2012 Montgomery County Community Health Assessment

FirstHealth OF THE CAROLINAS

Submitted by the Montgomery County Health Department with the Collaboration of the First-In-Health 2020 Vision Task Force and the Health Assessment Project Work Team

A PLACE FOR ALL PEOPLE
MONTGOMERY COUNTY HEALTH DEPARTMENT

ACKNOWLEDGMENTS

The Montgomery County Health Department, in collaboration with the First-Health 2020 Vision Task Force, and other community partners are pleased to submit the 2012 Montgomery County Community Health Assessment. We feel that the information contained within will be quite beneficial in the continuing quest to improve the health and quality of life in Montgomery County.

A complete list of contributors and their roles can be found in Appendix A of this document.

Autumn Care of Biscoe
First-in-Health 2020 Vision Task Force
FirstHealth of the Carolinas– Community Services
FirstHealth School Based Health Centers
Montgomery Community College
Montgomery County Board of Commissioners
Montgomery County Chamber of Commerce
Montgomery County Communities in Schools
Montgomery County Council on Aging
Montgomery County Department of Social Services
Montgomery County Economic Development Corporation
Montgomery County Health Department
Montgomery County JobLink
Montgomery County Partnership for Children
Montgomery County Sheriff's Office
North Carolina Cooperative Extension Service (Montgomery Chapter)
Safe Kids Mid-Carolinas Region
Troy-Montgomery Senior Center
University of North Carolina Center for Public Health Preparedness

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What is a Community Health Assessment?

Every four years, local health departments across the state of North Carolina are mandated to complete a comprehensive Community Health Assessment (CHA). It is a requirement of the consolidated agreement between the health departments and the NC Division of Public Health, but the project requires community involvement and collaboration. Although many hospitals were already partnering with health departments to complete this project, the Internal Revenue Service recently mandated that all not-for-profit hospitals participate in a community health assessment every three years.

The main goal of the Montgomery Community Health Assessment is to improve health and quality of life in Montgomery County. In order to do this, the CHA Project Team worked together to survey community members to garner data indicating community perception about the health concerns in the county. This data was then compared with state and local statistics, as well as with privately funded research (through First-Health of the Carolinas) to determine the overlap of community concern with the actual prevalence of health issues. The group also considered resources and identified community assets needed to achieve health improvement. A community forum was held in October 2012 to share the results of the data collection and to engage the community in the determination of health priorities for the next four years. After the forum, the project team collaborated to compile this document, which will be shared with key stakeholders and community members through the distribution of printed and electronic copies. Electronic files will be available on various community and agency websites, as well as accessible through the public library. Anybody can request an electronic copy by contacting the Montgomery County Health Department. The project team and any other identified partners will meet in the spring of 2013 to develop action plans and effective strategies to mitigate the identified concerns. This process closely mirrors the steps to a successful CHA as outlined in the CHA Guidebook and depicted in the chart to the right.

Phase 1:
Establish the CHA Team

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Phase 1: Establishment of the Montgomery CHA Team

Traditionally, members of the local health department collaborate with the Healthy Carolinians organization in their county to complete the various facets of the CHA process. However, Montgomery County's Healthy Carolinians organization officially disbanded in 2004. Seeing the need for continued partnership, not just in Montgomery County but in all the counties they serve, FirstHealth of the Carolinas organized what are called "2020 Vision Taskforces". This taskforce has been very active in Montgomery County, meeting almost monthly and successfully implementing a number of strategies and interventions to improve health in the county. For the purpose of the Community Health Assessment, the 2020 group served as the "Project Work Team" and additional community partners were brought into the process as needed. Members of the 2020 taskforce include representatives from the general public, faith organizations, town officials, FirstHealth of the Carolinas, FirstHealth School Based Health Centers, Montgomery Community College, Montgomery County Health Department, Montgomery County Partnership for Children, Montgomery School Nurses, Montgomery County Schools Administration, Montgomery County Farmers' Market, Montgomery Herald, North Carolina Cooperative Extension Service (Montgomery Chapter), and the Troy-Montgomery Senior Center. All meetings are open meetings and the public is encouraged to attend. Many guests have been involved in 2020 efforts, and although they may not have elected to officially join the committee their contributions have always been valued and encouraged. A complete list of Project Work Team members and other contributors can be found in Appendix A of this document.

Phase 2: Collection of Primary Data

In Montgomery County, our primary data collection measure was the completion of a randomized community survey conducted with 199 county residents. Because of the scientific design to this methodology, the results of this survey carried the most weight when analyzing primary data. However, the group wanted to gain even further input from the community, so the exact survey that was taken into the community in the door-to-door survey was entered into an internet site (www.surveymonkey.com) and distributed via email, and links on website and facebook pages. One hundred thirty nine respondents completed the online survey. Furthermore, for a different perspective, the work team developed a "community leader survey" and entered it into survey monkey and distributed it electronically to people seen as leaders in Montgomery County. Thirty-nine leaders completed this survey. Additionally, nursing students completed key informant interviews with the FirstHealth Montgomery Memorial Hospital Administrator and representatives from the senior population.

Montgomery Community Health Opinion Survey. The NC Institute for Public Health administers the North Carolina Public Health Incubator Collaboratives. Montgomery County is part of the South Central Partnership of this endeavor, along with Anson, Bladen, Cumberland, Harnett, Hoke, Lee, Moore, Randolph, Richmond, Robeson, Sampson and Scotland Counties. The mission of the South Central Partnership is "Working together to collectively address public health issues through sharing best practices and securing resources". As such, this group discussed best practice ways of conducting the CHA,

Collection of Primary Data *(continued)*

and one idea that resulted from this discussion was the development of a common survey tool that could be used throughout the region. The Office of Healthy Carolinians produced a sample Community Health Opinion Survey, and many counties use that model or some derivative of that model. FirstHealth of the Carolinas serves many of the counties included in the South Central Partnership, and that "mini group" worked together to finalize a survey tool that would be used in the following "FirstHealth" counties: Moore, Montgomery, Richmond and Hoke. Each county worked independently with the key stakeholders and partners in their community to tweak the survey until everyone was in agreement. In Montgomery County, the First-In-Health 2020 Vision Task Force reviewed the survey and adjusted it to include objectives already in progress, or to solicit feedback to assist in planning for future programs. For example, the 2020 group has a goal of reducing obesity, and as part of that, increasing access to healthy foods. The group has already implemented some garden projects, and was interested in expanding that effort, if the county showed interest. So, a question was added to the Montgomery survey asking about utilization of a community garden if it was available. Questions were also added to meet the needs of the local Partnership for Children, as well as other questions essential to program planning around tobacco use, access to healthy foods, and increased physical activity. Thus, the final survey is the "same" for all the FirstHealth counties in our region, but still "different" enough to meet the needs of Montgomery County. By doing this, we hope to have a clearer understanding of health care needs across the region and maximize resources to effectively negotiate these issues. A copy of the final survey tool "Montgomery Community Health Survey" can be found in Appendix B of this document. Results of primary data collection measures will be thoroughly discussed in the section titled "Montgomery County Health Survey" of this report.

This year, the Montgomery County Community Health Assessment Project Team was privileged to have the opportunity to partner with UNC Center for Public Health Preparedness. Matthew A. Simon, GIS Analyst and Research Associate, provided technical assistance and project coordination for the administration of the survey. Simon also recruited graduate students to assist with conducting, analyzing and documenting the results of the survey. Other survey team members included representatives from the Montgomery County Health Department and the Montgomery County Partnership for Children.

Phase 3: Collection of Secondary Data

The major source for secondary data collection for the Community Health Assessment was the North Carolina State Center for Health Statistics which can be accessed at the following web address: http://www.schs.state.nc.us/SCHS/. On the left side of this page, there is a blue section header which reads "Health Data" and beneath that header is a link to county-level data. Also beneath that same header is a link to "HealthStats" which provides statistical numerical data as well as contextual information on the health status of North Carolinians and the state of North Carolina's health care system. The site can be accessed directly at http://healthstats.publichealth.nc.gov/. Extensive efforts have been made to document data sources throughout this entire document. Where applicable, web links have also been

provided. An additional source of secondary data comes from FirstHealth's "PRC" data. It can be difficult to gather local data that describes current behaviors and the prevalence of health issues. The Behavioral Risk Factor Surveillance System is a good source of this information, but the data it collects is reported as a whole region of several counties, so applying that specifically to Montgomery County becomes quite challenging. Recognizing these struggles, in 1999, FirstHealth of the Carolinas determined this information to be vital to program planning, and hired "Professional Research Consultants" to conduct random phone surveys across the counties served by FirstHealth. Although the data still is not specific to only Montgomery County, it is much more relevant than data collected for an entire region. The PRC data is a random digit dialing survey that includes both land lines and cell lines. It is self-reported data, so it must be interpreted in light of the knowledge that self-reported data is not always completely accurate. However, this data still adds another component to understanding the health behaviors and concerns in Montgomery County.

To get a clear picture of health status in a particular county, it is important to not only look at the statistics for that county, but to also compare it to statistics representing the state as a whole, as well as to other counties, known as "peer counties". These comparisons can help to identify issues specific to one county, or even help to see that issues seem to span the state. Or conversely, it can show that the state doesn't seem to struggle with it, but a particular county and/or it's peer counties are struggling in that area, which could indicate issues specific to rural/urban areas (as appropriate to the county you are working with).

The Data Dissemination Unit with the State Center for Health Statistics assigned "HealthStats" Peer Counties. The peer counties were identified in the following manner:

> Peer counties were identified using the same county demographic variables used to create the peer county groups used in the Community Health Status Indicators (CHSI) Project. Data from the 2010 Census and poverty estimates for 2010 were used to determine the groups. Counties were first grouped by size, using the population groupings established by the National Association of County and City Health Officials (NACCHO) for its periodic survey of local health departments. These groups were then split by the percentage of individuals living below the poverty line. When necessary, those groups were further divided based on the age group distribution in the county (the percent of population less than 18 years and/or the percent of population 65 years or older). In some cases, all counties had similar age group distributions, so population density was used to determine the final division. These peer county groups may differ from the CHSI Project groups as more recent data were used and the division points were based only on North Carolina data, not United States data. The peer groups also differ from the NC CATCH peer counties, as the methodology and criteria have changed. These groupings will be reviewed annually. If significant changes are noted, the groups will be updated to reflect those changes.

By this methodology, Montgomery County was assigned to Group N, which also includes Anson, Bladen, Pasquotank, Richmond, Scotland and Vance. Demographics for this group are as follows:

- Population Size: 26,948-46,639
- Individuals living below poverty level: 22.3% - 28.1%
- Population under 18 years: 22%-25%
- Population 65 years and over: 14%-16%
- Population density (people per square mile): 40-179

In further review of these peer counties, it was judged that Anson, Richmond and Scotland counties would be most beneficial for comparison purposes since those counties already collaborate with Montgomery on many regional public health efforts.

Phase 4: Analyze and Interpret the Data

Once the data was gathered, the project team collaborated to analyze the findings and determine how that information applies to the health of Montgomery County. Representatives from the Health Department compiled the statistics and presented it to the CHA Project Work Team. All members of the team provided input and feedback regarding the interpretation and application of the data.

Phase 5: Determine Health Priorities

A community forum was held in October 2012 to serve as the priority setting session for the health assessment process. Paid advertisements for the session were placed in the local newspaper, as well as articles explaining the process and importance of the event. When the surveys were conducted at the end of September, participants were given incentive bags which included educational information, hand sanitizer and an announcement about the community forum. Participants were thanked for completion of the survey and encouraged to come to the forum as the next step in the process. A survey page was included on both the internet survey and the community leader survey that discussed the forum, its importance and encouraged participation. Respondents were asked to provide their email address for a reminder message about the forum if they were interested in attending. Furthermore, a flyer about the event was shared electronically with all members of the CHA Project Work Team, as well as distributed through various other email networks (including the Montgomery County School System, the Chamber of Commerce and HR professionals, etc). Autumn Care of Biscoe provided a meal during the forum, which was held at the Troy-Montgomery Senior Center. More than 40 participants, including community, agency, and business representatives participated in the event. Primary and secondary data was shared with the group, who then worked together to name issues they felt to be priorities for the county. The group was instructed to consider the issues based on the magnitude of the problem, and the feasibility of actually being able to change the problem. Current initiatives and county assets were named in order to assess what work is already being done toward specific issues and what capacity the county possessed to work toward health improvement. Through much discussion, the group finally voted to name the following three as the

priority issues for Montgomery County:

1) **Obesity Reduction and Prevention in Children and Adults**
2) **Teen Pregnancy Prevention**
3) **Substance Abuse Prevention and Reduction (including alcohol abuse, illicit drug abuse, prescription drug abuse, and tobacco use/abuse)**

Phase 6: Develop a Document

After the forum was held, the Project Team collaborated to develop the written document seen before you. Members of the team submitted contributions to specific sections, as well as provided proofreading and editing of the finalized submission.

Phase 7: Share the Document

Copies of the document will be printed and shared with all members of the Project Work Team and other key stakeholders as identified by the group. Electronic versions of the documents will be made accessible to the public upon request by contacting the Health Department. Electronic versions will also be accessible by visiting various websites, including the Montgomery County website (www.montgomerycountync.com), the website for FirstHealth of the Carolinas (www.firsthealth.org) and others. The document will also be available at the Public Libraries throughout the county.

Phase 8: Develop Action Plans

In the spring of 2013, the project team will meet again and work to develop action plans to mitigate the priorities identified through the assessment project. The group will work to name specific strategies and interventions, as well as list out who is responsible for what portion of those strategies and associate a time line with the work. Separate plans will be developed for each priority issue. These action plans will be used during the intermittent years prior to the next CHA cycle to evaluate progress made toward these community objectives. Highlights will be included in the annual State of the County Health Report which is completed every year that the CHA is not. If you would like to be involved in the development of action plans, or the implementation of health initiatives, please contact Rhonda Peters at the Health Department by emailing Rhonda.peters@montgomerycountync.com or Roxanne Elliott with FirstHealth of the Carolinas by emailing RMElliott@firsthealth.org. We welcome and encourage new faces and new energy!

History of Montgomery County

Montgomery County is named in honor of Revolutionary War Brigadier General Richard Montgomery. Before the British adequately reinforced strongholds in Canada, Montgomery, a native of Ireland, was commissioned to capture them. Montgomery moved quickly and seized Fort St. John and Montreal, but the general later died during the harsh Battle of Quebec. Many places across the United States are named after General Montgomery, and the Piedmont County of Montgomery, North Carolina is one. In the past, many have assumed that the county seat, Troy, is named after the ancient Trojan city. However, some historians have argued that the town is named after one of two Tar Heel politicians, John B. Troy or Robert Troy.

Montgomery County is situated in the southern Piedmont region of North Carolina. Culled from Anson county in 1779, Montgomery County was originally inhabited by the Cheraw until German and Scottish colonists, the first Europeans in the area, settled on the land. There are five main towns in the county: Biscoe, Candor, Mt. Gilead, Star and Troy. Other communities include Blaine, Ether, Ophir, Pekin, Steeds, Wadeville, Eldorado, and Uwharrie. Agriculture, manufacturing and mining make up most of the county's economy. Cotton and tobacco are the most productive crops while the county's primary industries include textiles and lumber. Montgomery County is known as the "Golden Opportunity" county, and although there is no solid evidence of this nickname, it is likely due to the presence of gold, silver, and other natural resources in the hills of Uwharrie and the rest of the county.

A rural and wooded region, Montgomery County's primary woodland attracts hunters, fishermen, and other outdoor enthusiasts. It is also home to much of the Uwharrie National Forest– approximately 50,000 acres. Also, many rivers, lakes, and mountains are within the region. Several parts of the Yadkin– Pee Dee River flow through the county as well as Badin Lake, a body of water dammed from the river. Some other geographic features include the Shelter Mountain, Horse Trough Mountain, Lick Fork (a historic stream in the county), Cheek Creek, and Drowning Creek.

(taken from North Carolina History Project. http://northcarolinahistory.org. (accessed November 2, 2012)

According to the 2012 Community Health Survey, most residents in Montgomery County have lived here the majority of their lives. All sources of primary data collected during the assessment process of 2012 indicate that the people in the county, the location and "ruralness", and the natural resources are the best things about living in Montgomery County.

Location. Montgomery County is the exact geographic center of North Carolina and is comprised of 492 square miles. Although the county ranks 45th in size geographically, it ranks 72st in size according to its population, as approximately two-thirds of the county acreage is included in the Uwharrie National Forest. Montgomery County is bounded by Moore, Richmond, Stanly, Davidson and Randolph Counties, and is located 50 minutes from Greensboro and 70 minutes from Charlotte.

Towns and Festivals. Five townships make up Montgomery County: Biscoe, Candor, Mt. Gilead, Star and Troy, which is the county seat. The Star Fiddler's Convention, Star Heritage Days, Troyfest, North Carolina Peach Festival, Small Town USA, and the Uwharrie Mountain Festival are just a few of the annual events that take place.

Natural Resources. Perhaps the greatest natural asset in Montgomery, the Uwharrie National Forest is located in the western part of Montgomery County, and is named for the Uwharrie Mountains. The Forest is bounded on the west by the Pee Dee River and by Badin Lake and Lake Tillery. The rivers and the forest provide incredible recreational activities for the area including camping, hiking, hunting, fishing, water skiing, boating and golf.

Recreation. In addition to the recreational opportunities available in the Uwharrie National Forest, there are recreational parks in all five towns in Montgomery County. Parks in Biscoe and Mt. Gilead have public swimming pools. Private swimming pools are located elsewhere in the county. Various sports leagues are available for children and adults throughout the county. Some are school teams and others are community leagues. The Montgomery County Parks and Recreation Department was established in May of 2007, but budgetary restrains necessitated its elimination.

Schools. Montgomery County is home to six public elementary schools (Candor Elementary, Green Ridge Elementary, Mt. Gilead Elementary, Page Street Elementary, Star Elementary and Troy Elementary), two middle schools (East Middle School and West Middle School), and three high schools (East Montgomery High School, Montgomery Learning Academy, and West Montgomery High School). Additionally, there are two private schools: Family Worship Ministries and Wescare Academy. Both private schools serve children kindergarten through twelfth grade. Montgomery Community College, located in Troy, provides higher education for the county.

Transportation. Regional Coordinated Area Transportation System (RCATS) provides transportation for county residents, mostly for medical travel. The RCATS program has increased citizens' ability to access medical care both in and out of the county.

County Assets. As evidenced throughout this Community Health Assessment, there are real needs and barriers to healthcare in Montgomery County. However, there are also many resources available and the importance of those resources cannot be understated. When these resources are combined with people who truly care about the community and work to make it a better place, positive changes happen. Responding to the question asking what the respondent

would consider to be the greatest strengths of Montgomery County, one participant answered in the following manner: "The commitment of service workers who work here to help. Many could work somewhere else, in other counties, and earn more money, but feel commitment to help their own." Again, the community spoke loudly that the people in Montgomery County is what makes the county a great place to live.

Input regarding county assets was sought in a variety of ways through this assessment process including community forums, community leader surveys, internet surveys, key informant interviews, and conversations with the general public. The following list is a compilation of all those resources that were named as beneficial to our county:

Angel Tree
Autumn Care of Biscoe
Back Pack Pals
Chamber of Commerce
Child Care Centers
Churches
Civic Clubs
Communities in Schools
Community Outreach Centers
Cooperative Extension Service
Council on Aging
Department of Social Services
Doctors
Economic Development Corporation
FirstHealth of the Carolinas
FirstHealth Mobile Services
FirstHealth School Based Health Centers
Food Pantries
Health Department
Hospice
JobLink
Maternity Programs
Meals on Wheels
Montgomery Community College
Montgomery County Public Libraries
Montgomery County Schools
Montgomery County Farmers' Market Association
Partnership for Children
Rural Health Clinic
Sandy Ridge Assisted Living
School Nutrition Program
Star Heritage Center
Sheriff's Office
The Cedar Plantation
Troy-Montgomery Senior Center
Veterans' Services Office
Water Department
Youth Sports

Source: UNC Sheps Center for Health Services Research

Montgomery County Health Professionals	
Primary Care Physicians	4
Specialty Physicians	1
Dentists	4
Dental Hygienists	9
Registered Nurses	90
Nurse Practitioners	1
Licensed Practical Nurses	51
Chiropractors	1
Occupational Therapists	2
Optometrists	2
Pharmacists	21
Physical Therapists	4
Physician Assistants	7
Podiatrists	1
Practicing Psychologists	2
Psychological Associates	2
Respiratory Therapists	9
General Hospital Beds	37
Nursing Facility Beds	141

Although low income, poverty, lack of health insurance, and the affordability of insurance were all named as major concerns throughout this assessment, the vast majority of respondents to the community survey as well as to the internet survey indicated that accessing health care and filling prescriptions was not a problem. For those that did have difficulty, "My share of the cost (Deductible/Co-Pay) was too high", "My insurance didn't cover what I needed" and "I couldn't get an appointment", were chosen as the main barriers to accessing care. Furthermore, more than half of the respondents to the community survey indicated that they obtained routine health care most often in Montgomery County, indicating that although the county may not have everything we'd like, a good health care system is still accessible right here in the county. Survey respondents and community leaders have expressed the desire for more specialty services in Montgomery County (such as OB/GYN services) as well as urgent care facilities and a trauma center.

A complete list of healthcare resources can be found in Appendix D of this document.

Who Lives in Montgomery County?

Total Population.

According to the 2011 US Census estimate, Montgomery County has a population of 27,667 which is slightly less than the 2010 estimate of 27,798. This shows a negative growth rate of –0.5% for the county as opposed to a 1.3% growth increase for the state of North Carolina. Interestingly, the three peer counties of Anson, Richmond, and Scotland also experienced population declines (-1.3%, -0.1, -0.8 respectively).

Growth Projections:

It is estimated that by July 2020, Montgomery's population would be 29,678, and will be 31,203 by July 2030. This represents a 6.8% growth increase by 2020 and a 5.1% growth increase by 2030. At the same time, North Carolina's population is expected to increase by 11.3% by July 2020 and by 9.6% by 2030. (Figures taken from the NC Office of State Budget and Management). Compared with an overall growth rate of 3.6% for the county, the older adult population (60 years of age and over) increased 27.3% between 2000 and 2010. The growth rate for the total population decreased from 1990 to 2010, while the growth rate for the older adult population (60 years of age and over) increased. The table to the left shows the growth rates for the total population compared to the older adult age categories from 1990 and 2000 and between 2000 and 2010.

Montgomery County
Growth Rate Trends Between Decades 1990-2010

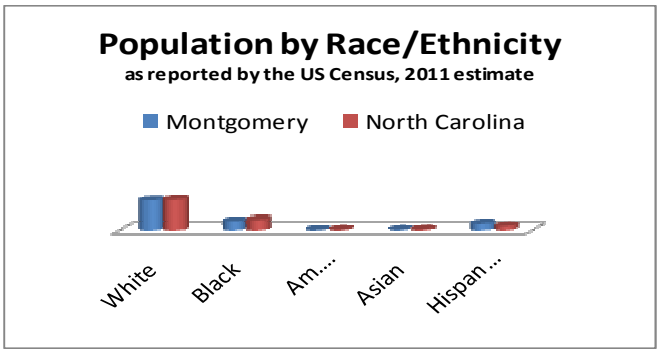
	1990-2000	2000-2010	
Total Population	14.9%	3.6%	Decreasing
Age 60+	16.2%	27.3%	Increasing
Age 60-64	11.6%	61.1%	Increasing
Age 65-74	3.3%	22.5%	Increasing
Age 75-84	33.0%	1.5%	Decreasing
Age 85+	72.5%	36.6%	Decreasing

Source: U.S. Census Bureau, 1990/2000/2000

Age Distribution	Montgomery County	North Carolina
Persons under 5 years, percent 2011	6.2%	6.5%
Person under 18 years, percent 2011	24.1%	23.7%
Persons 65 years and older	15.7%	13.2%

Age Breakdown.

The age distribution of residents in the county also closely mirrors that of the state as reflected in the table to the left. The North Carolina Division of Aging and Adult services reports that by the year 2030, close to one-fourth of the population of Montgomery County will be aged 60 and above (24.7%). Of the senior population, 83% are white, 1.4% are black, .2% are American Indian, .7 are Asian and 1.1% are Hispanic.



Racial Composition. As a whole, Montgomery County residents are primarily white (63.9%), followed by black (19.2), Hispanic (14.5%), Asian (1.6%), and American Indian (0.8%). The population of North Carolina reflects a similar breakdown, with a noticeable difference in the Hispanic population, where county rates are almost twice state rates.

Gender.

Women make up a slightly larger portion of the county's population (51.5%) then men (48.5%) which is very similar to the state percentages where 51.3% percent are women.

Disabilities.

In Montgomery County, 2,503 adults (15.2%) ages 18-64 have a disability and 1,801 older adults (44.3%) 65 years of age and over have a disability. The table to the right illustrates the types of disability for the two age groups. The American Community Surveys (ACS) defines a cognitive disability as a physical, mental, or emotional condition that causes a person to have serious difficulty concentrating, remembering, or making decisions.

Montgomery County				
Type of Disability	Population 18-64 years	Percent	Population 6 years and Over	Percent
With a hearing difficulty	492	3.0%	886	21.8%
With a vision difficulty	449	2.7%	514	12.6%
With a cognitive difficulty	905	5.5%	675	16.6%
With an ambulatory difficulty	1,534	9.3%	1,222	30.0%
With a self-care difficulty	581	3.5%	484	11.9%
With an independent living difficulty	1,126	6.8%	1,037	25.5%

Source: ACS 2008-2010 3-year estimates

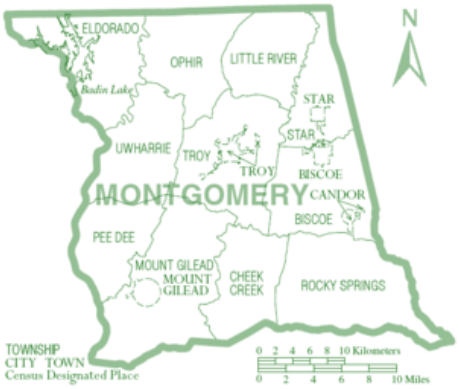
Of the adults ages 18-64 in Montgomery County with a disability, 39.6% (991 persons) are in a minority group. Of the older adults age 65 and older in the county with a disability, 18.1% (326 persons) are in a minority group.

Grandparent Caregivers.

Of the older adults (60 years of age and over) in the count, 1.4% (81 older adults) are grandparents responsible for grandchildren. Of those 81 grandparents, 63 (or 77.8%) are part of a minority group. Furthermore, sixty three percent of these grandparents (or two out of three) live below the poverty level, putting economic strain not only on themselves but on the grandchildren they are raising as well.

Townships/Communities.

There are five main towns in Montgomery County: Biscoe, Candor, Mount Gilead, Star and Troy. According to the 2000 US Census, the largest town is Troy (3430), followed by Biscoe (1700), Mt. Gilead (1389), Candor (825), and Star (807). The total population of these towns total 8151, indicating that approximately two-thirds of the county's population lives outside of town limits. The town of Star has the highest percentage of white residents (90.71%). Mt. Gilead has the highest concentration of black residents (50.04%) and also the highest concentration of Asian residents (2.16%). The town of Candor has the highest Hispanic population (27.03%), followed by Biscoe (23.24%), Star (9.17%), Troy (7.23%), and finally Mt. Gilead (.58%).



Life Expectancy.

Montgomery County and North Carolina Life Expectancies for Children <1					
	Total Life Expectancy	**Male**	**Female**	**White**	**African American**
Montgomery County	77.7	74.2	81.2	78.2	74.8
North Carolina	77.8	75.1	80.4	78.5	74.8

Source: North Carolina State Center for Health Statistics

Life expectancy is the average number of additional years that someone at a given age would be expected to live if current mortality conditions remained constant throughout their lifetime. According to the 2008-2010 Life Expectancies Report issued by the North Carolina State Center for Health Statistics, babies born in Montgomery County are expected to live an average of 77.7 years, which is an increase from the 1990-1992 report that indicated babies were expected to live an average of 73.7 years. Female babies have a higher life expectancy (81.2 years) than male babies (74..2 years) and white babies are expected to live a little over three years longer than black babies (78.2 years and 74.8 years respectively). This is comparable with life expectancies across the state of North Carolina as depicted in the table shown. Shaded cells indicate the highest life expectancy rate. Life expectancies for other age groups can be located by visiting http://www.schs.state.nc.us/schs/data/lifexpectancy/. Although life expectancy is very similar for both Montgomery County and North Carolina, once you move into the 5-9 age range and above, Montgomery's life expectancy is consistently higher than the state estimates (an average of .68 years longer across all age groups). The biggest difference occurs in the 45-49 age range, where Montgomery County has a life expectancy of 36.4 additional years and the state has only an additional 35.3 years.

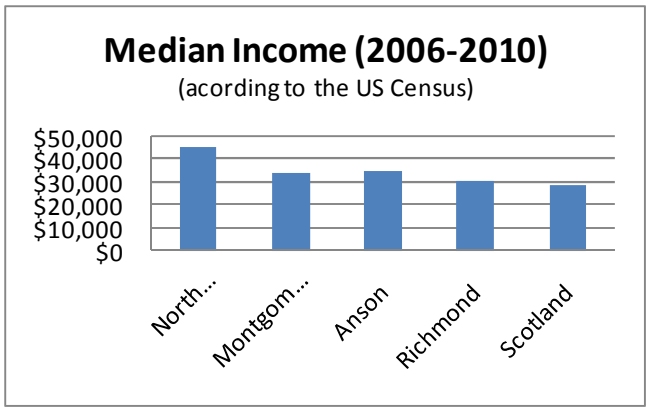
Factors That Affect Health

Montgomery County Schools

MONTGOMERY COUNTY
A Golden Opportunity

MONTGOMERY COMMUNITY COLLEGE

Socioeconomic Factors that Influence Health



Median Income.

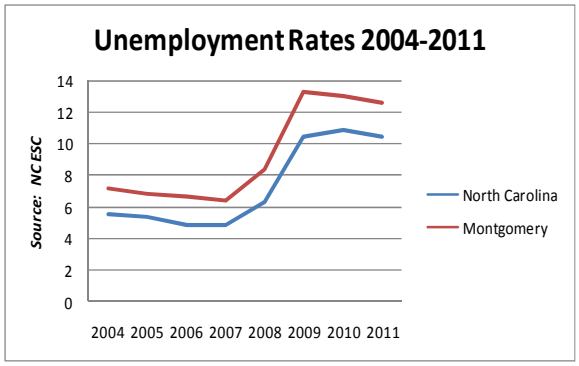
Median income for Montgomery County (2006-2010) as reported by the US Census was $33,861 as compared to the median income for the state which was $45,570. All three of our peer counties also showed median incomes much lower then that of the state. Montgomery's median income is second highest in the group of peer counties. (Anson-$34,745; Richmond- $30,439; and Scotland- $29,368.

Poverty.

The US Census reports that 23.2% of Montgomery's population (2006-2010) is below the poverty level, as compared to only 15.5% of the state population. Action for Children North Carolina reports that as of 2010, 34.3% of children in Montgomery County live in poverty– a percentage that has increased since 2006 when the rate was 25.7% The same data source reveals a similar trend for North Carolina as a whole, whose percentage of children in poverty has increased from 20.1% in 2006 to 24.6% in 2010.

Unemployment.

Montgomery County, along with all three peer counties has had unemployment rates higher than the state unemployment rate for all years between 2008 and 2011. The year 2009 saw the highest rate in the county, of 13.0, and has dropped slightly to 12.6 in the years 2010 and 2011. The highest unemployment rate during the years 2004-2011 was experienced by Scotland County, who's average for the year 2011 was 17.5 (Montgomery's was 12.6 for the same year).

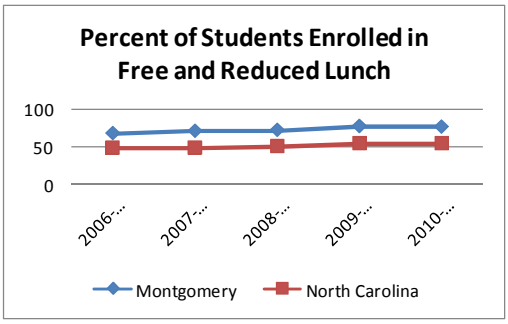


Uninsured.

One in four adults (25.8%) aged 19-64 are uninsured in Montgomery County as compared to 23.6% of adults in North Carolina. Twelve percent of children in the county are uninsured. 788 children in the county were enrolled in NC Health Choice in 2010, a number which has steadily increased since 2006, when there were 666 children enrolled. Although it is unfortunate that an additional 120 children qualify for the public assistance, it is very fortunate that they have been able to access and utilize the help. More than thirty-five hundred children in Montgomery County are enrolled in Medicaid. In 2007, 79.85% of children enrolled in Medicaid were able to receive preventive care. *(Data reported from Action for Children North Carolina.)*

Free or Reduced Lunch.

As the chart to the right indicates, almost 3 out of 4 children in Montgomery were enrolled in free and reduced lunch during the 2010-2011 school year. The number has increased steadily for both the county and the state for every school year from 2006-2011. *(Data reported from Action for Children North Carolina*.)



What is Being Done to Address These Economic Concerns?

Many efforts and initiatives are being conducted throughout the county (and in the state and nation as well) to help bolster the economy. An important asset in Montgomery County is the JobLink Career Center which is currently housed on the campus of Montgomery Community College. JobLink Centers are user-friendly facilities which provide job seekers and employers access to a variety of services all under one roof. As part of its program, JobLink Centers offer comprehensive training and employment services to the entire community. A JobLink Career Center (JLCC) makes the best use of available resources while serving all citizens of North Carolina. JobLink Partner Staffs work together as a team to provide a comprehensive and efficient workforce development system. Services offered include: job listings, job placement, labor market information, career information and guidance, assessments, case management, and information about education and training services. In 2011, Montgomery County JobLink served over 3500 customers with a total of 4,901 visits. From January through October 2012, over 4,300 customers have been assisted in their employment related endeavors. JobLink partners with Employment Services, the Chamber of Commerce, Economic Development Corporation, First Bank and Montgomery County Schools to host a Job Fair and Business Expo for the county. In 2012, the agency hosted the first ever Community Resource Fair to share some available resources to individuals in the county. Additionally, nu-

Wright Foods Job Fair 2012

Business Expo 2011

merous job fairs were held for specific employers in the county who were recruiting for new positions.

The Montgomery County Economic Development Corporation as well as the Chamber of Commerce provide support for local businesses and opportunities for networking. The agencies cooperate with the Small Business Center at Montgomery Community College to provide ongoing education for small businesses. The agencies work to create jobs and wealth in Montgomery County.

In 2010, the Montgomery County Economic Development Center established the Business Visitation Committee. Recognizing that 80% of new jobs are coming from within the county, the Economic Development Center has focused on trying to keep the industries that the county has and to do everything possible to help local businesses excel. The Business Visitation Committee, consisting of 10-12 people, visits all larger businesses and has visited several smaller businesses. The committee is comprised of representatives from local businesses and organizations, as well as a representative from the NC Department of Commerce and one from the SBTDC. The mission of the committee is to show local business owners what resources are available to them inside of Montgomery County and to encourage them to stay operational in this county. The main goal of this committee is to "Keep What We've Got".

The Commodore Corporation Candor Plant– one of the many buildings available in Montgomery County

Montgomery County has the advantage of having buildings and sites available for business development and expansion. One of the major goals of the agency is to develop the "megapark" which is located on the eastern side of the county. The megapark has over 3,000 available acres. There are some prospects on the horizon for the development of this site, but it will be at least two years before anything happens. The site has some shortcomings, as in the fact that natural gas isn't available there. Therefore, the gas has to come from Rockingham which comes with a price tag of $1.5 million dollar per mile. There is also an inadequate water capacity. Although these circumstances are certainly challenging, they are not insurmountable.

"Think Montgomery First" is a campaign that was launched in 2011, and focuses on encouraging people to make purchases inside the county, which will benefit the local businesses as well as to keep sales tax money within the county. The Montgomery Yellow Pages have been included on the Chamber's website and is an alphabetical listing of businesses in the county. It can be accessed at : http://www.montgomery-county.com/Montgomery-Yellow-Pages/. Additionally, a "Montgomery County NC" Facebook page has been developed which is regularly updated with reminders of events and sales happening in the county. Although there isn't formal data as of yet, word of mouth shows that the campaign has been

successful.

Judy Stevens, Retired Director of the Montgomery EDC, reported in the summer of 2012 that one of the biggest challenges for Montgomery County was infrastructure. It is crucial to get water and sewer in the right places for development. County water is not available throughout the entire county and therefore, towns need to take the initiative to develop their own industrial areas within their limits. This will also increase the towns' tax bases by providing water/sewer for those industries.

The goals for the EDC/Chamber of Commerce for the next four years are to bring more jobs into the county, develop industrial areas, encourage towns to be more aggressive in developing their own industrial areas, and keeping the businesses that are in Montgomery County. Additionally the Montgomery County Tourism Development Authority (TDA) is working to develop tourism, as the county is in desperate need of lodging. Tourism has the potential of becoming a major industry in the county due to the Uwharrie National Forest and the lakes area. In 2009, a lodging study was done that identified the need for a large conference center where businesses could hold meetings and the participants could bring their families.

Why are Socioeconomic Factors Important?

"In general, increasing income levels correspond with gains in health and health outcomes, especially at the lower end of the income scale. People in poverty have the worst health, compared to people at higher income levels. For example, compared with their counterparts, poor adults are more likely to have chronic illnesses, such as diabetes and heart disease, and poor children are more likely to be in poor or fair health."- North Carolina Institute of Medicine. *Healthy North Carolina 2020: A Better State of Health*.

Who's At Risk?

While information specific to Montgomery County is not available, the State Center for Health Statistics and the Office of Minority Health and Health Disparities reports that the percentage of Hispanic families living below the federal poverty level is almost four times higher than the percentage of white families who do; twenty-one percent of African American families also live in poverty. The median income for African American families is $20,000 less than white families; median income for Hispanic families is almost $18,000 less than white families. Forty-nine percent of Hispanics have less than a high school education, and twenty percent of African American's have less. The unemployment rate is highest for African-American's at 11%, followed by Hispanics at 7.7%. The white unemployment rate across the state is 5.4%.

Educational Factors that Affect Health

Educational Attainment.

The United States Census Quick Facts report indicated that only 72.1% of persons aged 25 and over in Montgomery County are high school graduates (2006-2010). This is the lowest rate amongst our peer counties, and is also lower than the state rate. The rate for Anson is 77.6%, Richmond is 74.9%, and Scotland is 75.2%. North Carolina's rate is 83.6%. The US Census reports that 14.8% of the population of persons over age 25 in Montgomery County possess a bachelor's degree or higher, as compared to the state rate of 26.1%. Montgomery's rate for higher education is higher than the peer counties however. (Anson-8.4%, Richmond– 10.0%, and Scotland 14.0%).

Schools in Montgomery County.

Montgomery County serves over 4100 students in the district, which is composed of six elementary schools, two middle schools, and three high schools. The county also has two private schools, which serve children in kindergarten through high school. Montgomery Community College providers higher education in the county.

High School Graduation/Dropout Rates.

HealthStats reports that the four year high school graduation rate for the 2010-2011 school year for Montgomery County is 77.9%, which is exactly the same as the state rate, and is higher than all of our peer counties (Anson– 75.9%, Richmond-73.6%, and Scotland– 65.6%). Montgomery County Schools reports that in 2012, 80.5% of students who started ninth grade in 2008-09 completed high school in four years or less. Furthermore, as can be seen in the tables below, the drop out rate for the county has been steadily declining since 2008 and is lower than both the state and regional rates for all reported year.

Drop Out Rates (2008-2011)

Drop Out Counts	2008-2009	2009-2010	2010-2011	2011-2012*
Montgomery Learning Academy	12	11	19	18
East High School	15	18	16	6
West High School	21	15	7	7

Comparison Rates	2008-2009	2009-2010	2010-2011	2011-2012*
Montgomery County District	3.63	3.41	3.25	2.53
Sandhills Region	3.94	3.72	3.92	n/a
State	4.27	3.75	3.43	n/a

**Rates As of 5-2-2012 and reported by Montgomery County Schools. Official data for 2011-2012 will not be released until 2012*

Academic Achievement/SAT Scores

Montgomery County Schools reports that according to the 2011-2012 ABCs of Public Education report, nearly 79.5% of North Carolina public schools met or exceeded their academic growth goals. For the second consecutive year in Montgomery County Schools, 100 percent of the schools met their growth targets in 2011-12, naming them a District of High Growth. Additionally, East Montgomery High School is a School of Distinction, with 86.5% of the students' scoring at or above Achievement Level III. The report also found that MCS met 85.7% percent of their Annual Measurable Objectives

(AMOs). AMOs have replaced the Adequate Yearly Progress (AYP) measures previously required by the U.S. Department of Education. Average SAT scores for Montgomery County are consistently less than the state rate. Montgomery County's average was 884 in 2010, as compared to the state average of 1005. The 2011 county average was slightly lower than in 2010 at 864, as compared to the state average of 1001.

2008 Academic Performance (data provided by Action for Children North Carolina)	MCS	NC
3rd Grade Students Proficient on End-of-Grade MATH testing	72.7%	73.2%
3rd Grade Students Proficient on End-of-Grade READING testing	76.2%	54.5%
8th Grade Students Proficient on End-of-Grade MATH testing	58.1%	68.2%
8th Grade Students Proficient on End-of-Grade Reading testing	40.9%	54.2%

Community College.

When analyzing completions rates at the community college curriculum level, it is important to consider that continuous enrollment is not mandatory nor is completion of a program within the traditionally prescribed timeframe. Moreover, many, if not most community college students continue to work at least part-time and many have families to support. Program completion is dependent on many variables as students balance the demands of adult life with the pressures of successfully pursuing an academic credential. What's more, the length of time needed to complete educational requirements varies according to type of program and program requirements.

Academic Year	Associate	Certificate	College Transfer Pathway	Diploma	Transitional	Curriculum Total
2011-2012	761	125	21	59	145	1111
2010-2011	767	112	n/a	61	256	1196
2009-2010	866	77	n/a	53	339	1335
2008-2009	852	80	n/a	58	383	1373
2007-2008	802	75	n/a	63	365	1305

Source: Montgomery Community College

While the completion rates for Montgomery Community College (2011-2012 graduation rate = 35%, of the 2008 entering student cohort) are well within the range found in the North Carolina Community College System as a whole, it is perhaps more practical to examine the number of students pursuing a credential. The table shows the curriculum status of students over the past five academic years. The "Associate", "Certificate", and "Diploma" categories represent the number of curriculum students pursuing the respective credential. "College Transfer Pathway" represents the number of students in the College's new high school program while "Transitions" represents the number of students transferring to other institutions. According to the 2011-2012 data, 6% of the adult population in Montgomery County was enrolled in at least one curriculum class or program. The numbers also reveal approximately two-thirds are female students and 4.4% are Hispanic students. When continuing education enrollment is added to the total, the proportion rises to 18% of the Montgomery County population.

The Montgomery Community College Strategic Plan for 2012-2017 examines program needs through systematic analysis of multiple sources of both quantitative and qualitative

Educational Factors that Affect Health

data. Economic trends and social change have led to changes in programs in support of the College's mission, quality education and student success. The Strategic Plan centers on the following:

- Workforce training for emerging jobs and a changing workplace.
- Partners in learning to serve all citizens.
- Promotion of quality and flexible programs and services.
- Resource procurement and allocation.
- Leverage the power of technology

Communities in Schools.

Communities in Schools is the nation's leading community-based dropout prevention organization focused on the mission of helping young people stay in school, successfully learn and be better prepared for life. Communities in School Montgomery County (CISMC) carries out this mission by connecting vital community resources with schools and the children, allowing them access to more opportunities and aid in the fulfillment of the basic needs in life. CISMC, along with partnerships developed throughout the community, are helping to provide a comprehensive solution to the issues that place young children in jeopardy. Rather than duplicating services or competing with other agencies, CISMC mobilizes existing community resources and fosters cooperative partnerships for the benefit of students and families, which in turn will benefit the community.

CISMC also forms an additional support system for the school system. By joining together, a strong foundation is ensured for youth to begin building their future. The goal is to bridge the gap between community resources and the schools, providing both the youth and teachers access to valuable resources that may have otherwise been unattainable. CISMC is committed to making a positive difference in the lives of the youth of Montgomery County by identifying and addressing the unmet needs of children and families– needs that, when left unanswered, contribute to failure or drop-out.

Youth Leadership Montgomery students give back to their community by assisting with the BackPack Pals program

BackPack Pals Program. Seventy-six percent of Montgomery County students are on the free or reduced cost lunch programs, meaning that thousands rely almost exclusively on the meals they receive at school Monday through Friday for nourishment. The Backpack Pals Program is sponsored by Communities in Schools of Montgomery County along with support from Montgomery County Churches in Action and Montgomery County Schools. The Backpack Pals program is designed to meet the needs of hungry children, identified by school staff, who have little to eat over the weekend. Letters are sent home to the parents/guardians of identified students to obtain permission for the child to participate. Bags are packed and brought to the schools by community volunteers and sent home with the students on Fridays. The Backpack Pals program has proven to have a positive impact on a student's behavior, attendance and academic achievement, as well as alleviating hun-

ger. During the 2012-2013 school year, the program was expanded to include middle and high school students to meet the increasing need of those populations, giving an overall goal of serving two hundred and sixty students.

During Parent Game Night, parents had a chance to learn more about the mentoring program and mentors and mentees had a chance to bond.

GO Mentoring. The main goal of the Golden Opportunity Mentoring Program (GO) is to match a caring adult with an at-risk child to help the child develop the skills and make the decisions and choices that will lead to academic and social success in his or her future life. The program is designed to target students in all grade levels, who are identified as at-risk of dropping out of school. Students enrolled in the program receive a volunteer mentor on a weekly basis and have access to all CIS resources. Mentors see their mentees both during the school year and throughout the summer. Enrolled students experience new cultural and educational opportunities, as well as benefit from time with a caring adult. With help from the guidance counselors and principals, the students are monitored on a daily basis, providing an additional support system for the student to succeed. Two grants are currently in place that focus on West Montgomery High School, West Middle School, and East Montgomery High School that help pay for two Site Coordinators that assist with mentors, tutors, and offer additional help and services to the students that are in the program. These grants will continue through the 2013-2014 school year. Grants are being sought to continue the work after the end of the current funding stream. This school year there is an added focus on rejuvenating mentoring programs at all school sites. Training will begin in January 2013 for those who are interested in becoming a mentor.

Why is Education Important?

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

Who's At Risk?

According to the data provided by Montgomery County Schools, 31 students dropped out of school during the 2011-2012 school year. White males seem to be most at risk, accounting for 11 of the 31 students. This is followed by Hispanic males (6), Hispanic females (5), White females (4), Black males (3) and black females (2). Reasons for dropping out include attendance issues, enrollment in community college, pregnancy and entering the work force full-time.

Environmental Factors that Affect Health: Water Quality

Water Quality.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for infections. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in `drinking water is primarily from materials and components associated with service lines and home plumbing. Montgomery County is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

The water that is used by the Montgomery County Water System is surface water from Lake Tillery, part of the Yadkin-PeeDee basin. The water is treated at the facility at 724 Hydro Road, Mt. Gilead, and pumped into our system. The system has over 5000 individually metered customers, and supplies water to all five towns in the county, in addition to Carolina Water Service for Wood Run and Carolina Forest. Water is also sold from this system to the town of Robbins in Moore County.

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The relative susceptibility rating of each source for Montgomery County Water System was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings are summarized in the table below:

Source Name	Susceptibility Rating	SWAP Report Date
Lake Tillery	Moderate	March 2007

During the year 2011, or during any compliance period that ended in the year 2011, Montgomery County Water System received no violation that covered the time period of January 1 to December 31.

Over 150 contaminants in drinking water are routinely monitored per Federal and State laws. The tables to the right list all of the drinking water contaminants that were detected in the last round of sampling for the particular contaminant group.

Microbiological Contaminants

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	2 positive	0	5% of monthly samples are positive	Naturally present in the environment
Fecal Coliform or E. Coli (presence or absence)	N	0 positive	0	0 (Note: The MCL is exceeded if a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive)	Human and animal fecal waste

Inorganic Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low-High	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	3-2-10	N	ND	N/A	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Fluoride (ppm)	3-2-10	N	.66 mg/l	N/A	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90th percentile)	Jun– Sept 2011	.105 \mg/l	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (90th percentile)	Jun-Sept 2011	N/D	0	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

Total Organic Carbon (TOC)

Contaminant (units)	TT Violation Y/N	Your Water (RAA Removal Ratio)	Range Monthly Removal Ratio Low-High	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon (removal ratio) (TOC)- TREATED	N	60% 1.14 low 1.60 high	1.09 low 1.81 high	N/A	TT	Naturally present in the environment

Unless otherwise noted, all data and information in this section is taken from the ***Montgomery County 2011 Annual Drinking Water Quality Report***

Disinfectants and Disinfection Byproducts Contaminants

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water (AVG)	Range Low-High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb) (Total Trihalomethanes)	N	.056 Mg/l	.111 high .015 low	N/A	80	By-product of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	N	.039 mg/l	.055 high .021 low	N/A	60	By-product of drinking water disinfection
Chlorine (ppm)	N	1.86	2.14 high .24 low	4	4	By-product of drinking water disinfection

Below are secondary contaminants, required by the NC Public Water Supply Section, are substances that affect the taste, odor, and/or color of drinking water. These aesthetic contaminants normally do not have any health effects and normally do not affect the safety of your water.

Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low-High	Secondary MCL
Iron (ppm)	3-2-11	.013 mg/l	N/A	0.3
Manganese (ppm)	3-2-11	.011 mg/l	N/A	0.05
Nickel (ppm)		N/D		
Sodium (ppm)	3-2-11	21.2	N/A	N/A
pH	3-2-11	7.4	N/A	6.5 to 8.5

Important Definitions

Not-Applicable (N/A)- Information not applicable/not required for that particular water system or that particular rule.

Non-Detects (ND): Laboratory analysis indicates that the contaminant is not present

Parts per million (ppm) or Milligrams per liter (ug/L): One part per billion corresponds to one minute in 2,000 years or a single penny in $10,000,000

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

EXTRA NOTE: MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Private Drinking Water Wells, Public Water Expansion.

In late 2007 and 2008, the chemicals 1,2 Dibromo– Cloropropane, 1,2-Dichloropropane, and 1,2,3-Trichloropropane were discovered in wells in the Rocky Springs area in the southeastern part of Montgomery County. Pesticides used in peach orchards and tobacco fields, banned since the 1970s, were believed to be the source. In response to this contamination, Montgomery County obtained funds through several sources to expand public water to the affected area.

Since 2008, public water has expanded in the Rocky Springs area along 13 roads in the contaminated area with the addition of 70 service taps. Additional lines are pending approval along Windblow Road and Tabernacle Church Road, providing an additional 57 taps.

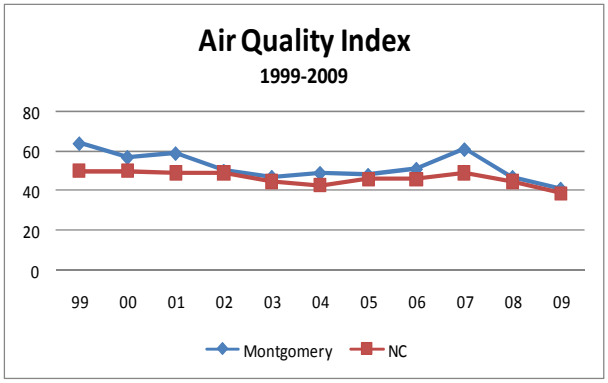
Current water line expansion throughout the county involves 12 additional roads with 71 new service taps.

In addition to public water expansion, the state mandated Private Drinking Water Well Program has been in place since 2008. This program provides for the permitting, inspection, and testing of all new wells throughout the county intended for human consumption. Permitting ensures that required setbacks from septic systems and other sources of contamination are maintained, and provide consumers with information regarding water quality so they can make informed decisions about any kind of treatment that may be needed to render their water supply safe. In addition, special requirements for grouting depths are enforced in areas of the county with naturally occurring arsenic in geologic formations, to help eliminate this hazard in the resulting well water supply.

Expansion of Public Sewer.

Handy Sanitary continues to work toward providing public sewer service to the subdivisions in Northern Montgomery County. Uwharrie Point and Badin Shores resort are already online, with work continuing to ready additional areas to be brought into service. Once operational, public sewer service in the area will protect water quality in Badin Lake by removing aging septic systems which are no longer functioning optimally from use. Given that the average life span of a septic system is 25 years, and that many of these lakefront community lots have no room for system repair, public sewer will benefit this area both now and in the future.

Environmental Factors that Affect Health: Air Quality



Source: *www.usa.com/montgomery-county-nc-air-quality.htm*

Air Quality. Air quality indices (AQI) are numbers used by government agencies to characterize the quality of the air at a particular location. As the AQI increases, an increasingly large percentage of the population is likely to experience increasingly severe adverse health effects. Air quality index values are divided into ranges, and each range is assigned a descriptor and a color code. Standardized public health advisories are associated with each AQI range. The United States Environmental Protection Agency (EPA) uses a scale indicating that index values between 0 and 50 are "good", 51-100 are "moderate", 101-150 are "unhealthy for sensitive groups", 151-200 are "unhealthy", 201-300 are "very unhealthy" and 301+ are "hazardous". According to www.usa.com, for the years 1999-2009, Montgomery County has the seventh highest air quality index of all 100 counties in the state. Montgomery's rate is 52.2, as compared with Anson's AQI of 47.4, Scotland's AQI of 47.3, and Richmond's AQI of 47.1. Montgomery's rate puts us just over the limit of the descriptor ratings, registering Montgomery as a county with "moderate" air quality. However, it is important to note that 80% of the days are considered "good" air quality, and just 20% are considered "moderate".

Movement for Changes in Tobacco Regulations. In March 2009, the Montgomery Board of Health voted to extend their "No Smoking" rule to include all tobacco products within a 50 foot perimeter around the Health Department. Board members were presented with information to support making this change from the staff health educators and Elisabeth Constandy, from the state Tobacco Prevention and Control Branch. New signage was posted on all entrances to the Health Department and also outside near the perimeter. In April 2009, the Montgomery County Commissioners voted to adopt an ordinance to include the grounds of the Department of Social Services within a 50 food perimeter as Tobacco Free. This ordinance took effect in May 2009. Later, an effort was made to extend this ordinance to all Montgomery County Government grounds, but commissioners chose to oppose this recommendation.

In May 2009, the North Carolina Legislature passed House Bill 2 to prohibit smoking in bars and restaurants to help protect the health of restaurant workers and patrons. The law went into effect in January 2010, and Montgomery County Health Department worked hard to help notify all affected establishments and provide them with signage to post about this change in law. Heath educators provided news articles to local papers and visited all county restaurants presenting them with table tents, coasters, and other information in an effort to publicize the "no smoking" law. Restaurant owners, as a whole, have had little trouble in enforcing the new law as patrons have expressed little opposition. Over the past two years, Montgomery County Health Department has had few, if any, complaints, with no need to use the enforcement provisions provided by the law.

The Montgomery County Health Department joined the Biscoe Town Manager and E. Donahue, a representative from the Tobacco Prevention and Control Branch in Raleigh at a Town

Commissioners meeting in May 2011, in support of an ordinance to ban tobacco in Biscoe Town Park(s). Brenda Caudill, Health Educator, read a letter of support from Julie Clark, interim Health Director, and representative of the County Health Board. A majority of the Town Commissioners opposed the ordinance, saying that smoking was the citizen's right, even though they recognized both the harmful effects that secondhand smoke can have on health and the poor example smokers set for our children.

The Montgomery County Board of Health learned that the community college board of directors was going to consider making Montgomery Community College a tobacco free campus. The Board of Health sent a letter of support for this action to the Directors and it was decided in the spring of 2011 to prohibit the use of tobacco products on the entire college campus, indoors and out. This new rule was passed and came into effect in January, 2012.

TRU– Tobacco. Reality. Unfiltered– is a movement started by young people to reduce teen tobacco use. Special projects in Montgomery County include "Through With Chew" activities, an Earth Day Cigarette Butt Clean-Up, a Tackle Tobacco 100% Tobacco-Free School Assessment and a school-wide Great American Smoke out Celebration along with many other school tobacco education activities. TRU provided sustainability tool kits to area middle and high school students providing Health and PE teachers with educational props to supplement the state tobacco standard course of study.

Environmental Factors that Affect Health: Lead Poisoning

As the table below indicates, childhood lead poisoning does not seem to be an issue in Montgomery County. Initial screenings didn't identify any children with elevated lead levels in 2010. No confirmed lead elevations occurred in 2009, but 1 did occur in 2008. For all years depicted, Montgomery's screening rates remain higher than state rates and peer rates.

Childhood Blood Lead Surveillance Data

		Ages 1 and 2 Years						*Ages 6 Months to 6 Years*		
								Confirmed		
		Target Population*	Number Screened	Percent Screened	Percent Medicaid Screened	Lead ≥ 10	% ≥ 10	Number Screened	10-19	≥ 20
2010	Mont.	705	564	80.0	95.6	-	-	703	-	-
	NC	257,543	132,014	51.3	81.1	51.9	0.4	162,060	146	24
	Anson	585	347	59.3	88.6	3	0.9	575	1	-
	Richmond	1296	735	56.7	79.0	4	0.5	848	1	-
	Scotland	1011	735	72.7	82.6	3	0.4	804	1	-
2009	Mont.	797	654	82.1	96.9	3	0.5	832	-	-
	NC	261,644	129,395	49.5	79.9	58.3	0.5	160,713	143	38
2008	Mont.	819	584	71.3	92.3	2	0.3	691	1	-
	NC	258,532	121,023	46.8	77.6	654	0.5	152,222	181	36

Target Population is based on the number of live births in the previous 2 years.
Includes ages 9-11 months
Source: Children's Environmental Health Branch, North Carolina Department of Environment and Natural Resources

Environmental Factors that Affect Health: Physical Environment

Weather.

Some counties and states are physically situated in such a way that they are at increased risk for hazardous weather events. Montgomery County is in the central part of North Carolina, and is not at major risk for any weather events. The Earthquake Index Value is calculated based on historical earthquake events data using USA.com algorithms. It is an indicator of the earthquake level in a region. A higher index value means a higher chance of an earthquake, and a lower value means a lower chance. According to USA.com, the chance of earthquake damage in Montgomery County is about the same as the North Carolina average, and is much lower than the national average. Montgomery County ranks 52nd in the state for earthquake risk, as compared to Anson County which ranks 48, Richmond-53, and Scotland-60. Montgomery's earthquake Index is 0.02, as compared to NC's earthquake index value of 0.18. No county in North Carolina is at risk for volcanic eruptions. Montgomery County is at a slightly lower risk for tornado than the state as a whole, with a Tornado Index Value of 103.80, as compared to the state's Tornado Index Value of 115.21. The county ranks 58th in the state for tornado risk– Scotland ranks 7th, Anson 35th, and Richmond 38th. A total of 15,299 other extreme weather events that occurred within 50 miles of Montgomery County were recorded from 1950 to 2010. The most common occurrence was severe thunderstorm winds (7,794 events), hail (1,245 events), flood (1,245 events), heavy snow (189 events), winter weather (180 events), strong winds (131 events), drought (97 events), and ice storms (54 events).

Badin Lake Fish Contamination.

After a study conducted by the Division of Environment and Natural Resources, Water Quality Division, an advisory was issued on February 11th, 2009 recommending that pregnant women, women who may become pregnant, and children under 15 years of age avoid eating catfish and largemouth bass from Badin Lake due to elevated levels of PCB's (polychlorinated biphenyls) in these fish. Others are recommended to limit their consumption of these fish to once per week. In addition, there continues to be a statewide advisory regarding the consumption of fish known to be high in mercury by pregnant women, children, and others. Information about these advisories, as well as the studies which led to them, can be found at http://epi.publichealth.nc.gov/fish/current.html#statewide.

Access to Recreational Facilities.

According to the 2012 MATCH report from countyhealthrankings.org, Montgomery County has a lower rate of access to recreational facilities than it's North Carolina counterparts. Montgomery's rate is 4, as compared to the state's rate of 11. Richmond also has a rate of 4 and Scotland has a rate of 6. This rate is calculated per 100,000.

Recognizing the limited opportunities for physical activity and recreation, increasing access to such venues was selected as a priority health issue during the 2008 Community Health Assessment. Much work has been done toward mitigating this concern, and descriptions of projects that have been implemented can be found in the State of the County Health Reports for 2009, 2010, and 2011 (accessible online at www.montgomerycountync.com). A significant change to the built environment has been the construction of a 1/2 mile walking trail at East Middle School. Funding for this project was provided through the North Carolina Eat Smart, Move More Community Grants program. Although there is still work that could be done to im-

prove the trail, students are using it regularly and an afterschool walking club has also been implemented.

Access to Healthy Foods. According to the 2012 MATCH report "limited access to healthy foods" is defined as the percentage of the population who are low-income and do not live close to a grocery store. "Close" is defined differently for metro versus non-metro areas. The report lists Montgomery County with a 0% in this category, as it does for Richmond and Scotland. However Anson County is listed at 32% and North Carolina is listed at 10%.

Farm and Food Council. Citizens from Anson, Montgomery and Stanly counties interested in the region's farm and food future came together over a two year period (2011-2012) to establish a vision of a locally based, economically resilient farm and food system for the tri-county area. A Farm and Food Council, with five representatives from each county, has been developed to encourage, support, advocate and coordinate a regional farm and food system that will enhance economic viability; increase farmer profitability through better marketing; aggregate and distribute locally grown foods to markets; improve public health and increase the number of local food and agriculture jobs. The five Council members will represent the following sectors: farming, government/economic development/Cooperative Extension, public health/medical, community colleges/educational system and interested individuals. The Council held its first true working session with all member representatives in place on November 27, 2012 at Stanly Agri/Civic Center and decided to redefine their name from Tri-County to Upper PeeDee Farm and Food Council. Meetings will rotate to each of the three counties every four months. This is an emerging opportunity for public health to promote healthy local foods that will help individuals move to healthier lifestyles.

Montgomery County Farmers' Market Association. The goal of Montgomery County Farmers' Market Association is to encourage farming and agriculturally related entrepreneurism in the Montgomery County area and strengthen sense of community. Working with about twenty small-scale farms in and around the county, a Farmers' Market in the town of Troy was developed in 2011. It is the only "growers-only" farmers market in the area. An all-volunteer and not-for-profit association, one of the group's priorities is working toward an official structural organization, such as a 501(c)3 status in 2013. The association operates one farmers' market in downtown Troy from the first Thursday in April until the first Thursday in November between the hours of 3:30 pm and 6:30 pm. Seventeen members (vendors) were part of the association in the second season (2012) of the farmers' market and an average of 6-10 vendors regularly participated on a weekly basis throughout the season. Bi-monthly cooking demonstrations using local foods were facilitated by Local Foods Coordinators at the NC Cooperative Extension, and musicians participated twice monthly. These are two very successful aspects of the market, bringing in a wide-variety of community members and increasing sales for individual vendors. It is challeng-

ing to "grow" a farmers' market to the point where it is profitable for the vendors. This is particularly true for a market serving a small town in a rural county. Marketing is essential for building a sizeable group of regular customers. Utilizing Facebook, a weekly e-newsletter and printed postcards have been marginally successful, and the weekly newspaper has been utilized as well. For the third season, recruitment of more fruit/vegetable growers and the continuation of local food demonstrations, music, and children's activities are main goals.

Fast Food Restaurants. This indicator is listed in the 2012 MATCH Report as the percentage of all restaurants that are fast food establishments. Montgomery County is listed at 48%, Anson at 50%, Richmond is also at 50%, and Scotland is at 58%. North Carolina as a whole is listed at 49%. Although many fast food restaurants are trying to incorporate healthier meals into their menus, most choices available at these venues are higher in fat and in calories making the prevalence of fast food restaurants in the county a risk factor for health.

North Carolina Food Code Adoption. On September 1st of 2012, after several years of preparation, North Carolina adopted the 2009 FDA Food Code. The food code provides up-to-date, science-based rules and provisions to avoid food-borne illnesses and marks a major change in the state's food protection standards. Among other changes, food handlers are now prohibited from touching ready-to-eat foods with bare hands, establishments must develop Employee Health Policies to prevent illness transmission, and the "person in charge" during operation must be a certified food protection manager. By adopting the Food Code, North Carolina comes more in line with food protection standards in use across the nation.

Why are Environmental Factors Important?

According to *Healthy North Carolina 2020: A Better State of Health,* the environment in which individuals live and work affects their health. Contaminants in water and air can have adverse health consequences. Both short-term and chronic exposure to pollution can be serious health risks. Air pollution from ozone can lead to respiratory symptoms, disruption in lung function, and inflammation of airways. Water pollution has been linked to both acute poisonings and chronic effects. Reducing contaminants protects the public's health by ensuring that those on community water systems receive safe drinking water. Good nutrition is essential to good health. Fruits and vegetables are nutritious foods that have been shown to guard against many chronic diseases, including cardiovascular disease, type 2 diabetes, and some cancers.

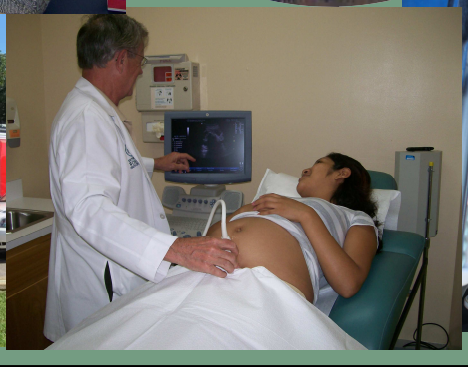
Who's At Risk?

Air Quality: Children, people with asthma and lung disease, older adults, infants, and active people of all ages

Water Quality: People who drink from private wells that are contaminated, and people who consume catfish and largemouth bass from Badin Lake (especially pregnant women, women who may become pregnant and children under 5)

Access to Healthy Foods: Candor has been named a "Food Desert" which is a community where healthy food is hard to find. Residents who live in Candor, people with transportation limitations, and people with economic constraints are all at risk of consuming less healthy foods

Secondary Data-



Leading Causes of Death

Total Death Rates.

The North Carolina County Health Data Book-2012, accessed via the State Center for Health Statistics webpage, indicates that although Montgomery County's unadjusted death rate for 2006-2010 is slightly higher than the state's rate (882.8-Mtg, 830.5– NC), the rate is lower than that of the peer counties (Anson-1141.7; Richmond-1165.4; Scotland– 1059.9). Utilizing the calculations spreadsheet provided in the Community Health Assessment Guidebook, these figures indicate that Montgomery's death rate is 6.3% higher than the state rate for the years indicated, and 16.7% lower than Scotland's rates; 22.7% lower than Anson's rates, and 24.2% lower than Richmond's rates.

Leading Causes of Death.

The North Carolina State Center for Health Statistics lists the following as the Ten Leading Causes of Death in Montgomery County and North Carolina for all ages for the 2006-2010 time frame:

Montgomery County

Rank	Cause of Death	Death Rate
1	Diseases of the Heart	200.8
2	Cancer-All Sites	180.5
3	Chronic Lower Respiratory Diseases	58.0
4	Cerebrovascular Disease	50.7
5	Alzheimer's Disease	39.1
6	Other Unintentional Injuries	34.1
7	Motor Vehicle Injuries	29.7
8	Diabetes Mellitus	26.1
9	Pneumonia & Influenza	19.6
10	Septicemia	16.7

North Carolina

Rank	Cause of Death	Death Rate
1	Cancer-All Sites	190.5
2	Diseases of the Heart	187.3
3	Cerebrovascular Disease	47.8
4	Chronic Lower Respiratory Disease	46.8
5	Other Unintentional Injuries	28.7
6	Alzheimer's Disease	27.7
7	Diabetes Mellitus	23.2
8	Kidney Disease	19.1
9	Pneumonia & Influenza	18.5
10	Motor Vehicle Injuries	16.8

Although the numbers seem to be somewhat similar, the calculation of percentage differences paints an interesting picture. For example, Montgomery County's death rate from motor vehicle injuries is 76.8% higher than the state's death rate from the same cause. Similarly, the county's Alzheimer's death rate is 41.2% higher than the state rate, and the county's Chronic Lower Respiratory Disease death rate is 23.9% higher than the state rate for the same cause of death. Interestingly, the cancer death rate in Montgomery County is 5% lower than the state rate. When looking at causes of death, it is also interesting to note that although septicemia makes the county's top ten list in 10th position, the condition does not appear on the state's top ten list. Conversely, kidney disease is the 8th leading cause of death for the state, but doesn't appear on Montgomery's top ten list at all.

Montgomery County's Leading Causes of Death by Age (2006-2010)

Source: North Carolina State Center for Health Statistics

00-19 Years	20-39 Years	40-64 Years	65-84 Years	85+ Years
Conditions originating in the Perinatal Period	Motor Vehicle Injuries	Cancer-All Sites	Cancer-All Sites	Diseases of the Heart
Motor Vehicle Injuries	Other Unintentional Injuries	Diseases of the Heart	Diseases of the Heart	Cancer-All Sites
Diseases of the Heart	Diseases of the Heart	Other Unintentional Injuries	Chronic Lower Respiratory Disease	Alzheimer's Disease
Congenital Anomalies	Homicide	Chronic Lower Respiratory Disease	Cerebrovascular Disease	Cerebrovascular Disease
Other Unintentional Injuries	Cancer-All Sites	Motor Vehicle Injuries	Alzheimer's Disease	Chronic Lower Respiratory Disease

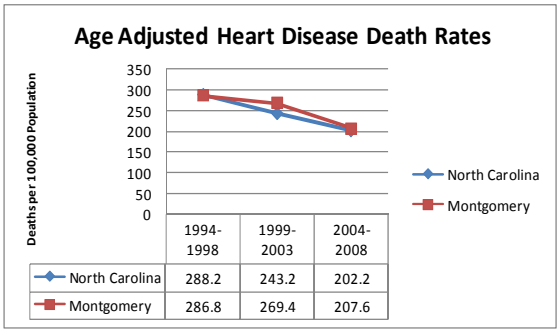
Trends in Leading Causes of Death.

When analyzing the top ten list it is also important to compare the leading causes of death for this time period with what was listed as the top ten causes in the past. Data listed in the 2008 Assessment was based on statistics from 2002-2006. At that time, the leading causes, ranked from highest to lowest were as follows: Heart Disease, Cancer, Stroke, Chronic Lower Respiratory Disease, Diabetes Mellitus, Pneumonia & Influenza, Motor Vehicle Injuries, Alzheimer's Disease, Other Unintentional Injuries, and Kidney Disease. When comparing the list reported in 2008 to this current assessment, it can be seen that Montgomery County's diabetes death rate moved from the 5th leading cause of death to the 8th leading cause of death, indicating that efforts toward diagnosis and treatment have positively impacted the disease's outcome. Likewise, the death rate for pneumonia and influenza moved from 6th place to 9th place. Kidney Disease, the 10th leading cause of death as reported in 2008, does not appear on the current list at all. Unfortunately, the Alzheimer's rate for the county moved it from 8th position up 5th position, and the unintentional injuries rate moved from 9th position to 6th indicating that death rates for these conditions have become more of a concern.

When analyzing the causes of death by age, it is clearly seen that diseases of the heart appears in the top five for all ages in the county, even our young babies and children, indicating that interventions to reduce heart disease are of extreme importance in Montgomery County. In comparison to the list from the past assessment, some changes can be seen. SIDS was ranked as the 4th leading cause of death in the 00-19 year olds, but doesn't appear on the current list at all. HIV Disease was 4th on the list for 20-39 year olds and isn't on the current list at all. Heart Disease was 6th for the same age group, and has moved into the 3rd position for this age group during the current period. Motor Vehicle Injuries didn't make the list for 40-64 years in the past, but is 5th on the current list. Although the rank has changed, the top five leading causes of death remain the same for the 65-84 year old range. In this year's list, Alzheimer's Disease is 3rd on the list for the 85+ age range although it didn't appear on the list in the last assessment.

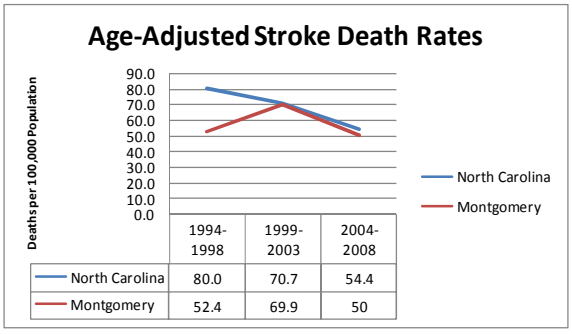
MORTALITY RATE TRENDS

The previous pages outlined the leading causes of death for Montgomery County and the state, and compared that data with peer counties. The charts and information in this section focuses on data as far back as 1994, allowing trends in key health indicators to be seen. All statistical information has been taken from the "North Carolina Statewide and County Trends In Key Health Indicators" report which is published by the North Carolina State Center for Health Statistics, which can be accessed online.



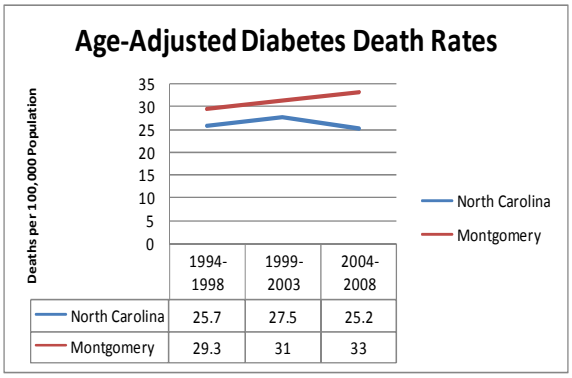
	1994-1998	1999-2003	2004-2008
North Carolina	288.2	243.2	202.2
Montgomery	286.8	269.4	207.6

Although the heart disease death rates for Montgomery County and the state were very similar for the 1994-1998 time period, Montgomery's rate was 10.8% higher than the state rate from 1999-2003 and 2.7% higher from 2004-2008. However, a downward trend exists overall for the county, with the highest rate occurring during the first time period, and the lowest occurring in the last. When compared with peer counties, Montgomery's heart disease death rates are closest to the state's rates, averaging 4.3% higher than state rates. Richmond County's heart disease death rates averaged 40.43% higher than state rates, Scotland averages 30.43% higher, and Anson averages 16.3% higher.



	1994-1998	1999-2003	2004-2008
North Carolina	80.0	70.7	54.4
Montgomery	52.4	69.9	50

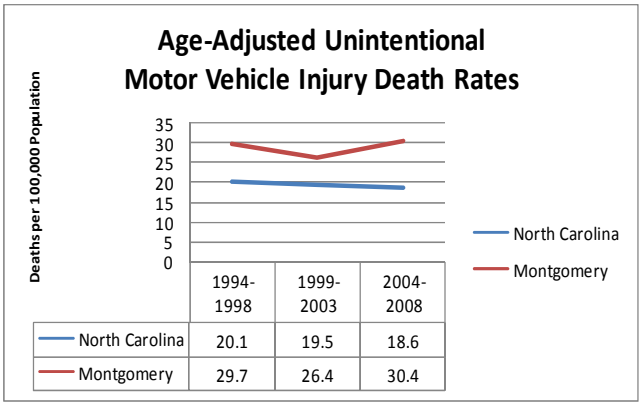
Montgomery's age-adjusted stroke death rates are consistently lower than state rates, with the most dramatic difference being seen from 1994-1998 where the county's rate was 34.5% lower than the state rate. The rate rose from 52.4 during that time period, to 69.9 in 1999-2003, before coming back down to 50.0 in 2004-2008. County rates in Scotland and Anson were consistently higher than state rates for all three time periods, with the biggest difference occurring in 2004-2008 where Scotland's rates were 47.8% higher than state rates and Anson's were 59.7% higher than state rates. Richmond's rates were very similar to state rates in the initial time period, and then were actually 8.3% lower from 1999-2003 before skyrocketing back up in 2004-2008 revealing rates that were 41.4% higher than the state rates for the same time frame.



	1994-1998	1999-2003	2004-2008
North Carolina	25.7	27.5	25.2
Montgomery	29.3	31	33

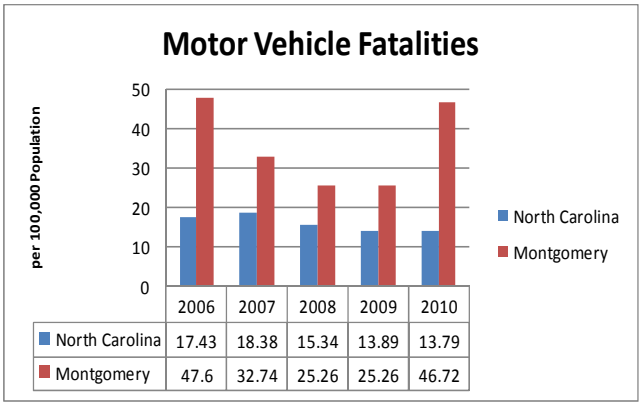
Not only are Montgomery County's diabetes death rates consistently higher than state rates, they are on an upward trend, rising from 25.5 in the 1994-1998 time period to 31.0 in the 2004-2008 time period. This represents county rates that are an average of 19.2% higher than state rates throughout the time span. As a whole, Montgomery County rates are still lower than peer counterparts, who range from 26.13% higher (Richmond) all the way to 62.9% (Scotland) higher than North Carolina rates. As reflected on the previous page, diabetes death rates have improved in the most recent years.

Death rates for Unintentional Motor Vehicle Injury for Montgomery County, and all three peer counties remain higher than state rates. Montgomery's rate is pretty stable across all three time periods depicted, but is still an average of 48.9% higher than state rates. In 2004-2008 alone, Montgomery's rate was 63.4% higher than the state rate. The highest difference among peer counties occurred in Anson County from 1994-1998 when the rate was 93.5% higher than the state rate (almost double). Richmond's rate during the same years was 79% higher, and Scotland's was 63.2% higher. Montgomery's rate was 47.8% higher during the same time frame, and although that number isn't as high as peer counties, it is still significantly higher than state rates implying that much work needs to be done in this area in Montgomery County as well as peer counties. The chart on the top displays trend data, but only goes through 2008. The National Highway Traffic Safety Administration (NHTSA) reports that motor vehicle fatalities continue to be an issue for Montgomery County all the way through the year 2010, which is the most recent data that is available. Montgomery's 2010 motor vehicle fatality rate is an astounding 238.8% higher than the state rate. In fact, Montgomery's rate (46.72) ranks them as 4th highest in the state for highest motor vehicle fatalities, preceded by Graham (56.34), Washington (53.01), and Gates (49.15). NHTSA also reports that speeding was identified as a factor for 23 of the 49 fatalities. Alcohol-Impaired Driving where the blood alcohol count was .08 or more was identified in 14 of the 49. Twenty nine of the cases were single vehicle crash fatalities, and 4 involved a large truck. Additionally, NHTSA reports 5 motorcyclists fatalities and one pedestrian fatality for the time period designated.



	1994-1998	1999-2003	2004-2008
North Carolina	20.1	19.5	18.6
Montgomery	29.7	26.4	30.4

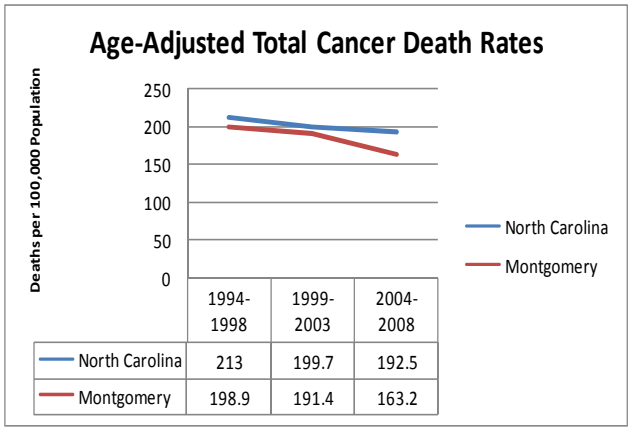
Source: State Center for Health Statistics



	2006	2007	2008	2009	2010
North Carolina	17.43	18.38	15.34	13.89	13.79
Montgomery	47.6	32.74	25.26	25.26	46.72

Source: National Highway Traffic Safety Administration

Montgomery County's age adjusted total cancer death rates are lower than the state rates for all time periods depicted with the biggest difference being seen in 2004-2008 where the county's rates were 15.2% lower than the state rates. Anson County's average cancer death rate across all time periods is also lower than the state's average, but both Scotland and Richmond counties rates are higher.

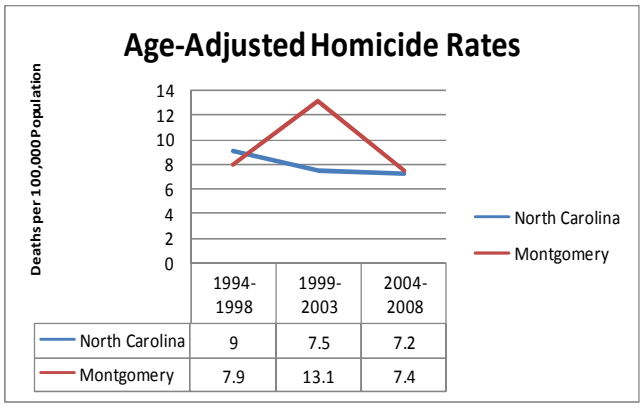


	1994-1998	1999-2003	2004-2008
North Carolina	213	199.7	192.5
Montgomery	198.9	191.4	163.2

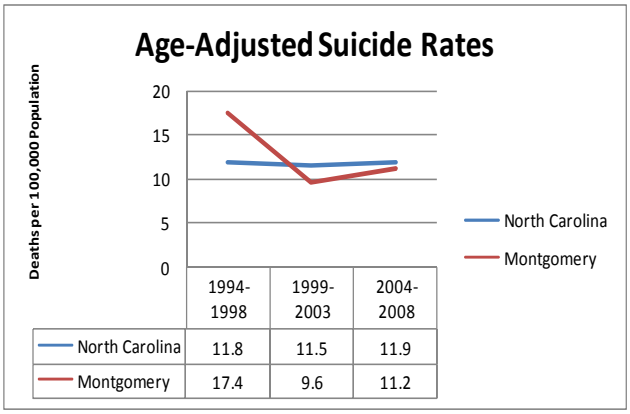
Source: State Center for Health Statistics

MORTALITY RATE TRENDS

(continued from previous page)



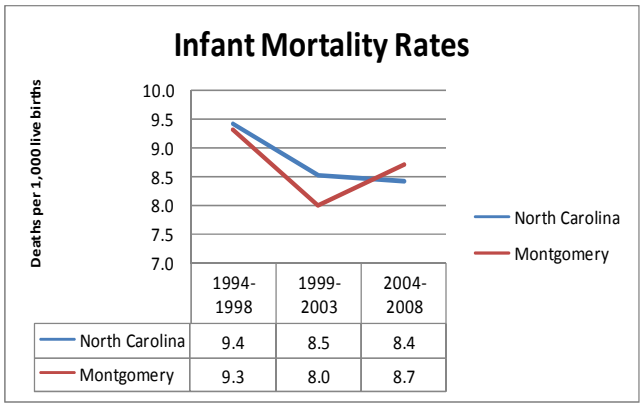
	1994-1998	1999-2003	2004-2008
North Carolina	9	7.5	7.2
Montgomery	7.9	13.1	7.4



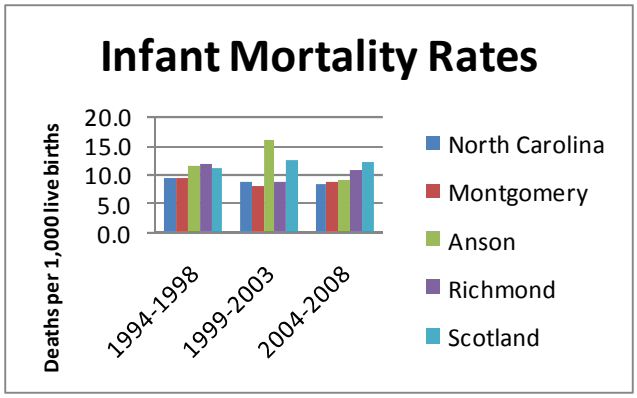
	1994-1998	1999-2003	2004-2008
North Carolina	11.8	11.5	11.9
Montgomery	17.4	9.6	11.2

When considered from the 1994-2008 time frame, Montgomery's homicide death rate seems pretty stable with the exception of the 1999-2003 time frame where the rate almost doubled. It is important to note that when there are so few occurrences and with such a low population, even one additional occurrence makes a huge difference in the death rates. Montgomery's suicide rate was higher than the state rate in 1994-1998, but has been below state rates ever since. All three peer counties have higher homicide death rates than the state rates for the entire time span, and Richmond's suicide rate is consistently higher than the state rate.

INFANT MORTALITY RATE TRENDS



	1994-1998	1999-2003	2004-2008
North Carolina	9.4	8.5	8.4
Montgomery	9.3	8.0	8.7



Montgomery County's infant mortality rates have been fairly consistent over the 1994-2008 time period, and have closely mirrored state rates. When compared to the peer counties of Anson, Richmond, and Scotland, Montgomery's rates are consistently lower for all time periods. However, the North Carolina State Center for Health Statistics reports that the infant death rate (defined as death of a child less than 1 year of age) for the 2006-2010 time period for Montgomery County is 8.9% higher than state rates. During the three time periods depicted in the charts to the left, the highest difference between county and state rates was for 2004-2008, where Montgomery's rates were 3.9% higher than state rates. Additionally, Montgomery's fetal death rate per 1,000 deliveries for the 2006-2010 time range is 21.2% higher than the state rate of only 6.6 per 1,000 live deliveries. Anson's rate is highest in the peer group, followed by Montgomery, Scotland, and Richmond (13.9; 8.0; 7.2 and 6.1 respectively). Neonatal deaths are any deaths that occur before

the 28th day of life. Montgomery's neonatal death rate is 7.0 per 1,000 live births, which is 32.1% higher than the state rate of 5.3. Montgomery's rate is the highest among their peer group, followed by Scotland (5.3), Richmond (4.9) and Anson (4.7). The post neo-natal death rate (defined as deaths that occur after the 28th day of life but before the first birthday) for Montgomery County is 38.5% lower than the state rate (1.6 and 2.6 respectively). Of the peer group, only Richmond has a lower rate (at just 1.5).

Some concerns have been identified as factors that lessen the chances of positive birth outcomes, and increase the risk of fetal death. As can be seen in the chart below, Montgomery's rates for these risk factors are higher than state rates in three of the six categories.

2006-2010 Resident Live Births At-Risk

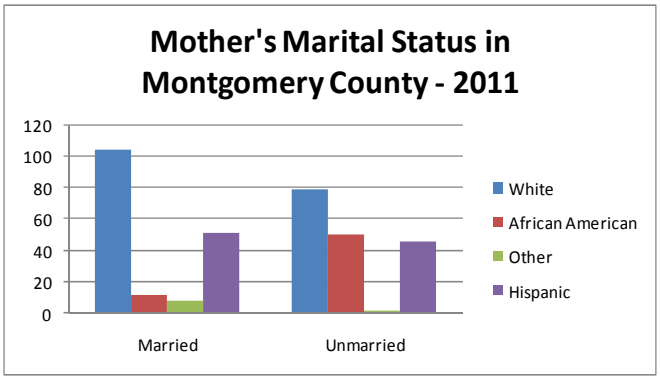
**Source: North Carolina State Center for Health Statistics*

	North Carolina	Anson	Montgomery	Richmond	Scotland
Percent of Mothers Under 30 years of age with High Parity	17.6	23.2	21.8	25.3	27.9
Percent of Mothers Over 30 years of Age with High Parity	20.8	21.9	26.8	23.3	25.5
Percent of Mothers with interval from Last Delivery to Conception of 6 Months or Less	13.0	15.6	11.6	14.4	15.0
Percent of Births by Cesarean Section	31.2	36.5	31.8	34.2	38.8
Percent of Babies Born with Low Birth Weight (<=2500 gms)	9.1	11.4	8.5	10.0	12.9
Percent of Babies Born with Very Low Birth Weight (<=1500 gms)	1.8	2.0	1.7	2.1	2.6

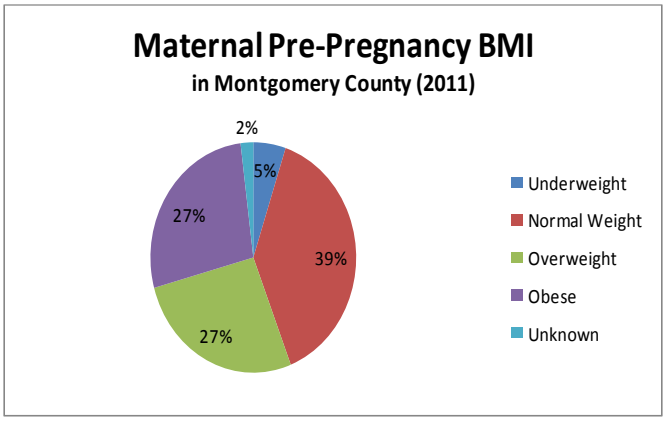
According to the same source, black mothers in Montgomery County have the highest percentage of low and very low birth weight babies (15.7 and 4.3), followed by "other" (12.0 and 2.0), white (8.2 and 1.2) and Hispanic (4.2 and 0.7). Montgomery's percentage of low and very low birth weight babies is lower than the state percentages as well as being the lowest in the peer group.

INFANT MORTALITY

The preceding data was indicative of rates and statistics encompassing the four year time period from 2006-2010. The North Carolina State Center for Health Statistics publishes what is called the "Baby Book" on an annual basis. This book presents pregnancy, delivery and postpartum data specific to the county for the specific year, and breaks it down by several factors including race, ethnicity, education, and risk factors and paints a clearer picture of risk factors associated with birth outcomes.



According to the Baby Book, 352 two babies were born in Montgomery County in the year 2011. Of these births, 175 babies were born to married mothers and 177 were born to unmarried mothers. Of the 352 births, only 34 babies were born to mothers who had earned a bachelor's degree or higher. Of the 23 babies who were born with either very low or low birth weight, 14 were born to mothers with less than a high school diploma, 7 were born to mothers who had either a high school diploma or GED, and one was born to a mother who had "some college". Over half (54%) of the mothers in Montgomery County had BMIs indicating that they were either overweight or obese prior to becoming pregnant. Of the 352 births, only 40 babies were born to mothers who reported being smokers while pregnant. Thirty two of the 40 smokers were white, 7 were African-American, 0 were "other" race, and only one was Hispanic. Most women who have healthy pregnancies and are not being followed for a high-risk factor will have an average 10 to 15 prenatal visits. Having significantly less visits or significantly more visits can negatively impact birth outcomes. Of the 352 births, 247 received the average number of prenatal visits indicating optimum prenatal treatment. Eighty mothers visited the doctor nine times or less, and 18 visited the doctor 16 times or more. Six mothers reported not having gotten prenatal care at all during their pregnancies, and in one case, prenatal visits were not stated. It is generally accepted that the earlier prenatal care is started, the better off both mother and baby will be. Several sources cite the American College of Obstetrics and Gynecology as having stated that "women who start prenatal visits during the first three months of pregnancy have fewer problems with their pregnancy and have healthier babies". In 2011 in Montgomery County, 63 mothers began prenatal care during their first or second month, and another 157 began in their third month, indicating that 220 out of 352 began care in the first trimester. Thirteen mothers waited until their last trimester to begin care,

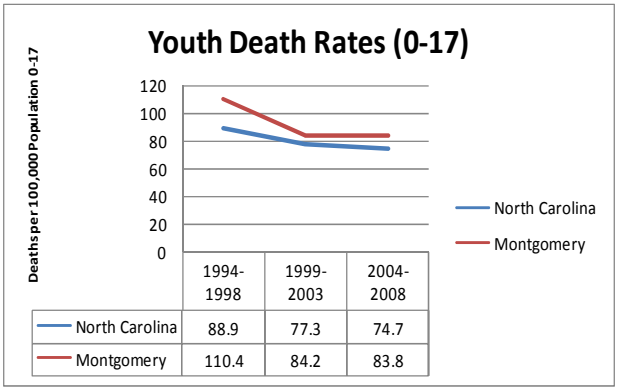


Additional risk factors and birth weights are depicted in the chart to the right. Of the four very low birth weight babies, two were born to mothers who had developed gestational hypertension, and one also had gestational diabetes. Of the two low birth weight babies, one was born to a mother with gestational hypertension and one was born to a mother who had previously had a preterm delivery. And although 330 babies were born at a healthy weight, 96 were born to mothers who had at least one risk factor.

Montgomery County Resident Births for 2011
By Risk Factor and Birth Weight
Source: North Carolina State Center for Health Statistics (Baby Book)

Risk Factors	Birth Weight in Grams			Total
	<1500	1500-2499	>=250	
None	2	16	234	252
Pre-pregnancy Diabetes	0	0	6	6
Gestational Diabetes	1	0	18	19
Pre-pregnancy Hypertension	0	0	6	6
Gestational Hypertension	2	1	15	18
Eclampsia	0	0	1	1
Previous Preterm	0	1	8	9
Other Previous Poor Pregnancy Outcome	0	0	5	5
Previous C-Section	0	0	58	58
Total	4	18	330	352

INFANT AND CHILD DEATHS



Trend data shows that youth death rates as a whole are coming down for both North Carolina and Montgomery County. The 1994-1998 rate was 110.4 for Montgomery, which was 24.2% higher than the state rate of 88.9 for the same period. The 2004-2008 rate is down to 83.8 for Montgomery, and 74.7 for the state, which is a county rate of only 12.2% higher than the state rate. Anson's rate increased from 99.0 in 1994-1998 to 101.3 in 2004-2008. Scotland's rate increased from 99.7 to 102.5 for the same time period. Richmond's dropped significantly from 102.8 to 71.7. According to the North Carolina State Center for Health Statistics, the 2011 Infant and Child Deaths in North Carolina Report indicates that Montgomery County had 27 infant and child deaths from 2007-2011 and 6 occurred during 2011. All six of the deaths in 2011 occurred in children under age 1: five deaths were due to conditions originating in the perinatal period, and one death was due to illness. Of the 27 reported deaths from 2007-2011, two were due to birth defects, 17 were due to perinatal conditions, 1 was due to SIDS, 3 to illness, 3 to motor vehicle injuries, and 1 to "other" injuries. Twenty-two of the twenty seven children that died were less than 1 year old. One child was between the age of 1 and 4; 1 was between the age of 5 and 9, and 3 were between the ages of 15 and 17.

Mortality Analysis

Why are Mortality Rates Important?

According to *Healthy North Carolina 2020: A Better State of Health,* chronic diseases such as heart disease, cancer and diabetes are major causes of death and disability in North Carolina. Although genetics and other factors contribute to the development of these chronic health conditions, individual behaviors play a major role. As much as 50% of individual health can be attributed to behavior alone. Physical inactivity, unhealthy eating, smoking, and excessive alcohol consumption are four behavioral risk factors underlying much of the burden caused by chronic disease.

Analyzing mortality statistics can highlight health conditions that pose a higher risk for Montgomery County residents and can help identify population groups that are also at increased risk. Once these groups have been identified, planning for the mitigation of these concerns can be directed in specific neighborhoods or with specific population groups in mind, hopefully yielding more effective programs which will improve health outcomes.

Who's At Risk?

The North Carolina State Center for Health Statistics provides death rates for counties, and breaks them down specifically for gender and racial comparisons. However, if there are fewer than 20 cases reported, then it is considered unstable, and rates are not computed. Because Montgomery County has such a low population, many of the mortality rates cannot be computed because there were less than 20 occurrences.

However, it is easily seen that heart disease is one of the leading causes of death for all age groups. The African American rate is 14% higher than the white rate, and the Latino rate is not given for Montgomery County. The Office of Minority Health and Health Disparities reports that heart disease is in the top three leading causes of death among Hispanics in 2008, but the age-adjusted death rate for heart disease is considerably lower than the white and African-American rates for the 2004-2008 time period (Hispanic-66.4, White-192.6, African American-236.0). Thus, although heart disease is a leading cause of death for all ages in Montgomery County, African-Americans seem to be at the highest risk.

Motor Vehicle Injuries is the leading cause of death for people aged 20-39 in Montgomery County. It is the second leading cause of death for children aged 00-19, and the 5th leading cause for people aged 40-64. More males died in Montgomery County than females due to motor vehicle injury. Although rates specific to Montgomery County are not available, the Office of Minority Health and Health Disparities reports that Hispanics are at the most risk for motor vehicle injuries (Hispanic rate-24.1, White – 18.1, and African-American-18.0).

Cancer is the leading cause of death for people between the ages of 40 and 84 in Montgomery County. It is the second leading cause of death for people older than 85, and the fifth leading cause for people aged 20-39. In Montgomery County, colorectal cancer, pancreatic cancer, and breast cancer all killed more females than males. However, men are more than twice as likely as women to die of lung cancer. African-Americans have the highest cancer death rate statewide at 224.0, but whites are also higher than Latinos (185.2 and 80.4 respectively).

Males are at greater risk in the county for dying of cerebrovascular disease, chronic lower respiratory disease, chronic liver disease, unintentional injuries, and suicide.

Females are at greater risk in Montgomery County for dying of septicemia, kidney disease, and Alzheimer's disease. Also, more women than men died of AIDS in Montgomery County.

The chart to the right shows age-adjusted death rates for all the major causes of death by race/ethnicity for North Carolina residents. These figures are not available specific to Montgomery County. The colored text shows the race/ethnicity at highest risk for each health condition. It is easy to see that African-Americans are definitely a disparate population.

Age-Adjusted Death Rates for Major Causes of Death

by Race/Ethnicity, North Carolina Residents, 2004-2008

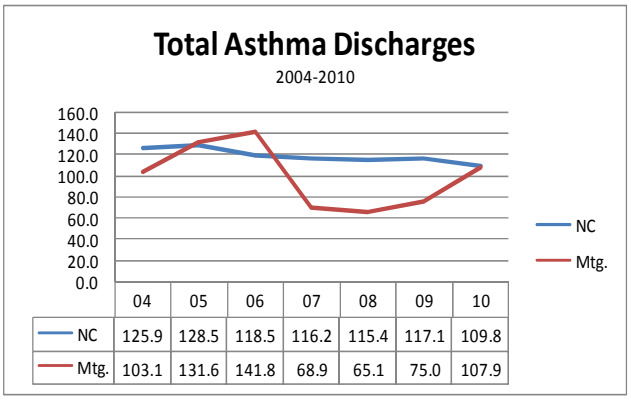
Cause of Death	Hispanic	White	African American
Chronic Conditions			
Heart Disease	66.4	192.6	**236.0**
Cancer	80.4	185.2	**224.0**
Stroke	20.5	49.2	**73.5**
Diabetes	11.2	19.5	**51.0**
Chronic Lung Disease	11.4	**51.1**	30.4
Kidney Disease	8.7	14.8	**36.5**
Chronic Liver Disease	5.9	**9.3**	8.4
Infectious Disease			
Pneumonia/Influenza	6.8	**20.2**	19.2
Septicemia	6.5	12.3	**22.3**
HIV Disease	2.7	1.2	**16.5**
Injury and Violence			
Motor Vehicle Injuries	**24.1**	18.1	18.0
Other Unintentional Injuries	13.4	**30.9**	21.8
Homicide	10.3	3.6	**16.4**
Suicide	5.6	**14.4**	5.0

*Rates are age-adjusted to the 2000 US standard population and are expressed as deaths per 100,000 population-using underlying cause of death.

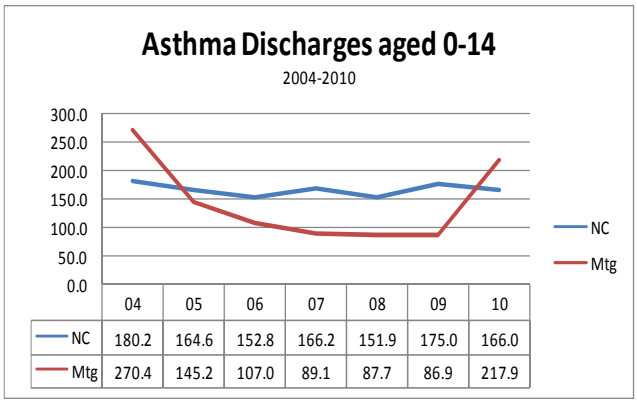
Source: Minority Health Facts– Hispanics/Latinos– July 2010
Office of Minority Health and Health Disparities and State Center for Health Statistics

Secondary Data– Health Status of Montgomery County

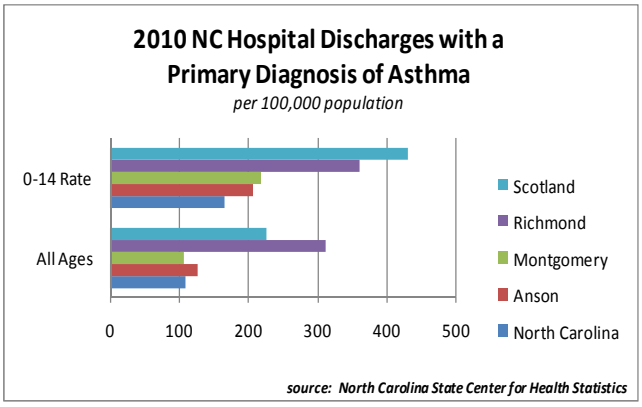
Asthma



	04	05	06	07	08	09	10
NC	125.9	128.5	118.5	116.2	115.4	117.1	109.8
Mtg.	103.1	131.6	141.8	68.9	65.1	75.0	107.9

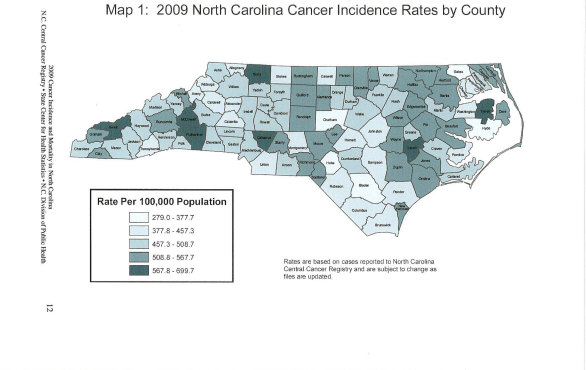


	04	05	06	07	08	09	10
NC	180.2	164.6	152.8	166.2	151.9	175.0	166.0
Mtg	270.4	145.2	107.0	89.1	87.7	86.9	217.9

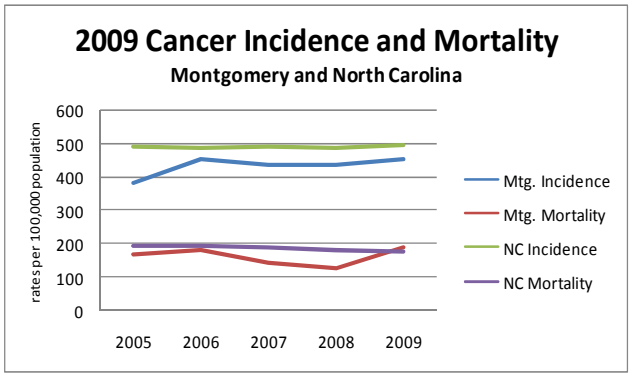


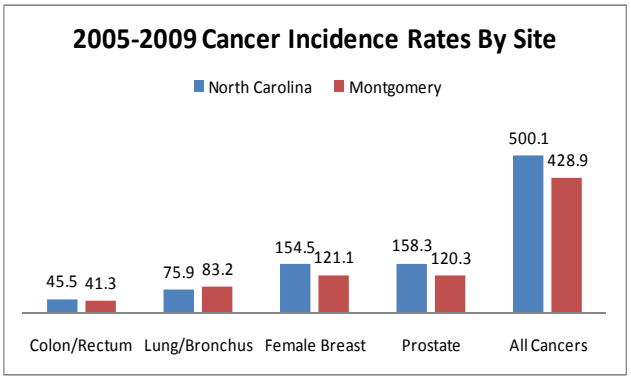
According to the North Carolina State Center for Health Statistics, Montgomery County's rates for hospital discharge with a primary diagnosis of asthma for all ages is lower than the state rates for five of the seven years shown. Although the rate for children is higher in Montgomery County for the year 2004 and the year 2010, the county rates were lower than the state rates for all years 2005 through 2009. Rates for all of the peer counties are higher than state rates for children aged 0-14 years, with Montgomery's rate right in the middle of the peer group. All peer counties are also higher than the state rate for total asthma discharges (regardless of age) except for Montgomery, which is just about even with the state rate (NC– 109.8 and Montgomery-107.9). These numbers represent a total of 12 children in Montgomery County aged 0-14 who had been hospitalized with asthma in the year 2010, and a total of 30 people altogether.

Cancer



The total North Carolina cancer incidence rate was 496.8 in 2009. Montgomery's rate was approximately 8% lower at 453.9, and is the lowest in the peer group. (Anson- 82.3, Richmond-533.8, and Scotland-516.4). However, for the same year, North Carolina's cancer mortality rate was 177.8 and Montgomery County's was 7% higher at 190.8. This data indicates that people in Montgomery County are less likely to be diagnosed with cancer, but are actually more likely to die from it.

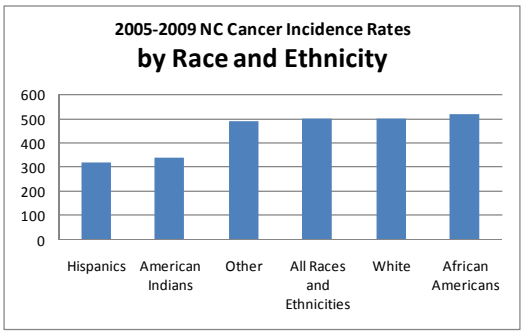




Source: North Carolina State Center for Health Statistics
**rates are age-adjusted to the 2000 Census*

Five year cancer incidence rates for Montgomery County and North Carolina indicate that Montgomery's incidence rates are consistently below the state rates, and with the exception of the year 2009, the county's mortality rates are also consistently lower than state rates. As can be seen in the chart above, Montgomery's "all cancers" incidence rate is lower than the state rate. This is also true for every cancer except for lung/bronchus where Montgomery's rate is just over 9% higher than the state rate. Not only is Montgomery's "all cancers" rate lower than the state rate, it is also the lowest among the peer group. Montgomery's female breast incidence rate and prostate incidence rate is also the lowest among the peer group. And although the county's lung/bronchus rate of 83.2 is higher than the state rate, it is less than Richmond's rate of 86.8 and Scotland's rate of 100.9. Anson's rate is lower at just 75.4. Montgomery's incidence rate for female breast cancer is more than 45% higher than the incidence for lung/bronchus, but the lung/bronchus cancer has the highest mortality rate in the county. The Professional Research Consultants Data, which was compiled by First-Health of the Carolinas in 2007 and 2011 indicates that the number of adults in Montgomery County who report currently smoking decreased from 23.3% in 2007 to 20.7% in 2011. This number is below the regional rate of 22.8% but slightly higher than the state rate of 19.7%. According to the State Center for Health Statistics, for the years 2006-2010, 249 people died of cancer. Of those: 21 cases were colon/rectum, 15 were pancreas, 88 were lung and bronchus, 19 were breast, and 10 were prostate. A possible implication from this data is the need for increased diagnosis of lung/bronchus cancer to hopefully prevent the disease from becoming fatal. Similarly, female breast cancer and prostate cancer have the highest incidence rates for Montgomery (indicating the highest rates of diagnosis), but also have very low fatalities as a result, meaning that diagnosis and treatment is having a positive impact on the outcome of the diseases.

Although demographic data specific to Montgomery County for cancer incidence is not available, the charts to the right indicate that in North Carolina, African Americans have the highest incidence rates. Minority males have the highest incidence rates (621.2), followed by white males (549.1), white females (459.2). Minority females have the lowest risk at 418.0.



Child Health

Child Health Indicators At-A-Glance	
Child Motor Vehicle Fatalities (2003-2007)	5
Child Fatalities	
2007	6
2008	6
2009	2
2010	7
Percent of Children Ages 0-3 Receiving Early Intervention Services	
Montgomery County	4.35
North Carolina	4.7%
Number of Child Care Centers (2011)	12
Number of Children Enrolled in Medicaid	
2007	3283
2008	3383
2009	3533
2010	3517
Number of Children Enrolled in NC Health Choice	
2007	724
2008	752
2009	746
2010	788
Total Enrollment in Child Care	636
Total Enrollment in Family Child Care Homes	69
Total Number of Children Receiving Public Health	4007
2007	4135
2008	4279
2009	4305
2010	
Percent of Children Aged 0-18 Uninsured (2010)	
Montgomery County	12.3%
North Carolina	10.3%

Source: kidscount.org

Safe Kids. According to NC Safe Kids, every year in this state, 200 children die from accidental injuries and another 45,000 visit a doctor's office for treatment of such injuries. Injuries are the second leading cause of hospitalizations and the leading cause of emergency room visits among children under age 14. Safe Kids Mid-Carolinas Region is an injury prevention coalition composed of representatives from Montgomery, Moore, Hoke, Richmond and Scotland counties. The primary focus of this coalition is to prevent accidental injuries for children ages 0-14. Injury prevention focus areas include child passenger safety, fire and burn prevention, pedestrian safety, and sports safety. In 2011, Safe Kids provided approximately 45 child safety restraints and installation education to Montgomery County families. Of these restraints, approximately 60% were provided to children under the age of 12 months. Currently, there are 5 certified child passenger safety technicians regularly serving families in Montgomery County. These technicians are registered with Safe Kids Worldwide and are required to complete annual continuing education to maintain certification. National statistics show that over 80% of parents have some type of child passenger restraint (carseat) misuse. This may include: wrong seat selection, harnessing errors, positioning errors and installation (belting) errors. In addition to safety in and around vehicles, Safe Kids encourages sports safety by promoting the availability of bike helmets to the children of Montgomery County at a low affordable cost. Bike safety education is provided in coordination with local law enforcement agencies upon request. In coordination with Governor's Highway Safety traffic officers, resources are available to address texting while driving, distracted driving, seatbelt usage and driving while impaired. Safe Kids collaborates with the Montgomery County Cooperative Extension service annually to conduct "Safety Day" for all fourth grade students in Montgomery County. This one day event reaches over three hundred and fifty students with information and interactive demonstrations on safety topics including heart safety/healthy weight, handwashing, emergency preparedness, food safety, poison prevention, internet safety, sun safety, safety in and around cars, tobacco and alcohol prevention, safety around animals, farm safety, food label safety, fire and water safety, and bike safety. SafeKids Mid Carolinas also plans and conducts annual events during nationally recognized observances such as National Child Safety Week, Child Passenger Safety Week, and Operation Medicine Drop.

Safety Days

Partnership for Children. The mission of the Montgomery County Partnership for Children is to ensure every child's success by turning opportunities into realities. Smart Start (a statewide early childhood initiative), NC Pre-K (program for at-risk 4 year olds), Child Care Central (child care resource and referral), and Dolly Parton's Imagination Library are just some of the services and programs provided by the agency. The Partnership for Children works closely with child care centers to assist them in the shared goal of providing high quality child care services to children in Montgomery County. The Partnership works diligently to identify needs of child care providers and then plan programs and initiatives to help meet those needs. For example, in January and February of 2012, the agency allocated some money to purchase "Boogie Wipes" kits for each classroom in every child care center in the county. MCPC staff and board members visited the centers, and discussed the importance of good hygiene and hand-washing to help prevent the spread of germs. Additionally, the agency houses a "Lending Library" filled with toys, books, and learning tools that are available for parents or caregivers to use and return. Annually, the Partnership for Children plans an active "Week of the Young Child" which is held in April. The purpose of the week is to focus public attention on the needs of young children and their families and to recognize the early childhood programs and services that meet those needs. Although the week's events vary every year, some popular events have included "Pinwheels for Prevention" in recognition of child abuse and neglect prevention, "Tuesdays for Tots" which encourages community advocacy with legislators for early childhood needs, special parent/child reading session, visits to the farmers' market, and encouraging families to be active together. One of the agency's most popular events is called "Dinner, Denim, and Dance" and is the agency's annual fundraiser. Unfortunately, over the last several years, allocations of state funds to North Carolina counties for Smart Start and Pre-K have decreased dramatically, while the needs of children and families have increased. Each year a specific program or activity is spotlighted during the event to give participants and sponsors a better idea of the local needs and how the Montgomery County Partnership for Children is meeting those needs. In 2011, the agency highlighted the School Readiness Backpacks. In an effort to help children be better prepared for kindergarten, MCPC distributes close to 300 backpacks during kindergarten registration each spring. Often parents do not know what is expected of a child entering kindergarten or they simply do not know what to do to help their child be ready. The brightly colored backpacks contain supplies and materials, such as paper, crayons, markers, scissors, glue sticks, etc. along with a couple of age-appropriate books for the children to use in the months between kindergarten registration and the first day of school. Many children in Montgomery County do not have access to such materials in their homes and consequently arrive to kindergarten without certain basic skills (holding a pencil, cutting with scissors, etc.) that will help make them feel good about themselves, good about school, and eager to learn. Parents also receive a copy of The Kindergarten Survival Handbook (A. Elovson, Ph.D.) which is full of simple, enjoyable, and inexpensive ways to transform a child's everyday world into an exciting learning environment and it shows parents what children need to be ready for kindergarten, while reminding them of the importance of staying involved in their child's education by establishing a beneficial connection between home and school. As previously mentioned, these backpacks are distributed to children during kindergarten registration, which is a resourceful event for children and parents. Along with the backpacks, during the registration, children visit with school nurses, dental professionals, and health educators to ensure the healthiest start to their school career.

Boogie Wipe kits distributed to child care centers by MCPC

MCPC Director, Debbi Musika, visits with children to discuss germ prevention and distribute Boogie Wipes

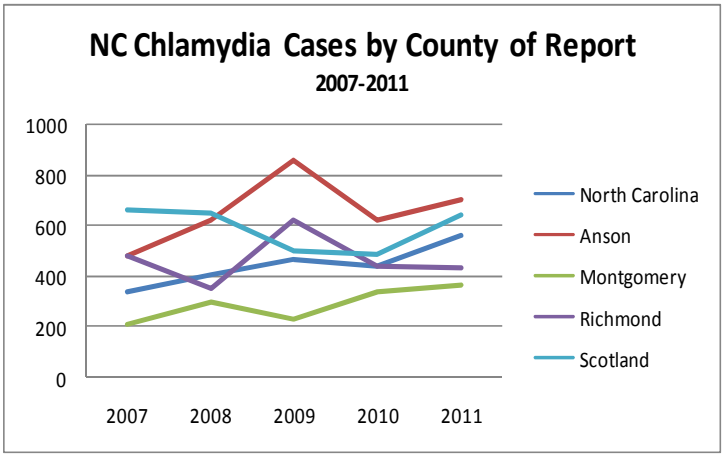
Family Fun Day 2011

Troy Pre-k "Pinwheels for Prevention"

Kindergarten Registration- MCHD Child Health Nurse works with entering kindergartener to demonstrate the importance of physical activity

Communicable Disease

AIDS/HIV. According to the North Carolina 2011 HIV/STD Surveillance Report, produced by the Communicable Disease Branch of the North Carolina Division of Public Health, Montgomery County ranks 63rd in the state for HIV disease cases. Of the peer group, Richmond ranks 23rd in the state, Anson ranks 33rd, and Scotland ranks 41st. These ranks are based on the average for the three years 2009-2011. For that time period, North Carolina's average rate was 16.4, and Montgomery's was significantly lower at just 6.0. This represents a total of just five HIV disease diagnoses in the county during the three years. When looking at AIDS cases, Montgomery County ranks 51st in the state with an average rate of 5.4 for the years 2009-2011. Of the peer group, Richmond ranks 36th with a rate of 8.6; Scotland ranks 42nd with a rate of 8.3; and Anson ranks 65th with a rate of 3.7. The 2008 Montgomery Community Health Assessment reported Montgomery's AIDS cases rank as 33rd in the state, with a rate of 10.9. The drop to 5.4 indicates a positive decline in the number of AIDS cases diagnosed which hopefully mirrors a decline in the transmission of the virus.



CHLAMYDIA. The 2008 Montgomery Community Health Assessment reported that Chlamydia was by far the communicable disease with the highest concern for Montgomery County and North Carolina as a whole. Although this continues to be true, Montgomery County rates for 2007 through 2011 are lower than the state rates for the same time period as well as for all of the peer groups every consecutive year.

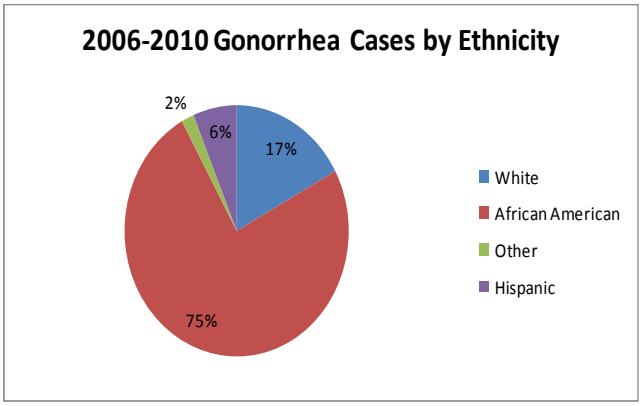
GONORRHEA. Similar to county Chlamydia rates, Montgomery's rates for gonorrhea cases are also lower than state rates and all peer counties for the years 2007-2011.

NC Gonorrhea Cases by County of Report
2007-2011

	2007 Rates	2008 Rates	2009 Rates	2010 Rates	2011 Rates
North Carolina	183.9	162.3	157.9	148.4	179.9
Anson	381.0	420.8	670.5	304.3	274.6
Montgomery	94.7	72.2	75.7	68.4	89.9
Richmond	304.7	160.8	313.2	139.4	128.6
Scotland	428.3	271.4	278.3	262.7	362.3

**Source: 2011 HIV/STD Surveillance Report*

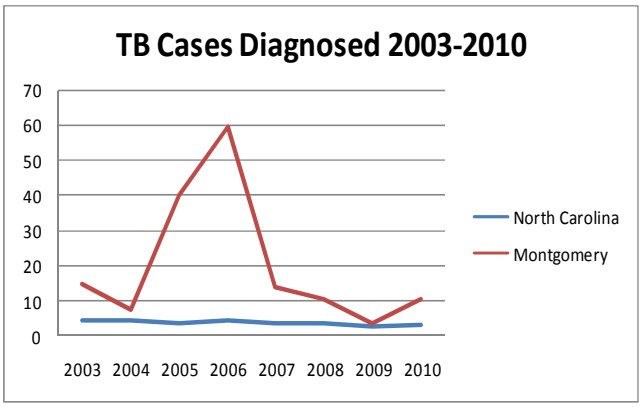
Furthermore, the North Carolina State Center for Health Statistics reports that Montgomery's Gonorrhea case rate is only 80.4 for the 2006-2010 time period, as compared to the North Carolina rate of 168.9. This represents a total of 111 gonorrhea cases. Of those 111 cases, 83 occurred in the African American population, 19 in the white population, 7 in the Hispanic population, and 2 in the "other" population indicating that African Americans are at the most risk for the disease, followed by whites.



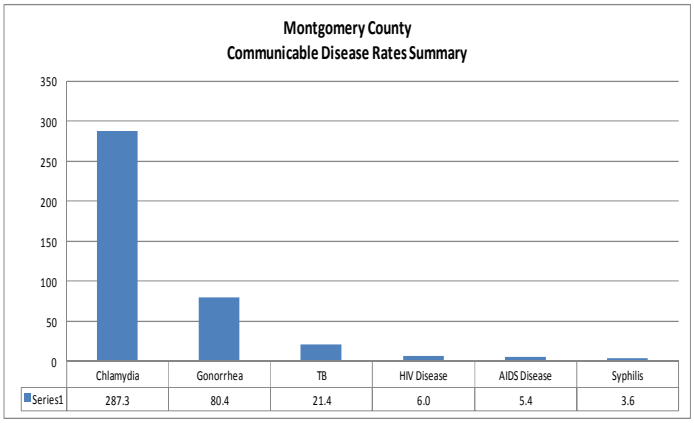
Source: North Carolina State Center for Health Statistics

SYPHILIS. The 2011 HIV/STD Surveillance Report indicates that Montgomery County didn't have any diagnosed cases of primary or secondary syphilis for the years 2007, 2008, 2009 or 2010. In the year 2011, the county had one case, giving the county a rate of 3.6. These findings are similar to what was reported in the 2008 Community Health Assessment where there was only one case diagnosed in the 2003-2007 time span.

TUBERCULOSIS (TB). Montgomery has experienced a rocky road with TB for the past several years, with TB rates soaring above state rates in several years. As a whole, the county rate peaked at 59.6 in 2006, and steadily declined to a low of 3.6 in 2009. In 2010, three cases were diagnosed, bringing the rate back up to 10.5. The 2010 Tuberculosis Statistics for North Carolina report indicates that of the 27 TB cases diagnosed in the county between 2006 and 2010, only 3 of the diagnosis were made in the Hispanic population.



Source: North Carolina State Center for Health Statistics



SUMMARY. By averaging all the rates presented in this section, and collecting it in one chart, it can easily be seen that Chlamydia is the communicable disease with the most concern for Montgomery County. Gonorrhea is the second highest prevalent communicable disease followed by TB infection. Syphilis is the issue presenting the least concern for Montgomery County.

Diabetes

The North Carolina State Center for Health Statistics is an excellent resource for disease mortality rates, however, disease prevalence rates are only available at a regional level. As such, FirstHealth of the Carolinas contracts with Professional Research Consultants out of Nebraska to conduct periodic, random digit-dialed, community health assessments. These health assessments, while costly for FirstHealth, provide an unbiased and statistically sound view of the health status of many in the region, and insight into the health behaviors that contribute to disease and disability. The data gathered also allows for comparisons to be made using statewide and national data in most cases, as questions asked mirror those asked through the Centers for Disease Prevention and Control's Behavioral Risk Factor Surveillance System and other standardized tools. To date, surveys have been conducted in 1999, 2003, 2007 and most recently, in 2011.

Data from the 2007 PRC survey indicated that the prevalence of diabetes among Montgomery County adults was almost double the state average, and also reflected extremely high diabetes mortality rates. In 2011, a shocking 20.9% of Montgomery County residents report having diabetes, a rate more than double that of the state (9.8%). This means that one in five adults in the community have been diagnosed with diabetes. Broken down by race, those with diabetes are 4% Hispanic, 65% white, and 27% African American, despite African Americans only comprising 19.7% of the county's population. Sadly, minority women in Montgomery County have three times the death rate of white women due to diabetes. State level statistics provide further insight, as African Americans have nearly two and a half times the diabetes death rate of white Americans.

However, there is some good news to report. The PRC data shows a decrease in the mortality rate for Montgomery County and an increase in the prevalence rate for diabetes diagnoses. Hopefully, this is indicative of more people being diagnosed and learning to manage the disease and fewer people actually passing away from complications of the disease.

Montgomery County PRC Data

Year	Diabetes Mortality Rate Per 10,000	Diabetes Prevalence Rate Per 10,000
2007	40.8	16.1
2011	22.8	20.9

Source: Professional Research Consultants (2011)

In recognition that Montgomery County residents– including those with diabetes and those who were considered pre-diabetic– were in desperate need, FirstHealth Community Health Services convened a multidisciplinary team, with members from FirstHealth's Diabetes Self-Management and Mobile Health Services, to address the needs contributing to this chronic disease issue. Based upon formal assessments, focus groups and patient interviews, the team determined there may be several contributing factors to the high mortality rates, such as a lack of intensive diabetes education, a lack of provider knowledge, low compliance for disease management for diagnosed diabetics, lack of access to diabetic medications and supplies, and high rates of undiagnosed and/or late diagnosed diabetes. In response to these factors, the team designed the **FirstReach** program, a comprehensive approach to diabetes outreach and education.

FirstReach began with a small mini-grant from MultiPlan, which provided funding to conduct glucose screenings and offer diabetes/nutrition counseling on a limited basis. The screening program was developed to target low-income, diverse, underserved, uninsured individuals. During the course of the project, FirstHealth discovered challenges reaching the target population, but through community partners, FirstHealth was able to identify effective screening locations such as banks on Friday afternoons, sporting events, and grocery stores. On average, 20 percent of the participants screened had abnormal glucose levels, indicating pre-diabetes or diabetes.

Shortly following, the FirstHealth Montgomery Memorial Hospital Foundation funded FirstReach for an additional two years, which allowed for the expansion of services offered. During the two-year project, the screening events continued, but a diabetes educator and a nutrition counselor also provided home visits for individuals who were deemed at high-risk for diabetes and/or diabetes complications.

The North Carolina Office of Rural Health and the North Carolina Health and Wellness Trust Fund funded FirstHealth for another FirstReach expansion. This funding was utilized to place a Certified Diabetes Educator (CDE) into a primary care clinic and to implement Group Medical Visits for diabetic patients. The CDE was integrated into the FirstHealth Troy Family Care Center two days per week. This primary care setting is designated as a rural health clinic, which serves a large population of uninsured and Medicaid. Many of the underserved, who need the services the most, encounter barriers such as transportation issues, medication challenges and overall have high no-show rates for education services. Furthermore, providers were not referring to diabetes self-management, because no formal program was offered in the county. Therefore, the concept of placing the diabetes professional in the clinic setting served multiple purposes to include breaking down the barrier of provider referrals to diabetes education, increasing provider knowledge of diabetes management, decreasing the barrier of transportation for the patient, increasing the convenience of education for the patient, and providing one-on-one appointments with an educator to allow for intensive education.

In addition to integrating the CDE, FirstHealth continued to provide the screening aspect of the program and also implemented Group Medical Visits (GMVs) at three medical practices in Montgomery County. All three practices served low-income, and uninsured patients; one of which included the Troy Family Care Center. The GMVs provided a medical appointment for diabetic patients in a group environment and FirstHealth provided a diabetes educator to participate in the sessions. A report card format was utilized during the GMVs to facilitate discussion and provide a visual for the individual patients on their disease management measures such as hemoglobin A1c levels, weight, blood pressure and last eye exam. The providers actually went from patient to patient, reviewed the report card results and looked for teachable moments to provide group discussion around diabetes care. Within the first year of the project, patient results showed declines in average HbA1cs, significant weight

Diabetes *(continued)*

loss, and a greater understanding of the importance of managing this chronic disease condition.

Access to medications was also a key issue for individual patients in managing their diabetes. As part of the comprehensive approach to diabetes outreach, FirstReach also included resources for diabetes medications and supplies (such as testing strips and monitors) for patients. FirstHealth partnered with locally-owned pharmacies to develop a voucher program. When a patient was deemed in need of assistance, the diabetes educator issued the voucher and patients obtained the necessary medications and/or supplies.

Based on initial FirstReach work, the program now serves an average of 500 individuals per year. The first phase of FirstReach was the community screening component. During the time period of July 1, 2008 to May 25, 2010, the following results were tracked for glucose screenings:

- **1,478 individuals were screened at 103 locations with 283 abnormal screening values**
- **173 were newly diagnosed diabetics**
- **410 educational encounters were conducted and 61 were home visits**
- **516 case management encounters were conducted with high-risk diabetic patients**
- **10 lay health advisors were trained to assist with future screenings events**

There was a focus on reaching disparate populations. As such, demographic data was collected and reported. Of the abnormal screening values, 95 individuals were African American, 147 White, 41 Latino, 50 uninsured, 29 undiagnosed and uninsured and 142 lived at or below 200 percent of poverty level. The data demonstrate that the screenings reached the target population of uninsured, underserved and minority individuals.

The second phase of FirstReach involved integrating a diabetes educator into the primary care clinic setting to decrease patient barriers to accessing one-on-one intensive diabetes education. The overall results during the two-year data tracking period included:

- **An average of 56 patient encounters per month in primary care setting**
- **62 percent of the patients demonstrated improved outcomes based on the five American Association of Diabetes Educator criteria (the criteria evaluate exercise, fruit, vegetable and whole grain consumption, and overall health)**
- **36 percent of participants reported improved consumption of fruits and vegetables**

- **Patients reported a 92 percent satisfaction rating with services provided**
- **Providers reported an 85 percent satisfaction rating with services provided**

Future FirstReach goals include the continuation of screenings to detect diabetes early, the continuing the provision of diabetes education, expanding efforts to the pediatric population, piloting efforts to address mental health among diabetic patients, testing technology-driven group education, and expanding FirstReach to the hospital inpatient setting.

Obesity

The burden of overweight and obesity is earning recognition throughout the country and North Carolina. The Centers for Disease Control and Prevention states that adult obesity is common, serious and costly. CDC further reports that more than one-third of U.S. adults (37.5%) are obese. Obesity-related conditions include heart disease, stroke, type 2 diabetes and certain types of cancer, which are some of the leading causes of preventable death. In 2008, medical costs associated with obesity were estimated at $147 billion; the medical costs for people who are obese were $1,429 higher than those of normal weight.

In 2011, the Trust for America's Health, in cooperation with the Robert Wood Johnson Foundation, issued a report called "F as in Fat: How Obesity Threatens America's Future". Findings in the report indicate that adult obesity rates rose in 16 states over the past year and no state decreased its rates. Obesity rates exceed 25% in more than two-thirds of the country's states (of which North Carolina is one). Obesity and obesity-related diseases such as diabetes and hypertension continue to remain the highest in the Southern part of the country. Except for Michigan, the top 10 most obese states are all in the South, as are the 10 states with the highest rates of hypertension.

Obesity and Overweight Rates and Related Health Indicators for North Carolina

	2008-2010 3 Yr. Average Percentage	Ranking
Obesity	29.4%	14
Overweight & Obese	65.5%	Not given
Diabetes	9.6%	13
Physical Inactivity	25.6%	18
Hypertension	29.9%	10
Poverty	14.4%	Not given

Source: "F as in Fat: How Obesity Threatens America's Future"

According to the same report, North Carolina has a total adult obesity rate of 29.4%. Twenty nine percent of both men and women are obese in the state. African Americans in the state have the highest obesity rates of 42.4%, followed by white and Latino populations who both have rates of 26%. African American women in the state are most at risk for obesity, with prevalence rates of 47.0%. The rate for black men in North Carolina is 36.8%.

Adult obesity rates in the state have more than doubled in North Carolina in the past twenty years. According to the aforementioned report, North Carolina had a 3 year average obesity

Obesity *(continued)*

rate of 12.3% for the 1988-1990 time frame, and was ranked 9th in the state at that time. Fifteen years ago (1993-1995), rates had moved from 12.3% up to 16.3%. Ten years ago (from 1998-2000), rates were listed at 20.9% for North Carolina, and currently the rates have risen all the way to 29.4%, ranking North Carolina in 14th place for the highest obesity rates in the nation.

As if that wasn't discouraging enough, when considering overweight AND obesity, the picture becomes even more dismal in North Carolina. Twenty years ago, North Carolina's combined rates were 45.1%. That rate rose to 51.5% fifteen years ago, and to 57.7% 10 years ago. Currently, North Carolina's overweight and obesity rate for adults is an astounding 65.5%, ranking the state 16th in the nation.

So what does that have to do with Montgomery County? Montgomery County is, of course, part of North Carolina and data reported for North Carolina should also be indicative of rates for Montgomery County. However, as shown throughout this Community Health Assessment, when county specific rates are available there are often measurable difference between state and county rates. Thus, although state rates are reflective of the county rates, the county may experience differences from state averages.

Furthermore, overweight and obesity data is very hard to gather for adults. Children in public health programs, in some private medical centers and even in some school settings are routinely screened for their Body Mass Index (BMI) measures. However, even though adults may regularly visit their health care providers and may be routinely screened, that information is not reported to any standardized data collection agency. Thus, overweight and obesity rates are most often "self-reported" numbers that are solicited through a survey tool of some kind. Nationally, the CDC has established a surveillance tool commonly referred to as the BRFSS, which is the "Behavioral Risk Factor Surveillance System". This tool is used throughout the country and in North Carolina as well. However, although the tool reports findings for some counties specifically, many counties in North Carolina are grouped into regions, and only regional information is reported. As such, data specific to Montgomery County is not available through any state system, but will be reported as part of the "Piedmont" region.

In response to this challenge, FirstHealth of the Carolinas contracts with an independent research firm called "Professional Research Consultants" out of Nebraska to complete similar random telephone surveys in the counties covered by FirstHealth (of which Montgomery is one). The positive side of this research is that results are available specific to Montgomery County, although it is still self-reported data. Similarly, this Community Health Assessment outlines findings from the Community Health Opinion Survey, which is also self-reported information.

When considered as a whole, it is easily seen that the burden of overweight and obesity is

an issue that certainly impacts Montgomery County, but also impacts the state and the nation as well. According to the 2011 BRFSS, 63.8% of Piedmont respondents reported having a BMI greater than 25, meeting the clinical definitions for overweight and obesity. Males, African-Americans, people with less than a high school education, and those who are physically disabled reported having a higher BMI most often. Professional Research Consultants posed the same questions to the four county region. In 2007, 35.8% of Montgomery County respondents reported having a BMI greater than 25%. That number increased to 71.8% in 2011 and is comparable with the four county regional rate of 70.0% and the state rate of 65.3% The Health Opinion Survey conducted as part of this Community Health Assessment only asked about obesity, not overweight and obesity. Still, 25% of those survey respondents reported being obese.

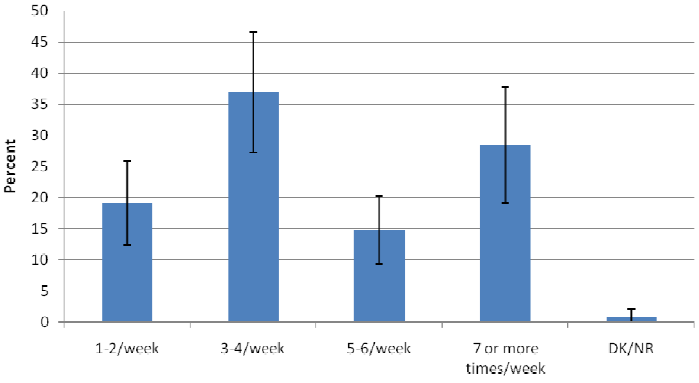
Adults Who Have a BMI Greater than 25 (overweight or obese)

		No	Yes
	NC	34.9%	65.1%
	Piedmont	36.2%	63.8%
Gender	Males	29.8%	70.2%
	Female	42.7%	57.3%
Race	White	39.1%	60.9%
	African American	25.2%	74.8%
	Other	39.7%	60.3%
	Hispanic	27.1%	72.9%
Educational Attainment	Less than High School	32.4%	67.6%
	HS Graduate or GED	33.3%	66.7%
	Some Education Past HS	34.0%	66.0%
	College Graduate	43.2%	56.8%
Disability Status	Yes, Disabled	29.2%	70.8%
	Not Disabled	38.8%	61.2%

Source: 2011 BRFSS

Just over 26% of Montgomery County respondents to the PRC survey indicated that they consume 2 or more fresh, frozen or canned fruits daily. Only 11% report consuming 3 or more fresh, frozen, or canned vegetables daily. More than 56% report consuming at least one sugar sweetened beverage the previous day and 11% report eating meals at home fewer than 4 times per week. Thirty two percent say they did engage in any leisure time physical activity during the past month. Almost 58% considered themselves to have a sedentary lifestyle. Living within walking distance of their workplace was only reported by 18% of respondents, but 31% live within walking distance of a park or playground. Only 20% can purchase healthy foods within walking distance of their home. More than 73% of respondents to the Community Health Opinion Survey reported being active for at least a half an hour during an average week, but only about 40% of them do it 5 or more times a week.

How Many Times Do You Engage in Physical Activity For at Least 30 Minutes in an Average Week?

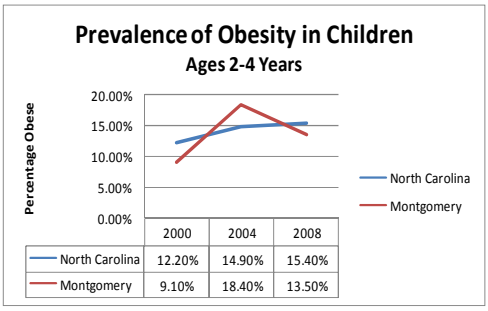


Source: 2012 Montgomery Community Health Opinion Survey

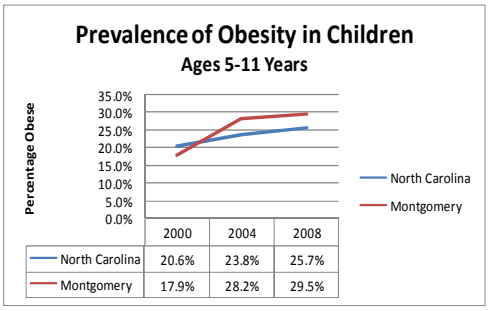
Obesity *(continued)*

Childhood Obesity

The Nutrition Services Branch of the North Carolina Division of Public Health maintains a database called NC-NPASS (North Carolina, Nutrition and Physical Activity Surveillance System which provides data for children seen in Public Health sponsored Women, Infant, and Children (WIC) and child health clinics, as well as some school-based health centers. Beginning in 2010, NC-NPASS only reports information for children aged 2-4. Previous to that, data was reported for children aged 2 all the way through 18.



	2000	2004	2008
North Carolina	12.20%	14.90%	15.40%
Montgomery	9.10%	18.40%	13.50%



	2000	2004	2008
North Carolina	20.6%	23.8%	25.7%
Montgomery	17.9%	28.2%	29.5%

Source: North Carolina State Center for Health Statistics County Trends Reports

Childhood Obesity Trends. From 2000-2004, the prevalence of obesity in children ages 2-4 years in Montgomery County doubled, and then dropped in 2008. Statewide rates steadily increased for all years 2000-2008. Obesity rates for children ages 5-11 years for both the county and the state steadily increased for all years. In 2004, Montgomery's obesity rate for children ages 2-4 was not only higher than the state rate, but was also higher than all of the peer county rates (Anson-13.9; Richmond-9.7; Scotland-15.1). Scotland's rates are the highest for children aged 5-11 years for all years indicated. As such, increasing obesity rates in children aged 2-4 years and 5-11 years are the trend for Montgomery County from 2000 to 2008.

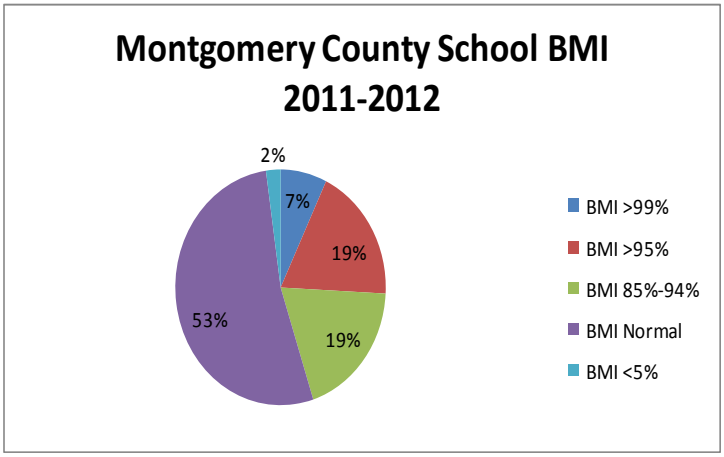
More recent data from the 2011 NC-NPASS report suggests that children age 2-4 in Montgomery County continue to be at risk. While just over 60% of children statewide and in the county are at a healthy weight, 18.9% of the county's children in this age group are overweight, and an additional 14.8% are obese. This ranks Montgomery County 88th in the state for overweight and 35th in the state for obesity. (According to this data source a ranking of 1 indicates the lowest (best) rate and 100 indicates the worst (highest) rate). Furthermore, the percent of overweight toddlers in Montgomery County increased from 17.0 in 2010 to 18.9 in 2011. However, obesity rates dropped from 17.0 in 2010 to 14.8 in 2011, changing the county's rank from 72nd to 35th. In 2011, Scotland County had the highest percentage of children at a healthy weight (66.9%) and Anson had the largest percentage of overweight and obese children combined (44.4%). For 2010, Richmond County had the highest percentage of children at a healthy weight (69.1), and Montgomery County had the largest total percentage of overweight and obese children (34.0). Montgomery's combined overweight and obese percentage rose from 34.0 in 2010 to 44.4 in 2011 for the 2-4 year old age group. At the same time, North Carolina's combined percentage remained stable from 31.7 in 2010 to 31.9 in 2011.

The most recent data that NC-NPASS provides for children aged 2-18 is from the year 2009, and indicates that just over forty-two percent of children in Montgomery County are either overweight or obese, which is 24% higher than the state combined rate of 34.2. Richmond County has the highest percentage of children at a healthy weight, and Montgomery County has the lowest percentage of children who are underweight. Montgomery's combined overweight and obese rates were higher than the state combined rates and all peer county combined rates in 2007 and 2008 with combined rates steadily increasing from 36.3 in 2007, to 39.2 in 2008 to 42.5 in 2009.

Prevalence of Obesity, Overweight, Healthy Weight, and Overweight
in Children Aged 2-18 years
(NC-NPASS– 2009)

	Underweight <5th Percentile	Healthy Weight 5th-85th %	Overweight 85th-95th Percentile	Obese > 95th Percentile	Combined Overweight/ Obese Rate
NC	3.5	62.3	16.2	18.0	34.2
Anson	14.2	67.4	8.3	10.1	18.4
Montgomery	1.6	55.8	18.3	24.2	42.5
Richmond	11.6	70.8	7.0	10.6	17.6
Scotland	4.2	66.4	16.4	13.0	29.4

The limitation to the data provided by the NC-NPASS report is that it only includes data on children that are seen in North Carolina Public Health Sponsored WIC and Child Health Clinics and some School Based Health Centers. To get a clearer picture of overweight and obesity among all school-aged children in Montgomery County, the FirstHealth Montgomery County School Health Centers (SHCs) have collaborated with the Montgomery County School nurses for five consecutive years to collect body mass index (BMI) data on all students enrolled in the Montgomery County School system. This data have been compiled for the past five school years and has provided the impetus for developing collaborative strategies to address the childhood obesity epidemic that is rampant in Montgomery County. According to this data, currently 46% of county adolescents are overweight or obese, which has decreased from 48% in 2010, but is still much higher than the state and national averages. Of the schools in the county, Candor Elementary school has the highest total percentage of overweight and obesity, at 56%. Page Street Elementary School ranks second highest in the county at 51%, followed by East Middle School at 49%. Mt. Gilead Elementary School has the lowest combined percentage at 34%.



Source: FirstHealth Montgomery County School Health Centers and Montgomery County School nurses

Obesity *(continued)*

One contributor to overweight and obesity is physical inactivity. In 2010, Montgomery County was one of 20 North Carolina counties that participated in a study of physical activity levels among 9-14 year old youth. Physical activity levels among children from the selected school and community sites within counties were measured in two ways: (1) All participating youth completed a survey about the amount and type of physical activity they engage in each day, and about other factors that might affect their activity levels, such as neighborhood safety and parent support. (2) Some study participants also wore an accelerometer for one week. An accelerometer is a device that measure the amount and intensity of the wearer's physical activity. In Montgomery County, 268 youth participated in the survey at East Middle School. 59% of participants were female; 31% were white, 15% black, and 53% other. Accelerometers captured Sedentary time (the number of minutes per 8-hour day participants spent sitting still) and Moderate-to-Vigorous Physical Activity (the number of minutes per 8-hour day participants were engaged in a level of activity corresponding to at least a jog).

In Montgomery County, MVPA and Sedentary Time were measured using accelerometer data from 68 out of 268 study participants. According to the Centers for Disease Control and Prevention, children and adolescents should have at least 60 minutes (1 hour) of physical activity daily. Most of the recommended 60 minutes per day should come from moderate or vigorous aerobic physical activity. The average MVPA per 8-hour day of Montgomery County participants was 16 minutes. In contrast, the average sedentary time of participants per 8-hour day was 311.9 minutes (5.20 hours). Sedentary Time does not include time spent sleeping at night.

The study survey included several multiple choice questions about specific physical activities and time spent engaged in each. The questionnaire uses participant responses to calculate an activity score that ranges from 1-5, where 5 indicates the highest level of activity. Based on this scale, the average self-reported activity score for Montgomery County participants was 3.12. Across all 20 participating counties, the average score was 3.23. Survey participants were also asked to estimate the amount of time spent doing certain activities. Boys reported being active at least 60 minutes an average of 4.81 days out of the past week, as compared to the 4.25 days averaged by girls. Conversely, girls reported watching an average of 2.97 hours of TV on a normal school day, while boys reported watching 2.68 hours. Boys however, reported playing video or computer games for more hours than girls in an average day (boys-2.20 hours; girls-1.79 hours).

To assess access to physical activity, participants were asked if there was "a place like this" near their homes (within half a mile or a 10 minute walk). The highest percentage of Montgomery County participants reported living near a church or place of worship (80%), park (64%), playing field (59%), and a basketball court (56%). Seventy percent of participants identified litter as a problem in their neighborhoods. Thirty-five percent reported noise to be a problem, 27% reported drugs, and 26% reported crime to be a neighborhood safety concern. In order to assess potential barriers to physical activity, participants were asked "How often do these things keep you from being physically active" and were given a table of po-

tential barriers to which they were asked to respond. Thirteen percent of respondents indicated that physical activity would "make me tired"; eleven percent indicated "the weather is bad"; 10% indicated "I don't like to sweat"; 10% indicated "I don't have time to do physical activity and 7% indicated "I might get hurt or sore".

What's the bottom line? On average, the Montgomery County youth who participated in this study engage in approximately 1/4 of the recommended 60 minutes of physical activity per day. Male participants engaged in approximately 1/3 of the recommended daily amount of physical activity, while female participants engage in about 1/4 of the recommended amount. The Montgomery County youth who participated in this study think they are more active than they actually are. They reported that they are moderately to vigorously active for at least 60 minutes about five days per week, but the data show that they are only moderately to vigorously active for about ***16 minutes*** per day. The data show that the Montgomery County youth who participated in this study are completely sedentary for more than half of an 8-hour day (average of 5.20 hours). The school day at East Middle School is about seven hours long, and it can be assumed that a large portion of this time is spent sitting in class. Participants also reported that on a typical school day, they spend about two hours using the computer or video games (not for school) and/or almost three hours watching TV.

Current Obesity Reduction Initiatives

The reduction and prevention of childhood and adult obesity was a priority adopted during the 2008 Community Health Assessment process in Montgomery County. Recognizing this decision, the long-term health and economic effects of unhealthy weight, as well as the struggle community members have with maintaining a healthy weight, many different agencies and organizations have worked to address obesity in some fashion. Specific strategies to reduce overweight and obesity have included increasing access to nutritional foods, increasing access to recreation and physical activity opportunities and increasing the percent of leisure time spent in physical activity. There are many activities and programs in the county with a main purpose that has nothing to do with reducing obesity, but a facet of the program still impacts weight. For example, as discussed in the "environmental factors that influence health" section of this report, the goal of the Montgomery County Farmers' Market Association is to encourage farming and agriculturally related entrepreneurialism in the county and strengthen the sense of community. However, the presence of farmer's markets increases access to healthy foods. Research has proven that the easier healthier food is to access, the more likely people will consume it and the less likely they are to consume unhealthy foods, making for a more nutritional diet which is associated with a healthier weight.

Community Transformation Grant Project. In 2011, the US Department of Health and Human Services awarded $7.4 million to the North Carolina Division of Public Health to fund the Community Transformation Grant Project. This project aims to reduce chronic diseases, promote healthier lifestyles, reduce health disparities, and control health care spending in North Carolina. This will require improving access to healthy living

Obesity *(continued)*

opportunities for all North Carolinians including racial and ethnic minorities, those of low socioeconomic status and individuals living in rural areas. CTG Project builds upon the successful efforts to decrease tobacco use, increase physical activity, improve nutrition, and increase access to evidence-based clinic preventative services by state, regional and community partners. By strategically using resources across these areas and working together across county lines, the CTG Project will expand the reach and success of these efforts.

Montgomery County is part of Region 6 in the CTG Project, which also includes Anson, Cumberland, Hoke, Harnett, Lee, Moore, Randolph, Richmond and Scotland counties. Current regional goals directly related to obesity include obtaining joint-use agreements and the enhancement of farmers' markets within the region. In the future, the region will also work to increase the number of convenience and corner stores that offer and promote healthier food and beverage options.

Healthy Kids,
Healthy Communities
Supporting Community Action to Prevent Childhood Obesity

Healthy Kids, Healthy Communities Grant.

The Healthy Kids, Healthy Communities grant is a national program of the Robert Wood Johnson Foundation which provided funding to FirstHealth of the Carolinas to work in five communities in Moore and Montgomery Counties to remove some of the barriers keeping children from being active and eating right.

In Montgomery County, the project focuses on the towns of Candor and Mt. Gilead. Successes in the town of Candor include the construction of a walking trail at Fitzgerald Park, and adoption of a Healthy Eating Policy by the Town of Candor and the implementation of the "Peachy Feet" 5K race which drew over 200 participants. Successes in Mt. Gilead include the adoption of a physical activity policy by the Town of Mt. Gilead and enhancement of the local elementary school's walking track. The town also received a $500,000 grant to make repairs to the Highland Community Center gym and are working on the development of a video that will tell the story of how a small rural town with limited resources can make changes to make a healthier community.

Currently, the project team is working with the Town of Candor on a corner store initiative that will survey 6 corner stores in the town of Candor to determine the availability of fresh fruits, vegetables and other healthy foods. The team plans to work with store owners to strategically place healthier foods in the store in order to encourage healthier shopping.

Produce currently available at "Tienda" in Candor, NC

In the spring of 2012, the Montgomery First-In-Health 2020 Task Force organized and implemented a corporate walking challenge called "MoCoFit– Ready, Set, Walk". This event kicked off in May and concluded with a celebration event on June 12. Corporations registered for the challenge on the mocofit.org website, and then employees registered and linked themselves to their employer. Individuals tracked daily physical activity on the website, which then converted activities into step. Individuals who earned 390,000 steps were eligible for prizes. The small and large business with the greatest average steps were also recognized. Twenty-two businesses enrolled in the challenge with 292 active participants. Ninety-one individuals recorded 390,000 steps or greater. Over 40 individuals attended the final event. Prizes included two bicycles, two I-Pod Shuffles, two stability balls, two kettle bells, one yoga mat, three sets of stretch bands, a walking hand weight set, walking DVD and farmers' market gift certificates. The small business with the greatest average steps was Rebecca's Cleaning Service, the large business was Montgomery Community College Traveling Trailblazers.

MoCoFit Kick-Off Event where participants are engaging in a warm-up activity before beginning a group walk

Community Programs.

Montgomery County Cooperative Extension implemented a program in 2012 with an emphasis on nutrition and food resource management education for Hispanic families. Eleven participants (4 adults and 6 youth) enrolled in this five session program in which the adults and youth were separated in order to learn different material. There were two translators who instructed the lessons while Cooperative Extension Agents aided in any help needed and provided healthy snacks and incentives. Written evaluations proved the program to be helpful in educating the parents in nutrition and encouraged the youth to try more healthy foods and engage in physical activity.

FirstHealth Community Health Services continues to offer the "PLAY" program and "The Happy Kitchen" program. PLAY– People Living Active Year-Round– is a free program that teaches participants how to play and stay motivated. PLAY mixes physical activity like jumping rope, doing the Hula Hoop and playing catch with a Frisbee along with working out with resistance bands, some simple stretching exercises and cardiovascular activities. Activity equipment used during the session is the participants' to keep. Classes meet once a week for six weeks. The Happy Kitchen/La Cocina Alegre is a program of Sustainable Food Center, and is designed to teach healthy living techniques in a fun, community-based at-

Obesity *(continued)*

mosphere. Classes meet once a week for an hour and a half for six weeks. After each class, participants receive a free bag of groceries so they can prepare the recipes learned in class at home. Participants learn to cook tasty, healthy and inexpensive meals; are informed of good nutrition for themselves and their families; learn how to get the most food for their money, and enjoy delicious foods.

2012 Eat Smart, Move More, Weigh Less Graduates

The Montgomery County Health Department continues to offer "Eat Smart, Move More, Weigh Less" classes in the community as interest and time allows. The 15 week weight-management program uses strategies proven to work. Each lesson informs, empowers and motivates participants to live mindfully as they make choices about eating and physical activity. The program provides opportunities for participants to track their progress and keep a journal of healthy eating and physical activity behaviors. In the spring of 2012, the Health Department partnered with Total Fitness for Ladies, a gym in Biscoe, to offer the Weigh Less series. An average of ten participants attended regularly, and recorded a combined weight loss of 85.9 pounds. The collective BMI measurement dropped a total of 40 points. Five of the participants recorded reduced blood pressures and seven participants exhibited reduced waist measurements.

The towns of Biscoe, Troy, and Mt. Gilead all have swimming pools open to the public during the summer season. The Biscoe pool reported a total of 16,779 pool uses. This number includes 9,381 regular swimming; 1,820 swimming lessons; and 5,578 swimmers at group events. Although these numbers are higher than the 2011 numbers, they are about 2,000 short of the 2010 numbers. However, the pool in Troy just became public in 2012, and could account for some of the decline. In 2012, the pool also offered a "Water Aerobics" class for the first time. Classes were offered three times a week from July until September and averaged 10-15 participants per session.

Participants at the Troy-Montgomery Senior Center are privileged to have several opportunities to be active. Teresa Thomas, director, reports that the most popular health programs are water exercise, Fit & Strong (an evidence-based program), yoga, walking programs, Stretch & Tone programs, and Zumba. All programs average between 5 and 15 participants.

Tammy Owens is a fitness instructor that is well-known throughout the community for bringing successful, yet fun exercise options to individuals in the county. She is best known for her Bootcamp classes that are taught through Montgomery Community College every semester. These classes offer a military style exercise program that motivates and encourages individuals to get fit and stay fit. Tammy also teaches classes on nutrition and

addresses the proper way to prepare balanced meals and implement portion control to assist in weight loss. Other group exercise classes that are offered include kick-boxing, Pilates', exercise ball and dumbbells, theraband and cord work outs. She also offers Learn to Run classes, which are free of charge, and led to the development of a running club called MoCo inMotion in 2010.

School Initiatives

Montgomery County Schools have implemented a new Meal Pattern this year based on recommendations from the Institute of Medicine. The pattern focuses on the following: age-appropriate calorie limits, larger servings of vegetables (including dark green and red/orange vegetables and legumes), fat-free or 1% milk (flavored milk must also be fat-free), more whole grains and less sodium. These new federal nutrition standards bring school meals in line with Dietary Guidelines for Americans while providing students with the nutrition they need to succeed in school. Every school lunch offers students, at minimum, milk, a fruit, a vegetable, a grain and a source of protein. School foodservice professionals encourage students to take all of these offerings and fill up on the larger servings of fruits and vegetables provided, since these fiber-rich foods keep students satisfied throughout the school day. The school system also offers a universal breakfast to every child free of charge.

In October 2012, Candor Elementary School had Farmers Day for their students. Local farmers and other community members were invited to come out to spend the day with the students to showcase a fruit, vegetable, trade, talent or farm machinery. Among other topics, students were taught about how fruits and vegetables were grown, why they are healthy and the importance of making healthy snack choices. Delicious, healthy snacks such as radishes, snow peas, cucumbers, grapes, tomatoes, squash, zucchini, cantaloupes, broccoli, apples, oranges and carrots were available for students to taste test. These were provided by the Fresh Fruit and Vegetable Program at Candor Elementary School and were prepared by the cafeteria manager and staff.

The FirstHealth Montgomery County School Health Centers, East and West, are committed to addressing childhood obesity and their nutrition educator sees all students registered at the health centers for an assessment that includes height/weight and BMI. All students receive information about their BMI and education regarding healthy eating and being physi-

Obesity *(continued)*

cally active. All students whose BMI is greater than the 85th percentile are seen by the nutrition educator for a minimum of two counseling sessions, and a registered dietician sees all students whose BMI is great than the 99th percentile for a minimum of two sessions for medical nutrition therapy.

Walking Trail Constructed at East Middle School in 2012 with funds from NC Eat Smart, Move More Community Grants program

In 2012, the School Health Advisory Council has targeted obesity, staff wellness and teen pregnancy prevention as priority areas. A wellness fair for all staff will be held in January 2013 and multiple schools in the county have staff that exercise and walk after school. Three schools are fortunate to have received the Fruit and Vegetable grant, which introduces healthy choices to children. Two schools, Star Elementary and Page Street Elementary have a walking and running club that students can participate in afterschool. Additionally, East Middle School has a new walking trail and has developed an afterschool walking club. School personnel continue to seek out ways to provide programs to help educate students on healthy choices in order to reduce childhood obesity.

Color Me Healthy Summer Fun participants make and taste healthy snacks

Cooperative Extension Agents in Montgomery County taught Color Me Healthy Steps to Health Program to all the kindergartners at two elementary schools in the county (Green Ridge and Troy Elementary) and the Pre-K classes at Eggleston's Playground. A total of 240 students enrolled in the program. Teaching methods were interactive and designed to educate and facilitate behavioral change in the students by engaging all the senses: sight, smell, touch, hearing, and taste. Taste tests enhanced the multisensory learning experience. Parents were sent a weekly nutrition education handout with information and recipes related to the classroom sessions. Classroom teachers observed an improved willingness to taste fruits and vegetables by their students and increase in physical activity by their students. Additionally, reporting parents observed other positive behavior changes in their children related to eating and physical activity habits. Color Me Healthy was also implemented during Summer Fun for young 4-H members. Activities and lessons were chosen from the curriculum and tasty, healthy snacks and enjoyable physical activities taught the children that being healthy is fun.

Why is Overweight and Obesity Important?

Overweight and obesity have reached epidemic proportions in our county, state, and nation. Overweight and obesity have been proven to be contributors to heart disease, cancer, stroke and diabetes. Lifestyle choices underlie obesity and many chronic diseases. According to the CDC, 2010, the consequences of childhood obesity are numerous, with increased risk of serious early-onset diseases such as diabetes, hypertension and elevated cholesterol levels that contribute to heart disease and other serious diseases such as asthma, sleep apnea, fatty liver disease, and orthopedic issues. In addition, psychological implications include stigmatization and low self-esteem (CDC, 2010), and increased risk for anxiety, depression and suicidality (Swahn et. Al, Journal of Adolescent Health, 2009).

Who's At Risk for Overweight and Obesity?

People who do not consume the recommended servings of fruits and vegetables, who drink less water, who drink more sugar-sweetened beverages, who eat meals outside of their home regularly, and do not engage in regular physical activity are at risk of becoming overweight or obese.

North Carolina data suggests that African-Americans have the highest obesity rates (42.4%), as compared to the white and Latino rates (both 26%). African-American women are the most at risk, with rates of 47.0. Furthermore, females have higher obesity rates than men according to the BRFSS data (42.7% women and 29.8% men). Individuals with the least income are the least likely to get the recommended level of physical activity. People with lower education levels, and people who are physically disabled are also more likely to be overweight or obese.

Hispanic children are more likely than white children and black children to be at an unhealthy weight (41.8-Hisp, 35.2-White, 30.5-Black). Children 12 to 18 are at the highest risk among the child age group, and females are at the most risk. The highest obesity rates among children in North Carolina are Hispanic males aged 5-11, followed by Hispanic females between the ages of 12 and 18.

Students at Candor Elementary School, Page Street Elementary School and East Middle school have the highest percentage of children at an unhealthy weight. (Interestingly, Candor and East Middle also have large Hispanic populations). Fifth graders at all elementary schools had the highest percentage of unhealthy weight. Females at East Middle School are more likely to be at an unhealthy weight due to their physical inactivity.

Oral Health

Oral health is definitely a health concern in Montgomery County, as dental diagnoses remains in the top three diagnoses seen at FirstHealth Montgomery Hospital. As a result of this knowledge, the FirstHealth Montgomery Foundation funded the Montgomery Smiles Project which involved both local dentists and the FirstHealth Dental Care Centers. Dr. Sharon Harrell, who oversees the Dental Care Centers, feels that great strides in children's dental health have been made as a result. Oral health statistics from the NC Division of Public Health, Oral Health Section, show that in 2009-10, 81% of kindergarten students and 96% of the fifth grade students in Montgomery County were screened and of those 64% had sealants compared to the state's 44%. However, the percent of both kindergarten and 5th grade students with decayed teeth is still higher at 26% and 4% respectively than the state's percentage of 15 % and 3% for those same age level students. Dr. Harrell states nutrition education is greatly needed, as the diets of many children consist of cariogenic drinks, such as Gatorade and colas, as well as foods such as cavity causing candy and chips. The FirstHealth Dental Care Center in Montgomery reported 3,340 visits from October, 2011 to October, 2012.

The dental voucher program, funded by the emergency department physicians and the FirstHealth Foundation, helps uninsured adult patients see their local dentist for a dental emergency exam, an x-ray and an extraction or filling.

The Montgomery School-Based Health Centers received a grant entitled, "Expanding Preventive Oral Health Services in School-Based Health Centers" in 2011. The nurses have performed 181 oral screenings, assessed for risk for decay, and applied preventive fluoride varnish to 151 students. Twenty-six urgent dental referrals were made, with 13 referrals to a dental home. One student who had never seen a dentist was screened, varnish applied and referred to the Dental Care Center where she had 11 cavities filled, paid for through the Kids in Crisis Fund which is a part of the Montgomery Smiles Project.
Montgomery County Health Department also applies dental varnish to children under the age of three who come into the health department through the Child Health Program. From October 1, 2011 to September 30, 2012, 77 children were treated with preventive fluoride varnish.

For the first time, Montgomery now has an orthodontist who comes to the area a minimum of once a month.

Senior Health

According to the Piedmont Triad Regional Council Area Agency on Aging, in 2010, older adults (60 years of age and over) accounted for 23% of the total population of Montgomery County. In the county, about two-thirds of older adults live with family members, defined as two or more people related by birth, marriage, or adoption residing in the same household unit. Almost one-third of older adults live alone and 69% are female. Only 1.9% live in non-family households , and 2.8% live in group quarters. Group quarters include such places as residential centers, skilled nursing facilities, group homes, and correctional facilities. The primary source of income for adults 60 and over is from social security and retirement in-

come rater than earned income. However, 15.8% of older adults (65 years of age and over) live below the poverty level. At $20,836, the average income of those who are age 65 and over is approximately $31,00 less per year than that of the total population. Of the 4,364 people who are age 65 and over, 83% receive Social Security benefits averaging $1,097 per month or $13,164 per year. This is only $1,994 more than the baseline Federal Poverty Level of $11,170 (for a family of one).

In Montgomery County, an estimated 168 households with an individual 65 years of age and over (6.7%) do not have access to a vehicle. English is the most common language spoken among older adults in Montgomery County. Only 1.8% of older adults speak a language other than English, compared to 12.9% of the general population.

Food Insecurity.

In a study released in 2011, AARP published national rankings for food insecurity. North Carolina ranked in the top ten states for the number of citizens age 60 and older who experience food insecurity, standing at number nine. The food insecurity rate of 7.97 is the percent of people in that age group who experience a moderate degree of not having enough to eat; often they must prioritize payment for rent, medical care, prescriptions, or utility bills from the money they would normally use for food. They go without food in order to meet these other vital living expenses. According to statistics from *Feeding America*, 20.5% of Montgomery County's total population is food insecure, or 5,660 residents. Of this group, roughly 76% are income-eligible for federal anti-hunger programs, leaving 24% who are dependent on charitable food assistance. Based on this percentage, a conservative estimate of 1,305 individuals age 60 and older experience food insecurity in the county on a regular basis. There may be as many as 313 senior citizens who face food insecurity but do not qualify for federal food assistance. Furthermore, of the older adults in the county, 1.4% (81 older adults) are grandparents responsible for grandchildren. Observational data indicates that seniors raising grandchildren who experience food insecurity are more likely to give the food to the children than to eat it themselves, raising even more concern about the nutritional needs of the senior adults in Montgomery County.

Food Insecurity
Age 60 and Over

Rank	State	Rate
1	Mississippi	12.45
2	New Mexico	10.01
3	Texas	9.67
4	South Carolina	9.66
5	Arizona	9.61
6	Georgia	8.74
7	Louisiana	8.32
8	Alabama	8.03
9	North Carolina	7.97
10	Oklahoma	6.66

Source: "Food Insecurity Among Older Adults" by the AARP Foundation, August 2011.

Healthcare Facilities.

Montgomery Memorial Hospital is the only hospital in the county, and it does serve seniors. Skilled Nursing Facilities provide up to 24 hour nursing care in addition to assistance with personal care needs. The care provided may be long-term care for chronic condition or short-term rehabilitative services for people who have been hospitalized. Nursing facilities must be licensed in accordance with North Carolina state law by the North Carolina Division of Health Service Regulation. In addition, nursing facilities that wish to receive Medicare and Medicaid reimbursement must be certified in accordance with federal law. Nursing facilities that are Medicare and Medicaid certified receive annual licensure inspections by the Division of Health Service Regulation. Adult Care

Montgomery County		
	Total # of Facilities	Total # of Beds
Adult Care Homes	4	230
Family Care Homes	5	30
Skilled Nursing Facilities	1	151
TOTAL	10	411

Source: Piedmont Triad Regional Council Area Agency on Aging

Homes and Family Care Homes provide care for persons age 18 and older who do not need nursing home care but are no longer able to remain in their own homes because they need help in meeting daily needs such as meal preparation and housekeeping. These homes are for people who only need occasional and incidental medical services. Room and board, personal assistance, supervision of medications, and social activities are provided. The private cost rates vary from facility to facility and supplemental assistance may be available to cover the cost for those with limited incomes. Information on assistance may be obtained through the local Department of Social Services. "Assisted Living" is a term used to refer to Adult Care Homes (7 or more residents) and Family Care Homes (2-6 residents). Other agencies that serve older adults and individuals with disabilities in Montgomery County include Troy-Montgomery Senior Center, Montgomery County Council on Aging, NC Cooperative Extension Service, Montgomery County Veterans Service Office, Montgomery County Department of Social Services, Montgomery Community Living Skills, and Montgomery County Health Department.

Council on Aging. The Montgomery County Council on Aging is a private, nonprofit organization serving adults aged 60+ and their families. The programs and services offered are designed to promote independent living and a dignified quality of life.

Nutritional services provided by the Council on Aging provide seniors with the nutrition they need to maintain a healthy and independent lifestyle. The agency provides three nutritional services: (1) home delivered meals, (2) community nutrition centers and (3) nutritional supplements.

The home delivered meals program allows for volunteers to deliver a hot midday meal five days a week to homebound adults aged 60 and over. Spouses of seniors are also eligible for the program, even if they are younger than age 60. The Home-Delivered Meals Program helps individuals continue to live independently and provides the nutrition they need for good health. In addition, the dedicated volunteers provide daily social contact and can be a valuable source of information on other community resources necessary to support special needs. There is no fee for the home delivered meals but participants are asked to contribute what they can in order to help expand services. Currently in Montgomery County, 70 home delivered meals are delivered daily.

For those who prefer to eat with others in a friendly and welcoming environment, midday meals are served each weekday at conveniently located nutrition centers. Community Nutrition Centers are an outreach service of the Montgomery County Council on Aging. Monday through Friday of each week, the agency provides a hot midday meal to persons 60+ while offering nutrition education, fun and fellowship. Additionally, people can participate in craft and games, take advantage of a variety of health and wellness programs, and locate information and resources while being with friends. Meals are served at the Montgomery County Senior Center in Troy and at the Highland Community Center in Mt. Gilead. The

Regional Coordinated Transportation System (RCATS) provides van service to the Community Nutrition Centers Monday through Friday of each week. The program currently serves 25 people at each location, or 50 people daily. Liquid meal supplements are also available at reduced rates through the Nutritional Supplement program.

The Council on Aging also provides prescription drug assistance, a program which helps the senior to navigate the applications required for prescription drug or medication management programs. In addition, the agency provides an In-Home Aide Program, a Summer Fan Program, and an Information and Referral Service which helps put seniors in touch with the various programs and resources available in the community to support senior adults and their families.

Additionally, the Troy-Montgomery Senior Center is working on new health and wellness programs. The Council on Aging has also added the "Senior Grocery Bag" program which provides about 500 households with additional food monthly. A Respite Program has also been implemented to assist caregivers and give them a break from caregiving which has proved to benefit their physical and mental health.

There are two exciting new projects happening in Montgomery County around nutrition, and both projects are located in Star. The creation of the "Montgomery Food Hub" allows Second Harvest to bring over sixteen tons of food monthly to the county for distribution to food pantries and those in need. Additionally, there is a new kitchen project that is being constructed due to grant funding sought by the Council on Aging. The community kitchen will allow the opportunity to use commodity and other free foods to set up a network of at least ten community feeding sites or "soup kitchens" throughout the county with the potential to serve five hundred meals daily to seniors and other economically disadvantaged people. The kitchen will also be used to prepare all the seniors meals that are currently being delivered in the county, but will be more cost effective instead of having to outsource the meals from another county. The kitchen also has a new classroom which will offer a space with a capacity of a hundred persons for workshops and training and other social and recreational events. The kitchen will enable Cooperative Extension and others a place to teach cooking and other kitchen skills for healthier meal preparation. The kitchen will also be available for others to create and sell products, thus increasing personal incomes and wealth. Finally, another goal with the kitchen is to move to healthier menu choices for seniors who suffer from diabetes and other diseases where proper nutrition will greatly benefit the individual.

Pictures from the Montgomery Food Hub, reprinted with permission from OutreachNC

Teen Pregnancy

According to data released by the Adolescent Pregnancy Prevention Campaign of North Carolina, the teen pregnancy rate for North Carolina fell 12% in 2011. The change represents the single biggest year-to-year drop ever, and reduces teen pregnancy to the lowest levels in the state's history. The 2011 pregnancy rate for North Carolina girls ages 15-19 was 43.8 out of every 1,000 15-19 year old girls. In other words, fewer than 5% of 15-19 year old girls in the state got pregnant in 2011. The new data includes several positive indicators for North Carolina youth including: (1) Racial and ethnic disparities are narrowing! Pregnancies fell among girls of all racial and ethnic backgrounds, helping to minimize some historical disparities. Pregnancies to white, black and Hispanic teens dropped 11%, 12% and 13% respectively. (2) Fewer pregnancies mean fewer births and abortions! Reducing the teen pregnancy rate also reduced all potential outcomes of a teen pregnancy. The teen birth rate dropped by 9% and the teen abortion rate dropped by 21%. (3) Teen pregnancy rates are 58% lower than they were at their peak in 1990.

While this is great news for the state of North Carolina as a whole, the outlook for teen pregnancy in Montgomery County is not as positive. While the state rate fell 12%, the Montgomery County teen pregnancy rate ***increased*** 9% in the same year, making the county's rate of 82.5 almost twice that of the state's rate of 43.8. This represents a total of 70 young women aged 15-19 that became pregnant in Montgomery County. When looking at ethnicity, the African American rate for the state is 61.6 and is not listed for Montgomery County because fewer than 20 pregnancies were African American girls. (Rates based on less than 20 cases are statistically unreliable and therefore not reported by APPCNC). However, the Hispanic teen pregnancy rate for the state is 71.1 and Montgomery's rate is 44% higher at 102.8. The white rate in the county is much more than double the state rate (73.6– Montgomery, 30.8– state).

2011 Teen Pregnancy Rates Ranked by County

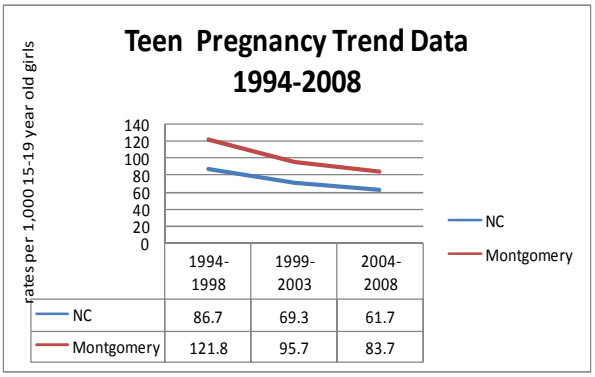
County	Rank	Rate
Richmond	1	90.3
Montgomery	2	82.5
Scotland	2	82.5
Onslow	4	79.0
Edgecombe	5	74.8

Source: Adolescent Pregnancy Prevention Campaign of NC

For 2011, the state of North Carolina is ranked 14th in the nation for having the highest teen pregnancy rate. For the same year, Montgomery County is tied with Scotland County for 2nd highest county in the state, preceded by Richmond County who ranks first with a rate of 90.3. Ranked information is available through APPCNC for all years 2005 through 2011. Of these years, Montgomery's highest rank is its current 2011 rank of 2nd place. In years 2006 and 2008, the county was ranked 8th. The lowest the county was ranked was in 2009 where it was 38th in the state.

Although Montgomery County's repeat teen pregnancy is 28% lower than the state rate, it is still very concerning that 18.6% of pregnancies in the county were repeats (meaning that the same young ladies who have given birth as teenagers previously were giving birth as teenagers again). The 2011 repeat rate in Montgomery County is the lowest repeat rate since 2005. The repeat rate peaked for the county in 2008 when it reached 36.8 as compared to the state's rate of 28.4. The state's repeat rate was highest in 2009 and 2005, with both years being listed as 28.6.

Unfortunately for Montgomery County, high teen pregnancy rates are not something that has only occurred in recent years. Data from as far back as 1994 shows county rates being much higher than state rates, a trend that has continued through 2008 (as pictured to the right). As previously discussed, data from the Adolescent Pregnancy Prevention Campaign of North Carolina also indicates that Montgomery's rates are higher than state rates for 2009, 2010, and 2011. For the 14 years depicted on the chart to the right, Montgomery and all three peer counties have rates consistently higher than state rates, indicating that teen pregnancy is not just a problem in Montgomery County, but for all peer counties as well.



	1994-1998	1999-2003	2004-2008
NC	86.7	69.3	61.7
Montgomery	121.8	95.7	83.7

Source: North Carolina State Center for Health Statistics

This information was shared during the Priority Setting session which was held in October 2012. During this community health forum, a participant suggested that the rates of teenage pregnancies might be higher in the Hispanic sector due to cultural beliefs and social norms, and inquired about the marital status of these teenagers. According to the Baby-Book, which is produced by the North Carolina State Center for Health Statistics, four white women between the ages of 15 and 19 who gave birth in 2011 were married. No African-Americans were married and no "Other" race was married. Only three Hispanic women were married at the time of delivery in 2011. So although there may be a link between social norms and cultural practice, it is not linked to marital status.

What's Being Done in Montgomery County to Address Teen Pregnancy?

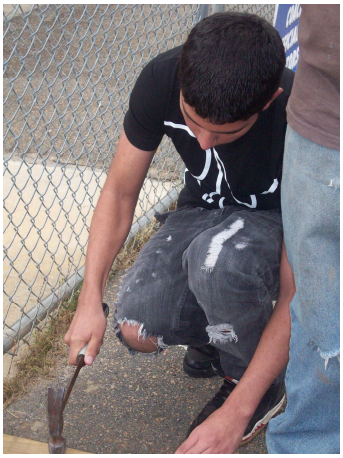
The Teen Outreach Program (TOP) is facilitated in the Montgomery County Schools through the Montgomery County Health Department. TOP was initiated in the Fall of 2007 in the Teen Living classes, following approval by Montgomery County Schools. TOP was funded by the Kate B. Reynolds Charitable Foundation for three years. The Health Department then obtained grant funding through the Teen Pregnancy Prevention Initiative (TPPI) of North Carolina, beginning in July 2010. This grant was awarded for 4 years. Montgomery County is one of a few counties that have permitted TOP to be administered during the school day. Initially, TOP was approved to be administered in the Teen Living classes at both East and West Montgomery High Schools. Montgomery County Schools decided to begin phasing out the Teen Living classes, beginning in Year 3 of TOP. TOP is now administered in the Parenting classes at the high schools.

In 2009, the Montgomery County Health Department, began taking steps to meet TPPI requirements (and concurrently prepare to apply for TPPI funding) and formed the Montgomery County Teen Pregnancy Prevention Community Advisory Council (CAC). This committee is comprised of representatives from the Montgomery County Health Department, Montgomery County Department of Social Services, Montgomery County Partnership for Children, Montgomery County Cooperative Extension, Guidance from both High Schools, School Social Workers, School nurses, Mental Health, and Eckerd Youth Alternative School

Teen Pregnancy

continued

TOP students doing community service projects



-Candor. The role of the CAC is to advise and assist the program staff to provide high quality services to participants. In addition, the CAC's role is to actively promote and support the program in the community. Currently, the CAC has 22 members. This committee meets quarterly.

In 2008, a TOP Teen Advisory Council was formed. This is comprised of past TOP graduates. They meet quarterly to assist the TOP Facilitator in decisions and offer suggestions for improvements. They also complete community outreach activities such as passing out teen pregnancy prevention and/or decision making information/incentives at East/West Montgomery High School games.

Sexuality education and/or portions of TOP curriculum have also been administered to various community organizations during the past six years. Those organizations include Eckerd Youth Alternative School-Candor, local church youth group, various community youth groups, and school clubs.

All TOP students complete a pre-evaluation (prior to participating in any TOP activities) and a post-evaluation (after TOP programming). The same TPPI survey is administered during the pre and the post-evaluations. Questions regarding the student's knowledge, behaviors/activities, and opinions/feelings, as related to sexual activity, are included on the survey. Comparison group evaluations are required by TPPI in Year 2 and Year 3 of funding. TPPI requires a comparison group of 50-students, which have not been exposed to TOP education/programming.

The portion of the TOP curriculum that has proven to be most embraced by TOP students is the community service projects. The most successful projects have been those interacting with and learning about the self-contained classes and the campus beautification projects. Some students have chosen their career paths based on

the community service projects they participated in. Some students have also chosen to continue serving after the project is complete.

The primary barriers to students receiving the ultimate impact of TOP are student's behavior and disrespect, class disruptions as related to those behaviors, and other various class disruptions. Student's behavior and disrespect negatively impacts other students' learning in the class.

Another concern with the program is its limited reach. Because it is only implemented in the Parenting classes, only the students who sign up for and take those classes are reached with the education and information, meaning that a large segment of the student population is still being missed.

Why is Teen Pregnancy Important?

The economic strain of teen pregnancy is felt at the county, state, and economic levels. Additionally, teenagers who become pregnant are at increased risk for lower health and may exhibit less responsible behaviors which could significantly impact their future health and wellbeing. Teenagers who become pregnant are also at risk for not completing their education and not becoming economically self-sufficient. According to the Adolescent Pregnancy Prevention Campaign of North Carolina, teen pregnancy has an impact that lasts for generations. Children of teen parents are more likely to struggle in school, be incarcerated, and become teen pregnancies themselves.

Who is At Risk For Teen Pregnancy?

The data clearly indicates that Hispanic teens are the most at risk for becoming pregnant in Montgomery County, followed by white teens and African American teens. Observational data indicates sexual activity is becoming more common in lower ages, even in middle school and the need for prevention initiatives is great. APPCNC indicates that teens born to teen mothers are also at risk for teen pregnancy. Additionally anecdotal evidence exists that shows teenagers are intentionally becoming pregnant to have someone to love, to qualify for public assistance, and to be accepted into the community college programs. Teenagers have also spoken up about the need for positive youth activities, specifically during the after-school time period when youth are unsupervised and bored.

Summary of Secondary Data

- Montgomery County rates for hospital discharges with a primary diagnosis of asthma for all ages is lower than the state rates.
- The cancer incidence rate for Montgomery County is lower than the state incidence rate, but the county's cancer mortality rate is higher than the state. Therefore, people in Montgomery County are less likely to be diagnosed with cancer, but are more likely to pas away from the disease. This indicates that there is an need for increased screening, diagnosis and treatment of the disease, especially for individuals at increased risk for developing lung/bronchus cancer, which is the only cancer site where Montgomery's rates are higher than state rates. The number of adults who report smoking in the county has decreased, but continued smoking cessation and prevention efforts are needed.
- There were five child motor vehicle fatalities in Montgomery County from 2003-2007. The number of children enrolled in Medicaid, in Health Choice, and receiving public health is steadily increasing. Twelve percent of children in Montgomery County are uninsured (which is higher than the percentage of uninsured children statewide). These economic constraints put children at increased risk for a variety of educational, social and health challenges. SafeKids, Montgomery County Cooperative Extension, and Montgomery County Partnership for Children are working to increase health, wellness, and quality of life for children in the county.
- Montgomery County has a relatively low HIV rate, and is less than half of the state rate. Montgomery County ranks 51st highest in the state for AIDS, with an average rate of 5.4. The 2008 Montgomery Community Health Assessment reported Montgomery County to be 33rd highest in the state for AIDS diagnoses, so the current rank of 51st is a positive improvement in this area. Although county rates are lower than state rates, Chlamydia is by far the communicable disease with the highest prevalence in Montgomery County. Gonorrhea rates are lower for the county than the state and all peer counties. There were no syphilis cases in the county for 2007, 2008, 2009, or 2010 and only one in 2011. Tuberculosis cases peaked in 2009, but three cases were diagnosed in 2010. In summary, Chlamydia is the most prevalent communicable disease in the county, followed by gonorrhea, tuberculosis, HIV, AIDS, and syphilis.
- The diabetes prevalence rate of 20.9 in Montgomery County is more than twice the state rate of 9.8 in 2011. FirstHealth of the Carolinas has launched an aggressive diabetes outreach initiative. Data from the PRC survey shows a decrease in the mortality rate for the county and an increase in prevalence rate, which hopefully indicates more people are being screened and diagnosed and learning to manage their disease and fewer people are actually passing away from it.
- Close to 3 out of 4 adults in Montgomery County responding to the PRC survey indicate having a BMI greater than 25%. According to the same survey, only 26% of county respondents indicate eating 2 or more fresh, frozen or canned fruits daily and only 11% consume 3 or more fresh, frozen or canned vegetables daily. More than half consume sugar sweetened beverages and consider themselves to have a sedentary lifestyle. Only 40% of adults report engaging in physical activity five or more times per week.
- Childhood obesity rates for children aged 2-4 and 5-11 have steadily increased. Montgomery County ranks 88th in the state for overweight and obesity and 35th in the state for obesity. (According to this ranking system, a rank of 1 indicates the lowest prevalence which is the best, and a rank of 100 indicates the highest prevalence rates which is the worst). Over 42% of children in Montgomery County aged 2-18 are overweight or obese. Candor Elementary School has the highest percentage of overweight/obese children (56%), followed by Page Street Elementary (51%), and East Middle School (49%).

Many obesity reduction and prevention initiatives are currently in progress include work being done through the Community Transformation Grant, Healthy Kids Healthy Communities, Montgomery First-in-Health 2020 Task Force, Montgomery Cooperative Extension Service, Montgomery County Health Department, the Senior Center, Montgomery County Schools and the School Health Advisory Committee.

- Dental diagnoses remain in the top 3 diagnoses at FirstHealth Montgomery Memorial Hospital. Twenty-six percent of kindergarteners and four percent of 5th graders have decayed teeth.
- An estimated 1,305 seniors (aged 60 and greater) experience food insecurity. A new "Montgomery Food Hub" project is helping to bridge the gap and fill the need.
- While the state teen pregnancy rate fell 12% in 2011, the Montgomery County teen pregnancy rate increased 9%, making the county's rate of 82.5 almost twice that of the state's rate of 43.8. Montgomery County is ranked 2nd highest in the state for teen pregnancy. Almost one out of five teen pregnancies were repeat. The Teen Outreach Program is currently in place in East Montgomery High School and West Montgomery High School, but challenges exist with the program, including the limited reach.

Why is This Data Important?

The North Carolina Institute of Medicine, in the "Healthy North Carolina 2020: A Better State of Health" report says this:

- Chronic diseases such as heart disease, cancer and diabetes are major causes of death and disability in North Carolina and Montgomery County. Although genetics and other factors contribute to the development of these chronic health conditions, individual behaviors play a major role. As much as 50% of individual health can be attributed to behavior alone. Physical inactivity, unhealthy eating, smoking, and excessive alcohol consumption are four behavioral risk factors underlying much of the burden caused by chronic disease.
- Injury is a leading cause of death and disability in North Carolina and Montgomery for both children and adults.
- Sexually transmitted diseases, including HIV infection and unintended pregnancy affect 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 and result in millions of dollars in preventable health expenditures annually. As with many disease and health conditions, the burden of sexually transmitted diseases and unintended pregnancy falls disproportionately on disadvantaged populations, young people, and minorities.
- Overweight and obesity pose significant health concerns for both children and adults. Excess weight increases an individual's risk of developing type 2 diabetes, high blood pressure, heart disease, certain cancers, and stroke. Physical activity and improved nutrition are among the many factors that can help individuals reach and maintain a healthy weight.
- An individual's oral health plays a very important role in their overall health. Studies have shown direct links between oral infections and other conditions, such as diabetes, heart disease, stroke, and poor pregnancy outcomes. Dental caries is the most common chronic infectious disease among children; if untreated, dental caries can result in problems with speaking, playing, learning, and receiving proper nutrition. In addition, untreated oral health problems in children and adults can cause severe pain and suffering, and those who delay care often have higher treatment costs when they finally receive it.
- Maternal health is an important predictor of newborn health and well-being, and addressing women's health is essential to improving birth outcomes. Many factors affect women's health including individual health behaviors, access to appropriate care, and socioeconomic factors. Focusing on the health of a woman before and during her pregnancy is essential to the reduction of poor birth outcomes such as low birth-weight, pre-term birth, and infant death.

Who's At Risk?

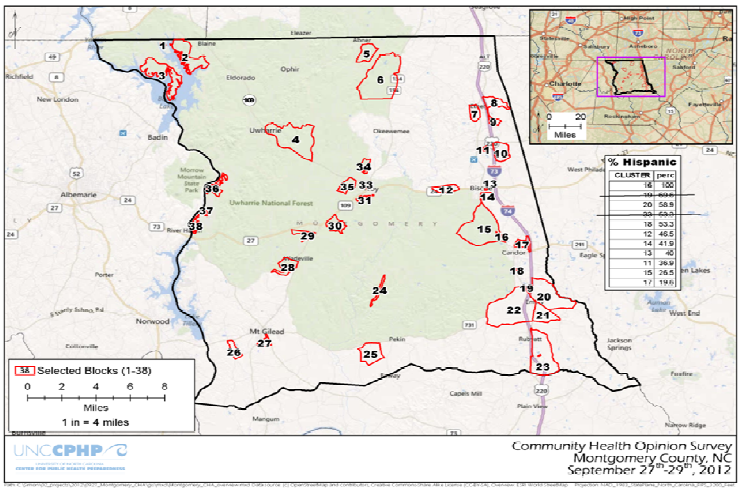
- Asthma. Children 0-14 seem to have a higher risk than adults. African-Americans are almost three times as likely to have asthma than Hispanics.
- Cancer. African Americans have the highest incidence rates, specifically minority males (621.2), white males (549.1), white females (459.2), and minority females (418.0). The most prevalent types of cancer in Hispanics are female breast, prostate, lung/ bronchus, and colon/rectum. African Americans have a substantially higher rate of prostate cancer compared to whites (242.5 vs 136.8) and higher rates of colon/rectum cancer (57.5 vs 46.9), as well as cervical cancer (9.8 vs.7.2).
- Child Health. Children in poverty, and uninsured children are the most likely to suffer negative health consequences and have a lower quality of life.
- HIV/Sexually Transmitted Disease. African-Americans have the highest rates of HIV and STDS. Hispanics have the second highest rates and whites have the lowest rates. This is true for syphilis, gonorrhea, Chlamydia, and HIV.
- Diabetes. Of those diagnosed with diabetes in Montgomery County, 65% are white, 27% are African-American, and 4% are Hispanic. Unfortunately, minority women have death rates three times that of white women. African-Americans have nearly two and a half times the diabetes death rates of white Americans.
- Obesity. North Carolina data suggests that African-Americans have the highest obesity rates (42.4%), as compared to the white and Latino rates (both 26%). African-American women are the most at risk, with rates of 47.0. Furthermore, females have a higher obesity rate than men according to the BRFSS data (42.7% women and 29.8% men). Individuals with the least income are the least likely to get the recommended level of physical activity. People with lower education levels, and people who are physically disabled are also more likely to be overweight or obese. Hispanic children are more likely than white children and black children to be at an unhealthy weight (41.8-Hisp, 35.2-White, 30.5-Black). Children 12 to 18 are at the highest risk among child age group, and females are at the most risk. The highest obesity rates among children in North Carolina are Hispanic males aged 5-11, followed by Hispanic females between the ages of 12 and 18. Students at Candor Elementary School, Page Street Elementary School and East Middle school have the highest percentage of children at an unhealthy weight. (Interestingly, Candor and East Middle also have large Hispanic populations). Additionally females attending East Middle School are at increased risk for overweight and obesity due to their lack of physical activity.
- Oral Health. Hispanics are the most likely not to have a regular dentist, followed by African-Americans and whites. Hispanics are also more likely to have fair or poor dental health, followed by African-Americans and whites.
- Senior Health. Seniors that have lower income levels and who do not have access to regular transportation, as well as those who live in the most rural parts of the county are the most likely to experience food insecurity.
- Teen Pregnancy. Hispanic teens are most at risk for becoming pregnant in Montgomery County, followed by white teens, and African American teens. Teens born to teen mothers are also at increased risk for teen pregnancy.

Montgomery Community Health Opinion Survey

Introduction and Methods

Primary data for the Montgomery County Community Health Assessment was collected over an eleven-day period in September 2012. Trained interviewers administered the community health survey to community residents and stakeholders at selected households through the county. The survey included questions related to community health problems and issues, access to healthcare and health behaviors, parenting concerns, emergency preparedness, and individual and household demographic characteristics.

Administration of the community health survey was facilitated with the assistance of the UNC Center for Public Health Preparedness (UNC CPHP). Using a two-stage cluster sampling methodology developed by the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) and utilizing population-based sampling weights from each census block; this methodology allows for generalizability of the collected data to the population of Montgomery County. Typically, this sampling methodology involves selection of 30 census blocks with seven randomly located interview sites in each. However, due to the scarcity of households in some Montgomery County census blocks, the sampling methodology was modified to include more census blocks with fewer interview locations per block. This ensured that a sufficient number of surveys would be collected to accurately represent county residents.



In the first stage of sampling, 40 census blocks were randomly selected with a probability proportionate to the population size with the most populated census blocks more likely to be selected. Two census blocks (clusters 17 and 28) were selected twice. The selected census blocks throughout Montgomery County are shown to the left. In the second stage of sampling, five random interview locations were selected in each census block using a toolkit developed by UNC CPHP in ESRI ArcPad. Ten households were selected in each of the census blocks (clusters 17 and 28) that were selected twice. A total of 199 interviews were conducted throughout the county, just below the goal of 200 interviews (5 interviews from 40 census blocks) for a sampling success rate of 99.5%.

Interviewers obtained oral consent in English or Spanish before interviewing potential survey participants. Eligible participants were at least 18 years of age and a resident of the selected households. Responses were recorded at the time of interview either on paper surveys, or electronically using the Magellan MobileMapper handheld computers. Approximately five paper surveys were left with participants for completion and retrieved by interviewers the following day Tracking forms were available for 185 of the 199 completed surveys indicating that the cooperation rate was 79.4% (completed interviews out of housing

units where contact was attempted).

Data were analyzed in SAS 9.3 (Cary, NC), and results for each question in the community health survey are reported as weighted proportions with their 95% confidence intervals (CI). Survey weights were calculated using methods described in CDC CASPER toolkit, which incorporates the total number of households in the sampling frame, the number of households in the census block, and the number of interviews collected in each census block. These weights were used to calculate the standard error for each proportion, from which 95% CIs were derived. These confidence intervals should be interpreted as the interval that contains the true value in 95% of repeated samples. Qualitative data were summarized into categorical variables where appropriate.

Interpretation of these data are generalizable at the county level because the sampling method collects responses from residents throughout the county in weighted census blocks. The limitation of this methodology is that stratifications to a finer scale, or within subpopulations of the county, results in imprecise estimates with no meaningful interpretive value. Compared to 2010 Census estimates, demographic information from survey respondents indicate that women were oversampled (75% of respondents vs. 52% of residents) but the sample was otherwise demographically similar to overall county residents.

Demographic Characteristics

Most of the respondents had lived in the country for more than ten years (43.8%; 95% CI: 35.1%, 52.4%) or their whole life (42.2%; 95% CI: 33.4%, 51.0%) with only 1.6% (95% CI: 0.0%, 3.4%) having resided in the county for less than one year.

The median age of survey respondents was 51 years and the oldest participant was 94 years. The majority of survey respondents were females (75.5%) and most reported white race (75%). Nearly one-fifth of respondents reported black race. Hispanic or Latino ethnicity was reported by 11.8% of respondents and 14.5% spoke a language other than English at home. Other languages spoken in the home included Spanish, French, and Telugu These demographic characteristics are similar to 2010 Census projection, with the exception of gender and age. Women were over represented in the sample relative to 2010 Census estimates. The distribution of age among respondents was generally older than that of the county census estimates because individuals interviewed were at least 18 years of age.

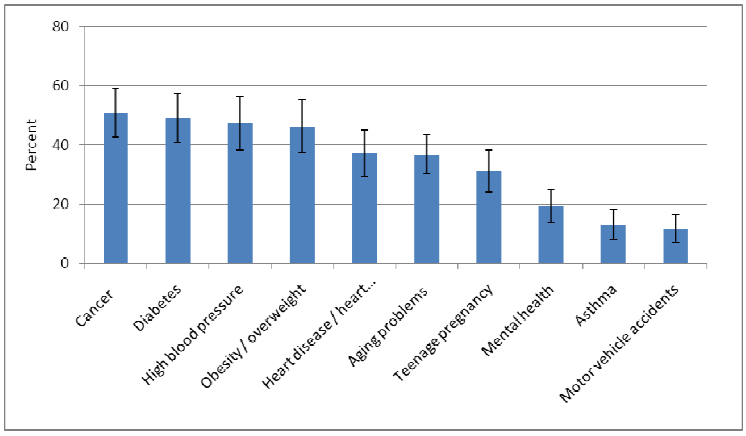
Additional demographic information collected includes education, household income and employment status. High school was the most frequently reported highest level of education completed (31.0%), with 19.4% of the respondents reporting an associate degree, and 8.2% reporting a bachelor's degree from a 4-year college. Median household size was 2.1 persons and 47.5% of respondents reported an annual household income below 200% of the Federal poverty threshold. About 10% of respondents did not know or did not report their annual household income. One third of respondents worked full time (33.9%), 24.5%

Demographic Characteristics *(continued)*

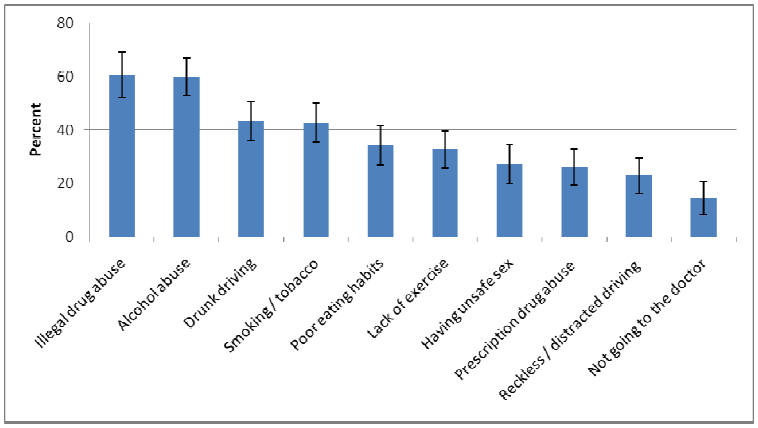
were retired and 11.3% were homemakers. Twelve percent were unemployed and 10.2% worked only part-time. Most respondents (78.3%) were members of faith organizations.

Community Issues

Most Important Health Problems Identified by Survey Respondents



Most Important Unhealthy Behaviors Identified by Survey Respondents



Survey respondents were asked a series of questions related to the health of Montgomery County as a whole. Most respondents felt the county was a good (47.5%), or excellent (27.9%) place to live. Few respondents rate the county as a fair (20.4%) or a poor (4.2%) place to live.

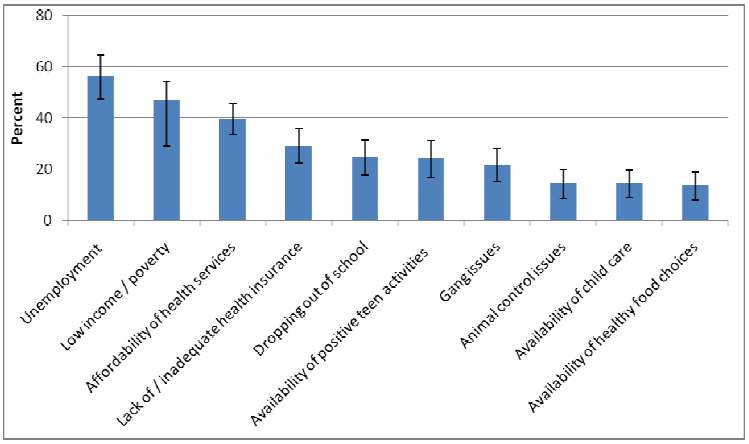
The five health problems with the greatest impact in Montgomery County identified by respondents were: cancer (51.1%), diabetes (49.0%), high blood pressure (47.2%), obesity/overweight (46.3%), and heart disease/heart attacks (37.2%). Aging problems (36.9%), and teenage pregnancy (31.1%) were the next most commonly identified health problems. Most health problems identified by respondents related to aging and chronic disease, which is not surprising given the age distribution of the sample.

Respondents were asked to indicate the five unhealthy behaviors with the greatest impact on the community as a whole. Illegal drug abuse (60.8%), alcohol abuse (59.9%), drunk driving (43.3%), smoking and tobacco use (42.8%) and poor eating habits (34.3%) were the most frequently identified unhealthy behaviors. Lack of exercise was also frequently identified as important (32.7%). Three of the six most common unhealthy behaviors (tobacco use, poor diet and physical inactivity) are closely associated with the chronic diseases identified by survey respondents as important.

When asked about community issues with the greatest impact on the quality of life, respon-

dents identified primarily economic concerns and adolescent/young adult issues. The four most frequently identified issues were economic: unemployment (56.1%), low income and poverty (46.7%), affordability of health services (39.5%), a lack of or inadequate health insurance (29.2%). The next three most important issues related to teens/young adults: dropping out of school (24.5%), availability of positive teen activities (24.0%), and gang issues (21.8%). Economic concerns, such as poverty and the expense of healthcare, are reflective of the current local and national trends, while issues pertaining to teens and young adults relate closely to substance abuse problems.

Community Issues that Have the Greatest Impact on Quality of Life, Identified by Survey Respondents



In summary, it is evident that chronic health problems, substance abuse, economic and teen issues were perceived to have the greatest impact on community health by Montgomery County residents.

Personal Health and Physical Activity

Respondents were asked a series of questions relating to their personal health and physical activity status. Questions asked related to where respondents obtained most of their health information, where they went most often when sick or in need of health advice and more general questions about health insurance and concerns about health services and coverage of their health insurance plans. The majority of respondents received health related information from a doctor, nurse, or pharmacist (49.5%). Other sources of health related information were the Internet, the health department, television, and social media.

When asked about where they seek health care most often, 80.0% reported that they visit the doctor's office or medical clinic, 7.1% reported going to the health department, 5.8% go to the emergency department and 3.7% seek care from a free clinic.

One question addressed previous diagnosis with a chronic health condition by a health care provider. Approximately twenty nine percent of participants affirmed that they had been told that they suffer from high blood pressure, twenty-five percent from obesity, and 8.4% from diabetes.

During a normal week, 73.1% of respondents engaged in some form of physical activity for at least a half hour. Approximately 37% of those that exercised did so 3-4 times a week, and 28.5% exercised seven or more times a week. Respondents primarily engaged in physical activity in their home/work/neighborhood (61.8%), in the park (9.6%), and in a fit-

ness center (7.4%). Among those who did not exercise, reasons given for not engaging in physical activity included being too tired to exercise (26.9%), physical disability (25.9%), 6% reported no access to recreation facilities. When asked about watching TV, playing video games or using the computer as a form of recreation, 40.7% reported engaging in one or more of these activities for 2-3 hours a day and 21.5% reported engaging for 4-5 hours a day.

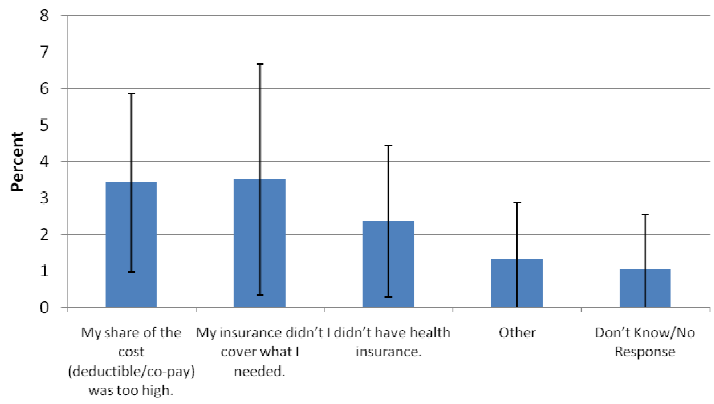
Healthcare Coverage

Slightly more than three quarters, 77.8% of the respondents had a form of health care coverage. Of this proportion, 49.7% had private insurance coverage, 35.5% were on Medicare, 9.5% were on Medicaid, and 3.0% had other forms of health care coverage.

Although some respondents had concerns about their health care coverage and services, the majority reported no concern with their coverage (63.1%). Concerns reported by respondents pertained primarily to costs such as high deductibles (12.4%), high co-payments (5.1%) and high prescription drug costs (3.4%). About three percent (2.7%) had concerns about a limited network of providers.

When asked about problems obtaining medically necessary care in the past 12 months, 89.2% reported no problems accessing needed care. When asked about potential barriers to accessing care, respondents were allowed to select more than one barrier. The top three barriers to accessing care were inability to secure an appointment (3.2%), lack of health insurance (2.9%), and inability to afford needed care (2.1%). Of survey respondents, 89.1% reported no problems filling a medically necessary prescription in the past 12 months. Of the approximately 10% that affirmed having problems filling a medically necessary prescription, one of the main reasons cited were costs (deductibles/co-payments); others reported inadequate insurance coverage for needed prescriptions, while others reported having no insurance coverage.

Problems Filling Medically Necessary Prescriptions Identified by Survey Respondents



Mental Health

Respondents were asked to whom they would refer a friend or family member needing drug, alcohol or substance abuse counseling. The most frequently reported referral source was a doctor (32.4%), followed by a private counselor or therapist (12.9%), and minister/religious official (18.8%). More than twelve percent reported not knowing where they would turn for help.

Environmental Health

If a community garden was accessible to them, 56.8% of the respondents said that they would utilize it.

More than three quarters of survey respondents reported smoking and using tobacco products. Among individuals that smoked and used tobacco products, 35.2% would see a doctor if they wanted to quit, 7.3% would go to NC Quit Now, and 18.6% reported that they did not want to quit smoking or using tobacco products.

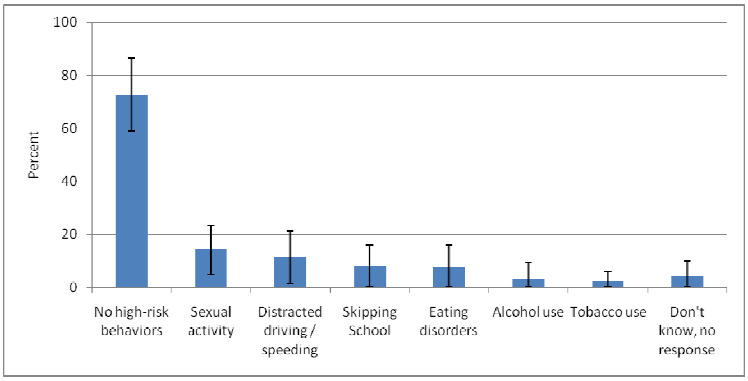
The majority of respondents (73.6%) would support a policy prohibiting the use of tobacco products in public parks. On exposure to secondhand smoke, 67,1% reported they were not currently exposed to secondhand smoke. Eighteen percent of respondents reported exposure to secondhand smoke at home, 11% at their place of work, 8% in automobiles and 9% in parks and recreational facilities.

Parenting

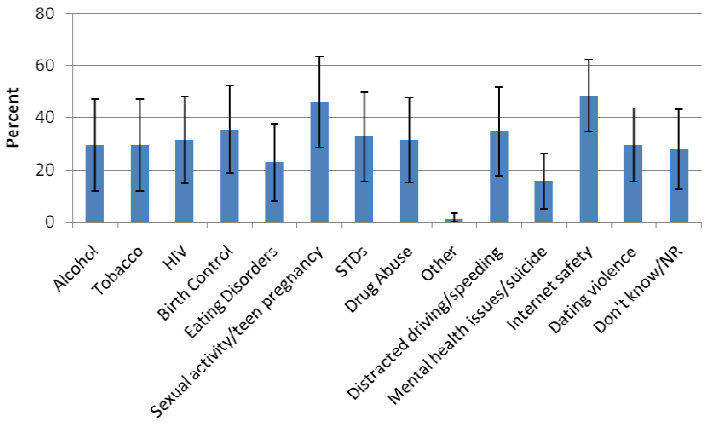
(Parents of Adolescents 9-19 years of age)

More than one quarter of respondents (26.5%) had a child between the ages of 9 and 19. Among the 51 respondents with children in this age range, 36.1% would be interested in allowing their child to walk to school if a safe route was available. Respondents with 9-19 year old children were asked several questions about their children and high-risk behaviors. Most did not believe their children engaged in high risk behaviors (72.8%). However, according to parents, the two most frequently identified high risk behaviors in which children were engaged were sexual activity (13.9%) and distracted driving or speeding (11.3%). Almost all parents (96.0%) were comfortable discussing risky behaviors with their children. Many parents indicated that their children needed more information about Internet safety (48.3%), sexual activity and teen pregnancy (46.0%), birth control (35.5%), and distracted driving/speeding (34.8%). These risky behaviors identified as a priority by

High Risk Behaviors In Which Survey Respondents Believed Their 9-19 Year Old Children Engage



High Risk Behaviors About Which Survey Respondents Believed their 9-19 Year Old Children Need More Information



parents closely mirror the unhealthy behaviors and community issues identified earlier in the survey.

(Parents of Young Children [newborn to 5 years of age])
Thirty-six respondents (18.7%) had a child between newborn and five years of age. Among the respondents with children in this age group, the majority reported two sources of primary childcare during the day: a parent in the home (33.8%) or a licensed childcare center or family childcare home (29,6%). Half of parents (50.7%) reported reading or talking about books for 15-20 minutes with their children seven or more times per week. Less than a third of respondents reported needing help with parenting questions (29.6%) and among those needing help, most (9 respondents) were able to find help. Parents reported help from pediatricians, parents and family (3 respondents each), church, doctors or teachers, or online (1 respondent each).

Twenty-five percent of respondents had utilized at least one service funded or provided by the Montgomery County Partnership for Children; however an equal percentage of respondents had not heard of the Partnership prior to the survey. Of potential family activities, respondents were most interested in an organized playgroup for 3-4 year olds (59.2%) or toddlers (56.3%), or parent-child reading activities (57.5%). The limited familiarity of parents with the Montgomery County Partnership for Children and interest in additional programs for young children, suggests that promotion and development of family activities may be important in Montgomery County.

Emergency Preparedness

Survey respondents were asked about emergency preparedness measures in their household. While 55.4% of respondents had a smoke detector in their home, only 33.9% had both a smoke detector and a carbon monoxide detector and 8.2% had neither type of detector in their home. More than half of the respondents had a family emergency plan but 60.2% did not have a basic emergency supply kit at home. Families with emergency supply kits most frequently had supplies for 1 week. Only 9.2% of respondents reported that a member of their household would require special assistance during an emergency and 70.1% had Internet access at home.

Summary

The most important community health problems reported by Montgomery County residents were chronic health conditions. Many respondents also reported previous diagnoses with chronic conditions including high blood pressure and overweight/obesity. These problems were reflected in respondents' concerns about poor eating habits and physical inactivity in the community. Although most respondents reported exercising multiple times per week, those who did not exercise reported lack of time and energy or disability as barriers to exercise.

Other unhealthy behaviors with the greatest impact on the community were related to substance abuse and community issues of top concern included teens dropping out of school and lack of positive teen activities. Many parents of older children felt that their children

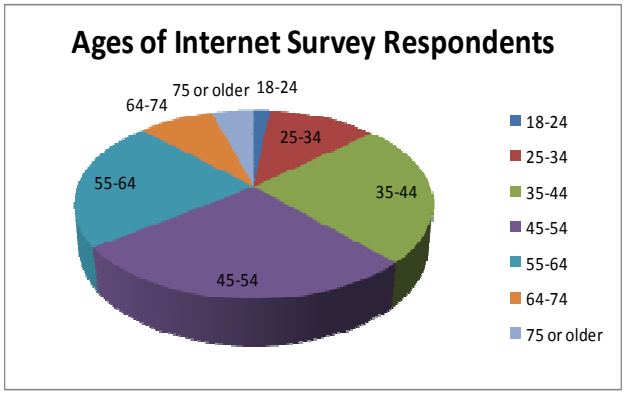
needed more information about high-risk behaviors. Smoking was also of concern to respondents and more than three quarters of respondents reported using tobacco products. However, support for a smoking ban in Montgomery County public parks was high.

Finally, residents were concerned about economic conditions such as unemployment, poverty, affordability of health services, and inadequate health insurance. The majority of residents obtained their health related information from a health care provider, and most had not had difficulty accessing medical services or prescriptions. However, nearly one quarter of respondents were uninsured, and the cost of health services was the most frequently identified barrier to accessing care.

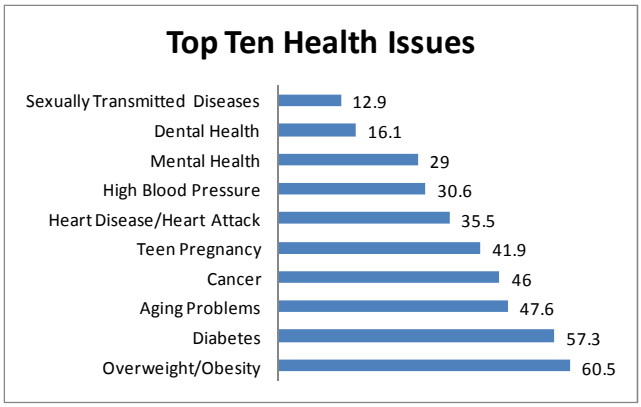
The two-stage cluster sample design employed in this survey should result in a representative sample of Montgomery County residents. However, in interpreting the results of this survey, it is important to note that women were overrepresented among respondents. Also, all surveys were conducted on weekdays (Monday-Friday), and most were conducted during business hours. This may limit the generalizability of these results to all Montgomery County residents.

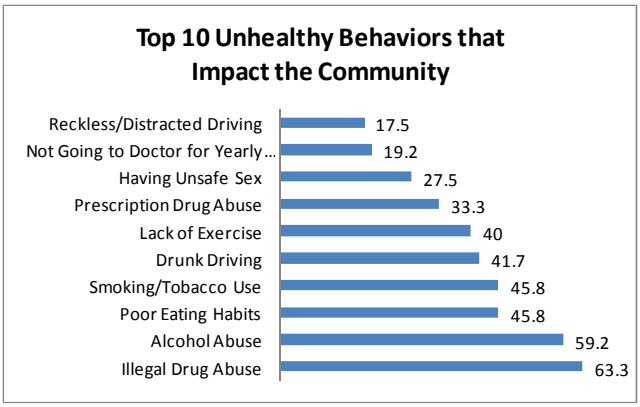
Internet Surveys

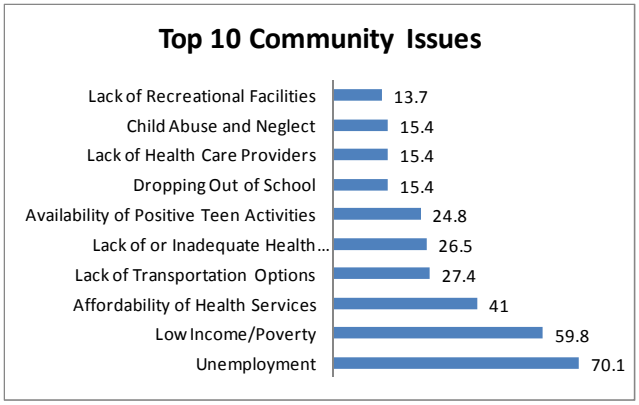
Recognizing the limitations of the community survey, the Community Assessment team decided it would be beneficial to post the survey online via Survey Monkey and deploy the questionnaire to various email list-serves in an effort to solicit responses from the working class as well as more male representation. It was assumed that since the door to door surveys were only administered during business hours on weekdays that many people who work during those hours would not have had the opportunity to participate. The survey tool that was posted online utilized the exact same questionnaire, and the Survey Monkey website used its own built in tools to analyze the data.



One hundred and thirty seven people participated in the survey and affirmed that they were 18 years of age or older and residents of Montgomery County. Sixty three percent of respondents were between the ages of 25 and 54, indicating that the attempt at soliciting input from working class aged people was successful. And although 83.6% of respondents were, once again, female, the team was encouraged that 18 males also participated. Additionally, 2.7% of respondents were of Hispanic origin. 91.9% of respondents indicated their race as white, and 6.3% indicated Black or African American. Thirty five percent indicated that they had earned an associate's degree or vocational training while another 60% indicated that had completed some college (with no degree), or had earned a bachelor's degree or a graduate or professional degree. Only 13.5% of respondents had a high school diploma, GED, or lesser education. The vast majority of respondents reported incomes higher than the poverty level. Eighty-one percent reported being employed full time, and an additional nine percent reported being employed part-time. Ten percent were retired, and only 2% reported being unemployed. The majority of respondents (47.7%) indicated their zip code was 27371. The next largest representation was from Mt. Gilead's zip code of 27306 (24.3%).







More than seventy percent of those surveyed believed their community was an excellent or good place to live. Only six percent, or 8 people, believed it was a poor place to live. The top ten health issues identified on the internet survey mirror the community survey with two exceptions: the internet survey identified asthma and motor vehicle accidents as the 9th and 10th biggest concerns whereas the community survey identified dental health and sexually transmitted diseases as the 9th and 10th biggest concerns. When looking at the top ten unhealthy behaviors that have the greatest effect on the community as a whole, the ten issues identified were the very same on both the internet survey and the community survey even though they may not have appeared in the very same order. When it comes to the issues that have the greatest impact on quality of life in the county, Unemployment, Low Income/Poverty, and the Affordability of Health Services top the list on both the community survey as well as the internet survey. Lack of transportation options, lack of health care providers, child abuse and neglect, and lack of recreational facilities all earned places on the top ten list in the internet survey but did not place on the community survey. Instead, the community survey identified gang issues, animal control issues, availability of quality child care and the availability of healthy food choices.

Similar to the community survey, forty-eight percent of internet respondents get their health-related information from a doctor/nurse/pharmacist and twenty nine percent access the internet as their primary source of health information. Ninety percent of internet respondents go to the doctor's office or a medical clinic when they are sick. Eighty one percent have private insurance, and only 0.9% (1 respondent) reported not having health care coverage. Forty eight percent were concerned about the high deductibles associated with their insurance. Thirty-seven percent were concerned about high co-pays, and 25% were concerned about high prescription costs. Another 25% did not have any concerns about their health care coverage at all.

Only 16 internet respondents reported having a problem accessing needed health care, and of those 16, half had difficulty because their share of the cost (deductible or co-pay) was too high. Additional concerns were identified as not being able to afford the cost, and the doctor

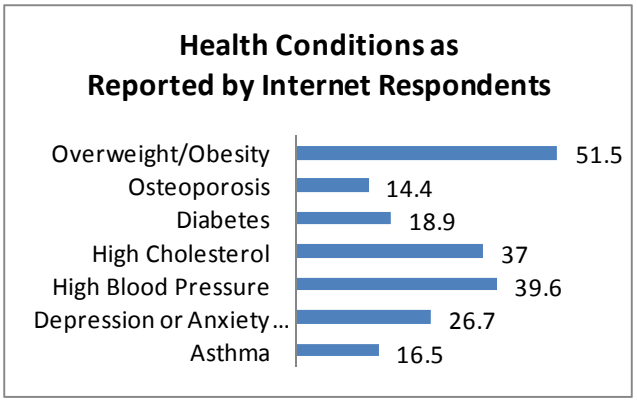
not taking their insurance. Sixty-five percent of internet respondents seek routine health care in Montgomery County; 16% go to Moore County, 9.8% go to Stanly County, and 7.1% go to Randolph County for routine care. Only 10.3% (or 12 respondents) reported having a problem filling a medically necessary prescription, and the reasons for difficulty include their share of the cost was too high (41.7%), insurance not covering what they needed (41.7%), and not having health insurance (8.3%-1 response).

Forty-seven percent of internet participants indicated they would refer people to a doctor for mental health or drug/alcohol abuse problems. Another 42% would refer to a private counselor or therapist, 36% to a minister or a religious official, and 21% would refer to a support group.

Sixty-six percent report engaging in any type of exercise activity that lasts at least a half of an hour, and more than half of those report engaging in that activity 3 or more times per week. The majority of respondents (76%) engage in physical activity at their own home. Fifty four percent of respondents indicated that they watch TV, play video games, or use the computer for recreation at least 2-3 hours every day. Fifty three percent indicated that they would NOT utilize a community garden if it were available.

Seventy two percent of internet respondents would support a policy prohibiting tobacco usage in public parks in Montgomery County, although 54% said that they are not exposed to secondhand smoke, and only 22% report being exposed to secondhand smoke in public parks. Eighty-four percent of respondents indicated that they do not currently smoke or use other tobacco products, but of the 18 respondents who do, 13 reported they would go to a doctor for cessation assistance and two would turn to Quit Now NC.

More than half of internet respondents reported that they had been told by doctor, nurse, or other health professional that they are overweight or obese. Thirty-nine percent report having been told they have high blood pressure, thirty-seven percent indicate having high cholesterol, and twenty six percent indicate having depression or anxiety disorders.



Source: Montgomery Community Health Opinion Internet Survey

In relation to parenting, 41 survey participants indicated that they have children between the ages of 9 and 19 , but only 14 of those report being interested in allowing their children to walk to school if there was a safe route. A majority of respondents commented that because Montgomery County is such a rural area, many parents live too far away from school and it was just too far for their children to walk. One suggestion to overcoming that challenge is to have a convenient “drop off” location for children, but this opportunity would still require intense advocacy and educational awareness with parents. The vast majority of parents do not believe their children are engaging in high-risk behaviors (responses range from 82.9% to 97.6%- all indicating their children are not engaging in those risk behaviors. Nine parents think their child may be engaging in distracted driving or speeding, seven believe their children may be engaging in sexual activity, five think they may be using alcohol, four parents think their children may be using tobacco or have an eating disorder, three parents are concerned about drug abuse, and

one parent is concerned about gangs, criminal activities, or skipping school. One hundred percent of parents indicate that they feel comfortable talking to their children about these high-risk behaviors, and the majority do not believe their children need any additional information. Of those who are interested in more information, internet safety was identified most often, followed by distracted driving/speeding, sexual activity, and STDs.

Seventeen internet respondents have children between the ages of newborn and 5. More than sixty percent report their children being in licensed child care centers or family child care homes during the day. Similarly, sixty-two percent of parents have had parenting questions and have been able to find help from pediatricians, family members or friends. Sixty-one percent indicate that they would be interested in parenting support groups, and 46% indicate interest in a story time program. Only two respondents indicate being very familiar with the programs and services funded and provided by the Partnership for Children.

Sixty-four percent of internet respondents indicate they have working smoke detectors in their home, and thirty-two percent indicate that they have smoke detectors and carbon monoxide detectors. Only three people indicated that they had neither detector in their home. More than half of respondents indicated that they have a Family Emergency Plan , but sixty-five percent state they do not have a basic emergency supply kit. Twenty percent report having a supply kit that would last for 3 days.

Community Leader Survey

The assessment team wanted to get additional input from community leaders so a community leader survey was also developed and launched through surveymonkey.com. The link to this particular survey was only sent to individuals who would be considered public leaders. Although the survey was confidential, respondents were asked to describe their role in the county. A total of 38 individuals participated in the survey, and identified themselves as nurses, members of the school board, school guidance counselors, school principals, girl and boy scout leaders, branch officers for local banks, county department heads, county manager, attorneys, school administrators, Board of Heath members, and directors of various non-profit organizations.

More than three-quarters of respondents indicated that they believe there is a good health care system in Montgomery County. Several respondents made additional comments expressing their concern about a lack of health care providers, especially those who provide specialty services. They also specified a need for urgent care services, emergency/trauma services, maternity services and pediatric services.

More than eighty-four percent of respondents indicated that they believe Montgomery County to be a good place to raise children, although several indicated the need for more recreational and afterschool activities for the children. One respondent also indicated their concern for the county having little to offer youth to keep them in the county after they graduate.

Eighty-seven percent of community leaders believe that Montgomery County is a god place to grow old and ninety-seven percent indicate that the county is a safe place to live.

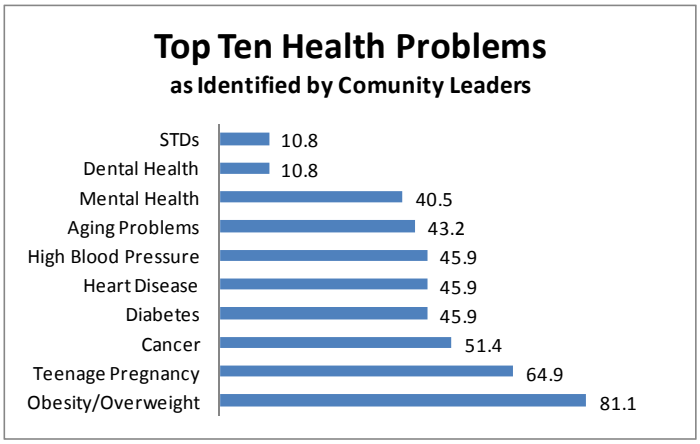
Ninety-seven percent of community leaders ***disagreed*** with the statement "There are plenty of ways to earn a living in Montgomery County." Many comments were made indicating concern over the lack of job availability and the need for economic development in the county.

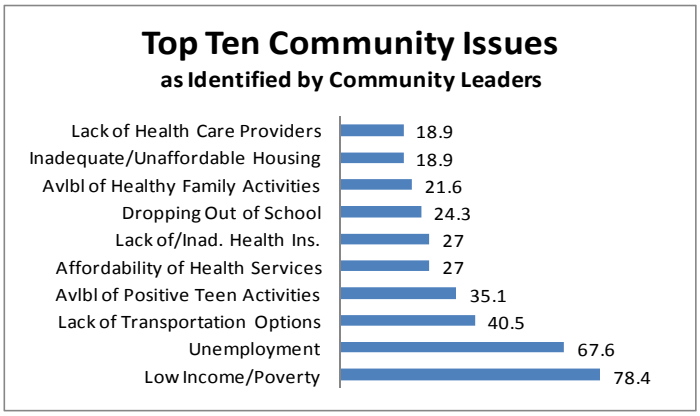
Fifty-five percent of community leaders believe there is plenty of support for individuals and families during times of stress and need in Montgomery County. Many indicated that this help came through faith organizations and the people of the community. There was also concern that although help was available some people did not know how to access it.

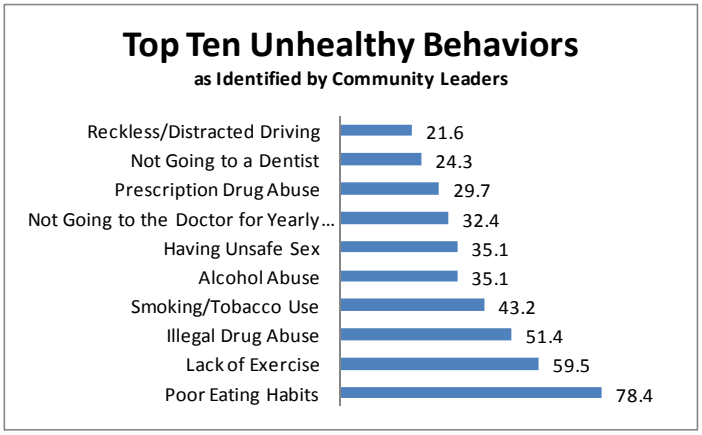
Ninety-four percent of respondents believe that Montgomery County has clean air and eighty-eight percent believe the county has clean water.

When asked what they consider to be the greatest strengths of the county, community leaders loudly agreed that the people and the natural beauty and resources of the county are what makes it great. Other responses include: the healthcare system, the school system, the rural life, and the educational opportunities available. When asked about the challenges facing Montgomery County, community leaders identified the lack of jobs, depressed economic conditions, lack of funding, and budgetary constraints as the major sources of concern. Other challenges include the lack of natural gas, the lack of a trained work force, homelessness, housing, transportation, keeping businesses in the county, gas prices, the tendency of young educated people to leave the county, an increasing aging population, obesity, teen pregnancy, drug abuse, and low literacy levels.

Community leaders identified obesity/ overweight, teenage pregnancy, cancer, diabetes and heart disease as the five leading health conditions that have the greatest im-







Source: 2012 Community Leader Survey

pact on the community as a whole. When looking at quality of life issues, the community leaders identified low income/poverty, unemployment, lack of transportation, unavailability of positive teen activities, and un-affordability of health services as the five issues having the greatest impact on quality of life in Montgomery County. Community leaders identified poor eating habits, lack of exercise, illegal drug abuse, smoking/tobacco use, and alcohol abuse as the five most important community issues.

Summary of Primary Data

In conclusion, secondary data was collected in Montgomery County in three formats. The first, and primary means of data collection was called the 2012 Montgomery Community Health Opinion Survey, and instituted a scientific approach to randomly selecting households for participation in a manner that would cover all areas of the county and all population segments. Ideally, this method would match demographically with the census data, but due to the sampling time frame (only during business hours on workdays), women were over-represented and the assessment work team determined it important to employ another survey to give everyone the opportunity to participate and make their voices heard. The community survey is the primary means of data collection, and the results from that survey hold the most weight. Results from the internet survey and the community leader survey simply provide supplemental information.

Demographically speaking, the community survey and the internet survey were very similar. The median age in the community survey was 51, and the median age range in the internet survey was 45-54 (the internet survey just asked for age range instead of a specific age. The largest number of respondents indicated this range as their age in the internet survey). Seventy-five percent of the community survey respondents and eighty-three percent of the internet survey respondents were women. Similarly, seventy-five percent of community survey respondents were white and ninety-one percent of internet respondents were white. While 47% of the community survey respondents indicate their income level to be below the federal poverty level, the majority of internet survey respondents indicated their income to be over the poverty level. Demographic information was not collected in the community leader survey.

Top Five Health Problems Identified as a Concern
(Comparison Between Survey Methods)

	Community Survey	Internet Survey	Community Leader Survey
1	Cancer	Overweight/Obesity	Obesity/Overweight
2	Diabetes	Diabetes	Teen Pregnancy
3	High Blood Pressure	Aging Problems	Cancer
4	Obesity/Overweight	Cancer	Diabetes
5	Heart Disease/ Heart Attack	Teen Pregnancy	Heart Disease/ Heart Attacks

Source: 2012 Montgomery Community Health Assessment Primary Data Collection

It is interesting to see that all three survey methods yielded similar results in the identification of health problems that are major concerns in Montgomery County. When looking at all survey methods, three health issues stand out as being identified in all three survey samples: Cancer, Diabetes, and Obesity and

Overweight. Heart Disease/Heart Attack and Teen Pregnancy appear in two of the three survey samples.

Top Five Unhealthy Behaviors Identified as a Concern
(Comparison Between Survey Methods)

	Community Survey	Internet Survey	Community Leader Survey
1	Illegal Drug Abuse	Illegal Drug Abuse	Poor Eating Habits
2	Alcohol Abuse	Alcohol Abuse	Lack of Exercise
3	Drunk Driving	Poor Eating Habits	Illegal Drug Abuse
4	Smoking/Tobacco	Smoking/Tobacco	Smoking/Tobacco
5	Poor Eating Habits	Drunk Driving	Alcohol Abuse

Source: 2012 Montgomery Community Health Assessment Primary Data Collection

Interestingly enough, the top five unhealthy behaviors identified in the community survey and the internet survey are exactly the same, even though they may not appear in the same order. Community leaders in the county also agreed on the majority of unhealthy behaviors, but failed to identify drunk driving as a concern, instead identifying lack of exercise as a problem.

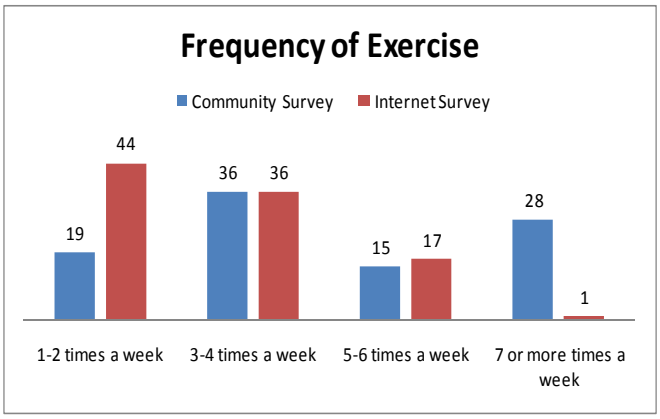
Top Five Community Issues Identified as a Concern
(Comparison Between Survey Methods)

	Community Survey	Internet Survey	Community Leader Survey
1	Unemployment	Unemployment	Low Income/ Poverty
2	Low Income/ Poverty	Low Income/ Poverty	Unemployment
3	Affordability of Health Services	Affordability of Health Services	Lack of Transportation
4	Lack of/ Inadequate Health Insurance	Lack of Transportation	Availability of Positive Teen Activities
5	Dropping Out of School	Lack of / Inadequate Health Insurance	Affordability of Health Services

Source: 2012 Montgomery Community Health Assessment Primary Data Collection

The top two community issues identified as concerns were the same across all three survey pools and were economic concerns: unemployment and low income/poverty. Affordability of Health Services was third for the community survey and the internet survey, and also appears in the top five for community leaders, although it is positioned further down in the list. Lack of or inadequate health insurance was also named in two surveys, as was lack of transportation. Dropping out of school was listed as 5th in the community survey and didn't place in the other survey methods. Similarly, community leaders identified the unavailability of positive teen activities as a community concerns while it did not rank in the top five for the community or internet survey.

Because the community leader survey was an entirely separate questionnaire, no other comparisons can be made between the data sets for all three, but correlations can be seen between the community survey and the internet survey. Twenty-nine percent and thirty-nine percent of survey respondents (community and internet respectively) have been told by a doctor, nurse, or other health professional that they have high blood pressure. Similarly, 25% of community survey respondents and 50% of internet respondents have been told they are obese or overweight.



Seventy-three percent of community survey respondents indicate that they exercise at least thirty minutes in a given week, as do 66% of internet survey respondents. However, only 43% of community respondents and 18% of internet survey respondents report engaging in physical activity for the recommended 5 times or more per week. When asked why they don't exercise, 27% of community survey respondents indicated that they were too tired, 26% indicated being physically disabled and 20% indicated not liking to exercise. Twenty percent also reported not having enough time to exercise. Similar reasons were given by the internet respondents: 48% reported being too tired to exercise, 46% reported not having enough time to exercise, 34% reported not liking to exercise and 20% reported that it costs too much to exercise. However, although not having enough time was listed by both groups as barriers to regular physical activity, 37% of community survey respondents indicated watching television, playing video games, or using the computer for recreation at least **3-4 hours every day**. Similarly, 54% of internet survey respondents reported an average of 2-3 hours of screen time every day.

The majority of community survey respondents (56.8%) indicated that they would use a community garden if it was available to them, while less than half (47%) of internet survey respondents indicated they would use it.

Three out of four respondents to the community survey reported being current smokers or tobacco users, while only 16% of internet survey respondents were. However, both groups indicated that they would support a policy prohibiting tobacco usage in public parks in Montgomery County (73.6% community survey, 72% internet survey). Interestingly, only 9% of community survey respondents report being exposed to secondhand smoke in public parks and only 22% of internet survey respondents report being exposed.

Also of interest to policy makers and program planners, there seems to be little support for a walking school bus initiative. Only thirty-six percent of community survey participants and thirty-one percent of internet participants expressed interest in allowing their children to walk to school if a safe route was available.

Of the participants who have children aged 9-19, the majority of both groups reported that they do not believe their children are engaging in high risk behavior. Of those who thought their children might be, sexual activity and distracted driving were the two both groups identified as possibilities. Parents from both groups thought their children could benefit from more information about internet safety, sexual activity, teen pregnancy, birth control, gangs, and criminal activity. Almost all parents (96% and 100%) reported being comfortable talking with their children about risky behaviors.

Most respondents to the community survey as well as the internet survey reported having a very limited knowledge of the services and programs available through the Montgomery

County Partnership for Children. Community survey respondents indicated being most interested in organized playgroups for 3-4 year old children or toddlers, while internet respondents indicated being most interested in parenting support groups.

While more than half of both groups of participants have smoke detectors, less than a third of respondents have both smoke detectors and carbon monoxide detectors. More than half of all participants have a family emergency plan, although more than 60% of both groups do not have a basic emergency supply kit. Of those who do have a kit, the majority report having enough supplies in the kit to last 3 days to week.

Key Messages

The Montgomery Community Health Assessment Work Team solicited feedback and input from the community through a randomized, face-to-face survey which can be generalized to the entire population. Due to the sampling method and scientific approach that was taken, results from this community survey serve as the primary data source and carry the most weight. Interestingly enough, supplemental data gleaned from the internet survey and community leader survey mimic this primary source almost entirely. Key messages from the data collected in Montgomery County include:

- Most health problems identified by respondents related to aging and chronic disease.
- Three of the unhealthy behaviors that were identified by respondents as important are linked to chronic diseases (tobacco use, poor diet, and physical inactivity).
- Economic concerns and adolescent/young adult issues are perceived to be the biggest community issues. The four most frequently identified concerns were economic in nature and included: unemployment, low income/poverty, affordability of health services, and the lack of / inadequate health insurance.
- Risky behaviors identified as a priority by parents of 9-19 year old children closely mirror the unhealthy behaviors and community issues identified as concerns.
- Parents seem to have limited familiarity with the services and programs offered by the Montgomery County Partnership for Children, but indicate an interest in additional programs for young children, thus suggesting that promotion and development of family activities may be important in Montgomery County.
- Respondents have generally not made changes in their lifestyles to reflect being prepared for emergencies. The public needs to understand the need for carbon monoxide detectors, the importance of a family emergency plan, and the importance of an emergency supply kit. It is likely that funds to complete these projects may be barriers for county residents.

In summary, it is evident that chronic health problems, substance abuse, economic and teen issues were perceived to have the greatest impact on community health in Montgomery County.

Health Disparities in Montgomery County and North Carolina

These are pictures of initiatives in Montgomery County that were either specifically planned to help decrease health disparities in Montgomery County, or initiative that have been implemented that benefit the entire county.

At-risk population groups have been identified throughout this community health assessment according to health conditions. In order to most efficiently plan interventions, it is helpful to summarize risk conditions for specified populations. The following pages represent a compilation of the data presented in previous sections, stratified by race. Data sources are identified in previous sections, and are most commonly reported by the North Carolina State Center for Health Statistics, the Office of Minority Health and Health Disparities, and North Carolina Institute of Medicine's ***"Healthy North Carolina 2020: A Better State of Health"*** report.

African-Americans

African-Americans have the highest prevalence rates for the following health conditions and health indicators as compared to white and Hispanic populations:

- Unemployment
- Heart Disease Deaths
- Lung Cancer Deaths
- Infant Mortality
- Total Cancer Deaths
- Stroke Deaths
- Diabetes Deaths
- Kidney Disease Deaths
- Septicemia Deaths
- HIV Disease
- Homicide
- Cancer Incidence (specifically prostate cancer, colorectal cancer, and cervical cancer)
- Obesity

African-Americans have the second highest prevalence rates of the following health conditions and health indicators as compared to white and Hispanic populations:

- Poverty
- Low Educational Attainment
- Chronic Lung Disease Deaths
- Chronic Liver Disease Deaths
- Pneumonia/Influenza Deaths
- Unintentional Injury Deaths
- Diabetes Incidence
- Oral Health

The following information is reported by the State Center for Health Statistics and Office of Minority Health and Health Disparities. While it references information for North Carolina as a whole, it is also generalizable to Montgomery County African-Americans, although exact figures may be higher or lower for county residents.

Social and Economic Well-Being

The percentage of African-American families in North Carolina living below the federal poverty level in 2008 was 21.3, compared to 6.7 for whites. The median annual household income where the head of the household is African American was $32,345 compared to $52,412 for households headed by whites. Forty-four percent of African-American families were headed by single female householders, compared to 12.6% of white families. Of the families with a single female householder, 37% of the African-American families lived in poverty, compared to 24.5% of the families headed by single white females. Twenty percent of African American adults ages 25 and older had less than a high school education, compared to 12.6 percent for whites. The unemployment rate for African Americans was double that for whites

(11% vs. 5.4% in 2008). Low income, low educational level, and unemployment are all associated with a higher rate of health problems.

Mortality

Consistent with the white population, heart disease and cancer are the top two causes of death for African Americans in 2008. Homicide ranks considerably higher (10th) as a cause of death among African Americans than among whites (19th). Other causes that rank higher for African Americans than whites are diabetes, kidney disease, and HIV. Injuries are the leading cause of death for younger African Americans. Unintentional injuries (motor vehicle and other) rank first among children up to 14 years old. Homicide ranks first and motor vehicle injuries rank second among 15-34 year olds. The largest health disparities, in which the African-American death rate is at least twice that of whites, are in diabetes, kidney disease, HIV, and homicide.

Cancer Incidence

African Americans in North Carolina have a higher rate of total new cancer cases than whites. African Americans have a substantially higher rate of prostate cancer compared to whites and higher rates of colon/rectum cancer and cervical cancer.

Chronic Disease

African Americans were substantially more likely than whites to report that they had diabetes and high blood pressure in the North Carolina Behavioral Risk Factor Surveillance System telephone survey.

HIV and Sexually Transmitted Diseases

The HIV and STD rates for African Americans are at least seven times higher than the rates for whites.

Health Risk Factors

According to the NC BRFSS survey, African Americans in North Carolina were less likely than whites to engage in physical exercise, less likely to eat the recommended amount of fruits and vegetables each day, and more likely to be obese. African Americans were less likely than whites to report that they engaged in binge drinking (five or more drinks on one or more occasions in the last month).

Access to Health Care

Twenty three percent of African Americans reported having no current health insurance, compared to 14 percent of whites responding to the NC BRFSS survey.

Maternal and Infant Health

The percentage with late or no prenatal care is more than twice as high among African-American women, but the rate of smoking during pregnancy is lower for African-American women than white women. African American women are at substantially higher risk then white women for having high risk factors associated with pregnancy and child birth. The rate of low birth weight among African Americans is nearly twice the rate of whites and the African American infant mortality rate is more than two times higher.

Child and Adolescent Health

According to self-reports from parents, compared to white children, African-American children were significantly more likely to have poor or fair health, engage in no leisure time physical activity, and have the size of their meals cut because there was not enough money for food. African-American children were also more likely not to have had health insurance in the past 12 months, to have fair or poor dental health, and to have ever had asthma. African-American children had a death rate 40 percent higher than the rate for white children. The leading causes of death in this age group were motor vehicle injuries, homicide, other unintentional injuries, cancer, and heart disease. African-American teen girls had a pregnancy rate almost twice as high as the rate for white teenagers. African-American high school students reported the lowest rates of current cigarette smoking and alcohol consumption of any racial/ ethnic group.

Summary

African Americans in North Carolina experience substantially worse health problems than whites. However, there are certainly some areas of advantage for African Americans. They have substantially better rates than whites for chronic lung disease mortality, suicide, maternal smoking during pregnancy, and reported binge drinking, as well as high school smoking and drinking. Many studies suggest that racism- prejudice or discrimination based on race– is an important determinant of health dis parities and quality of life. A State Center for Health Statistics study found that adults who reported having emotional upset and/or physical symptoms due to treatment based on race, and those who reported experiences worse than other races when seeking health care, had significantly lower reported quality of life and higher rates of reported chronic disease (such as arthritis and diabetes) and health risks (such as obesity).

Hispanics/Latinos

Hispanics/Latinos have the highest prevalence rates of the following health conditions and health indicators as compared to white and African American populations:

Motor Vehicle Injury Fatalities	Childhood Obesity
Teen Pregnancy	Poverty
Low Educational Attainment	Poor Oral Health

The following information is reported by the State Center for Health Statistics and Office of Minority Health and Health Disparities. While it references information for North Carolina as a whole, it is also generalizable to Montgomery County Hispanics/Latinos, although exact figures may be higher or lower for county residents.

Hispanics or Latinos are those people who classified themselves in one of the specific Spanish, Hispanic, or Latino categories listed in the Census 2000 questionnaire– Mexican, Mexican American, Chicano, Puerto Ricans, or Cuban– as well as those who indicate they are “other Spanish/Hispanic/Latino”.

Social and Economic Well Being

The percentage of Hispanic families living below the federal poverty level in 2008 was 24.8 compared to 6.7 for whites. The 2008 median household income in families where the head of the householder is Hispanic/Latino is $34,426 compared to $52,412 for white households. Over 85% of whites have received a high school diploma or higher, compared to 51 percent of Hispanics. The unemployment rate in 2008 for Hispanics was higher compared to whites (7.7 compared to 5.4). Low income, low educational level, and unemployment are all associated with a higher rate of health problems.

Mortality

The top cause of death among Hispanics is cancer. The second leading cause of death among Hispanics is motor vehicle injuries, which ranked substantially lower among whites (10th) and African Americans (11th). Homicide also ranked higher among Hispanics. As with whites and African Americans, cancer and diseases of the heart ranked in the top three leading causes of deaths for Hispanics. The death rates for all chronic conditions were much lower for Hispanics compared to whites and African Americans. The largest health disparities for Hispanics among the causes of death were homicide, motor vehicle injuries, and HIV disease. The Hispanic suicide rate was similar to the African American rate and much lower than the rate for whites.

Cancer Incidence

The leading types of cancer for Hispanics/Latinos are female breast, prostate, lung/ bronchus, and colon/rectum. Cancer incidence rates were much lower for Hispanics than whites.

Chronic Diseases

Hispanics were less likely to report diabetes, high blood pressure, asthma and arthritis in the NC BRFSS telephone survey than both whites and African Americans.

Access to Health Care

Hispanics had substantially higher percentages than whites and African Americans for not currently having health insurance, couldn't see a doctor due to cost, and having no personal doctor.

Quality of Life

A higher percentage of Hispanics reported fair or poor health than both whites and African Americans. On the other hand, the percentage of Hispanics who reported a disability was significantly less than for whites and African Americans.

Maternal and Infant Health

The percentage of mothers with late or no prenatal care is three times as high for Hispanic women compared to whites, and over 20 percent higher than the percentage for African-American women. On a positive note, the rate of smoking during pregnancy is much lower for Hispanic women compared to both white and African-American women. Hispanic women were at a higher risk than white women for having unintended pregnancies, not taking folic acid every day before pregnancy, usual sleeping position

for baby was not on back, and the mother reported physical violence during pregnancy. However, Hispanic women were more likely to breastfeed and less likely to smoke after pregnancy than both whites and African Americans. The infant death rate was substantially lower for Hispanics compared to African Americans and was nearly identical to that of whites.

Child and Adolescent Health

The leading causes of death for children 1-17 years of age during 2004-2008 were motor vehicle injuries, other unintentional injuries, homicide, cancer, and birth defects. The Hispanic child death rate is lower than the African-American rate and somewhat higher than the white rate. According to self-reports from parents, compared to white and African American children, Hispanic children were more likely to have fair or poor health, have no health insurance in the past year, have no personal doctor or dentist, and were less likely to engage in physically active play. The percentage of children with an elevated need for medical, mental health, or educational services was lower for Hispanics, compared to white and African American children. The percentage of North Carolina Hispanic youth who reported smoking cigarettes on one or more of the past 30 days was lower than the white percentage, but much higher than the African-American percentage. The percentage of high school students who reported drinking alcohol follows the same pattern, with the Hispanic percentage lower than whites but higher than the African American percentage. The teen pregnancy rate for Hispanics was nearly four times the white rate and almost twice the African American rate.

Conclusion

Hispanics in North Carolina experience worse outcomes across many health measures than do whites. Diabetes and other chronic diseases are expected to become much more prevalent in North Carolina's Hispanic population in future years. However, Hispanics are currently less likely than both whites and African Americans to report diabetes, high blood pressure, or asthma. Hispanics were substantially more likely to report not having health insurance, not being able to see a doctor due to cost, or not having a personal doctor. This means less opportunity to diagnose chronic conditions. These results suggest significant health care barriers faced by Hispanic. Hispanics had a lower percentage of low birth weight babies than both whites and African Americans and an infant death rate equal to whites and lower than African Americans. Across most health measures, Hispanics fare worse than whites and better than African Americans. The Hispanic population in North Carolina and Montgomery County continues to increase substantially. Hispanics are faced with many health problems and health care barriers.

White Americans

White-Americans have the highest prevalence rates of the following health conditions and health indicators as compared to white and Hispanic populations:

Chronic Lung Disease Death	Chronic Liver Disease Deaths
Pneumonia/Influenza Death	Unintentional Injuries Death
Diabetes Incidence	Suicide

White Americans have the second highest prevalence rates of the following health conditions and health indicators as compared to African Americans and Hispanic populations:

Heart Disease Death	Lung Cancer Death
All Cancer Death	Cerebrovascuar Deaths
Diabetes Deaths	Kidney Disease Deaths
Septicemia Deaths	Cancer Incidence
Obesity	Motor Vehicle Fatalities
Childhood Obesity	Teen Pregnancy

Conclusion

Minorities in Montgomery County and North Carolina, as a whole, are more likely to have more socioeconomic challenges which negatively impact their health outcomes. The Hispanic population in Montgomery County is continuing to grow. Although White Americans are not considered a racial minority, they also have unique health challenges and are at risk for certain conditions that should not be overlooked.

The effects of the disparate health status of Montgomery County's racial and ethnic minority populations and the economically disadvantaged is documented in the form of shorter life expectancies and higher rates of cancer, birth defects, infant mortality, asthma, diabetes and cardiovascular disease. Other areas in which racial and ethnic minorities and the medically underserved suffer a disproportionate burden of morbidity and mortality include: HIV Infections/ AIDS, autoimmune disease such as lupus and scleroderma, oral health, sexually transmitted diseases, disease burden associated with mental disorders, drug use associated mortality, and viral borne disease such as hepatitis C.

Program planning designed to mitigate specific health issues should take into consideration the population groups at the highest risk. The focus of community leaders involved in the planning process must be on developing interventions to reduce health disparities. At risk populations must be a part of the planning process for effective planning and positive outcomes to occur.

2012 Montgomery County Community Health Assessment Summary

Obesity
Teen Pregnancy
Substance Abuse

Assessment Summary

The 2012 Montgomery Community Health Assessment is a compilation of the hard work and dedication of many health professionals and community partners who are committed to improving health, wellness, and quality of life in Montgomery County.

Some of the major findings of this assessment include:

- Montgomery County is a very rural county that is experiencing economic and health struggles that is reflective of state and national concerns. The kind, friendly people who live in the county and the breathtaking natural resources are two of the biggest assets of the county. Although the county may not have all the resources of larger, more financially successful counties, a good health care system is still in place and accessible right here in the county.

- Montgomery County is economically distressed. Median income in the county is approximately 25% lower than the median income for the state. One fourth of the county's population is below the poverty level, and 1 out of 3 children in the county are impoverished. County unemployment rates are higher than state rates. One in four adults in the county do not have health insurance. Almost 3 out of 4 children in the Montgomery County School system qualify for free or reduced lunch.

- Only 72.1% of adults over age 25 in Montgomery County are high school graduates, but this seems to be improving, as county drop-out rates are now equal to state rates. Programs are in place through the school system, community college, as well as other organizations to assist in meeting the needs of students in order to help them experience educational success.

- Montgomery County has a clean water system, and is expanding the county water system to meet the needs of residents with wells in high needs areas. Sewer services are also being expanded. Montgomery County has the 7th highest air quality index of all 100 counties in the state. Legislation has been passed to eliminate tobacco usage in restaurants across the state to further protect workers and patrons. Children in Montgomery County are at very low risk for lead poisoning. Although there are some environmental concerns with access to recreational facilities and healthy foods, progress is being made in these areas. Legislation has also been passed to strengthen standards for food preparation and delivery to further ensure public health.

- Montgomery County rates for hospital discharges with a primary diagnosis of asthma for all ages is lower than the state rates.

- The cancer incidence rate for Montgomery County is lower than the state incidence rate, but the county's cancer mortality rate is higher than the state. Therefore, people in Montgomery County are less likely to be diagnosed with cancer, but are more likely to pass away from the disease. This indicates that there is a need for increased screening, diagnosis and treatment of the disease, especially for individuals at increased risk for developing lung/bronchus cancer, which is the only cancer site where Montgomery's rates are higher than state rates. The number of adults who report smoking in the county has decreased, but continued smoking cessation and

prevention efforts are needed.

- There were five child motor vehicle fatalities in Montgomery County from 2003-2007. The number of children enrolled in Medicaid, in Health Choice, and receiving public health is steadily increasing. Twelve percent of children in Montgomery County are uninsured (which is higher than the percentage of uninsured children statewide). These economic constraints put children at increased risk for a variety of educational, social and health challenges. Safe Kids, Montgomery County Cooperative Extension, and Montgomery County Partnership for Children are working to increase health, wellness, and quality of life for children in the county.

- Montgomery County has a relatively low HIV rate, and is less than half of the state rate. Montgomery County ranks 51st highest in the state for AIDS, with an average rate of 5.4. The 2008 Montgomery Community Health Assessment reported Montgomery County to be 33rd highest in the state for AIDS diagnoses, so the current rank of 51st is a positive improvement in this area. Although county rates are lower than state rates, Chlamydia is by far the communicable disease with the highest prevalence in Montgomery County. Gonorrhea rates are lower for the county than the state and all peer counties. There were no syphilis cases in the county for 2007, 2008, 2009, or 2010 and only one in 2011. Tuberculosis cases peaked in 2009, but three cases were diagnosed in 2010. In summary, Chlamydia is the most prevalent communicable disease in the county, followed by gonorrhea, tuberculosis, HIV, AIDS, and syphilis.

- The diabetes prevalence rate of 20.9 in Montgomery County is more than twice the state rate of 9.8 in 2011. FirstHealth of the Carolinas has launched an aggressive diabetes outreach initiative. Data from the PRC survey shows a decrease in the mortality rate for the county and an increase in prevalence rate, which hopefully indicates more people are being screened and diagnosed and learning to manage their disease and fewer people are actually passing away from it.

- Close to 3 out of 4 adults in Montgomery County responding to the PRC survey indicate having a BMI greater than 25%. According to the same survey, only 26% of county respondents indicate eating 2 or more fresh, frozen or canned fruits and only 11% consume 3 or more fresh, frozen or canned vegetables. More than half consume sugar sweetened beverages and consider themselves to have a sedentary lifestyle. Only 40% of adults report engaging in physical activity five or more times per week.

- Childhood obesity rates for children aged 2-4 and 5-11 have steadily increased. Montgomery County ranks 88th in the state for overweight and obesity and 35th in the state for obesity. (According to this ranking system, a rank of 1 indicates the lowest prevalence which is the best, and a rank of 100 indicates the highest prevalence rate which is the worst). Over 42% of children in Montgomery County aged 2-18 are overweight or obese. Candor Elementary School has the highest percentage of overweight/obese children (56%), followed by Page Street Elementary (51%), and East Middle School (49%). Many obesity reduction and prevention initiatives are cur-

rently in progress including work being done through the Community Transformation Grant, Healthy Kids Healthy Communities, Montgomery First-in-Health 2020 Task Force, Montgomery Cooperative Extension Service, Montgomery County Health Department, the Senior Center, Montgomery County Schools and the School Health Advisory Committee.

- Dental diagnoses remain in the top 3 diagnoses at FirstHealth Montgomery Memorial Hospital. Twenty-six percent of kindergarteners and four percent of 5th graders have decayed teeth.

- An estimated 1,305 seniors (aged 60 and greater) experience food insecurity. A new "Montgomery Food Hub" project is helping to bridge the gap and fill the need.

- While the state teen pregnancy rate fell 12% in 2011, the Montgomery County teen pregnancy rate increased 9%, making the county's rate of 82.5 almost twice that of the state's rate of 43.8. Montgomery County is ranked 2nd highest in the state for teen pregnancy. Almost one out of five teen pregnancies were repeat. The Teen Outreach Program is currently in place in East Montgomery High School and West Montgomery High School, but challenges exist with the program, including the limited reach.
- Most health problems identified by respondents related to aging and chronic disease.

- Three of the unhealthy behaviors that were identified by respondents as important are linked to chronic diseases (tobacco use, poor diet, and physical inactivity).

- Economic concerns and adolescent/young adult issues are perceived to be the biggest community issues. The four most frequently identified concerns were economic in nature and included: unemployment, low income/poverty, affordability of health services, and the lack of / inadequate health insurance.

- Risky behaviors identified as a priority by parents of 9-19 year old children closely mirror the unhealthy behaviors and community issues identified as concerns.

- Parents seem to have limited familiarity with the services and programs offered by the Montgomery County Partnership for Children, but indicate an interest in additional programs for young children, thus suggesting that promotion and development of family activities may be important in Montgomery County.

- Respondents have generally not made changes in their lifestyles to reflect being prepared for emergencies. The public needs to understand the need for carbon monoxide detectors, the importance of a family emergency plan, and the importance of an emergency supply kit. It is likely that funds to complete these projects may be barriers for county residents.

Priority Setting Session

As described din the "Introduction to the Community Health Assessment" section of this document, a priority setting session was held in October 2012. Paid advertisements for the session were placed in the local newspaper, as well as articles explaining the process and importance of the event. When the surveys were conducted at the end of September, participants were given incentive bags which included educational information, hand sanitizer and an announcement about the community forum. Participants were thanked for completion of the survey and encouraged to come to the forum as the next step in the process. Information was included in both internet surveys discussing the forum and its importance while encouraging participation. Respondents were asked to provide their email address for a reminder message about the forum if they were interested in attending. Furthermore, a flyer about the event was shared electronically with all members of the CHA Project Work Team, as well as distributed through various other email networks (including the Montgomery County School System, the Chamber of Commerce and Human Resource Professionals, etc.). Autumn Care of Biscoe provided a meal during the forum, which was held at Troy-Montgomery Senior Center. More than 40 participants, including community, agency, and business representatives participated in the event. *(A complete list of participants can be found in the appendix section of this document).*

Participants were welcomed to the meeting by Brenda Caudill, Health Education Supervisor with the Montgomery County Health Department. Rhonda Peters, Health Educator with the same agency, shared primary and secondary data via a Power Point presentation with the group. Roxanne Elliott, Policy Director with FirstHealth of the Carolinas, shared results from the PRC (Professional Research Consultants) survey and then facilitated the group discussion and priority identification.

During the session, the following health concerns identified through the community survey, internet survey, and community leader survey were presented to session participants:

Top Ten Health Problems			
	Community Health Opinion Survey	**Internet Survey**	**Community Leader Survey**
1	Cancer	Overweight and Obesity	Overweight and Obesity
2	Diabetes	Diabetes	Teen Pregnancy
3	High Blood Pressure	Aging Problems	Cancer
4	Overweight and Obesity	Cancer	Diabetes
5	Heart Disease/ Heart Attacks	Teen Pregnancies	Heart Disease/ Heart Attacks
6	Aging Problems	Heart Disease/ Heart Attacks	High Blood Pressure
7	Teen Pregnancy	High Blood Pressure	Aging Problems
8	Mental Health	Mental Health	Mental Health
9	Asthma	Childhood Overweight and Obesity	Dental Health
10	Motor Vehicle Accidents	Dental Health	Sexually Transmitted Diseases

Top Ten Unhealthy Behaviors

	Community Health Opinion Survey	Internet Survey	Community Leader Survey
1	Illegal Drug Abuse	Illegal Drug Abuse	Poor Eating Habits
2	Alcohol Abuse	Alcohol Abuse	Lack of Exercise
3	Drunk Driving	Poor Eating Habits	Illegal Drug Abuse
4	Smoking/Tobacco Use	Smoking/Tobacco Use	Smoking/Tobacco Use
5	Poor Eating Habits	Drunk Driving	Alcohol Abuse
6	Lack of Exercise	Lack of Exercise	Having Unsafe Sex
7	Having Unsafe Sex	Prescription Drug Abuse	Not Going to the Doctor for Yearly Checkups
8	Prescription Drug Abuse	Having Unsafe Sex	Prescription Drug Abuse
9	Reckless/ Distracted Driving	Not Going to the Doctor for Yearly Checkups	Not Going to the Doctor for Preventive Services
10	Not Going to the Doctor for Yearly Checkups	Reckless/Distracted Driving	Reckless/Drunk Driving

Top Ten Community Issues

	Community Health Opinion Survey	Internet Survey	Community Leader Survey
1	Unemployment	Unemployment	Low Income/Poverty
2	Low Income/Poverty	Low Income/ Poverty	Unemployment
3	Affordability of Health Services	Affordability of Health Services	Lack of Transportation
4	Lack of/Inadequate Health Insurance	Lack of Transportation	Availability of Positive Teen Activities
5	Dropping Out of School	Lack of/ Inadequate Health Insurance	Affordability of Health Services
6	Positive Teen Activities	Positive Teen Activities	Lack of/Inadequate Health Insurance
7	Gang Issues	Dropping Out of School	Dropping Out of School
8	Animal Control Issues	Lack of Health Care Providers	Availability of Healthy Family Activities
9	Availability of Child Care	Child Abuse and Neglect	Inadequate/ Unaffordable Housing
10	Availability of Healthy Foods	Lack of Recreational Facilities	Lack of Health Care Providers

The Power Point Presentation that was shared with the group also included state and local statistics, including comparisons with the peer counties. Leading causes of death were discussed, including the differences between the top ten list for Montgomery County and the top ten list for the state of North Carolina. Trend data depicting the death rates for heart disease, stroke, diabetes, and motor vehicle injuries was also shown. A slide included the infant death rate, and the health disparities associated with those fatalities. Additional information shared included cancer mortality and cancer incidence, teen pregnancy rates, and childhood overweight and obesity rates. Additionally, the results of the Professional Research Consultants Survey that was done for FirstHealth of the Carolinas was also shared.

After the data presentation, the group was instructed to consider the issues based on the magnitude of the problem, the health consequences of the issue, and the feasibility of actually being able to make improvements in those areas. Current initiatives and county assets were named in order to assess what work is already being done toward specific issues and what capacity the county possessed to work toward health improvement.

In the initial phase of prioritizing, the group named the following issues:

Adult Obesity	Diabetes
Childhood Obesity	Heart Disease
Reckless Behavior	Medical Negligence
Teen Pregnancy	Poverty/Unemployment
Drug Abuse	Cancer
Motor Vehicle Accidents	Lung Cancer
Tobacco Usage	Care During the Postpartum & Newborn Stage
Malnourishment/Food Insecurity (Access to Healthy Foods)	
Recruitment Of Specialty Health Care Providers	

The group talked about each issue and the feasibility of changing these issues. By far, the majority of the group agreed that poverty and unemployment were major concerns for the county, and everyone wished they could fix that problem. However, it was determined that addressing those issues was beyond the capacity of the group to change, although it was agreed by all participants to lend support and resources toward mitigating these challenges as much as possible. There was no data to back up the medical negligence concern, and the group felt that care during the postpartum and newborn period was being adequately addressed through maternity clinics and child health visits. The group also agreed that the recruitment of specialty health care providers was important in the county, but no one felt qualified to work on recruitment efforts and felt that the hospital and current medical practices and medical systems would continue to recruit providers as appropriate.

The group discussed choosing Reckless Behavior as a priority because it encompassed so many things, but after debate and further conversation, it was determined to be too broad of a category and the group was concerned that it was too broad of a category to effectively plan, implement, and evaluate initiatives.

After much discussion, the group was able to narrow the health concerns down to the following three priority areas:

(1) Obesity, (2) Teen Pregnancy, and (3) Substance Abuse.

Obesity was selected as a priority because it covered so many of the areas that had been named as concerns. With obesity as a goal, the group can continue to work on all of the following issues:

- Diabetes
- Heart Disease
- Cancer
- Access to Healthy Foods
- Increased Physical Activity

Similarly, Substance Abuse was selected as a priority because it encompassed the following concerns:

- Reckless Behavior
- Illegal Drug Abuse
- Prescription Drug Abuse
- Motor Vehicle Accidents
- Lung Cancer
- Tobacco Usage

In the end, all participants expressed satisfaction with these selections. Many of the priority setting session participants registered to participate on the First-In-Health 2020 Vision Task Force to help tackle these concerns.

Next Steps

The identification of these priority issues is not the final step in this process. Instead, the Health Assessment Project Work Team will reconvene in the spring of 2013 to determine action plans to address the three priority issues. Priority setting session participants, contributors to the project, as well as community members will be asked to participate in this meeting. It is planned that the action plan meeting will be advertised in the local newspaper, and announcements will also be included on community websites and email networks.

The 2012 Montgomery Community Health Assessment will be shared with members of the project work team, all contributors, and key stakeholders in the community. An electronic version will be posted on the Montgomery County website, as well as included on other organizations' websites as appropriate. Printed copies will be placed in the public libraries for greater community access.

It is very important to note that these priority issues were identified by the community and for the community. Increased community involvement is not only appreciated and encouraged, but is vital to the success in the improvement of the health of the people of Montgomery County. For more information on how you can be involved, please contact the Montgomery County Health Department at (910) 572-1393 or by emailing Rhonda.Peters@montgomerycountync.com or RMElliott@firsthealth.org.

Appendix

Appendix A

2012 Community Health Assessment Partners and Contributions

Although the Montgomery County Health Department is mandated to complete a community health assessment every four years, it could not be done without the help and collaboration of our community members. The Health Department is very fortunate to have partnered with the First-In-Health 2020 Vision Task Force to complete this project. We would like to express our sincere appreciation to all of the individuals, agencies, and businesses that have contributed to the development and completion of the 2012 Montgomery County Community Health Assessment. The collective time, energy, effort, and resources of these partners will go a long way toward improving the health, wellness and quality of life in Montgomery County.

The following is a list of all of our partners, their agencies, and their role in the Community Health Assessment process.

2012 Montgomery Community Health Assessment Coordinators

Brenda Caudill, Montgomery County Health Department
Roxanne Elliott, FirstHealth of the Carolinas
Rhonda Peters, Montgomery County Health Department

First-In-Health 2020 Vision Task Force Members:

Linda Beaulieu	Montgomery Herald
Susan Brooks	Montgomery County School Nurse
Brenda Caudill	Montgomery County Health Department
Teresa Caudill	Montgomery County School Nurse
Julie Clark	Montgomery County Health Department
Kim Cook	FirstHealth Troy Family Care Center
Kristen Cook	FirstHealth School Based Health Center
Danelle Cutting	Montgomery County Cooperative Extension Service
Brenda DeBerry	Montgomery County School Nurse
Jon Galloway	Montgomery Herald
Tabitha Gibson	Montgomery County School Nurse
Shirley Harris	Montgomery County Schools
Chrissy Haynes	Montgomery County Cooperative Extension Service
Doshia Haywood	Montgomery County Health Department
Melissa Herman	FirstHealth Diabetes Self-Management
Cathy Hodges	Community Representative
K. Jehan Benton-Clark	Kate B. Reynolds Charitable Trust
Terry Jordan	Montgomery County Schools– Child Nutrition
Cindy Laton	FirstHealth Community Health Services
Sharon Matheny	Community Representative

Sheila Menendez	Montgomery County Farmers' Market Association
Debbi Musika	Montgomery County Partnership for Children
Hayley Napier	Montgomery County Cooperative Extension Service
Robert Nelson	FirstHealth Health & Fitness Center
Sheriff Dempsey Owens	Montgomery County Sheriff's Office
Tammy Owens	Montgomery Community College
Kathie Parson	FirstHealth Physician Liaison
Rhonda Peters	Montgomery County Health Department
Gail Rushing	Montgomery County School Nurse
Emily Sloan	FirstHealth Corporate Communications
Regina Smith	FirstHealth School Based Health Centers
Michelle Smith	Town of Candor
Katie Spears	Youth Empowered Solutions
Chicky Su	Hmong Community Representative
Katrina Tatum	Town of Mt. Gilead
Cindy Taylor	Community Representative
Stephanie Vann	Community Representative
Ellie Wiles	FirstHealth Community Health Services
Michelle Yarboro	FirstHealth Montgomery Memorial Hospital

2012 Community Health Assessment Project Work Team

Ronke Akinkugbe	UNCCPHP
Susan Brooks	Montgomery County School Nurse
Brenda Caudill	Montgomery County Health Department
Teresa Caudill	Montgomery County School Nurse
Julie Clark	Montgomery County Health Department
Danelle Cutting	Montgomery County Cooperative Extension Service
Teresa Davis	Montgomery County Health Department (Environmental Health)
Brenda DeBerry	Montgomery County School Nurse
Lynn Epps	Communities in Schools
Amy Forrester	Safe Kids Mid-Carolinas Region
Tabitha Gibson	Montgomery County School Nurse
Ockidde Harris	Community Transformation Grant
Doshia Haywood	Montgomery County Health Department (Teen Outreach Program)
Michelle Haywood	Montgomery Community College
Katie Hursey	Montgomery County JobLink
Sydney Jones	UNCCPHP
Terry Jordan	Montgomery County Schools– Child Nutrition
Tim Kennedy	Montgomery Community College
Cindy Laton	FirstHealth Community Health Services
Sheila Menendez	Montgomery County Farmers' Market Association
Mark Miller	Town of Biscoe
Debbi Musika	Montgomery County Partnership for Children
Hayley Napier	Montgomery County Cooperative Extension Service
Dempsey Owens	Montgomery County Sheriff
Tammy Owens	Montgomery Community College
Mary Perez	Montgomery County Health Director

(Work Team Members, continued from previous page)

Rhonda Peters	Montgomery County Health Department
Mike Rood	Montgomery County Council on Aging
Gail Rushing	Montgomery County Schools Nurse
Ashley Sherrill Cagle	Montgomery County Economic Development Center
Regina Smith	FirstHealth School Based Health Center
Theresa Thomas	Troy-Montgomery Senior Center
Tricia Webb	Montgomery County Chamber of Commerce
Lindsey Whitley	Montgomery County Schools
Ellie Wiles	FirstHealth Community Health Services

Community Health Opinion Survey Team

Matt Simon, UNCCPHP	**Survey Administrator/Coordinator**
Ronke Akinkugbe	UNCCPHP
Dele Alakija	UNCCPHP
Angie Alderman	Montgomery County Health Department
Brenda Caudill	Montgomery County Health Department
Julie Clark	Montgomery County Health Department
Julie Coggins	Winston Salem State University Nursing Student
Lisa Davis	Montgomery County Health Department
Christy DeBerry	Montgomery County Health Department
Kimberly DeBerry	Montgomery County Health Department
Sharon Dustin	Montgomery County Health Department
Ashley Edwards	Montgomery County Partnership for Children
Leann Gibson	Montgomery County Health Department
Paula Gomez	Montgomery County Health Department
Emily Hamilton	Montgomery County Health Department
Doshia Haywood	Montgomery County Health Department
Joy Haywood	Montgomery County Health Department
Marie Jo Horner	Montgomery County Health Department
Michelle Hunsucker	Montgomery County Health Department
Anamelia Jaimes	Montgomery County Health Department
Maria Jaimes	Montgomery County Health Department
Sydney Jones	UNCCPHP
Carla Maness	Montgomery County Health Department
Lisa Morris	Montgomery County Health Department
Damon Ogburn	UNCCPHP
Lupe Pena	Montgomery County Health Department
Mary Perez	Montgomery County Health Director
Rhonda Peters	Montgomery County Health Department
Tami Raynor	
Michelle Richardson	Montgomery County Health Department
Tori Rodgers	Winston Same State University Nursing Student
Tabitha Salazar	Montgomery County Health Department
Jackie Smith	Montgomery County Health Department
Kim White	Montgomery County Health Department
Mary Williams	Montgomery County Health Department

Dwight Yin	UNCCPHP

Priority Setting Session Participants

Molly Alexi	Montgomery County Cooperative Extension Service
Julie Clark	Montgomery County Health Department
Kim Cooke	FirstHealth Troy Family Care Center
Danelle Cutting	Montgomery County Cooperative Extension Service
Susan Davey	FirstHealth Montgomery Memorial Hospital
Brenda DeBerry	Montgomery County School Nurse
Lilia Diaz	Hispanic Community Representative
Lynn Epps	Communities in Schools
Robert George	Montgomery County Sheriff's Office
Jessica Hamilton	Autumn Care of Biscoe
Doshia Haywood	Montgomery County Health Department (TOP Program)
Cathy Hodges	Community Representative
Katie Hursey	Montgomery County JobLink
Mandy Lucas	Montgomery County Schools –Guidance
Jim Matheny	Montgomery County Board of Commissioners
Sharon Matheny	Community Representative
Roxie McIntyre	FirstHealth Health & Fitness Center
Becky Morris	Montgomery County Department of Social Services
Lisa Morris	Montgomery County Health Department
Debbi Musika	Montgomery County Partnership for Children
Hayley Napier	Montgomery County Cooperative Extension Service
Sheriff Dempsey Owens	Montgomery County Sheriff's Office
Mary Perez	Montgomery County Health Director
Mike Rood	Montgomery County Council on Aging
Remedios Saavedra	Hispanic Community Representative
Ashley Sherrill Cagle	Montgomery County Economic Development Center
Kayla Shomaker Woodruff	Montgomery County Senior Services Board
Regina Smith	FirstHealth School Based Health Centers
Leesa Speer	Montgomery County Department of Social Services
Chicky Su	Hmong Community Representative
Theresa Thomas	Troy-Montgomery Senior Center
Stephanie Vann	Community Representative
Tricia Webb	Montgomery County Chamber of Commerce
Ellie Wiles	FirstHealth Community Health Services
Clyde Woodruff	Community Representative

Appendix B:

Cluster_____ Survey_____

Montgomery County
Community Health Survey- Fall 2012

Read the following section after personalizing to each potential participant:

Hello, I am _____ and this is _____ representing Montgomery County Health Department. (Show badges.) We are conducting a survey of our county to learn more about the health and quality of life in Montgomery County. The Health Department, FirstHealth of the Carolinas, and FirstInHealth 2020 Vision Task Force, and community partners will use the results of this survey to help address the major health and community issues in our county.

Your address was one of many randomly selected from our county. The survey is completely voluntary, and it should take no longer than 20 minutes to complete. Your answers will be completely confidential. The information you give us will not be linked to you in any way.

Would you like to participate? _____Yes _____ No

(If no, stop the survey here and thank the person for his or her time.)

Eligibility

Do you live at this address? _____Yes _____ No

(If no, stop the survey here and thank the person for his or her time.)

1

PART 1: Community Problems and Issues

Health Problems

1. **Thinking about your community, what kind of place is it to live?**
   _____ Excellent ____ Good ____ Fair ____ Poor ____ DK/NR

2. **These next questions are about health problems that have the largest impact on the community as a whole. Please look at this list of health problems.** ***(Give the person the sheet of health problems.)*** **I would like for you to pick the most important health problems in this county. You can choose up to 5. Remember this is your opinion and your choices will not be linked to you in any way. If you do not see a health problem you consider one of the most important, please let me know and I will add it in. I can also read these out loud as you think about them.** ***(Read health problems if they prefer to have them read.)***

___ Aging problems (Alzheimer's, arthritis, hearing or vision loss, etc.)
___ Asthma
___ Autism
___ Birth defects
___ Cancer
___ Dental health
___ Diabetes
___ Gun-related injuries
___ Heart disease/heart attacks
___ High blood pressure
___ Infant death
___ Infectious/Contagious diseases (TB, salmonella, pneumonia, flu, etc.)
___ Kidney disease
___ Liver disease
___ Mental health (depression, schizophrenia, suicide etc.)
___ Motor vehicle accidents
___ Neurological disorders (Multiple Sclerosis, muscular dystrophy, A.L.S.)
___ Obesity/overweight
___ Other injuries (drowning, choking, home or work related)
___ Lung disease (emphysema, etc.)
___ Sexually transmitted diseases (STDs)
___ HIV/AIDS
___ Stroke
___ Teenage pregnancy
___ Other
___ Don't Know/No Response

Unhealthy Behaviors

3. **These next questions are about unhealthy behaviors that some individuals do that have the largest impact on the community as a whole. Please look at this list of unhealthy behaviors.** ***(Give person the sheet of unhealthy behaviors.)*** **Pick top unhealthy behaviors in this county. Please choose up to 5. Remember this is your opinion and your choices will not be linked to you in any way. If you do not see an unhealthy behavior that you consider one of the most important, please let me know and I will add it in. I can also read these out loud as you think about them.** ***(Read health problems if they prefer to have them read.)***

___ Alcohol abuse
___ Drunk driving
___ Having unsafe sex
___ Illegal drug abuse
___ Prescription drug abuse
___ Lack of exercise
___ Not getting immunizations ("shots") to prevent disease
___ Not getting prenatal (pregnancy) care
___ Not washing hands
___ Poor eating habits
___ Not going to a dentist for preventive check-ups / care
___ Not going to the doctor for yearly check-ups & screenings
___ Not using child safety seats
___ Not using seat belts
___ Reckless/Distracted driving
___ Smoking/tobacco use
___ Suicide
___ Violent behavior
___ Other
___ Don't Know/No Response

Community Issues

4. **These next questions are about community-wide issues that have the largest impact on the overall quality of life in this county. Please look at this list of community issues.** ***(Give person the sheet of community issues.)*** **Pick the community issues that have the greatest effect on quality of life in this county. Please choose up to 5. Remember this is your opinion and your choices will not be linked to you in any way. If you do not see a community problem you consider one of the most important, please let me know and I will add it in. I can also read these out loud as you think about them.** ***(Read health problems if they prefer to have them read.)***

___ Affordability of health services
___ Animal control issues
___ Availability of child care
___ Availability of healthy food choices
___ Availability of healthy family activities
___ Availability of positive teen activities
___ Bioterrorism
___ Domestic Violence
___ Dropping out of school
___ Gang issues
___ Homelessness
___ Inadequate/unaffordable housing
___ Lack of/inadequate health insurance
___ Lack of culturally appropriate health services.
___ Lack of health care providers
___ Lack of law enforcement
___ Lack of recreational facilities (parks, trails, community centers, etc.)
___ Lack of transportation options
___ Literacy
___ Low income/poverty
___ Elder neglect and abuse
___ Child neglect and abuse
___ Pollution (air, water, land)
___ Racism
___ Rape/sexual assault
___ Secondhand smoke
___ Unemployment
___ Unsafe, un-maintained roads
___ Unhealthy/unsafe home conditions
___ Violent crime (murder, assault, etc.)
___ Work safety
___ Youth crime
___ Other
___ Don't Know/No Response

PART 2: Personal Health

Now I am going to ask you some questions about your own personal health. Remember, the answers you give for this survey will not be linked to you in any way.

5. **Where do you get most of your health-related information?** **(Please choose only one.)**

____ Books/magazines
____ Church
____ Doctor/nurse/pharmacist
____ Free Care Clinic
____ Friends and family
____ Health Department
____ Help lines (telephone)
____ Hospital
____ Internet
____ Newspaper
____ School
____ Social media (twitter, facebook)
____ Television
____ Other
____ DK/NR

6. **Where do you go <u>most often</u> when you are sick or need advice about your health?** ***(DO NOT read the options. Mark only the one they say. If they cannot think of one, read:*** **Here are some possibilities.** ***Read responses.*** **Choose the one that you usually go to.)**

_____ Doctor's office/medical clinic
_____ Free Care Clinic
_____ Health department
_____ Other
_____ Veterans Administration Clinic
_____ Urgent Care Center
_____ Hospital/Emergency Room
_____Don't Know/No Response

7. **Are you covered by a health insurance plan?** ____ Yes ____ No
If yes, what type of coverage do you have? (Choose one, primary insurance)

_____ *Medicare (includes supplemental policy)*
_____ *Private insurance (Ex: BCBS, Aetna, Cigna, etc…)*
_____ *Other*
____ *Medicaid*
____ *Tricare/VA*
____*DK/NR*

If yes, are there any concerns you have about your health care coverage? If so, what is your main concern? (Choose one)

_____*I do not have any concerns*
_____ *High deductibles*
_____ *High co-pays*
_____ *High prescription costs*
_____*Limited network of providers*
_____ *Other*

8. **In the past 12 months, did you ever have a problem getting the health care you needed from any type of health care provider or facility?**

____ Yes ____ No *(now skip to question #10)* ___Don't Know/No Response

9. **If you did have a problem or you were to have a problem, please indicate on the list below your challenges. You can choose as many of these as you need to. If there was a problem you had that we do not have here, please tell us and I will write it in.** ***(Read Problems.)***

a. ___ I didn't have health insurance.
b. ___ My insurance wouldn't pay for what I needed.
c. ___ My share of the cost (deductible/co-pay) was too high.
d. ___ Doctor would not take my insurance.
e. ___ I could not afford the cost.
f. ___ I didn't have a way to get there.
g. ___ I didn't know where to go.
h. ___ I couldn't get an appointment.
i. ___ Other
j. ___ Don't Know/No Response

10. Please identify which county you seek routine health care in most often?

a. ___ Moore
b. ___ Montgomery
c. ___ Richmond
d. ___ Randolph
e. ___ Stanly
f. ___ Scotland
g. ___ Cumberland
h. ___ Hoke
i. ___ Other
j. ___Don't Know/No Response

11. In the past 12 months, did you have a problem filling a medically necessary prescription?

____ Yes ____ No (*now skip to question #13*) ___DK/NR

12. Since you said "yes", which of these problems did you have? You can choose as many of these as you need to. If there was a problem you had that we do not have here, please tell us and I will write it in. (*Read Problems.)*

a. ___ I didn't have health insurance.
b. ___ My insurance didn't cover what I needed.
c. ___ My share of the cost (deductible/co-pay) was too high.
d. ___ Pharmacy would not take my insurance.
e. ___ I didn't have a way to get there.
f. ___ I didn't know where to go.
g. ___ Other
h. ___Don't Know/No Response

13. If a friend or family member needed counseling for a mental health or a drug/alcohol abuse problem, who is the first person you would tell them to call or talk to? *(DO NOT read the options. Mark only the ones they say. If they can't think of anyone…* "Here are some possibilities. You can choose as many as you want." *Read responses.)*

a.____ Private counselor or therapist
b.____ Support group (e.g., AA. Al-Anon)
c.____ School counselor
e.____ Doctor
f.____ Minister/religious official
g.____ Other

d.____ Don't know h.____ No Response

14. During a normal week, do you engage in any exercise activity that lasts at least a half an hour?

____ Yes ____ No (*now skip to question #17*) ____DK/NR

15. Since you said yes, how many times would you say you engage in this activity during a normal week?

a. ____ 1 to 2 times/week
b. ____ 3 to 4 times/week
c. ____ 5 to 6 times/week
d. ____ 7 or more times/week
e. ____ Don't Know/No Response

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

a.____ Park
b.____ Public Recreation Center
c.____ Gym/Fitness Center
d.____ Greenway trails
e.____ Home/Work/Neighborhood
f.____ Senior Center
g.____ Church/Faith community
h. ____ Other
i. _____ Don't Know/No Response

17. Since you said "no", what are the reasons you do not exercise for at least a half hour during a normal week? You can give as many of these reasons as you need to. ***(DO NOT read the options. Mark only the ones they say. This is to test their knowledge. If they really can't think of one, then mark I don't know.)***

a.____ My job is physical or hard labor.
b.____ Exercise is not important to me.
c.____ I don't have access to facilities (pool, golf course, track, etc.)
d.____ No safe place to exercise
e. ____ I don't have enough time to exercise.
f. ____ I don't like to exercise.
f.____ It costs too much to exercise (equipment, shoes, gym costs).
g.____ I'm too tired to exercise.
h.____ I'm physically disabled.
i._____ Other
j._____ Don't Know/No Response

18. How many hours per day do you watch TV, play video games, or use the computer for recreation?

____ 0-1 hour ____ 2-3 hours ____ 4-5 hours ____ 6+ hours ____ DK/NR

19. If you had access to a community garden, would you utilize it?

____ Yes ____ No ____DK/NR

20. Would you be support a policy prohibiting tobacco usage in public parks in Montgomery County?
____ Yes ____ No ___DK/NR

21. Are you exposed to secondhand smoke in any of the following places *(Read the list and check all that apply.)*?

a.____ Home
b.____ Workplace
c.____ Church
d.____ Automobile
e.____ Parks/Recreational facilities
f.____ Other
g.____ I am not exposed to secondhand smoke.

22. Do you currently smoke? ____Yes ____No ____NR
Do you currently use other tobacco products? _____Yes _____No _____NR
(If no to both, skip to question #25)

23. If yes, where would you go for help if you wanted to quit?
(DO NOT read the options. Mark all that apply. Mark only the ones they say.) (This is to test their knowledge.)

a.____ Quit Now NC
b.____ Doctor
c.____ Church
d.____ Pharmacy
e.____ Private counselor/therapist
f.____ Health Department
g.____ Hospital
h.____ Other (specify): _____
i.____ Not applicable; I don't want to quit

24. Have you ever been told by a <u>doctor, nurse, or other health professional</u> that you have any of the conditions I am about to read?

a.	Asthma	____ Yes	____ No
b.	Depression or anxiety disorder	____ Yes	____ No
c.	Diabetes (not during pregnancy)	____ Yes	____ No
d.	High cholesterol	____ Yes	____ No
e.	High blood pressure	____ Yes	____ No
f.	Osteoporosis	____ Yes	____ No
g.	Overweight/Obesity	____ Yes	____ No

25. Do you have children between the ages of 9 and 19?
____ Yes *(now go to question #26)* ____ No *(now skip to question #30)*
____*NR/Refused*

26. Would you be interested in allowing your child to walk to school if there was a safe route?
_____ Yes ____ No ____DK/NR

27. Do you think your child is engaging in any of the following high risk behaviors I am about to read? *(Please answer yes or no after each behavior. Read the list and check all that apply.)*

a.___ Alcohol Use
b.___ Criminal activities
c.___ Distracted driving/speeding
d.___ Drug Abuse
e. ___ Eating Disorders
f. ___ Gangs
g.___ Sexual activity
h. ___ Skipping school
i. ___ Tobacco Use
j.___ I don't think my child is engaging in any high risk behaviors.
k. ___ DK/NR

(If you get questions about other risky behaviors: We are aware that there are other risky behaviors. For the purposes of this survey, however, we are only requesting information about these 9 behaviors or none at all.)

28. Are you comfortable talking to your child about the risky behaviors we just asked about?
____ Yes ____ No ___DK/NR

29. Do you think your child or children need more information about the following problems: *(Read list. Allow time for a yes or no following each item. Check all that apply.)*

a.___ Alcohol
b.___ Tobacco
c.___ HIV
d.___ Birth Control
e.___ Eating Disorders
f.___ Sexual activity/teen pregnancy
g.___ STDs
h. ___ Drug Abuse
i.___ Distracted driving/speeding
j.___ Mental health issues/suicide
k.___Internet safety
l.___ Dating violence
m.___Other
n.___ Don't Know/NR

30. Do you have children between the ages of newborn and 5?
___YES (go to question #31) ___NO (skip to question #36) ___NR/Refused to Answer

31. Who is your primary care provider for your child (children) ages 5 or under during the day? (Select only one)

a. ____ Parent in the home
b. ____ Relative, friend or neighbor
c. ____ Licensed child care center or family child care home
d. ____ Head Start or Early Head Start program
e. ____ NC Pre-K program
f. ____ Part-day pre-school program
g. ____ Other
h. ____ No Response/Refused to Answer

32. Approximately how many times each week are you spending at least 15-20 minutes reading with your child or talking with your child about books or stories? (Select only one.)

a. ____ None
b. ____ 1 - 2 times a week
c. ____ 3 - 4 times a week
d. ____ 5 - 6 times a week
e. ____ 7 or more times a week
f. ____ Don't Know/No Response

33. Have you ever had questions related to parenting that you needed help in answering?

____ YES ____ NO ____DK/NR
Were you able to find help? _____ YES _____ NO

If YES, where?_____

***If you have had questions about parenting and could not get help, what has been the problem?* (Select all that apply.)**

a. ____ Didn't know who to contact
b. ____ Didn't have a way to call
c. ____ On a waiting list for services
d. ____ Made a contact, but didn't get answers
e. ____ Didn't have money to pay for services
f. ____ Didn't have a way to get to service
g. ____ Services were not available
h. ____ Other
i. ____ No Response/Refused

34. Which of the following programs might you be interested in attending if they were offered in the county? (Read ALL options, Select all that apply.)

a. ____ Story time program or other parent/child reading activities
b. ____ An organized playgroup for infants and toddlers (age 2 and under)
c. ____ An organized playgroup for 3-4 year olds
d. ____ Parenting skills program or workshops
e. ____ Parenting support group, MOM's Club, or other parent get-together opportunities
f. ____ Other

35. **How familiar are you with the services the Montgomery County Partnership for Children funds and provides in the community? (Select only one)**
   a. ____ I had never heard of the Partnership before this survey
   b. ____ I have heard of the Partnership, but I really don't know what it does
   c. ____ I am somewhat familiar with the services of the partnership, but I have never used them
   d. ____ I am very familiar with the programs and services funded and provided by the Partnership
   e. ____ I have used at least one service provided by or funded by the Partnership.

Part 3. Emergency Preparedness

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

____Yes, smoke detectors only

____Yes, carbon monoxide detectors only

____Yes, both

____No

____I Don't Know

____No Response/Refused

37. **Does your household have a Family Emergency Plan?**
_____Yes _____No _____DK/NR

38. **Does your family have a basic emergency supply kit? If yes, how many days do you have supplies for? (These kits include 3-days of water and non-perishable food, any necessary prescriptions, battery powered or hand crank weather radio, first aid supplies, flashlight and batteries, etc.)**
____ No
____ 3 days ____ 1 week ____2 weeks ____ More than 2 weeks ___DK/NR

39. **Is there anyone living in your home that would require special assistance during an emergency?**
_____Yes _____No ____DK/NR

(CONTINUED ON NEXT PAGE→)

Part 4. Demographic Questions

The next set of questions are <u>general</u> questions about you, which will only be reported as a summary of all answers given by survey participants. Your answers will remain anonymous.

40. How long have you lived in this county?
_____ less than one year _____ 1 – 5 years _____ 6 – 10 years
_____ more than 10 years _____ my whole life ____NR/Refused

41. What year were you born? _____ ____NR/Refused

42. Are you Male or Female? ***(In most cases, this question can be answered by the interviewer without asking.)***
_____Male _____Female

43. Are you of Hispanic origin?
_____Yes _____ No ____NR/Refused

44. What is your race?
Ask the question by reading the categories. If the person is of more than one race or one not written here, check "other" and write in his or her answer.)

_____	Black or African American	_____	American Indian or Alaskan Native
_____	Asian or Pacific Islander	_____	White
_____	Other	_____	NR/Refused

45. A. Do you speak a language other than English at home? ***(If no, skip to #38.)***
___Yes ___No ___DK/NR

B. If yes, what language do you speak at home? _____

(CONTINUED ON NEXT PAGE→)

46. What is the highest level of school, college or vocational training that you have finished? ***(Read choices. Mark only one.)***

_____ Some high school, no diploma
_____ High school diploma or GED
_____ Associate's Degree or Vocational Training
_____ Some college (no degree)
_____ Bachelor's degree
_____ Graduate or professional degree
_____ Other
_____ No Response/Refused to answer

47. How many people live in your household? _____ ____NR/Refused

48. Is your annual household income GREATER than $XX,XXX before taxes?
(Based on answer to question # 39, ask the individual if their annual household income is above the 200% poverty threshold. Place an "X" indicating if income is "above" or is "at or below" the threshold.)

_____Yes, Income is above threshold _____ No, Income is at or below threshold
____Don't Know _____No Response/Refused to answer

Family size	200% FPL Threshold Level
1	$21,780
2	$29,420
3	$37,060
4	$44,700
5	$52,340
6	$59,980
7	$67,620
8	$75,260

49. What is your employment status? I will read a list of choices. Let me know which ones apply to you. ***(Check all that apply.)***

a._____ Employed full-time
b._____ Employed part-time
c._____ Retired
d._____ Military
e._____ Unemployed
f._____ Disabled
g._____ Student
h._____ Homemaker
i._____ Self-employed
j. _____ No Response/Refused

50. Do you have access to the Internet? ____ Yes ____ No ____NR

51. Are you a member of a faith organization? ____ Yes ____ No ____NR

Appendix C
Health Assessment Tracking Form

Cluster________

Montgomery County Health Assessment Tracking Form

Date: ______________________ Interview Team: _____________________

Status Codes:

IC – Interview Conducted
NO – Not Occupied / No One Home
IR – Interview Refused
NE – No Resident Eligible
LB – Language Barrier

Cluster 1 – 38 and Survey 1-5	Address	Status Code

Appendix D:

Health and Wellness Resources in Montgomery County

Adult Care Homes/Nursing Facilities
Autumn Care of Biscoe
Baaseiah Family Care Home #1, #2, #3
Brookstone Haven of Star
Crowder Family Care Home
Poplar Springs Rest Home
Sandy Ridge Assisted Living
Tillery Chase Adult Care Home
Wilson Family Home Care

Agricultural Resources
Consolidated Farm Service Agency
Montgomery County Cooperative Extension Service
Montgomery County Farm Bureau
NC Forest Service Rangers Office
NC Wildlife Resource Commission
Poultry Agent
Soil Conservation Service
Water Pollution Control

American Red Cross
Montgomery Chapter

Animal Services
Montgomery County Animal Control
Montgomery Animal Clinic

Blind Services
American Council on the Blind
Eye Care America
NC Library for the Blind
Montgomery County Department of Social Services
Vocational Rehabilitation Service

Chamber of Commerce
Montgomery County Chamber of Commerce

Child Abuse
Child Help-National Child Abuse Hotline
Department of Social Services
Montgomery County Rescue Squad
National Center for Missing and Exploited Children

Children's and Youth Concerns
4-H Club
E-Ku-Sumee Boys Camp
Family and Consumer Sciences Agent
Child Help-National Child Abuse Hotline
Communities in Schools
Family Support Network of the Sandhills
First in Families of the Sandhills
Montgomery County Health Department
Partnership for Children
National Child Safety Council
National Run-Away Switchboard
Sandhills Children's Developmental Services

Chiropractors
Montgomery County Chiropractic Center

Council on Aging
Montgomery County Council on Aging

Crisis Counseling
The Crisis Council
Crisis Line
National Suicide Prevention Lifeline
Therapeutic Alternatives

Dentists
Dr. Donald Davis
Lane and Associates
Dr. Johnny McKinnon
Dr. Terry Wood
FirstHealth Dental Care Center

Department of Public Health
Montgomery County Health Department

Department of Social Services
Montgomery County DSS

Diabetes Self-Management
FirstHealth of the Carolinas

Dialysis
Davita, Inc

Emergency Assistance
American Red Cross
FirstHealth EMS
Montgomery County Emergency Management

Food Pantries
First Baptist of Troy
Food Pantry at Highland School
Montgomery Baptist Association
Page Memorial Methodist Church

Health Clubs
FirstHealth Center for Health & Fitness
Total Fitness for Women
Troy Fitness Center

Health Services
AIDS Hotline
American Cancer Society
American Heart Association
American Lung Association
Autumn Care Nursing and Rehabilitation
Baaseiah Family Care
Brookstone Haven of Star
Crisi Line
Department of Social Services
Diversicare
FirstHealth EMS
FirstHealth Response– Lifeline
Health and Human Services Hotline
Home Care of the Carolinas
Leukemia and Lymphoma Society
Montgomery County Health Department
Montgomery Memorial Hospital
Moore Regional Hospital
Muscular Dystrophy Association
National Kidney Foundation of NC
National Parkinson Foundation
National Suicide Prevention Lifeline
North Carolina Eye Bank
Poplar Springs Rest Home
Sandhills Center for Mental Health, Mental Retardation, and Substance Abuse

Home Health Services
Bayada Nurses
Community Home Care & Hospice
Duke & St. Joseph Home Care
Elite Home Care Services
Family First Home Care
FirstHealth Home Care Services
Gentiva Home Health
Home Care of the Carolinas
Shipman Family Home Care, Inc

Hospices
Community Home Care & Hospice
FirstHealth Hospice and Palliative Care
Hospice of Randolph County
Hospice of Richmond County
Hospice of Stanly County

Hospitals
FirstHealth Montgomery Memorial Hospital

Housing Services
Star Housing Authority
Sandhills Community Action Program
Troy Housing Authority
Wesleyan Homes #1 and #2
Westwood Apartments
US Housing Discrimination Information

Intellectually/Developmentally Disabled Services
Family Support Network of North Carolina
Library of Congress– Division of the Blind and Physically Handicapped
Monarch

Lactation Consultation and Support
Moore Regional Hospital
Montgomery County Health Department

Medical Providers
Family Care Associates
FirstHealth Family Care Center
Health Plus
Mid Carolina Family Medicine
Montgomery Urology
Mount Gilead Medical Services
Troy Foot Clinic
Troy Medical Services
Troy Surgical Clinic

Medication Assistance Program
FirstHealth of the Carolinas

Mental Health Services
Alcoholics Anonymous
Aurora Family Counseling Center
Behavioral Healthcare-Mentor
Daymark Recovery Services
Living Solutions
PRI Counseling Services

Opticians and Optometrists
Academy Eye Center of Biscoe
Dr. Haywood

Pharmacies
Biscoe Pharmacy
Cochrane Ridenhour Drug
CVS Pharmacy
Kerr Drug
Montgomery Drug
Standard Drug
Wal-Mart Pharmacy
White Star Pharmacy

School Health Centers
FirstHealth School Based Health Center, East
FirstHealth School Based Health Center, West

Senior Citizen Information
Department of Social Services
Family Caregiver Support Program
Medicare
Montgomery County Council on Aging
Troy-Montgomery Senior Center
Seniors Health Insurance Information Program
Senior Help Line
Social Security Administration

Substance Abuse
Center for Substance Abuse Treatment
National Drug Abuse Hotline
Sandhills Center for Mental Health, Mental Retardation and Substance Abuse

A full copy of "Health and Wellness Resources in Montgomery County (2011)", including phone numbers, can be accessed by visiting www.montgomerycountync.com)

Want to Know More?
Want to Become Involved?

Contact the Health Education Staff at the
Montgomery County Health Department
217 South Main Street
Troy, NC 27371
(910) 572-1393-phone
(910) 572-8177

This document may be accessed at the Montgomery County website at the following address:
http://www.montgomerycountync.com