<2500 grams)*	<span style="color: green;">●</span>	6.0%	7.4%	7.0%	↓	7.5%	8.9%	8.0%
% Very Low Birthweight Babies (<1500 grams)*	<span style="color: green;">●</span>	0.7%	1.4%	1.6%	↓	0.9%	1.7%	1.4%
% Mothers Smoking while pregnant	<span style="color: orange;">▲</span>	6.6%	1.4%	6.0%	↑	3.4%	10.6%	10.0%
% Preterm Births (<37 Wks Gestation)*	<span style="color: green;">●</span>	9.0%	11.4%	9.6%	SAME	10.3%	11.4%	11.4%

Unintended Pregnancy	Progress	Orange County		Trend		Compare to		
		Icon	Current	Target	Previous	Progress	Peer	NC
Teen Pregnancy (Rate/1,000)	<span style="color: green;">●</span>	9.6	#N/A	12.4	↓	24.0	32.3	26.5
Repeat Teen Pregnancy Rate	<span style="color: green;">●</span>	8.7%	#N/A	25.0%	↓	13.5%	22.4%	18.3%

## Sources: NC SCHS

Data points are the most current measures from multiple sources (available on request).

## **Appendix B: Public Health Dashboard FAQ and Sources**

# Public Health Dashboards:

*In addition to an overview of OCHD public health dashboards, this document contains:*

*1) FAQs, 2) Explanation of some data set considerations, and 3) 2016 Public Health Dashboard source information*

## **Purpose:**

To provide an executive level view of how the county is performing on indicators in major public health content areas as compared to the state, nation, peers, and available targets or goals. Icons provide quick reference to indicators of note, and how Orange County compares to these benchmarks.

## **Content Areas:**

Access to Care; Chronic Disease; Injury and Violence; Maternal and Infant Health; Physical Activity and Nutrition; Poverty Mitigation; Sexually Transmitted Diseases; Substance Abuse and Mental Health; Tobacco and Respiratory Disease;

## **Data Disclaimer:**

These dashboards are intended to be a starting point for collecting a number of related indicators in one place. However, because these data come from a variety of different data sources, each indicator will have its own set of limitations and considerations based on the collection and analysis methodology for that data source. It is important to understand the methodology utilized for the indicators you may be interested in and incorporate corresponding limitations into any of your own reporting. References and/or more detailed information on the sources for particular data points are provided in summary at the end of this document, and additional information may be provided on request.

## **FAQs:**

### **Q: What sources do you use for your data?**

The dashboards use the most recent and available data/statistics from a variety of different sources, including:

American Community Survey (ACS) and Decennial Census from the Census Bureau;  
Behavioral Risk Factor Surveillance Survey (BRFSS);  
The Cecil G. Sheps Center for Health Services Research (Sheps Center);  
Center for Disease Control and Prevention (CDC);  
Department of Health and Human Services (DHHS);  
Henry J. Kaiser Family Foundation  
Morbidity and Mortality Weekly Report and Statistics (MMWR);  
National Center for Education Statistics (NCES);  
NC Controlled Substance Reporting System (CSRS);  
North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT);  
North Carolina Electronic Disease Surveillance System (NC EDSS);  
North Carolina Public Schools;  
North Carolina State Department of Public Safety (NC DPS) and Bureau of Investigation (NCSBI);  
North Carolina State Center for Health Statistics (NC SCHS);  
North Carolina Department of Transportation (NC DOT)  
Pediatric Nutrition Surveillance System (PedNSS);  
Small Area Health Insurance Estimates (SAHIE);  
Surveillance, Epidemiology, and End Results Program (SEER) through The National Cancer Institute;  
UNC School of Government Hunger Research;  
Youth Risk Behavior Survey (YRBS);

***Sources for the 2016 Public Health Dashboards can be found at the end of this document.***

### Q: What years are your data from?

The data included in these dashboards are the most up to date data available for Orange County. In some cases, there may be more recent data available for peers, the state, or the US; however, benchmark values are selected from the same year as the Orange County data, for consistency of comparison. In some cases, data points from one geography may represent multiple year rates (such as 3-year or 5-year rates), whereas other geographies may show only 1-year rates. In these cases, the smaller geography (counties) uses multiple years of data to improve statistical power through a larger sample size, whereas US numbers are large enough in a single year to report a 1-year rate.

### Q: How do you determine which indicators to include in your dashboards?

The over-arching content areas selected for our dashboards are based on current county priority areas and on the topic area categories included in the Healthy People 2020 and Healthy North Carolina 2020 Objectives. In order to present a meaningful set of data that develops an executive level picture for what is happening in our county's health, we only include indicators that meet several criteria. These criteria help contextualize county measures by relating them to comparable benchmarks. Meaning, a number by itself does not give you any frame of reference unless you have other measures to compare it with.

We aim to select measures that are **meaningful** to public health and:

- 1) **annual** measures
- 2) **updated** on a regular basis
- 3) available at the **county level**
- 4) have **existing objectives, targets, or benchmarks** (such as the HP2020 or HNC2020 Objectives)
- 5) are **commonly used measures across geographies** (other counties, the state, the US)

In some cases, an indicator may meet several but not all of these criteria. In general, an indicator must meet a majority of these criteria to be included in the dashboard.

### Q: What do the circle, triangle, and square icons mean?

-  Performing better than four or more benchmarks
-  Performing better than two or three benchmarks
-  Performing better than one or no benchmarks

*Benchmarks include Target, Previous, Peer, NC, and US*

The performance icons serve as "at-a-glance" guides that allow

the reader to scan the dashboard and identify indicators for which the county is performing either better or worse than the majority of available benchmarks (target, previous, peer, NC and US).

It is important to note that these icons serve as a starting point for conversations, but there are many stories to tell behind each indicator. For example, an indicator with a green circle may not alert the reader to health disparities for a specific demographic group within an indicator data set. The absence of disparity measures is a general limitation of this indicator set, but the department hopes to incorporate more data related to health disparities in future dashboard iterations.

## Q: How do you determine whether a trend is increasing, decreasing, or the same?

	Positive trend		Significant change
	Negative trend		from previous
SAME	No trend		
-	Trend can not be assessed		

As most of these indicators currently only observe two data points in time, it is difficult to identify a true change in trend (a second limitation of this data set). Observing whether confidence intervals or margins of error for the two observed values overlap from one year to another represents the best method for determining if there is a statistical difference between previous and current indicator values. However, confidence intervals are not always readily available in reports. In addition, when there are changes in survey or data reporting methodology, current measures may not be comparable to previous years. In these cases, it is indicated that the trend cannot be assessed.

For the purposes of this dashboard, we have adopted three “rules of thumb” for identifying a threshold for change in trend, as well as if that change appears significant, in the absence of confidence intervals or margin of error.

- **A difference of one percentage point or greater from a surveyed population (such as BRFSS/YRBS, represented by a percentage value) is deemed as a change in trend.** For example, a change from 7.0% to 8.4% would represent an increasing trend, whereas a change from 7.0% to 7.8% would be considered the same. Whether this trend is “positive” or “negative” (signified by green or red colors) depends on the nature of the indicator. If we are observing an increase in diabetes that would be a negative trend, but an increase in physical activity would be a positive trend.
- **A difference in a rate that represents a 1% increase or decrease of the previous rate value would also be deemed as a change in trend.** For example, a rate difference from 3.1 to 2.7 per 100,000 people would represent a -12.9% difference ( $(3.1-2.7) / 3.1 = .129$ ). This would represent a decrease in trend. However, a rate difference from 256.3 to 255.9 per 100,000 people would only represent a -0.2% difference (rounded), and would thus be considered the same as the previous year for the purposes of this dashboard ( $(256.3-255.9) / 256.3 = .0016$ ).
- **For rates greater than 5, green and red fill backgrounds signify a greater than 20% increase or decrease in rate from previous, noted in this case as a significant change in trend from previous.**

# Data Source Considerations

(more detailed considerations to come in future dashboard iterations)

Sources: *Urban Institute, NC DETECT*

## Decennial Census

Prior to 2010, the decennial census included basic information on the 100 percent sample (Summary File 1, or SF1) as well as detailed information on a subset of the population receiving the long form, which includes additional questions. Beginning in 2010, the decennial census only provides data on basic demographic information (SF1), as the long form has been replaced by the American Community Survey (ACS) discussed below.

**Frequency:** Every 10 years.

**Geographies:** Blocks, block groups, census tracts, counties, county subdivisions, zip code tabulation areas.

**Variables:** Total population, age, sex, race and ethnicity, household type, tenure, vacancy.

**Strengths:** Data are available at small geographies (down to the block level). Data come from a census rather than a sample survey, with results in smaller margins of error.

**Drawbacks:** Because the decennial census occurs only once every 10 years, its data quickly become outdated. Data are limited to a small set of variables.

**Additional Information:** The Census Bureau may draw new geographic boundaries for a new decennial census. Consequently, when using the decennial census from multiple years, Promise Neighborhoods must first ascertain that geographic boundaries have not changed. Moreover, the decennial census can change how a question is phrased, which might change the indicator over time. (For example, in 2010 the Census Bureau changed how it asked respondents about race and ethnicity.) Because of this, data might not be comparable from year to year or between the decennial census and the ACS (discussed below). Users should check the Census Bureau web site (<http://2010.census.gov/2010census/>) for any changes in phrasing and their effects on comparability.

**Data Availability:** Data for specific geographies can be found using FactFinder (<http://factfinder2.census.gov>).

## American Community Survey

The American Community Survey (ACS) is an ongoing statistical survey run by the U.S. Census Bureau, replacing the long form in the decennial census. The ACS has approximately 250,000 respondents monthly, totaling 3 million per year. ACS data are particularly useful, as it is publicly available and offers indicators on several topics.

**Frequency:** Survey data are collected regularly. Because the ACS covers a smaller sample size than the decennial census, these data files come in one-year, three-year, and five-year averages. For example, data from the 2008–2010 sample will represent averages over the 36-month span.

**Geographies:** Census tracts, county subdivisions, zip code tabulation areas, counties. Only the five-year averages have data down to the census tract level.

**Variables:** ACS data are collected on both persons/households and housing characteristics. Data on persons/households includes age, sex, ancestry or immigration status, disability, work commutes, education, employment, family composition, income, language, poverty, and race/ethnicity. Data on housing include financial characteristics such as rent and mortgage costs, as well as physical characteristics such as the number of units in the building and the age of the housing unit.

**Strengths:** Compared to the decennial census, ACS data are available on more topics and are updated

more frequently.

**Drawbacks:** Because of the smaller ACS sample sizes, users must pay special attention to standard errors, as they can be particularly large. In addition, when using data that represent multiyear averages, users are advised to not compare overlapping years (e.g., 2005–2009 data should not be compared to 2006–2010 data).

**Additional Information:** The Census Bureau has created a useful guide for ACS data (<http://www.census.gov/acs/www/Downloads/handbooks/ACSResearch.pdf>).

**Data Availability:** Data can be downloaded for specific geographies using FactFinder (<http://factfinder2.census.gov/>), or flat files can be downloaded for multiple areas ([http://www.census.gov/acs/www/data\\_documentation/data\\_via\\_ftp/](http://www.census.gov/acs/www/data_documentation/data_via_ftp/))

## North Carolina Disease Event Tracking and Epidemiologic Collection Tool

NC DETECT is North Carolina's statewide syndromic surveillance system. NC DETECT was created by the North Carolina Division of Public Health (NC DPH) in 2004 in collaboration with the Carolina Center for Health Informatics (CCHI) in the UNC Department of Emergency Medicine to address the need for early event detection and timely public health surveillance in North Carolina using a variety of secondary data sources. Authorized users are currently able to view data from emergency departments, the Carolinas Poison Center, and the Pre-hospital Medical Information System (PreMIS), as well as pilot data from select urgent care centers.

NC DETECT is designed, developed and maintained by CCHI staff with funding by the NC DPH. New functionality is added regularly based on end user feedback.

Please send questions to [ncdetect@listserv.med.unc.edu](mailto:ncdetect@listserv.med.unc.edu).

**Frequency:** Real-time, monthly, and annual reports.

**Geographies:** By hospital, County, and in some cases Zipcode

**Variables:** Number of visits, age, sex, payer type, ICD diagnosis codes, keywords.

**Strengths:** Rich data set for developing aggregate measures and real-time nature of data is informative for situational awareness and emergency response.

**Drawbacks:** Because different fields and agencies may define indicators or conditions differently, it can be difficult to establish standard case definitions for syndromes.

**Data Availability:** Data and reports can be found at <http://www.ncdetect.org/>

## For Additional Information:

If you have any questions or comments regarding the methodology and/or data contained in these dashboards, please contact Allison Young, Health Informatics Manager, at [ayoung@orangecountync.gov](mailto:ayoung@orangecountync.gov).

# 2016 Public Health Dashboard Sources and Years

Dashboard	Category	Indicator	Source	Target	Peer (Average or Best of)	Orange County	Peer	NC	US
<b>Access to Care</b>									
<b>Affordability and Insurance</b>									
		% Uninsured (<65 years old)	SAHIE	Unavailable	New Hanover (best)	2013	2013	2013	2013
		% Low-income Uninsured (<65 years old, <200% FPL)	SAHIE	Unavailable	New Hanover (best)	2013	2013	2013	2014
		% Children Uninsured (<19 years old)	SAHIE	Unavailable	New Hanover (best)	2013	2013	2013	2014
		% Low Income Children Uninsured (<19 years old, <200% FPL)	SAHIE	Unavailable	Buncombe (best)	2013	2013	2013	2014
<b>Resources and Prevention</b>									
		Physicians Rate per 10,000	SHEPS	Unavailable	Buncombe (best)	2013	2013	2013	2011
		Primary Care Physician Rate per 10,000	SHEPS	Unavailable	Buncombe (best)	2013	2013	2013	2013
		Dentist Rate per 10,000	SHEPS	Unavailable	Unavailable	2013	2013	2013	2013
<b>Chronic Disease</b>									
<b>Cancer</b>									
		Cancer Incidence Rate	SCHS	Unavailable	Brunswick (best)	2009-2013	2009-2013	2009-2013	2008-15
		Cancer Mortality Rate	SCHS	HP2020 (C-1)	Buncombe (best)	2009-2013	2009-2013	2010-2014	2008-2012
		Female Breast Cancer Incidence Rate	SCHS	Unavailable	Brunswick (best)	2009-2013	2009-2013	2009-2013	2008-2012
		Female Breast Cancer Mortality Rate	SCHS/NC-HIP	HP2020 (C-3)	Buncombe (best)	2010-2014	2010-2014	2010-2014	2008-2012
		Lung Cancer Incidence Rate	SCHS	Unavailable	Buncombe (best)	2009-2013	2009-2013	2009-2013	2008-2012
		Lung Cancer Mortality Rate	SCHS	HP2020	Buncombe (best)	2010-2014	2010-2014	2010-2014	2008-2012
		Colorectal Cancer Incidence Rate	SCHS	Unavailable	New Hanover (best)	2009-2013	2009-2013	2008-2012	2008-2012
		Colorectal Cancer Mortality Rate	SCHS	HNC2020	Buncombe (best)	2010-2014	2010-2014	2010-2014	2008-2012
		Prostate Cancer Incidence Rate	SCHS	Unavailable	Brunswick (best)	2008-2012	2008-2012	2008-2012	2008-2012
		Prostate Cancer Mortality Rate	SCHS	HP2020	Buncombe (best)	2009-13	2010-2014	2009-2013	2008-2012
<b>Diseases of the Heart</b>									
		Cardiovascular Disease Prevalence	SCHS (BRFSS)	Unavailable	New Hanover (best)	2011	2011	2011	2014
		Cardiovascular Disease Mortality Rate	SCHS	HNC2020	Buncombe (best)	2008-2012	2008-2012	2008-2012	Unavailable
		Diseases of the Heart Mortality Rate	SCHS	HP2020 (HDS-2)	Buncombe (best)	2010-2014	2009-2013	2010-2014	2012
		Heart Disease Crude ED Rate per 10,000 person-yrs	NC DETECT	Unavailable	Buncombe (best)	2013	2013	2013	Unavailable
		Circulatory Crude ED Rate per 10,000 person-yrs	NC DETECT	Unavailable	Buncombe (best)	2013	2013	2013	Unavailable
		Hypertension Crude ED Rate per 10,000 person-yrs	NC DETECT	Unavailable	Buncombe (best)	2013	2013	2013	Unavailable
<b>Stroke</b>									
		Stroke Mortality Rate	SCHS	HP2020 (HDS-3)	Brunswick (best)	2009-2013	2010-2014	2009-2013	2013
		Stroke Crude ED Rate per 10,000 person-yrs	NC DETECT	Unavailable	Buncombe (best)	2013	2013	2013	Unavailable
<b>Diabetes</b>									
		Adult Diabetes Prevalence*	BRFSS	HNC2020	Buncombe, New Hanover (Peer Calculator)	2011	2013	2013	2014
		Diabetes Mortality Rate	SCHS	HP2020 (D-3): 66.6--t	Buncombe (best)	2010-2014	2010-2014	2010-2014	2013
<b>Clinical Preventative Services</b>									
		% Colorectal Cancer Screening*	BRFSS	Unavailable	Buncombe, Durham, New Hanover, Wake	2008-2010	2008-2010	2008-2010	2010
		% Women who received Mamogram (50+)*	BRFSS	HP2020 (C 17)	Buncombe, Durham, New Hanover, Wake	2008-2010	2008-2010	2008-2010	2010
<b>Injury and Violence</b>									
<b>Mental Health and Emergencies</b>									
		Avg # Poor Mental Health Days / Month*	BRFSS	HNC2020	Unavailable	2011	2011	2011	Unavailable
		Suicide Mortality Rate	SCHS	HNC2020	New Hanover(best)	2010-2014	2010-2014	2010-2014	2013
		Mental Health Crude ED Rate per 10,000 person-yrs	NC DETECT	HNC2020	New Hanover (best)	2013	2013	2013	Unavailable
		Substance Abuse Crude ED Rate per 10,000 person-yrs	NC DETECT	Unavailable	Buncombe (best)	2013	2013	2013	Unavailable
<b>Unintentional Injuries</b>									
		Other Unintentional Mortality Rate (Age-Adj)	SCHS	Unavailable	Best of Peers, Buncombe	2010-2014	2010-2014	2010-2014	Unavailable
		% Adults 45+ experienced fall(s) in past 3 months*	BRFSS	Unavailable	Buncombe (best)	2010	2010	2010	Unavailable
		% Adults ever experienced traumatic brain injury*	BRFSS	Unavailable	Buncombe (best)	2011	2010	2011	2012
<b>Drug Overdose and Poisoning</b>									
		Drug Overdose Mortality Rate	Injury Prevention Brach	Unavailable	Buncombe (best)	2014	2013	2013	Unavailable
		Opioid Overdose Mortality Rate	Injury Prevention Branch	Unavailable	Buncombe (best)	2013	2013	2013	Unavailable
<b>Motor Vehicle Safety and Accidents</b>									
		Crash Injuries Per 1000 People							
		Unintentional Motor Vehicle Mortality Rate	SCHS	Unavailable	Best of Peers, New Hanover	2014	2010-2014	2010-14	2014
		% Crashes that are Alcohol Related	DHHS Annual Report/ Highway Safety Research Center	HNC2020	New Hanover (best)	2012-2014	2012-2014	2012	Unavailable
		% Adults who drove after drinking in past 30 days*	BRFSS	Unavailable	New Hanover	2010	2010	2010	2010
		% High schoolers who drove after drinking in past 30 days(CHCCS)**	YRBS	Unavailable	Unavailable	2013	Unavailable	2013	2013
		% High schoolers who texted while driving in past 30 days(CHCCS)**	YRBS	Unavailable	Unavailable	2013	Unavailable	2013	2013
<b>Violence and Crime</b>									
		Violent Crime Rate per 100,000	NC DPS	Unavailable	Brunswick (best)	2014	2014	2014	2014
		Assault Rate per 100,000	NC DPS	Unavailable	Brunswick (best)	2014	2014	2014	2014
		Rape Rate per 100,000	NC DPS	Unavailable	Buncombe (best)	2014	2014	2014	2014
		Homicide Rate per 100,000	NC DPS	HP2020	Brunswick (best)	2014	2014	2014	2014
		% High schoolers who had been injured in a fight (CHCCS)**	YRBS	Unavailable	Unavailable	2013	Unavailable	2013	2013
		% High schoolers who experienced dating violence (CHCCS)**	YRBS	Unavailable	Unavailable	2013	Unavailable	2013	2013
		% High schoolers who experienced forced intercourse (CHCCS)**	YRBS	Unavailable	Unavailable	2013	Unavailable	2013	2013

# 2016 Public Health Dashboard Sources and Years

Dashboard	Category	Indicator	Source	Target	Peer (Average or Best of)	Orange County	Peer	NC	US
<b>Maternal and Infant Health</b>									
<b>Birth Outcomes</b>									
		Infant Mortality Rate (/1,000)	SCHS	HNC2020	New Hanover (best)	2014	2011-2013	2014	2011
		% Low Birthweight Babies (<2500 grams)*	SCHS	HP2020 (MICH- 8.1)	New Hanover (best)	2014	2014	2009-2013	2013
		% Very Low Birthweight Babies (<1500 grams)*	SCHS	HP2020 (MICH 8.2)	New Hanover (best)	2014	2014	2014	2013
		% Mothers Smoking while pregnant	SCHS	HP2020 (MICH- 11.3)	Buncombe	2011-2013	2011-2013	2011-2013	2011
		% Preterm Births (<37 Wks Gestation)*	SCHS	Unavailable	New Hanover (best)	2014	2014	2009-2013	2013
<b>Unintended Pregnancy</b>									
		Repeat Teen Pregnancy Rate	SCHS	Unavailable	New Hanover (best)	2011-2013	2014	2014	2010
		Teen Birth Rate (%)	SCHS	Unavailable	Buncombe (best)	2009-2011	2009-2011	2009-2011	2013
		Teen Pregnancy (Rate/1,000)	SCHS	Unavailable	New Hanover (best)	2014	2014	2014	2013
<b>Physical Activity, Nutrition, and Weight</b>									
		% Adults Getting Recommended Exercise*	BRFSS	HNC2020	Buncombe (best)	2011	2011	2011	Unavailable
		% High Schoolers getting 60 min exercise/day (CHCCS)**	YRBS	Previous Target	Unavailable	2013	Unavailable	2013	Unavailable
		% Adults Eating 5+ Fruits or Veggies/Day*	BRFSS	HNC2020	Unavailable	2011	2009	2011	Unavailable
		% High Schoolers eating Fruits and Veggies 1+/Day**	YRBS	Previous Target	Unavailable	2011	Unavailable	Unavailable	Unavailable
		% Adults with Healthy Weight*	BRFSS	HP2020 (NWS-8)	Buncombe, Durham, New Hanover, Wake	2011	2011	2011	2008-12
		% High Schoolers not overweight or obese (CHCCS)**	YRBS- US Document 2013	HNC2020	Unavailable	2013	Unavailable	2013	Unavailable
		% Low-income Preschool Children Obese	Pediatric Nutrition Surveillance System (PedNSS)	Unavailable	Buncombe (best)	2009-2011	2009-2011	2011	2011
		% Population that is Food Insecure	UNC School of Government	HP2020	New Hanover (best)	2013	2013	2013	2013
		% Kids in Food Insecure Households	UNC School of Government	Unavailable	New Hanover (best)	2013	2013	2013	2013
<b>Poverty Mitigation</b>									
<b>Social and Economic Determinants of Health</b>									
		% Population living in Poverty	ACS	HNC2020	Brunswick (best)	2010-2014	2010-2014	2010-2014	2010-2014
		% Children <18 living in Poverty	ACS	Unavailable	Buncombe (best)	2010-2014	2010-2014	2010-2014	2010-2014
		% Households on SNAP benefits	ACS	Unavailable	New Hanover (best)	2010-2014	2010-2014	2010-2014	2010-2014
		% Unemployed	LAUS	Unavailable	Buncombe (best)	2010-2014	2010-2014	2010-2014	2010-2014
		% Population that is Food Insecure	UNC School of Government	HP2020	New Hanover (best)	2013	2013	2013	2013
		% Children Eligible for Free or Reduced Lunch	NC Public Schools	Unavailable	New Hanover (best)	2014-15	Unavailable	Unavailable	2010-11
		% Renters paying >30% Income on Rent	ACS	HNC2020	Buncombe (best)	2010-2014	2010-2014	2010-2014	2010-2014
		4 year Graduation Rate (%)	NC Public Schools/ NCES	Unavailable	Buncombe (best)	2014-15	2014-15	2014-15	2012-2013
		Gini Coefficient of Income Inequality (0= most equal, 1.0 = least equal)	ACS	Unavailable	Unavailable	2010-2014	2010-2014	2010-2014	2010-2014
<b>Sexually Transmitted Infections (STIs)</b>									
<b>STI</b>									
		% age 15-24 testing positive for Chlamydia of those tested	SCHS	HNC2020	Brunswick, Buncombe, New Hanover (Peer Calculator)	2011	Unavailable	2011	2011
		Chlamydia Incidence Rate (/100,000)	DHHS	HP2020	Brunswick, Buncombe, New Hanover (Peer Calculator)	2013	2013	2013	2013
		Early Syphilis Rate (/100,000)	DHHS	HP2020- but broken o	Brunswick, Buncombe, New Hanover (Peer Calculator)	2013	2013	2013	2013
		Gonorrhea Incidence Rate (/100,000)	DHHS	HP2020- but broken o	Brunswick, Buncombe, New Hanover (Peer Calculator)	2013	2013	2013	2013
<b>HIV/AIDS</b>									
		AIDS Incidence Rate (/100,000)	DHHS	HP2020- since archiev	Brunswick, Buncombe, New Hanover (Peer Calculator)	2013	2013	2013	2013
		HIV Infection Rate (/100,000)	DHHS	HNC2020	Brunswick, Buncombe, New Hanover (Peer Calculator)	2013	2013	2013	2013
<b>Substance Use and Abuse</b>									
<b>Alcohol</b>									
		% Adults who Drink Excessively*	SCHS, BRFSS	Unavailable	brfss results don't really add up...but simple average of B	2011	2011	Unavailable	2013
		% High schoolers using alcohol products (CHCCS)**	YRBS	Previous Target	Unavailable	2013	2013	2013	2013
		% Crashes that are Alcohol Related	DHHS Annual Report/ Highway Safety Research Center	HNC2020	New Hanover (best)	2012-2014	2012-2014	2012	Unavailable
<b>Illicit Drugs</b>									
		% Illicit drug use self-report*	Previous OCHD Report	Unavailable	not sure where this came from...	Unavailable	Unavailable	Unavailable	Unavailable
		% Providers registered in CSRS	Previous OCHD Report	Unavailable	not sure where this came from...	Unavailable	Unavailable	Unavailable	Unavailable
		Drug Overdose Mortality Rate	Injury Prevention Brach	Unavailable	Buncombe (best)	2014	2013	2013	Unavailable
		Opioid Overdose Mortality Rate	Injury Prevention Branch	Unavailable	Buncombe (best)	2013	2013	2013	Unavailable
<b>Tobacco</b>									
		% Adult Smokers*	SCHS	HNC2020	Unavailable	2011	2006-2010	2011	2011
		% High schoolers who smoked in past 30 days (CHCCS)**	YRBS	HP2020	Unavailable	2013	2013	2013	2009
		Tobacco Use Disorder Crude ED Rate per 10,000 person-yrs	NC DETECT	Unavailable	Buncombe (best)	2013	2013	2013	Unavailable
		Lung Cancer Incidence Rate	SCHS	Unavailable	Buncombe (best)	2009-2013	2009-2013	2009-2013	2008-2012
		% Exposed to Secondhand Smoke at Work*	BRFSS	HNC2020	Unavailable	2006-2010	Unavailable	2011	Unavailable

## 2016 Public Health Dashboard Sources and Years

Dashboard	Category	Indicator	Source	Target	Peer (Average or Best of)	Orange County	Peer	NC	US
<b>Mental Health</b>									
<b>Mental Health and Emergencies</b>									
		Avg # Poor Mental Health Days / Month*	BRFSS	HNC2020	Unavailable	2011	2011	2011	Unavailable
		Suicide Mortality Rate	SCHS	HNC2020	New Hanover(best)	2010-2014	2010-2014	2010-2014	2013
		Mental Health Crude ED Rate per 10,000 person-yrs	NC DETECT	HNC2020	New Hanover (best)	2013	2013	2013	Unavailable
		Substance Abuse Crude ED Rate per 10,000 person-yrs	NC DETECT	Unavailable	Buncombe (best)	2013	2013	2013	Unavailable
<b>Older Adult Mental Health</b>									
		% Older Adults with Depression	CMS	Unavailable	Brunswick (best)	2012	2012	2014	2014
		Alzheimer's Age-Adj Mortality Rate	SCHS	Unavailable	New Hanover (best)	2014	2014	2014	2014
		Alzheimer's Crude ED Rate per 10,000 person-yrs	NC DETECT	Unavailable	Buncombe (best)	2013	2013	2013	Unavailable
<b>Cardiovascular and Respiratory Disease</b>									
<b>Behaviors</b>									
		% Adult Smokers*	SCHS	HNC2020	Unavailable	2011	2006-2010	2011	2011
		% High schoolers who smoked in past 30 days (CHCCS)**	YRBS	HP2020	Unavailable	2013	2013	2013	2009
		Tobacco Use Disorder Crude ED Rate per 10,000 person-yrs	NC DETECT	Unavailable	Buncombe (best)	2013	2013	2013	Unavailable
<b>Lung Cancer (Rate/100,000)</b>									
		Lung Cancer Incidence Rate	SCHS	Unavailable	Buncombe (best)	2009-2013	2009-2013	2009-2013	2008-2012
		Lung Cancer Mortality Rate	SCHS	HP2020	Buncombe (best)	2010-2014	20010-2014	2010-2014	2008-2012
<b>Policies</b>									
		% Exposed to Secondhand Smoke at Work*	BRFSS	HNC2020	Unavailable	2006-2010	Unavailable	2011	Unavailable
<b>Asthma and Respiratory Disease</b>									
		% Asthma Diagnosis (ever in lifetime)*	SCHS	Unavailable	Buncombe (best)	2010	2010	2011	2010
		% Asthma Current Diagnosis*	SCHS	Unavailable	New Hanover (best)	2011	2010	2011	2013
		Asthma Crude ED Rate per 10,000 person-yrs	NC DETECT	Unavailable	Buncombe (best)	2013	2013	2013	2009
		Hospital Discharge Rate for Asthma	SCHS	Unavailable	Brunswick, Buncombe, New Hanover (Peer Calculator)	2013	2013	2013	Unavailable
		Hospital Discharge Rate for Asthma, Age 0-14	SCHS	Unavailable	Brunswick, Buncombe, New Hanover (Peer Calculator)	2013	2013	2013	Unavailable
		Chronic Lower Respiratory Disease Mortality	SCHS	Unavailable	Brunswick, Buncombe, New Hanover (Peer Calculator)	2009-2013	2009-2013	2009-2013	Unavailable

## **Appendix C: Healthy North Carolina 2020 Objectives**

Healthy NC 2020 Objective	Orange County	North Carolina	Target
<b>Tobacco Use</b>			
Decrease the percentage of adults who are current smokers	16.8%	19.1% (2014)	13.0%
Decrease the percentage of high school students reporting current use of any tobacco product	9%	22.5% (2011)	15.0%
Decrease the percentage of people exposed to secondhand smoke in the workplace in the past seven days.	6.4%	9.7% (2014)	0%
<b>Physical Activity and Nutrition</b>			
Increase the percentage of high school students who are neither overweight nor obese	78.0%	72.3% (2013)	79.2%
Increase the percentage of adults getting/ meeting CDC Aerobic Recommendations	51.7%	48.1% (2013)	60.6%
Increase the percentage of adults who consume fruit one or more times per day.	68.0% (2015)*	57.1% (2013)	69.7%
Increase the percentage of adults who consume vegetables one or more times per day.	68.0% (2015)*	76.3% (2013)	84.7%
<b>Injury and Violence</b>			
Reduce the unintentional poisoning mortality rate (per 100,000 population)	6.7(2014)	12.5 (2014)	9.9
Reduce the unintentional falls mortality rate (per 100,000 population)	18.6	10.0 (2014)	5.3
Reduce the homicide rate (per 100,000 population)	1.4	5.6 (2014)	6.7
<b>Maternal and Infant Health</b>			
Reduce the infant mortality racial disparity between whites and African Americans	3.76 (2014)	2.39 (2014)	1.92
Reduce the infant mortality rate (per 1,000 live births)	4.9	7.1 (2014)	6.3
Reduce the percentage of women who smoke during pregnancy	6.6%	9.8%(2014)	6.8%
<b>Sexually Transmitted Disease and Unintended Pregnancy</b>			
Decrease the percentage of pregnancies that are unintended	County data not available	42.7% (2011)	30.9%
Reduce the percentage of positive results among individuals aged 15 to 24 tested for chlamydia	8.5% (2011)	10.8%(2014)	8.7%
Reduce the rate of new HIV infection diagnoses (per 100,000 population)	12.3 (2013)	16.0 (2013)	22.2
<b>Substance Abuse</b>			
Reduce the percentage of high school students who had alcohol on one or more of the past 30 days	32%	32.2% (2013)	26.4%
Reduce the percentage of traffic crashes that are alcohol-related	6.1%	4.8% (2014)	4.7%
Reduce the percentage of individuals aged 12 years and older reporting any illicit drug use in the past 30 days	9%	7.5% (2012-13)	6.6%
<b>Mental Health</b>			
Reduce the suicide rate (per 100,000 population)	10.4	13.0 (2014)	8.3
Decrease the average number of poor mental health days among adults in the past 30 days	2.5	3.6 (2014)	2.8
Reduce the rate of mental health-related visits to emergency departments (per 10,000 population)	82.1	104.5 (2012)	82.8
<b>Oral Health</b>			
Increase the percentage of children aged 1–5 years enrolled in	55.7% (2009-	58.0% (2013)	56.4%

Medicaid who received any dental service during the previous 12 months	11)		
Decrease the average number of decayed, missing, or filled teeth among kindergartners	0.9 (2009-11)	1.5 (2009-10)	1.1
Decrease the percentage of adults who have had permanent teeth removed due to tooth decay or gum disease	30.2% (2009-11)	49.1% (2014)	38.4%
<b>Environmental Health</b>			
Increase the percentage of air monitor sites meeting the current ozone standard of 0.075 ppm	0*	95.6% (2011-13)	100%
Increase the percentage of the population being served by community water systems (CWS) with no maximum contaminant level violations (among persons on CWS)	County data not available	97.9% (2013)	95.0%
Reduce the mortality rate from work-related injuries (per 100,000 equivalent full-time workers)	County data not available	2.5 (2013)	3.5
<b>Infectious Disease and Foodborne Illness</b>			
Increase the percentage of children aged 19–35 months who receive the recommended vaccines	County data not available	76.6% (2013)	91.3%
Reduce the pneumonia and influenza mortality rate (per 100,000 population)	13.7	17.1 (2014)	13.5
Decrease the average number of critical violations per restaurant/food stand	1.9% (2014-15)	6.5 (2011)	5.5
<b>Social Determinants of Health</b>			
Decrease the percentage of individuals living in poverty	14.1%	18.6% (2013)	12.5%
Increase the four-year high school graduation rate	88%	85.4% (2014-15)	94.6%
Decrease the percentage of people spending more than 30 percent of their income on rental housing	53%	46.3% (2014)	36.1%
<b>Chronic Disease</b>			
Reduce the cardiovascular disease mortality rate (per 100,000 population)	182.6	216.5 (2014)	161.5
Decrease the percentage of adults with diabetes	7.3%	10.8% (2014)	8.6%
Reduce the colorectal cancer mortality rate (per 100,000 population)	10.9	14.2 (2014)	10.1
<b>Cross-cutting</b>			
Increase average life expectancy (years)	82	78.3 (2014)	79.5
Increase the percentage of adults reporting good, very good, or excellent health	93% (2015)*	81.0% (2014)	90.1%
Reduce the percentage of non-elderly uninsured individuals (aged less than 65 years)	15.3%	15.2% (2014)	8.0%
Increase the percentage of adults who are neither overweight nor obese	52.8% (2011)	34.4% (2014)	38.1%

**\*2015 Community Health Assessment Survey results:** 68% of respondents reported eating 5 or more cups of fruits and vegetables a week; 93% of respondents reported their general health as Excellent, Very Good, or Good

**\*Under Environmental Health:** There are no air monitor sites in Orange County

## **Appendix D: Community Health Assessment Team Members**

### CHA Leadership Team (CHALT)

The CHALT, known as the governing body, was made up of diverse individuals from the Orange County Health Department, UNC Hospital, United Way of the Greater Triangle, Cardinal Innovations, Orange County Board of Health, Piedmont Health Services, Orange County Schools, Chapel Hill – Carrboro City Schools, Freedom House Recovery Center, Orange County Emergency Management, Orange County Department on Aging, Orange County Board of County Commissioners, and Community Members.

- Ashley Mercer, Orange County Health Department
- Bernadette Pelissier, Orange County Board of County Commissioners
- Cindy Bucy, Cardinal Innovations
- Donna King, Orange County Health Department
- Dr. Collen Bridger, Orange County Health Department
- Janaki Nicastro, Freedom House Recovery Center
- Linda Joseph, Chapel Hill Carrboro City Schools
- Liska Lackey, Orange County Board of Health
- Michael Gilbert, Orange County Schools
- Mike Fliss, Community Member
- Misty Drake, Piedmont Health Services
- Myra Austin, Orange County Department on Aging
- Pam McCall, Orange County Health Department
- Spencer Lindgren, Orange County Emergency Management
- Suzanne Deobold, United Way of the Greater Triangle
- Tom Maltais, UNC Health Care

### Communication Team

The Communication Team was responsible for communication efforts around every aspect of the CHA process. This small group developed general and universal talking points and utilized professional and personal connections to reach various channels. The Communication Team included individuals from Freedom House Recovery Center, UNC Hospital, Piedmont Health Services, a Community Resident and the Health Department.

- Anne-Marie Vanaman, Freedom House Recovery Center
- Ashley Mercer, Orange County Health Department
- Debra Markley, Piedmont Health Services
- Donna King, Orange County Health Department
- Laura Wenzel, Community Resident
- Tom Maltais, UNC Health Care

### Community Engagement Team

The Community Engagement Team worked closely with the Communication Team and was responsible for ensuring that the true needs of the community were identified, accurately represented and addressed. The Community Engagement Team consisted of individuals from Cardinal Innovations, Orange County Board of Health, Orange County Emergency Management, Orange County Health Department, and Piedmont Health Services.

- Ashley Mercer, Orange County Health Department
- Cindy Bucy, Cardinal Innovations
- Donna King, Orange County Health Department
- Heather Miranda, Piedmont Health Services
- Liska Lackey, Orange County Board of Health
- Marni Holder, Piedmont Health Services
- Spencer Lindgren, Orange County Emergency Management
- Susan Clifford, Orange County Health Department
- Victoria Hudson, Orange County Health Department

### Data Team

The Data Team was responsible for identifying, collecting and analyzing primary and secondary data, designing the survey and geographic sampling, and integrating data into the final document. This team was made up of individuals from the Health Department, OC Information Technology, OC Planning, Carrboro Farmer's Market, and UNC Chapel Hill.

- Adrien Wilke, University of North Carolina at Chapel Hill
- Allison Young, Orange County Health Department
- Ashley Mercer, Orange County Health Department
- Bradley Saul, University of North Carolina at Chapel Hill
- Brennan Bouma, University of North Carolina at Chapel Hill
- Brian Carson, Orange County Planning
- Diana Sanchez, University of North Carolina at Chapel Hill
- Hardik Patel, Orange County Information Technology
- Jim Northrop, Orange County Information Technology
- Kristin Voltzke, University of North Carolina at Chapel Hill
- Margaret Krome-Lukens, Carrboro Farmer's Market
- Mike Fliss, Community Member
- Paula Strassle, University of North Carolina at Chapel Hill
- Rahul Gondalia, University of North Carolina at Chapel Hill

- Rebecca Stebbins, University of North Carolina at Chapel Hill

- Richard Wilson, Orange County Information Technology

## **Appendix E: Community Health Assessment Survey Volunteers**

1. Adair Smith
2. Anna Kenion
3. Asela Gillis-Alonso
4. Ashley DeSena
5. Barbara Pringle
6. Bono Sen
7. Camille Birkhead
8. Cathy Ferniany
9. Cathy York
10. Christine Rheem
11. Christy Bridges
12. Coby Jansen-Austin
13. Cynthia Bucy
14. Darlene Wirag
15. Deanna Bucy
16. Deanna Ryder
17. Donna King
18. Emily Earnest
19. Gary Barker
20. Hardik Patel
21. Irene Ferguson
22. Ishaan Pilant
23. Janaki Nicastro
24. Jean McDonald
25. Jennifer Sharpe
26. Jessica Salemo
27. Jessica Southwell
28. Jessica Young
29. Jirreney Colbert
30. Judy Butler
31. Jurate Sorensen
32. Kathleen Goodhand
33. Kendra Ferrell
34. Kristin Voltzke
35. Latitia Chavious
36. LaTosha Scott
37. LaToya Strange
38. Lela Nelson
39. Lindsey Urena
40. Lynn Hecht
41. Marne Meredith
42. Martha Workman
43. Matt Simon
44. Melissa Chua
45. Melissa Walter
46. Meredith McMonigle
47. Meredith Stewart
48. Michelle Robinson
49. Myra Austin
50. Pam McCall
51. Pat Casper
52. Patty Rhodes
53. Paula Craige
54. Rabiga Khozhamkul
55. Rebecca Crawford
56. Rhea Colmer
57. Ritza Saenz
58. Rongrong Qu
59. Samatha Croffut
60. Shelley Hoekstra
61. Steven Campbell
62. Susan Clifford
63. Susan Wagoner
64. Susan Ward
65. Tanika Reddon
66. Victoria Alonso
67. Xiaoming Gao
68. Teresa Martin

## **Appendix F: Map of Survey Locations**



**Appendix G: Notification Postcard Sent to Randomly Selected  
Households**



Healthy  
Carolinians  
of Orange  
County



**Orange County Health  
Department**  
300 W. Tryon St.  
Hillsborough, NC 27278

Place your  
stamp here

The Orange County Health Department needs your help in the 2015 Community Health Assessment process.

Teams of volunteers, clearly identified, will be visiting your neighborhood during the months of June and July with a brief survey. Your opinion matters.

Your answers to the survey will be used to pick health concerns that need more attention in our county.

For more information, or questions, please call 919.245.2440.

To:

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**Appendix H: 2015 Orange County Community Health Opinion Survey,  
English**



**2015 Orange County Community Health Opinion Survey**

Date	COMMENTS

	Description
€	No One Home
€	Language Barrier <input type="checkbox"/> Spanish <input type="checkbox"/> Other: _____ (Call back to complete? Provide phone number)
€	Ended Before Survey Completed (Call back to complete? Provide phone number)
€	No one in home eligible <ul style="list-style-type: none"> <li>▪ Under 18 years of age</li> <li>▪ Non-resident of Orange County</li> </ul>
€	Household Refusal
€	Unoccupied/Vacant/Demolished House
€	Selected Address Not a Household
€	Survey Completed <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> </ul>

**ADMIN ONLY**

**Follow Up?**

Phone Number:  
\_\_\_\_\_

Address:  
\_\_\_\_\_  
\_\_\_\_\_

Email:  
\_\_\_\_\_



## 2015 Orange County Community Health Opinion Survey

*READ THE FOLLOWING SECTION TO EACH POTENTIAL PARTICIPANT:*

Hello, I am \_\_\_\_\_ and this is \_\_\_\_\_ representing the Orange County Health Department *[SHOW BADGES]*. We are conducting a survey of our community to learn more about the health and quality of life in Orange County. Your response will help determine the direction of future programs for the health department and other agencies across the county. Maybe you remember a postcard that you should have gotten in the mail recently that described the survey *[SHOW LAMINATED POSTCARD]*.

Your address was one of many randomly selected from our county. The survey is completely voluntary, and it should take about 30 minutes to complete. There is no right or wrong answer. You may refuse to answer any question. Your answers will be completely confidential. The information you give us will not be linked to you in any way.

## NON-ENGLISH LANGUAGE RESPONDENTS ONLY

### IF RESPONDENT IS SPANISH-SPEAKING ONLY

*SHOW RESPONDENT THE MESSAGE BELOW ON LAMINATED SHEET AND OFFER A PEN TO WRITE DOWN THEIR PHONE NUMBER BELOW.*

We are conducting a community health survey. You may have received a postcard about this in the mail. Unfortunately, we do not have a Spanish-speaking interviewer available at this time, but if you would like to participate in the survey, please write your telephone number below and we can have a Spanish-speaking interviewer call you later. Thank you for understanding.

Phone Number: \_\_\_\_\_

*Estamos realizando una encuesta de la salud de la comunidad. Usted puede haber recibido una carta al respecto en el correo. Desafortunadamente en este momento no tenemos disponible a un entrevistador que hable español, pero si usted desea participar de la encuesta, por favor, escriba su número de teléfono aquí abajo y un entrevistador que hable español puede llamarle más tarde. Gracias por su comprensión.*

Número de teléfono: \_\_\_\_\_

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### IF RESPONDENT DOES NOT SPEAK ENGLISH OR SPANISH

*GIVE RESPONDENT A COPY OF THE POSTCARD IN ENGLISH. IF YOU CAN, ASK THEIR LANGUAGE AND RECORD BELOW.*

Language: \_\_\_\_\_

*READ THE FOLLOWING TO RESPONDENT AND OFFER A PEN TO WRITE DOWN THEIR PHONE NUMBER.*

We are conducting a community health survey. We are sorry that we do not have interviewers available today who speaks that language. If you would like someone to call you later, please write your phone number below.

Phone Number: \_\_\_\_\_

Would you be willing to participate?  YES  NO  
*(If NO, stop the survey here and thank him/her for his/her time.)*

**ELIGIBILITY**

Do you live in Orange County?  YES  NO  
*(If NO, stop the survey here and thank him/her for his/her time.)*

I will now begin asking questions. If you realize that you have already participated in this survey this year, let me know, and I can stop.

**BEGIN SURVEY**

**Community Improvement**

**Read: These first set of questions will ask about community problems, issues, and services that are important to you based on the topics selected for Healthy North Carolina 2020. In these questions, and all the ones that follow, there is no right or wrong answer. We are just interested in your honest opinion, based on what you have seen or experienced. Remember your choices will not be linked to you in any way.**

**1. All topics are important; choose the one(s) most important to you (*select all that apply*).**

- |   |   |
|---|---|
| <input type="checkbox"/> Tobacco Use  | <input type="checkbox"/> Infectious Disease & Foodborne Illness   |
| <input type="checkbox"/> Physical Activity & Nutrition                          | <input type="checkbox"/> Social Determinants of Health<br>(poverty, housing, homelessness,<br>graduation rates, unemployment,<br>uninsured) |
| <input type="checkbox"/> Injury & Violence                                      | <input type="checkbox"/> Chronic Disease  |
| <input type="checkbox"/> Maternal & Infant Health                               | <input type="checkbox"/> Cross-Cutting (life expectancy, years<br>lost, single parent households)   |
| <input type="checkbox"/> Sexually Transmitted Disease &<br>Unintended Pregnancy |   |
| <input type="checkbox"/> Substance Abuse  |   |
| <input type="checkbox"/> Mental Health  |   |
| <input type="checkbox"/> Oral Health  |   |
| <input type="checkbox"/> Environmental Health                                   |   |

**2. If you had to pick one issue, from the previous list, which would it be?**

- |  |   |
|--|---|
| <input type="checkbox"/> 1- Tobacco Use  | <input type="checkbox"/> 9- Environmental Health  |
| <input type="checkbox"/> 2- Physical Activity & Nutrition                          | <input type="checkbox"/> 10- Infectious Disease & Foodborne<br>Illness  |
| <input type="checkbox"/> 3- Injury & Violence                                      | <input type="checkbox"/> 11- Social Determinants of Health<br>(poverty, housing, homelessness,<br>graduation rates, unemployment,<br>uninsured) |
| <input type="checkbox"/> 4- Maternal & Infant Health                               | <input type="checkbox"/> 12- Chronic Disease  |
| <input type="checkbox"/> 5- Sexually Transmitted Disease &<br>Unintended Pregnancy | <input type="checkbox"/> 13- Cross-Cutting (life expectancy,<br>years lost, single parent households)   |
| <input type="checkbox"/> 6- Substance Abuse  |   |
| <input type="checkbox"/> 7- Mental Health  |   |
| <input type="checkbox"/> 8- Oral Health  |   |

## Health Information

**3. Where do you get most of your health-related information? (Choose only one.)**

- |  |  |
|--|--|
| <input type="radio"/> Friends and Family | <input type="radio"/> Health Department        |
| <input type="radio"/> Doctor/Nurse       | <input type="radio"/> Help Lines               |
| <input type="radio"/> Pharmacist         | <input type="radio"/> Books/Magazines          |
| <input type="radio"/> Church             | <input type="radio"/> Don't Know/Not Sure      |
| <input type="radio"/> Internet           | <input type="radio"/> Other _____              |
| <input type="radio"/> My Child's School  | <input type="radio"/> <b>Refused to Answer</b> |
| <input type="radio"/> Hospital           |  |

**4. In your opinion, what are the top three programs/services/issues for teens that should be a priority in this community? (Choose only three)**

- |  |   |
|--|---|
| <input type="radio"/> Dental hygiene                       | <input type="radio"/> Alcohol                   |
| <input type="radio"/> Nutrition                            | <input type="radio"/> Drug Abuse                |
| <input type="radio"/> Eating Disorders                     | <input type="radio"/> Reckless driving/speeding |
| <input type="radio"/> Asthma management                    | <input type="radio"/> Mental health issues      |
| <input type="radio"/> Diabetes management                  | <input type="radio"/> Suicide prevention        |
| <input type="radio"/> Tobacco including e-cigarettes       | <input type="radio"/> Other _____               |
| <input type="radio"/> Sexually Transmitted Diseases (STDs) | <input type="radio"/> <b>Refused to Answer</b>  |
| <input type="radio"/> Sex education                        |   |

## Personal Health

**5. Would you say that, in general, your health is...(Choose only one)**

- |                                 |  |
|---------------------------------|--|
| <input type="radio"/> Excellent | <input type="radio"/> Poor                     |
| <input type="radio"/> Very good | <input type="radio"/> Don't know/Not sure      |
| <input type="radio"/> Good      | <input type="radio"/> <b>Refused to Answer</b> |
| <input type="radio"/> Fair      |  |

**6. Have you ever been told by a doctor, nurse, or other health professional that you have any of the health conditions? (DK= Don't know/ Not sure; R= Refuse to answer)**

a. Asthma	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> DK	<input type="radio"/> R
b. Depression or anxiety	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> DK	<input type="radio"/> R
c. High Blood Pressure	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> DK	<input type="radio"/> R
d. High Cholesterol	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> DK	<input type="radio"/> R
e. Diabetes (not during pregnancy)	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> DK	<input type="radio"/> R
f. Osteoporosis	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> DK	<input type="radio"/> R
g. Overweight/Obesity	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> DK	<input type="radio"/> R
h. Heart Disease	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> DK	<input type="radio"/> R
i. Cancer	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> DK	<input type="radio"/> R

**7. Do you identify as Male or Female, or another way?**

- Male  Female  
 Another Way  Refused to Answer

**8. When it comes to Cancer screenings, have you ever had a.....(DK= Don't know/ Not sure; R= Refuse to answer, NA = Not Applicable/Does not apply)**

<b>Mammogram (Female)?</b> – An x-ray taken only of the breast by a machine that presses against the breast.	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> DK	<input type="radio"/> R	<input type="radio"/> NA
<b>PSA or DRE test (Male)?</b> – The prostate-specific antigen (PSA) test and digital rectal exam (DRE) are tests used to check men for prostate cancer.	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> DK	<input type="radio"/> R	<input type="radio"/> NA
<b>Blood Stool Test (Male/Female)?</b> – A test that may use a special kit at home to determine whether the stool contains blood.	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> DK	<input type="radio"/> R	<input type="radio"/> NA

**9. In the past 30 days, have there been any days when feeling sad or worried kept you from going about your normal business?**

- Yes  No  
 Don't Know/Not Sure  Refused to Answer

**10. During a normal week, other than in your regular job, how many days do you engage in any physical activity or exercise for at least a half an hour?**

- € Zero (0) days
- € One to two (1-2) days
- € Three to four (3-4) days
- € Five (5) or more days
- € Refused to Answer

**11. If you answered “zero days”, what are the reasons you do not exercise for at least half an hour for 3 or more days during a normal week? (Choose all that apply.)**

- € N/A: I answered more than zero (0) days
- € I don't have time.
- € It costs too much.
- € I don't have convenient exercise facilities.
- € I don't have child care.
- € There is no safe place to exercise.
- € I have no one to exercise with.
- € My job is physical or hard labor.
- € I don't like to exercise.
- € I'm too tired to exercise.
- € I'm physically disabled.
- € Exercise is not important to me.
- € Don't know/Not sure
- € Other \_\_\_\_\_
- € Refused to Answer

**12. Where do you go to exercise or engage in physical activity? (Check all that apply.)**

- € Gym or Recreation Center
- € Public Parks or Trails
- € Home
- € Work
- € Church
- € School
- € Daily Travel/Commute (i.e. walking/biking to work/school)
- € Other: \_\_\_\_\_
- € Refused to Answer

**13. Not counting lettuce salad or potato products, how many servings *per week* of fruits and vegetables would you say you eat?**

- € Five (5) or more cups
- € Three to four (3-4) cups
- € Two (2) or fewer cups
- € Never eat fruits/vegetables
- € Don't know/Not sure
- € Refused to Answer

**14. In the past month, did you ever cut the size of your meals, or skip meals, because there wasn't enough money for food?**

- € Yes
- € No
- € Refused to Answer

**15. During the past 12 months, have you had a seasonal flu vaccine?**

- € Yes, flu shot
- € Yes, flu spray
- € Yes, both
- € No
- € Don't Know/Not Sure
- € Refused to Answer

**16. About how much do you weigh without shoes?**

Weight: \_\_\_\_\_ pounds

Refused to Answer

**17. About how tall are you without shoes?**

Height: \_\_\_\_\_ feet \_\_\_\_\_ inches

Refused to Answer

**NOTE:** Body Mass Index (BMI) is a measure of body fat based on height and weight that applies to adult men and women.

### Environmental Health

**18. Have you been exposed to secondhand smoke in the past year?**

Yes

No.

Don't know/Not sure

Refused to Answer

**19. If yes, where do you think you are exposed to secondhand smoke most often? (Check all that apply)**

N/A; I am not exposed to secondhand smoke

Bars/Nightclubs

Home

Coffee Shops

Work

Public Places

Hospitals

Other: \_\_\_\_\_

Restaurants

Refused to Answer

School

**20. Do you currently smoke or use tobacco products, whether regularly or in social settings? (Products such as e-cigarettes, hookah, etc.)**

Yes

No

Refused to Answer

**21. If yes, where would you go for help first if you wanted to quit? (Choose only one.)**

N/A; I don't want to quit

Private Counselor/Therapist

Quit Line NC

Health Department

Doctor

Don't know/Not sure

Church/Minister

Other: \_\_\_\_\_

Pharmacy

Refused to Answer

## Access to Care

**22. Where do you go most often when you are sick? (Choose only one.)**

- |   |  |
|---|--|
| <input type="radio"/> Doctor's Office         | <input type="radio"/> Health Department        |
| <input type="radio"/> Hospital Emergency Room | <input type="radio"/> Piedmont Health Services |
| <input type="radio"/> Hospital Clinic         | <input type="radio"/> Other: _____             |
| <input type="radio"/> Urgent Care             | <input type="radio"/> Refused to Answer        |

**23. What is your primary health insurance plan? This is the plan which pays the medical bills first or pays most of the medical bills? (Please choose only one.)**

- |  |   |
|--|---|
| <input type="radio"/> No health plan of any kind   | <input type="radio"/> Medicare  |
| <input type="radio"/> The State Employee Health Plan   | <input type="radio"/> Medicaid or Carolina ACCESS or Health Choice 55 |
| <input type="radio"/> Blue Cross and Blue Shield of North Carolina                                     | <input type="radio"/> The military, Tricare, CHAMPUS, or the VA       |
| <input type="radio"/> Other private health insurance plan purchased from employer or workplace         | <input type="radio"/> The Indian Health Service                       |
| <input type="radio"/> Other private health insurance plan purchased directly from an insurance company | <input type="radio"/> Other (government plan)                         |
|  | <input type="radio"/> Don't know/Not sure                             |
|  | <input type="radio"/> Refused to Answer                               |

**24. Do you have children under the age of 19 for whom you are the caretaker? (Includes step-children, grandchildren, or other relatives).**

- |   |                          |
|---|--------------------------|
| <input type="radio"/> Yes               | <input type="radio"/> No |
| <input type="radio"/> Refused to Answer |                          |

**25. Have you ever had trouble getting medical care for the child(ren) you care for?**

- |   |  |
|---|--|
| <input type="radio"/> Yes               | <input type="radio"/> No                             |
| <input type="radio"/> Refused to Answer | <input type="radio"/> Not Applicable; Does not apply |

**26. If “yes”, why did you have trouble? (Choose all that apply)**

- N/A; Does not apply
- There are no doctors in my community
- My children don’t have health insurance or medical coverage
- I couldn’t afford it
- The doctors don’t accept Medicaid
- The doctors have strict late or “no-show” policies that make it difficult to stay with the practice
- It’s too hard to get to a doctor’s office
- The hours and days they are open is not convenient
- Other: \_\_\_\_\_
- Refused to Answer**

**27. In the past 12 months, did you have a problem getting the health care you needed for you personally or for a family member from any type of health care provider, dentist, pharmacy, or other facility?**

- Yes
- Don’t Know/Not Sure
- No
- Refused to Answer**

**28. If you said “yes,” what type of provider or facility did you or your family member have trouble getting health care from? (Choose all that apply).**

- N/A; Does not apply
- Dentist
- General practitioner
- Eye care/ optometrist/ ophthalmologist
- Pharmacy/ prescriptions
- Pediatrician
- OB/GYN
- Health department
- Hospital
- Urgent Care Center
- Medical Clinic
- Specialist: \_\_\_\_\_
- Refused to Answer**

**29. Concerning your issue of access, which of these problems prevented you or your family member(s) from getting the necessary health care? (Choose all that apply).**

- N/A; Does not apply
- No health insurance
- Insurance didn’t cover what I/we needed
- My/our share of the cost (deductible/co-pay) was too high
- Doctor would not take my/our insurance or Medicaid
- Hospital would not take my/our insurance
- No transportation get there
- Dentist would not take my/our insurance or Medicaid
- Pharmacy would not take my/our insurance or Medicaid
- Didn’t know where to go
- Couldn’t get an appointment
- The wait was too long
- Other: \_\_\_\_\_
- Refused to Answer**

**30. If a friend or family member needed counseling for a mental health or a drug/alcohol abuse problem, who would you tell them to talk to? (Choose all that apply).**

- |  |   |
|--|---|
| <input type="checkbox"/> Private counselor or therapist    | <input type="checkbox"/> Doctor                   |
| <input type="checkbox"/> Support group (e.g., AA, Al-Anon) | <input type="checkbox"/> Don't know/Not Sure      |
| <input type="checkbox"/> School counselor                  | <input type="checkbox"/> Other: _____             |
| <input type="checkbox"/> Minister/religious official       | <input type="checkbox"/> <b>Refused to Answer</b> |

### **Emergency Preparedness**

**31. Does your household have working smoke and carbon monoxide detectors? (Choose only one.)**

- |  |   |
|--|---|
| <input type="checkbox"/> Yes, smoke detectors only           | <input type="checkbox"/> No                       |
| <input type="checkbox"/> Yes, carbon monoxide detectors only | <input type="checkbox"/> Don't know/ Not sure     |
| <input type="checkbox"/> Yes, both                           | <input type="checkbox"/> <b>Refused to Answer</b> |

**32. What would be your main way of getting information from authorities in a large-scale disaster or emergency? (Check only one.)**

- |  |  |
|--|--|
| <input type="checkbox"/> Television                  | <input type="checkbox"/> Neighbors                             |
| <input type="checkbox"/> Radio                       | <input type="checkbox"/> Text message (emergency alert system) |
| <input type="checkbox"/> Internet                    | <input type="checkbox"/> Other: _____                          |
| <input type="checkbox"/> Print media (ex: newspaper) | <input type="checkbox"/> Don't know/ Not sure                  |
| <input type="checkbox"/> Social networking site      | <input type="checkbox"/> <b>Refused to Answer</b>              |

### **Demographic Questions**

**33. How old are you? \_\_\_\_\_**

**34. What is your race? (Please check all that apply.)**

- |  |   |
|--|---|
| <input type="checkbox"/> White   | <input type="checkbox"/> Pacific Islander including Native Hawaiian, Samoan, Guamanian/Chamorro |
| <input type="checkbox"/> Black or African American   | <input type="checkbox"/> Hispanic/Latino  |
| <input type="checkbox"/> American Indian or Alaska Native  | <input type="checkbox"/> Other: _____   |
| <input type="checkbox"/> South Asian, including Asian Indian, Sri Lankan, Pakistani, Nepalese, etc.  | <input type="checkbox"/> <b>Refused to Answer</b>   |
| <input type="checkbox"/> Other Asian including Japanese, Chinese, Korean, Vietnamese, and Filipino/a |   |

**35. Do you speak a language other than English at home?**

- Yes
- No
- Refused to answer
- If yes, what language do you speak at home? \_\_\_\_\_

**36. What is your marital status?**

- Never Married/Single
- Married
- Divorced
- Other
- Widowed
- Separated
- Unmarried partner
- Refused to answer

**37. What is the highest level of school, college or vocational training that you have finished? (Choose only one.)**

- Less than 9th grade
- 9-12th grade, no diploma
- High school graduate (or GED/ equivalent)
- Associate's Degree or Vocational Training
- Some college (no degree)
- Bachelor's degree
- Graduate or professional degree
- Other: \_\_\_\_\_
- Refused to answer

**38. What was your total household income last year, before taxes? Let me know which category you fall into. (Choose only one.)**

- Less than \$10,000
- \$10,000 to \$14,999
- \$15,000 to \$24,999
- \$25,000 to \$34,999
- \$35,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 or more
- Refused to answer

**39. How many people does this income support? (If you are paying child support but your child is not living with you, this still counts as someone living on your income.) \_\_\_\_\_**

**40. What is your employment status? (Choose all that apply.)**

- Employed full-time
- Employed part-time
- Retired
- Armed forces
- Unemployed for more than 1 year
- Unemployed for 1 year or less
- Disabled
- Student
- Homemaker
- Self-employed
- Refused to answer

**41. Do you have access to the Internet?**

Yes

Refused to Answer

No

**42. What ways do you access the internet? (Choose all that apply)**

Computer

Smart Phone

Tablet

Refused to Answer

Watch

**Thank you for your time answering these questions about health. The Orange County Health Department and Healthy Carolinians of Orange County will use the results of this survey to help address the major health and community issues in our county. After these results are ready, we will host community workshops, which you are invited to, to prioritize and decide on the most important county issues.**

**43. Would you like to be additionally contacted by email or phone when this happens?**

Yes

No

Don't Know/Not Sure

Refused to Answer

**Appendix I: 2015 Orange County Community Health Opinion Survey,  
Spanish**



**2015 Orange County Community Health Opinion Survey**  
**SPANISH VERSION / VERSIÓN EN ESPAÑOL**

Date	COMMENTS

	Description
€	No One Home
€	Language Barrier <input type="checkbox"/> Spanish <input type="checkbox"/> Other: _____ (Call back to complete? Provide phone number)
€	Ended Before Survey Completed (Call back to complete? Provide phone number)
€	No one in home eligible <ul style="list-style-type: none"> <li>▪ Under 18 years of age</li> <li>▪ Non-resident of Orange County</li> </ul>
€	Household Refusal
€	Unoccupied/Vacant/Demolished House
€	Selected Address Not a Household
€	Survey Completed <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> </ul>

**ADMIN ONLY**

---

**Follow Up?**

Phone Number  
 \_\_\_\_\_

Address:  
 \_\_\_\_\_  
 \_\_\_\_\_

Email:  
 \_\_\_\_\_

---



## Encuesta de opinión sobre la salud de la comunidad en el condado de Orange - 2015

***READ THE FOLLOWING SECTION TO EACH POTENTIAL PARTICIPANT:***

Buenos días/Buenas tardes, me llamo \_\_\_\_\_ y me acompaña \_\_\_\_\_.

Representamos al Departamento de Salud del Condado de Orange.

***[SHOW BADGES]*** Estamos haciendo una encuesta en nuestra comunidad para conseguir más información sobre la salud y la calidad de vida en el Condado de Orange. Sus respuestas ayudarán a determinar la dirección de los futuros programas del Departamento de Salud y de otras agencias a través de todo el condado. Quizás recuerde haber recibido recientemente en el correo, una carta que habla sobre esta encuesta. ***[SHOW LAMINATED POSTCARD]***.

El suyo es uno de los domicilios que se eligieron al azar en el condado. La encuesta es totalmente voluntaria y tardaremos unos 30 minutos en completarla. No hay respuestas correctas o incorrectas. Sus respuestas serán totalmente confidenciales. La información que nos dé no será relacionada con usted por ningún motivo.

## NON-ENGLISH LANGUAGE RESPONDENTS ONLY

### IF RESPONDENT IS SPANISH-SPEAKING ONLY

*SHOW RESPONDENT THE MESSAGE BELOW ON LAMINATED SHEET AND OFFER A PEN TO WRITE DOWN THEIR PHONE NUMBER BELOW.*

We are conducting a community health survey. You may have received a postcard about this in the mail. Unfortunately, we do not have a Spanish-speaking Interviewer available at this time, but if you would like to participate in the survey, please write your telephone number below and we can have a Spanish-speaking Interviewer call you later. Thank you for understanding.

Phone Number: \_\_\_\_\_

***Estamos realizando una encuesta de la salud de la comunidad. Usted puede haber recibido una carta al respecto en el correo. Desafortunadamente en este momento no tenemos disponible a un entrevistador que hable español, pero si desea participar en la encuesta, por favor, escriba su número de teléfono aquí abajo y un entrevistador que hable español puede llamarle más tarde. Gracias por su comprensión.***

***Número de teléfono:*** \_\_\_\_\_

---

### IF RESPONDENT DOES NOT SPEAK ENGLISH OR SPANISH

*GIVE RESPONDENT A COPY OF THE POSTCARD IN ENGLISH. IF YOU CAN, ASK THEIR LANGUAGE AND RECORD BELOW.*

**Language:** \_\_\_\_\_

*READ THE FOLLOWING TO RESPONDENT AND OFFER A PEN TO WRITE DOWN THEIR PHONE NUMBER.*

We are conducting a community health survey. We are sorry that we do not have interviewers available today who speaks that language. If you would like someone to call you later, please write your phone number below.

**Phone Number:** \_\_\_\_\_

¿Desea participar?  SÍ  NO

*(If NO, stop the survey here and thank him/her for his/her time.)*

**ELIGIBILITY**

¿Vive usted en el Condado de Orange?  SÍ  NO

*(If NO, stop the survey here and thank him/her for his/her time.)*

Ahora voy a empezar a hacer las preguntas. Si nota que usted ya ha participado este año en esta encuesta, dígame, y puedo detenerme.

**BEGIN SURVEY**

**Mejoras en la Comunidad**

**Read:** Estas primeras preguntas son sobre los problemas, asuntos y servicios en la comunidad que son importantes para usted en base a los temas seleccionados por Healthy North Carolina 2020. Para estas preguntas, al igual que para todas las preguntas a continuación, no hay respuestas correctas o incorrectas. Solo estamos interesados en conocer su honesta opinión, en base a sus vivencias y experiencias. Recuerde que la información que nos dé nunca será relacionada con usted por ningún motivo.

**1. Todos los temas son importantes; elija los que son más importantes para usted (Seleccione tantos como desee).**

- |  |  |
|--|--|
| € Uso de Tabaco                        | € Enfermedades Infecciosas y           |
| € Nutrición y Actividad Física         | Enfermedades Transmitidas por          |
| € Violencia y Lesiones                 | Alimentos                              |
| € Salud Maternal e Infantil            | € Determinantes Sociales de la Salud   |
| € Enfermedades de Transmisión Sexual y | (pobreza, vivienda, falta de vivienda, |
| Embarazo no Planeado                   | desempleo, tasas de graduación, falta  |
| € Abuso de Sustancias                  | de seguro médico)                      |
| € Salud Mental                         | € Enfermedades Crónicas                |
| € Salud Oral                           | € Temas-Transversales (esperanza de    |
| € Salud Ambiental                      | vida, años perdidos, hogares con solo  |
|  | uno de los padres)                     |

**2. Si tuviera que elegir solo uno de los anteriores temas, ¿Cuál elegiría?**

- |  |   |
|--|---|
| € 1- Uso de Tabaco   | € 10- Enfermedades Infecciosas y Enfermedades Transmitidas por Alimentos  |
| € 2- Nutrición y Actividad Física                              | € 11- Determinantes Sociales de la Salud (pobreza, vivienda, falta de vivienda, desempleo, tasas de graduación, falta de seguro médico) |
| € 3- Violencia y Lesiones                                      | € 12- Enfermedades Crónicas   |
| € 4- Salud Maternal e Infantil                                 | € 13- Temas-Transversales (esperanza de vida, años perdidos, hogares con solo uno de los padres)  |
| € 5- Enfermedades de Transmisión Sexual y Embarazo no Planeado |   |
| € 6- Abuso de Substancias                                      |   |
| € 7- Salud Mental  |   |
| € 8- Salud Oral  |   |
| € 9- Salud Ambiental   |   |

**Información sobre la Salud**

**3. ¿Dónde obtiene usted la mayoría de su información sobre la salud? (Elija solo uno.)**

- |                               |                               |
|-------------------------------|-------------------------------|
| € Amigos y Familiares         | € El Departamento de Salud    |
| € Médico/Enfermera            | € Líneas telefónicas de ayuda |
| € Farmacéutico                | € Libros/Revistas             |
| € Iglesia                     | € No lo sabe o no está seguro |
| € Internet                    | € Otro _____                  |
| € La escuela de su(s) hijo(s) | € <b>No desea contestar</b>   |
| € Hospital                    |                               |

**4. Según su opinión, ¿Cuáles son los tres principales programas o servicios para adolescentes y jóvenes que deben ser una prioridad en esta comunidad? (Elija solo tres)**

- |  |  |
|--|--|
| € Higiene Dental                           | € Alcohol                                |
| € Nutrición                                | € Abuso de drogas                        |
| € Enfermedades alimenticias                | € Manejo desordenado/exceso de velocidad |
| € Control del asma                         | € Problemas de salud mentales            |
| € Control de la diabetes                   | € Prevención de suicidio                 |
| € Tabaco                                   | € Otro _____                             |
| € Enfermedades de Transmisión Sexual (ETS) | € <b>No desea contestar</b>              |
| € Educación Sexual                         |  |

## Salud Personal

### 5. Diría usted que en general su salud es... (Elija solo uno)

- |                                 |   |
|---------------------------------|---|
| <input type="radio"/> Excelente | <input type="radio"/> Deficiente (Mala)         |
| <input type="radio"/> Muy Buena | <input type="radio"/> No lo sé/ No estoy seguro |
| <input type="radio"/> Buena     | <input type="radio"/> No desea contestar        |
| <input type="radio"/> Regular   |   |

### 6. ¿Le ha dicho un médico, enfermera u otro profesional de la salud que usted tiene alguna de estas condiciones de salud? (NS= No lo sabe o no está seguro; D= No desea contestar)

j. Asma	<input type="radio"/> Sí	<input type="radio"/> No	<input type="radio"/> NS	<input type="radio"/> D
k. Depresión o ansiedad	<input type="radio"/> Sí	<input type="radio"/> No	<input type="radio"/> NS	<input type="radio"/> D
l. Presión Alta	<input type="radio"/> Sí	<input type="radio"/> No	<input type="radio"/> NS	<input type="radio"/> D
m. Colesterol Alto	<input type="radio"/> Sí	<input type="radio"/> No	<input type="radio"/> NS	<input type="radio"/> D
n. Diabetes (no durante el embarazo)	<input type="radio"/> Sí	<input type="radio"/> No	<input type="radio"/> NS	<input type="radio"/> D
o. Osteoporosis	<input type="radio"/> Sí	<input type="radio"/> No	<input type="radio"/> NS	<input type="radio"/> D
p. Sobrepeso /Obesidad	<input type="radio"/> Sí	<input type="radio"/> No	<input type="radio"/> NS	<input type="radio"/> D
q. Enfermedad del Corazón	<input type="radio"/> Sí	<input type="radio"/> No	<input type="radio"/> NS	<input type="radio"/> D
r. Cáncer	<input type="radio"/> Sí	<input type="radio"/> No	<input type="radio"/> NS	<input type="radio"/> D

### 7. ¿Usted se identifica como Hombre, Mujer o de alguna otra manera?

- |                                      |  |
|--------------------------------------|--|
| <input type="radio"/> Hombre         | <input type="radio"/> Mujer              |
| <input type="radio"/> De otra manera | <input type="radio"/> No desea contestar |

### 8. En cuanto a exámenes de detección del cáncer, ¿Se ha realizado un o una... (NS= No lo sabe o no está seguro; D= No desea contestar; NA= No aplica)

<b>Mamografía (Mujeres)?</b> – Una radiografía solo de los senos en una máquina que se presiona contra los senos.	<input type="radio"/> Sí	<input type="radio"/> No	<input type="radio"/> NS	<input type="radio"/> D	<input type="radio"/> NA
<b>La prueba PSA o DRE (Hombres)?</b> – El examen de sangre del antígeno prostático específico (PSA) y el examen tacto rectal (DRE) - usados para revisar por cáncer de la próstata en los hombres.	<input type="radio"/> Sí	<input type="radio"/> No	<input type="radio"/> NS	<input type="radio"/> D	<input type="radio"/> NA
<b>Examen de sangre en las heces (Hombres y Mujeres)?</b> – Un examen que puede usar un paquete en casa para determinar si hay sangre en las heces.	<input type="radio"/> Sí	<input type="radio"/> No	<input type="radio"/> NS	<input type="radio"/> D	<input type="radio"/> NA

**9. En los últimos 30 días, ¿Han habido días, en los que no ha podido hacer sus actividades normales por sentirse triste o preocupado/a?**

- € Sí
- € No
- € No lo sabe o no está seguro
- € No desea contestar

**10. Ahora voy a preguntarle sobre su condición física. Durante una semana normal, además de en su trabajo regular, ¿Cuántos días realiza alguna actividad física o ejercicio por al menos media hora?**

- € Ningún día (0)
- € Cinco días o más (5 o +)
- € De uno a dos días (1-2)
- € No desea contestar
- € De tres a cuatro días (3-4)

**11. ¿A dónde va usted a hacer ejercicio o realizar una actividad física? (Marque todas las que apliquen.)**

- € Gimnasio o centro de recreación
- € Escuela
- € Parques o senderos públicos
- € Como parte de su desplazamiento diario/yendo de un lugar a otro (por ejemplo: va a su trabajo o escuela caminando o montando bicicleta)
- € En su casa
- € Otro: \_\_\_\_\_
- € En su trabajo
- € No desea contestar
- € Iglesia

**12. ¿Si contestó "cero días", cuáles son los motivos por los que no hace ejercicio al menos media hora 3 o más días en una semana normal? (Elija todas las que apliquen.)**

- € No tiene tiempo.
- € No le gusta el ejercicio.
- € Cuesta mucho dinero.
- € Está muy cansado para hacer ejercicio.
- € No tiene instalaciones para ejercicios que sean convenientes para usted.
- € Tiene un impedimento o discapacidad física que se lo impide.
- € No tiene cuidado para los niños.
- € El ejercicio no es importante para usted.
- € No hay un lugar que sea seguro para hacer ejercicio.
- € No lo sabe o no está seguro
- € No tiene con quien hacer ejercicio.
- € Otro \_\_\_\_\_
- € Su trabajo es físico o implica labor física.
- € No desea contestar

**13. Sin contar la lechuga, la ensalada o los productos con papa, ¿Cuántas servidas de frutas y vegetales piensa que come *por semana*?**

- € Cinco (5) o más tazas
- € Nunca come frutas o vegetales
- € Tres o cuatro (3-4) tazas
- € No lo sabe o no está seguro
- € Dos (2) o menos tazas
- € No desea contestar

**14. El mes pasado, ¿Alguna vez comió menos o dejó de comer porque no tenía suficiente dinero para obtener alimentos?**

- € Sí € No  
€ No desea contestar

**15. Ahora voy a preguntar sobre su vacuna contra la gripe o influenza. En los últimos 12 meses, ¿Le han puesto la vacuna contra la gripe estacional?**

- € Sí, la vacuna inyectable contra la gripe € No  
€ Sí, la vacuna en atomizador nasal € No lo sabe o no está seguro  
€ Sí, ambas € No desea contestar

**Cálculo del BMI (Índice de Masa Corporal)** – El Índice de Masa Corporal (BMI) es una manera de medir la grasa corporal basada en el peso y altura, y se aplica tanto a hombre y mujer.

**16. ¿Cómo cuánto pesa usted sin zapatos?**

Weight (peso): \_\_\_\_\_ pounds (en libras)

- € No desea contestar

**17. ¿Cómo cuánto mide usted sin zapatos?**

Height (altura): \_\_\_\_\_ feet (pies) \_\_\_\_\_ inches (pulgadas)

- € No desea contestar

### **Salud del Medio Ambiente**

**18. ¿En el pasado año, ha estado expuesto al humo de segunda mano?**

- € Sí € No.  
€ No lo sabe o no está seguro € No desea contestar

**19. Si contestó sí, ¿Dónde piensa que está expuesto al humo de segunda mano con más frecuencia? (Marque todas las que apliquen)**

- |                            |   |
|----------------------------|---|
| € Hogar                    | € Cafeterías/ Cafés   |
| € Trabajo                  | € Lugares Públicos  |
| € Hospitales               | € Otro: _____   |
| € Restaurantes             | € No Aplica; No estoy expuesto al humo de cigarro de segunda mano |
| € Escuela                  | € No desea contestar  |
| € Bares y Clubes Nocturnos |   |

**20. ¿Actualmente fuma o usa productos de tabaco, ya sea regularmente o en entornos sociales? (Productos como cigarrillos electrónicos, cachimba/hookah, etc.)**

- Sí  No  
 No desea contestar

**21. Si contestó sí, ¿Cuál sería el primer lugar a donde iría a buscar ayuda si quisiera dejar de fumar o consumir productos de tabaco? (Elija solo uno.)**

- Línea telefónica (Quit Line NC)  Departamento de Salud  
 Doctor  No lo sabe o no está seguro  
 Iglesia/Ministro religioso  Otro  
 Farmacia  Esta pregunta no aplica  
 Consejero o Terapeuta Privado  No desea contestar

### **Acceso a la Atención de Salud**

**22. ¿A dónde acude con más frecuencia cuando se enferma? (Elija solo uno.)**

- Consultorio Médico  Departamento de Salud  
 Sala o Cuarto de Emergencia del Hospital  Centro de Salud Comunitario Piedmont Health Services (Ejemplo: La Clínica de Carrboro o de Prospect Hill)  
 Clínica del Hospital  Otro: \_\_\_\_\_  
 Clínica de Cuidados de Urgencia  No desea contestar

**23. ¿Cuál es su principal seguro médico o plan de salud? ¿Es este el seguro o plan que paga las facturas médicas primero o paga la mayor parte de las facturas médicas? (Por favor elija solo uno.)**

- No tiene ningún plan de salud  Medicare  
 Plan de Salud de Empleados del Estado  Medicaid o Carolina ACCESS o Health Choice 55  
 Blue Cross y Blue Shield de Carolina del Norte  Plan para personal militar, Tricare, CHAMPUS, o VA  
 Otro plan de seguro médico privado adquirido a través de su empleador o lugar de trabajo  Indian Health Service  
 Otro plan de seguro médico privado adquirido directamente de una compañía de seguros  Otro (plan del gobierno)  
 No lo sabe o no está seguro  
 No desea contestar

**24. ¿Tiene niños menores de 19 años que dependen de usted? (Incluyendo hijastros, nietos u otros familiares).**

Sí

No

No desea contestar

**25. ¿Ha tenido alguna vez problemas para obtener atención médica para los menores que dependen de usted?**

Sí

No

No desea contestar

Esta pregunta no aplica

**26. Si contestó "Sí", por qué tuvo problemas? (Elija todas las que apliquen)**

No hay médicos en su comunidad

Es muy/demasiado difícil llegar a un consultorio médico

Sus niños no tienen seguro de salud o cobertura médica

Las horas y los días en que están abiertos no son convenientes

No podía pagar por la atención médica

Otro: \_\_\_\_\_

Los médicos no aceptan Medicaid

Esta pregunta no aplica

Los médicos tienen reglas estrictas sobre llegar tarde o "faltar a las citas" que hacen difícil poder continuar con estos médicos

No desea contestar

**27. En los últimos 12 meses, ¿Tuvo problemas para obtener la atención médica que necesitó para usted o para un miembro de la familia de cualquier tipo de proveedor médico, dentista, farmacia u otro centro?**

Sí

No

No lo sabe o no está seguro

No desea contestar

**28. Si contestó "Sí," ¿De cuál tipo de proveedor o centro, usted o el miembro de su familia, tuvo dificultad para obtener cuidados de salud? (Elija todas las que apliquen).**

Dentista

Departamento de Salud

Médico General

Hospital

Cuidado de la vista/ optómetra/ oftalmólogo

Centro de Cuidados de Urgencia

Farmacia/ prescripciones o recetas

Clínica Médica

Pediatra

Especialista: \_\_\_\_\_

Obstetra o ginecóloga

Esta pregunta no aplica

No desea contestar

**29. Con respecto al problema de acceso, ¿Cuáles de estos problemas impidieron que usted o algún miembro o miembros de su familia recibieran los cuidados de salud necesarios? (Elija todas las que apliquen).**

- |   |   |
|---|---|
| <input type="checkbox"/> No tenía seguro médico o de salud                                      | <input type="checkbox"/> El dentista no aceptaba su seguro o Medicaid |
| <input type="checkbox"/> El seguro no cubría lo que usted o su familia necesitaba               | <input type="checkbox"/> La farmacia no aceptaba su seguro o Medicaid |
| <input type="checkbox"/> La parte del costo que tenía que pagar (deducible/copago) era muy alto | <input type="checkbox"/> No sabía a dónde ir                          |
| <input type="checkbox"/> El médico no aceptaba su seguro o Medicaid                             | <input type="checkbox"/> No pudo conseguir una cita                   |
| <input type="checkbox"/> El hospital no aceptaba su seguro médico                               | <input type="checkbox"/> La espera fue demasiado larga                |
| <input type="checkbox"/> No tenía forma de llegar al médico                                     | <input type="checkbox"/> Otro: _____                                  |
|   | <input type="checkbox"/> Esta pregunta no aplica                      |
|   | <input type="checkbox"/> No desea contestar                           |

**30. ¿Si un amigo o miembro de la familia necesitara consejería para la salud mental o un problema de abuso de drogas o alcohol, con quién les diría que hable? (Elija todas las que apliquen).**

- |  |   |
|--|---|
| <input type="checkbox"/> Consejero o terapeuta privado         | <input type="checkbox"/> Médico                   |
| <input type="checkbox"/> Grupo de apoyo (ejemplo: AA. Al-Anon) | <input type="checkbox"/> No lo sé/No estoy seguro |
| <input type="checkbox"/> Consejero de la escuela               | <input type="checkbox"/> Otro: _____              |
| <input type="checkbox"/> Ministro u oficial religioso          | <input type="checkbox"/> No desea contestar       |

### **Preparación para Casos de Emergencia**

**31. ¿Tiene su casa detectores de humo y detectores de monóxido de carbono que funcionen? (Elija solo uno.)**

- |   |  |
|---|--|
| <input type="checkbox"/> Sí, solo detectores de humo                | <input type="checkbox"/> No                          |
| <input type="checkbox"/> Sí, solo detectores de monóxido de carbono | <input type="checkbox"/> No lo sabe o no está seguro |
| <input type="checkbox"/> Sí, ambos                                  | <input type="checkbox"/> No desea contestar          |

**32. ¿Cuál sería su principal forma de obtener información de las autoridades en caso de una emergencia o catástrofe de gran escala? (Elija solo uno.)**

- |  |   |
|--|---|
| <input type="checkbox"/> Televisión                          | <input type="checkbox"/> Vecinos  |
| <input type="checkbox"/> Radio                               | <input type="checkbox"/> Mensajes de texto (sistema de alerta de emergencias) |
| <input type="checkbox"/> Internet                            | <input type="checkbox"/> Otro: _____  |
| <input type="checkbox"/> Prensa escrita (ejemplo: periódico) | <input type="checkbox"/> No lo sabe o no está seguro                          |
| <input type="checkbox"/> Sitios de internet (redes) sociales | <input type="checkbox"/> No desea contestar                                   |

## Preguntas Demográficas

33. ¿Cuántos años tiene? \_\_\_\_\_

34. ¿De qué raza es usted? (Por favor marque todas las que apliquen.)

- |  |   |
|--|---|
| <input type="checkbox"/> Blanco  | <input type="checkbox"/> de las Islas del Pacífico incluyendo<br>Nativo Hawaiano, Samoano,<br>Guames/Chamorro |
| <input type="checkbox"/> Negro o afro-americano  | <input type="checkbox"/> Hispano/Latino   |
| <input type="checkbox"/> Nativo americano o nativo de Alaska   | <input type="checkbox"/> Otro: _____  |
| <input type="checkbox"/> del sur de Asia, incluyendo Indo-<br>asiático, Esrilanqués, Pakistani,<br>Nepalés, etc. | <input type="checkbox"/> No desea contestar   |
| <input type="checkbox"/> Otro Asiático incluyendo Japonés,<br>Chino, Coreano, Vietnamita, y<br>Filipino          |   |

35. ¿Habla en casa algún otro idioma además de inglés?

- |   |   |
|---|---|
| <input type="checkbox"/> Sí                 | <input type="checkbox"/> No   |
| <input type="checkbox"/> No desea contestar | <input type="checkbox"/> Si contestó Sí, ¿Qué otro idioma habla en<br>casa? _____ |

36. ¿Cuál es su estado civil?

- |   |   |
|---|---|
| <input type="checkbox"/> Nunca se ha casado/soltero | <input type="checkbox"/> Viudo                                    |
| <input type="checkbox"/> Casado                     | <input type="checkbox"/> Separado                                 |
| <input type="checkbox"/> Divorciado                 | <input type="checkbox"/> Vive con su pareja pero no están casados |
| <input type="checkbox"/> Otro                       | <input type="checkbox"/> No desea contestar                       |

37. ¿Cuál es el más alto nivel de educación escolar, universitario o entrenamiento vocacional que ha completado? (Elija solo uno.)

- |  |  |
|--|--|
| <input type="checkbox"/> Menos del noveno (9th) grado  | <input type="checkbox"/> Estudios Universitarios o de College<br>(sin haber obtenido un diploma) |
| <input type="checkbox"/> Entre el 9 al 12 grado, sin haber<br>obtenido un diploma                        | <input type="checkbox"/> Título universitario, Licenciatura                                      |
| <input type="checkbox"/> Obtuvo diploma del 12 <sup>avo</sup> grado<br>(High School) o equivalente (GED) | <input type="checkbox"/> Título de Postgrado o Professional                                      |
| <input type="checkbox"/> Diploma de 2 años de Universidad,<br>College o capacitación vocacional          | <input type="checkbox"/> Otro: _____   |
|  | <input type="checkbox"/> No desea contestar  |

**38. ¿Cuál fue el ingreso total de su familia el año pasado, antes de sacar los impuestos? Dígame en cuál de estas categorías estaría. (Elija solo una.)**

- |  |  |
|--|--|
| <input type="radio"/> Menos de \$10,000    | <input type="radio"/> \$50,000 to \$74,999 |
| <input type="radio"/> \$10,000 to \$14,999 | <input type="radio"/> \$75,000 to \$99,999 |
| <input type="radio"/> \$15,000 to \$24,999 | <input type="radio"/> \$100,000 o más      |
| <input type="radio"/> \$25,000 to \$34,999 | <input type="radio"/> No desea contestar   |
| <input type="radio"/> \$35,000 to \$49,999 |  |

**39. ¿Cuántas personas dependen de este ingreso? (Si está pagando manutención para niños pero su niño no vive con usted, esto aún cuenta como alguien viviendo de su ingreso.)\_\_\_\_\_**

**40. ¿Cuál es su situación laboral? (Elija todas las que apliquen.)**

- |  |   |
|--|---|
| <input type="radio"/> Empleado a tiempo completo     | <input type="radio"/> No puede trabajar debido a una enfermedad o incapacidad |
| <input type="radio"/> Empleado a medio tiempo        | <input type="radio"/> Estudiando  |
| <input type="radio"/> Retirado/Jubilado              | <input type="radio"/> Hace las labores del hogar en casa                      |
| <input type="radio"/> En las Fuerzas Armadas/Militar | <input type="radio"/> Trabajando por su cuenta                                |
| <input type="radio"/> Desempleado por más de 1 año   | <input type="radio"/> No desea contestar                                      |
| <input type="radio"/> Desempleado por menos de 1 año |   |

**41. ¿Tiene acceso a Internet?**

- |                          |  |
|--------------------------|--|
| <input type="radio"/> Sí | <input type="radio"/> No desea contestar |
| <input type="radio"/> No |  |

**42. ¿De qué formas tiene acceso al internet? (Elija todas las que apliquen)**

- |  |  |
|--|--|
| <input type="radio"/> Computadora      | <input type="radio"/> Teléfono celular (Smart Phone) |
| <input type="radio"/> Tableta (Tablet) | <input type="radio"/> No desea contestar             |
| <input type="radio"/> Reloj            |  |

**Gracias por su tiempo respondiendo estas preguntas acerca de la salud. El Departamento de Salud del Condado de Orange y Healthy Carolinians del Condado de Orange utilizarán los resultados de esta encuesta para ayudar a determinar cómo abordar los principales asuntos sobre la salud y la comunidad en nuestro condado. Una vez estén listos los resultados, realizaremos talleres comunitarios, a los cuales usted está invitado, para priorizar y decidir sobre los asuntos más importantes en el condado.**

**43. ¿Desea ser contactado adicionalmente, ya sea por email o por teléfono, cuando esto suceda?**

- |                          |  |
|--------------------------|--|
| <input type="radio"/> Sí | <input type="radio"/> No desea contestar |
| <input type="radio"/> No |  |

## **Appendix J: Focus Group Guide and Demographics, English**

# Orange County Community Health Assessment

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## *Focus Group Discussion Guide*

### INTRODUCTION

- Thank you for taking the time to join us today.
- INTRODUCE YOURSELF, NOTETAKER(S)

THE FOLLOWING SCRIPT IS FOR YOU TO SUMMARIZE. YOU DO NOT NEED TO READ IT WORD FOR WORD. YOU DO NEED TO COVER CONFIDENTIALITY AND THE RIGHT TO WITHDRAW WITHOUT PENALTY.

I am working with the Orange County Health Department and Healthy Carolinians of Orange County, and we are interested in learning about the health of Orange County residents. Today we would like to hear what you think about the overall health of your community (i.e. physical, mental, and environmental). The information that you share, information gathered from community surveys, other discussions and existing statistics, will help us plan future programs that better meet the needs of residents of Orange County.

No names will be attached to any of the information we collect. We will share what we learn with community and agency members during open forums in the fall. In the winter we will write a report about our county's health, to submit to the state. If you would like to be invited to a community forum, please write your name and contact information on the sign-up sheet. (INCLUDED WITH DEMOGRAPHICS SHEET)

While we talk today, I want you to feel free to share your opinions even if they are different from others and to react to each other's thoughts. There is no right or wrong answer. I am here to help facilitate the discussion and listen to what you have to say. (NOTETAKER'S NAME) \_\_\_\_\_ will be taking notes. If there are no objections, we will be recording this discussion to make sure we do not miss any comments. Try and speak up so the recorder can pick up your answer. After this discussion, we will listen to the recording and write down all of the responses, and then we will erase/destroy the recording. Since this is a group discussion, you do not have to wait for me to call on you to speak. Anything we say here is confidential. I ask that when you all leave today that you remember to respect others' privacy and not share any information outside of this discussion. We will talk for about 1 hour.

You are here because you voluntarily agree to participate in this group discussion. However, if for any reason you feel uncomfortable and do not want to continue in the discussion, you are free to withdraw at any time. This will not affect, in any way, the services you receive in the future from Orange County. Again, no names will be attached to the information that we collect. Is this OK with everyone?

(DO NOT CONTINUE UNTIL EVERYONE AGREES OR DISMISSES THEMSELVES. ONCE YOU ARE READY TO BEGIN, TURN ON THE RECORDER).

## OPENING

Let us start with introductions. One at a time, please introduce yourself and tell us how long you have lived in Orange County.

## INTRODUCTORY QUESTIONS

1. **Since we will be talking about health, what does being healthy mean to you, personally?**
  - *PROBE: Think about physical health. Mental health. Environmental health.*
2. **Another way to think about health is looking at the health of a community, not just individuals. To you, what would a healthy community look like?**
  - *PROBE: In a perfect world, how would you describe a perfect community?*
    - *Built Environment (sidewalks, crosswalks, bike lanes, etc.)*
    - *Safety*
    - *Access*
    - *Transportation/travel time*
    - *Housing*
    - *Employment*
    - *Schools*
    - *Recreation activities*
    - *Religion*
    - *Healthcare*

## TRANSITION QUESTIONS

3. **What do you think are the healthiest things about your physical community/Orange County?**
  - *:PROBE: parks/trails, recreation facilities, numerous medical facilities, farmer's markets?*
4. **Now, thinking about less healthy things, which things concern you the most about the health of your physical community/Orange County?**
  - *PROBE: Thinking about where you live, are there health issues that specifically concern you?*
    - *Tobacco use*
    - *Drug use*
    - *Violent crime*
    - *Alcohol*
    - *Low graduation rates*
    - *Lack of access to things such as: health care, grocery stores*
    - *Farmer's market*

## KEY QUESTIONS

*THE MOST TIME PROBING SHOULD BE SPENT ON THESE QUESTIONS. FOLLOW ANSWERS WITH PHRASES LIKE, "TELL ME MORE ABOUT..." OR "COULD YOU GIVE ME AN EXAMPLE..." OR "IN WHAT WAYS..."*

5. **Thinking about the people in your community, what are your main health concerns?**
  - *PROBE: physical, mental, environmental*
6. **Where do you go for health care services?**
  - *PROBE: The hospital, clinic, health department, other (cultural healers). What are the reasons for going/not going to those facilities?*
7. **Tell us about your own experience getting the help you need in Orange County.**
  - *PROBE: Positive experiences, challenges/barriers*
8. **Are there groups of people within your community whose healthcare needs seem to be overlooked, or not met?**
  - *PROBE: Who? Older adults, men, women, people who live in rural areas, etc. In what ways? Why do you think that might be?*
9. **Where do you and others in your community get most of your health information?**
  - *PROBE: TV, radio, internet? Experience or comfort level with technology?*
10. **In your neighborhoods/communities, is biking/walking to school encouraged or supported?**
  - *PROBE: Is it safe for students to walk/bike to school?*
    - i. *Are their bike lanes?*
    - ii. *Are schools close enough for students to bike/walk to school?*
    - iii. *Do you live by or off of major highways where biking/walking is not safe?*
    - iv. *Would you feel comfortable and safety for your students if they biked or walked to school alone?*
11. **Think back over all the topics we've discussed. If you were in charge, what specific things would you do to improve the health status of community members?**
  - *PROBE: What specific things do you wish that agencies were doing to help you and your community? Are there things you would do to improve people's access to care, health information, quality of care, subsidies/cost, types of services available?*

## ENDING QUESTIONS

12. **We want to make sure that the health programs in this community will help *you and your community*. With that in mind, 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?**

## CLOSING

14. **Questions from the notetaker(s)?**
  - Thank you!! **\*\*INCENTIVE FOR PARTICIPATION\*\***

## Demographic Information

---

Questions will only be reported as a summary of all answers given by focus group participants. Your individual answers will remain anonymous.

### Demographic Questions

1. How old are you? \_\_\_\_\_
  
2. What is your race? *(Please check all that apply.)*
  - € White
  - € Black or African American
  - € American Indian or Alaska Native
  - € South Asian, including Asian Indian, Sri Lankan, Pakistani, Nepalese, etc.
  - € Other Asian including Japanese, Chinese, Korean, Vietnamese, and Filipino/a
  - € Pacific Islander including Native Hawaiian, Samoan, Guamanian/Chamorro
  - € Hispanic/Latino
  - € Other: \_\_\_\_\_
  - € Refused to Answer
  
3. Do you speak a language other than English at home?
  - € Yes
  - € No
  - € Refused to answer
  - € If yes, what language do you speak at home? \_\_\_\_\_
  
4. What is your marital status?
  - € Never Married/Single
  - € Married
  - € Divorced
  - € Other
  - € Widowed
  - € Separated
  - € Unmarried partner
  - € Refused to answer
  
5. What is the highest level of school, college or vocational training that you have finished? *(Choose only one.)*
  - € Less than 9th grade
  - € 9-12th grade, no diploma
  - € High school graduate (or GED/ equivalent)
  - € Associate's Degree or Vocational Training
  - € Some college (no degree)
  - € Bachelor's degree
  - € Graduate or professional degree
  - € Other: \_\_\_\_\_
  - € Refused to answer

**6. What was your total household income last year, before taxes? Let me know which category you fall into. (Choose only one.)**

- |   |   |
|---|---|
| <input type="checkbox"/> Less than \$10,000   | <input type="checkbox"/> \$50,000 to \$74,999 |
| <input type="checkbox"/> \$10,000 to \$14,999 | <input type="checkbox"/> \$75,000 to \$99,999 |
| <input type="checkbox"/> \$15,000 to \$24,999 | <input type="checkbox"/> \$100,000 or more    |
| <input type="checkbox"/> \$25,000 to \$34,999 | <input type="checkbox"/> Refused to answer    |
| <input type="checkbox"/> \$35,000 to \$49,999 |   |

**7. How many people does this income support?** (If you are paying child support but your child is not living with you, this still counts as someone living on your income.) \_\_\_\_\_

**8. What is your employment status? (Choose all that apply.)**

- |  |  |
|--|--|
| <input type="checkbox"/> Employed full-time              | <input type="checkbox"/> Disabled          |
| <input type="checkbox"/> Employed part-time              | <input type="checkbox"/> Student           |
| <input type="checkbox"/> Retired                         | <input type="checkbox"/> Homemaker         |
| <input type="checkbox"/> Armed forces                    | <input type="checkbox"/> Self-employed     |
| <input type="checkbox"/> Unemployed for more than 1 year | <input type="checkbox"/> Refused to answer |
| <input type="checkbox"/> Unemployed for 1 year or less   |  |

**9. Do you have access to the Internet?**

- |                              |  |
|------------------------------|--|
| <input type="checkbox"/> Yes | <input type="checkbox"/> Refused to Answer |
| <input type="checkbox"/> No  |  |

**10. What ways do you access the internet? (Choose all that apply)**

- |                                   |  |
|-----------------------------------|--|
| <input type="checkbox"/> Computer | <input type="checkbox"/> Smart Phone       |
| <input type="checkbox"/> Tablet   | <input type="checkbox"/> Refused to Answer |
| <input type="checkbox"/> Watch    |  |

**11. What is your zip code?** \_\_\_\_\_

## Community Forum/Presentations

---

If you would like to be sent an invitation to the Community Forums/presentations in the Fall where we will present the data collected and begin prioritizing issues, please provide your name and contact information.

This information will be kept separate from the above questions/answers.

<b>Name</b>			
<b>Email Address</b>			
<b>Mailing Address</b>	Street Address:		
	City:	State:	Zip Code

**Appendix K: Focus Group Guide and Demographics, Spanish**

# Evaluación de Salud de la Comunidad del Condado de Orange

## Guía de Discusión del Grupo de Enfoque

### INTRODUCCIÓN

- Gracias por tomarse el tiempo para reunirse con nosotros hoy.
- PRESENTESE USTED Y A LAS PERSONAS QUE ESTÉN TOMANDO NOTAS Y GRABANDO

**EL SIGUIENTE ESCRITO ES PARA QUE LO RESUMA. NO ES NECESARIO LEERLO PALABRA POR PALABRA. NECESITA HABLAR SOBRE LA CONFIDENCIALIDAD Y EL DERECHO A RETIRARSE SIN SUFRIR CONSECUENCIAS.**

Estoy trabajando con el Departamento de Salud del Condado de Orange y Healthy Carolinians del Condado de Orange - y estamos interesados en aprender sobre la salud de los residentes del Condado de Orange. Hoy nos gustaría saber qué piensan acerca de la salud de su comunidad en general (por ejemplo física, mental y ambiental). La información que ustedes compartan, junto con información obtenida de las encuestas comunitarias, otros diálogos y las estadísticas existentes, nos ayudará a planear futuros programas que satisfagan mejor las necesidades de los residentes del Condado de Orange.

Ningún nombre será conectado con ninguna de la información que obtengamos. Compartiremos lo que aprendamos con miembros de comunidad y de la agencia durante foros abiertos en el otoño. En el invierno escribiremos un informe acerca de la salud de nuestro condado, para enviarlo al estado. Si desea ser invitado a un foro comunitario, por favor escriba su nombre y la información para ponerse en contacto con usted en la hoja de asistencia. (INCLUIDA CON LA HOJA DE INFORMACIÓN DEMOGRÁFICA)

Mientras hablamos, quiero que se sienta libre para compartir sus opiniones, incluso si son diferentes de las de los demás, y a responder a los pensamientos de otros. No hay respuestas correctas o incorrectas. Estoy aquí para ayudar a facilitar la discusión y escuchar lo que tienen que decir. (NOMBRE DE QUIEN ESTÁ TOMANDO NOTAS) \_\_\_\_\_ va a tomar notas. Si no hay objeciones, vamos a grabar esta discusión para asegurarnos de no perder ningún comentario. Trate de hablar de forma que la grabadora pueda recoger su respuesta. Después de esta discusión, vamos a escuchar la grabación y escribir todas las respuestas, luego vamos a borrar o destruir la grabación. Como se trata de una discusión de grupo, no tiene que esperar que yo se lo indique para hablar. Todo lo que digamos aquí es confidencial. Les pido que cuando se retiren, recuerden respetar la privacidad de los demás y no compartir ninguna de la información fuera de esta discusión. Vamos a hablar por cerca de una hora.

Ustedes están aquí porque voluntariamente aceptaron participar en esta discusión en grupo. Sin embargo, si por alguna razón se siente incómodo y no desea continuar en la discusión, usted es libre de retirarse en cualquier momento. Esto no afectará de ningún modo los servicios que reciba en el futuro del Condado de Orange. Una vez más, ningún nombre será conectado a la información que obtengamos. ¿Están todos de acuerdo?

**(NO CONTINÚE HASTA QUE TODOS ESTÉN DE ACUERDO O SE RETIRE EL QUE NO ESTÉ DE ACUERDO. CUANDO ESTÉ LISTO ENCIENDA LA GRABADORA.)**

## PREGUNTAS PRELIMINARES

Comencemos con las presentaciones. Uno a la vez, por favor, preséntese y díganos cuánto tiempo ha vivido en el Condado de Orange.

---

## PREGUNTAS DE INTRODUCCIÓN

1. Como vamos a hablar acerca de la salud, para usted, personalmente ¿qué significa, *ser saludable*?
  - **EXPLORACIÓN:** *Piense sobre salud física. Salud mental. Salud ambiental.*
2. Otra manera de pensar acerca de la salud es mirando la salud de la comunidad, no solo a los individuos. Para usted, ¿Cómo se vería una comunidad saludable?
  - *EXPLORACIÓN: En un mundo perfecto, ¿cómo describiría una comunidad perfecta? Medio ambiente construido (aceras, pasos peatonales, carriles para bicicletas, etc.)*
  - *Seguridad*
  - *Acceso*
  - *Transporte/tiempo del viaje*
  - *Vivienda*
  - *Empleo*
  - *Escuelas*
  - *Actividades recreativas*
  - *Religión*
  - *Cuidado de salud*

## PREGUNTAS DE TRANSICIÓN

3. Para usted, ¿cuáles son las cosas más saludables acerca de su comunidad física/el Condado de Orange?
  - **EXPLORACIÓN:** *parques/senderos, lugares de recreación, numerosas instalaciones médicas y mercados de agricultores/(farmer's markets).*
4. Ahora, pensando en cosas menos saludables, ¿Cuáles cosas le preocupan más acerca de la salud de su comunidad física/del Condado de Orange?
  - *EXPLORACIÓN: Piense a cerca de donde vive, ¿hay asuntos de salud que le preocupen específicamente? Uso de tabaco*
  - *Uso de drogas*
  - *Crimen violento*
  - *Alcohol*
  - *Baja tasa de graduación*
  - *Falta de acceso a cosas tale como: cuidados de salud, tiendas de comestibles*
  - *Mercados de agricultores*

## PREGUNTAS CLAVES

LA MAYORÍA DEL TIEMPO DE LA DISCUSIÓN DEBE SER USADO EN ESTAS PREGUNTAS. SIGA LAS RESPUESTAS CON FRASES COMO: “DÍGEME MÁS ACERCA DE...” O “PODRÍA DARME UN EJEMPLO...” O “DE QUE MANERAS...”

5. **Pensando en las personas en su comunidad, ¿cuáles son sus principales preocupaciones acerca de la salud?**
  - *EXPLORACIÓN: física, médica, dental, mental, nutricional, ambiental, seguro médico*
6. **¿A dónde va para sus servicios de salud?**
  - *EXPLORACIÓN: El hospital, una clínica, el departamento de salud, otro (curanderos o otros sanadores típicos de su cultura). ¿Cuáles son las razones por las que va o no va a esas instalaciones?*
7. **Díganos sobre su propia experiencia para conseguir la ayuda que necesita en el Condado de Orange.**
  - *EXPLORACIÓN: Las experiencias positivas, los desafíos/obstáculos*
  - *EXPLORACIÓN SI TIENE TIEMPO: ¿Qué hace que valga la pena su tiempo y esfuerzo para ir a una cita? (AYUDA) ¿Qué le impide ir a una cita? (BARRERA)*
8. **Díganos sobre su experiencia comunicándose con su proveedor de salud.**
  - *EXPLORACIÓN: ¿Cuándo está en una cita, su proveedor de salud se comunica bien con usted? ¿Puede comunicarle sus necesidades e ideas a su proveedor de salud? Dígame más al respecto.*
9. **¿Hay grupos de personas dentro de su comunidad cuyas necesidades de salud parecen haberse pasado por alto o no haber sido satisfechas?**
  - *EXPLORACIÓN: ¿Quién? Adultos mayores, hombres, mujeres, personas que viven en áreas rurales, etc. ¿De qué manera? ¿Por qué piensa que sucede eso?*
10. **¿Dónde obtiene usted y otros en su comunidad la mayoría de su información de salud?**
  - *EXPLORACIÓN: ¿La televisión, la radio, el Internet? ¿Experiencia o nivel de comodidad con la tecnología?*
11. **¿En sus barrios o comunidades se anima o apoya el ir a la escuela en bicicleta o caminando?**
  - *EXPLORACIÓN: ¿Es seguro para los estudiantes caminar o ir en bicicleta a la escuela?*
    - *¿Hay carriles para bicicleta?*
    - *¿Están las escuelas lo suficientemente cerca para que los estudiantes vayan en bicicleta o caminando?*
    - *¿Vive en o cerca de carreteras principales donde no es seguro caminar o andar en bicicleta?*
    - *¿Siente que es cómodo y hay seguridad para sus estudiantes si van en bicicleta o caminando solos a la escuela?*

**12. Piense sobre todos los temas que hemos discutido. Si estuviera a cargo, ¿Qué cosas específicas haría para mejorar el estado de salud de los miembros de la comunidad?**

- *EXPLORACIÓN: ¿Qué cosas concretas desea que las agencias hagan para ayudarle a usted y a su comunidad? ¿Hay cosas que usted haría para mejorar el acceso a la atención de salud, la información de salud, la calidad de la atención, las subvenciones/costo, los tipos de servicios disponibles?*

## **PREGUNTAS FINALES**

**13. Queremos estar seguros de que los programas de salud en esta comunidad le ayudarán a usted y a su comunidad. Con eso en mente, ¿Hay algo que no hemos preguntado o que le gustaría añadir?**

**14. ¿Tiene alguna pregunta sobre el proceso de la evaluación comunitaria?**

## **CONCLUSIÓN**

**15. ¿Hay preguntas de la(s) persona(s) que están tomando nota?**

- ¡¡Gracias!! **\*\*INCENTIVOS POR PARTICIPAR\*\***
- PIDA QUE COMPLETEN LAS HOJAS DE INFORMACIÓN DEMOGRÁFICA Y LAS COSAS DE LA RIFA

## Información Demográfica

---

Las preguntas solo serán reportadas como un resumen de todas las respuestas recibidas de los participantes del grupo de enfoque. Sus respuestas permanecerán anónimas.

**1. ¿Cuántos años tiene? (Marque la categoría que corresponde a su edad.)**

- |                                |                                     |
|--------------------------------|-------------------------------------|
| <input type="checkbox"/> 18-24 | <input type="checkbox"/> 55-64      |
| <input type="checkbox"/> 25-34 | <input type="checkbox"/> 65-74      |
| <input type="checkbox"/> 35-44 | <input type="checkbox"/> 75 o mayor |
| <input type="checkbox"/> 45-54 |                                     |

**2. ¿Usted se identifica como Hombre o Mujer, o de otra manera?**

- |   |                                |
|---|--------------------------------|
| <input type="checkbox"/> Hombre         | <input type="checkbox"/> Mujer |
| <input type="checkbox"/> De otra manera |                                |

**3. ¿De qué raza es usted? (Por favor marque todas las que apliquen.)**

- |  |   |
|--|---|
| <input type="checkbox"/> Blanco  | <input type="checkbox"/> De las islas del Pacífico incluyendo<br>Nativo Hawaiano, Samoano,<br>Guames/Chamorro |
| <input type="checkbox"/> Negro o Afro-Americano  | <input type="checkbox"/> Hispano/Latino   |
| <input type="checkbox"/> Nativo Americano o Nativo de Alaska   | <input type="checkbox"/> Otro: _____  |
| <input type="checkbox"/> Del sur de Asia, incluyendo Indo-<br>asiático, Esrilanqués, Pakistaní,<br>Nepalés, etc. |   |
| <input type="checkbox"/> Otro Asiático incluyendo Japonés,<br>Chino, Coreano, Vietnamita, y<br>Filipino          |   |

**4. ¿Habla en casa algún otro idioma además de inglés?**

- |                             |   |
|-----------------------------|---|
| <input type="checkbox"/> Sí | <input type="checkbox"/> Sí contestó sí, ¿qué idioma habla en casa? |
| <input type="checkbox"/> No | _____   |

**5. ¿Cuál es su estado civil?**

- |   |   |
|---|---|
| <input type="checkbox"/> Nunca se ha casado/Soltero | <input type="checkbox"/> Viudo                                    |
| <input type="checkbox"/> Casado                     | <input type="checkbox"/> Separado                                 |
| <input type="checkbox"/> Divorciado                 | <input type="checkbox"/> Vive con su pareja pero no están casados |
| <input type="checkbox"/> Otro                       |   |

**6. ¿Cuál es el más alto nivel de educación escolar, universitario o de entrenamiento vocacional que usted completó? (Elija solo uno.)**

- |  |   |
|--|---|
| <input type="checkbox"/> Menos del noveno (9 <sup>no</sup> ) grado                             | <input type="checkbox"/> Estudios universitarios o de College sin haber obtenido un diploma |
| <input type="checkbox"/> Grados del 9 al 12 <sup>avo</sup> , sin haber obtenido un diploma     | <input type="checkbox"/> Título universitario/Licenciatura                                  |
| <input type="checkbox"/> Terminó 12 años de educación y obtuvo un diploma (o GED/ equivalente) | <input type="checkbox"/> Título de postgrado o Profesional                                  |
| <input type="checkbox"/> Diploma universitario de dos años o Capacitación Vocacional           | <input type="checkbox"/> Otro: _____  |

**7. ¿Cuál fue el ingreso total de su familia el año pasado, antes de sacar los impuestos? Indique en que categoría está usted. (Elija solo una.)**

- |  |  |
|--|--|
| <input type="checkbox"/> Menos de \$10,000   | <input type="checkbox"/> \$50,000 a \$74,999 |
| <input type="checkbox"/> \$10,000 a \$14,999 | <input type="checkbox"/> \$75,000 a \$99,999 |
| <input type="checkbox"/> \$15,000 a \$24,999 | <input type="checkbox"/> \$100,000 o más     |
| <input type="checkbox"/> \$25,000 a \$34,999 | <input type="checkbox"/> No desea contestar  |
| <input type="checkbox"/> \$35,000 a \$49,999 |  |

**8. ¿Cuántas personas dependen de este ingreso? (Sí está pagando manutención para niños pero su niño o niña no vive con usted, aun así cuenta como alguien viviendo de su ingreso.)\_\_\_\_\_**

**9. ¿Cuál es su situación laboral? Voy a leer una lista de opciones. Dígame cuales aplican a usted. (Elija todas las que apliquen.)**

- |  |   |
|--|---|
| <input type="checkbox"/> Empleado a tiempo completo              | <input type="checkbox"/> Desempleado por menos de un año    |
| <input type="checkbox"/> Empleado a tiempo parcial/ medio tiempo | <input type="checkbox"/> Incapacitado                       |
| <input type="checkbox"/> Retirado/ Jubilado                      | <input type="checkbox"/> Estudiante                         |
| <input type="checkbox"/> En las Fuerzas Armadas / Militar        | <input type="checkbox"/> Hace las labores del hogar en casa |
| <input type="checkbox"/> Desempleado por más de un año           | <input type="checkbox"/> Trabaja por cuenta propia          |

**10. ¿Tiene acceso al Internet?**

- |   |                             |
|---|-----------------------------|
| <input type="checkbox"/> Si                     | <input type="checkbox"/> No |
| <input type="checkbox"/> No Sabe/No Está Seguro |                             |

**11. ¿De qué maneras tiene acceso al Internet? (Elija todas las que apliquen)**

- |  |   |
|--|---|
| <input type="checkbox"/> Computadora de Alta Velocidad | <input type="checkbox"/> Reloj                          |
| <input type="checkbox"/> Tablet                        | <input type="checkbox"/> Teléfono Celular (Smart Phone) |

**12. ¿Cuál es su Código Postal (zip code)? \_\_\_\_\_**

## Foro de la Comunidad/Presentaciones

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Sí desea que le envíen una invitación para el Foro Comunitario/ La presentación en el otoño donde vamos a presentar los resultados y a empezar a dar un orden de prioridad a los asuntos, por favor denos su nombre y la información para contactarle.

Esta información se mantendrá separada de las preguntas y respuestas anteriores.

<b>Nombre</b>			
<b>Dirección de Correo Electrónico</b>			
<b>Dirección Postal</b>	Dirección:		
	Ciudad:	Estado:	Código Postal

## **Appendix L: Youth Focus Group Guide and Demographic**

# Orange County Community Health Assessment

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## *Focus Group Discussion Guide*

### INTRODUCTION

- Thank you for taking the time to join us today.
- INTRODUCE YOURSELF, NOTETAKER(S)

THE FOLLOWING SCRIPT IS FOR YOU TO SUMMARIZE. YOU DO NOT NEED TO READ IT WORD FOR WORD. YOU DO NEED TO COVER CONFIDENTIALITY AND THE RIGHT TO WITHDRAW WITHOUT PENALTY.

I am working with the Orange County Health Department and Healthy Carolinians of Orange County, and we are interested in learning about the health of Orange County residents. Today we would like to hear what you think about the overall health of your community (i.e. physical, mental, and environmental). The information that you share, information gathered from community surveys, other discussions and existing statistics, will help us plan future programs that better meet the needs of residents of Orange County.

No names will be attached to any of the information we collect. We will share what we learn with community and agency members during open forums in the fall. In the winter we will write a report about our county's health, to submit to the state. If you would like to be invited to a community forum, please write your name and contact information on the sign-up sheet. (INCLUDED WITH DEMOGRAPHICS SHEET)

While we talk today, I want you to feel free to share your opinions even if they are different from others and to react to each other's thoughts. There is no right or wrong answer. I am here to help facilitate the discussion and listen to what you have to say. (NOTETAKER'S NAME) \_\_\_\_\_ will be taking notes. If there are no objections, we will be recording this discussion to make sure we do not miss any comments. Try and speak up so the recorder can pick up your answer. After this discussion, we will listen to the recording and write down all of the responses, and then we will erase/destroy the recording. Since this is a group discussion, you do not have to wait for me to call on you to speak. Anything we say here is confidential. I ask that when you all leave today that you remember to respect others' privacy and not share any information outside of this discussion. We will talk for about 1 hour.

You are here because you voluntarily agree to participate in this group discussion. However, if for any reason you feel uncomfortable and do not want to continue in the discussion, you are free to withdraw at any time. This will not affect, in any way, the services you receive in the future from Orange County. Again, no names will be attached to the information that we collect. Is this OK with everyone?

**(DO NOT CONTINUE UNTIL EVERYONE AGREES OR DISMISSES THEMSELVES. ONCE YOU ARE READY TO BEGIN, TURN ON THE RECORDER).**

## OPENING

Let us start with introductions. One at a time, please introduce yourself and tell us what you like most about living in Orange County.

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## INTRODUCTORY QUESTIONS

15. Since we will be talking about health, what does being healthy mean to you, personally?
  - **PROBE: Think about physical health. Mental health. Environmental health.**
16. What type of things makes Orange County healthy?
  - *PROBE: parks/trails, recreation facilities, plenty of medical facilities, farmer's markets?*
17. Now, thinking about less healthy things, which things concern you the most about the health of Orange County?
  - *PROBE: Thinking about where you live, are their health issues that specifically concern you?*
    - Tobacco use
    - Drug use
    - Crime
    - Alcohol
    - Low graduation rates
    - Suicide

## TRANSITION QUESTIONS

18. Do you see a lot of “unhealthy behavior” among people your age?
  - *PROBE: Things like unsafe sexual activities, drug use, bullying, skipping school, suicide, etc.*
19. Among those things, what do people your age engage in the most?
  - *PROBE: Is there one thing that is more common than others? (I.e. tobacco use, drinking, prescription drug sharing, sexual activities, etc.)*

## KEY QUESTIONS

**THE MOST TIME PROBING SHOULD BE SPENT ON THESE QUESTIONS. FOLLOW ANSWERS WITH PHRASES LIKE, “TELL ME MORE ABOUT...” OR “COULD YOU GIVE ME AN EXAMPLE...” OR “IN WHAT WAYS...”**

20. Where do people your age get drugs?
  - *PROBE: Alcohol, marijuana, prescription drugs, tobacco (chewing, cigarettes)?*

21. **How easy is it for people your age to get drugs from those places that you just mentioned?**
  - *PROBE: Do they get it from people in school, from parents or adults, from other students/peers?*
22. **What makes people your age want to do drugs, of any kind?**
  - *PROBE: Peer pressure, family members doing it, stress, boredom, etc.?*
23. **What are some of the things that can happen to people your age if they use drugs?**
  - *PROBE: Think about things like overdose, alcohol poison, car wrecks, hospital visits.*
24. **How do parents, and other adults in your community, feel about people your age drinking and doing other drugs?**
  - *PROBE: Do they know, and if so, what do they do to try and stop it?*
    - *Do they talk to you about it?*
    - *Do they not care if you are at home with them?*
25. **Do people your age care about the health of the community?**
  - *PROBE: Do people your age engage in clubs or educate their peers to help prevent things like smoking, drinking, or using drugs to improve health?*
26. **Are people your age physically active?**
  - *PROBE: What type of activities do they engage in? Are they mainly traditional school sports or do people your age engage in activities that are not the traditional sports?*
27. **If biking/walking to school was the norm, would you choose to bike and/or walk to school?**
  - *PROBE: Would you prefer to bike or walk versus riding the bus or getting dropped off?*
    - *Would your parents let you?*
    - *Would you feel safe to bike/walk alone or would you prefer to have an adult or parent with you?*
28. **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 your community?**
  - *PROBE: What specific things do you wish that agencies were doing to help you and your community? Are there things you would do to improve people's access to care, health information, quality of care, subsidies/cost, types of services available?*

## ENDING QUESTIONS

29. **Is there anything that we have not asked or that you would like to add?**
30. **Do you have any questions about the community health assessment process?**

## CLOSING

31. **Questions from the note taker(s)?**
  - Thank you!! **\*\*INCENTIVE FOR PARTICIPATION\*\***



## Healthy Carolinians of Orange County Youth Survey and Focus Group Questions

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***We want to know a few things about you, your thoughts and opinions. All responses are completely confidential, so please be honest when answering.***

**1. I go to...**

Carrboro High School .....	<input type="checkbox"/> 1
Chapel Hill High School .....	<input type="checkbox"/> 2
East Chapel Hill High School.....	<input type="checkbox"/> 3

**2. I am a...**

Freshman.....	<input type="checkbox"/> 1
Sophomore.....	<input type="checkbox"/> 2
Junior.....	<input type="checkbox"/> 3
Senior .....	<input type="checkbox"/> 4

**3. I am...**

Male .....	<input type="checkbox"/> 1
Female.....	<input type="checkbox"/> 2

**4. I am...**

13.....	<input type="checkbox"/> 2
14.....	<input type="checkbox"/> 3
15.....	<input type="checkbox"/> 4
16.....	<input type="checkbox"/> 5
17.....	<input type="checkbox"/> 6
18 or older.....	<input type="checkbox"/> 7

**5. I am... (Select all that apply.)**

American Indian or Alaska Native .....	<input type="checkbox"/> 1
Asian .....	<input type="checkbox"/> 1
Black or African American .....	<input type="checkbox"/> 1
Hispanic or Latino .....	<input type="checkbox"/> 1
Native Hawaiian or other Pacific Islander .....	<input type="checkbox"/> 1
White .....	<input type="checkbox"/> 1

**6. My parent(s) talk to me about...**

	<u>Never</u>	<u>Seldom</u>	<u>Sometimes</u>	<u>Frequently</u>	<u>Always</u>
a. Staying away from alcohol.....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
b. Staying away from tobacco (including cigarettes, chewing tobacco, e-cigarettes, hookah, etc.).....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
c. Staying away from prescription drugs that are not prescribed to me .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

	<u>Never</u>	<u>Seldom</u>	<u>Sometimes</u>	<u>Frequently</u>	<u>Always</u>
d. Staying away from other harmful drugs (i.e. marijuana, heroin, etc.).....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
e. Abstinence and/or safe sex.....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>

**7. How much trouble would a student get into if they were caught with...**

	<u>Not at All</u>	<u>Not Much</u>	<u>Some</u>	<u>A lot</u>
a. Alcohol at school or at a school event? .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
b. A prescription drug not prescribed to them at school or a school event? .....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
c. Tobacco products at school or at a school event?.....	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>
d. Any harmful drug or substance at school or at a school event?.....				

***Thank you for completing this survey.  
We really appreciate your help.***

## **Appendix M: Community Listening Session Flyers, English and Spanish**

# Community Listening Sessions

Are you interested in improving the health of our community?

Join us for a Community Listening Session to share your thoughts.

## Together we will:

- Learn about what was found in conversations with neighbors during the 2015 Community Health Assessment.
- Discuss your concerns with people who work in government and the health department.
- Help decide what health issues are the most important for the Healthy Carolinians of Orange County Partnership.
- Map out next steps toward a plan that improves the health of the whole community.

**Compliance with the “Americans with Disabilities Act” and Title VI** - Interpreter services and/or special sound equipment are available on request. Call the Immigrant and Refugee Health Program Manager at 919.245.2387 to request an interpreter or other accommodation.

**Conforme a la “Ley sobre Estadounidenses con Discapacidades” (ADA) y el Título VI** – los servicios de intérprete y/o equipo de sonido especial están disponibles a solicitud. Llame a la Administradora del Programa de Salud para Inmigrantes y Refugiados al 919-245-2387 para solicitar un intérprete u otros arreglos o adaptaciones.

## Listening Session Dates

### 1 Rogers Road Community Center

Date: Saturday, October 3  
Time: 1:00p – 3:00p  
Address: 101 Edgar Street. Chapel Hill, 27516

### 2 Frank Porter Graham Elementary

Date: Monday, October 5  
Time: 6:00p – 8:00p  
Address: 101 Smith Level Rd. Chapel Hill, 27516

### 3 Mt. Zion AME Church

Date: Tuesday, October 6  
Time: 4:00p – 6:00p  
Address: 5124 NC Hwy 86 N. Hillsborough, 27278

### 4 UNC Hospital – Hillsborough Campus

Date: Tuesday, October 20  
Time: 4:00p – 6:00p  
Address: 430 Waterstone Dr. Hillsborough, 27278

### 5 Efland-Cheeks Community Center

Date: Thursday, October 22  
Time: 6:00p – 8:00p  
Address: 117 Richmond Road. Efland, 27302

**FREE DINNER SERVED!**



# Reuniones para Escuchar a la Comunidad

¿Le interesa mejorar la salud de su comunidad?

Venga a una de las Reuniones para Escuchar a la Comunidad y comparta sus ideas y pensamientos.

## Lo que haremos juntos:

- Aprender sobre lo que descubrimos en las conversaciones con los vecinos durante la Evaluación de Salud en la Comunidad del 2015.
- Hablar sobre sus preocupaciones con personas que trabajan en el gobierno y en el Departamento de Salud.
- Ayudar a decidir cuáles temas de salud son los más importantes para la Alianza Healthy Carolinians del Condado de Orange
- Crear los pasos siguientes hacia un plan para mejorar la salud de toda la comunidad

**Compliance with the “Americans with Disabilities Act” and Title VI** - Interpreter services and/or special sound equipment are available on request. Call the Immigrant and Refugee Health Program Manager at 919.245.2387 to request an interpreter or other accommodation.

**Conforme a la “Ley sobre Estadounidenses con Discapacidades” (ADA) y el Título VI** – los servicios de intérprete y/o equipo de sonido especial están disponibles a solicitud. Llame a la Administradora del Programa de Salud para Inmigrantes y Refugiados al 919-245-2387 para solicitar un intérprete u otros arreglos o adaptaciones.

**¡HABRÁ CENA GRATIS!**

Fechas de las Reuniones	
<b>1</b>	<b>Centro Comunitario Rogers Road</b> Fecha: Sábado, 3 de octubre Hora: de 1:00pm a 3:00pm Dirección: 101 Edgar Street. Chapel Hill, 27516
<b>2</b>	<b>Primaria de Frank Porter Graham</b> Fecha: Lunes, 5 de octubre Hora: de 6:00pm a 8:00pm Dirección: 101 Smith Level Rd. Chapel Hill, 27516
<b>3</b>	<b>Iglesia AME Mt. Zion</b> Fecha: Martes, 6 de octubre Hora: de 4:00pm a 6:00pm Dirección: 5124 NC Hwy 86 N. Hillsborough, 27278
<b>4</b>	<b>Hospital UNC – ubicado en Hillsborough</b> Fecha: Martes, 20 de octubre Hora: de 4:00pm a 6:00pm Dirección: 430 Waterstone Dr. Hillsborough, 27278
<b>5</b>	<b>Centro Comunitario Efland-Cheeks</b> Fecha: Jueves, 22 de octubre Hora: de 6:00pm a 8:00pm Dirección: 117 Richmond Road. Efland, NC 27302



## **Appendix N: References:**

- 
- <sup>1</sup> U.S. Census Bureau (2015). State and County Quick Facts. Retrieved from <http://quickfacts.census.gov/qfd/states/37/37135.html>
- <sup>2</sup> North Carolina Department of Commerce. (2015). AccessNC County Profile. North Carolina Economic Data and Site Information. Retrieved from <http://accessnc.commerce.state.nc.us/docs/countyProfile/NC/37135.pdf>.
- <sup>3</sup> <http://www.census.gov/quickfacts/table/PST045215/3710620,3711800,3731620>
- <sup>4</sup> U.S. Census Bureau (2015). State and County Quick Facts. Retrieved from <http://quickfacts.census.gov/qfd/states/37/37135.html>.
- <sup>5</sup> <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>
- <sup>6</sup> US Census Bureau (2010). Detailed Hispanic or Latino Origin, and Asian Population. Retrieved from [http://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml#none](http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml#none).
- <sup>7</sup> Orange County Health Department (2005-2015). Refugee Screening Logs.
- <sup>8</sup> American Community Survey (2010-2014). 5-Year Estimates. Retrieved from [http://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml#none](http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml#none).
- <sup>9</sup> Orange County NC Genealogy (2010). Orange County, NCGenWeb. Retrieved from <http://ncgenweb.us/nc/orange/>.
- <sup>10</sup> Felitti et al. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. American Journal of Preventive Medicine. Retrieved from [http://www.ajpmonline.org/article/S0749-3797\(98\)00017-8/abstract](http://www.ajpmonline.org/article/S0749-3797(98)00017-8/abstract).
- <sup>11</sup> Child Trends report "Adverse Childhood Experiences: National and State-Level Prevalence" Retrieved from [http://www.childtrends.org/wp-content/uploads/2014/07/Brief-adverse-childhood-experiences\\_FINAL.pdf](http://www.childtrends.org/wp-content/uploads/2014/07/Brief-adverse-childhood-experiences_FINAL.pdf).
- <sup>12</sup> Austin and Herrick (2014). The Effect of Adverse Childhood Experiences on Adult Health: 2012 North Carolina Behavioral Risk Factor Surveillance System. Retrieved from [http://www.schs.state.nc.us/schs/pdf/SCHS\\_Study\\_167\\_FIN\\_20140505.pdf](http://www.schs.state.nc.us/schs/pdf/SCHS_Study_167_FIN_20140505.pdf).
- <sup>13</sup> U.S. Department of Health and Human Services. (2016). Healthy People 2020: Access to Health Services. Retrieved from <http://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services>
- <sup>14</sup> North Carolina State Center for Health Statistics (2012). CHAMP Racial and Ethnic Disparities in Child Health. Retrieved from [http://www.schs.state.nc.us/schs/pdf/CHAMP\\_FS\\_RAED\\_20120615.pdf](http://www.schs.state.nc.us/schs/pdf/CHAMP_FS_RAED_20120615.pdf)
- <sup>15</sup> NC Resident Population. Health Data by Race and Ethnicity 2010-2014. Retrieved from <http://www.schs.state.nc.us/schs/pdf/NCPopHealthDatabyRaceEthNov2015.pdf>
- <sup>16</sup> Orange County (2015). Community Health Assessment Focus Group Results, Latino Immigrants and Refugees from Burma.
- <sup>17</sup> U.S. Census Bureau (2014). American Fact Finder. Selected Economic Characteristics 2010 – 2014 American Community Survey 5 – Year Estimates. Retrieved from [http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_14\\_5YR\\_DP03&prodType=table](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_DP03&prodType=table)
- <sup>18</sup> U.S. Department of Health and Human Services (2016). The Affordable Care Act. Retrieved from: <http://www.hhs.gov/healthcare/about-the-law/read-the-law/index.html#>
- <sup>19</sup> American Academy of Periodontology (2015). Gum Disease and Heart Disease. Accessed from: [https://www.perio.org/consumer/heart\\_disease](https://www.perio.org/consumer/heart_disease)
- <sup>20</sup> U.S. Census Bureau (2014). American Fact Finder. Selected Economic Characteristics 2010-2014 American Community Survey 5-Year Estimates. Retrieved from [http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_14\\_5YR\\_DP03&prodType=table](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_DP03&prodType=table)
- <sup>21</sup> U.S. Department of Health and Human Services. (2000). Healthy People 2010. 2<sup>nd</sup> ed. With Understanding and Improving Health and Objectives for Improving Health. Washington, DC: U.S. Government Printing Office.
- <sup>22</sup> Orange County Literacy Council (2016). Retrieved from <http://orangeliteracy.org/why-literacy/>
- <sup>23</sup> Centers for Disease Control and Prevention (2013). Emergency Department Visits by Patients with Mental Health Disorders – North Carolina, 2008 – 2010. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6223a4.htm>
- <sup>24</sup> NC Department of Health and Human Services (2015). Injury and Violence Prevention Branch. Suicide Prevention. Retrieved from <http://www.injuryfreenc.ncdhhs.gov/preventionResources/Suicide.htm>
- <sup>25</sup> UNC School of Medicine (2015). Alcoholism and Alcohol Abuse. Retrieved from <https://www.med.unc.edu/alcohol/education-prevention/alcoholism-and-alcohol-abuse/alcoholism>.
- <sup>26</sup> North Carolina Alcohol Facts (2013). Crashes that Involved Alcohol, 2009-2013. Retrieved from ([http://ncaf.hsnc.unc.edu/county\\_veh.cfm](http://ncaf.hsnc.unc.edu/county_veh.cfm)).
- <sup>27</sup> NC Department of Health and Human Services (2016). Unintentional Poisoning from Prescription Drugs (Overdose). Retrieved from <http://www.injuryfreenc.ncdhhs.gov/preventionResources/UnintentionalPoisoning.htm>.
- <sup>28</sup> North Carolina Institute of Medicine Task Force on Prevention. (2009). Prevention for the Health of North Carolina: *Prevention Action Plan*. Morrisville, NC: North Carolina Institute of Medicine.
- <sup>29</sup> Lasser, K., Boyd, W., Woolhandler, S., Himmelstein, D. U., McCormick, D., & Bor, D. H. (2000). *Smoking and Mental illness: A population based prevalence study*. Journal of the American Medical Association, 284, 2606–2610.
- <sup>30</sup> U.S. Department of Health and Human Services. National Institute on Alcohol Abuse and Alcoholism (2007). Alcohol and Tobacco. Alcohol Alert, 71. <http://pubs.niaaa.nih.gov/publications/AA71/AA71.htm>.
- <sup>31</sup> Centers for Disease Control and Prevention. Current Cigarette Smoking Among U.S. Adults Aged 18 Years and Older. Retrieved from <http://www.cdc.gov/tobacco/campaign/tips/resources/data/cigarette-smoking-in-united-states.html>.
- <sup>32</sup> American Cancer Society. (2014). Cancer Facts & Figures 2014. Atlanta: American Cancer Society.
- <sup>33</sup> U.S. DHHS (2014). *The Health Consequences of Smoking – 50 Years of Progress*. A Report of the Surgeon General, Executive Summary.
- <sup>34</sup> Strasburger, V.C. & the Council on Communications and Media. (2010). Pediatrics: Children, Adolescents, Substance Abuse, and Media. *Pediatrics*. 126, 791-799.
- <sup>35</sup> U.S. DHHS (2014). *The Health Consequences of Involuntary Exposure to Tobacco Smoke*. A Report of the Surgeon General.
- <sup>36</sup> U.S. DHHS (2014). *Smoking and Youth*. Surgeon's Report on Smoking and Health.
- <sup>37</sup> Preliminary data from Chapel Hill Carrboro School District YRBS (2015).
- <sup>38</sup> Singh T., et al. (2016). Vital signs: exposure to electronic cigarette advertising among middle school and high school students—United States, 2014. *MMWR*. 64(52):1403-8.
- <sup>39</sup> Federal Trade Commission. (2015). [Federal Trade Commission Cigarette Report for 2012](http://www.ftc.gov/pressroom/2015/07/federal-trade-commission-cigarette-report-for-2012). Washington: Federal Trade Commission.
- <sup>40</sup> Thornburg, J. (2016). E-Cigarettes and Vapor Products: State of the Science. Presentation to Orange County Board of Health. Available at: <http://www.orangecountync.gov/departments/health>
- <sup>41</sup> American Industrial Hygiene Association. (2014). White Paper: Electronic Cigarettes in the Indoor Environment. Falls Church, VA. Available at: [https://www.aiha.org/government-affairs/Documents/Electronic%20Cig%20Document\\_Final.pdf](https://www.aiha.org/government-affairs/Documents/Electronic%20Cig%20Document_Final.pdf)
- <sup>42</sup> CDC Office on Smoking and Health. (2015). Electronic Nicotine Delivery Systems: Key Facts. Available at: <http://www.cdc.gov/tobacco/stateandcommunity/pdfs/ends-key-facts2015.pdf>

- 
- <sup>43</sup> Thornburg, J. (2016). E-Cigarettes and Vapor Products: State of the Science. Presentation to Orange County Board of Health. Available at: <http://www.orangecountync.gov/departments/health>
- <sup>44</sup> Thornburg, J., et. al. (2015). Exhaled Electronic Cigarette Emissions: What's Your Secondhand Exposure? Research Triangle Park, NC. RTI Press. Available at: [https://www.rti.org/pubs/secondhand\\_exposure\\_to\\_electronic\\_cigarette\\_emissions.pdf](https://www.rti.org/pubs/secondhand_exposure_to_electronic_cigarette_emissions.pdf)
- <sup>45</sup> U.S. Department of Agriculture (2016). All About the Fruit Group. Retrieved from <http://www.choosemyplate.gov/fruit>.
- <sup>46</sup> NC State Center for Health Statistics (2016). 2016 County Health Book. 2010 – 2014 Race-Sex-Specific Age-Adjusted Death Rates by County. <http://www.schs.state.nc.us/data/databook/>
- <sup>47</sup> NC State Center for Health Statistics (2016). 2016 County Health Book. Death County and Crude Death Rates per 100,000 Population for Leading Causes of Death, by Age Groups NC 2010-2014. Retrieved from <http://www.schs.state.nc.us/data/databook/>
- <sup>48</sup> NC State Center for Health Statistics (2016). 2016 County Health Book. 2010 – 2014 Race-Sex-Specific Age-Adjusted Death Rates by County. Retrieved from <http://www.schs.state.nc.us/data/databook/>.
- <sup>49</sup> NC Department of Health and Human Services (2015). Breast and Cervical Cancer Control Program. Cardiovascular Disease. Retrieved from <http://bcccp.ncdhhs.gov/cardiovascular.htm>.
- <sup>50</sup> Heart Attack and Stroke Prevention Center (2012-2016). Risks of Living in the Stroke Belt. Retrieved from <http://www.thepreventioncenter.com/cardiovascular-disease/stroke-belt/>.
- <sup>51</sup> NC Department of Health and Human Services (2015). Breast and Cervical Cancer Control Program. Cardiovascular Disease. Retrieved from <http://bcccp.ncdhhs.gov/cardiovascular.htm>.
- <sup>52</sup> Medline Plus. Diabetes. Retrieved from <http://www.nlm.nih.gov/medlineplus/diabetes.html>.
- <sup>53</sup> U.S. Department of Health and Human Services. Global Health Topics. Communicable Diseases. Retrieved from <http://www.globalhealth.gov/global-health-topics/communicable-diseases/>
- <sup>54</sup> NC Department of Health and Human Services (2015). North Carolina HIV/STD Quarterly Surveillance Report: Vol. 2015, No. 4 HIV/STD Surveillance Unit. Retrieved from <http://epi.publichealth.nc.gov/cd/stds/figures/vol15no4.pdf>.
- <sup>55</sup> NC Department of Health and Human Services (2014). HIV Infections in North Carolina Reported HIV Case Data, 2014. Retrieved from [http://epi.publichealth.nc.gov/cd/stds/figures/factsheet\\_HIV\\_infection\\_2014r3.pdf](http://epi.publichealth.nc.gov/cd/stds/figures/factsheet_HIV_infection_2014r3.pdf).
- <sup>56</sup> Orange County Economic Development (2016). Orange County Community Profile. Retrieved from <http://growinorangenc.com/livability/community-profile/>
- <sup>57</sup> Campaign for Racial Equity in Our Schools (2015). Excellence with Equity: The Schools Our Children Deserve. Retrieved from [http://dig.abclocal.go.com/wtvd/docs/Excellence\\_with\\_Equity\\_Report-Final10-23.pdf](http://dig.abclocal.go.com/wtvd/docs/Excellence_with_Equity_Report-Final10-23.pdf).
- <sup>58</sup> American Nutrition Association (2015). *Nutrition Digest*, 37(4). USDA Defines Food Deserts. Retrieved from <http://americannutritionassociation.org/newsletter/usda-defines-food-deserts>.
- <sup>59</sup> UNC School of Government (2013). Hunger Research: Understand Food Insecurity in Your Community. Retrieved from [http://hunger-research.sog.unc.edu/datatable/hunger\\_data?order=field\\_county&sort=desc](http://hunger-research.sog.unc.edu/datatable/hunger_data?order=field_county&sort=desc).
- <sup>60</sup> US Census Bureau (2014). American Fact Finder. Selected Economic Characteristics. 2010-2014 American Community Survey 5-Year Estimates. Retrieved from [http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_14\\_5YR\\_DP03&src=pt](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_DP03&src=pt)
- <sup>61</sup> US Census Bureau (2014). Quick Facts. Retrieved from <http://www.census.gov/quickfacts/table/HSG010214/3713500>.
- <sup>62</sup> US Census Bureau (2014). Quick Facts. Retrieved from <http://quickfacts.census.gov/qfd/states/37/37135.html>.
- <sup>63</sup> UNC Carolina Population Center (2013). Homelessness in North Carolina: 2014 Update. Retrieved from <http://demography.cpc.unc.edu/2014/10/27/homelessness-in-north-carolina-2014-update/>
- <sup>64</sup> Yazdkhasti M, Pourreza A, Pirak A, Abdi F. Unintended Pregnancy and Its Adverse Social and Economic Consequences on Health System: A Narrative Review Article. *Iranian Journal of Public Health*. 2015;44(1):12-21.
- <sup>65</sup> NC Department of Health and Human Services (2014). Infant Mortality Statistics for North Carolina. Retrieved from <http://www.schs.state.nc.us/data/vital/ims/2014/>.
- <sup>66</sup> Anderson ME, Johnson DC, Batal HA. Sudden infant death syndrome and prenatal maternal smoking: rising attributed risk in the *Back to Sleep* era. *BMC Medicine* 2005;3(1):4.
- <sup>67</sup> Little J, Cardy A, Munger RG. Tobacco smoking and oral clefts: a meta-analysis. *Bulletin of the World Health Organization* 2004a;82(3):213–8.
- <sup>68</sup> Torfs CP, Christianson RE. Maternal risk factors and major associated defects in infants with Down syndrome. *Epidemiology* 1999;10(3):264–70.
- <sup>69</sup> Fried PA, Watkinson B, Siegel LS. Reading and language in 9- to 12-year olds prenatally exposed to cigarettes and marijuana. *Neurotoxicology and Teratology* 1997;19(3):171–83.
- <sup>70</sup> Batstra L, Hadders-Algra M, Neeleman J. Effect of antenatal exposure to maternal smoking on behavioural problems and academic achievement in childhood: prospective evidence from a Dutch birth cohort. *Early Human Development* 2003;75(1–2):21–33.
- <sup>71</sup> Drews CD, Murphy CC, Yeargin-Allsopp M, Decoufle P. The relationship between idiopathic mental retardation and maternal smoking during pregnancy. *Pediatrics* 1996;97(4):547–53.
- <sup>72</sup> European Heart Journal, news release, June 21, 2011
- <sup>73</sup> Environmental Protection Agency six common air pollutants; Accessed on June 16<sup>th</sup>, 2011; <http://www.epa.gov/air/urbanair/>
- <sup>74</sup> North Carolina Institute of Medicine. Healthy North Carolina 2020: A Better State of Health. Morrisville, NC: North Carolina Institute of Medicine; 2011; Accessed on March 14, 2011; <http://publichealth.nc.gov/hnc2020/index.htm>
- <sup>75</sup> Healthy North Carolina 2020, accessed on June 16, 2011; <http://publichealth.nc.gov/hnc2020/docs/HNC2020-FINAL-March-revised.pdf>
- <sup>76</sup> US EPA Drinking Water Contaminants; Accessed on January 25, 2016; <http://water.epa.gov/drink/contaminants/#List>
- <sup>77</sup> NC Department of Health and Human Services, Epidemiology Branch; accessed on January 25, 2016; <http://epi.publichealth.nc.gov/lead/lhmp.html>

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# Physical Activity & Nutrition

# 3

## Physical Activity & Nutrition

**75.4%**  
of adults do not eat 5+ fruits or veggies per day

**43.2%**  
of adults did not meet aerobic nor strengthening guidelines

**14%**  
Of low income preschool children are obese

**78%**  
of high schoolers do not get 60 minutes of exercise per day.

## Chronic Disease

While chronic diseases are the leading causes of death in Orange County, lack of physical activity and not eating healthy contributes heavily to the incidence of chronic disease.

- While the number of deaths due to disease of the heart has increased in the past 3 years, the age-adjusted mortality rate has been declining, implying heart disease mortality is generally improving or stable. However, prevalence of chronic diseases, such as Cardiovascular Disease and Diabetes has increased in the last decade.
- More than half of all deaths in Orange County (52%) are caused by cancer, diseases of the heart, or chronic respiratory diseases.
- Nearly 50 million dollars was spent on cardiovascular and circulatory disease inpatient visits in Orange County in 2013, accounting for 16% of all condition costs.

**52%**  
of deaths are caused by Chronic Diseases

**16%**  
Of all in-patient visit costs were spent on Chronic diseases in 2013.



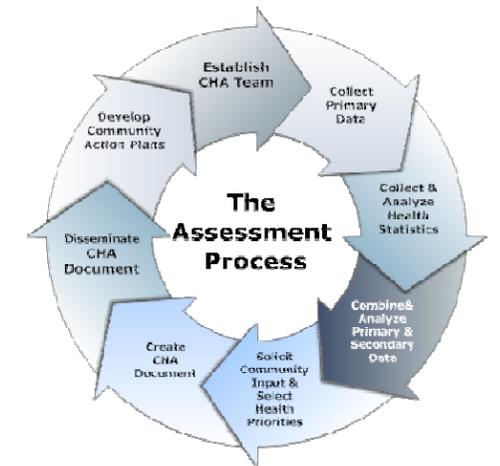
# 2015 ORANGE COUNTY COMMUNITY HEALTH ASSESSMENT

## EXECUTIVE SUMMARY

### Introduction

Every 4 years, the Orange County Health Department and Healthy Carolinians of Orange County (HCOC) conducts a Community Health Assessment (CHA). Regular assessment of Orange County's health enables public health officials to monitor trends in health status, determine priorities among health issues, and determine the availability of resources within Orange County to best protect and promote the public's health.

With the overall goal to address health disparities and identify needs of populations who are most disadvantaged, 799 survey households were randomly selected from census blocks, stratifying to ensure low-income communities were included. 279 addresses were attempted and 166 door-to-door surveys were completed. New to this CHA, a health opinion survey was placed online and was completed by 1,548 community residents. Combined, this created 1,714 total health opinion surveys answered, 5 focus groups conducted, and 4 community listening sessions held.



### Selected Priorities

The results from the 4 community listening sessions were brought to HCOC's Annual Meeting in December 2015 where participants prioritized issues on the basis of importance and changeability. The health priorities, as determined by Annual Meeting participants to be of greatest concern to the Orange County community, were 1) Social Determinants of Health with priority around Access and Poverty, 2) Mental Health & Substance Abuse, and 3) Physical Activity and Nutrition.

### Next Steps

Findings from this CHA report will help influence strategic planning across the community. HCOC will assure broad dissemination of the full report so that entities contributing to the health of Orange County residents can develop new or modify existing programs, services, and resources to address the community health needs relevant to their stated missions.

This executive summary does not include all the details in the full report. The full report can be found online at <http://www.orangecountync.gov/departments/health/publicationsDoc.php#>.

### Acknowledgements

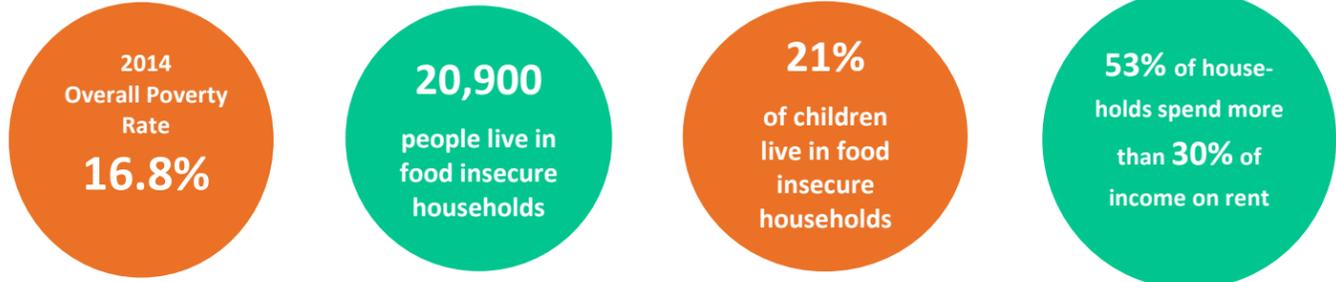
Thank you to the residents of Orange County, the CHA Team members and all of the HCOC partners and member agencies who helped to guide and make the assessment a true community process.



# 1 Social Determinants of Health

1

## Poverty



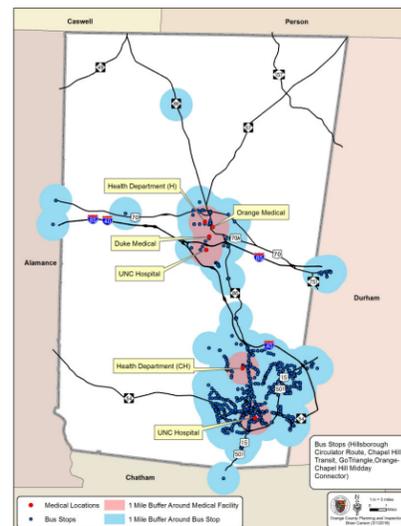
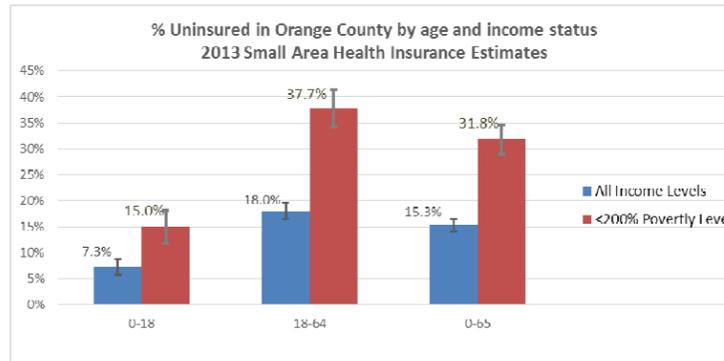
- Orange County has the highest Gini Coefficient of Income Inequality in NC (0.52). This means our county experiences high income dispersion, where fewer people hold a lot of capital and many people hold little capital.
- While the median income for households in Orange County is \$57,261, 17% of residents are living in poverty, including 16% of children.
- Food insecurity and affordable housing are key areas of emphasis for mitigating the effects of poverty in Orange County.
- While Orange County's median gross rent is \$918, half of Orange County households (52.7%) who rent spend more than 30% of their income on rent.

## Access

- Approximately 21,000 (15.3%) Orange County residents between 0-64 years of age are uninsured.
- Low income residents are twice as likely to be uninsured compared to the average county resident.
- In 2013 a higher percentage of low income youth under 19 years were uninsured in Orange County [15% (+/- 3.2%)], and 31.8% of low income residents under 64 years were uninsured.
- Over 6,000 Orange County residents enrolled into the Marketplace for 2015 coverage.

## Transportation

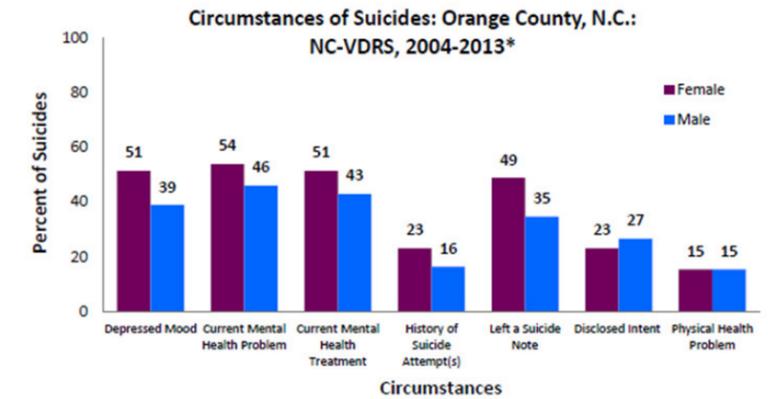
- 3,000 individuals in Orange County with no vehicle live outside of the walkable/ridable coverage area to medical clinics



# 2 Mental Health & Substance Abuse

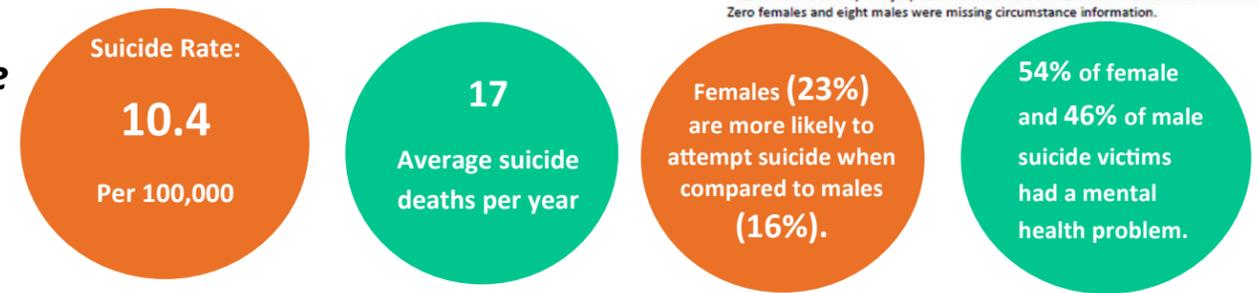
2

- Mental Health refers to a wide range of conditions that affect one's mood, thinking and behavior.
- Broad classes of mental illness include mood disorders (depression, bipolar disorder), eating, personality, anxiety and psychotic disorders (schizophrenia), and addictive behaviors/substance abuse disorders.



\*Based on the county of injury occurrence. 94.5% of cases had circumstance information. Zero females and eight males were missing circumstance information.

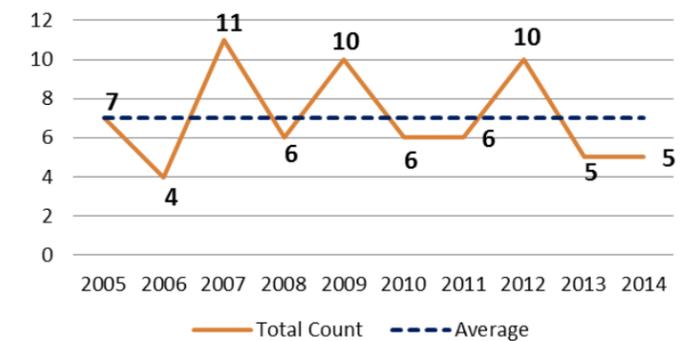
## Suicide



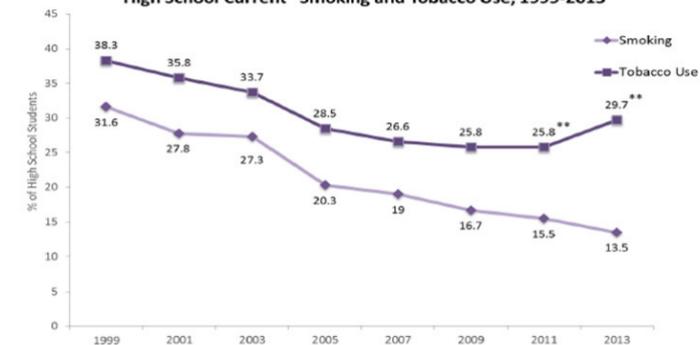
## Substance Abuse

- 6% of Orange County motor vehicle crashes are alcohol related
- 8% of County adults and 9% of High Schoolers drove after drinking in the past 30 days.
- Orange County has a drug overdose mortality rate of 5.7
- Overuse of alcohol is considered to be more than 3-4 drinks per occasion for women and more than 4-5 drinks per occasion for men.

## Orange County Opiate Poisoning Deaths, 2005-2014



## High School Current\* Smoking and Tobacco Use, 1999-2013

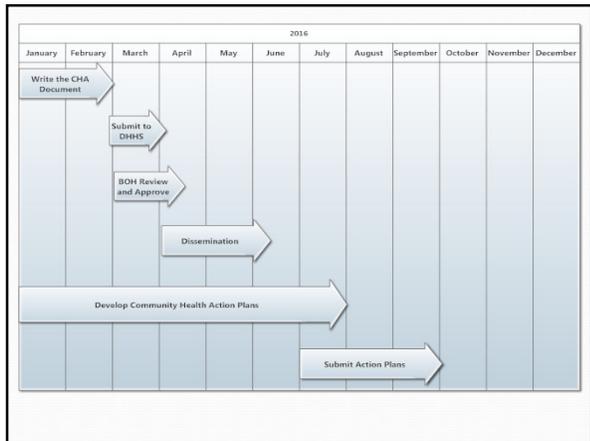


\*Current use is defined as using on one or more of the past 30 days. \*\*In 2011, N.C. YTS began tracking use of emerging tobacco products, including electronic cigarettes, clove cigars, dissolvable tobacco products, flavored cigarettes, flavored little cigars, hookahs or waterpipes, roll-your-own cigarettes, and smms. Data on emerging tobacco product use prior to 2011 are not available.

- While cigarette use is decreasing among NC youth, overall tobacco use is increasing, driven in large part by use of e-cigarettes and hookah.
- Almost 4 out of 10 high school students in Orange County have tried an e-cigarette, and about 2 out of 10 high school students currently use them.

# Board of Health Meeting

March 23, 2016  
Community Health Assessment Update

## CHA Process Accomplishments

- Data Collection
  - Quantitative: Survey Collection
    - 1,714 total responses (1,548 online surveys and 166 door-to-door)
  - Qualitative:
    - 5 Focus Groups - (57 voices)
    - 4 Community Listening Sessions (76 voices)
  - Secondary
    - County level data updated in the form of dashboards
- Prioritization
  - Occurred in December at HCOC's Annual Meeting
- Document Writing and Submission
  - Electronically submitted – 3/10/16
  - Hard copy mailed – 3/14/16



## Chosen Community Priorities

- Chosen Priorities for Action Planning:
  1. Social Determinants of Health
    - Access
    - Poverty
  2. Mental Health & Substance Abuse
  3. Physical Activity & Nutrition
    - Chronic Disease Prevention



## CHA Overview

### 1 Social Determinants of Health

**Poverty**

- 10% of the population lives in poverty (15.8% in 2010)
- 20,900 people live in food insecurity
- 21% of children live in food insecure households
- 15% of women live on SNAP

**Access**

- Approximately 25,000 (23%) Orange County residents live 10 miles or more from a hospital
- Low income residents are 1.5x more likely to live in areas with no access to a hospital
- 10% of the population lives in a medically underserved area
- 10% of the population lives in a medically underserved area

**Transportation**

- 25% of the population lives in an area with no access to a public transit station

### 2 Mental Health & Substance Abuse

**Mental Health**

- Mental health refers to a wide range of conditions that affect how we think, feeling and behavior
- Broad classes of mental illness include mood disorders (depression, bipolar disorder), anxiety disorders, personality, conduct and psychotic disorders (schizophrenia), and addictive disorders (substance abuse disorders)

**Substance Abuse**

- 10.4% of the population lives in a household with a substance use disorder
- 17% of the population lives in a household with a substance use disorder
- 10% of the population lives in a household with a substance use disorder

### BOH Requirements for Accreditation

- **Benchmark 38:** The local board of health shall participate in the establishment of public health goals and objectives.
- **Activity 38.1** – the local board of health shall annually by the LHD on the community’s health (e.g. SOTCH & CHA)
- **Required documentation:** Minutes reflecting board of health’s review of annual reports related to the community’s health



### BOH Requirements for Accreditation

- **Activity 38.2** – The local board of health shall review community health assessment data and citizen input used to plan and monitor progress toward health-related goals.
- **Documentation** – Board of health minutes reflecting discussion of specific aspects of CHA data **AND** the approval of action plans to address health related goals.



### BOH Requirements for Accreditation

- **Activity 38.3** – The local board of health shall assure that individuals, agencies, and organizations have the opportunity to participate in the development of goals, objectives and strategies for community health improvement.
- **Documentation** – Board of health policy regarding public participation in the development of goals, objectives and strategies for community health improvement **AND** board of health minutes reflecting that public participation occurred or agenda indicating allocated time to encourage public participation.



### Benchmark Activities

- To satisfy Benchmark 38:
  - **Activity 38.1**
    - Review of annual reports (i.e. 2015 CHA)
  - **Activity 38.2** (review CHA data and citizen input):
    - Citizen input was received through surveys, focus groups, listening sessions and during prioritization process and board participation was requested by Liska Lackey during the March 2015 BOH Meeting.
    - Participated on the CHA committee’s (CHALT and Community Engagement)
    - Participated in Community Listening Sessions
    - Participated in HCOC’s Annual Meeting and prioritization process
  - **Activity 38.3**
    - Assure participation in goal, objective, and strategy development (i.e. community health action plans)



### Dissemination Requirements

- **Benchmark 1**
  - **Activity 1.3.3:** The local health department shall disseminate results of the most recent (2015) CHA to the local health department’s stakeholders, community partners and the general population.
  - **Documentation:** Evidence of CHA dissemination efforts by at least 2 methods directed to stakeholders/community partners **AND** the general population
    - Examples: Website, newsletter, news releases, meeting minutes describing the presentation, etc.



### Next Steps

1. CHA approval and dissemination
2. Continue and finalize community health action plans around the 3 priority areas and present to you for approval.
  1. Will work through June with intentions to begin implementation July 2016.

