2015 DAVIDSON COUNTY COMMUNITY HEALTH NEEDS ASSESSMENT

Secondary Data and Community Health Survey Report

Davidson County Health Department,
Wake Forest Baptist Health Lexington Medical Center, and Novant Health Thomasville Medical Center

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ACKNOWLEDGMENTS

The 2015 Davidson County Community Health/Community Health Needs Assessment process was conducted by the Davidson County Health Department, in partnership with Novant Health Thomasville Medical Center and Wake Forest Baptist Health Lexington Medical Center. The Davidson County Health Department's Health Education Supervisor served as the Project Coordinator. The primary participants in project sponsorship and oversight were:

Name	Agency	Role/Contribution
Bill James	WFBH Lexington Medical Center	President
Dasia Jenkins	WFBH Lexington Medical Center	Marketing/Outreach
Amber Kirkman	WFBH Lexington Medical Center	Marketing/Outreach
Kathie Johnson	Novant Health Thomasville Medical Center	President
Jane Murphy	Novant Health Thomasville Medical Center	Marketing/Outreach
Jen Hames	Davidson County Health Department	CHA Coordinator

Involving a variety of people in the assessment process was vital to fully understand the community's perspective on health, determine what health issues the community deemed most important, and discern the perceptions held by Davidson County residents. To expand participation in the CHA/CHNA process the Davidson County CHA/CHNA team worked very closely with the Davidson County Healthy Communities Coalition (DCHCC), a community coalition composed of agency and organization leaders and community policymakers. This coalition acted as the Steering Committee for this assessment, reflecting a broad understanding of county characteristics and resources available. We thank DCHCC members for their guidance and support:

Davidson County Healthy Communities Members

Amber Kirkman – WFBH Lexington Medical Center
Angela Kimsey – Davidson County Senior Services
Angie Banther – Path of Hope
Bill James - WFBH Lexington Medical Center
Billy Freeman – Lexington YMCA
Brittany Pruitt – United Way of Davidson County
Dr. Cathy Riggan – Physician
Charles Parnell – Davidson County Parks and Recreation
Dale Moorefield – Davidson County Department of Social Services
Darren Cecil – Davidson County Health Department
Dasia Jenkins - WFBH Lexington Medical Center
Don Truell – Davidson County Commissioner
Dr. Amy Suttle – Physician
Dr. Lory Morrow – Davidson County Schools
Ellen Welborn - WFBH Lexington Medical Center
Gene Klump – Lexington YMCA
Helen Fitzgerald – Life Center of Davidson County
Jane Wilder – Novant Health Thomasville Medical Center
Jarrod Dunbar – Thomasville YMCA
Jeannie Leonard – Davidson County Cooperative Extension
Jen Hames – Davidson County Health Department

Jim Price – Davidson County Government
John Giampaolo – Cardinal Innovations Healthcare
Kathie Johnson – Novant Health Thomasville Medical Center
Keith Raulston – N.C. Department of Transportation
Laura Duran – City of Lexington Parks and Recreation
Laura Owen – Hospice of Davidson County
Mary Jane Akerman – Thomasville City Schools
Mary Lou Collett – Davidson County Health Department
Nancy Litton – Center for Prevention Services
Rick Kriesky – Lexington City Schools
Rose McDaniel – Davidson County Community College
Sandy Motley – Davidson Medical Ministries Clinic/Davidson Health Services
Scott Leonard – Davidson County Planning and Zoning
Sherry Brannon – Smart Start of Davidson County
Teresa McKeon – ARC
Vickie McKiver – City of Thomasville Parks and Recreation

Besides representatives from the organizations above, collaborators also included personnel from:

- Daymark Recovery Services
- Family Services of Davidson County
- Second Harvest Food Bank

Thank you to our community for completing the survey or contributing information in other ways.

Independent public health consultants Sheila S. Pfaender and Annika Pfaender-Purvis provided secondary data collection and analysis, primary data analysis, and report development services to produce the comprehensive *2015 Davidson County Community Health Needs Assessment: Secondary Data and Community Health Survey Report* which is the source document from which this report was derived.

The community health assessment process, source document, and final report were made possible by financial contributions from Novant Health Thomasville Medical Center, Wake Forest Baptist Health Lexington Medical Center, and the Davidson County Health Department.

INTRODUCTION

Local public health agencies in North Carolina (NC) are required to conduct a comprehensive Community Health Assessment (CHA) at least once every three or four years. The CHA is required of public health departments in the consolidated agreement between the NC Division of Public Health (NCDPH) and the local public health agency. Furthermore, a CHA is required for local public health department accreditation through the NC Local Health Department Accreditation Board (G.S. § 130A-34.1). As part of the US Affordable Care Act of 2011, not-for-profit hospitals are also now required to conduct a Community Health Needs Assessment (CHNA) once every three years. Recognizing that duplicate assessment efforts are a poor use of community resources, local health departments (LHDs) and not-for-profit hospitals across the state are developing models for collaboratively conducting the community health assessment process.

In Davidson County, the CHA/CHNA process included the two hospitals in the county: Wake Forest Baptist Health Lexington Medical Center, and Novant Health Thomasville Medical Center. In counties that have a community health coalition, the CHA/CHNA partnership also usually includes that entity, which in Davidson County is the Davidson County Healthy Communities Coalition (DCHCC). The DCHCC is composed of agency and organization leaders and community policymakers. Thus the members of the Davidson County CHA/CHNA "team" included representatives of the agencies and organizations that serve the health and human service needs of the local population, as well as representatives from businesses, communities of faith, schools and civic groups. The Davidson County Health Department provided staff to coordinate the project. The partners in Davidson County agreed to call the dual-purpose 2015 project by one name, the 2015 Davidson County Community Health Needs Assessment (CHNA).

The CHNA, which is both a process and a document, investigates and describes the current health status of the community, what has changed since the last assessment, and what still needs to change to improve the health of the community. The *process* involves the collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, environmental data, hospital data, and professional and public opinion. The *document* is a summary of all the available evidence and serves as a resource until the next assessment. The completed CHNA serves as the basis for prioritizing the community's health needs, and culminates in planning to meet those needs.

The partners contracted with Sheila S. Pfaender, Public Health Consultant, and her team to assist in conducting the 2015 CHNA for Davidson County, following the guidance provided by the *Community Assessment Guidebook: North Carolina Community Health Assessment Process*, published by the NC Office of Healthy Carolinians/Health Education and the NC State Center for Health Statistics (June 2014 revision). The assessment also adheres to the 2014 standards for community assessment stipulated by the NC Local Health Department Accreditation (NCLHDA) Program. An additional goal for this project was to meet the US Affordable Care Act/Internal Revenue Service Form 990 Schedule H requirements for not-for-profit hospitals in conducting a Community Health Needs Assessment (CHNA) as cited in the December, 2014 Final Rule.

The CHA Coordinator from the Davidson County Health Department worked with the consultant to develop a multi-phase plan for conducting the assessment. The phases included: (1) a secondary data research phase to identify, collect and analyze secondary demographic,

socioeconomic, health and environmental data; (2) a primary data research phase to collect and analyze data collected via an on-line community survey; (3) a data synthesis and analysis phase; (4) a period of data reporting and discussion among the project partners and the public, including issues prioritization exercises; and (5) a decision-making phase among partners. Upon completion of this work the assessment partners and the community have the tools they need to develop plans and activities that will improve the health and well-being of the people living in Davidson County.

ASSESSMENT METHODOLOGY

In order to learn about the specific factors affecting the health and quality of life of Davidson County residents, the consultant tapped numerous readily available secondary data sources. For data on Davidson County demographic, economic and social characteristics sources included: the US Census Bureau; Log Into North Carolina (LINC); NC Office of State Budget and Management; NC Department of Commerce; Employment Security Commission of NC; NC Division of Aging and Adult Services; NC Department of Public Instruction; NC Department of Justice; NC Department of Juvenile Justice and Delinquency Prevention; NC Department of Administration; NC Division of Medical Assistance; NC Division of Child Development; NC State Board of Elections; NC Division of Health Services Regulation; the Cecil B. Sheps Center for Health Services Research; and the Annie E. Casey Foundation *Kids Count Data Center*. Local sources for socioeconomic data included: the Davidson County Department of Social Services; the Davidson County Chamber of Commerce; local educational authorities (LEAs) in Davidson County; among other Davidson County agencies and organizations. The author has made every effort to obtain the most current data available at the time the report was prepared.

The primary source of health data for this report was the NC State Center for Health Statistics, including its County Health Data Books, Behavioral Risk Factor Surveillance System, and Vital Statistics and Cancer Registry units. Other health data sources included: US Centers for Disease Control and Prevention; NCDPH Epidemiology Section; NC Division of Mental Health, Developmental Disabilities and Substance Abuse Services; National Center for Health Statistics; Healthy North Carolina 2020; NCDPH Nutrition Services Branch; UNC Highway Safety Research Center; NC Department of Transportation; and the NCDPH Oral Health Section, among other *public domain* sources. Other important *local* health data sources included DCHD, the two hospitals in the county, and Davidson County Emergency Medical Services.

Because in any community health assessment it is instructive to relate local data to similar data in other jurisdictions, Davidson County data is compared to like data describing the state of NC as a whole, as well as data from Randolph County, NC, a state-approved “peer” county. In some cases Davidson County data is compared to US-level data, or to Healthy People/Healthy North Carolina 2020 goals or other standardized measures. Where appropriate, trend data has been used to show changes in indicators over time, at least since the most recent previous assessment three years ago, but sometimes further back than that.

Environmental data were gathered from public domain sources including: US Environmental Protection Agency, NC Department of Environment and Natural Resources Divisions of Air Quality and Waste Management, the Section of Environmental Health in NCDPH, and the NC State Laboratory of Public Health.

This report represents a topical synthesis of all the secondary data researched in connection with the 2015 Davidson County CHNA project. It is intended to serve as the master secondary data resource for guiding community deliberations about the most important health issues in Davidson County and how to solve them.

It should be noted at the onset that the consultant thoroughly cites and personally vouches for all data sources in the public domain. Local data cites the name of the provider of the information, and readers should judge for themselves the authority of those sources. Finally, as is typical in all time-limited activities such as community health assessment, all data were mined

at a point in time in the recent past, and may not represent present conditions. Numbers, entity names, program titles, etc. that appear in the data may no longer be current.

This comprehensive report is available on-line in PDF format on the Davidson County Health Department's website (…), via the link

CHAPTER ONE: DEMOGRAPHIC DATA

POPULATION CHARACTERISTICS

General Population Characteristics

The following general population characteristics of Davidson County, its peer county and the state of NC were based on 2014 US Census data estimates.

- The population of Davidson County was 164,072.
- The population of Davidson County had a slightly higher percentage of females (51.0%) than males (49.0%).
- The overall median age in Davidson County was 42.1, 3.9 years older than the median age for NC as a whole.

Table 1. General Demographic Characteristics (2014 US Census Bureau Estimate)

Location	Total Population	Number Males	% Population Male	Median Age Males	Number Females	% Population Female	Median Age Females	Overall Median Age
Davidson County	164,072	80,435	49.0	41.0	83,637	51.0	43.0	42.1
Randolph County	142,778	70,548	49.4	39.9	72,230	50.6	42.0	41.0
State of NC	9,943,964	4,844,593	48.7	36.7	5,099,371	51.3	39.7	38.2
	a	a	c	b	a	c	b	b

a - US Census Bureau, American Fact Finder, PEPSR6H: 2014 Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States, States, and Counties.
b - US Census Bureau, American Fact Finder, PEPAGESEX: Annual Estimates of the Resident Population for Selected Age Groups by Sex
c - Percentages are calculated

Population by Township

As noted in the following figure and table, Davidson County is divided into 17 townships among which Thomasville Township and Lexington Township had the largest populations and Alleghany Township had the smallest. Hampton Township had the “oldest” median age (53.7 years), and Alleghany Township the “youngest” (33.5 years).

Figure 1. Map of Davidson County

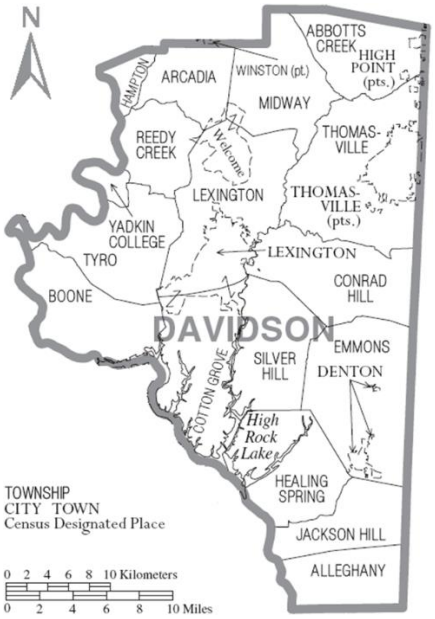


Table 2. Population by Township, Davidson County (2009-2013 US Census Bureau Estimate)

Township	No. of Persons	% of County Population	Median Age
Abbotts Creek township	12,612	**7.7**	40.4
Alleghany township	639	0.4	**33.5**
Arcadia township	10,885	6.7	41.8
Boone township	4,633	2.8	43.1
Conrad Hill township	10,004	6.1	40.0
Cotton Grove township	8,854	5.4	46.7
Emmons township	6,947	4.3	38.9
Hampton township	1,144	0.7	**53.7**
Healing Spring township	2,470	1.5	44.8
Jackson Hill township	1,005	0.6	48.7
Lexington township	30,979	**19.0**	38.0
Midway township	12,282	7.5	45.6
Reedy Creek township	5,404	3.3	39.5
Silver Hill township	6,246	3.8	37.2
Thomasville township	38,800	**23.8**	38.6
Tyro township	9,060	5.6	41.5
Yadkin College township	1,011	0.6	43.6
Davidson County Total	162,975	100.0	40.6

Source: US Census Bureau, American Fact Finder, 2013 ACS, Table S0101, Age and Sex (by Township); http://factfinder2.census.gov

Population Growth

The next table illustrates that the Davidson County population has grown by over 10% in every decade since 1990, and this pattern is projected to continue through at least 2030. Note, however, that the Davidson County rate of growth is smaller than the rate for the state as a whole in every period covered by the table below.

Table 3. Decadal Population Growth
(1980-2030 US Census Counts and Projections)

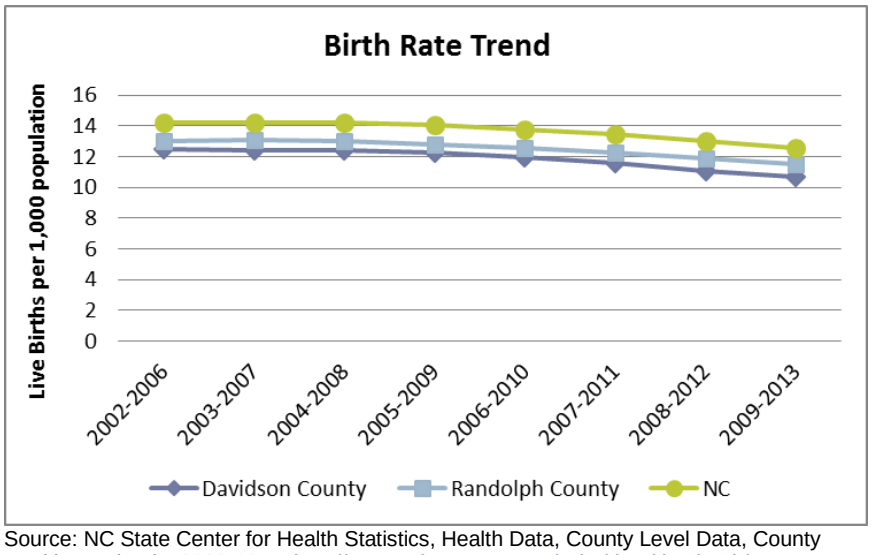
Location	Number of Persons and Percent Change										
	1980	1990	%Change 1980-1990	2000	%Change 1990-2000	2010	%Change 2000-2010	2020 (Projection)	%Change 2010-2020	2030 (Projection)	%Change 2020-2030
Davidson County	113,162	126,677	11.9	147,250	16.2	162,878	10.6	183,671	12.8	204,022	11.1
Randolph County	91,300	106,546	16.7	130,471	22.5	141,752	8.6	157,017	10.8	171,908	9.5
State of NC	5,880,095	6,632,448	12.8	8,046,813	21.3	9,535,483	18.5	11,039,342	15.8	12,463,244	12.9

Note: percentage change is calculated.
Source: Log Into North Carolina (LINC) Database, Topic Group Population and Housing, Total Population, Population (Data Item 5001); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

Birth Rate

Overall population growth is a function both of increase (via in-migration and birth) and decrease (via out-migration and death). The following figure illustrates that the birth rate is declining in NC and both counties in the comparison, but at the fastest rate (steepest slope) in Davidson County.

Figure 2. Birth Rate Trend, Live Births per 1,000 Total Population
(Five-Year Aggregates, 2002-2006 through 2009-2013)



Source: NC State Center for Health Statistics, Health Data, County Level Data, County Health Databooks 2008-2015; http://www.schs.state.nc.us/schs/data/databook/.

Population Density

As seen in the table below, population density in Davidson County has increased every decade since 1980, a trend projected to continue in the next two decades.. The population density in Davidson County has been higher than the population density statewide since 1990.

Table 4. Decadal Population Density (1980-2030)

Location	Persons per Square Mile					
	1980	1990	2000	2010 (Estimate)	2020 (Projection)	2030 (Projection)
Davidson County	6.39	229.39	266.68	293.76	323.11	352.17
Randolph County	115.74	135.30	165.71	186.14	210.14	234.67
State of NC	120.39	136.14	165.19	191.93	219.86	248.20

Source: Log Into North Carolina (LINC) Database, Topic Group Population and Housing, Total Population, Population Density (Data Item 5004); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

Race and Ethnicity

The population of Davidson County is less diverse than the population of NC as a whole. In Davidson County as of a 2014 US Census Bureau estimate:

- Whites composed 86.9% of the total population; statewide the comparable figure was 71.5%.
- Blacks/African Americans composed 9.4% of the total population; statewide the comparable figure was 22.1%.
- American Indians and Alaskan Natives composed 0.8% of the total population; statewide the comparable figure was 1.6%.
- Asians, Native Hawaiians and Other Pacific Islanders composed 1.5% of the total population; statewide the comparable figure was 2.8%.
- Hispanics/Latinos of any race composed 6.8% of the total population; statewide the comparable figure was 9.0%.

Table 5. Population Distribution by Race/Ethnicity (2014 US Census Bureau Estimate)

Location	Total	Number and Percent											
		White		Black or African-American		American Indian and Alaskan Native		Asian, Native Hawaiian and Other Pacific Islander		Two or More Races		Hispanic or Latino of Any Race	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Davidson County	164,072	142,563	86.9	15,503	9.4	1,254	0.8	2,395	1.5	2388	1.5	11,151	6.8
Randolph County	142,778	128,250	89.8	9,017	6.3	1,480	1.0	1,834	1.3	2197	1.5	15,908	11.1
State of NC	9,943,964	7,108,057	71.5	2,196,390	22.1	154,735	1.6	279,315	2.8	205,467	2.1	894,276	9.0
Source	a	a	b	a	b	a	b	a	b	a	b	a	b

a - US Census Bureau, American Fact Finder, PEPSR6H: 2014 Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States, States, and Counties; http://factfinder2.census.gov
b - Percentages were calculated

Race and Ethnicity by Township

The following information about racial and ethnic population diversity at the township level in Davidson County was derived from 2010 US Census data presented in the table below.

- Lexington Township is home to the highest proportion of African Americans (18.8%) followed by Thomasville Township (13.8%).
- Thomasville Township is home to the highest proportion of American Indians/Alaskan Natives (0.7%).
- Lexington Township is home to the highest proportion of Asian, Native Hawaiian or Other Pacific Islanders (3.0%).
- Lexington Township is home to the highest proportion of Hispanics (11.4%), followed by Thomasville Township (10.7%).

Table 6. Population by Race/Ethnicity, by Township (2010 US Census)

Township	Persons Self-Identifying as of One Race											Two or More Races		Hispanic or Latino (of any race)	
	Total Population	White		Black or African American		American Indian and Alaska Native		Asian, Native Hawaiian or Other Pacific Islander		Some Other Race					
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No	%
Abbotts Creek township	12,846	11,161	86.9	895	7.0	52	0.4	238	1.8	280	2.2	220	1.7	87	4.6
Alleghany township	710	693	97.6	0	0.0	4	0.6	3	0.4	0	0.0	10	1.4	10	1.4
Arcadia township	10,799	9,921	91.9	474	4.4	52	0.5	87	0.8	119	1.1	146	1.4	282	2.6
Boone township	4,753	4,432	93.2	77	1.6	21	0.4	28	0.6	138	2.9	57	1.2	232	4.9
Conrad Hill township	9,401	8,981	95.5	131	1.4	38	0.5	49	0.5	95	1.0	107	1.1	211	2.2
Cotton Grove township	9,066	8,127	89.6	513	5.7	28	0.3	117	1.3	163	1.8	118	1.3	332	3.7
Emmons township	7,243	7,108	98.1	12	0.2	15	0.2	19	0.2	28	0.4	61	0.8	87	1.2
Hampton township	1,282	1,194	93.1	41	3.2	6	0.5	6	0.5	16	1.2	19	1.5	30	2.3
Healing Spring township	2,642	2,584	97.8	13	0.5	10	0.4	8	0.3	14	0.5	13	0.5	32	1.2
Jackson Hill township	1,107	1,080	97.6	1	0.1	2	0.2	2	0.2	9	0.8	13	1.2	22	2.0
Lexington township	30,851	21,048	68.2	5,805	18.8	173	0.6	915	3.0	2,289	7.4	621	2.0	3,503	11.4
Midway township	12,181	11,078	90.9	712	5.8	35	0.3	58	0.4	164	1.3	134	1.1	394	3.2
Reedy Creek township	5,088	4,888	96.1	57	1.1	23	0.5	33	0.6	35	0.7	52	1.0	89	1.7
Silver Hill township	6,164	5,945	96.4	67	1.1	18	0.3	49	0.8	46	0.7	39	0.6	140	2.3
Thomasville township	39,010	29,998	76.9	5,384	13.8	257	0.7	353	0.9	2,329	6.0	689	1.8	4,166	10.7
Tyro township	9,025	8,447	93.6	219	2.4	57	0.6	54	0.6	138	1.5	110	1.2	276	3.1
Yadkin College township	710	674	94.9	20	2.8	3	0.4	2	0.3	8	1.1	3	0.4	15	2.1
Davidson County Total	162,878	137,359	84.3	14,421	8.9	794	0.5	2,021	1.2	5,871	3.6	2,412	1.5	10,408	6.4

Note: percentages are calculated from population figures.
Source: US Census Bureau, American Fact Finder, 2010 Census, Summary File DP-1, 2010 Demographic Profile Data, Profile of General Population and Housing Characteristics: 2010; http://factfinder2.census.gov.

Age

Regarding the age (and gender) distribution of the Davidson County population according to 2014 US Census Bureau estimates shown in the following table:

- In terms of both numbers (12,806) and percent (7.8%), the largest segment of the population in Davidson County was the age group 50-54.
- Persons 65 years of age or older composed 16.7% of the population in Davidson County, and 14.6% of the population of NC; persons 19 years of age and younger composed 24.9% of the population in Davidson County, and 25.8% of the population of NC.

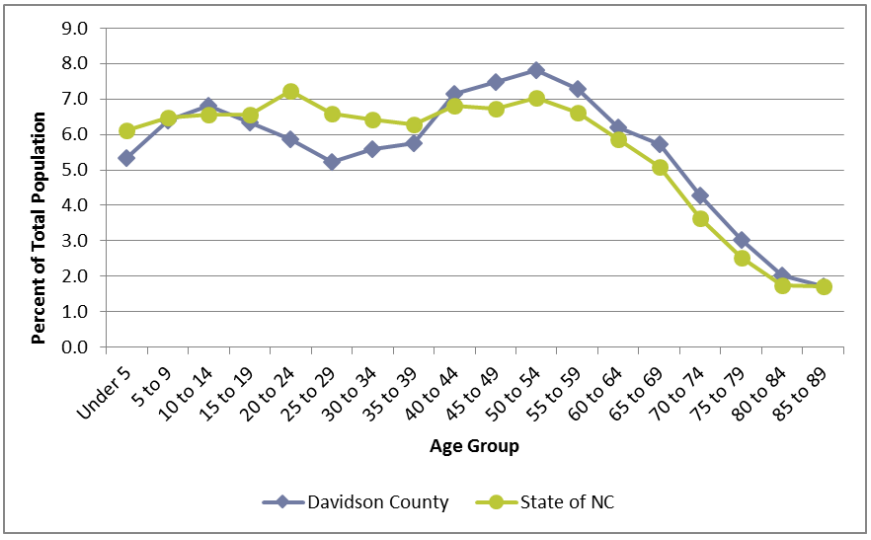
Table 7. Population Distribution by Age and Gender, Number and Percent (2014 US Census Bureau Estimate)

Age Group	Davidson County						North Carolina					
	No. in Population			% of Total Population			No. in Population			% of Total Population		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	164,072	80,435	83,637	100.0	49.0	51.0	9,943,964	4,844,593	5,099,371	100.0	48.7	51.3
Under 5	8,754	4,512	4,242	5.3	2.8	2.6	607,476	310,355	297,121	6.1	3.1	3.0
5 to 9	10,490	5,460	5,030	6.4	3.3	3.1	644,895	328,815	316,080	6.5	3.3	3.2
10 to 14	11,155	5,621	5,534	6.8	3.4	3.4	651,864	332,271	319,593	6.6	3.3	3.2
15 to 19	10,419	5,363	5,056	6.4	3.3	3.1	652,941	333,645	319,296	6.6	3.4	3.2
20 to 24	9,631	5,035	4,596	5.9	3.1	2.8	718,261	376,049	342,212	7.2	3.8	3.4
25 to 29	8,579	4,201	4,378	5.2	2.6	2.7	654,475	324,122	330,353	6.6	3.3	3.3
30 to 34	9,147	4,434	4,713	5.6	2.7	2.9	637,775	312,509	325,266	6.4	3.1	3.3
35 to 39	9,460	4,599	4,861	5.8	2.8	3.0	625,513	305,953	319,560	6.3	3.1	3.2
40 to 44	11,721	5,771	5,950	7.1	3.5	3.6	677,245	331,038	346,207	6.8	3.3	3.5
45 to 49	12,268	6,116	6,152	7.5	3.7	3.7	668,371	327,819	340,552	6.7	3.3	3.4
50 to 54	12,806	6,262	6,544	7.8	3.8	4.0	699,194	338,657	360,537	7.0	3.4	3.6
55 to 59	11,947	5,978	5,969	7.3	3.6	3.6	658,373	314,339	344,034	6.6	3.2	3.5
60 to 64	10,168	4,885	5,283	6.2	3.0	3.2	584,219	273,695	310,524	5.9	2.8	3.1
65 to 69	9,405	4,475	4,930	5.7	2.7	3.0	505,469	236,107	269,362	5.1	2.4	2.7
70 to 74	7,007	3,278	3,729	4.3	2.0	2.3	362,314	165,643	196,671	3.6	1.7	2.0
75 to 79	4,982	2,140	2,842	3.0	1.3	1.7	251,577	109,253	142,324	2.5	1.1	1.4
80 to 84	3,298	1,343	1,955	2.0	0.8	1.2	173,620	69,325	104,295	1.7	0.7	1.0
85 and older	2,835	962	1,873	1.7	0.6	1.1	170,382	54,998	115,384	1.7	0.6	1.2

Source: US Census Bureau, American FactFinder, 2014 Population Estimates, PEPAGESEX: Annual Estimates of the Resident Population for Selected Age Groups by Sex. http://factfinder.census.gov/.
Percentages are calculated.

The next figure compares the age distribution of the NC population to the age distribution of the population in Davidson County according to 2014 US Census Bureau estimates. In Davidson County there was a smaller proportion of persons in most age groups under the age of 44 and a larger proportion of persons over the age of 44 than demonstrated in the state age distribution profile.

Figure 3. Population Distribution by Age, Davidson County and NC (2014)



Source: US Census Bureau, American FactFinder, 2014 Population Estimates, PEPAGESEX: Annual Estimates of the Resident Population for Selected Age Groups by Sex. http://factfinder.census.gov/.
Percentages are calculated.

Age by Township

According to 2010 US Census data presented in the table below:

- Abbotts Creek Township had the highest proportion of persons under the age of 18 (25.7%), followed by Boone Township (25.6%).
- Hampton Township had the highest proportion of persons ages 65 and older (16.9%), followed by Emmons Township (16.3%).

Table 8. Population by Age, by Township (2010 US Census)

Township	Percent of Total Population						
	<18	18-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65 Years and Over
Abbotts Creek township	**25.7**	6.5	**12.8**	15.4	15.9	12.1	11.6
Alleghany township	21.1	6.1	10.3	13.2	16.8	18.0	14.5
Arcadia township	24.4	5.8	9.2	15.8	18.2	13.9	12.7
Boone township	25.6	8.3	11.2	16.4	15.5	12.4	10.6
Conrad Hill township	21.8	7.1	10.6	14.6	15.8	14.3	15.8
Cotton Grove township	21.8	7.2	10.3	13.8	17.1	15.8	14.1
Emmons township	22.4	7.5	10.0	14.4	15.8	13.5	16.3
Hampton township	19.3	5.2	9.0	15.2	15.7	**18.6**	**16.9**
Healing Spring township	20.2	7.0	8.7	15.3	15.9	17.1	15.6
Jackson Hill township	23.8	8.0	8.9	14.0	16.4	14.2	14.6
Lexington township	23.7	**8.5**	12.3	13.5	14.0	12.2	15.8
Midway township	21.5	7.1	9.5	14.5	**17.7**	13.9	15.8
Reedy Creek township	23.9	6.5	10.7	**17.8**	16.2	12.5	12.3
Silver Hill township	24.2	7.3	11.0	15.0	16.1	13.5	12.8
Thomasville township	25.3	7.9	11.9	14.3	14.6	11.5	14.4
Tyro township	24.6	7.3	11.2	15.1	16.4	12.0	13.5
Yadkin College township	21.8	8.2	11.0	14.4	17.6	12.3	14.8
Davidson County Total	23.9	7.5	11.2	14.6	15.6	12.8	14.4

Source: US Census Bureau, American FactFinder, 2010 Census, 2010 Census Summary File 1 (SF-1), Table QT-P1, Age Groups and Sex (geographies as listed); http://factfinder2.census.gov.

Elderly Population

Because the proportion of the Davidson County population age 65 and older is larger than the proportion of that age group statewide, it merits closer examination. The population segment age 65 and older often requires more and different health and social services than the rest of the population, and understanding how that population will change in coming years will be an important consideration in planning to meet the county's future health and human service needs. The following information regarding the elderly population was extracted from the following table, which contains 2000 and 2010 US Census figures and current projections for the years 2020 and 2030 from the NC Office of State Budget and Management.

- The proportion of all age groups in Davidson County age 65 and older will increase through the year 2030, when the number of persons in the county age 65 and older is projected to reach 38,303.
- Though all segments of the elderly population will grow, the segment expected to grow by the largest proportion between 2010 and 2030 is the age group 75-84, which is predicted to grow by 67% over that period, from 4.5% to 7.5% of the county population.

- The proportion of the segment age 65-74 will grow by 49% over the same period, and the proportion of the segment age 85 and older will grow by 53%.

Table 9. Growth Trend for the Elderly (Age 65 and Older) Population, by Decade (2000 through 2030)

Location	2000 Census								
	Total Population (2000)	# Population Age 65 and Older	% Population Age 65 and	# Age 65-74	% Age 65-74	# Age 75-84	% Age 75-84	# Age 85+	% Age 85+
Davidson County	147,246	18,774	12.8	10,498	7.1	6,330	4.3	1,946	1.3
Randolph County	130,454	15,802	12.1	8,782	6.7	5,314	4.1	1,706	1.3
State of NC	8,049,313	969,048	12.0	533,777	6.6	329,810	4.1	105,461	1.3
Source	a	a	d	a	d	a	d	a	d

Location	2010 Census								
	Total Population (2010)	# Population Age 65 and Older	% Population Age 65 and Older	# Age 65-74	% Age 65-74	# Age 75-84	% Age 75-84	# Age 85+	% Age 85+
Davidson County	162,878	23,388	14.4	13,583	8.3	7,350	4.5	2,455	1.5
Randolph County	141,752	19,949	14.1	11,451	8.1	6,221	4.4	2,277	1.6
State of NC	9,535,483	1,234,079	12.9	697,567	7.3	389,051	4.1	147,461	1.5
Source	b	b	d	b	d	b	d	b	d

Location	2020 (Projected)								
	Total Projected Population	# Population Age 65 and Older	% Population Age 65 and Older	# Age 65-74	% Age 65-74	# Age 75-84	% Age 75-84	# Age 85+	% Age 85+
Davidson County	167,341	31,013	18.5	18,389	11.0	9,595	5.7	3,029	1.8
Randolph County	146,606	26,656	18.2	15,677	10.7	8,230	5.6	2,749	1.9
State of NC	10,573,611	1,778,622	16.8	1,056,714	10.0	530,489	5.0	191,419	1.8
Source	c	d	d	c	d	c	d	c	d

Location	2030 (Projected)								
	Total Projected Population	# Population Age 65 and Older	% Population Age 65 and Older	# Age 65-74	% Age 65-74	# Age 75-84	% Age 75-84	# Age 85+	% Age 85+
Davidson County	172,133	38,303	22.3	21,379	12.4	12,935	7.5	3,989	2.3
Randolph County	152,486	33,083	21.7	18,091	11.9	11,296	7.4	3,696	2.4
State of NC	11,629,556	2,262,855	19.5	1,241,404	10.7	765,598	6.6	255,853	2.2
Source	c	d	d	c	d	c	d	d	d

a - US Census Bureau, American FactFinder. Profile of General Demographic Characteristics: 2000 (DP-1), SF1; http://factfinder2.census.gov.
b - US Census Bureau, American FactFinder. *Profile of General Population and Housing Characteristics: 2010 (DP-1);* http://factfinder2.census.gov.
c - NC Office of State Budget and Management, County/State Population Projections. *Age, Race, and Sex Projections, Age Groups - Total, July 1, 2020 and July 1, 2030 County Total Age Groups - Standard;* http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/county_projections.shtm.
d – Percentages were calculated using age group population as numerator and total population as denominator.

Non-English Speaking Population

The foreign-born population in a community is one that potentially does not speak English, and so is of concern to service providers.

In NC, the greatest proportion of the increase in foreign-born persons is represented by immigrants of Hispanic origin; however, statewide there has also been an influx of foreign-born immigrants from Southeast Asia.

According to 2013 US Census Bureau data summarized in the table below:

- There were an estimated 8,305 foreign-born residents residing in Davidson County in 2010. Using a base 2010 total population of 162,878 as the denominator, foreign-born residents made up approximately 5% of the total county population at that time.
- The largest influx of the foreign-born population in Davidson County—2,932 persons—arrived between 1990 and 1999. The population of foreign-born residents grew little after 2009.

Table 10. Growth of the Foreign-Born Population (Before 1990 through 2013)

Location	Number of Persons Arriving				%Increase 2000-2013
	Before 1990	1990-1999	2000-2009	After 2010	
Davidson County	2,728	2,932	2,645	78	0.9
Randolph County	2,469	4,221	3,675	44	0.4
State of NC	225,160	241,832	324,570	42,765	5.4

Source: US Census Bureau, American Fact Finder, 2013 ACS 5-Year Estimates, Table B05005: Year of Entry by Citizenship Status in the United States. http://factfinder2.census.gov.
Note: Percent increase is calculated.

Linguistic Isolation

"Linguistic isolation", reflected as an inability to communicate because of a lack of language skills, can be a barrier preventing foreign-born residents from accessing needed services. The US Census Bureau tracks linguistically isolated households according to the following definition:

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

The following information about linguistically isolated households is derived from the 2009-2013 five-year US Census Bureau estimates presented in the next table.

- Of the 64,580 Davidson County households included in the statistic, an estimated 4,471 (6.9%) spoke a language other than English. An estimated 1,311 of these households were linguistically isolated; in 86% of these cases the isolated residents were Spanish-speaking.

Table 11. Household Language by Linguistic Isolation
(Five-Year Estimate, 2008-2012)

Location	Total Households	Number of Households								
		English-Speaking	Spanish-Speaking		Speaking Other Indo-European Languages		Speaking Asian or Pacific Island Languages		Speaking Other Languages	
			Isolated	Not isolated	Isolated	Not isolated	Isolated	Not isolated	Isolated	Not isolated
Davidson County	64,580	60,109	1,129	2,105	13	433	46	523	123	99
Randolph County	54,350	49,403	1,140	2,889	94	460	109	212	0	43
State of NC	3,715,565	3,316,345	73,130	167,418	7,872	72,220	12,867	43,169	2,695	16,849

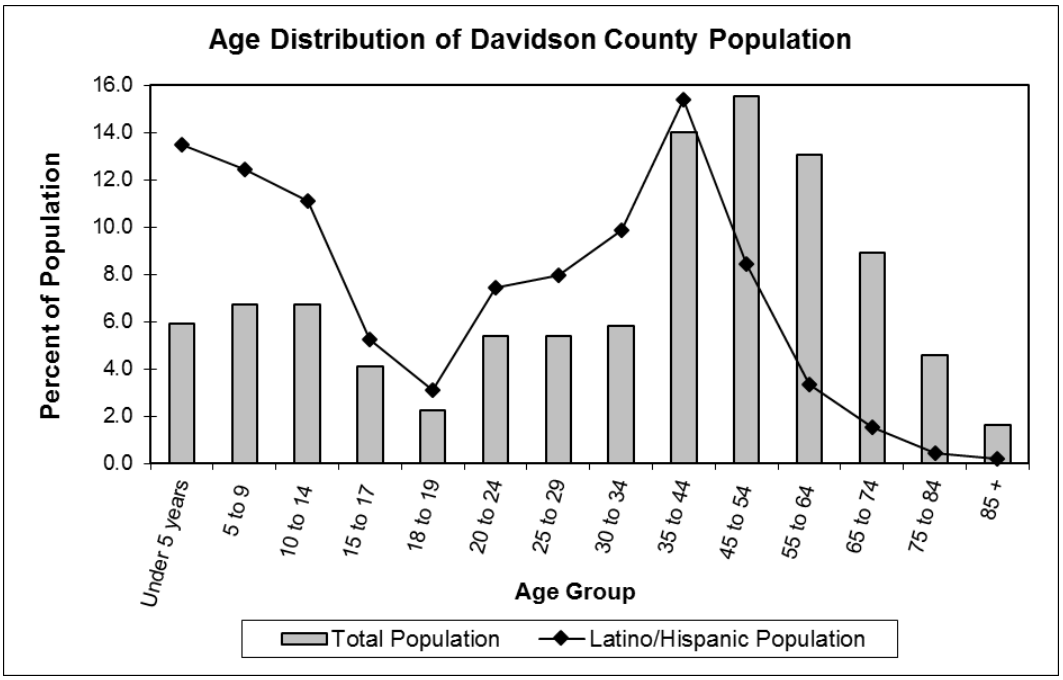
Source: US Census Bureau, American Fact Finder, American Community Survey, ACS 2013 5-Year Estimates, Table B16002: Household Language by Linguistic Isolation; http://factfinder2.census.gov.

Age Distribution of the Latino Population

The following figure is a graphic depiction of the population profiles, by age group, of the total Davidson County population and the Hispanic/Latino population. These data are based on the 2009-2013 population estimate via the US Census Bureau American Community Survey for 2013.

- In Davidson County all age groups under the age of 44 were present in higher proportions in the Hispanic/Latino population than in the overall county population. There were lower proportions for Hispanics/Latinos than for the general population in all the other age groups.
- The highest proportions of the Hispanic/Latino population in Davidson County occurred in the Under 5 and 35-44 age groups.

Figure 4. Age Distribution of Overall and Latino Populations in Davidson County (2013)



Sources - US Census Bureau, American Fact Finder, 2013 ACS 5-Year Estimates, Table B01001: Sex by Age, and Sex by Age (Hispanic or Latino); http://factfinder.census.gov/.

Special Populations

Military Veterans

A population group that sometimes needs special health services is military veterans. The next table summarizes estimates regarding that population for the aggregate period 2009-2013.

- Veterans composed 9.4% of Davidson County's overall adult civilian population in the period cited, lower than the NC (9.9%) and Randolph County (9.6%) averages, but higher than the national average (9.0%).
- Larger proportions of the veterans in Davidson County were age 65 and older (45.0%) than in NC as a whole (39.1%) in Randolph County (42.6%), or nationally (43.7%).
- The Veterans Administration Medical Center nearest to Davidson County is the W.G. (Bill) Hefner VA Medical Center in Salisbury, NC. Others are located in Asheville, Durham, and Fayetteville.
- VA Outpatient Clinics are located in Hickory, Fayetteville, Raleigh and Supply, NC; Community-Based Outpatient Clinics serving veterans are located in Winston-Salem, Charlotte, Durham, Elizabeth City, Franklin, Goldsboro, Hamlet, Jacksonville, Morehead City, Pembroke, Raleigh, Rutherfordton, and Wilmington, NC; and Vet Centers are located in Greensboro, Charlotte, Fayetteville, Greenville, and Jacksonville, NC (1).

Table 12. Veteran Status of Population (Five-Year Estimate, 2009-2013)

Location	Civilian Population 18 years and over					% Veterans by Age				
	Total	# Non-Veterans	% Non-Veterans	# Veterans	% Veterans	18 to 34 years	35 to 54 years	55 to 64 years	65 to 74 years	75 years and over
Davidson County	124,717	113,046	90.6	11,671	9.4	4.8	23.3	26.9	24.3	20.7
Randolph County	107,575	97,270	90.4	10,305	9.6	7.3	25.2	25.0	21.4	21.2
State of NC	7,282,130	6,557,835	90.1	724,295	9.9	8.6	28.9	23.3	20.4	18.7
National Total	236,576,902	215,313,123	91.0	21,263,779	9.0	8.1	25.1	23.1	21.2	22.5

Source: US Census Bureau, American Fact Finder, American Community Survey, 2013 ACS 5-Year Estimate, Table S2101: Veteran Status; http://factfinder2.census.gov.

Blind/Visually Impaired Population

The table below presents the number of blind and visually-impaired persons in the three jurisdictions being compared.

Table 13. Blind/Visually Impaired Populations (2011)

Location	Number Blind/Visually Impaired (2011)
Davidson County	334
Randolph County	260
State of NC	20,972

Source: Log into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 520); http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show.

Special Needs Registry

In order to assist residents with special needs in the event of an emergency, county Emergency Management Officials and their community partners develop a special needs registry to help emergency workers know about residents that may have difficulties managing for themselves during a disaster such as a hurricane, flood, winter storm, power outage, disease outbreak or other catastrophic event. Persons volunteer to be included on the registry and have the choice to accept or decline assistance when it is offered.

At the present time there is no Special Needs Registry in Davidson County (2).

CIVIC ENGAGEMENT

Electoral Process

One measure of a population's engagement in community affairs is its participation in the electoral process. The table below summarizes current voter registration figures. Although historical voter turnout data (by percent) was once freely available from the NC State Board of Elections, it is no longer available from that source. Neither is it available from the Davidson County Board of Elections. Log Into North Carolina (LINC) provides the limited data available, and it does not include composite data except for presidential election years.

Registered Voters

- The proportion of the overall voting age population registered to vote in Davidson County in August, 2015 was 75.8%, lower than the state percentage of 82.9% but higher than the Randolph County percentage of 74.1%.

Table 14. Registered Voters, by Race/Ethnicity, Number and Percent (As of August, 2015)

Location	Estimated Voting Age Population (2012)	Number and Percent of Voting Age Population Registered to Vote (2015)[1]											
		Total		White		Black		American Indian		Other		Hispanic	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Davidson County	131,377	99,641	75.8	87,158	66.3	9,385	7.1	228	0.2	2,870	2.2	1,086	0.8
Randolph County	118,915	88,135	74.1	79,047	66.5	5,568	4.7	268	0.2	3,252	2.7	1,770	1.5
State of NC	7,677,231	6,365,462	82.9	4,490,653	58.5	1,430,702	18.6	52,058	0.7	392,049	5.1	125,200	1.6
Source:	a	b	c	b	c	b	c	b	c	b	c	b	c

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

a - Log Into North Carolina (LINC) Database, Topic Group Government, Voters and Elections, Voting Age Population (Data Item 1714), 2012; http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

b - NC State Board of Elections, Voter Registration, Voter Statistics, Voter Registration Statistics, By County; http://www.app.sboe.state.nc.us/webapps/voter_stats/.

c - Percentages are calculated

Table 15. Voter Turnout in General Elections (2008 and 2012)

Location	% of Registered Voters that Voted	
	2008	2012
Davidson County	68.62	69.64
Randolph County	66.57	69.76
State of NC	68.17	71.90

Source - Registered Voters (125), % Registered Voters Voting in General Election (1717) for the Years as Noted. North Carolina Office of State Budget and Management, State Data Center, Log Into North Carolina (LINC): http://linc.state.nc.us/.

RELIGIOUS LIFE

The fabric of a community is often maintained and repaired through its citizens' participation in organized religion. Increasingly, health and human service providers have come to realize that the faith community can be an important partner in assuring the health and well-being of at least its members if not larger segments of the population. The following table lists the religious bodies in Davidson County as of 2010.

Table 16. Religious Bodies in Davidson County (2010)

Religious Bodies in Davidson County	Tradition	Family	Number of Congregations	Number of Adherents
African Methodist Episcopal Zion Church	Black Protestant	Methodist/Pietist	5	774
Assemblies of God	Evangelical Protestant	Pentecostal	5	661
Bahá'í	Other	Other Groups	0	41
Buddhism, Theravada	Other	Other Groups	1	396
Catholic Church	Catholic	Catholicism	2	2,412
Christian and Missionary Alliance	Evangelical Protestant	Holiness	2	565
Church of God (Cleveland, Tennessee)	Evangelical Protestant	Pentecostal	5	751
Church of God of Prophecy	Evangelical Protestant	Pentecostal	4	168
Church of Our Lord Jesus Christ of the Apostolic Faith, Inc.	Black Protestant	Pentecostal	1	---
Church of the Brethren	Evangelical Protestant	European Free-Church	1	88
Church of the Nazarene	Evangelical Protestant	Holiness	1	40
Churches of Christ	Evangelical Protestant	Baptist	5	385
Community of Christ	Other	Latter-day Saints	1	137
Congregational Holiness Church	Evangelical Protestant	Pentecostal	1	16
Convention of Original Free Will Baptists	Evangelical Protestant	Baptist	2	301
Episcopal Church	Mainline Protestant	Episcopalianism/Anglicanis	2	325
Evangelical Association of Reformed, and Congregational Christian Churches	Evangelical Protestant	Presbyterian-Reformed	1	---
Evangelical Lutheran Church in America	Mainline Protestant	Lutheran	9	2,379
Evangelical Methodist Church	Evangelical Protestant	Methodist/Pietist	1	---
Friends United Meeting*	Mainline Protestant	European Free-Church	1	66
International Pentecostal Holiness Church	Evangelical Protestant	Pentecostal	3	735
Jehovah's Witnesses	Other	Adventist	3	---
Moravian Church in America--Southern Province	Mainline Protestant	Methodist/Pietist	1	79
National Association of Free Will Baptists	Evangelical Protestant	Baptist	7	884
National Baptist Convention, USA, Inc.	Black Protestant	Baptist	2	612
National Missionary Baptist Convention, Inc.	Black Protestant	Baptist	1	184
Non-denominational	Evangelical Protestant	----	36	7,786
Pentecostal Fire-Baptized Holiness Church	Evangelical Protestant	Pentecostal	3	---
Presbyterian Church (U.S.A.)	Mainline Protestant	Presbyterian-Reformed	5	968
Presbyterian Church in America	Evangelical Protestant	Presbyterian-Reformed	1	450
Progressive National Baptist Convention, Inc.	Black Protestant	Baptist	1	343
Salvation Army	Evangelical Protestant	Holiness	1	181
Seventh-day Adventist Church	Evangelical Protestant	Adventist	3	236
Southern Baptist Convention	Evangelical Protestant	Baptist	49	17,677
United Church of Christ	Mainline Protestant	Presbyterian-Reformed	16	4,267
United Methodist Church	Mainline Protestant	Methodist/Pietist	59	19,949
United Pentecostal Church International	Evangelical Protestant	Pentecostal	1	---
Wesleyan Church	Evangelical Protestant	Holiness	9	1,931
Total			251	65,787

Source: Association of Religious Data Archives (ARDA), US Congregational Membership: Reports, County Membership Report, Browse Reports, Counties; http://www.thearda.com/rcms2010/.

COMMUNITY SERVICES AND ORGANIZATIONS

Law Enforcement

Davidson County Sheriff's Department

The Davidson County Sheriff's Department is headquartered at Davidson County Government offices in Lexington and serves the whole of the county. Units within the department include:

- **Civil Division** - The Civil Division is responsible for the service of court-issued orders for civil judgements, subpoenas, jury pool notification, and courtroom security.
- **Criminal Investigation Division** - The Criminal Investigation Division is a unit of ten specially trained investigators who conduct intensive and in-depth investigations into criminal activity for the purpose of apprehension and prosecution of the persons who committed those crimes.
- **Detention Center/Jail** - The Sheriff's Office is responsible for the housing of any person who is under indictment, or ordered held in custodial care by a judicial official. The Davidson County Jail maintains housing for an average of 280 inmates daily. This includes meals, exercise, mail service, phone access, visitation, and the fielding of inquiries regarding an assortment of subjects. The Jail is manned 24 hours-a-day, every day of the year.
- **Patrol Division** - The Sheriff's Office provides law enforcement services 24 hours-a-day, every day of the year. The primary provider of this service is the Patrol Division, which places one or more deputies into all areas of the county. These deputies are trained to provide information, assistance, and resolution to problems which may require their attention. The Canine Division consists of seven handlers and their canines. There is a canine available for use 24 hours-a-day, 7 days-a-week. The Marine Area Patrol works to avert hazards in and around the county's waterways, with deputies regularly patrolling High Rock Lake and its tributaries.
- **School Resource Officers** - Every middle school and high school in Davidson County has a specially trained deputy sheriff assigned to the campus as a liaison for security, information, and communication between the school and the Sheriff's Office.
- **Vice and Narcotics Division** - The Sheriff's Office has six full-time detectives specifically assigned to the enforcement and elimination of illegal drug use in the county.
- **Technical Services Division** - The Technical Services Division consists of units which provide specialized support to the citizens of Davidson County. It provides specialized Crime Scene Investigation personnel, Crime Prevention specialists, Evidence and Property Control, Animal Control, Telecommunication, Records, and Administrative Office Support (3).

Police Departments in Davidson County

Each of the three largest municipalities in Davidson County, Thomasville, Lexington and Denton, maintain their own police departments.

Lexington Police Department

The Lexington Police Department personnel include 54 sworn officers, 11 civilians, 5 reserve officers and 4 school guards. The department is made up of three divisions: Administration, Uniformed, and Investigations.

- **Uniformed Division** – The Uniformed Division that is responsible for providing 24-hour protection by responding to 911 emergency calls, enforcing traffic laws and investigating traffic crashes. A Special Operations unit within the division addresses neighborhood problems, traffic complaints, school security, animal issues and parking enforcement.
- **Investigations Division** – This division is responsible for investigating major crimes and drug investigations. The division is made of two teams, detectives and vice. Detectives handle serious crime including murder, rape, robbery, burglary, larceny, aggravated assault, auto theft and fraud. Vice is responsible for drug, alcohol and prostitution violations (4).

Thomasville Police Department

The Thomasville Police Department is structured into three bureaus (Administrative Bureau, Investigative/Support Services Bureau and Field Operations Bureau) that include the following operational units:

- **Special Operations Unit -** The Special Operations Unit is responsible for the enforcement of vice laws and the investigation of vice activities of an organized or commercial nature such as gambling, prostitution, and liquor law violations as well as the investigation of illegal narcotic and controlled substance sales, possession, and use, including illegal use of prescription drugs. It also conducts special education and enforcement programs targeted at drug abuse reduction.
- **Criminal Investigations Unit** - The Criminal Investigations Unit is responsible for investigating all death cases, as well as attempted suicides; all reported robbery offenses, assaults, sex-related offenses, adult missing person cases, and any reports of abuse or exploitation of elderly persons in the cases involving financial crimes, which include forgery, fraud and false pretense. One of the crime scene investigator's primary responsibilities is responding to crime scenes and providing field support related to evidence collection, processing and crime scene investigations. The Unit's Juvenile Services Division investigates offenses reportedly committed by or against juveniles, including arson, all cases of suspected Sudden Infant Death Syndrome (SIDS), and other cases in which the victim is under the age of sixteen years. The Juvenile Services Squad conducts conferences concerning juvenile behavior and forwards reports to juvenile court. The Crime Stoppers Program is also organized within this division.
- **Community Liaison Unit** – includes Animal Control, School Resource Officers, and Housing Authority Officers.
- **Traffic Services Unit** – Includes Traffic Enforcement, Bike Safety, Speed Surveying and Crash Reconstruction (5).

Denton Police Department

The Denton Police Department is comprised of 6 full-time officers, 6 reserve officers and 1 civilian. This group of professionals provide law enforcement and community services to the citizens of Denton twenty-four hours a day, seven days a week. The Denton police department offers weekly home visits and phone calls to check on the well-being of area residents, including elders, persons who deem themselves a fall risk, shut-ins and anyone else with any other disability that may need an extra watchful eye (6).

Fire Departments

Fire protection in Davidson County is provided by the seven municipal and 28 volunteer fire departments listed in the following table.

Table 17. Fire Departments Serving Davidson County (September, 2015)

Department Name	Location
Municipal Fire Departments	
Station 1, Lexington Fire	Lexington (Uptown Station)
Station 2, Lexington Fire	Lexington
Station 3, Lexington Fire	Lexington (Northside Station)
Station 21, Thomasville Fire	Thomasville (Howard Matthews Fire Station) - Headquarters
Staion 22, Thomasville Fire	Thomasville
Station 23. Thomasville Fire	Thomasville
Station 24, Thomasville Fire	Thomasville
Volunteer Fire Departments Receiving Funds from Davidson County	
Station 7	Badin Lake Volunteer Fire Department, Inc.
Station 15	Griffith Volunteer Fire Department, Inc.
Station 29	Horneytown Volunteer Fire Department of Forsyth County, Inc.
Station 31	Churchland Rural Fire Department, Inc.
Station 33	Arcadia- Reedy Creek-Hampton Volunteer Fire and Rescue Department, Inc.
Station 35	Gumtree Fire and Rescue. Inc.
Station 37	Central Fire Department of Davidson County, Inc.
Station 39	Town of Denton Volunteer Fire Department
Station 41	Linwood Rural Fire Department, Inc.
Station 43	Thomasville Volunteer Fire Department
Station 46	South Lexington Volunteer Fire Deparatment, Inc.
Station 48	Healing Springs Fire Department, Inc.
Station 51	Reeds Fire Department, Inc.
Station 54	Pilot Fire Department and Community Center of Davidson County, Inc.
Station 56	Southmont Fire Department, Inc.
Station 58	South Davidson Fire Department, Inc.
Station 61	Wallburg Fire and Rescue, Inc.
Station 64	North Lexington Triangle Fire Department, Inc.
Station 67	Tyro Rural Fire Department, Inc.
Station 71	West Lexington Volunteer Fire and Rescue Department, Inc.
Station 73	Welcome Fire Department, Inc.
Station 76	Holly Grove Fire Department, Inc.
Station 86	Midway Fire and Rescue Department, Inc.
Station 91	Silver Valley Fire Department, Inc., Station 1
Station 92	Silver Valley Fire Department, Inc., Station 2
Staion 96	Hasty Fire and Rescue, Inc.
Station 10	The Clemmons Fire Department, Inc., Forsyth County
Station 14	The Clemmons Fire Department, Inc., Forsyth County

Sources: NC Fire Station Lists by County, http:www.carolinasfirepage.com/members/nc_ctys.html#pers/ and Davidson County Government website, Volunteer Fire Departments; http://www.co.davidson.nc.us/dcg/VolFireDepaartments.aspx.

Community Resources

Many government agencies and community organizations maintain on-line resource directories to help the citizens of Davidson County locate the organizations and services they need. Among them are:

Davidson County Department of Senior Services Community Resource Directory

The county department of Senior Services maintains an on-line directory of resources of interest—but not limited—to senior citizens. It can be located via the following URL: http://www.co.davidson.nc.us/media/PDFs/20/SrSvcsCOMMUNITYRESOURCEDIRECTORY032311.pdf

Davidson County Health Department Resource List

The Davidson County Health Department maintains an on-line resource list arranged topically by kind of service offered. It can be located at: http://www.dchdnc.com/Docs/HealthED/ResourceList%20.pdf.

United Way of Davidson County

The United Way maintains an alphabetized list of links to partner agencies, most of which provide advocacy or direct assistance to the public. The list is accessed via: http://uwdavidson.org/Partner_Agencies.php.

2-1-1 of Davidson County

With the help of the United Way, many communities in NC, including Davidson County, help maintain a local "2-1-1" phone information system to help citizens locate health and human services and resources as varied as employment assistance, food pantries, or homeless shelters. A call to NC 2-1-1 is free, confidential, available all day, every day, and in any language.

In addition, there is an on-line gateway to NC 2-1-1 that provides links to a listing of county resources via the following URL: http://www.nc211.org/index.php/component/cpx/?task=search.advanced.

Davidson County Assistance Programs

This unnamed source provides information on local charities, non-profit agencies, and other organizations that can provide economic assistance, such as help in paying rent, mortgage, and utility bills, finding free food, and other forms of aid. The website is indexed by type of aid needed. It can be located at: http://www.needhelppayingbills.com/html/davidson_county_assistance_pro.html.

Davidson County Government Services

The Davidson County government website provides a page with links to a directory of the programs and services provided by twenty-six county departments, covering topics like Planning, Administration, Taxes, Recycling, Child Care, Permits, Deeds, Senior Care, Health and Well Being, Transportation and much more. The Directory also shows where these services are located in the county and how to find them. It includes maps and driving directions to services, as well as phone numbers and the times services are available. The URL is: http://www.co.davidson.nc.us/dcg/ProgramsAndServices.aspx.

Thomasville Area Chamber of Commerce

The Thomasville Area Chamber of Commerce website offers a homepage “tab” labeled “Area Information” that provides links to community services and health and wellness resources. The tab is located on the Chamber’s homepage at:
http://www.thomasvillechamber.net/#.

Lexington Chamber of Commerce

The Lexington Area Chamber of Commerce offers a simple list of community resources on its website, located at:
http://www.lexingtonchamber.net/community_resources.html.

CHAPTER TWO: SOCIOECONOMIC DATA

ECONOMIC CLIMATE

Tier Designation

The NC Department of Commerce annually ranks the state's 100 counties based on economic well-being and assigns a Tier Designation. The 40 most distressed counties are designated as Tier 1, the next 40 as Tier 2, and the 20 least distressed as Tier 3. The Tier system is incorporated into various state programs, including a system of tax credits (Article 3J Tax Credits) that encourage economic activity and business investment in less prosperous areas of NC. In 2015 Davidson County was assigned the Tier 2 designation; its peer Randolph County also was assigned the Tier 2 designation (7).

County Revenue Indicators

For the period covering FY2005-2006 through FY2013-2014, gross collections of state sales and use taxes in Davidson County were only about 82% of the average for all NC counties, as shown in the table below. These taxes provide some of the money available to the county to fund public services.

Table 18. NC State Sales and Use Tax Gross Collections (FY2005-2006 through FY2012-2013)

Location	FY2005-06	FY2006-07	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Davidson County	38,184,094	40,495,471	38,524,918	37,863,062	43,283,985	48,381,914	43,746,219	42,680,654	44,215,974
Randolph County	30,429,444	32,826,087	31,685,956	32,683,137	40,473,266	48,254,281	41,952,821	41,068,771	41,852,277
State of NC (avg calculated)	45,605,858	46,004,427	46,029,546	43,169,210	50,252,290	55,679,535	49,906,563	50,164,100	62,256,514

Source: NC Department of Revenue, Tax Publications and Reports, State Sales and Use Tax Reports by Fiscal Year, by County Summary; http://www.dornc.com/publications/fiscalyearsales.html.

Income

While revenue indicators give us some idea of economic health from the community economic development standpoint, income measures tell us about the economic well-being of individuals in the community. Among the more useful income measures are personal income, family income, and household income. For comparison purposes, personal income is calculated on a per capita basis; family income and household income are viewed as a median value for a target population. The following are definitions of each of the three income categories:

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

relative, the household would include all three people, but the family would be just the couple.

The next table summarizes recent (August, 2015) income data for Davidson County and its comparators. Among these jurisdictions:

- Projected 2014 per capita personal income in Davidson County was $3,501 *lower* than the comparable state average.
- Projected 2014 median household income in Davidson County was $4,746 *lower* than the comparable state average.
- Estimated 2013 median family income in Davidson County was $2,710 *lower* than the comparable state average.

Table 19. Income Measures
(August, 2015)

Location	2014 Projected Per Capita Income [1]	Per Capita Income Difference from State	2014 Projected Median Household Income [2]	Median Household Income Difference from State	2013 Est Median Family Income [2]	Median Family Income Difference from State
Davidson County	$21,783	-$3,501	$41,588	-$4,746	$54,218	-$2,710
Randolph County	$20,869	-$4,415	$41,015	-$5,319	$50,234	-$6,694
State of NC	$25,284	n/a	$46,334	n/a	$56,928	n/a

[1] State number comes from the US Census Bureau, American Fact Finder. Table B19301: Per Capita Income in the Past 12 Months. 2013 ACS 5-Year Estimates. http://factfinder2.census.gov
[2] State number comes from the US Census Bureau, American Fact Finder. Table S1903: Median Income in the Past 12 Months. 2013 ACS 5-Year Estimates. http://factfinder2.census.gov
Source: NC Department of Commerce, AccessNC, Community Demographics, County Report, County Profile, http://accessnc.commerce.state.nc.us/EDIS/page1.html.

Employment

The following definitions will be useful in understanding the data in this section.

- *Labor force*: includes all persons over the age of 16 who, during the week, are employed, unemployed or in the armed services.
- *Unemployed*: civilians who are not currently employed but are available for work and have actively looked for a job within the four weeks prior to the date of analysis; also, laid-off civilians waiting to be called back to their jobs, as well as those who will be starting new jobs in the next 30 days.
- *Unemployment rate*: calculated by dividing the number of unemployed persons by the number of people in the civilian labor force.

Employment by Sector

The table below details the various categories of industry by sector in Davidson County and its jurisdictional comparators for 2014, showing the number employed in each sector, the percentage of all employment that that number represents, and the average annual wage for people employed in each sector.

- The industry in Davidson County that employed the largest percentage of the workforce (22.06%) was Manufacturing, with an average weekly wage of $803.
- The Retail Trade sector accounted for the second largest percentage of the Davidson County workforce, at 12.04% (average weekly wage of $470), followed closely by Health Care and Social Assistance at 11.45% (average weekly wage of $690).
- Statewide, the sector employing the largest percentage of the workforce was Health Care & Social Assistance (14.29%), followed by Retail Trade (11.79%) and Manufacturing (11.06%).
- The average weekly wage for all sectors in Davidson County was $818. $116 *less* than the average weekly wage for all sectors in NC as a whole.

Table 20. Insured Employment and Wages by Sector (Annual Summary, 2014)

Sector	Davidson County			Randolph County			North Carolina		
	Avg. No. Employed	%Total Employment in Sector	Average Weekly Wage per Employee	Avg. No. Employed	%Total Employment in Sector	Average Weekly Wage per Employee	Avg. No. Employed	%Total Employment in Sector	Average Weekly Wage per Employee
Agriculture, Forestry, Fishing & Hunting	56	0.14	$550	250	0.57	$531	28,754	0.71	$616
Mining	28	0.07	$560	13	0.03	$961	2,867	0.07	$934
Utilities	133	0.32	$1,007	129	0.29	$1,431	14,905	0.37	$1,625
Construction	1,566	3.79	$680	1,891	4.31	$751	178,986	4.41	$876
Manufacturing	9,114	22.06	$803	15,585	35.52	$723	448,623	11.06	$1,061
Wholesale Trade	2,125	5.14	$824	1,665	3.79	$798	176,928	4.36	$1,282
Retail Trade	4,977	12.04	$470	4,010	9.14	$468	478,478	11.79	$504
Transportation & Warehousing	1,520	3.68	$772	691	1.57	$784	132,682	3.27	$886
Information	169	0.41	$767	262	0.60	$785	73,577	1.81	$1,411
Finance & Insurance	602	1.46	$866	810	1.85	$856	153,707	3.79	$1,635
Real Estate & Rental & Leasing	336	0.81	$651	230	0.52	$624	52,383	1.29	$841
Professional, Scientific & Technical Services	617	1.49	$876	568	1.29	$720	210,768	5.19	$1,388
Management of Companies & Enterprises	1,130	2.73	$1,597	491	1.12	$701	80,461	1.98	$1,919
Administrative & Waste Services	2,802	6.78	$422	2,310	5.26	$440	284,159	7.00	$622
Educational Services	4,201	10.17	$650	3,725	8.49	$654	370,960	9.14	$795
Health Care & Social Assistance	4,733	11.45	$690	4,381	9.98	$675	579,594	14.29	$880
Arts, Entertainment & Recreation	660	1.60	$1,068	390	0.89	$372	65,625	1.62	$584
Accommodation & Food Services	3,551	8.59	$260	3,228	7.36	$253	382,672	9.43	$300
Other Services	971	2.35	$491	1,022	2.33	$481	102,771	2.53	$587
Public Administration	2,032	4.92	$727	2,229	5.08	$708	238,343	5.87	$859
TOTAL ALL SECTORS	41,323	100.00	$818	43,880	100.00	$807	4,057,243	100.00	$934

Source - NC Employment Security Commission, Labor & Economic Analysis Division (LEAD), 4D website. Quarterly Census Employment and Wages (QCEW), 2014 Annual. http://esesc23.esc.state.nc.us/d4/.

* - Disclosure suppressed

[1] Percent Total Employment in Sector values were calculated by dividing the Avg. Number of Employed within a sector by the total employees in All Sectors.

Largest Employers

The following table lists the largest 25 employers in Davidson County as of the end of the 4th Quarter, 2014.

- Only one of the employers listed—the Davidson County Board of Education—employed more than 1,000 people.
- Ten employers listed employed between 500 and 999 people.

Table 21. Largest 25 Employers in Davidson County
(Fourth Quarter, 2014)

Rank	Employer	Industry	No. Employed
1	Davidson County Board of Education	Education & Health Services	1000+
2	County of Davidson	Public Administration	500-999
3	Atrium Windows and Doors Inc	Manufacturing	500-999
4	Old Dominion Freight Line	Trade, Transportation & Utilities	500-999
5	Wal-Mart Associates Inc	Trade, Transportation & Utilities	500-999
6	Thomasville Medical Center	Education & Health Services	500-999
7	Food Lion	Trade, Transportation & Utilities	500-999
8	Century Employer Organization LLC	Professional & Business Services	500-999
9	Davidson County Community College	Education & Health Services	500-999
10	Lexington Medical Center	Education & Health Services	500-999
11	Lexington City Schools	Education & Health Services	500-999
12	Jeld-Wen	Manufacturing	250-499
13	Thomasville City Schools	Education & Health Services	250-499
14	Vitacost Com Inc	Trade, Transportation & Utilities	250-499
15	Ppg Instrustries	Manufacturing	250-499
16	Asco Power Technologies Lp	Trade, Transportation & Utilities	250-499
17	Rcr Race operations LLC	Leisure & Hospitality	250-499
18	City of Lexington	Public Administration	250-499
19	Leggett & Platt Incorporated	Manufacturing	250-499
20	Lowes Home Centers Inc	Trade, Transportation & Utilities	250-499
21	City of Thomasville	Public Administration	250-499
22	United Church Homes and Services	Trade, Transportation & Utilities	250-499
23	Facility Logistic Services Inc	Trade, Transportation & Utilities	250-499
24	Pergo LLC	Manufacturing	250-499
25	Shelba D Johnson Trucking Inc	Trade, Transportation & Utilities	250-499

Source: NC Department of Commerce, Economic Intelligence Development System (EDIS), Business Data, Top Employers, by County; http://accessnc.commerce.state.nc.us/EDIS/business.html.

Travel for Employment

Data gathered by the US Census Bureau on how many resident workers travel outside the county for employment can help demonstrate whether or not a county provides adequate employment opportunities for its own citizens.

- According to the estimate for 2009-2013 shown in the table below, less than half—47.1%—of Davidson County resident workers were employed within the county.

Table 22. Place of Work for Resident Workers Age 18 and Older
(Five-Year Estimate, 2009-2013)

Location	Number and Percent of Residents										
	Total # Workers Over 16	# Working in NC	% Working in NC	# Working in County	% Working in County	# Working out of County	% Working out of County	# Working out of State	% Working out of State	Total # Leaving County for Work	Total % Leaving County for Work
Davidson County	70,120	69,341	98.9	33,019	47.1	36,322	51.8	779	1.1	37,101	52.9
Randolph County	60,804	60,384	99.3	34,978	57.5	25,406	41.8	420	0.7	25,826	42.5
State of NC	4,227,986	4,121,984	97.5	3,039,407	71.9	1,082,577	25.6	106,002	2.5	1,188,579	28.1

Note: percentages are calculated and may include some rounding error.
Source: US Census Bureau, American Fact Finder, American Community Survey, 2013 ACS 5-Year Estimate, Table B08007: Sex of Workers by Place of Work, State and County Level; http://factfinder2.census.gov.

Modes of Transportation to Work

Besides serving as an indicator of environmentalism, the mode of transportation workers use to get to their places of employment can also point to the relative convenience of local workplaces and the extent of the local public transportation system. The next table compares data on modes of transportation to work from the 2000 US Census and a Census Bureau estimate for 2009-2013.

- Very few Davidson County workers used public transportation to get to work in 2000, and the number for 2009-2013 was even smaller.
- The number of Davidson County workers who carpooled decreased 40% between 2000 and 2009-2013.
- The number of Davidson County workers who walked to work increased 3% over the period cited.
- The number of Davidsion County workers who worked at home increased 36% over the same period.

Table 23. Modes of Transportation to Work
(2000 Count and 2009-2013 Five -Year Estimate)

Location	Number of Persons											
	Drove Alone		Carpooled		Used Public Transportation		Walked		Taxicab, motorcycle, bicycle or other means		Worked at Home	
	2000	2009-2013	2000	2009-2013	2000	2009-2013	2000	2009-2013	2000	2009-2013	2000	2009-2013
Davidson County	59,688	60,663	10,480	6,328	193	149	775	802	597	316	1,223	1,660
Randolph County	53,531	51,858	9,159	6,267	47	48	925	822	201	397	1,381	1,412
State of NC	3,046,666	3,428,471	538,264	439,219	29,716	45,765	74,147	76,768	46,029	53,414	102,951	184,349
Source:	a	b	a	b	a	b	a	b	a	b	a	b

a - US Census Bureau, American Fact Finder, 2000 US Census Data Sets, Summary File 3, Detailed Tables, Means of Transportation to Work for Workers 16 Years and Over; http://factfinder2.census.gov.
b - US Census Bureau, American Fact Finder, American Community Survey, 2013 ACS 5-Year Estimates, Data Profiles, County, North Carolina (Counties as listed); http://factfinder2.census.gov.

Public Transportation in Davidson County

Davidson County Transportation System (DCTS) provides non-emergency medical transportation for Davidson County residents that are qualified Medicaid recipients. DCTS also provides transportation services for Senior Services nutrition programs, medical appointments and employment. DCTS also oversees contracted transportation services for the Workshop of Davidson and the Life Center of Davidson County. These services are provided as Demand Response (para-transit) and Subscription (standing appointments) services.

In order to serve residents and anyone visiting in the Davidson County area, DCTS offers flex route service in the City of Lexington and regular flex route service in the City of Thomasville. A third flex route is a connector route between Lexington and Thomasville providing service to both County government facilities and Davidson County Community College. DCTS flex routes allows DCTS bus vehicles to deviate from the flex route alignment or regular route up to ¼ mile in either direction. This type of route provides collection and drop off service to passengers who have requested the deviation. DCTS also provides Paratransit Services. The following table summarizes the annual number of trips made by DCTS (8).

Table 24. Annual Number of Trips Made by Davidson County Transportation System (2007-2015)

Year	Trips
2007	75,117
2008	83,287
2009	88,101
2010	90,204
2011	103,890
2012	130,148
2013	183,462
2014	217,480
2015	233,524

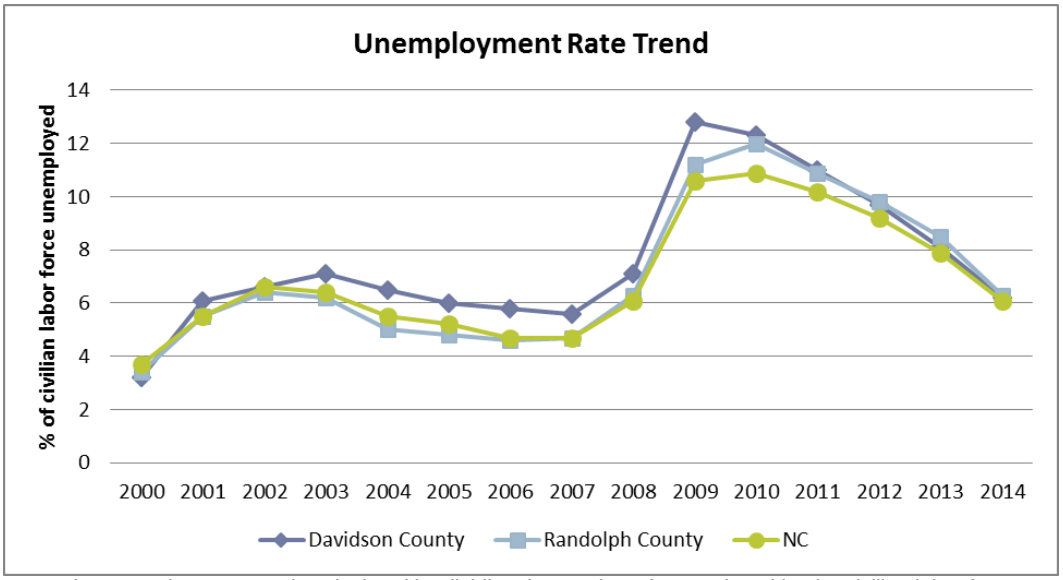
Source: Personal communication from Jen Hames, Health Education Supervisor, Davidson County Health Department to Sheila Pfaender, Public Health Consultant; August 24, 2015.

Unemployment

The next figure plots the unemployment rate in Davidson County and its comparators.

- Beginning after 2008, the unemployment rate rose significantly in all three jurisdictions. Unemployment in Davidson County began to decline after 2009, a year before the declines began in Randolph County and the state of NC. The declines continue at the present time.
- The latest (June, 2015, un-plotted) annual unemployment rate for Davidson County (5.9%) was the same as the state rate (9).

Figure 5. Annual Unemployment Rate (2000-2014)



Note: The unemployment rate is calculated by dividing the number of unemployed by the civilian labor force. The civilian labor force is the total employed plus the unemployed.
Source: North Carolina Department of Commerce, Labor and Economic Analysis Division (LEAD), D4 - Demand Driven Data Delivery System. Local Area Unemployment Statistics (LAUS) - Unemployment Rate. http://esesc23.esc.state.nc.us/d4/.

Poverty

The poverty rate is the percent of the population (both individuals and families) whose money income (which includes job earnings, unemployment compensation, social security income, public assistance, pension/retirement, royalties, child support, etc.) is below a federally established threshold; this is the “100%-level” figure.

The following table shows the decadal poverty rate for the period from 1970 through 2000 and the estimated poverty rate for four five year periods: 2006-2010 through 2009-2013. The data in this table describe an overall rate, representing the entire population in each geographic entity. As subsequent data will show, poverty may have strong racial and age components that are not discernible in these numbers.

- In Davidson County, the poverty rates after 2000 were all higher than the rates for 2000 or earlier.
- The poverty rate in Davidson County increased in each five-year period from 2006-2010 through 2009-2013.
- In the state of NC, the poverty rate fell each decade from 1970 through 2000, but rose after that in every period cited.

Table 25. Annual Poverty Rate
(1970-2000; 2006-2010 through 2009-2013 Five-Year Estimates)

Location	Percent of All People in Poverty							
	1970	1980	1990	2000	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	12.6	10.6	9.8	10.1	14.5	15.1	15.2	16.3
Randolph County	11.7	8.9	8.3	9.1	17.2	17.6	17.1	17.8
State of NC	20.3	14.8	13.0	12.3	15.5	16.1	16.8	17.5
Source:	a	a	a	a	b	b	b	b

a - Log Into North Carolina (LINC) Database, Topic Group Employment and Income (Data Item 6094); http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show.
b - US Census Bureau, American Fact Finder, American Community Survey, 2010, 2011, 2012, 2013 ACS 5-Year Estimates, Table DP03: Selected Economic Characteristics, County, North Carolina (Counties as listed); http://factfinder2.census.gov/.

The next table presents poverty data stratified by broad racial group (white/black) for the decades from 1980 through 2000, and stratified by white/black/Hispanic for four five-year aggregates from 2006-2010 through 2009-2013.

- Across all time periods and in all jurisdictions cited, the poverty rate among blacks was higher than the poverty rate among whites.
- In Davidson County over the seven periods shown the poverty rate for blacks averaged 2.8 times the poverty rate for whites.
- The poverty rate among Hispanics in Davidson was consistently higher than the comparable rate for whites, but lower than the rate for blacks. Over the four periods shown the poverty rate for Hispanics averaged 2.3 times the poverty rate for whites.

Table 26. Persons in Poverty, by Race
(1980-2000; 2006-2010 through 2009-2013 Five-Year Estimates)

Location	1980				1990				2000			
	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty
Davidson County	11,846	10.6	9.0	24.2	12,290	9.8	8.4	21.5	14,636	10.1	7.9	25.6
Randolph County	8,134	8.9	8.2	20.0	8,777	8.3	7.5	22.4	11,802	9.1	7.6	23.5
State of NC	839,950	14.8	10.0	30.4	829,858	13.0	8.7	27.1	958,667	12.3	8.5	22.9

Source: Log Into North Carolina (LINC) Database, Topic Group Employment and Income (Data Items 6094, 6096, 6098); http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show.

Location	2006-2010					2007-2011				
	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	% Hisp/Lat in Poverty	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	% Hisp/Lat in Poverty
Davidson County	23,016	14.5	11.0	35.7	29.0	24,092	15.1	12.0	34.7	25.6
Randolph County	23,766	17.2	14.2	13.7	39.8	24,494	17.6	14.6	29.1	36.6
State of NC	1,399,945	15.5	11.2	25.6	29.8	1,473,556	16.1	11.8	26.1	31.5

Location	2008-2012					2009-2013				
	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	% Hisp/Lat in Poverty	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	% Hisp/Lat in Poverty
Davidson County	8,815	23.2	12.5	33.9	29.9	26,105	16.3	13.8	34.4	30.7
Randolph County	8,717	25.8	14.8	28.9	28.9	24,921	17.8	16.1	30.8	25.8
State of NC	1,536,464	16.8	12.5	26.8	33.3	1,643,389	17.5	13.3	27.6	34.0

Source: US Census Bureau, American Fact Finder, American Community Survey, 2010, 2011, 2012, 2013 American Community Survey 5-Year Estimates, Table S1701: Poverty Status in the Past 12 Months. Data Profiles, County, North Carolina (Counties as listed); http://factfinder2.census.gov/.

The following table presents poverty data stratified by age group. Note that the youngest age category is defined somewhat differently in the two hemi-tables, so the summary data below focuses only on the data from the four aggregate periods. From these data it is apparent that children suffer disproportionately from poverty.

- In all jurisdictions in every aggregate time period cited in the table, the poverty rate for children under the age of 18 exceeded the overall poverty rate. For the four aggregate periods cited the average poverty rate for youth under age 18 in Davidson County was 50% higher than the overall poverty rate.
- The poverty rate for children under the age of 6 (or 5) varied even more significantly from the overall rate. For the four aggregate periods 2006-2010 through 209-2013, the average poverty rate for children under age 5 in Davidson County was 93% higher than the overall poverty rate.

Table 27. Persons in Poverty, by Age
(1980-2000; 2006-20010 through 2009-2013 Five-Year Estimates)

Location	1980				1990				2000			
	Total % in Poverty	% Children Under 6 in Poverty	% Children Under 18 in Poverty	% Adults 65 or Older in Poverty	Total % in Poverty	% Children Under 6 in Poverty	% Children Under 18 in Poverty	% Adults 65 or Older in Poverty	Total % in Poverty	% Children Under 6 in Poverty	% Children Under 18 in Poverty	% Adults 65 or Older in Poverty
Davidson County	10.6	13.3	13.3	20.1	9.8	15.0	12.4	17.8	10.1	14.5	13.3	12.1
Randolph County	8.9	11.4	10.0	23.1	8.3	11.4	10.0	16.4	9.1	14.4	10.6	11.6
State of NC	14.8	19.7	18.3	23.9	13.0	19.1	16.9	19.5	12.3	17.8	15.7	13.2

Source: Log Into North Carolina (LINC) Database, Topic Group Employment and Income (Data Items 6094, 6100, 6102, 6104); http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show

Location	2006-2010				2007-2011				2008-2012				2009-2013			
	Total % in Poverty	% Related Children Under 5 in Poverty	% Related Children Under 18 in Poverty	% Adults 65 or Older in Poverty	Total % in Poverty	% Related Children Under 5 in Poverty	% Related Children Under 18 in Poverty	% Adults 65 or Older in Poverty	Total % in Poverty	% Related Children Under 5 in Poverty	% Related Children Under 18 in Poverty	% Adults 65 or Older in Poverty	Total % in Poverty	% Related Children Under 5 in Poverty	% Related Children Under 18 in Poverty	% Adults 65 or Older in Poverty
Davidson County	14.5	27.5	21.7	11.3	15.1	26.9	22.4	11.9	15.2	32.1	22.7	10.8	16.3	31.1	25.1	10.1
Randolph County	17.2	32.0	26.2	10.6	17.6	34.2	26.5	10.3	17.1	33.7	25.6	10.7	17.8	32.9	26.0	10.1
State of NC	15.5	25.5	21.3	10.7	16.1	26.4	22.3	10.3	16.8	28.0	23.5	10.2	17.5	29.1	24.6	10.0

Source: US Census Bureau, American Fact Finder, American Community Survey, 2010, 2011, 2012, 2013 American Community Survey 5-Year Estimates. DP03 Seelcted Economic Characteristics (Counties as listed); http://factfinder2.census.gov

Children Receiving Free or Reduced-price School Lunch

Other data corroborate the impression that children bear a disproportionate burden of poverty. One measure of poverty among children is the percent of school-age children who are eligible for and receive free or reduced-price school lunch.

Students have to be eligible to receive meals; not everyone who is eligible will choose to enroll in the program and receive meals. To be eligible for *free* lunch under the National School Lunch Act students must live in households earning at or below 130 percent of the Federal poverty guidelines. To be eligible for *reduced-price* lunch students must live in households earning at or below 185 percent of the Federal poverty guidelines.

The table below shows the percent of students in each LEA deemed *"needy"* relative to free and reduced-price lunch. This figure is calculated as the number of applications for free lunch plus the number of applications for reduced-price lunch divided by the average daily membership.

- The need for assistance in the Lexington and Thomasville LEAs exceeded the NC average in every period cited.

Table 28. Percent of Students Eligible for Free or Reduced-Price School Lunch ("Needy")
(SY2006-07 through SY2013-14)

Location	% of Students Determined to be "Needy"							
	SY2006-07	SY2007-08	SY2008-09	SY2009-10	SY2010-11	SY2011-12	SY2012-13	SY2013-14
Davidson County Schools	32.00	33.97	36.37	41.60	42.13	45.42	45.90	47.66
Lexington City Schools	85.67	84.27	85.23	92.49	80.65	86.11	87.44	88.23
Thomasville City Schools	66.45	84.81	88.78	88.49	91.90	90.53	90.75	91.81
Randolph County Schools	42.88	43.92	48.31	52.40	53.95	55.60	56.00	57.31
Asheboro City Schools	57.76	60.43	59.67	62.54	71.24	70.15	75.27	75.92
State of NC	48.46	48.39	49.85	53.68	53.86	55.94	56.14	57.56

Source: NC Department of Instruction, Data & Statistics, Other Education Data: Select Financial Data, Free and Reduced Meals Application Data (by school year). http://www.ncpublicschools.org/fbs/resources/data/.

HOUSING

The following table presents US Census Bureau data on housing by type in the jurisdictions being compared. This data covers two aggregate periods: 2006-2010 and 2009-2013.

- There were lower estimated proportions of vacant housing units in Davidson County than in NC as a whole during both periods cited.
- Of the estimated total occupied housing units in Davidson County, approximately 73% were owner-occupied and 27% were renter-occupied.
- In Davidson County approximately 15% of all housing units were classified as mobile homes, a figure 7% higher than the NC average of 14%.

Table 29. Housing by Type
(2006-2010 and 2009-2013 Five-Year Estimates)

Location	2006-2010 Estimate										
	Total Housing Units	Vacant Housing Units		Occupied Housing Units		Owner Occupied Units		Renter Occupied Units		Mobile Home Units	
	No.	No.	%	No.	%	No.	%	No.	%	No.	%
Davidson County	71,474	6,990	9.8	64,484	90.2	47,230	73.2	17,254	26.8	11,296	15.8
Randolph County	60,510	5,585	9.2	54,925	90.8	40,399	73.6	14,526	26.4	12,921	21.4
State of NC	4,229,552	603,373	14.3	3,626,179	85.7	2,468,489	68.1	1,157,690	31.9	605,418	14.3

Location	2009-2013 Estimate										
	Total Housing Units	Vacant Housing Units		Occupied Housing Units		Owner Occupied Units		Renter Occupied Units		Mobile Home Units	
	No.	No.	%	No.	%	No.	%	No.	%	No.	%
Davidson County	72,556	7,976	11.0	64,580	89.0	47,157	73.0	17,423	27.0	10,805	14.9
Randolph County	60,982	6,632	10.9	54,350	89.1	40,166	73.8	14,234	26.2	11,864	19.5
State of NC	4,349,023	633,458	14.6	3,715,565	85.4	2,466,388	66.4	1,249,177	33.6	593,510	13.6

Source - US Census Bureau, American Fact Finder, American Community Survey, 2010 and 2013 ACS 5-Year Estimates, Table DP04: Selected Housing Characteristics (geographies as listed). http://factfinder2.census.gov.

The next table presents data on housing costs for the aggregate periods 2008-2012 and 2009-2013.

- In the periods cited the average estimated median monthly gross rent in Davidson County was $634, $134 lower than the state average of $768. Over the same period the average estimated monthly mortgage cost in Davidson County was $1,148, $136 lower than the state average of $1,284.
- The average percentage of renter occupied units in Davidson County spending more than 30% of household income on housing in the periods cited was 46%, 10% *lower* than the state average of 51%. Over the same period the average percentage of mortgaged housing units in Davidson County spending more than 30% of household income on housing was 32%, the same as the state average of 32%.

Table 30. Estimated Housing Cost as Percent of Household Income (2008-12 and 2009-2013 Five-Year Estimates)

Location	Renter Occupied Units							
	2008-2012				2009-2013			
	Total Units [1]	Units Spending >30% Household Income on Housing		Median Gross Monthly Rent	Total Units	Units Spending >30% Household Income on Housing		Median Gross Monthly Rent
		#	%			#	%	
Davidson County	15,751	7,090	45.1	$630	15,537	7,303	47.0	$637
Randolph County	12,755	6,274	49.2	$642	12,416	6,092	49.1	$650
State of NC	1,095,577	554,428	50.6	$759	1,125,192	574,369	51.0	$776

Location	Mortgaged Housing Units							
	2008-2012				2009-2013			
	Total Units [1]	Units Spending >30% Household Income on Housing		Median Monthly Mortgage Cost	Total Units	Units Spending >30% Household Income on Housing		Median Monthly Mortgage Cost
		#	%			#	%	
Davidson County	30,105	9,477	31.5	$1,154	29,917	9,562	32.0	$1,141
Randolph County	25,354	8,654	34.2	$1,095	24,581	8,276	33.6	$1,084
State of NC	1,658,483	539,993	31.8	$1,287	1,636,185	523,069	31.9	$1,281

Source: US Census Bureau, American FactFinder. 2012, 2013 ACS 5-Year Estimates. Table DP04: Selected Housing Characteristics (geographies as listed). http://factfinder2.census.gov.

Affordable Housing

According to information from the NC Rural Economic Development Center based on 2006-2010 US Census data estimates, 28% of housing in Davidson County was classified as "unaffordable", compared to 30% in Randolph County and 32% statewide (10). This data is at least partially reflective of the population living in households that pay more than 30% of the household income for housing costs.

The US Department of Housing and Urban Development (HUD) maintains a system for tracking "affordable" housing for its low-income clients, to whom it provides housing subsidies. HUD services are delivered through Public and Indian Housing Authority (PHA) offices throughout NC. The HUD Field Office in North Carolina is located in Greensboro (11), and public housing agency (PHA) offices in Lexington and Thomasville can assist Davison County residents in accessing HUD services (12).

At the time this report was developed in January, 2016, there were four single-family HUD-subsidized homes available in Davidson County, two in Lexington, one in Linwood, and one in Thomasville (13). In addition, there were 14 affordable apartments listed for the county, 12 in Lexington and two in Thomasville (14).

The US Department of Agriculture (USDA) catalogues information about rental properties available in rural areas. The agency's Multi-Family Housing (MFH) Rental website provides an online guide to government-assisted rental projects. At the time this report was developed, the MFH website listed no qualifying rental properties in Davidson County (15).

Homelessness

According to data from the NC Housing Coalition, there is at the present time one homeless shelter in Davidson County: Crisis Ministries (in Lexington), which operates an overnight shelter for men and women, and a 24-hour shelter for families with children (16). The table below presents an annual summary of utilization data for this shelter.

Table 31. Crisis Ministries Shelter Utilization (2012-2015)

Year	Average Daily Occupancy
2012	69
2013	71
2014 (11 months)	80
2015 (7 months)	77

Source: Personal communication from Jen Hames, Health Education Supervisor, Davidson County Health Department to Sheila Pfaender, Public Health Consultant; August 25, 2015.

In addition, Davidson County Family Services operates an emergency domestic violence shelter for women and minor children (16).

The NC Coalition to End Homelessness assists local jurisdictions in conducting an annual "point-in-time" survey of homeless persons every autumn. The 2015 PiT survey in Davidson County counted 123 homeless persons (18 homeless adults in families with a total of 20 children age 17 and younger, and 85 homeless adults without children) (17).

HOUSEHOLDS

The following table describes households in the three comparator jurisdictions.

- The average number of persons per household in Davidson County—2.49—was slightly lower than the state average of 2.53.
- The percent of one-person households in Davidson County—26.3%—was lower than the comparable figure for the state as a whole (27.8%).
- The percent of one-person households where the resident is age 65 or older in Davidson County—10.4%—was higher than the comparable state average of 9.5%.

Table 32. Household Characteristics
(2009-2013 5-Year Estimate)

Location	Total No. Households[1]	Average Persons per Household	% Households One-person	% One-person Households ≥Age 65
Davidson County	64,580	2.49	26.3	10.4
Randolph County	54,350	2.59	24.8	9.6
State of NC	3,715,565	2.53	27.8	9.5

[1] - A household includes all the persons who occupy a housing unit. A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from the outside of the building or through a common hall. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements. (People not living in households are classified as living in group quarters.
Source: US Census Bureau, American Fact Finder, American Community Survey, 2013 ACS 5-Year Estimates, Table S1101: Households and Families. http://factfinder2.census.gov.

Single-Parent Families

Data in the next table describe some characteristics of single-parent families.

- Of the total households In Davidson County in the 2009-2013 period, 53% were married couple family households, 5% were male householder family households, and 12% were female householder family households.
- Of the 2,959 male householder family households in Davidson County, 1,532 (51.8%) included children under the age of 18. Of the 8,020 female householder family households, 4,325 (53.9%) included children under the age of 18.

Table 33. Single-Parent Families
(2009-2013 ACS 5-Year Estimate)

Location	Total Households[1]	Married Couple Family Housholds			Male Householder (no wife present) Family Households			Female Householder (no husband present) Family Households		
		Total Households	With own children <18		Total Households	With own children < 18		Total Households	with own children <18	
		Number	Number	Percent	Number	Number	Percent	Number	Number	Percent
Davidson County	64,580	33,939	12,541	37.0	2,959	1,532	51.8	8,020	4,325	53.9
Randolph County	54,350	29,171	10,307	35.3	2,633	1,206	45.8	7,005	4,114	58.7
State of NC	3,715,565	1,802,864	706,106	39.2	163,103	84,199	51.6	506,921	293,665	57.9
	a	a	a	b	a	a	b	a	a	b

a - US Census Bureau, American Fact Finder, 2013 ACS, Table S1101: Households and Families (geographies as noted). http://factfinder2.census.gov.
b - calculated

Grandparents Responsible for Minor Children

The following table presents data on grandparents with responsibility for minor children. Data on grandparents as primary caregivers were derived from US Census Bureau American Community Survey questions. Data were collected on whether a grandchild lives with a

grandparent in the household, whether the grandparent has responsibility for the basic needs of the grandchild, and the duration of that responsibility. Responsibility for basic needs determines if the grandparent is financially responsible for food, shelter, clothing, day care, etc., for any or all grandchildren living in the household. Percent is derived with the number of grandparents responsible for grandchildren (under 18 years) as the numerator and number of grandparents living with own grandchildren (under 18 years) as the denominator.

- In Davidson County for the period cited, an estimated 52.5% of grandparents living with their minor grandchildren were also responsible for their care. This was the highest figure among the comparators.

Table 34. Grandparents with Responsibility for Minor Children (Five-Year Estimate, 2009-2013)

Location	# Grandparents Living with Own Grandchildren (<18 Years)	Grandparent Responsible for Grandchildren (under 18 years)*	
		Est. #	%
Davidson County	3,436	1,805	52.5
Randolph County	3,239	1,453	44.9
State of NC	206,632	100,422	48.6

Source: US Census Bureau, American FactFinder, American Community Survey, 2013 5-Year Estimates. Selected Social Characteristics in the United States (DP02); http://factfinder2.census.gov.

CHILD CARE

Child Care Facilities

The NC Division of Child Development is the state agency charged with overseeing the child care industry in the state, including the regulation of child day care programs. The Division licenses child care facilities that keep more than two unrelated children for more than four hours a day. In NC, regulated child day care facilities are divided into two categories—Child Care Centers and Family Child Care Homes—with the categories delineated on the basis of enrollment. A *child care center* is a larger program providing care for three or more children, but not in a residential setting. The number of children in care is based upon the size of individual classrooms and having sufficient staff, equipment and materials. A *family child care home* is a smaller program offered in the provider's residence where three to five preschool children are in care. A family child care home may also provide care for three school-age children (18).

In 1999, the NC Division of Child Development began issuing “star rated” licenses to all eligible Child Care Centers and Family Child Care Homes. NC’s Star Rated License System gave from one to five stars to child care programs based on how well they were doing in providing quality child care. A rating of one star meant that a child care program met the state’s minimum licensing standards for child care. Programs that chose to voluntarily meet higher standards could apply for a two to five star license. (Note: Religious-sponsored child care programs could opt to continue to operate with a notice of compliance and not receive a star rating.)

Three areas of child care provider performance were assessed in the star system: program standards, staff education, and compliance history. Each area had a range of one through five points. The star rating was based on the total points earned for all three areas.

Then, in 2005, the way facilities were evaluated was changed in order to give parents better information about a program's quality. The new rules made a 75% "compliance history" a minimum standard for any licensed facility. Because it is now a minimum requirement, all programs earn their star rating based only on the two components that give parents the best indication of quality: staff education and program standards. In addition, programs having a two component license can earn a "quality point" for enhanced standards in staff education and program standards. As reported in the table below:

- Of the 70 licensed child care centers in Davidson County at the time of this report, 36 (51%) were five-star facilities and 18 (26%) were four-star facilities.
- Of the 15 licensed family child care homes in Davidson County at the time of this report, two (13%) were five-star facilities and four (27%) were four-star facilities.

Table 35. NC-Licensed Child Care Facilities in Davidson County (January, 2014)

Type of Facility	Number
Child Care Centers (70)	
Five-star	36
Four-star	18
Three-star	6
Two-star	0
One-star	0
GS 110-106 (Church-affiliated)	8
Temporary	2
Family Child Care Homes (15)	
Five-star	2
Four-star	4
Three-star	3
Two-star	2
One-star	4

Source: NC Department of Health and Human Services, Division of Child Development, Child Care Facility Search Site; http://ncchildcaresearch.dhhs.state.nc.us/search.asp.

The next table presents total enrollment summaries for NC-regulated child care facilities Davidson County and its comparators for 2008 through 2011.

Table 36. Children Enrolled in NC-Regulated Child Care (2008-2011)

Location	No. Children (0-5) Enrolled in Child Care Centers				No. Children (0-12) Enrolled in Family Care Homes			
	2008	2009	2010	2011	2008	2009	2010	2011
Davidson County	2,463	2,384	2,348	2,796	194	181	174	135
Randolph County	2,054	1,956	2,116	2,156	128	129	137	115
State of NC	172,717	168,953	169,852	194,632	15,354	14,936	14,384	13,321

Source: Annie E. Casey Foundation, Kids Count Data Center, Community Level Data, North Carolina Indicators; http://datacenter.kidscount.org/data/bystate/StateLanding.aspx?state=NC.

EDUCATION

Higher Education

There are two college-level educational institutions in Davidson County: Davidson County Community College and High Point University.

Davidson County Community College (DCCC). Davidson County Community College was initially chartered in 1958 as an Industrial Education Center (IEC). Like other industrial education centers chartered in the 1950s and consolidated under the Community College Act of 1963, this center was designed to equip adults with the skills needed to move from an agricultural to a manufacturing-based economy. When the William E. Sinclair Building opened on a 22-acre site in 1963, the Davidson County IEC enrolled 125 students in vocational and technical programs and 51 students in adult education and service programs. In 1965, the institution was chartered as Davidson County Community College (DCCC). The Associate in Arts and Associate in Science degrees were added to the existing Associate in Applied Science degree, diploma, and certificate offerings.

The Davie County Campus of DCCC opened in the spring of 1994 in Mocksville. The Davie campus consists of 45 acres, three classroom and lab buildings, and an emergency services training facility.

With support from many community partners, DCCC opened three satellite education centers in 2004 (Uptown Lexington Education Center), 2005 (Thomasville Education Center), and 2008 (Davie Education Center in Advance).

DCCC continues to grow, including the addition of state-of-the-art classrooms, including new Macintosh-based computer, advanced manufacturing, and automotive labs. DCCC serves approximately 16,000 students each year and has more than 50 curriculum programs. DCCC is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate degrees (19).

High Point University (HPU). High Point University is the successor to Yadkin College, a college founded in 1857 by the Methodist Protestant Church. Yadkin College, which closed in 1924, was located in rural Davidson County, and named for the nearby Yadkin River.

The present High Point University is located in the city of High Point, the only city in NC that exists in four counties: Davidson, Forsyth, Guilford and Randolph. The city limits of Thomasville come within a half-mile of the High Point city limits to the southwest.

Established in 1924, HPU is a private liberal arts institution with 4,200 undergraduate and graduate students from 46 states and 27 countries. With small class sizes, the student-to-faculty ratio is 15:1. High Point University currently offers 44 undergraduate majors, 43 undergraduate minors, and 11 graduate degree programs, including a doctoral program in educational leadership and two more doctoral programs proposed for 2017. HPU is accredited by the Commission of Colleges of the Southern Association of Colleges and Schools, and is a member of the NCAA Division I and the Big South Conference (20).

Primary and Secondary Education

Schools and Enrollment

The next several tables focus on data pertaining *mostly* to the primary and secondary *public* schools in the three Local Educational Authorities (LEAs) within Davidson County: There are no charter schools in Davidson County.

Table 37. Schools in the Lexington City LEA (SY2012-13)

School	Location	School Type/Calendar	Grade Range
Charles England Elementary School	Lexington	Regular School, Traditional Calendar	1-5
Lexington Middle School	Lexington	Regular School, Traditional Calendar	6-8
Lexington Senior High	Lexington	Regular School, Traditional Calendar	9-12
Pickett Elementary School	Lexington	Regular School, Traditional Calendar	1-5
South Lexington School	Lexington	Regular School, Traditional Calendar	PK-K
Southwest Elementary School	Lexington	Regular School, Traditional Calendar	1-5

Source: NC Department of Public Instruction, Data and Statistics, Education Data, NC School Report Cards, School Year 2012-13; http://www.ncreportcards.org/src. Note that the referenced source maintains archive data only. Similar, recent data is not available at this site.

In addition to the traditional schools listed in the table above, the Lexington City LEA operates the South Lexington Developmental Center in Lexington, which serves approximately 30 school-aged students, ages 5-21, who have multiple disabilities. It offers a low teacher-to-student ratio with extensive support personnel, including a full-time nurse, to help meet the individual needs of every student (21).

Table 38. Schools in the Thomasville City LEA (SY2012-2013)

School	Location	School Type/Calendar	Grade Range
Liberty Drive Elementary	Thomasville	Regular School, Traditional Calendar	4-5
Thomasville High	Thomasville	Regular School, Traditional Calendar	9-12
Thomasville Middle	Thomasville	Regular School, Traditional Calendar	6-8
Thomasville Primary	Thomasville	Regular School, Traditional Calendar	PK-3

Source: NC Department of Public Instruction, Data and Statistics, Education Data, NC School Report Cards, School Year 2012-13; http://www.ncreportcards.org/src. Note that the referenced source maintains archive data only. Similar, recent data is not available at this site.

Table 39. Schools in the Davidson County LEA (SY2012-2013)

School	Location	School Type/Calendar	Grade Range
Brier Creek Elementary	Thomasville	Regular School, Traditional Calendar	K-5
Central Davidson High	Lexington	Regular School, Traditional Calendar	9-12
Central Davidson Middle	Lexington	Regular School, Traditional Calendar	6-8
Churchland Elementary	Lexington	Regular School, Traditional Calendar	PK-5
Davidson County High School	Lexington	Alternative Education, Traditional Calenar	6-12
Davidson Early College	Lexington	Regular School, Traditional Calendar	9-13
Davis-Townsend Elementary	Lexington	Regular School, Traditional Calendar	PK-5
Denton Elementary	Denton	Regular School, Traditional Calendar	PK-5
E Lawson Brown Middle	Thomasville	Regular School, Traditional Calendar	6-8
East Davidson High	Thomasville	Regular School, Traditional Calendar	9-12
Fair Grove Elementary	Thomasville	Regular School, Traditional Calendar	PK-5
Friedberg Elementary	Winston-Salem	Regular School, Traditional Calendar	K-5
Friendship Elementary	Winston-Salem	Regular School, Traditional Calendar	PK-5
Hasty Elementary	Thomasville	Regular School, Traditional Calendar	K-5
Ledford High	Thomasville	Regular School, Traditional Calendar	9-12
Ledford Middle	Thomasville	Regular School, Traditional Calendar	6-8
Midway Elementary	Lexington	Regular School, Traditional Calendar	PK-5
North Davidson High	Lexington	Regular School, Traditional Calendar	9-12
North Davidson Middle	Lexington	Regular School, Traditional Calendar	6-8
Northwest Elementary	Lexington	Regular School, Traditional Calendar	K-5
Oak Grove Middle	Winston-Salem	Regular School, Traditional Calendar	6-8
Pilot Elementary	Thomasville	Regular School, Traditional Calendar	PK-5
Reeds Elementary	Lexington	Regular School, Traditional Calendar	PK-5
Silver Valley Elementary	Lexington	Regular School, Traditional Calendar	PK-5
South Davidson High	Denton	Regular School, Traditional Calendar	9-12
South Davidson Middle	Denton	Regular School, Traditional Calendar	6-8
Southmont Elementary	Lexington	Regular School, Traditional Calendar	K-5
Southwood Elementary	Lexington	Regular School, Traditional Calendar	PK-5
Tyro Elementary	Lexington	Regular School, Traditional Calendar	K-5
Tyro Middle	Lexington	Regular School, Traditional Calendar	6-8
Wallburg Elementary	Winston-Salem	Regular School, Traditional Calendar	PK-5
Welcome Elementary	Lexington	Regular School, Traditional Calendar	PK-5
West Davidson High	Lexington	Regular School, Traditional Calendar	9-12
Yadkin Valley Regional Career Academy	Lexington	Regular School, Traditional Calendar	9-9

Source: NC Department of Public Instruction, Data and Statistics, Education Data, NC School Report Cards, School Year 2012-13; http://www.ncreportcards.org/src. Note that the referenced source maintains archive data only. Similar, recent data is not available at this site.

A new high school, Oak Grove HS, is under construction in the Davidson County LEA and is expected to open in the 2017-2018 school year.

In addition to the public schools listed above, there are an additional eight private schools in Davidson County, most of which are religiously-affiliated.

Table 40. Private Schools in Davidson County (SY2012-2013)

School	Location	School Type (Enrollment)	Grade Range
Bethany Christian School	Thomasville	Religious Day School (41 students)	K-11
Carolina Christian Academy	Thomasville	Religious Day School (57 students)	K-12
Galilee Christian Academy	Lexington	Religious Day School (19 students)	K-11
New Hope Christian Academy	Thomasville	Religious Day School (35 students)	1-12
Paramount Christian Academy	Thomasville	Religious Day School (3 students)	9-11
Sheets Memorial Christian School	Lexington	Religious Day School (246 students)	9-12
Union Grove Christian School	Lexington	Religious Day School (387 students)	K-12
Westchester Country Day School	High Point	Independent Day School (363 students)	K-12

Source: 2013 North Carolina Directory of Non-Public Schools; http://www.ncdnpe.org/documents/12-13-CS-Directory.pdf.

School enrollment figures in Davidson County have decreased annually in the Davidson County LEA, and in most years in the Thomasville City LEA. Enrollments in the Lexington City LEA have been more variable, and have actually increased recently, as seen in the table below.

Table 41. K-12 Public School Enrollment (SY2006-07 through SY2012-13)

Location	Number of Students						
	SY2006-07	SY2007-08	SY2008-09	SY2009-10	SY2010-11	SY2011-12	SY2012-13
Davidson County Schools	21,029	21,123	20,944	20,853	20,697	20,473	20,355
Lexington City Schools	3,188	3,199	3,182	3,056	3,047	3,096	3,125
Thomasville City Schools	2,647	2,703	2,623	2,521	2,536	2,527	2,490
Randolph County Schools	19,201	19,386	19,163	18,939	18,980	18,768	18,691
Asheboro City Schools	4,625	4,599	4,683	4,650	4,694	4,812	4,793
State of NC	1,452,420	1,458,156	1,456,558	1,446,650	1,450,435	1,458,572	1,467,297

Source: NC Department of Public Instruction, Data and Statistics, Education Data: NC Statistical Profile. NC Statistical Profile Online: Local Education Agencies Information, Pupil Accounting. http://apps.schools.nc.gov/pls/apex/f?p=1:1:497147721913602.

Educational Attainment

The next table presents data on several measures of educational attainment. It should be noted that SY2012-13 was the first year of implementation of NC's new statewide Standard Course of Study, new assessments, and a new school accountability model. As a result, student performance data from SY2012-13 is very different from, and is not directly comparable to, similar data from previous years.

- As of a 2009-2013 US Census Bureau estimate, both Davidson County and Randolph County had lower percentages of both high school diploma or higher and residents with a bachelor's degree or higher than NC as a whole.
- According to SY2013-14 End of Grade (EOG) Test results, third-graders and eighth-graders in both Lexington and Thomasville City Schools demonstrated grade-appropriate proficiency in reading and math at *lower* percentages than students statewide. That same year, *higher* proportions of third-graders and eighth-graders in Davidson County schools demonstrated grade-level proficiency in and math, and eighth-graders in reading, than students of comparable grade level statewide.

- In SY2013-14 the average total SAT score for students in the Davidson County LEA (1,011) was above the average total SAT score for students statewide (994) as well as in the other two Davidson County LEAs.

Table 42. Educational Attainment

Location	% Population High School Graduate or Higher[1]	% Population Bachelor's Degree or Higher[1]	% 3rd Graders Grade Level Proficient on EOG Reading Test	% 3rd Graders Grade Level Proficient on EOG Math Test	% 8th Graders Grade Level Proficient on EOG Reading Test	% 8th Graders Grade Level Proficient on EOG Math Test	SAT Participation Rate	Average Total SAT Scores
	2009-2013	2009-2013	SY2013-14	SY2013-14	SY2013-14	SY2013-14	SY2012-13	SY2013-14
Davidson County (Overall)	80.4	17.6	n/a	n/a	n/a	n/a	n/a	n/a
Davidson County Schools	n/a	n/a	58.7	64.8	60.1	46.5	48%	1,011
Lexington City Schools	n/a	n/a	49.8	55.4	36.8	28.4	50%	909
Thomasville City Schools	n/a	n/a	36.5	48.7	38.9	28.6	69%	815
Randolph County Schools	78.0	13.8	54.6	61.4	48.3	35.2	40%	957
Asheboro City Schools	n/a	n/a	46.0	55.4	37.6	36.8	52%	942
State of NC	84.9	27.3	60.2	60.9	54.2	42.2	53%	994
Source:	a	a	b	b	b	b	b	b

a - US Census Bureau, American Fact Finder, American Community Survey, 2009-2013 American Community Survey (ACS) 5-Year Estimates, Table DP02: Selected Social Characteristics, Educational Attainment, by State or County; http://factfinder.census.gov
b - NC Department of Public Instruction, Data and Statistics, Education Data, NC School Report Cards. District Profile. http://www.ncpublicschools.org/src/
[1] Refers to the population aged 25 years and older

Educational Expenditures

The next table presents data on local, state and federal expenditures on education.

- In SY2013-14 the total per-pupil expenditure (the sum of Federal, state and local investments) in public schools in Davidson County was higher than the state average for the Lexington City and Thomasville City LEAs, but lower for the Davidson County LEA.
- In all jurisdictions, the state contributed the highest proportion to the total per-pupil expenditure. The federal contribution was the smallest proportion of the total in all jurisdictions *except* the Thomasville City LEA where the federal contribution was larger than the local contribution.

Table 43. Educational Expenditures (SY2013-14)

Location	Average Per Pupil Expenditure			
	Local	State	Federal	Total
Davidson County Schools	$1,400	$5,172	$710	$7,282
Lexington City Schools	$1,912	$6,143	$1,573	$9,628
Thomasville City Schools	$1,867	$5,927	$2,166	$9,960
Randolph County Schools	$1,579	$5,413	$807	$7,799
Asheboro City Schools	$2,210	$5,654	$1,460	$9,324
State of NC	$2,103	$5,386	$965	$8,454

Source: NC Department of Public Instruction, Data and Statistics, Education Data, NC School Report Cards. District Profile; Charter School Profiles http://www.ncreportcards.org/src/.

High School Drop-Out Rate

The table below presents data on the high school (grades 9-12) drop-out rate. According to the NC Department of Public Instruction, a "drop-out" is any student who leaves school for any reason before graduation or completion of a program of studies without transferring to another elementary or secondary school. For reporting purposes, a drop-out is a student who was enrolled at some time during the previous school year, but who was not enrolled (and who does not meet reporting exclusions) on day 20 of the current school year. The data below is specific to high school students in regular (non-charter) public schools.

- The high school drop-out rate in all three LEAs in Davidson County, as well as those in Randolph County, fluctuated without clear pattern over the period cited in the table. Drop-out rates in Davidson County did tend to be lower after SY2010-11 than before that date, perhaps reflecting the reality that in the then full-blown recession a high schooler was better off in school than out trying to find a job.

Table 44. High School Drop-Out Rate
(SY2004-05 through SY2013-14)

Location	Drop-Out Rate									
	SY2004-05	SY2005-06	SY2006-07	SY2007-08	SY2008-09	SY2009-10	SY2010-11	SY2011-12	SY2012-13	SY2013-14
Davidson County Schools	4.86	5.79	5.85	5.96	4.22	4.01	3.57	2.99	2.25	2.79
Lexington City Schools	6.49	5.63	5.52	5.59	4.32	4.36	6.53	3.90	3.46	3.36
Thomasville City Schools	4.01	3.76	6.98	6.62	4.93	5.13	5.69	5.28	4.85	5.26
Randolph County Schools	5.57	5.89	6.41	5.95	5.00	3.13	1.98	1.85	2.41	1.82
Asheboro City Schools	4.84	3.93	5.18	5.38	5.37	5.15	2.88	4.11	2.31	2.18
State of NC	4.74	5.04	5.27	4.97	4.27	3.75	3.43	3.01	2.45	2.28

Source: NC Department of Public Instruction, Research and Evaluation, Dropout Data and Collection Process, Annual Dropout Reports; http://www.ncpublicschools.org/research/dropout/reports/.

Graduation Rate

The four-year cohort graduation rates for subpopulations of 9th graders entering public high school in SY2011-12 and graduating in SY2014-15 or earlier are presented for all comparator jurisdictions in the following table.

- The four-year cohort graduation rates in all LEAs were lower than comparable state rates for *all* groups except for economically disadvantaged students in the Lexington City Schools.

Table 45. Four Year Cohort Graduation Rate
(9th Graders Entering SY2011-12 and Graduating SY2014-15 or Earlier)

School System	All Students			Male			Female			Economically Disadvantaged		
	Total Students	# Students Graduating	% Students Graduating	Total Students	# Students Graduating	% Students Graduating	Total Students	# Students Graduating	% Students Graduating	Total Students	# Students Graduating	% Students Graduating
Davidson County Schools	1,657	1,362	82.2	841	670	79.7	816	692	84.8	626	479	76.5
Lexington City Schools	188	152	80.9	102	80	78.4	86	72	83.7	138	110	79.7
Thomasville City Schools	175	149	85.1	87	71	81.6	88	78	88.6	66	51	77.3
Randolph County Schools	1,279	1,146	89.6	642	550	85.7	637	596	93.6	544	453	83.3
Asheboro City Schools	302	262	86.8	148	128	86.5	154	134	87.0	175	148	84.6
State of NC	110,469	94,380	85.4	56,294	46,212	82.1	54,175	48,168	88.9	44,069	34,992	79.4

Note: subgroup information is based on data collected when a student is last seen in the cohort
Source: Public Schools of North Carolina, Cohort Graduation Rate. *4-Year Cohort Graduation Rate Report, 2011-12 Entering 9th Graders Graduating in 2014-15 or Earlier*. http://www.ncpublicschools.org/accountability/reporting/cohortgradrate.

School Crime and Violence

Along with test scores and dropout rates, schools now also track and report acts of crime and violence that occur on school property.

The NC State Board of Education has defined 17 criminal acts that are to be monitored and reported, ten of which are considered dangerous and violent:

- Homicide
- Assault resulting in serious bodily injury
- Assault involving the use of a weapon
- Rape
- Sexual offense
- Sexual assault
- Kidnapping
- Robbery with a dangerous weapon
- Robbery without a dangerous weapon
- Taking indecent liberties with a minor

The other seven criminal acts are:

- Assault on school personnel
- Bomb threat
- Burning of a school building
- Possession of alcoholic beverage
- Possession of controlled substance in violation of law
- Possession of a firearm or powerful explosive
- Possession of a weapon

The following table summarizes crime and violence catalogued by the NC Department of Public Instruction for SY2007-08 through SY2013-14.

- The number and rate of acts of school crime and violence in the three Davidson County LEAs fluctuated without pattern over the period cited. Only the statewide average showed any stability, likely due to the large size of the sample.
- The average annual school crime and violence rates for the period cited were 2.8 (Lexington City LEA), 5.5 (Thomasville City LEA) and 8.3 (Davidson County LEA).

Table 46. School Crime and Violence[1] Trend, All Grades[1]
(SY2007-08 through SY2013-14)

Location	SY2007-08		SY2008-09		SY2009-10		SY2010-11		SY2011-12		SY2012-13		SY2013-14	
	No. Acts	Rate	No. Acts	Rate	No. Acts	Rate	No. Acts	Rate	No. Acts	Rate	No. Acts	Rate	No. Acts	Rate
Davidson County Schools	141	6.89	160	7.84	205	10.09	161	7.98	223	11.17	144	7.26	140	7.08
Lexington City Schools	17	5.58	15	4.94	3	1.03	7	2.40	7	2.33	3	1.00	7	2.32
Thomasville City Schools	12	4.65	19	7.48	20	8.17	11	4.57	17	7.03	10	4.18	6	2.57
Randolph County Schools	144	7.68	100	5.37	124	6.70	139	7.57	121	6.61	170	9.34	111	6.17
Asheboro City Schools	19	4.27	31	6.87	27	6.02	52	11.39	46	9.82	29	6.18	30	6.40
State of NC	11,276	7.85	11,116	7.59	11,608	8.00	11,657	7.95	11,161	7.6	10,630	7.20	10,132	6.79

[1] Rate is number of acts per 1,000 students
Source - NC Department of Public Instruction, Research and Evaluation, Discipline Data, Consilidated Data Reports, Crime & Violence Table (years as noted); http://www.ncpublicschools.org/research/discipline/reports/#consolidated

The next three tables display detail on the acts of crime and violence committed in the LEAs in Davidson County in SY2012-13 and SY2013-14.

- Although there is variation among the LEAs, the most common offense overall in Davidson County Schools was possession of a controlled substance; the second most common offense overall was possession of a weapon.

Table 47. School Crime and Violence in the Davidson County LEA, by Type of Offense (SY2012-13 and SY2013-14)

Type of Offense	No. Reportable Acts	
	SY2012-13	SY2013-14
Assault resulting in serious personal injury	1	1
Assault involving use of a weapon	0	1
Assault on school personnel	8	9
Bomb threat	0	1
Burning a school building	0	0
Homicide	0	0
Kidnapping	0	0
Possession of alcohol	12	15
Possession of controlled substance	68	65
Possession of a firearm	0	1
Possession of weapon	54	47
Rape	0	0
Robbery with dangerous weapon	0	0
Sexual assault	0	0
Sexual offense	1	0
Indecent liberties with a minor	0	0
TOTAL	144	140

Source: NC Department of Public Instruction, Research and Evaluation, Discipline Data, Consolidated Data Reports, Crime & Violence Table (years as noted); http://www.ncpublicschools.org/research/discipline/reports/#consolidated

Table 48. School Crime and Violence in the Lexington City LEA, by Type of Offense (SY2012-13 and SY2013-14)

Type of Offense	No. Reportable Acts	
	SY2012-13	SY2013-14
Assault resulting in serious personal injury	0	0
Assault involving use of a weapon	0	0
Assault on school personnel	0	1
Bomb threat	0	0
Burning a school building	0	0
Homicide	0	0
Kidnapping	0	0
Possession of alcohol	0	1
Possession of controlled substance	0	3
Possession of a firearm	0	0
Possession of weapon	3	2
Rape	0	0
Robbery with dangerous weapon	0	0
Sexual assault	0	0
Sexual offense	0	0
Indecent liberties with a minor	0	0
TOTAL	3	7

Source: NC Department of Public Instruction, Research and Evaluation, Discipline Data, Consolidated Data Reports, Crime & Violence Table (years as noted); http://www.ncpublicschools.org/research/discipline/reports/#consolidated

Table 49. School Crime and Violence in the Thomasville City LEA, by Type of Offense (SY2012-13 and SY2013-14)

Type of Offense	No. Reportable Acts	
	SY2012-13	SY2013-14
Assault resulting in serious personal injury	0	0
Assault involving use of a weapon	0	0
Assault on school personnel	0	0
Bomb threat	0	0
Burning a school building	0	0
Homicide	0	0
Kidnapping	0	0
Possession of alcohol	2	0
Possession of controlled substance	4	2
Possession of a firearm	0	0
Possession of weapon	3	3
Rape	0	0
Robbery with dangerous weapon	0	0
Sexual assault	0	0
Sexual offense	1	1
Indecent liberties with a minor	0	0
TOTAL	10	6

Source for tables above: NC Department of Public Instruction, Research and Evaluation, Discipline Data, Consolidated Data Reports, Crime & Violence Table (years as noted); http://www.ncpublicschools.org/research/discipline/reports/#consolidated

The following table presents data summarizing disciplinary activity in the public school systems of the comparator jurisdictions for the period SY2010-11 through SY2013-14. Since the data represent *counts* of activity of school systems of different sizes, direct comparisons are problematic.

- The most common disciplinary activity in Davidson County LEAs was the short-term suspension. Expulsions were rare in all jurisdictions.

Table 50. School Disciplinary Activity (SY2010-11 through SY2013-14)

School System	SY2010-11			SY2011-12			SY2012-13			SY2013-14		
	Short-Term Suspensions	Long-Term Suspensions	Expulsions	Short-Term Suspensions	Long-Term Suspensions	Expulsions	Short-Term Suspensions	Long-Term Suspensions	Expulsions	Short-Term Suspensions	Long-Term Suspensions	Expulsions
Davidson County Schools	1,939	14	0	1,895	17	0	304	1	0	1,814	13	0
Lexington City Schools	12	0	0	1	1	1	0	0	0	0	0	0
Thomasville City Schools	815	0	0	903	4	3	915	1	0	736	0	0
Randolph County Schools	823	29	0	914	30	0	874	22	0	663	9	0
Asheboro City Schools	334	1	0	388	7	0	316	1	0	318	4	0
State of NC	262,858	2,586	59	258,197	1,609	30	247,919	1,423	37	198,254	1,088	37

A short-term suspension is up to 10 days.
A long term suspension is 11 or more days.
Source - NC Department of Public Instruction, Research and Evaluation, Discipline Data, Consolidated Data Reports (years as noted); http://www.ncpublicschools.org/research/discipline/reports/#consolidated.

CRIME AND SAFETY

Crime Rates

All crime statistics reported below were obtained from the NC Department of Justice, State Bureau of Investigation unless otherwise noted.

Index crime is composed of *violent crime* and *property crime*. Violent crime includes murder, forcible rape, robbery, and aggravated assault; property crime includes burglary, larceny, arson, and motor vehicle theft.

The following table presents the rates for index crime, violent crime, and property crime for the period from 2009 through 2013 for Davidson County and its comparators.

- The overall index crime rate in Davidson County fell 15% overall between 2009 and 2013, and was lower than the comparable state rate in each of the years cited.
- The largest component of Davidson County index crime was property crime, rates for which also were consistently lower than the comparable rates for the state as a whole.

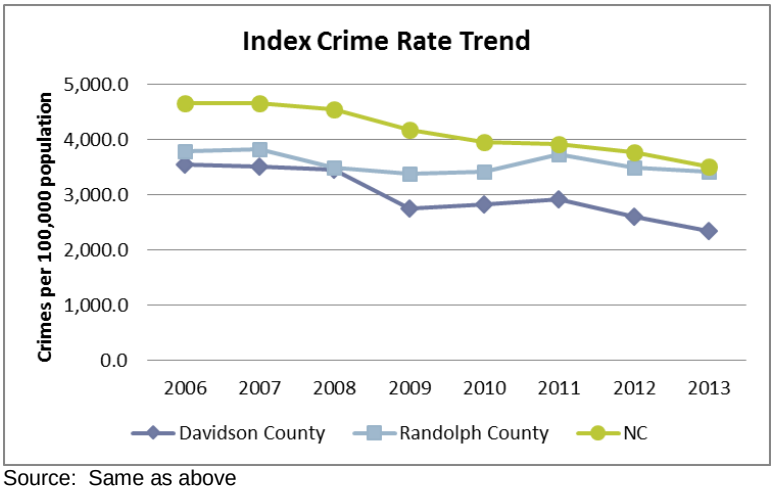
Table 51. Crime Rates, Crimes per 100,000 Population (2009-2013)

Location	Crimes per 100,000 Population														
	2009			2010			2011			2012			2013		
	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime
Davidson County	2,757.8	254.6	2,503.2	2,819.6	231.2	2,588.4	2,921.9	213.0	2,708.9	2,610.0	184.6	2,425.4	2,339.8	187.4	2,212.4
Randolph County	3,381.7	188.0	3,193.6	3,426.2	125.7	3,300.5	3,727.1	144.4	3,582.7	3,498.9	164.6	3,334.3	3,414.2	156.0	3,258.2
State of NC	4,178.4	417.2	3,761.2	3,955.7	374.4	3,581.4	3,919.8	354.6	3,565.2	3,770.6	358.9	3,411.7	3,506.2	339.5	3,166.6

* - Indicates incomplete or missing data.
Source: NC Department of Justice, State Bureau of Investigation, Crime, View Crime Statistics, Crime Statistics (by Year); http://ncdoj.gov/Crime/View-Crime-Statistics.aspx.

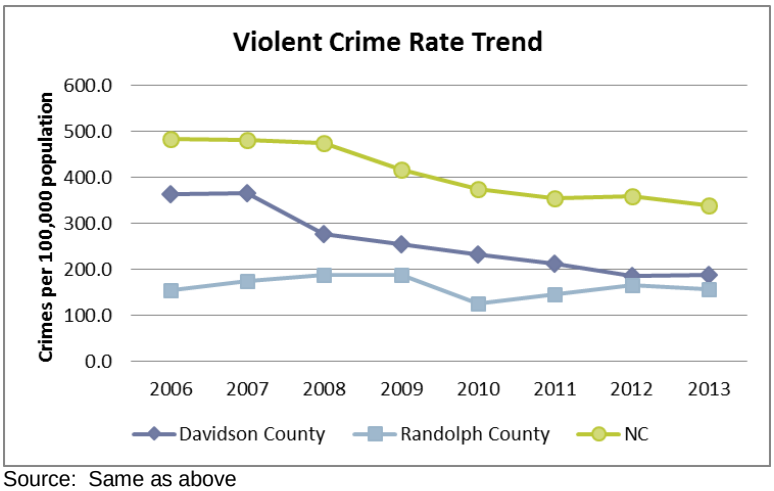
The next three figures present similar but slightly longer-term crime trend data so overall trends can be discerned.

Figure 6. Index Crime Rate (2006-2013)



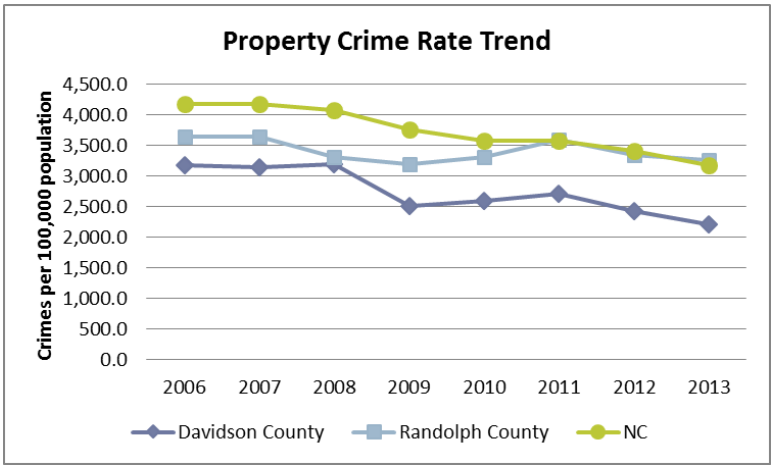
Source: Same as above

Figure 7. Violent Crime Rate (2006-2013)



Source: Same as above

Figure 8. Property Crime Rate (2006-2013)



Source: Same as above

The table below presents detail on index crime committed in Davidson County from 2006-2013. Note the following definitions:

Robbery: larceny by the threat of violence;
Aggravated assault: a physical attack on another person which results in serious bodily harm and/or is made with a deadly or dangerous weapon such as a gun, knife, sword, ax or blunt instrument;
Burglary: unlawful breaking and entering into the premises of another with the intent to commit a felony;
Larceny: the theft of property without use of force; and
Motor vehicle theft: the theft or attempted theft of a motor vehicle

- The predominant violent crime reported in every year cited was aggravated assault.
- The predominant property crime reported in every year cited was larceny.

Table 52. Types of Crimes Reported in Davidson County (2006-2013)

Type of Crime	Number of Crimes							
	2006	2007	2008	2009	2010	2011	2012	2013
Violent Crime	**549**	**555**	**424**	**395**	**361**	**334**	**289**	**294**
Murder	5	3	4	0	8	7	0	4
Rape	15	16	22	22	17	24	14	18
Robbery	109	114	102	112	87	78	75	81
Aggravated Assault	420	422	296	261	249	225	200	191
Property Crime	**4,808**	**4,779**	**4,863**	**3,883**	**4,042**	**4,247**	**3,798**	**3,470**
Burglary	918	1,072	1,586	1,331	1,334	1,541	1,312	1,369
Larceny	3,523	3,340	2,952	2,336	2,535	2,510	2,327	1,936
Motor Vehicle Theft	367	367	325	216	173	196	159	165
Total Index Crimes	5,357	5,335	5,287	4,278	4,403	4,581	4,087	3,764

Source: NC State Bureau of Investigation, Crime in North Carolina, North Carolina Crime Statistics, Crime Statistics in Detailed Reports (By Year), 2013 Annual Reports, County Offenses Ten Year Trend, http://crimereporting.ncdoj.gov/.

Other Criminal Activities

The following table summarizes miscellaneous (non-index crime) criminal activities of the recent past.

- As of September 8, 2015 there were 316 registered sex offenders in Davidson County.
- According to the NC Governor's Crime Commission, there were seven gangs reported in Davidson County in 2013.
- According to the NC State Bureau of Investigation, there were 44 methamphetamine drug lab busts in Davidson County during the period from 2005 through 2013.

Table 53. Other Criminal Activity

Location	No. Registered Sex Offenders (9/8/2015)	No. Gangs	No. Methamphetamine Lab Busts								
		2013	2005	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	316	7	10	1	11	3	0	2	8	6	3
Randolph County	234	6	6	3	3	1	1	0	1	2	4
State of NC	14,469	982	328	197	157	197	206	235	344	460	561
Source:	a	b	c	c	c	c	c	c	c	c	c

a - NC Department of Justice, Sex Offender Statistics, Offender Statistics; http://sexoffender.ncdoj.gov/stats.aspx. (Note that the total does not include those who are incarcerated.) Accessed September 28, 2015.
b - NC Department of Crime Control and Public Safety, Governor's Crime Commission, Publications. Gangs in North Carolina 2013: An Analysis of GangNET Data, March 2013, Appendix 2. https://www.ncdps.gov/div/GCC/PDFs/Pubs/Gangs2013.pdf.
c - NC Department of Justice, State Bureau of Investigation, Crime, Enforce Drug Laws, Meth Focus, Meth Lab Busts; http://www.ncdoj.gov/getdoc/b1f6f30e-df89-4679-9889-53a3f185c849/Meth-Lab-Busts.aspx.

Juvenile Crime

The following definitions will be useful in understanding the subsequent data and discussion.

Complaint: A formal allegation that a juvenile committed an offense, which will be reviewed by a counselor who decides whether to approve or not approve the complaint. If approved, it will be heard in juvenile court.
Undisciplined: Describes a juvenile between the ages of six and 16, who is unlawfully absent from school, or regularly disobedient and beyond disciplinary control of parent/guardian, or is regularly found where it is unlawful for juveniles to be, or has run away from home for more than 24 hours. It also includes 16-17 year olds who have done any of the above except being absent from school.
Delinquent: Describes a juvenile between the ages of six and not yet 16 who commits an offense that would be a crime under state or local law if committed by an adult.
Diversion: If a complaint is not approved, it may be diverted to a community resource or placed on a diversion contract or plan that lays out stipulations for the juvenile (like community service) to keep the juvenile out of court.
Non-divertible: Non-divertible offenses include offenses like: murder, rape, sexual offense, arson, first degree burglary, crime against nature, willful infliction of serious bodily harm, assault with deadly weapon, etc.
Transfer to Superior Court: A juvenile who is 13, 14 or 15 who is alleged to have committed a felony may be transferred to Superior Court and tried and sentenced as an adult. If a juvenile is over 13 and charged with first degree murder, the judge must transfer the case to Superior Court if probable cause is found.
Rate: The number per 1,000 persons that are aged 6 to 17 in the county.

The next table presents a summary of juvenile justice *complaints* for the period 2011 through 2014. The table after that presents the related juvenile justice *outcomes* for the same period.

- The number and rate of complaints for *undisciplined* youth in Davidson County fluctuated throughout the period cited.
- The number of complaints of *delinquent* youth in Davidson County *increased* in each year cited.

Table 54. Juvenile Justice Complaints
(2011 through 2014)

Location	Complaints															
	No. Undisciplined				No. Delinquent				Rate Undisciplined (Complaints per 1,000 Ages 6 to 17)				Rate Delinquent (Complaints per 1,000 Age 6 to 15)			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Davidson County	81	96	129	80	516	531	654	738	3.0	4.4	4.9	3.1	23.0	43.4	29.7	33.8
Randolph County	61	86	76	63	360	330	266	322	2.5	3.6	3.2	2.7	17.9	16.6	13.6	16.6
State of NC	3,603	3,194	2,738	2,277	33,556	31,575	29,353	29,288	2.3	2.5	1.7	1.5	26.1	24.7	22.9	22.5

Source: NC Department of Juvenile Justice and Delinquency Prevention, Statistics and Legislative Reports, County Databooks (Search by Year); https://www.ncdps.gov/index2.cfm?a=000003,002476,002483,002482,002506,002523.

The following table summarizes the outcomes relative to juvenile justice complaints from 2011 through 2014 in the comparator jurisdictions.

- Over the four years cited, 175 Davidson County youth were sent to secure detention, 18 were sent to youth development centers, and none were transferred to Superior Court. (Note: there is no explanation at the source for the "0" sent to secure detention in 2012, but the figure seems questionable.)

Table 55. Juvenile Justice Outcomes
(2011 through 2014)

Location	Outcomes											
	No. Sent to Secure Detention				No. Sent to Youth Development Center				No. Transferred to Superior Court			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Davidson County	68	0	53	54	4	6	2	6	0	0	0	0
Randolph County	20	13	9	25	0	1	1	3	0	0	0	0
State of NC	3,558	2,767	2,352	2,244	307	216	219	202	28	36	28	14

Source: NC Department of Juvenile Justice and Delinquency Prevention, Statistics and Legislative Reports, County Databooks (Search by Year); https://www.ncdps.gov/index2.cfm?a=000003,002476,002483,002482,002506,002523.

Sexual Assault

The table below summarizes data from the Domestic Violence Commission of the NC Council for Women on the number of individuals who filed complaints of sexual assault in the period from FY2004-05 through FY2013-14.

- Sexual assault complaints in Davidson County peaked at 95 in FY2006-07 and decreased annually after that until FY2011-12.

Table 56. Sexual Assault Complaint Trend
(FY2004-05 through FY2013-14)

Location	No. of Individuals Filing Complaints ("Clients")									
	FY2004-05	FY2005-06	FY2006-07	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Davidson County	59	90	95	65	65	44	24	30 *	55	40
Randolph County	71	55	34	24	43	76	96	148	410	205
State of NC	8,564	8,721	7,444	6,527	8,494	13,392	13,881	13,214	12,971	13,736

* Program submitted partial data.
Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, County Statistics (years as noted); http://www.doa.state.nc.us/cfw/stats.htm.

The next table presents details on the types of sexual assaults reported in FY2013-14.

- The largest proportions of sexual assault complaints in Davidson County were for marital rape (27.5%) and adult survivor of child sexual assault (25.0%).
- Statewide the largest proportion of sexual assault complaints involved child sexual offense (26.2%); the second largest proportion involved adult rape (19.1%).

Table 57. Types of Sexual Assaults
(FY2013-14)

Location	Total Assault Clients	Type of Assault													
		Adult Rape		Date Rape		Adult Survivor of Child Sexual Assault		Marital Rape		Child Sexual Offense		Incest		Other	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Davidson County	40	9	22.5	0	0.0	10	25.0	11	27.5	2	5.0	2	5.0	6	15.0
Randolph County	205	57	27.8	5	2.4	7	3.4	16	7.8	24	11.7	2	1.0	94	45.9
State of NC	13,736	2,624	19.1	1,037	7.5	2,485	18.1	1,120	8.2	3,598	26.2	823	6.0	2,049	14.9

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, 2013-2014 County Statistics; http://www.doa.state.nc.us/cfw/stats.htm.

The following table details the types of offenders involved in sexual assault complaints in comparator jurisdictions in FY2013-14.

- In Davidson County the most common offender in sexual assault complaints was a relative (50.0%), followed by an acquaintance (22.5%).
- Statewide the most common offender was a relative (39.5%), followed by an acquaintance (24.9%).

Table 58. Types of Offenders in Sexual Assaults
(FY2013-14)

Location	Total Offenders	Type of Offender									
		Relative		Acquaintance		Boy/Girl Friend		Stranger		Unknown	
		No.	%	No.	%	No.	%	No.	%	No.	%
Davidson County	40	20	50.0	9	22.5	6	15.0	0	0.0	5	12.5
Randolph County	205	46	22.4	10	4.9	25	12.2	17	8.3	107	52.2
State of NC	14,245	5,632	39.5	3,541	24.9	1,565	11.0	839	5.9	2,668	18.7

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, 2011-2012 County Statistics; http://www.doa.state.nc.us/cfw/stats.htm.

Domestic Violence

The table below summarizes data on the number of individuals who filed complaints of domestic violence from FY2004-05 through FY2013-14.

- Since the figures are counts and not rates, they are difficult to compare from one jurisdiction to another.
- The annual number of complaints varies in all three jurisdictions without a clear pattern over the period covered, but in Davidson County complaints appeared to be more numerous in FY2008-09 and earlier than in FY2009-10 and later. This is contrary to what might be expected, since domestic violence tends to increase in times of economic hardship, such as the national recession that began around 2009-2010.

Table 59. Domestic Violence Complaint Trend (FY2004-05 through FY2013-14)

Location	No. of Individuals Filing Complaints ("Clients")									
	FY2004-05	FY2005-06	FY2006-07	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Davidson County	649	617	491	389	408	259	232	143 *	325	197
Randolph County	1,982	1,416	1,609	2,690	4,226	4,858	3,192	2,833	3,194	2,732
State of NC	50,726	48,173	47,305	41,787	51,873	66,320	61,283	51,563	57,345	55,274

* Program submitted partial data.
Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, County Statistics (years as noted); http://www.doa.state.nc.us/cfw/stats.htm.

The next table provides details on the services received by domestic violence complainants in FY2013-14.

- The most common service provided to domestic violence complainants in Davidson County in the period cited was advocacy.
- The local domestic violence shelter in Davidson County was full on 64 days.

Table 60. Services Received by Domestic Violence Complainants (FY2013-14)

Location	Total Domestic Violence Clients	Services Received									Days Local Shelter was Full
		Total	Information	Advocacy	Referral	Transport	Counseling	Hospital	Court	Other	
Davidson County	197	2,540	796	944	139	25	387	1	103	145	64
Randolph County	2,732	10,930	3,042	2,304	979	350	668	25	526	3,036	306
State of NC	55,274	465,463	136,058	89,745	69,043	31,783	42,762	677	38,369	57,026	8,086

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, 2010-11 County Statistics; http://www.doa.state.nc.us/cfw/stats.htm.

The table below presents data on the number of domestic violence-related homicides in Davidson County and comparators from 2008-2013. (State and local law enforcement agencies are required by General Statute to report specific information on domestic violence related homicides.)

- There was a total of six domestic violence-related homicides in Davidson County over the period cited.

Table 61. Domestic Violence-Related Homicides (2008-2013)

Location	Number of Domestic Violence Related Homicides					
	2008	2009	2010	2011	2012	2013
Davidson County	1	0	4	0	0	1
Randolph County	3	3	0	1	2	2
State of NC	137	99	107	107	106	108

Source: NC Department of Justice, Help for Victims, Domestic Violence Victims, Domestic Violence Statistics. http://ncdoj.gov/getdoc/e79bb308-90e3-44e5-be11-1c847f65a1b0/Domestic-Violence-Murders.aspx

Family Services of Davidson County

Family Services of Davidson County is a community non-profit serving families, youth and children who are having difficulties at home, work, school, juvenile court, or with law enforcement with a variety of services offered on a sliding scale. The agency's Crisis Intervention unit provides advocates and family violence therapists to assist victims of domestic violence and sexual assault. The agency's Hattie Lee Burgess Home provides a safe, temporary residence available 24 hours a day, seven days a week for domestic violence and sexual assault survivors and their children (22). Family Services of Davidson County provided the shelter utilization figures for 2012 through July, 2015 shown in the table below (23).

Table 62. Family Services of Davidson County Shelter Utilization (2012-2015)

	2012	2013	2014	2015 (Thru July)
Total clients	143	156	89	55
Adults	74	78	53	29
Children under age 18	69	78	36	26

Personal communication from Danette Edwards, Crisis Intervention Manager, Family Services of Davidson County, Inc., to Jen Hames, Health Education Supervisor, Davidson County Health Department; August 24, 2015.

Child Maltreatment

The responsibility for identifying and reporting cases of child abuse, neglect and exploitation falls to the child protective services program within a county's department of social services. Generally speaking, such a unit will have sufficient staff to handle intake of all reports. However, an agency's ability to investigate and monitor reported cases may vary from year to year, depending on the number of properly trained staff available to it; hence, follow-up on reports may vary independently of the number of reports. The following table presents data for Davidson County from the state's Child Welfare website for the period FY2004-05 through FY2013-14.

- The total number of findings of child abuse, neglect or dependency in Davidson County fluctuated without a clear pattern. The average annual number of findings per year throughout the 10-year period cited was 53. The most frequent finding was for neglect.

Table 63. Reports of Child Abuse and Neglect, Davidson County (FY2004-05 through FY2013-14)

Category	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Total No. of Findings of Abuse, Neglect, Dependency	148	81	33	37	52	46	32	21	40	39
No. Substantiated[1] Findings of Abuse and Neglect	13	4	6	2	6	4	3	2	4	4
No. Substantiated Findings of Abuse	24	29	13	12	15	16	6	9	5	10
No. Substantiated Findings of Neglect	111	48	14	23	31	26	23	10	31	25
Services Needed	105	97	92	79	94	101	110	127	122	151
Services Recommended	204	288	309	160	120	164	155	104	75	90
No. Unsubstantiated Findings	239	158	89	138	127	116	137	141	149	153
Services Not Recommended	275	403	316	649	610	671	654	707	627	591

[1] A "substantiated" report of child abuse, neglect or exploitation indicates that the investigation supports a conclusion that the subject child(ren) was/were abused, neglected, or exploited.
Source: Child Welfare, Reports of Abuse and Neglect section, Reports of Abuse and Neglect Type of Finding/Decision (Not Exclusive) (Longitudinal Data); http://sasweb.unc.edu/cgi-bin/broker?_service=default&_program=cwweb.tbReport.sas&county=Alamance&label=County&format=html&entry=10&type=CHILD&fn=FRST&vtype=xfind.

The next table presents demographic detail from the same source as above on the complaints of child maltreatment tracked in FY2013-14.

- The vast majority (90%) of the 41 substantiated findings involved white children.
- For the year cited, 56% of the substantiated findings involved females.
- The largest proportion of victims (44%) were under the age of six.

Table 64. Demographic Detail of Child Maltreatment Cases, Davidson County (FY2013-14)

Category of Finding	Number of Children											
	Total	White	African-American	Other Races	Hispanic	Non-Hispanic	Male	Female	Ages 0-5	Ages 6-12	Ages 13-17	Missing Age
Abuse and Neglect	6	5	0	1	4	2	5	1	1	3	2	0
Abuse	10	8	2	0	1	9	4	6	3	6	1	0
Neglect	25	24	1	0	1	24	9	16	14	5	5	1
Services Needed	151	119	22	10	4	147	80	71	114	23	6	8
Services Provided, No Longer Needed	18	14	1	3	3	15	6	12	11	3	4	0
Services Recommended	90	77	11	2	6	84	48	42	48	30	12	0
Unsubstantiated	153	134	18	1	12	141	68	85	78	49	24	2
Services Not Recommended	591	480	84	27	40	551	286	305	311	191	88	1

Source: Child Welfare, Reports of Abuse and Neglect section, Table of Summary Data: Type of Finding by Category (Longitudinal). http://sasweb.unc.edu/cgi-bin/broker?_service=default&_program=cwweb.icans.sas&county=North%20Carolina&label=&entry=10.

CHAPTER THREE: HEALTH RESOURCES

Access to and utilization of healthcare is affected by a range of variables including the availability of medical insurance coverage, availability of medical professionals, transportation, cultural expectations and other factors.

MEDICAL INSURANCE

Medically Indigent Population

In most communities, citizens' utilization of health care services is related to their ability to pay for those services, either directly or through private or government health insurance plans/programs. People without these supports are called “medically indigent”, and theirs is often the segment of the population least likely to seek and/or to be able to access necessary health care.

The following table presents data on the proportion of the population (by age group) without health insurance of any kind. Prior to the adoption of the Affordable Care Act (ACA) the health insurance system in the US was built largely upon employer-based insurance coverage, so an increase in the number of unemployed people usually resulted in an increase in the number of uninsured. This may change due to activity in the ACA Insurance Marketplace; time will tell.

- During the period cited, the percent of the Davidson County population overall (age 0-64) without health insurance was highest in 2010 (19.9%), but improved each period to a low of 17.5% in 2013.
- In all jurisdictions the younger age group (0-18) had a significantly lower percent without health insurance than the older age group (19-64). This is due at least in part to NC Health Choice, a children’s insurance program discussed below.

Table 65. Percent of Population without Health Insurance, by Age Group (2010 through 2013)

Location	2010			2011			2012			2013		
	0-18	19-64	0-64	0-18	19-64	0-64	0-18	19-64	0-64	0-18	19-64	0-64
Davidson County	8.4	24.5	19.9	7.3	23.2	18.8	6.8	23.0	18.5	6.1	21.9	17.5
Randolph County	8.5	25.2	20.3	9.8	26.5	21.7	8.7	26.8	21.6	8.4	26.1	21.0
State of NC	8.3	23.5	19.1	7.9	23.0	18.7	7.9	23.4	19.0	6.9	22.5	18.1

Source: *Small Area Health Insurance Estimates,* (years as noted).. U.S. Census Bureau, Small Area Health Insurance Estimate (SAHIE) Interactive Data Tool. Geographies and age groups as noted. www.census.gov/did/www/sahie/data/interactive.

As will be reported on fully in a later chapter in this report, the 2015 Davidson County Community Health Survey asked participants whether or not they had health insurance at the time of the survey (summer, 2015). Among the 922 respondents who answered the question, 118 (12.8%) did not have health coverage, a figure not even close to the admittedly dated figures in the table above. Among Davidson County males participating in the survey the percent uninsured was 22%; the percent of females who were uninsured was 11%. According to survey data, the highest frequency of uninsured occurred among African Americans (33%)

and Hispanics (84%). The smaller proportion of uninsured identified in the survey compared to the data in the table may be due to a number of factors, including uneven distribution of survey participants (the survey was based on a convenience sample that reached predominately wealthier and employed residents), and an economy that had improved since 2013. It is also possible that the lower survey figure was connected to persons recently having gained coverage through the Affordable Care Marketplace.

North Carolina Health Choice

In 1997, the Federal government created the *State Children's Health Insurance Program* (SCHI)—later known more simply as the *Children's Health Insurance Program* (CHIP)—that provides matching funds to states for health insurance for families with children. The program covers uninsured children in low-income families who earn too much to qualify for Medicaid (24).

States are given flexibility in designing their CHIP eligibility requirements and policies within broad Federal guidelines. The NC CHIP program is called NC Health Choice for Children (NCHC). This plan, which took effect in October 1998, includes the same benefits as the State Health Plan, plus vision, hearing and dental benefits (following the same guidelines as Medicaid). Children enrolled in NCHC are eligible for benefits including sick visits, check-ups, hospital care, counseling, prescriptions, dental care, eye exams and glasses, hearing exams, hearing aids, and more (25). In NC, the maximum income limit for participation in the NCHC program is 200% of the Federal Poverty Guideline.

The following table presents enrollment figures for NCHC for 2008 through 2013.

- In Davidson County the percent of eligible children enrolled rose annually over the period cited to a high of 99.0% in 2013.

Table 66. NC Health Choice Enrollment (2008-2013)

Location	January, 2008		January, 2009		January, 2010		January, 2011		January, 2012		January, 2013	
	# Children Eligible	% Eligibles Enrolled	# Children Eligible	% Eligibles Enrolled	# Children Eligible	% Eligibles Enrolled	# Children Eligible	% Eligibles Enrolled	# Children Eligible	% Eligibles Enrolled	# Children Eligible	% Eligibles Enrolled
Davidson County	2,360	76.0	2433	86.0	2,653	90.0	2,871	94.6	2,935	98.7	3,027	99.0
Randolph County	1,978	58.0	2202	67.0	2,415	71.0	2,551	83.3	2,703	94.6	2,815	96.3
State of NC	116,712	65.0	124,434	77.0	131,499	83.0	137,825	88.9	1,455,992	92.5	151,262	96.1

Source: NC Division of Medical Assistance, Statistics and Reports, N.C. Health Choice Monthly Enrollment/Exemption Reports, 2008-2013; http://www.ncdhhs.gov/dmA/ca/nchcenroll/index.htm.

Medicaid

Medicaid is a health insurance program for low-income individuals and families who cannot afford health care costs. It serves low-income parents, children, seniors, and people with disabilities. Both coverage and eligibility requirements are different for people with different kinds of needs. Chief among these requirements is low income, which depending on service can range from 51% to 200% of the Federal Poverty Guideline.

The table below summarizes data on Medicaid eligibility and expenditures for the period from FY2007 through FY2010.

- The number of Davidson County residents eligible for Medicaid increased annually every year cited. The percent of residents eligible increased annually from FY2007 through FY2009 before stabilizing in FY2010.
- The average Medicaid cost per adult enrollee in Davidson County increased overall between FY2007 and FY2010.

Table 67. Medicaid Eligibility and Expenditures (FY2007 through FY2010)

Location	FY2007			FY2008			FY2009			FY2010		
	No. Eligible	% Eligible	Average Cost per Adult Enrollee	No. Eligible	% Eligible	Average Cost per Adult Enrollee	No. Eligible	% Eligible	Average Cost per Adult Enrollee	No. Eligible	% Eligible	Average Cost per Adult Enrollee
Davidson County	23,679	15.0	$6,297	25,368	16.0	$6,275	27,035	17.0	$6,365	27,940	17.0	$7,798
Randolph County	22,234	16.0	$6,829	23,638	17.0	$6,970	25,548	18.0	$7,099	26,427	19.0	$6,725
State of NC	1,330,486	15.0	$7,254	1,397,732	15.0	$7,244	1,500,204	16.0	$7,389	1,577,121	17.0	$7,256

Source: NC Division of Medical Assistance, Statistics and Reports, Medicaid Data, County-Specific Snapshots for NC Medicaid Services, 2008-2011 (geographies as noted); http://www.ncdhhs.gov/dma/countyreports/index.htm.

The next table presents data for Davidson County on the number of Medicaid-eligible persons by program area for six recent calendar years. Note that the figure presented represents the number eligible in December of each year.

- The total number of eligibles increased annually between 2008 and 2013 except for 2012.
- The program areas with the largest number of eligibles were Infants and Children, followed by AFDC (Aid to Families with Dependent Children).

Table 68. Davidson County Medicaid Eligibles, by Program Area (as of December 31, 2008 through 2013)

Year	Number of Eligibles											
	Aged	Blind	Disabled	AFDC	Foster Care	Pregnant Women	Infants & Children	Medicaid CHIP	Medicare Catastrophic	Refugees Aliens	BCC	Total Eligibles
2008	1,893	23	3,812	5,801	49	503	10,153	761	1,266	6	6	24,273
2009	1,830	25	3,818	6,082	40	520	11,390	719	1,410	3	5	25,842
2010	1,841	22	3,875	6,400	34	505	11,362	740	1,479	26	7	26,291
2011	1,866	23	4,024	6,272	39	546	12,261	745	1,600	21	10	27,407
2012	1,882	18	4,070	5,302	22	568	13,074	784	1,575	24	6	27,325
2013	1,916	19	4,159	5,153	23	535	13,204	801	1,682	26	11	27,529

Source: NC Division of Medical Assistance, Statistics and Reports, Medicaid Data: Authorized Eligibles by County and Program Aid Category. Title XIX Authorized Medicaid Eligibles (years as noted); http://www2.ncdhhs.gov/dma/elig/index.htm
AFDC - Medicaid Aid to Families with Dependent Children
BCC - Breast and Cervical Cancer Program

Health Check Early Periodic Screening, Diagnosis and Treatment

Federal law requires that Medicaid-eligible children under the age of 21 receive any medically necessary health care service covered by the federal Medicaid law, even if the service is not normally included in the NC State Medicaid Plan. This requirement is called Early Periodic Screening, Diagnosis and Treatment (EPSDT). In NC, Health Check EPSDT covers complete medical and dental check-ups, provides vision and hearing screenings, and referrals for treatment (26).

The following table presents a four-year summary of the participation of eligible children in the NC Health Check program.

- The number of Davidson County children eligible for Health Check services increased annually between FY2008-09 and FY2011-12.
- The Health Check participation ratio in Davidson County was highest in FY2009-10 (57.3%) but fell significantly thereafter, to little more than 50%.

Table 69. Participation in Health Check EPSDT (FY2008-09 through FY2011-12)

Location	FY2008-09			FY2009-10			FY2010-11			FY2011-12		
	No. Eligible	No. Eligibles Due Initial or Periodic Service	Participation Ratio	No. Eligible	No. Eligibles Due Initial or Periodic Service	Participation Ratio	No. Eligible	No. Eligibles Due Initial or Periodic Service	Participation Ratio	No. Eligible	No. Eligibles Due Initial or Periodic Service	Participation Ratio
Davidson County	19,107	16,124	57.2	19,891	17,141	57.3	20,184	17,141	56.4	20,435	16,968	50.8
Randolph County	18,390	15,754	53.0	19,178	16,672	54.5	19,732	16,569	53.7	19,405	16,804	57.1
State of NC	n/a*	594,043	80.0	1,185,510	963,619	53.8	1,146,716	961,381	54.7	1,161,170	999,141	57.1

Note - The participation ratio is calculated by dividing the number of eligibles receiving at least one initial screening service by the number of eligibles who should receive at least 1 initial or period screenings (not shown in the table).
Source: NC Division of Medical Assistance, Statistics and Reports, Health Check Participation Data; http://www.ncdhhs.gov/dma/healthcheck/participationdata.htm.

HEALTH CARE PROVIDERS

Practitioners

One way to compare the supply of health professionals among jurisdictions is to calculate and compare the ratio of the number of health care providers to the number of persons in the populations of those jurisdictions. In NC, there is data on the ratio of active health professionals per 10,000 population calculated at the county level. The table below presents those data (which for simplicity's sake will be referred to simply as the "ratio") for Davidson County, Randolph County, the state of NC and the US for five key categories of health care professionals: physicians, primary care physicians, registered nurses, dentists and pharmacists. The period covered is 2009-2012.

- The health professional ratios in Davidson County for MDs, primary care MDs, registered nurses, dentists and pharmacists were lower than the comparable state and national ratios in each year cited.

Table 70. Active Health Professionals per 10,000 Population (2009-2012)

Location	2009					2010					2011					2012				
	MDs	Primary Care MDs	DDSs	RNs	Pharms	MDs	Primary Care MDs	DDSs	RNs	Pharms	MDs	Primary Care MDs	DDS	RNs	Pharms	MDs	Primary Care MDs	DDS	RNs	Pharms
Davidson County	7.9	4.6	1.9	47.9	4.8	7.83	4.47	1.71	45.57	4.59	7.77	4.47	1.53	46.40	5.63	7.71	4.04	1.59	46.57	5.32
Randolph County	8.8	5	2.5	41.9	4.7	9.5	5.28	2.74	40.81	4.08	9.38	4.62	2.59	41.85	4.69	9.12	4.21	2.81	44.81	5.33
State of NC	21.2	9.2	4.4	96.9	9.3	21.68	9.42	4.36	97.29	9.15	22.07	7.78	4.35	98.60	9.51	22.31	7.58	4.51	99.56	10.06
United States	23.4 [2]	8.5 [2]	5.3 [3]	92.5 [3]	8.7 [3]	22.7 [2]	8.2 [2]	5.7 [3]	92.0 [3]	8.3 [3]	22.7 [2]	8.2 [2]	5.7 [3]	92.0 [3]	8.3 [3]	22.7 [2]	8.2 [2]	5.7 [3]	92.0 [3]	8.3 [3]

Abbreviations used: MDs (Physicians), RNs (Registered Nurses), DDSs (Dentists), Pharms (Pharmacists)
[1] Primary Care Physicians are those who report their primary specialty as family practice, general practice, internal medicine, pediatrics, or obstetrics/gynecology.
[2] US ratio from US Census Bureau estimates. Comparison data is for date two years previous.
[3] US ratio from Bureau of Labor Statistics. Comparison data matches.
Source for NC Data: Cecil G. Sheps Center for Health Services Research, North Carolina Health Professions Data System, North Carolina Health Professions Data Books, Table 14 (2009 - 2012); http://www.shepscenter.unc.edu/hp/publications.htm.

Lower ratios alone are not, by themselves, an indicator of substandard health care access, since Davidson County is adjacent to Forsyth County, home to two major medical centers, and surrounding counties house numerous private provider practices.

The following table lists the number of active health professionals in Davidson County, by specialty, for 2012:

- As of 2012 representatives of most specialties were present in Davidson County, although there were particularly low numbers of general practitioners, certified nurse midwives, podiatrists, practicing psychologists, and psychological assistants.

Table 71. Number of Active Health Professionals in Davidson County, by Specialty (2012)

Category of Professional	Davidson County
Physicians	
Non-Federal Physicians	126
Primary Care Physicians	66
Family Practice	24
General Practice	1
Internal Medicine	13
Obstetrics/Gynecology	10
Pediatrics	18
Other Specialities	60
Dentists and Dental Hygienists	
Dentists	26
Dental Hygienists	84
Nurses	
Registered Nurses	761
Nurse Practitioners	30
Certified Nurse Midwives	1
Licensed Practical Nurses	212
Other Health Professionals	
Chiropractors	12
Occupational Therapists	32
Occupational Therapy Assistants	25
Optometrists	14
Pharmacists	87
Physical Therapists	59
Physical Therapy Assistants	29
Physician Assistants	16
Podiatrists	1
Practicing Psychologists	5
Psychological Assistants	3
Respiratory Therapists	29

[1] Numbers reported include those active within the profession and those newly licensed in 2009 with unknown activity status; inactives are excluded.
Source: Cecil G. Sheps Center for Health Services Research, North Carolina Health Professions Data System. Publications. 2011 North Carolina Health Professions Databook; http://www.shepscenter.unc.edu/hp/publications/2012_HPDS_DataBook.pdf.

There were 26 dentists in Davidson County at the time of the census above, but because many dental practices do not accept Medicaid and/or NC Health Choice clients accessing dental care may be a particularly difficult problem for Medicaid enrollees. The table below lists dental practices in Davidson County that accept Medicaid and/or NC Health Choice clients.

Table 72. Davidson County Dentists Accepting Medicaid/Health Choice Clients (As of February 2, 2015)

Provider Name/Practice Name	Location	Medicaid/ Health Choice	Currently Accepting New Medicaid Clients	Currently Accepting New Health Choice Clients
Madeline Abudu/Davidson County Health Dept	Lexington	Medicaid	Yes	
Ltanya Bailey	Denton	Medicaid	Yes	
Terry Bowman	Denton	Both	Yes	No
Diane Bundy/Smith Bundy and Fisher DDS	Thomasville	Medicaid	No	
Pamela Darr	Thomasville	Both	No	No
Gerald Fisher/Smith Bundy and Fisher DDS	Thomasville	Medicaid	No	
Sarah Frye/Sarah Frye DDS PA	Lexington	Both	Yes	Yes
Melanie Hairston/J. Mark Oliver DDS	High Point	Medicaid	No	
Anthony Hoang/Anthony Hoang DMD PLLS	Lexington	Both	Yes	No
Charles Hoover	Lexington	Both	Yes	Yes
Carolina North/North Carolina Baptist Hospital	Winston Salem	Medicaid	Yes	
John Oliver/J. Mark Oliver DDS	High Point	Medicaid	No	
Daniel Siceloff	Lexington	Both	Yes	Yes
Edward Smith/Smith Bundy and Fisher DDS	Thomasville	Medicaid	No	
Michael Strohecker/Anthony Hoang DMD PLLS	Lexington	Medicaid	No	
Sheri Thomas/Davidson County Health Dept	Lexington	Medicaid	Yes	
Nikki Tucker/J. Mark Oliver DDS	High Point	Both	Yes	No

Source: NC Division of Medical Assistance, Medicaid, Find a Doctor, NC Medicaid and NC Health Choice Dental Provider Lists; http://www.ncdhhs.gov/dma/dental/dentalprov.htm.

Hospitals

Novant Health Thomasville Medical Center

The city of Thomasville, in the northern part of Davidson County, is home to Novant Health Thomasville Medical Center, is a not-for-profit hospital offering advanced treatments for residents of Davidson County and surrounding communities. Over 200 physicians have privileges at Thomasville Medical Center, including hospitalists available 24/7 to treat the urgent medical needs of hospitalized patients. The hospital has 101 general beds, and an additional 45 beds in its Geriatric Behavioral Health unit designed to meet the unique medical needs of persons age 55 and older (27).

Wake Forest Baptist Health Lexington Medical Center

Lexington, in the center of Davidson County, is home to Wake Forest Baptist Health Lexington Medical Center. As part of Wake Forest Baptist Health, Lexington Medical Center is a not-for-profit facility which operates 94 acute care beds and serves as a satellite provider of Wake Forest Baptist Health specialty services including digestive health, ENT Head and Neck surgery among others. In addition, the medical center operates 14 physician practices and a public pharmacy (28).

Demographic Davidson County Hospital Utilization Data

Both hospitals in Davidson County provided the CHNA consultant with hospital proprietary admissions data for 2012, 2013 and 2014, with the condition that no data be specifically linked to a particular hospital. For that reason the tables below present aggregated data from the two hospitals. Note that aggregate data is not shown in the Payer Group category in 2012 because this data was not provided by one of the two hospitals.

Regarding emergency department (ED) admissions shown in the table below:

- Females represented on average more than half (57%) of all ED admissions in the period cited.
- Whites represented an average of 78% of all ED admissions, while composing approximately 87% of the overall Davidson County population in 2014.
- African-Americans/Blacks are greatly over-represented in the ED: this group represented an average of almost 16% of all ED admissions, while composing 9.4% of the overall Davidson County population in 2014.
- Although the category is somewhat muddled by identifier conventions that differ from hospital to hospital, Hispanic/Latinos represented an average of approximately 5% of all ED admissions, while composing 6.8% of the overall Davidson County population in 2014.
- The Adult age group (18-64 years) is over-represented in the ED: this age group represented an average of 69% of all ED admissions, while composing approximately 58% of the overall county population.
- Pediatric (under age 18) and Geriatric (age 65 and older) patients were under-represented in the ED. Pediatric patients represented an average of 19.5% of all ED admissions while composing approximately 25% of the overall county population, and Geriatric patients represented an average of 11% of all ED visits while composing 16.8% of the Davidson County population in 2014.
- An average of 28% of all ED admissions were for “self-pay” or “indigent” patients. Medicaid patients represented an average of approximately 33% of all ED admissions.

Table 73. Davidson County Hospital Emergency Department Admissions (2012-2014)

Demographic Parameter	Total Number of Admissions					
	2012		2013		2014	
	Number	Percent	Number	Percent	Number	Percent
Gender						
Male	25,368	42.3	25,397	42.9	23,910	43.2
Female	34,645	57.7	33,851	57.1	31.484	56.8
Total	60,013	100.0	59,248	100.0	55,394	100.0
Race						
African American/Black	9,070	15.1	9,483	16.0	9,057	16.4
Asian	237	0.4	290	0.5	474	0.9
Caucasian/White	47,290	78.8	46,080	77.8	42,773	77.2
Hispanic/Latino/Other	3,024	5.0	3,059	5.2	2,578	4.7
Native American	172	0.3	187	0.3	385	0.7
Other	93	0.2	60	0.1	48	0.1
Unknown/Unavailable	127	0.2	89	0.2	79	0.1
Total	60,013	100.0	59,248	100.0	55,394	100.0
Age Group						
Pediatric (<18 years)	12,066	20.1	11,576	19.5	10,552	19.0
Adult (18-64 years)	41,836	69.7	41,163	69.5	38,280	69.1
Geriatric (≥65 years)	6,111	10.2	6,509	11.0	6,562	11.9
Total	60,013	100.0	59,248	100.0	55,394	100.0
Payer Group						
Commercial (incl. Managed Care)	n/a	n/a	10,067	17.0	10,251	18.5
Medicaid (incl. Managed Care)	n/a	n/a	19,709	33.3	18,614	33.6
Medicare (incl. Managed Care)	n/a	n/a	10,857	18.3	10,462	18.9
Military	n/a	n/a	355	0.6	387	0.7
Self-Pay/Indigent	n/a	n/a	17,462	29.5	14,764	26.7
Workers Compensation	n/a	n/a	523	0.9	493	0.9
Other	n/a	n/a	268	0.5	423	0.8
Unknown/Unavailable	n/a	n/a	7	0.0	0	0.0
Total	n/a	n/a	59,248	100.0	55,394	100.0

Source: Based on proprietary data provided to Sheila S. Pfaender, Public Health Consultant, by Wake Forest Baptist Health Lexington Medical Center and Novant Health Thomasville Medical Center.

Regarding inpatient (IP) hospitalization discharges shown in the next table:

- Females represented an average of 64% of all IP discharges over the period cited.
- Whites represented an average of approximately 81% of all IP discharges, while composing approximately 87% of the overall Davidson County population in 2014.
- African-Americans/Blacks represented an average of almost 12% of all IP discharges, while composing 9.4% of the overall Davidson County population in 2014.
- Although the category is somewhat muddled by identifier conventions that differ from hospital to hospital, Hispanic/Latinos represented an average of approximately 6% of all IP discharges, while composing 6.8% of the overall Davidson County population in 2014.
- The Adult age group (18-64 years) age group represented an average of 45% of all IP discharges, while composing approximately 58% of the overall county population.
- Pediatric patients (<18 years of age) represented an average of 18% of all IP discharges while composing approximately 25% of the overall county population.
- Geriatric patients (age 65 and older) were over-represented in terms of IP discharges, representing an average of 37% of all IP discharges while composing 17% of the Davidson County population in 2014.

- An average of only 6% of all IP discharges were of “self-pay” or “indigent” patients. Medicaid was the primary payer for an average of approximately 32% of all IP discharges. Medicare was the payer of record for the highest proportion of IP discharges, accounting for an average of 44% of all IP discharges.

Table 74. Davidson County Hospital Inpatient Hospital Discharges (2012-2014)

Demographic Parameter	Total Number of Admissions					
	2012		2013		2014	
	Number	Percent	Number	Percent	Number.	Percent
Gender						
Male	2,565	35.6	2,509	36.8	2,457	36.5
Female	4,633	64.4	4,312	63.2	4,282	63.5
Total	7,198	100.0	6,821	100.0	6,739	100.0
Race						
African American/Black	891	12.4	749	11.0	823	12.2
Asian	88	1.2	55	0.8	80	1.2
Caucasian/White	5,763	80.1	5,555	81.4	5,405	80.2
Hispanic/Latino/Other	425	5.9	431	6.3	383	5.7
Native American	15	0.2	12	0.2	25	0.4
Unknown/Unavailable	16	0.2	19	0.3	23	0.3
Total	7,198	100.0	6,821	100.0	6,739	100.0
Age Group						
Pediatric (<18 years)	1,299	18.0	1,259	18.5	1,187	17.6
Adult (18-64 years)	3,153	43.8	3,110	45.6	3,034	45.0
Geriatric (≥65 years)	2,746	38.2	2,452	35.9	2,518	37.4
Total	7,198	100.0	6,821	100.0	6,739	100.0
Payer Group						
Commercial (incl. Managed Care)	n/a	n/a	1,048	15.4	1,104	16.4
Medicaid (incl. Managed Care)	n/a	n/a	2,291	33.6	2,092	31.0
Medicare (incl. Managed Care)	n/a	n/a	2,967	43.5	3,010	44.7
Military	n/a	n/a	30	0.4	50	0.7
Self-Pay/Indigent	n/a	n/a	437	6.4	421	6.2
Workers Compensation	n/a	n/a	3	0.0	8	0.1
Other	n/a	n/a	44	0.6	54	0.8
Unknown/Unavailable	n/a	n/a	1	0.0	0	0.0
Total	n/a	n/a	6,821	100.0	6,739	100.0

Source: Based on proprietary data provided to Sheila S. Pfaender, Public Health Consultant, by Wake Forest Baptist Health Lexington Medical Center and Novant Health Thomasville Medical Center.

Davidson County Health Department

Davidson County Health Department began in 1916 when the county first appointed a health officer. Since that time, the Davidson County Health Department's mission has been to assess, protect, and promote the quality of life for all people within the county. The agency carries out this mission by identifying and reducing health risks, preventing the spread of diseases, fostering healthy lifestyles through education, promoting a safe and healthful environment, and providing quality healthcare services in partnership with the community. The health department houses five distinct sections: Administration, Personal Health, Environmental Health, WIC, and Health Education. The health department is located at 915 Greensboro Street in Lexington. The Davidson County Health Department experienced a significant decline in the number of full-time employees (FTEs) between FY2009 and FY2011 (dropping from 122 to 92) but has seen an increase in the number of full-time employees to 98 in FY2015 (29).

The following table provides figures on the total number of clients utilizing Davidson County Health Department Services in 2014 and 2015.

Table 75. Davidson County Health Department Utilization

Year	Total No. Clients
2014	7,659
2015	7,285

Source: Personal communication from Jen Hames, Health Education Supervisor, Davidson County Health Department, to Sheila S. Pfaender, Public Health Consultant, February 12, 2016.

Federally-Qualified Health Center

Currently there are no FQHCs in Davidson County. The nearest are in Sparta (Alleghany County), Jefferson (Ashe County), Boone (Watauga County) and Statesville (Iredell County) (30).

Davidson Medical Ministries Clinic

Davidson Medical Ministries Clinic (DMMC) is a low-cost clinic located in Lexington that meets the needs of the uninsured and the underinsured of Davidson County. It is a private, not-for-profit organization; it is not a government agency, nor is it a part of the Department of Social Services or the Health Department. It's services are not free. Before services can be provided, all clients must provide necessary paperwork to determine their eligibility. If a patient's household income is under 100% of the Federal Poverty Level, DMMC charges a $10 administrative fee for medical and dental visits. If household income is between 101-200% of the Federal Poverty Level, the patient pays on a sliding scale fee, paying the $10 administrative fee upon arrival and being billed subsequently on the scale for the remainder of the cost. Those who have Medicaid, Medicare or private insurance will be seen by Davidson Health Services, a sister organization of Davidson Medical Ministries. DMMC provides primary medical and dental care, but does not treat emergency situations (31).

Davidson County Emergency Medical Services

Established in 1967, Davidson County EMS (DCEMS) was the first county government-funded service of its type in NC. It has grown from a small, basic life support provider into a high-volume, EMT-Paramedic Service. DCEMS was awarded Model System Status by the NC Office of EMS in 2002 and was the first EMS program in the Piedmont Triad to achieve this title. DCEMS operates from seven different locations within the county and is funded by general tax revenues.

DCEMS provides emergency medical care for a population of over 162,000 in a 582 square mile area. With an annual emergency call volume in excess of 20,000 responses, DCEMS operates a minimum of nine Advanced Life Support ambulances and one Advanced Life Support Operations Supervisor quick response vehicle each day. The department has approximately 57 full-time career employees and 40 part-time career employees. In excess of 90% of DCEMS

full-time personnel are cross-trained in Rescue, Fire, Law Enforcement, and Emergency Medical Response (32).

The following table lists the EMS calls for 2012, 2013 and 2014, categorized by nature of call. The highest percentages of calls over the entire period cited were for:

- Sick calls (14.05%).
- Falls (10.35%)
- Breathing problems (8.89%)
- Transfers (7.86%)
- Traffic accidents (7.64%)
- Chest pains (7.27%)
- Unconscious/Fainting (5.58%

Table 76. Davidson County Emergency Communications: EMS Calls (2012-2014)

Code	Nature of Call	Number of Calls				Total as % of All Calls
		2012	2013	2014	Total	
1021	Call by Phone	1	0	0	1	0.00
1036	Domestic/Intimate Partner	0	0	1	1	0.00
1045	Bomb Threat/Susp Pack	1	6	4	11	0.02
1046	Assault	0	1	0	1	0.00
1060	Suspicious Person	0	0	1	1	0.00
1061	Vehicle Stop	0	0	1	1	0.00
1070	Improperly Parked Car	0	0	1	1	0.00
1078	Unlock Vehicle	287	243	262	792	1.12
	Active Shooter	0	0	8	8	0.01
	Announcement	0	0	2	2	0.00
	Assist	31	21	20	72	0.10
	Assist Fire Department	5	1	0	6	0.01
	Attempted Suicide/Suicide	286	249	299	834	1.18
	Attempt to Locate/Welfare	1	0	0	1	0.00
	Cellular Hang-Up/Open Line	0	0	1	1	0.00
	Commercial Structure Fire	5	3	2	10	0.01
	Dam Failure	1	0	0	1	0.00
	EMD	8	0	2	10	0.01
	EMS-Public Service	323	367	402	1092	1.54
	Explosion	7	4	2	13	0.02
	Fire-Public Service	1	0	0	1	0.00
	Mass Casualty Incident	4	6	14	24	0.03
	Medical Call PROQA Launch	623	572	501	1696	2.40
	Out of Units	28	23	20	71	0.10
P10	Chest Pains	1792	1659	1698	5149	7.27
P11	Choking	65	86	95	246	0.35
P12	Convulsion/Seizure	766	769	789	2324	3.28
P13	Diabetic Problems	632	661	553	1846	2.61
P14	Drowning (Near) - Diving	6	6	3	15	0.02
P15	Electrocution	9	7	6	22	0.03
P16	Eye Problem/Injury	20	15	18	53	0.07
P17	Fall	2329	2419	2582	7330	10.35
P18	Headache	140	151	158	449	0.63
P19	Heart Problems	292	318	306	916	1.29
P1	Abdominal Pains	496	500	574	1570	2.22
P20	Heat/Cold Exposure	39	23	27	89	0.13
P21	Hemorrage/Laceration	653	625	713	1991	2.81
P22	Industrial Machine	2	2	2	6	0.01
P23	Overdose/Ingestion	366	363	429	1158	1.64
P24	Pregnancy/Childbirth	102	109	109	320	0.45
P25	Psychiatric/Suicide	374	353	383	1110	1.57
P26	Sick	3330	3320	3297	9947	14.05
P27	Stabbing/Gunshot	61	90	77	228	0.32
P28	Stroke (CVA)	518	556	507	1581	2.23
P29	Traffic Accident	1800	1824	1783	5407	7.64
P2	Allergies/Hives/Med	210	206	187	603	0.85
P30	Traumatic (Specific)	272	268	305	845	1.19
P31	Unconscious/Fainting	1266	1287	1396	3949	5.58
P32	Unknown/Man Down	565	647	700	1912	2.70
P33	Transfer/Interfacility	1843	2015	1710	5568	7.86
P3	Animal Bite/Attack	36	42	40	118	0.17
P4	Assault/Rape	310	317	339	966	1.36
P51	Plane Emergency/Crash/Unknown	8	7	6	21	0.03
P54	Collapse	7	5	1	13	0.02
P56	Elevator Entrapment/Malfunction	1	3	1	5	0.01
P57	Explosion	7	4	5	16	0.02
P5	Back Pain	181	189	165	535	0.76
P60	Odor - High Life Hazard	5	7	1	13	0.02
P61	Hazmat	10	4	11	25	0.04
P62	High Angle Rescue	4	0	2	6	0.01
P66	Odor Inside/Out Patients	4	2	1	7	0.01
P67	Person on Fire (Outside)	2	0	1	3	0.00
P69	Stranded	18	16	20	54	0.08
P6	Breathing Problems	2082	2039	2175	6296	8.89
P70	Train Collision/Derailment	7	1	2	10	0.01
P71	Vehicle Fire	7	4	9	20	0.03
P72	Water Rescue/Recovery/Stranded	7	4	7	18	0.03
P75	Train/Rail Fire/Unknown	3	1	2	6	0.01
P7	Burns/Explosions	40	27	35	102	0.14
P8	Carbon/Hazmat/Inhalation	24	15	17	56	0.08
P9	Cardiac/Respiratory	334	396	384	1114	1.57
	Plane Incident	1	1	1	3	0.00
	Standby	718	418	498	1634	2.31
	Stranded Motorist/Tow	1	0	0	1	0.00
	Test/OS/Trouble	0	70	18	88	0.12
	TK65 Transport	126	143	118	387	0.55
	Train Accident	1	0	0	1	0.00
	Water Rescue	0	1	1	2	0.00
	Total	**23504**	**23491**	**23810**	**70805**	100.00

Source: Personal communication from Jen Hames, Health Education Supervisor, Davidson County Health Department, to Sheila Pfaender, Public Health Consultant, August 24, 2015.

School Health

Lexington City Schools and Thomasville City Schools each employee one full-time nurse; Davidson County Schools employs two full-time nurses. The Davidson County Health Department employees the other 14 school nurses. The most recent (SY2012-2013) ratio of school nurses to students in Davidson County schools was 1:3,625; the comparable ratio for Lexington City Schools was 1:753 and for Thomasville City Schools 1:598. During the same school year the ratio for the state was 1:1,177 (33). The recommended ratio is 1:750.

Student's needs range from first aid for cuts, acute illness nursing and hygiene counseling to chronic disease management. The following table summarizes the conditions presented by students, and the services provided to them, by nurses in Davidson County LEAs for SY2014-15.

Following is a list of the medical conditions presenting in the largest number of students in Davidson County:

- Asthma – 2,110 students
- Allergies (severe) – 718
- Migraine headaches – 321
- Seizure disorder/Epilepsy – 169
- Gastrointestinal disorders – 125
- Cardiac condition – 106
- Orthopedic disability (permanent) – 89
- Renal/Adrenal/Kidney condition (including Addison's disease) – 83
- Hearing loss - 76

In addition, significant numbers of students in the three LEAs present with behavioral, emotional and mental health issues, including:

- ADD/ADHD – 1,697
- Autistic disorders (ASD) includiong Asperger's Syndrome, PDD – 229
- Emotional/behavioral and/or psychiatric disorder not otherwise listed – 261
- Traumatic brain injury – 16
- Eating disorders (including anorexia, bulemia) - 7

In the period cited, 31 students were deemed "obese", with a BMI exceeding the 95th percentile. Diabetes affects 103 students in the county; 89 students with Type I, and 14 with Type II. Note that the appearance of Type II diabetes was previously extremely uncommon in the population under age 18. In addition, school nurses in Davidson County performed 100 blood glucose monitoring procedures in SY2014-15, gave 42 insulin injections, and monitored insulin pumps on 45 occasions (34). The matters of overweight/obesity and emerging Type II diabetes in the school-age population bear monitoring in Davidson County.

Table 77. School Nurse Activity Summary, Davidson County LEA's, SY2014-15

Nature of Condition/Medication/Activity	No. Clients Served/Services Provided		
	Davidson County Schools	Lexington City Schools	Thomasville City Schools
Identified Health Conditions			
ADD/ADHD	1,351	210	136
Allergies (severe)	534	91	93
Asthma	1,577	239	294
Autistic disorders (ASD) including Asperger's Syndrome, PDD	180	24	25
Blood disorders not listed elsewhere (e.g., chronic anemia, Thalassemia)	15	0	6
Cancer, including leukemia	16	0	3
Cardiac condition	86	13	7
Cerebral palsy	37	14	3
Chromosomal/genetic conditions not otherwise listed including Down's Syndrome, Fragile X, Trisomy 18	41	3	9
Chronic encopresis	21	5	6
Concussion	8	8	5
Chronic infectious diseases (toxoplasmosis, cytomegalovirus, hepatitis B/C, HIV, syphilis, TB)	5	0	2
Cystic fibrosis	9	0	0
Diabetes Type I	81	8	0
Diabetes Type II	7	4	3
Eating disorders (including anorexia, bulimia)	4	0	3
Emotional/behavioral and/or psychiatric disorder not otherwise listed	200	21	40
Fetal alcohol syndrome	2	0	0
Gastrointestinal disorders including Crohn's, celiac disease, IBS, gluten intolerance, etc.	102	11	12
Hearing loss	59	9	8
Hemophilia	7	0	1
Hydrocephalus	23	3	0
Hypertension	16	5	4
Hypo-/Hyper-thyroidism	27	2	1
Metabolic conditions or endocrine disorders not otherwise listed	28	1	1
Migraine headaches	252	22	47
Multiple sclerosis	1	0	0
Muscular dystrophy	6	0	0
Obesity (>95th% BMI)	24	0	7
Orthopedic disability (permanent)	58	25	6
Other neurological condition not otherwise listed	24	5	1
Other neuromuscular condition not otherwise listed	5	7	2
Renal/Adrenal/Kidney condition including Addison's	69	5	9
Rheumatological conditions including Lupus, JRA	15	2	2
Seizure disorder/Epilepsy	127	29	13
Sickle cell anemia	1	3	1
Sickle cell trait (only)	4	10	10
Spina bifida (myelomeningocele)	5	1	1
Traumatic brain injury	12	3	1
Visually impaired (uncorrectable)	46	20	5
Student Medications			
Number of students on long-term medications (>3 weeks)	704	53	36
Number of students on short-term medications (<3 weeks)	200	45	16
Number of students on PRN (non-emergency) medications	683	44	127
Number of students on emergency medications	1,039	232	265
Health Care Procedures			
Blood glucose monitoring	84	6	10
Clean intermittent catheterization	6	0	0
Central venous line monitoring	0	0	0
Dressing change/Wound care	5	0	0
Insulin injection	31	10	1
Insulin pump	45	0	0
Nebulizer treatment	16	2	1
Oxygen therapy	2	0	0
Pulse oximeter	2	1	2
Respirator care	1	0	0
Shunt care	0	0	0
Tracheal suctioning (including tracheostomy care)	2	0	1
Stoma care (other than tracheal)	1	1	0
Tube feeding	7	4	1
Reinsertion of feeding tube	2	5	1
Vagal nerve stimulator	1	0	0

Source - Annual School Health Report, 2014-2015; personal communication from Jen Hames, Health Education Supervisor, Davidson County Health Department, to Sheila Pfaender, Public Health Consultant; August 26, 2015

Long-Term Care Facilities

The NC Division of Aging and Adult Services is the state agency responsible for planning, monitoring and regulating services, benefits and protections to support older adults, persons with disabilities, and their families. Among the facilities under the agency's regulatory jurisdiction are nursing homes, adult care homes, and family care homes. Each category of long-term care is discussed subsequently, but the following table summarizes numbers of facilities in each category in Davidson County. There is a total of 1,304 long-term beds in the county.

Table 78. NC-Licensed Long-Term Care Facilities in Davidson County (September, 2015)

Facility Type/Name	Location	# Beds SNF (ACH)[1]	NC ACLS Star Rating (of 5)
Nursing Homes/Homes for the Aged			
Abbots Creek Center	Lexington	64 (0)	
Alston Brook	Lexington	100 (0)	
Avante at Thomasville	Thomasville	120 (0)	
Brian Center Nursing Care/Lexington	Lexington	106 (0)	
Lexington Health Care Center	Lexington	90 (10)	
Mountain Vista Health Park	Denton	60 (60)	
Piedmont Crossing	Thomasville	114 (20)	
Pine Ridge Health and Rehabilitation Center	Thomasville	140 (14)	
Adult Care Homes/Homes for the Aged			
Brookdale Lexington/Southern Assisted Living LLC	Lexington	76	3
Brookstone Retirement Center/Brookstone Rest Home & Retirement Center Inc.	Lexington	115	3
Grayson Creek of Welcome/Landmark Assisted Living LLC	Lexington	55	2
Hilltop Living Center/Plemmons Enterprises Inc.	Linwood	80	3
Mallard Ridge Assisted Living/Mallard Ridge LLC	Clemmons	100	3
Spring Arbor of Thomasville/The Oaks of Thomasville II LP	Thomasville	62	3
Family Care Homes			
Kateland Family Care Home/McCubbins Real Estate Group LLC	Lexington	6	3
The Lyman House/the Almost Home Group LLC	Thomasville	6	n/a
The Perryman House/The Almost Home Group LLC	Thomasville	4	3
Westanna Family Care/McCubbins Real Estate Group LLC	Lexington	6	3

[1] - SNF (ACH) = Maximum number of nursing or adult care home beds for which the facility is licensed.
Source: NC Department of Health and Human Services, Division of Health Services Regulation (DHSR), Licensed Facilities, Adult Care Homes, Family Care Homes, Nursing Facilities (by County); http://www.ncdhhs.gov/dhsr/reports.htm.

Nursing Homes

Nursing homes are facilities that provide nursing or convalescent care for three or more persons unrelated to the licensee. A nursing home provides long term care of chronic conditions or short term convalescent or rehabilitative care of remedial ailments, for which medical and nursing care are indicated. All nursing homes must be licensed in accordance with state law by the NC Division of Health Service Regulation Licensure Section (35).

At the time this report was prepared, there were eight state-licensed nursing homes in Davidson County, offering a total of 794 beds.

Adult Care Homes and Family Care Homes

Adult care homes are residences for aged and disabled adults who may require 24-hour supervision and assistance with personal care needs. People in adult care homes typically need a place to live, some help with personal care (such as dressing, grooming and keeping up with medications), and some limited supervision. Medical care may be provided on occasion but is *not* routinely needed. Medication may be given by designated, trained staff. These homes vary in size from *family care homes* of two to six residents to *adult care homes* of more than 100 residents. These homes were previously called "domiciliary homes," or "rest homes." The smaller homes, with two to six residents, are still referred to as family care homes. In addition, there are Group Homes for Developmentally Disabled Adults, which are licensed to house two to nine developmentally disabled adult residents (36).

Adult care homes are different from nursing homes in the level of care and qualifications of staff. They are licensed by the state Division of Health Service Regulation (Group Care Section) under State regulations and are monitored by Adult Home Specialists within county departments of social services. Facilities that violate licensure rules can be subject to sanctions, including fines.

Effective in January, 2009 the state of NC implemented a Star Rating system to help consumers seeking a long-term placement for a loved one in an adult care home or family care home. The North Carolina Star Rated Certificate program for assisted living facilities was established in response to requests of NC citizens for increased availability of public information regarding the care provided in adult care facilities. The rules are based on General Statute 131D-10 and were created by the NC Medical Care Commission with input from residents and families in adult care homes, advocacy groups, providers, and others. The ratings (from a low of one to a high of five) are based on once-a-year inspections that typically last two or three days. Note that the ratings may not reflect changes in the facility's care and services that have occurred since that inspection date (37).

At the time this report was prepared, there were six state-licensed adult care homes in Davidson County (none of which was rated "5-star"; all are either "3-star" or "2-star" facilities) and four state-licensed family care homes (all of which were either rated "3-star or were unrated). The Adult Care Homes offer a total of 488 beds, and the family care homes a total of 22 beds.

Alternatives to Institutional Care

An alternative to institutional care preferred by many disabled and senior citizens is to remain at home and use community in-home health and/or home aide services. This report prefers to cite only those in-home health and/or home aide services that are licensed by the state of NC. Note that there may be additional providers in Davidson County that refer to themselves as "home health service (or care) providers" that are *not* licensed by the state and are not named in this report. Note that this section also includes hospice services in Davidson County.

Home Care, Home Health and Hospice Services

The table below lists the licensed home care, home health, and hospice services in Davidson County.

Table 79. Licensed Home Care and Hospice Services in Davidson County (September, 2015)

Facility Name	Location	Services
Advantage Nursing Services	Greensboro	Home Care Only
Alpha Healthcare of the Carolinas Inc	Lexington	Home Care Only
Amblecare Inc	Lexington	Home Care Only
Amedisys Home Health Care	Thomasville	Home Care Only, Accredited
BAYADA Home Health Care Inc (2 locations)	Lexington	Home Care Only, Accredited
CareSouth Homecare Professionals	Lexington	Home Care Only, Accredited
Continuum Home Care of Davidson	Thomasville	Home Care Only
Davidson Co. Dept of Senior Services	Lexington	Home Care Only
Home Instead Senior Care	Lexington	Home Care Only
Home Sweet Home Inc.	Lexington	Home Care Only
Hospice of Davidson County Inc	Lexington	Hospice Facility, Accredited
Hospice of Davidson County/Hinkle Hospice House	Lexington	Hospice Facility (8 inpatient beds, 4 residents beds)
Liberty Home Care	Thomasville	Home Care Only, Accredited
Liberty Medical Specialties, Inc	Thomasville	Home Care Only, Accredited
Lincare, Inc	Lexington	Home Care Only
Piedmont Crossing	Thomasville	Home Care Only
Piedmont Home Care	Lexington	Home Care Only, Accredited
Providence Senior Care	Thomasville	Home Care Only

Source - NC Department of Health and Human Services, Division of Health Services Regulation (DHSR), Licensed Facilities, Home Care Only, Home Care with Hospice, Home Health Only, and Home Health with Hospice Facilities (by County); http://www.ncdhhs.gov/dhsr/reports.htm.

Davidson County Department of Social Services

The Davidson County Department of Social Services (DCDSS) assists adults and families with finding appropriate living and healthcare arrangements when care can no longer be maintained at home. Part of this also includes help in returning home or to more independent living arrangements. DCDSS also works with the NC Division of Facility Services to license and monitor the facilities in Davidson County that serve this population. This includes receiving and evaluating complaints made by or on behalf of residents.

DCDSS also provides limited home management and respite services to disabled and elderly adults, families, and children who are unable to perform these tasks themselves. Social Workers assess and evaluate each adult to develop and implement a service plan to meet their needs. This can include locating and contacting other providers as well as coordinating and monitoring the delivery of services (38).

Adult Day Care/Adult Day Health Centers

These facilities offer organized services that are provided during the day in a community group setting for helping individuals improve their self-reliance and delay or avoid placement in a long-term care facility. Family members benefit as the program allows them to continue to work or provide full -time caregivers with respite time.

Adult day care provides an organized program of services during the day in a community group setting for the purpose of supporting the personal independence of older adults and promoting their social, physical and emotional well-being. Also included in the service, when supported by funding from the Division of Aging and Adult Services (NCDAAS), are no-cost medical examinations required for admission to the program. Nutritional meals and snacks, as

appropriate, are also expected. Providers of adult day care must meet State Standards for Certification, which are administrative rules set by the state Social Services Commission. These standards are enforced by the office of the Adult Day Care Consultant within the NCDAAS. Routine monitoring of compliance is performed by Adult Day Care Coordinators located at county departments of social services. Costs to consumers vary, and there is limited funding for adult day care from state and federal sources (39).

Adult day health services are similar programs to adult day care programs in that they provide an organized program of services during the day in a community group setting to support the personal independence of older adults and promote their social, physical, and emotional well-being. In addition, providers of adult day health services, as the name implies, offer health care services to meet the needs of individual participants. Programs must also offer referral to and assistance in using other community resources, and transportation to and from the program may be provided or arranged when needed and not otherwise available. Also included in the service, when supported by funding from the NCDAAS, are medical examinations required for individual participants for admission to day health care services and thereafter when not otherwise available without cost. Food and services to provide a nutritional meal and snacks as appropriate are expected as well (40).

DCDSS works with The Life Center of Davidson Co. to provide this service in Davidson County.

The Life Center of Davidson County

The purpose of The Life Center of Davidson County, Inc. is to provide high quality day-time care to older and impaired adults, and to help improve the quality of life for both the participant and their caregivers by offering a safe supportive environment, support, relief, respite and counseling. The Life Center serves adults in the Lexington, Thomasville, Denton, and Davidson County area. The Life Center provides supervised daytime care (7:15 am until 5:30 pm, Monday through Friday) in a safe and secure home-like setting by trained professionals

The Life Center provides a range of services including:

- Nutritious meals and snacks
- Assistance in personal care (bathing, shaving, assistance in the restroom, etc.)
- Assistance with medications—including monitoring of blood pressure and blood sugar, injections, breathing treatments, etc.
- Socialization with other seniors.

Specific programs and activities include:

- Crafts and Games - Word games, trivia, and Bingo, played to entertain and stimulate. Craft projects are designed to increase dexterity and creativity.
- Exercise – A daily exercise program along with physical activities such as shuffle board, horseshoes, and balloon volleyball are tailored to the person's ability.
- Music – Staff use music to recall memories, assist with positive changes in mood, and decrease anxiety and stress.
- Therapeutic activities - Therapeutic activities are a core component of the services provided, offering a varied program of activities designed to enhance the adult's feeling of self-worth and usefulness, stimulate creativity, provide safety, and provide peer association, enjoyment and fun. Activities are planned to meet the interests, needs and abilities of the participants with an emphasis placed on utilizing strengths. Time is also

scheduled for rest and relaxation. Activities include: guest speakers, exercise, health and nutrition education, cultural enrichment, intergenerational programs, motivation, crafts, music therapy, gardening, devotions, trivia, trips down memory lane, games, Bible Study, Chapel services and more. Safe "wandering" is permitted within the building and onto the screened porch.

- Health Care Services - Health Care staff members assist the participant with taking medications, following special diets, walking and moving about the center, monitoring health through regular blood sugar and blood pressure checks, maintaining mobility through individualized range of motion exercises, bowel and bladder retraining, and more. Additional fee based health services include: daily/weekly blood sugar checks, blood draws, bathing, hair care, and limited transportation.
- Special Diets - A light breakfast, nutritious lunch, and an afternoon snack are part of the services provided. Participants with special dietary needs as prescribed by a physician, will receive meals to meet their special diets (low salt, diabetic, vegetarian, soft or ground foods) (41).

Mental Health Services and Facilities

The unit of NC government responsible for overseeing mental health services is the Division of Mental Health, Developmental Disabilities and Substance Abuse Services (DMH/DD/SAS). In NC, the mental health system is built on a system of Local Management Entities/Managed Care Organizations (LME/MCOs). LME/MCOs are responsible for managing, coordinating, facilitating and monitoring the provision of mental health, developmental disabilities and substance abuse services in the catchment area served. LME/MCO responsibilities include offering consumers 24/7/365 access to services, developing and overseeing providers, and handling consumer complaints and grievances.

At the time this report was prepared, the LME/MCO for Davidson County was Cardinal Innovations Healthcare Solutions. Cardinal serves a total of 16 counties in central NC (42). The duties and responsibilities of the Cardinal LME/MCO include:

- Managing, coordinating and monitoring the mental health intellectual/developmental disabilities and substance use/addiction services (MH/IDD/SA) in the Cardinal Innovations Healthcare Solutions region.
- Authorizing payment for Medicaid services for residents who need MH/IDD/SA services and whose Medicaid originates in the Cardinal Innovations Healthcare Solutions region.
- Authorizes payment for state-funded services for residents without Medicaid or private insurance who live in the Cardinal Innovations Healthcare Solutions region.
- Managing a network of community provider agencies and licensed practitioners who offer a variety of services designed to meet consumer needs.
- Providing a toll-free number for access to information, assessment, crisis care and referrals to Cardinal Innovations Healthcare Solutions 24 hours a day, 7 days a week, 365 days a year through its Access Call Center.
- Monitoring the quality of services, and handling consumer concerns and grievances (43).

While Cardinal Innovations Healthcare Solutions is headquartered in Kannapolis, NC, it maintains a 24-hour 1-800 access/crisis number. It also provides an on-line provider directory to help prospective patients understand their local provider options. For FY2015 the Cardinal Innovations Healthcare Solutions on-line Provider Directory listed 20 contracted providers with physical addresses in Davidson County (44).

(See also the discussion of Mental Health in *Chapter Four: Health Statistics* of this report for a discussion of Mental Health system reform in NC and a review of mental health service utilization by Davidson County residents.)

There is a list of NC-licensed mental health *facilities* (not providers) *physically located* in Davidson County, as shown in the following table. Most of these facilities provide day activities or supervised living services for the developmentally disabled, but other services include adult vocational programs and sheltered workshops, substance abuse treatment and psychosocial rehabilitation.

Table 80. NC-Licensed Mental Health Facilities (G.S. 122C) in Davidson County (September, 2015)

Name of Facility/Operator	Location	Category
AFL - Garrison/Omni Visions, Inc	Lexington	Supervised Living/Alternative Family Living
Ambleside Adult Day Program/Ambleside Inc	Lexington	Day Activity
Arlington House	Lexington	Supervised Living DD Adult
C.F. Marketing/C.F. Marketing LLC	Lexington	Adult Developmental Vocational Programs
Community Living Services of Lexington	Lexington	Adult Developmental Vocational Programs
Davidson #1/The ARC of Davidson County	Lexington	Supervised Living DD Adult
Davidson #2/The ARC of Davidson County	Lexington	Supervised Living DD Adult
Davidson #3/The ARC of Davidson County	Lexington	Supervised Living DD Adult
Davidson #4/The ARC of Davidson County	Lexington	Supervised Living DD Adult
Daymark Davidson Day Treatment/Daymark Recovery Services Inc	Thomasville	Day Treatment
Daymark Davidson Day Treatment at Pickett Elementary	Lexington	Day Treatment
Daymark Recovery Services #2	Lexington	SA Intensive and Comprehensive Outpatient Treatments, Day Treatment for SA
Dream Makers Assisted Living Services LLC	Lexington	Supervised Living DD Adult
LMS Day Treatment/Daymark Recovery Services Inc	Lexington	Day Treatment
Lexington IOP/Nazareth Children's Home	Lexington	Substance Abuse Intensive Outpatient Program
Lexington Treatment Associates/Treatment Centers LLC	Lexington	Outpatient Methadone
LifeSkills Counseling Center/Ellen E. Elliot LCAS, CCS	Lexington	Day Treatment for SA, SA Intensive Outpatient Program
Marajo Place/Alberta Professional Services Inc	Winston-Salem	Supervised Living/Alternative Family Living
Mayfair/Ambleside, Inc.	Lexington	Supervised Living DD Adult
McDaniel AFL/Onmi Visions Inc	Linwood	Supervised Living/Alternative Family Living
Midway/Ambleside	Winston-Salem	Supervised Living DD Adult
New Life/Alberta Professional Services Inc	Thomasville	Supervised Living/Alternative Family Living
Passageway Psychosocial Rehabilitation Program/RHA Health Services Inc	Lexington	Psychosocial Rehabilitation
Path of Hope/Path of Hope Inc	Lexington	Residential Treatment/Rehabilitation, Day Treatment for SA, SA Intensive and Comprehensive Outpatient Treatment Programs
Path of Hope Inc.	Lexington	Residential Treatment/Rehabilitation
Pinnacle Therapeutic Services/Pinnacle Therapeutic Services, LLC	Thomasville	SA Intensive and Comprehensive Outpatient Treatments
Scotthurst I & II/Howell's Child Care Center Inc	Winston-Salem	Day Activity, Supervised Living DD Adult
The Green Center of Growth and Development/Brenda M. Green	Lexington	Substance Abuse Intensive Outpatient Program
The Green Center of Growth and Development/Brenda M. Green	Thomasville	Day Treatment for SA, SA Intensive Outpatient Program
The Workshop of Davidson	Lexington	Adult Developmental Vocational Programs, Day Activity
The Workshop of Davidson - Group Home #1 - Women	Lexington	Supervised Living DD Adult
The Workshop of Davidson - Group Home II (Men)	Lexington	Supervised Living DD Adult
UMAR - Lanier Home/UMAR-WNC, Inc	Lexington	Supervised Living DD Adult
Unique Services of Lexington	Lexington	Supervised Living DD Adult

Source - NC Department of Health and Human Services, Division of Health Services Regulation (DHSR), Licensed Facilities, Mental Health Facilities (G.S. 122C) (by County); http://www.ncdhhs.gov/dhsr/reports.htm.

Other Healthcare Resources

Other Healthcare Facilities

- As of September 15, 2015 there was one independent, free-standing ambulatory surgical facility, two licensed cardiac rehabilitation facilities, and no licensed nursing pools in or proximal to Davidson County, as shown below.
- There were two Medicare-approved dialysis facilities in Davidson County as of September, 2015.

Table 81. Other NC-Licensed Healthcare Facilities in Davidson County (As of September, 2015)

Type and Name of Facility	Location
Licensed Ambulatory Surgical Facilities	
Digestive Health Specialists, PA	Winston-Salem
Licensed Cardiac Rehabilitation Facilities	
Lexington Medical Center	Lexington
Thomasville Medical Center Cardiac Rehabilitation	Thomasville
Licensed Nursing Pools	None

Source - NC Department of Health and Human Services, Division of Health Services Regulation (DHSR), Licensed Facilities; http://www.ncdhhs.gov/dhsr/reports.htm.

Table 82. Medicare-Approved Dialysis Facilities in Davidson County (As of September, 2015)

Facility	Location	Features
Thomasville Dialysis Center of Wake Forest University	Thomaville	In-center hemodialysis; no shifts after 5:00pm
Lexington Dialysis Center of Wake Forest University	Lexington	29 hemodialysis stations; no shifts after 5:00pm; offers peritoneal dialysis, offers home hemodialysis training

Source: Dialysis Facility Compare, http://www.Medicare.gov/Dialysis/Include/DataSection/Questions.

Recreational Facilities

The next table lists some of the public recreational facilities in Davidson County.

Table 83. Public Recreational Facilities in Davidson County

Category/Name	Location	Facilities/Programs
Parks and Recreational Facilities		
East Davidson Hughes Park	Southeastern Davidson County (Thomasville)	youth softball and baseball programs, baseball and softball fields, shelters, concession stand, restrooms, soccer fields
Optimist Park	Eastern Davidson County (Thomasville)	Youth football programs, walking trail, football and soccer fields
Bombay Park	Denton	baseball/softball field, tennis courts, outdoor basketball court, picnic shelter, playground
Davidson County Government West Center Street Campus	Lexington	Main offices, walking trail, gymnasium, soccer field, bocce courts, meeting room, Community Garden project. Exercise and yoga classes offered. Arts and crafts classes offered.
Southmont Park	Lexington	playground, baseball and softball fields, outdoor basketball court, concession stand, restrooms
Linwod Park	Lexington	picnic shelter, walking trail, baseball/softball field
Boone's Cave Park	Western Davidson County (Lexington)	100 acres of forested hiking trails, Natural Heritage Site, picnic shelter, river access for fishing and canoing.
Lake Thom-A-Lex Park	Lexington	picnic shelters, boat launches, kayak and canoe access, bait shop, recreational fishing. Greenway trails under construction.

Source: Davidson County, NC; Departments; Parks and Recreation; http://www.co.davidson.nc.us/ParksAndRecreation/

Note: Over the summers, the Parks and Recreation Department arranges for the public to have access to the playgrounds at several local elementary schools: Brier Creek, Davis Townsend, Denton, Southwood, Tyro and Welcome.

CHAPTER FOUR: HEALTH STATISTICS

METHODOLOGY

Routinely collected mortality and morbidity surveillance data and behavior survey data can be used to describe—and compare—the health status of communities. Briefly speaking, mortality refers to death; morbidity refers to illness or disability among the living. These data, which are readily available in the public domain, typically use standardized definitions, thus allowing comparisons among county, state and national figures. There is, however, some error associated with each of these data sources. Surveillance systems designed to track morbidity, for communicable diseases and cancer diagnoses for instance, rely on reports submitted by health care facilities across the state and are likely to miss a number of cases, and mortality statistics are dependent on the primary cause of death listed on death certificates without consideration of co-occurring conditions.

Understanding Health Statistics

Mortality

Mortality, or the rate of death, is calculated by dividing the number of deaths due to a specific disease in a given period by the population size in the same period. Mortality typically is described as a rate, usually presented as number of deaths per 100,000 residents. Mortality rates are readily available since the underlying (or primary) cause of death is routinely reported on death certificates, the submission of which is more or less universal. However, some error can be associated with cause-of-death classification, since it is sometimes difficult to choose a single underlying cause of death from potentially many co-occurring conditions.

Mortality rate by cause is calculated according to the following formula:

(number of deaths due to a cause/population) X 100,000 = deaths per 100,000 people

Age-adjustment

Many factors can affect the risk of death, including race, gender, occupation, education and income. The most significant factor is age, because the risk of death inevitably increases with age; that is, as a population ages, its collective risk of death increases. Therefore, an older population will automatically have a higher overall death rate just because of its age distribution. At any one time some communities have higher proportions of “younger” people, and others have a higher proportion of “older” people. In order to compare mortality data from one community with the same kind of data from another, it is necessary first to control for differences in the age composition of the communities being compared. This is accomplished by *age-adjusting* the data. Age-adjustment is a statistical manipulation usually performed by the professionals responsible for collecting and cataloging health data, such as the staff of the NC State Center for Health Statistics (NCSCHS). It is not necessary to understand the nuances of age-adjustment to use this report. Suffice it to know that age-adjusted data are preferred for comparing health data from one population or community to another and have been used in this report whenever available.

Aggregate Data

Another convention typically used in the presentation of health statistics is *aggregate data,* which combines annual data gathered over a multi-year period, usually three or five years. The practice of presenting data that are aggregated avoids the instability typically associated with using highly variable year-by-year data consisting of relatively few cases or deaths. The calculation is performed by dividing the number of cases or deaths due to a particular disease over a period of years by the sum of the population size for each of the years in the same period.

Morbidity

Morbidity as used in this report refers generally to the presence of injury, sickness or disease (and sometimes the symptoms and/or disability resulting from those conditions) in the population. Morbidity data usually is presented as a percentage, or a count, but not a rate.

Prevalence

Prevalence, which describes the extent of morbidity, refers to the number of existing cases of a disease or health condition in a population at a defined point in time or during a period. Prevalence expresses a proportion, not a rate. Prevalence is often estimated by consulting hospital records; for instance, hospital discharge records available from NCSCHS show the number of residents within a county who use hospital in-patient services for given diseases during a specific period. Typically, these data underestimate the true prevalence of the given disease in the population, since individuals who do not seek medical care or who are diagnosed outside of the hospital in-patient setting are not captured by the measure. Note also that decreasing hospital discharge rates do not necessarily indicate decreasing prevalence; rather they may be a result of a lack of access to hospital care.

Incidence

Incidence is the population-based rate at which *new cases* of a disease occur and are diagnosed. It is calculated by dividing the number of newly diagnosed cases of a disease or condition during a given period by the population size during that period. Typically, the resultant value is multiplied by 100,000 and is expressed as cases per 100,000; sometimes the multiplier is a smaller number, such as 10,000.

Incidence rate is calculated according to the following formula:

(number of new cases/population) x 100,000 = new cases per 100,000 people

The incidence rates for certain diseases, such as cancer, are simple to obtain, since data on newly discovered cases is routinely collected by the NC Central Cancer Registry. However, diagnoses of other conditions, such as diabetes or heart disease, are not normally reported to central data-collecting agencies, so accurate incidence data on these conditions is rare.

Trends

Data for multiple years is included in this report wherever possible. Since comparing data on a year-by-year basis can yield very unstable trends due to the often small number of cases, events or deaths per year (see below), the preferred method for reporting incidence and mortality data is long-term trends using the age-adjusted, multi-year aggregate format. Most trend data used in this report is of that type.

Small Numbers

Year-to-year variance in small numbers of events can make dramatic differences in rates that can be misleading. For instance, an increase from two events one year to four the next could be statistically insignificant in a population sense but result in a calculated rate increase of 100%. Aggregating annual counts over a five year period before calculating a rate is one method used to ameliorate the effect of small numbers. Sometimes even aggregating data is not sufficient, so the NCSCHS recommends that all rates based on fewer than 20 events—whether covering an aggregate period or not—be considered "unstable", and interpreted only with caution. In recent years, NCSCHS has suppressed reporting data (e.g., mortality rates) based on fewer than 20 events in a five-year aggregate period. (Other state entities that report health statistics may use their own minimum reporting thresholds.) In an effort to assure that unstable health data do not become the basis for local decision-making, this author makes every effort to highlight and discuss primarily rates based on 20 or more events in a five-year aggregate period and on 10 or more events in a single year. However, in jurisdictions the size of Davidson County it may be necessary to use unstable figures in order to have any data at all to report. Where these exceptions occur, the narrative will highlight the potential instability of the data being discussed.

Describing Difference and Change

In describing differences in data of the same type from two populations or locations, or changes over time in the same kind of data from one population or location—both of which appear frequently in this report—it is useful to apply the concept of percent difference or change. While it is always possible to describe difference or change by the simple subtraction of a smaller number from a larger number, the result often is inadequate for describing and understanding the scope or significance of the difference or change. Converting the amount of difference or change to a *percent* takes into account the relative size of the numbers that are changing in a way that simple subtraction does not, and makes it easier to grasp the meaning of the change.

For example, there may be a rate for a type of event (e.g., death) that is one number one year and another number five years later. Suppose the earlier figure is 12.0 and the latter figure is 18.0. The simple mathematical difference between these rates is 6.0. Suppose also there is another set of rates that are 212.0 in one year and 218.0 five years later. The simple mathematical difference between these rates also is 6.0. Although the same, these simple numerical differences are not of the same significance in both instances. In the first example, converting the 6 point difference to a percent yields a relative change factor of 50%; that is, the smaller number increased by half, a large fraction. In the second example, converting the 6-point difference to a percent yields a relative change factor of 2.8%; that is, the smaller number in the comparison increased by a relatively small fraction. In these examples the application of percent makes it very clear that the difference in the first example is of far greater degree than the difference in the second example. This document uses percentage almost exclusively to describe and highlight degrees of difference and change, both positive (e.g., increase, larger than, etc.) and negative (e.g., decrease, smaller than, etc.)

Behavioral Risk Factor Surveillance System (BRFSS)

Davidson County residents participate in the state's annual Behavioral Risk Factor Surveillance System (BRFSS) Survey, as part of an aggregate 35-county sample that encompasses the entire middle third of the state ("Piedmont North Carolina"). It is not possible to isolate survey responses from Davidson County BRFSS participants without oversampling the county, which rarely occurs. Since the aggregate regional data covers such a diverse area, the results cannot

responsibly be interpolated to describe health in Davidson County. As a result, BRFSS data will not be used in this document *except* for local BRFSS data manipulated by the CDC to yield a county-level *estimate*.

Final Health Data Caveat

Some data that is used in this report may have inherent limitations, due to sample size, or its age, for example, but is used nevertheless because there is no better alternative. Whenever this kind of data is used, it will be accompanied by a warning about its limitations.

HEALTH RANKINGS

America's Health Rankings

Each year for more than 20 years, America's Health Rankings™, a project of United Health Foundation, has tracked the health of the nation and provided a comprehensive perspective on how the nation—and each state—measures up. America's Health Rankings is the longest running state-by-state analysis of health in the US.

America's Health Rankings are based on several kinds of measures. Together the metrics for those measures help calculate an overall rank. The table below shows where NC stood in the 2014 overall rankings and in rankings of specific categories relative to the "best" and "worst" states, and those states ranked on either side of NC. Note that first ranked (Hawaii) is best and 50th ranked (Mississippi) is worst.

Table 84. Rank of North Carolina in America's Health Rankings (2014)

Location	National Rank (Out of 50)[1]								
	Overall	Determinants	Outcomes	Diabetes	Smoking	Binge Drinking	Drug Deaths	Obesity	Physical Inactivity
Hawaii	1	3	1	9	3	38	18	2	9
Missouri	36	37	34	22	41	31	38	34	40
North Carolina	***37***	***36***	***40***	***43***	***33***	***8***	***24***	***25***	***34***
Georgia	38	40	32	37	23	9	10	33	31
Mississippi	50	50	50	48	47	5	11	49	50

Source: United Health Foundation, 2014. America's Health Rankings; http://www.americashealthrankings.org.

County Health Rankings

Building on the work of *America's Health Rankings*, the Robert Wood Johnson Foundation, collaborating with the University of Wisconsin Population Health Institute, undertook a project to develop health rankings for the counties in all 50 states. In this project, each state's counties are ranked according to health outcomes and the multiple health factors that determine a county's health. Each county receives a summary rank for its health outcomes and health factors and also for the four different types of health factors: health behaviors, clinical care, social and economic factors, and the physical environment.

The following table presents the 2015 county rankings for Davidson County and its comparator in terms of health outcomes and health factors; the table following that presents additional comparative detail.

- In 2015 Davidson County was ranked 59th in the state of NC in terms of health outcomes, due mostly to a poor quality of life ranking, and 56th in terms of health factors, in which category clinical care and physical environment contributed most to the lower rank.

It should be noted that the County Health Rankings serve a limited purpose, since the data on which they are based in some cases is very old. Furthermore, comparing rankings from year to year may not be valid because the parameters used in the ranking algorithms change from time to time.

Table 85. County Health Rankings
(2015)

Location	County Rank (Out of 100)[1]							
	Health Outcomes			Health Factors				
	Length of Life	Quality of Life	Overall Outcomes Rank	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment	Overall Factors Rank
Davidson County	50	70	59	62	72	40	73	56
Randolph County	43	39	38	42	66	39	80	47

Source: County Health Rankings and Roadmaps, 2015. University of Wisconsin Population Health Institute; http://www.countyhealthrankings.org/app/north-carolina/2014/rankings/outcomes/overall.

Table 86. County Health Rankings Details (2015)

Outcome or Determinate	Davidson	Randolph	NC County Average	Top US Performers[1]
Mortality	***50***	***38***		
Premature death	7,920	7,771	7,212	5,200
Morbidity	***70***	39		
Poor or fair health	21%	19%	18%	10%
Poor physical health days	4.2	4	3.6	2.5
Poor mental health days	4.4	3.7	3.4	2.3
Low birthweight	9.7%	8.3%	9.1%	5.9%
Health Factors	***59***	***47***		
Health Behaviors	***62***	***42***		
Adult smoking	26%	23%	20%	14%
Adult obesity	30%	30%	29%	25%
Food Environment Index	7.0	7	6.6	8.4
Physical inactivity	33%	29%	25%	20%
Access to exercise opportunities	81%	74%	76%	92%
Excessive drinking	15%	11%	13%	10%
Alcohol-impaired driving deaths	33%	36%	33%	14%
Sexually transmitted infections	299	281	519	138
Teen births	47	52	42	20
Clinical Care	***72***	***66***		
Uninsured	18%	22%	19%	11%
Primary care physicians	3265:1	2226:1	1448:1	1045:1
Dentists	5447:1	3752:1	1970:1	1377:1
Mental health providers	1297:1	963:1	472:1	386:1
Preventable hospital stays	69	56	57	41
Diabetic monitoring	88%	90%	89%	90%
Mammography screening	61.3%	63.9%	68.2%	70.7%
Social and Economic Factors	***40***	***39***		
High school graduation	82%	84%	81%	n/a
Some college	52.6%	49.2%	63.8%	71.0%
Unemployment	8.4%	8.2%	8.0%	4.0%
Children in poverty	28%	29%	25%	13%
Income Equality	4.3	4.3	4.8	3.7
Children in single-parent households	34%	4%	36%	20%
Social associations	11.2	11.2	11.70	22.00
Violent crime	218	145	355	59
Injury deaths	66	75	64	50
Physical Environment	***73***	***80***		
Air pollution - particulate matter	12.7	12.5	12.3	9.5
Drinking water violations	0%	10%	4%	0%
Severe housing problems	15%	15%	16%	9%
Driving alone to work	87%	85%	81%	71%
Long commute - driving alone	31%	29%	30%	15%

Source: County Health Rankings and Roadmaps, 2015. University of Wisconsin Population Health Institute; http://www.countyhealthrankings.org/app/north-carolina/2015/rankings/granville/county/outcomes/overall/snapshot

[1] 90th percentile; i.e., only 10% are better

MATERNAL AND INFANT HEALTH

Pregnancy

The following definitions and statistical conventions will be helpful in understanding the data on pregnancy:

- Reproductive age = 15-44
- Total pregnancies = live births + induced abortions + fetal death at 20+ weeks gestation
- Pregnancy rate = number of pregnancies per 1,000 women of reproductive age
- Fertility rate = number of live births per 1,000 women of reproductive age
- Abortion rate = number of induced abortions per 1,000 women of reproductive age
- Birth rate = number of live births per 1,000 *population (Note that in the birth rate calculation the denominator includes the entire population, both men and women, not just women of reproductive age.)* Since the birth rate is a measure of population growth, it was presented among the demographic data in Chapter One of this report.

Pregnancy, Fertility and Abortion Rates, Women Age 15-44

The table below presents total annual pregnancy, fertility and abortion rates for women age 15-44 for the period from 2005-2009.

Beginning in 2010, NCSCHS began reporting stratified pregnancy, fertility and abortion data in a different manner than previously. Prior to 2010 the data was stratified by "Total", "White" and "Minority". After that date and up until 2012, the data was stratified by "Total", "White non-Hispanic", "African-American non-Hispanic", "Other non-Hispanic", and "Hispanic". Beginning in 2013, the racial category "American Indian non-Hispanic" was separated from the "Other non-Hispanic" category. Because of this change, stratified data prior to 2010 is not directly comparable to 2010 through 2012 or 2013 data. The table on the next page presents pregnancy, fertility, and abortion rates stratified according to the new model.

Table 87. Pregnancy, Fertility and Abortion Rates, Ages 15-44 (Single Years, 2005-2009)

Location		Females Ages 15-44														
		2005			2006			2007			2008			2009		
		Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate
Davidson County	Total	70.9	70.3	9.2	70.2	61.4	8.5	70.1	61.4	8.3	72.5	63.4	8.9	67.8	60.3	7.2
	White	70.2	72.7	7.1	69.4	62.5	6.6	68.1	61.8	6.0	71.1	64.5	6.5	65.4	60.8	4.4
	Minority	72.1	66.3	20.5	70.3	53.4	16.4	77.0	58.4	17.6	75.3	56.4	17.9	76.7	57.5	18.5
Randolph County	Total	72.8	61.7	10.7	73.9	63.0	10.7	79.5	67.7	11.3	76.4	66.5	9.7	70.1	61.0	8.7
	White	71.9	62.5	8.9	72.2	63.4	8.6	76.7	67.7	8.5	75.6	67.4	8.0	69.8	62.5	6.9
	Minority	70.9	52.3	18.2	76.0	58.4	17.6	90.0	66.8	22.3	73.5	56.8	16.7	62.8	46.9	15.5
State of NC	Total	82.2	66.8	15.0	84.8	68.5	15.8	84.7	69.1	15.1	83.9	69.1	14.4	78.9	65.1	13.4
	White	77.2	67.8	9.0	79.1	69.3	9.5	79.3	69.8	9.1	78.6	69.9	8.4	74.0	66.0	7.7
	Minority	89.9	64.1	25.0	93.2	66.7	25.8	92.4	67.5	24.2	91.2	67.1	23.3	85.4	62.8	21.9

Note: Bold type and/or "n/a" indicates an unstable rate based on a small number (fewer than 10 cases)
Source: NC Center for Health Statistics, County-level Data, Vital Statistics: Reported Pregnancies (single years as noted):http://www.schs.state.nc.us/data/vital/pregnancies/.

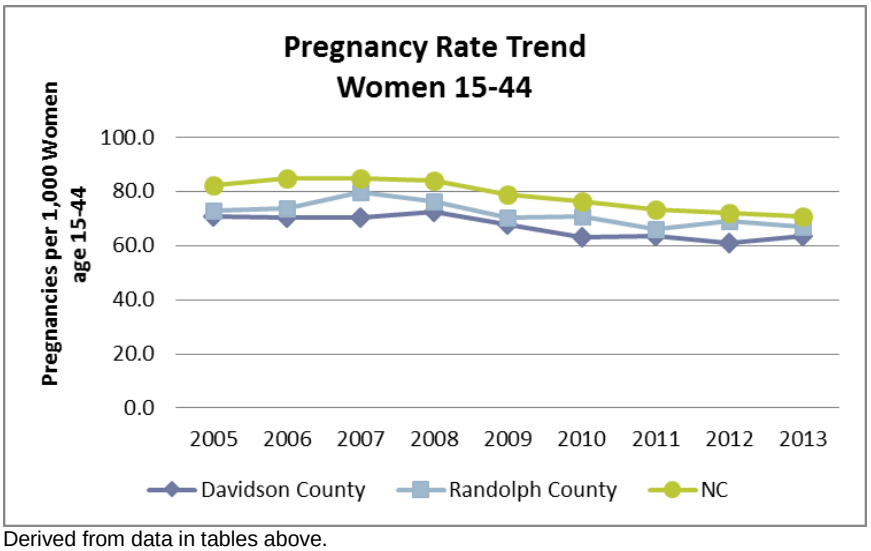
Table 88. Pregnancy, Fertility and Abortion Rates, Ages 15-44 (Single Years, 2010-2013)

Location		Females Ages 15-44											
		2010			2011			2012			2013		
		Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate
Davidson County	Total	62.9	56.5	6.2	63.5	63.5	5.3	60.8	55.8	4.6	63.3	58.3	4.9
	White, Non-Hispanic	59.4	54.1	5.1	58.2	58.2	4.6	56.3	52.2	3.8	59.6	55.7	3.8
	African American, Non-Hispanic	63.6	52.5	11.0	68.0	68.0	10.2	64.7	55.5	7.9	62.3	51.4	10.9
	American Indian, Non-Hispanic										**n/a**	**n/a**	**n/a**
	Other, Non-Hispanic	45.6	29.9	**n/a**	61.4	**61.4**	**n/a**	71.6	67.5	**n/a**	77.1	71.8	**n/a**
	Hispanic	101.2	93.3	**n/a**	109.8	109.8	**n/a**	96.7	89.0	**n/a**	96.9	90.6	**n/a**
Randolph County	Total	70.7	62.5	7.9	66.1	66.1	6.4	69.0	62.4	6.1	67.1	61.0	5.3
	White, Non-Hispanic	64.7	57.9	6.6	59.7	59.7	5.4	62.6	57.2	5.0	61.4	56.4	4.5
	African American, Non-Hispanic	72.5	55.2	16.8	67.6	67.6	14.5	80.9	62.4	18.4	85.3	67.9	13.9
	American Indian, Non-Hispanic										**n/a**	**n/a**	**n/a**
	Other, Non-Hispanic	87.9	70.3	**n/a**	70.9	70.9	**n/a**	89.1	83.3	**n/a**	74.1	66.7	**n/a**
	Hispanic	103.5	92.9	9.7	101.9	101.9	7.3	97.6	90.4	6.3	91.9	85.9	**n/a**
State of NC	Total	76.4	62.7	13.2	73.3	34.8	11.4	72.1	61.0	10.7	70.8	60.3	10.1
	White, Non-Hispanic	65.6	57.1	8.2	63.6	25.2	7.0	63.0	56.1	6.6	61.8	55.4	6.1
	African American, Non-Hispanic	86.1	61.0	24.4	81.5	45.5	21.1	79.6	59.1	19.8	79.0	59.7	18.6
	American Indian, Non-Hispanic										71.5	62.9	8.2
	Other, Non-Hispanic	84.5	71.3	12.8	80.6	32.9	10.9	79.7	69.7	9.5	79.4	69.5	9.5
	Hispanic	114.0	99.0	14.7	106.6	62.7	12.2	102.6	91.4	10.8	98.6	87.9	10.3

Note: Bold type and/or "n/a" indicates an unstable rate based on a small number (fewer than 10 cases)
Source: NC Center for Health Statistics, County-level Data, Vital Statistics: Reported Pregnancies (single years as noted):http://www.schs.state.nc.us/data/vital/pregnancies/.

The three figures below present graphic representations of some of the data in the tables above.

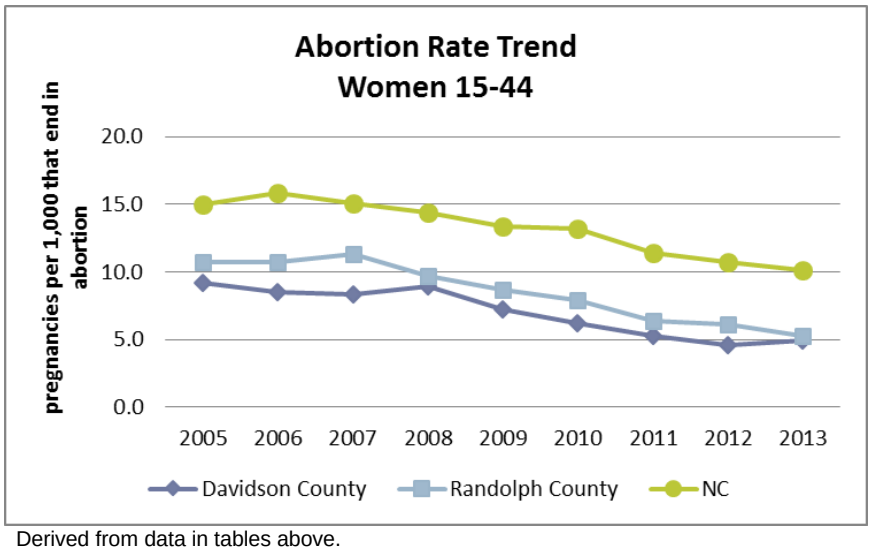
Figure 9. Total Pregnancy Rate Trend, Ages 15-44



Derived from data in tables above.

- The total pregnancy rate in all three jurisdictions cited have fallen between 2005 and 2013.
- The total pregnancy rate in Davidson County was lower than both the Randolph County and NC rates throughout the period cited.
- The Davidson County total pregnancy rate in 2012 (60.8)) was the lowest it had been since 2005. It rose to 63.3 in 2013.

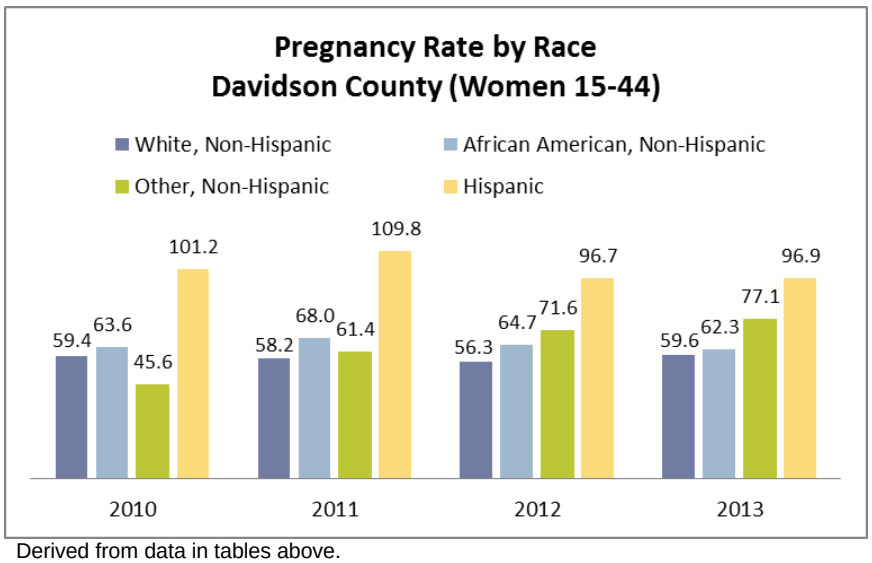
Figure 10. Total Abortion Rate Trend, Ages 15-44



Derived from data in tables above.

- The total abortion rates in all three jurisdictions have fallen dramatically since 2005. The 2013 abortion rates in each jurisdiction is the lowest since 2005.

Figure 11. Pregnancy Rate by Race, Ages 15-44, Davidson County 2010 - 2013



Derived from data in tables above.

- When stratified by race and ethnicity, the *stable* total pregnancy rates for Davidson County in most years were highest among Hispanic women.
- The second highest pregnancy rates occurred among African-American non-Hispanic women in 2010 and 2011, but among Other non-Hispanic women in 2012 and 2013.

Pregnancy, Fertility and Abortion Rates, Women Age 15-19 ("Teens")

The next two tables and the accompanying three figures after them present total annual pregnancy, fertility and abortion rates for girls age 15-19 ("teens"), following the same conventions as were used for the 15-44 age group.

Table 89. Pregnancy, Fertility and Abortion Rates, Ages 15-19 (Single Years, 2005-2009)

Location		Females Ages 15-19														
		2005			2006			2007			2008			2009		
		Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate
Davidson County	Total	62.0	51.7	10.1	61.4	50.3	10.7	61.5	53.3	7.8	59.7	49.9	9.1	49.8	41.8	7.6
	White	60.7	52.4	8.3	57.6	48.4	8.9	56.2	49.9	5.8	56.1	49.3	6.4	45.1	40.4	4.7
	Minority	65.1	47.3	16.3	78.6	61.4	15.7	84.8	73.7	**11.1**	72.6	53.3	16.9	68.8	49.3	17.2
Randolph County	Total	62.6	50.1	12.3	62.5	50.9	11.5	67.7	54.6	12.9	66.8	55.0	11.9	60.6	52.6	7.4
	White	63.0	50.9	11.9	61.9	52.3	9.6	67.0	55.2	11.6	65.5	55.3	10.1	59.8	54.0	5.1
	Minority	56.9	42.7	**14.2**	54.3	38.5	**15.8**	65.0	49.3	**15.7**	68.7	51.5	**17.2**	54.0	41.0	**13.0**
State of NC	Total	61.7	47.0	14.3	63.1	48.3	14.5	63.0	48.4	14.3	58.6	45.7	12.5	56.0	43.4	12.2
	White	50.9	40.9	9.8	52.9	42.8	9.8	52.3	42.3	9.8	47.8	39.6	8.0	45.4	37.9	7.4
	Minority	82.3	60.6	21.0	82.1	60.0	21.3	82.5	61.5	20.3	77.7	58.3	18.7	74.3	55.0	18.8

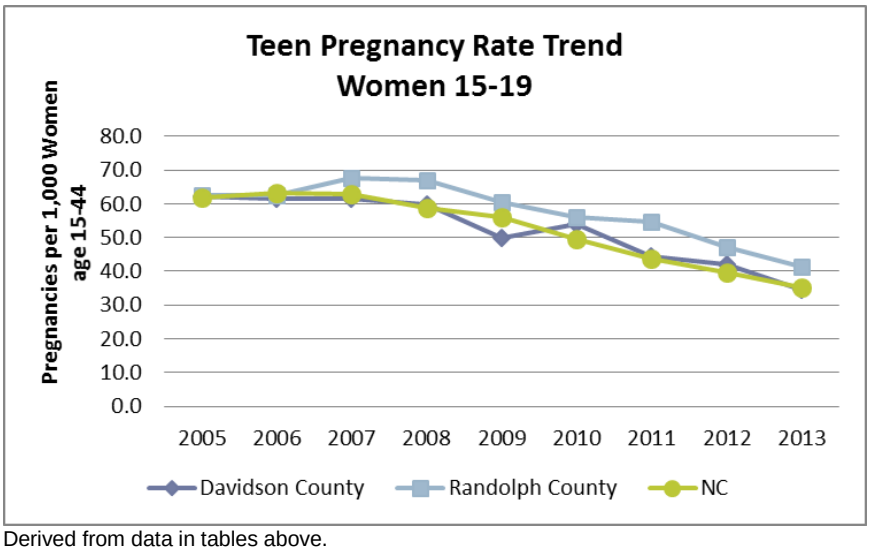
Note: Bold type and/or "n/a" indicates an unstable rate based on a small number (fewer than 10 cases)
NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2011). Pregnancy and Live Births. Pregnancy, Fertility, & Abortion Rates per 1,000 Population, by Race, by Age; http://www.schs.state.nc.us/SCHS/data/databook/

Table 90. Pregnancy, Fertility and Abortion Rates, Ages 15-19 (Single Years, 2010-2013)

Location		Females Ages 15-19											
		2010			2011			2012			2013		
		Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate
Davidson County	Total	53.9	47.5	6.3	44.5	40.1	4.2	42.1	37.7	4.5	34.4	29.9	4.3
	White, Non-Hispanic	46.4	41.9	**n/a**	36.9	34.0	**n/a**	36.9	32.9	**n/a**	28.6	25.2	**n/a**
	African American, Non-Hispanic	75.5	62.4	**n/a**	47.3	**n/a**	**n/a**	52.2	45.2	**n/a**	46.6	**n/a**	**n/a**
	American Indian, Non-Hispanic										**n/a**	**n/a**	**n/a**
	Other, Non-Hispanic	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**
	Hispanic	98.5	83.7	**n/a**	102.4	102.4	**n/a**	74.6	69.9	**n/a**	63.7	59.5	**n/a**
Randolph County	Total	56.1	45.3	10.6	54.7	50.0	4.6	47.0	41.6	5.4	41.3	35.2	5.7
	White, Non-Hispanic	46.9	38.4	8.5	47.3	43.1	**n/a**	44.2	40.0	**n/a**	40.5	35.1	**n/a**
	African American, Non-Hispanic	92.5	68.7	**n/a**	78.5	66.5	**n/a**	68.3	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**
	American Indian, Non-Hispanic										**n/a**	**n/a**	**n/a**
	Other, Non-Hispanic	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**
	Hispanic	85.1	67.7	**n/a**	85.2	81.8	**n/a**	50.7	42.6	**n/a**	52.0	44.6	**n/a**
State of NC	Total	49.7	38.3	11.0	43.8	34.8	8.7	39.6	31.8	7.6	35.2	28.4	6.6
	White, Non-Hispanic	34.4	27.2	7.0	30.8	25.2	5.5	28.3	23.1	5.1	24.7	20.3	4.2
	African American, Non-Hispanic	70.2	50.9	18.7	61.6	45.5	15.6	55.0	41.4	13.1	49.2	37.3	11.5
	American Indian, Non-Hispanic										52.6	46.4	6.0
	Other, Non-Hispanic	48.9	38.8	9.5	39.4	32.9	6.4	36.4	29.8	6.3	19.9	14.3	5.4
	Hispanic	82.7	70.6	11.7	71.1	62.7	8.2	62.0	55.7	6.2	57.9	51.2	6.2

Note: Bold type and/or "n/a" indicates an unstable rate based on a small number (fewer than 10 cases)
NC Center for Health Statistics, County-level Data, County Health Data Books (2012-2015). Pregnancy and Live Births. Pregnancy, Fertility, & Abortion Rates per 1,000 Population, by Race, by Age; http://www.schs.state.nc.us/SCHS/data/databook/

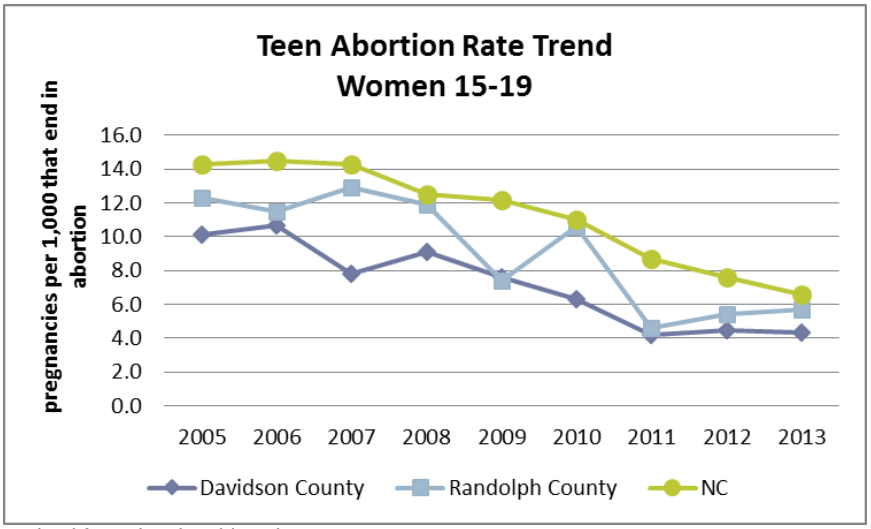
Figure 12. Total Pregnancy Rate Trend, Ages 15-19



Derived from data in tables above.

- The teen pregnancy rate has fallen dramatically in all three jurisdictions since 2005.

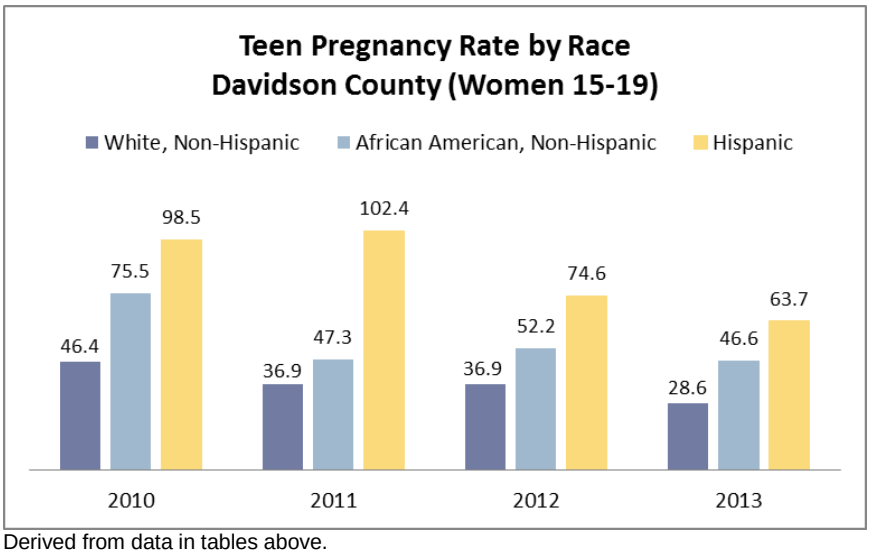
Figure 13. Total Abortion Rate Trend, Ages 15-19



Derived from data in tables above.

- The abortion rate among teens has fallen in all three jurisdictions, at what appears to be somewhat erratic rates in Davidson and Randolph Counties, due likely to small and varying numbers of events in those jurisdictions.

Figure 14. Pregnancy Rate by Race, Ages 15-19, Davidson County 2010 - 2013



Derived from data in tables above.

- The highest teen pregnancy rates in Davidson County in every period cited occurred among Hispanic teens. The second-highest teen pregnancy rates in the county occurred among African American non-Hispanic teens. (Teen pregnancy rates for all other racial groups were unstable.)

Pregnancies among Teens (age 15-19) and Adolescents (under age 15)

The following two tables present the *number* of teen pregnancies and adolescent (under age 15) pregnancies in each jurisdiction from 2004-2013.

Table 91. Number of Teen Pregnancies (Ages 15-19) (Single Years, 2004-2013)

Location	Number of Pregnancies, Ages 15-19									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	290	295	304	308	328	275	275	222	208	169
Randolph County	294	280	287	310	321	296	253	236	202	181
State of NC	18,143	18,259	19,192	19,615	19,398	18,142	15,957	13,909	12,535	11,178

Source: NC State Center for Health Statistics, North Carolina Health Data Query System. Pregnancy Data. North Carolina Reported Pregnancy Data. (2004-2013. (Counties and age groups as indicated); http://www.schs.state.nc.us/interactive/query/

Table 92. Number of Adolescent Pregnancies (Under Age 15) (Single Years, 2004-2013)

Location	Number of Pregnancies, Age 14 and Younger									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	11	4	6	9	6	6	4	4	3	4
Randolph County	4	5	6	7	2	5	4	1	4	3
State of NC	472	468	405	404	376	324	282	255	214	182

Source: NC State Center for Health Statistics, North Carolina Health Data Query System. Pregnancy Data. North Carolina Reported Pregnancy Data (2004-2013). (Counties and age groups as indicated); http://www.schs.state.nc.us/interactive/query/.

Pregnancy Risk Factors

High Parity and Short Interval Births

According to the NCSCHS, a birth is *high parity* if the mother is younger than 18 when she has had one or more births, or aged 18 or 19 and has had two or more births, or is 20-24 and has had four or more births, etc. A *short-interval birth* involves a pregnancy occurring less than six months since the last birth. High-parity and short-interval pregnancies can be a physical strain on the mother and sometimes contribute to complicated pregnancies and/or poor birth outcomes.

The table below presents data on high-parity and short interval births for the single aggregate period 2009-2013.

- Among its comparators, Davidson County had the second lowest percentage of high-parity births among women under age 30 and among women age 30 or older. Randolph County had the highest percentages.
- The percentage of short-interval births was highest among the comparators in Davidson County.

Table 93. High Parity and Short Interval Births
(Single Five-Year Aggregate Period, 2009-2013)

Location	High Parity Births				Short Interval Births	
	Mothers < 30		Mothers ≥ 30			
	No.[1]	%[2]	No.[1]	%[2]	No.[3]	%[4]
Davidson County	1,036	17.0	592	22.2	835	14.3
Randolph County	1,039	18.2	563	22.9	748	13.5
State of NC	61,454	16.0	48,339	21.7	50,564	12.6
Source:	a	a	a	a	b	b

[1] Number at risk due to high parity

[2] Percent of all births with age of mother in category indicated

[3] Number with interval from last delivery to conception of six months or less

[4] Percent of all births excluding 1st pregnancies

a - NC State Center for Health Statistics, County-level Data, County Health Data Book (2015), Pregnancy and Births, 2009-2013 Number At Risk NC Live Births due to High Parity by County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

b - NC State Center for Health Statistics, County-level Data, County Health Data Book (2015), Pregnancy and Births, 2009-2013 NC Live Births by County of Residence, Number with Interval from Last Delivery to Conception of Six Months or Less; http://www.schs.state.nc.us/SCHS/data/databook/.

Smoking during Pregnancy

Smoking during pregnancy is an unhealthy behavior that may have negative effects on both the mother and the fetus. Smoking can lead to fetal and newborn death, and contribute to low birth weight and pre-term delivery. In pregnant women, smoking can increase the rate of placental problems, and contribute to premature rupture of membranes and heavy bleeding during delivery (45).

The following table presents trend data on smoking during pregnancy for the period from 2006-2013.

- *Note that while eight years of data are presented in the table below, data from prior to 2010 should not be compared to subsequent data because the format of the instrument used to collect the data was changed in 2010.*
- The percent of births to mothers who smoked during pregnancy in Davidson County was highest among the comparator jurisdictions in every year cited from 2006 through 2013.
- In 2013, the percent of births to mothers who smoked during pregnancy in Davidson County was 18.6%, 81% *higher* than the comparable rate statewide.

Table 94. Smoking during Pregnancy Trend
(Single Years, 2006-2013)

Location	Number and Percent of Births to Mothers Who Smoked Prenatally															
	2006		2007		2008		2009		2010		2011		2012		2013	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Davidson County	381	19.8	357	18.6	319	16.0	309	16.4	n/a	n/a	366	19.2	300	18.0	320	18.6
Randolph County	279	15.8	247	13.1	246	13.4	266	15.6	n/a	n/a	223	14.2	213	13.0	235	14.8
State of NC	14,668	11.5	14,426	11.0	13,621	10.4	12,975	10.2	n/a	n/a	13,159	10.9	12,727	10.6	12,242	10.3

Source: NC State Center for Health Statistics, Vital Statistics, Volume 1 (2006 through 2013): Population, Births, Deaths, Marriages, Divorces, (geography as noted), Mother Smoked; http://www.schs.state.nc.us/schs/data/vitalstats.cfm.

Early Prenatal Care

Good pre-conception health and early prenatal care can help assure women the healthiest pregnancies possible.

The next table presents trend data on the percent of all women receiving prenatal care in the first trimester for the jurisdictions included in this report.

- *Note that while eight years of data are presented in the table below, data from prior to 2010 should not be compared to subsequent data because the format of the instrument used to collect the data was changed in 2010.*
- The percent of pregnant women in Davidson County who received early prenatal care was the lowest among the comparators in 2006 through 2008. Beginning in 2011 the percent in Davidson County was the highest among comparators.

Table 95. Women Receiving Prenatal Care in the First Trimester
(Single Years, 2006-2013)

Location	Number and Percent of Women Receiving Prenatal Care in the First Trimester															
	2006		2007		2008		2009		2010		2011		2012		2013	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Davidson County	1,556	81.0	1,533	80.1	1,603	80.3	1,575	83.5	n/a	n/a	1,329	76.1	1,270	76.2	1,339	77.6
Randolph County	1,436	81.4	1,522	80.4	1,486	81.2	1,452	85.1	n/a	n/a	974	61.9	1,079	66.0	912	57.4
State of NC	104,528	81.9	105,849	80.9	107,183	82.0	105,626	83.3	n/a	n/a	85,706	71.2	85,380	71.3	83,663	70.3

Source: NC State Center for Health Statistics, Basic Automated Birth Yearbook (BABY Book), North Carolina Residents (2006 through 2013) (geographies as noted): Table 6 (and others): County Resident Births by Month Prenatal Care Began, All Women; http://www.schs.state.nc.us/schs/births/babybook/.

Pregnancy Outcomes

Low Birth Weight and Very Low Birth Weight

Low birth weight can result in serious health problems in newborns (e.g., respiratory distress, bleeding in the brain, and heart, intestinal and eye problems), and cause lasting disabilities (mental retardation, cerebral palsy, and vision and hearing loss) or even death (46).

The next table presents data on low birth weight births; i.e., infants weighing 2,500 grams (5.5 pounds) or less.

- The total proportion of low birth-weight births in Davidson County was roughly the same—9.7%—in each period cited.
- The percentages of low birth-weight births among black non-Hispanic women in Davidson County were consistently over 60% higher than the comparable percentages of low birth weight births among white non-Hispanic women.

Table 96. Low Birth-Weight Births
(Five Year Aggregate Periods, 2006-2010 through 2009-2013)

Location	Percent of Low Birth Weight (≤ 2,500 Gram) Births																			
	2006-2010					2007-2011					2008-2012					2009-2013				
	Total	White, Non-Hispanic	Black, Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White, Non-Hispanic	Black, Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White, Non-Hispanic	Black, Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White, Non-Hispanic	Black, Non-Hispanic	Other Non-Hispanic	Hispanic
Davidson County	9.7	9.5	16.2	9.2	6.0	9.6	9.4	15.4	9.3	6.8	9.7	9.5	15.5	**7.1**	7.0	9.7	9.5	15.1	**8.5**	7.3
Randolph County	8.4	8.7	11.8	12.3	6.4	8.5	8.7	12.8	11.4	6.2	8.3	5.3	12.7	**10.3**	6.8	8.2	8	12.4	**11.1**	7.2
State of NC	9.1	7.7	14.4	9.3	6.3	9.1	7.7	14.3	9.4	6.5	9.0	7.6	14.1	9.3	6.5	9.0	7.5	13.9	9.3	6.6

Note: Bold type indicates an unstable rate based on a small number (fewer than 20 cases).
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2012, 2013, 2014), Pregnancy and Births, Low and Very Low Weight Births; http://www.schs.state.nc.us/SCHS/data/databook/.

The following presents data on *very* low birth-weight births; i.e., infants weighing 1,500 grams (3.3 pounds) or less.

- In both counties the percentages of very low birth-weight births in several stratified groups were based on small numbers of events and thus were unstable. However, the stable rates of very low birth weight births among African American non-Hispanic women in Davidson County were approximately twice the comparable rates among white non-Hispanic women.

Table 97. Very Low Birth-Weight Births
(Five-Year Aggregate Periods, 2006-2010 through 2009-2013)

Location																				
	2006-2010					2007-2011					2008-2012					2009-2013				
	Total	White, Non-Hispanic	Black, Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White, Non-Hispanic	Black, Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White, Non-Hispanic	Black, Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White, Non-Hispanic	Black, Non-Hispanic	Other Non-Hispanic	Hispanic
Davidson County	1.6	1.4	3.6	**0.5**	**1.1**	1.5	1.4	3.2	**0.9**	**1.0**	1.7	1.7	3.3	**0.9**	**1.2**	1.8	1.6	3.9	**0.5**	**1.4**
Randolph County	1.6	1.6	**2.7**	**2.8**	1.2	1.5	1.4	**2.7**	**1.7**	**1.3**	1.5	1.3	**3.2**	**2.2**	1.3	1.5	1.4	**3.0**	**2.9**	1.3
State of NC	1.8	1.3	3.4	1.5	1.2	1.8	1.3	3.3	1.5	1.2	1.8	1.3	3.3	1.4	1.2	1.8	1.3	3.3	1.5	1.2

Note: Bold type indicates an unstable rate based on a small number (fewer than 20 cases).
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2012, 2013, 2014), Pregnancy and Births, Low and Very Low Weight Births; http://www.schs.state.nc.us/SCHS/data/databook/.

Cesarean Section Delivery

The table below presents data on the percent of births delivered by Cesarean section.

- Over the period cited in the table, Cesarean deliveries averaged 34% of all births in Davidson County and 30% statewide.

Table 98. Cesarean Section Deliveries, Primary and Repeat (Five-Year Aggregate Periods, 2002-2006 through 2009-2013)

Location	Percent of Resident Births Delivered by Cesarean Section							
	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	31.7	32.9	33.5	34.4	34.6	35.0	35.0	35.5
Randolph County	29.5	30.3	30.6	30.8	31.2	31.5	31.4	31.7
State of NC	28.7	29.6	30.3	30.9	31.2	31.2	31.1	30.9

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Pregnancy and Births, Births Delivered by Caesarian Section (Primary and Repeat); http://www.schs.state.nc.us/SCHS/data/databook/.

Infant Mortality

Infant mortality is the number of infant (under one year of age) deaths per 1,000 live births. The next two tables present infant mortality data.

Table 99. Total Infant Deaths (Five-Year Aggregate Periods, 2001-2005 through 2005-2009)

Location		Infant Deaths									
		2001-2005		2002-2006		2003-2007		2004-2008		2005-2009	
		No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Davidson County	Total	74	7.7	82	8.6	83	8.7	82	8.5	91	9.4
	White	59	6.9	64	7.5	63	7.4	62	7.3	69	8.1
	Minority	**15**	**14.5**	**18**	**17.4**	20	18.5	20	18.3	22	19.3
Randolph County	Total	65	7.3	57	6.4	61	6.8	61	6.8	68	7.6
	White	59	7.1	55	6.7	59	7.1	58	6.9	64	7.7
	Minority	**6**	**9.4**	**2**	**3.2**	**2**	**3.0**	**3**	**4.6**	**4**	**6.0**
State of NC	Total	5,056	8.5	5,084	8.4	5,234	8.4	5,333	8.4	5,289	8.3
	White	2,648	6.1	2,680	6.1	2,773	6.2	2,818	6.2	2,764	6.0
	Minority	2,404	14.7	2,400	14.5	2,457	14.4	2,515	14.3	2,525	14.0

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2011), Mortality, Infant Death Rates per 1,000 Live Births; http://www.schs.state.nc.us/SCHS/data/databook/.

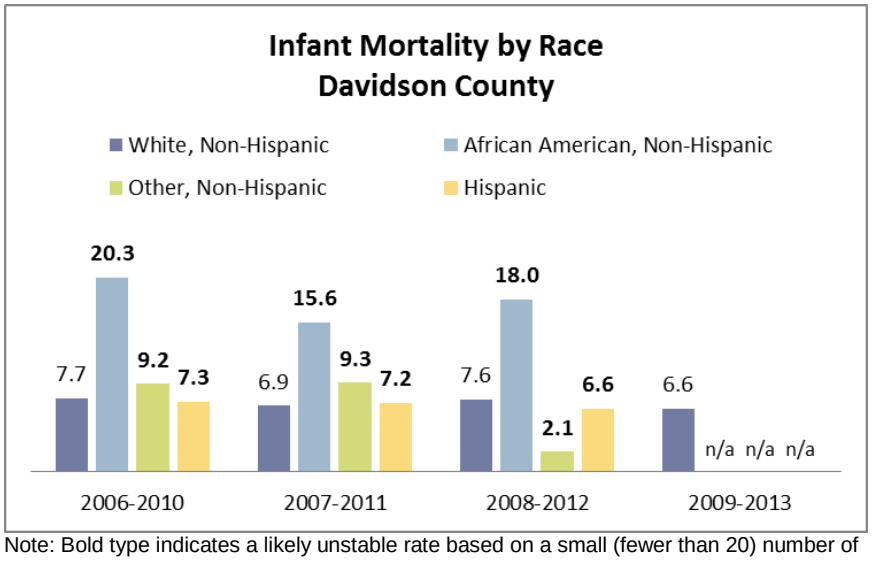
Table 100. Total Infant Deaths (Five-Year Aggregate Periods, 2006-2010 through 2009-2013)

Location		Infant Deaths							
		2006-2010		2007-2011		2008-2012		2009-2013	
		No.	Rate	No.	Rate	No.	Rate	No.	Rate
Davidson County	Total	84	8.9	73	7.9	78	8.6	69	7.9
	White, Non-Hispanic	55	7.7	48	6.9	51	7.6	43	6.6
	African American, Non-Hispanic	**18**	**20.3**	**14**	**15.6**	**16**	**18.0**	**16**	**n/a**
	Other, Non-Hispanic	**2**	**9.2**	**2**	**9.3**	**3**	**2.1**	**2**	**n/a**
	Hispanic	**9**	**7.3**	**9**	**7.2**	**8**	**6.6**	**8**	**n/a**
Randolph County	Total	67	7.6	61	7.0	52	6.2	53	6.5
	White, Non-Hispanic	51	8.0	46	7.4	36	6.0	39	6.6
	African American, Non-Hispanic	**6**	**12.2**	**6**	**12.4**	**6**	**12.7**	**6**	**n/a**
	Other, Non-Hispanic	**0**	**0.0**	**0**	**0.0**	**2**	**10.8**	**3**	**n/a**
	Hispanic	**10**	**5.4**	**9**	**5.0**	**8**	**4.6**	**5**	**n/a**
State of NC	Total	5,066	7.9	4,899	7.8	4,675	7.5	4,441	7.3
	White, Non-Hispanic	2,074	5.9	2,001	5.7	1,918	5.6	1,850	5.4
	African American, Non-Hispanic	2,208	14.7	2,129	14.3	2,064	14.0	1,967	13.6
	Other, Non-Hispanic	187	6.3	188	6.2	181	5.9	178	5.7
	Hispanic	597	5.8	581	5.8	512	5.3	446	4.8

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2012-2015), Mortality, Infant Death Rates per 1,000 Live Births; http://www.schs.state.nc.us/SCHS/data/databook/.

The following figure shows Davidson County infant mortality data stratified by race.

Figure 15. Infant Deaths, by Race/Ethnicity, Davidson County (Five-Year Aggregate Periods, 2006-2010 through 2009-2013)



Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2012-2014), Mortality, Infant Death Rates per 1,000 Live Births; http://www.schs.state.nc.us/SCHS/data/databook/.

According to data in the figure above, many racially/ethnically- stratified infant mortality rates in Davidson County were unstable. However, according to data in the preceding tables the infant mortality rate among Minorities/African-American non-Hispanics statewide was approximately twice the comparable rate for Whites/white non-Hispanics.

LIFE EXPECTANCY

Life expectancy is the average number of additional years that someone at a given age would be expected to live if he/she were to experience throughout life the age-specific death rates observed in a specified reference period. Life expectancies in terms of years of life remaining can be calculated for any age. Because life expectancy is an average, however, a particular person may well die many years before or many years after their "expected" survival, due to life experiences, environment, and personal genetic characteristics.

Life expectancy from birth is a frequently utilized and analyzed component of demographic data. It represents the average life span of a newborn and is considered an indicator of the overall health of a population or community.

Life expectancy rose rapidly in the twentieth century due to improvements in public health, nutrition and medicine, and continued progress in these areas can be expected to have further positive impact on life expectancy in the future. Decreases in life expectancy are also possible, influenced mostly by epidemic disease (e.g. plagues of history and AIDS in the modern era), and natural and man-made disasters. One of the most significant influences on life expectancy in populations is infant mortality, since life expectancy at birth is highly sensitive to the rate of death in the first few years of life.

The following table presents gender- and race-stratified life expectancy at birth data for comparator jurisdictions.

- Overall life expectancy at birth in Davidson County increased by 0.9 years (1%) between 1990-1992 and 2011-2013.
- Life expectancy for Davidson County females in 2011-2013 was 0.6 years (0.8%) *shorter* than female life expectancy in 1990-1992, but the 2011-2013 figure for females was still 4.2 years (5.6%) higher than the comparable figure for males in 2011-2013.
- In Davidson County in 1990-1992 the life expectancy for African Americans was 6.0 years (7.9%) shorter than life expectancy for whites. By 2011-2013 the gap had narrowed to 1.6 years (2.1%).

Table 101. Life Expectancy at Birth, by Gender and Race (1990-1992 and 2011-2013)

Location	Life Expectancy in Years									
	Person Born in 1990-1992					Person Born in 2011-2013				
	Overall	Male	Female	White	African-American	Overall	Male	Female	White	African-American
Davidson County	75.7	72.1	79.3	76.3	70.3	76.6	74.5	78.7	76.7	75.1
Randolph County	75.8	71.8	79.8	76.2	69.5	77.1	74.4	79.7	77.0	77.0
State of NC	74.9	71.0	78.7	76.4	69.8	78.2	75.7	80.6	78.8	75.9

Source: NC State Center for Health Statistics, County-level Data, Life Expectancy, State and County Estimates, Life Expectancy: North Carolina 1990-1992 and 2011-2013, State and County; http://www.schs.state.nc.us/schs/data/lifexpectancy/.

MORTALITY

Leading Causes of Death

This section describes mortality for the 15 leading causes of death, as well as mortality due to five major site-specific cancers. The list of topics and the accompanying data was retrieved from the NCSCHS *County Health Data Books*. Unless otherwise noted, the numerical data are age-adjusted and represent five-year aggregate periods.

The table below compares mortality rates for the 15 leading causes of death in Davidson County, Randolph County, NC and the US for the five-year aggregate period 2009-2013 (or as otherwise noted). The causes of death are listed in descending order of rank in Davidson County. Note that because NCSCHS suppressed rates in the County Health Data Book for some causes of death in each county because the number of deaths fell below the Center's threshold of 20 per five-year aggregate period, it was necessary to turn to NC Vital Statistics Volume II to obtain those unstable rates.

Table 102. Overall Age-Adjusted Mortality Rates for the 15 Leading Causes of Death, Davidson County and Comparators (Single Five-Year Aggregate Period, 2009-2013 or as Noted)[1]

Rank/Cause of Death	Davidson County			Randolph County			State of NC			United States (2012)	
	Number	Rate	Rank	Number	Rate	Rank	Number	Rate	Rank	Rate	Rank
1. Diseases of the Heart	1,817	197.7	1	1,399	175.7	2	86,285	170.0	2	191.0	1
2. Cancer	1,725	177.5	2	1,467	177.2	1	90,717	173.3	1	185.6	2
Trachea, Bronchus, and Lung	608	61.0	a	513	59.9	a	27,364	51.6	a	50.2	a
Breast	108	20.7	b	99	21.8	b	6,361	21.7	c	13.2 [2]	c
Prostate	64	16.9	c	59	19.4	c	4,287	22.1	b	8.7 [2]	e
Colon, Rectum and Anus	152	15.6	d	125	15.3	d	7,520	14.5	d	16.6	b
Pancreas	117	12.0	e	79	9.5	e	5,573	10.6	e	12.4	d
3. Chronic Lower Respiratory Disease	590	62.1	3	505	62.4	3	23,346	46.1	3	45.7	3
4. Cerebrovascular Disease	442	49.2	4	335	43.4	4	21,816	43.7	4	40.9	4
5. Alzheimer's Disease	315	37.3	5	221	29.9	6	14,000	28.9	6	26.6	6
6. All Other Unintentional Injuries	275	33.5	6	250	34.4	5	14,403	29.3	5	40.7	5
7. Diabetes Mellitus	221	23.0	7	181	22.7	7	11,220	21.7	7	23.6	7
8. Pneumonia and Influenza	198	22.0	8	162	21.3	8	8,890	17.9	8	16.1	8
9. Nephritis, Nephrotic Syndrome, and Nephrosis	176	19.1	9	161	20.6	9	8,850	17.6	9	14.5	9
10. Unintentional Motor Vehicle Injuries	138	16.6	10	123	17.2	10	6,687	13.7	10	11.6	11
11. Septicemia	121	13.0	11	113	14.5	12	6,731	13.3	11	11.4	12
12. Suicide	109	12.7	12	117	15.9	11	6,070	12.2	12	12.9	10
13. Chronic Liver Disease and Cirrhosis	97	9.9	13	105	12.4	13	5,128	9.5	13	11.1	13
14. Homicide	21	2.7	14	29	4.5	14	2,742	5.8	14	5.3	14
15. Acquired Immune Deficiency Syndrome	**15**	**1.7**	15	**9**	**1.2**	15	1,471	2.9	15	2.3	15
Total Deaths All Causes (incl. some not listed above)	8,037	879.5		6,726	857.2		400,347	790.9		810.2	
Source:	a	a/b	c	a	a/b	c	a	a	c	d	d

a - NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

b (bold/unstable rates) - NC State Center for Health Statistics, Statistics and Reports, Vital Statistics, NC Vital Statistics Volume II, Leading Causes of Death, 2013. http://www.schs.state.nc.us/data/vital.cfm#vitalvol2

c - Calculated

d - National Center for Health Statistics, National Vital Statistics Reports, Volume 63, No. 1 to Present. Deaths: Final Data for 2012. http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63_09.pdf

[1] Rate = Number of events per 100,000 population, where the Standard = Year 2000 US Population

[2] Denominator is not-sex-specific, but rather the whole population

Specific differences between Davidson County and NC mortality rates for 2009-2013, calculated from data in the preceding table, are summarized in the table below. In this table, a plus sign ("**+**") and the color **red** indicates a Davidson County mortality rate *higher* than the comparable state rate by the percent cited; a minus sign ("**-**") and the color **green** indicates a Davidson County rate *lower* than the comparable state rate by the percent cited. The color blue is used when the percent rate difference, regardless of "**+**" or "**-**", should be considered unstable because it is based on an unstable county mortality rate.

Table 103. Leading Causes of Death in Davidson County Compared to NC (2009-2013)

Age-Adjusted Rates (2009-2013)	Davidson County No. of Deaths	Davidson County Mortality Rate	Davidson Rate Difference from NC
1. Diseases of the Heart	1,817	197.7	+16.3%
2. Total Cancer	1,725	177.5	+2.4%
3. Chronic Lower Respiratory Disease	590	62.1	+34.7%
4. Cerebrovascular Disease	442	49.2	+12.6%
5. Alzheimer's Disease	315	37.3	+29.1%
6. All Other Unintentional Injuries	275	33.5	+14.3%
7. Diabetes Mellitus	221	23.0	+6.0%
8. Pneumonia and Influenza	198	22.0	+22.9%
9. Nephritis, Nephrotic Syndrome and Nephrosis	176	19.1	+8.5%
10. Unintentional Motor Vehicle Injuries	138	16.6	+21.2
11. Septicemia	121	13.0	-2.3%
12. Suicide	109	12.7	+4.1%
13. Chronic Liver Disease and Cirrhosis	97	9.9	+4.2%
14. Homicide	21	2.7	-53.4%
15. AIDS	15	1.7	-41.4%

Source: Sheila S. Pfaender, Public Health Consultant, after data from NC SCHS.

From the data in the two tables above it is apparent that in the 2009-2013 aggregate period, mortality rates in Davidson County were *higher* than comparable rates statewide for the following 12 leading causes of death (in descending order of percent difference):

- Chronic lower respiratory disease
- Alzheimer's disease
- Pneumonia and influenza
- Unintentional motor vehicle injuries
- Diseases of the heart
- All other (non-motor vehicle) injuries
- Cerebrovascular disease
- Nephritis, nephrotic syndrome and nephrosis
- Diabetes
- Chronic liver disease and cirrhosis
- Suicide
- Total cancer

In the 2009-2013 period mortality rates in Davidson County were *lower* than comparable rates statewide for only two of the leading causes of death:

- Homicide
- Septicemia

The Davidson County mortality rate for AIDS in the 2009-2013 period was unstable, and cannot be definitively compared to the comparable NC rate, although the county rate appears to be much lower.

The next table summarizes changes in the leading causes of death between the last CHA (2006-2010 aggregate period) and the present CHNA (2009-2013 aggregate period), an interval of three years.

- There was no change in rank among the first six leading causes of death, although mortality rates for three of these causes (Chronic Lower Respiratory Disease, Alzheimer's disease, and All Other Unintentional Injuries) worsened in the intervening period.
- Diabetes and the complex of kidney diseases each rose one place in rank between 2006-2010 and 2009-2013, and the mortality rate attributable to each increased.
- Pneumonia/influenza and unintentional motor vehicle injuries each fell one place in rank between 2006-2010 and 2009-2013, and the mortality rate attributable to each decreased.

Table 104. Changes in Leading Causes of Death, Davidson County (Between 2006-2010 and 2009-2013)

Davidson County Rank by Descending Overall Age-Adjusted Rate (2009-2013)	Rank 2006-2010	Rank Change 2006-2010 to 2009-2013	% Rate Change 2006-2010 to 2009-2013
1. Diseases of the Heart	1	n/c	-17.6%
2. Total Cancer	2	n/c	-6.5%
3. Chronic Lower Respiratory Disease	3	n/c	+6.5%
4. Cerebrovascular Disease	4	n/c	-10.9%
5. Alzheimer's Disease	5	n/c	+7.8%
6. All Other Unintentional Injuries	6	n/c	+13.9%
7. Diabetes Mellitus	8	+1	+2.3%
8. Pneumonia and Influenza	7	-1	-11.6%
9. Nephritis, Nephrotic Syndrome and Nephrosis	10	+1	+1.6%
10. Unintentional Motor Vehicle Injuries	9	-1	-16.2%
11. Septicemia	11	n/c	-13.9%
12. Suicide	12	n/c	-2.3%
13. Chronic Liver Disease and Cirrhosis	13	n/c	+13.8%
14. Homicide	14	n/c	-38.6%
15. AIDS	15	n/c	n/a

Source: Sheila S. Pfaender, Public Health Consultant, after data from NCSCHS.

Gender Disparities in Leading Causes of Death

In the past, NC CHAs have demonstrated some significant differences in mortality rates between men and women. The following table compares gender-stratified rates for leading causes of death in Davidson County and its comparator jurisdictions. Note that comparisons are limited by occasional “N/As”, representing rates suppressed due to below-threshold numbers of events among stratified groups.

- In Davidson County in the 2009-2013 aggregate period, the overall mortality rate for males (1,027.1) was 35% higher than the overall mortality rate for females (758.6).
- In Randolph County in the same period the overall mortality rate for males (1,028.9) was 43% higher than the overall mortality rate for females (719.9).
- In NC in the same period the overall mortality rate for males (940.6) was 40% higher than the overall mortality rate for females (673.4).
- Note that the lower gender difference in Davidson County may be due primarily to a high mortality rate among women. In Randolph County, the mortality rate among males is almost identical to the comparable rate in Davidson County but the mortality rate among females is significantly lower in Randolph County, and the gender differential is larger as well.

Table 105. Sex-Specific Age-Adjusted Death Rates for Leading Causes of Death, Davidson County and Comparators (Single Five-Year Aggregate Period, 2009-2013)

Cause of Death	Davidson County				Randolph County				State of NC Rate	
	Males		Females		Males		Females			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Males	Females
1. Diseases of the Heart	976	252.5	841	155.5	747	221.4	652	138.0	217.3	134.0
2. Cancer	959	226.7	766	142.7	827	231.8	640	139.1	217.6	143.0
3. Chronic Lower Respiratory Disease	274	68.5	316	58.2	223	66.2	282	60.2	52.9	42.0
4. Cerebrovascular Diseases	176	46.3	266	49.7	136	44.7	199	42.4	44.1	42.5
5. Alzheimer's Disease	78	24.4	237	44.1	72	27.5	149	31.2	23.0	32.0
6. All Other Unintentional Injuries	163	42.9	112	24.9	150	46.2	100	24.4	38.7	21.3
7. Diabetes Mellitus	127	29.2	94	17.9	94	27.5	87	18.4	25.7	18.4
8. Pneumonia and Influenza	94	25.8	104	19.4	80	27.9	82	17.4	20.5	16.2
9. Nephritis, Nephrotic Syndrome and Nephrosis	92	24.5	84	15.5	82	25.9	79	16.8	21.4	15.1
10. Unintentional Motor Vehicle Injury	80	19.9	58	13.4	82	23.5	41	11.0	20.2	7.7
11. Septicemia	59	15.1	62	11.6	55	16.8	58	12.5	14.6	12.3
12. Suicide	86	20.6	23	5.5	96	26.8	21	5.5	19.8	5.4
13. Chronic Liver Disease and Cirrhosis	70	15.4	27	5.4	72	18.1	33	7.4	13.2	6.2
14. Homicide	12	n/a	9	n/a	23	7.1	**6**	**n/a**	9.0	2.5
15. Acquired Immune Deficiency Syndrome	12	n/a	3	n/a	**7**	**n/a**	**2**	**n/a**	4.1	1.8
Total Deaths All Causes (Some causes are not listed above)	4,034	1,027.1	4,033	758.6	3,405	1028.9	3,321	719.9	940.6	673.4

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source - NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

The next table summarizes the gender differences in mortality specific to Davidson County.

Table 106. Leading Causes of Death in Davidson County, Gender Comparison (2009-2013)

Davidson County Rank by Descending Overall Age-Adjusted Rate (2009-2013)	Rank Among Males	Rank Among Females	% Male Rate Difference from Females
1. Diseases of the Heart	1	1	+62.4%
2. Total Cancer	2	2	+58.9%
3. Chronic Lower Respiratory Disease	3	3	+17.7%
4. Cerebrovascular Disease	4	4	-6.8%
5. Alzheimer's Disease	9	5	-44.7%
6. All Other Unintentional Injuries	5	6	+72.3%
7. Diabetes Mellitus	6	8	+63.1%
8. Pneumonia and Influenza	7	7	+33.0%
9. Nephritis, Nephrotic Syndrome and Nephrosis	8	9	+58.1%
10. Unintentional Motor Vehicle Injuries	11	10	+48.5%
11. Septicemia	13	11	+30.2%
12. Suicide	10	12	3.7X
13. Chronic Liver Disease and Cirrhosis	12	13	2.9X
14. Homicide	n/a	n/a	n/a
15. AIDS	n/a	n/a	n/a

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source – Sheila S. Pfaender, Public Health Consultant, after data from NCSCHS.

In Davidson County in the 2009-2013 period, mortality rates for *males* were *higher* than comparable rates for females for the following 11 causes of death (in descending order of percent difference):

- Suicide
- Chronic liver disease and cirrhosis
- All other unintentional injuries
- Diabetes mellitus
- Diseases of the heart
- Total cancer
- Nephritis, nephrotic syndrome, nephrosis
- Unintentional motor vehicle injuries
- Pneumonia and influenza
- Septicemia
- Chronic lower respiratory disease

In Davidson County in the same period, the mortality rates for females were higher than comparable rates for males for only two of the leading causes of death:

- Alzheimer's disease
- Cerebrovascular disease

In Davidson County the gender-stratified mortality rates for homicide and AIDS in the 2009-2013 period were unstable, and cannot be definitively compared to the comparable NC rates.

Racial Disparities in Leading Causes of Death

Because of below-threshold numbers of deaths for some causes during the 2009-2013 period, age-adjusted mortality rates among Davidson County minorities are available only for African Americans and for only seven causes of death, as shown in the table below.

- In Davidson County in the 2009-2013 period, the overall mortality rate for African American non-Hispanics (898.1) was 0.6% higher than the comparable rate for white non-Hispanics (892.5).
- The overall mortality rate for Hispanics was only about one-third the comparable rate for white non-Hispanics

Table 107. Race-Specific Age-Adjusted Death Rates for Leading Causes of Death (Single Five-Year Aggregate Period, 2009-2013)

Cause of Death	Davidson County											
	White, non-Hispanic		African-American, non-Hispanic		American Indian, non-Hispanic		Other Races, non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1. Diseases of the Heart	1,701	204.1	107	162.6	2	n/a	4	n/a	3	n/a	1,817	197.7
2. Cancer	1,570	179.6	136	184.3	5	n/a	4	n/a	10	n/a	1,725	177.5
3. Chronic Lower Respiratory Disease	567	65.5	22	33.0	1	n/a	0	n/a	0	n/a	590	62.1
4. Cerebrovascular Diseases	393	48.3	45	63.4	1	n/a	1	n/a	2	n/a	442	49.2
5. Alzheimer's Disease	284	36.5	29	51.1	1	n/a	0	n/a	1	n/a	315	37.3
6. All Other Unintentional Injuries	257	37.1	13	n/a	0	n/a	0	n/a	5	n/a	275	33.5
7. Diabetes Mellitus	184	21.1	34	50.6	0	n/a	1	n/a	2	n/a	221	23.0
8. Pneumonia and Influenza	183	22.4	13	n/a	0	n/a	1	n/a	1	n/a	198	22.0
9. Nephritis, Nephrotic Syndrome and Nephrosis	149	18.1	26	36.6	0	n/a	0	n/a	1	n/a	176	19.1
10. Unintentional Motor Vehicle Injuries	119	16.9	9	n/a	1	n/a	1	n/a	8	n/a	138	16.6
11. Septicemia	108	12.8	13	n/a	0	n/a	0	n/a	0	n/a	121	13.0
12. Suicide	101	13.9	5	n/a	0	n/a	0	n/a	3	n/a	109	12.7
13. Chronic Liver Disease and Cirrhosis	86	9.9	9	n/a	0	n/a	0	n/a	2	n/a	97	9.9
14. Homicide	17	n/a	3	n/a	0	n/a	0	n/a	1	n/a	21	2.7
15. Acquired Immune Deficiency Syndrome	5	n/a	10	n/a	0	n/a	0	n/a	0	n/a	15	1.7
Total Deaths All Causes (Some causes not listed above)	7,335	892.5	620	898.1	13	n/a	18	n/a	51	289.2	4,034	1027.1

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source - NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

The next table presents derivative Davidson County data specific for whites and African Americans only.

Table 108. Leading Causes of Death in Davidson County, Racial Comparison (2009-2013)

Davidson County Rank by Descending Overall Age-Adjusted Rate (2009-2013)	Rank Among White Non-Hispanic	Rank Among Black non-Hispanic	% Blacks Rate Difference from Whites
1. Diseases of the Heart	1	2	-20.5%
2. Total Cancer	2	1	+2.6%
3. Chronic Lower Respiratory Disease	3	7	-49.6%
4. Cerebrovascular Disease	4	3	+31.3%
5. Alzheimer's Disease	5	4	+40.0%
6. All Other Unintentional Injuries	6	n/a	n/a
7. Diabetes Mellitus	7	5	2.4X
8. Pneumonia and Influenza	8	n/a	n/a
9. Nephritis, Nephrotic Syndrome and Nephrosis	9	6	2.0X
10. Unintentional Motor Vehicle Injuries	10	n/a	n/a
11. Septicemia	11	n/a	n/a
12. Suicide	12	n/a	n/a
13. Chronic Liver Disease and Cirrhosis	13	n/a	n/a
14. Homicide	n/a	n/a	n/a
15. AIDS	n/a	n/a	n/a

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source – Sheila S. Pfaender, Public Health Consultant, after data from NCSCHS

In Davidson County in the 2009-2013 period mortality rates were *higher* among African Americans than among whites for five leading causes of death (in descending order of percent difference):

- Diabetes mellitus
- Nephritis, nephrotic syndrome and nephrosis
- Alzheimer's disease
- Cerebrovascular disease
- Total cancer

In Davidson County in the same period, the mortality rates for African Americans were *lower* than comparable rates for whites for only two of the leading causes of death:

- Chronic lower respiratory disease
- Diseases of the heart

In Davidson County African American mortality rates for eight leading causes of death were unstable, and cannot be definitively compared to rates for whites.

Age Disparities in Leading Causes of Death

Each age group tends to have its own leading causes of death. The following table lists the three leading causes of death by age group for the five-year aggregate period from 2009-2013. (Note that for this purpose it is important to use *non-age adjusted* death rates.)

The leading cause(s) of death in each of the age groups in Davidson County were:

- Age Group 00-19: Conditions originating in the perinatal period
- Age Group 20-39: All other unintentional injuries (i.e., non-motor vehicle injuries)
- Age Group 40-64: Cancer – all sites
- Age Group 65-84: Cancer – all sites
- Age Group 85+: Diseases of the heart

Table 109. Three Leading Causes of Death by Age Group, Number of Deaths and Unadjusted Death Rates (Single Five-Year Aggregate Period, 2009-2013)

Age Group	Rank	Cause of Death		
		Davidson County	Randolph County	State of NC
00-19	1	Conditions originating in the perinatal period	Conditions originating in the perinatal period	Conditions originating in the perinatal period
	2	Congenital abnormalities (birth defects)	Motor Vehicle Injuries	Congenital anomalies (birth defects)
	3	Motor Vehicle Injuries Other Unintentional Injuries	Congenital abnormalities (birth defects)	Motor vehicle injuries
20-39	1	Other Unintentional Injuries	Other Unintentional Injuries	Other Unintentional injuries
	2	Motor Vehicle Injuries	Suicide	Motor vehicle injuries
	3	Suicide	Motor Vehicle Injuries	Suicide
40-64	1	Cancer - All Sites	Cancer - All Sites	Cancer-All sites
	2	Diseases of the heart	Diseases of the heart	Diseases of the heart
	3	Chronic lower respiratory diseases	Chronic lower respiratory diseases	Other Unintentional injuries
65-84	1	Cancer - All Sites	Cancer-All sites	Cancer-All sites
	2	Diseases of the heart	Diseases of the heart	Diseases of the heart
	3	Chronic lower respiratory diseases	Chronic lower respiratory diseases	Chronic lower respiratory diseases
85+	1	Diseases of the heart	Diseases of the heart	Diseases of the heart
	2	Cancer - All sites	Cancer - All sites	Cancer-All sites
	3	Alzheimer's disease	Alzheimer's disease	Alzheimer's disease

Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, Death Counts and Crude Death Rates per 100,000 for Leading Causes of Death, by Age Groups, NC, 2009-2013; http://www.schs.state.nc.us/SCHS/data/databook/.

Differences in mortality statistics will be covered as each cause of death is discussed separately below, in the order of highest to lowest rank in Davidson County. It is important to emphasize once more that because of below-threshold numbers of deaths there will be no stable county rates for some causes of death, especially among racially stratified groups. Some unstable data will be presented in this document, but always accompanied by cautions regarding its use.

Diseases of the Heart

Heart disease is an abnormal organic condition of the heart or of the heart and circulation. Heart disease is the number one killer in the US and a major cause of disability. The most common cause of heart disease—coronary artery disease—is a narrowing or blockage of the coronary arteries, the blood vessels that supply blood to the heart itself. Coronary artery disease is the major reason people have heart attacks, but other kinds of heart problems may originate in the valves in the heart, or the heart may not pump well and cause heart failure (47).

Heart disease was the leading cause of death in Davidson County, and the second leading cause of death in Randolph County and NC in the 2009-2013 period (cited previously).

Heart Disease Hospitalizations

The table below presents hospital discharge rate trend data. According to this data from NCSCHS, heart disease has been cause for a high proportion of illness-related hospitalizations among Davidson County residents over time, but at a rate lower than the rate for the state as a whole in every period cited.

Table 110. Heart Disease Hospital Discharge Rate Trend (2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	12.2	11.5	11.3	10.6	10.5	10.0	10.1	9.2
Randolph County	12.9	11.9	11.0	11.7	10.8	10.6	10.4	9.9
State of NC	12.7	12.2	11.8	11.4	11.3	10.9	10.7	10.3

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS data on Inpatient Hospital Utilization and Charges by Principal Diagnosis, there were 1,510 cases of heart disease from Davidson County hospitalized somewhere in NC in 2013 (48).

The two hospitals in Davidson County provided data broadly associated with heart disease-related ICD-9 codes, as summarized in the table below. Emergency department (ED) admissions and in-patient hospitalization (IP) discharges are presented separately. Note that this data is specific to Davidson County residents served at either of the medical centers in the county. The number column represents ED admissions and IP discharges; the percent column denotes the percent of all ED admissions or IP discharges, respectively, the previous figures represent.

- For the three years cited, 0.8% of all ED admissions were associated with diagnoses of heart disease.
- In the same period, 7.9% of all IP discharges were associated with diagnoses of heart disease.

Table 111. Davidson County Hospital Data: Heart Disease (2012-2014)

Service	Number and Percent of Admissions/Discharges							
	2012		2013		2014		Total	
	#	%	#	%	#	%	#	%
ED	464	0.8	497	0.8	509	0.9	1470	0.8
IP	603	8.4	495	7.3	533	7.9	1631	7.9

ICD-9 Codes included: 390-398xx, 402xx, 404-429xx,

Heart Disease Mortality Rate Trend

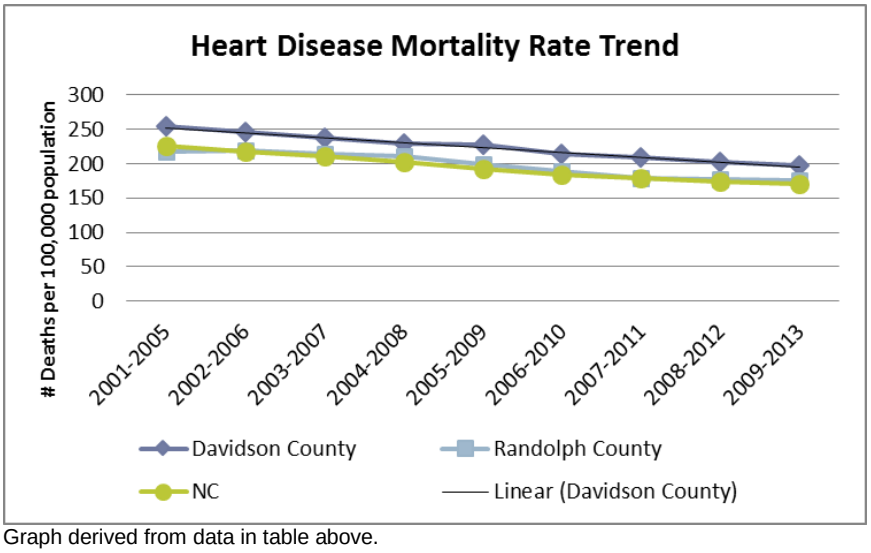
The following table and its companion figure capture heart disease mortality rate trends.

Table 112. Overall Heart Disease Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	253.9	246.3	237.8	228.9	227.3	215.0	209.3	202.1	197.7
Randolph County	218.4	219.7	214.9	210.2	198.5	189.1	179.7	177.2	175.7
State of NC	226.8	217.9	210.7	202.2	191.7	184.9	179.3	174.4	170.0

Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 16. Overall Heart Disease Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in table above.

- Heart disease mortality decreased over time in all three jurisdictions.
- In Davidson County the heart disease mortality rate decreased overall by 22% over the period cited; in NC the heart disease mortality rate fell 25% over the same period.

Racial Disparities in Heart Disease Mortality

The next table presents heart disease mortality data for the aggregate period 2009-2013, stratified by race/ethnicity.

- Due to below-threshold numbers of heart disease deaths among some minority populations at the county-level, mortality rates were suppressed for those groups.
- In Davidson County the heart disease mortality rate among African American non-Hispanics was 20% lower than the comparable rate among white non-Hispanics.

Table 113. Race/Ethnicity-Specific Heart Disease Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	1,701	204.1	107	162.6	**2**	**n/a**	**4**	**n/a**	**3**	**n/a**	1,817	197.7
Randolph County	1,313	179.7	77	191.1	**1**	**n/a**	**5**	**n/a**	**3**	**n/a**	1,399	175.7
State of NC	67,667	168.0	16,926	193.2	847	196.5	343	66.0	502	50.7	86,285	170.0

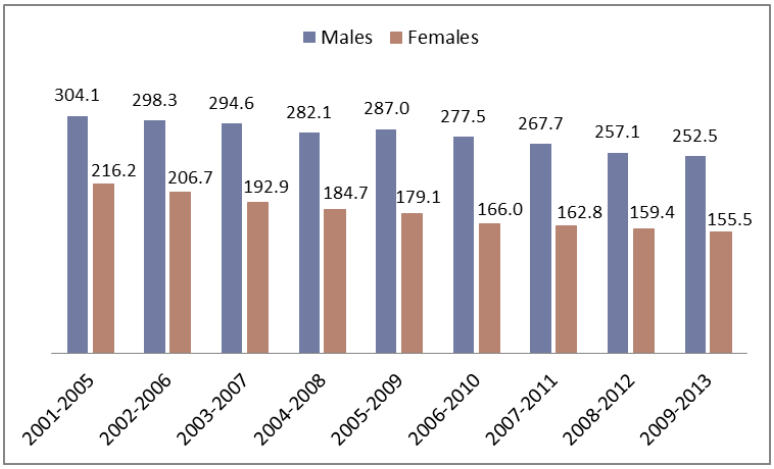
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in Heart Disease Mortality

The figure below presents gender-stratified heart disease mortality rates in Davidson County for the aggregate periods 2001-2005 through 2009-2013.

- It appears that the gender disparity noted previously for recent heart disease mortality rate data in Davidson County is actually long-standing. Males have had higher heart disease mortality rates since at least 2001-2005.
- Heart disease mortality rates for both males and females in Davidson County have been decreasing since 2001-2005.

Figure 17. Sex-Specific Heart Disease Mortality Rates, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Total Cancer

Cancer is a term for diseases in which abnormal cells divide without control and can invade nearby tissues. Cancer cells also can spread to other parts of the body through the blood and lymph systems. If the disease remains unchecked, it can result in death (49).

Total cancer (cancers of all types) was the second leading cause of death in Davidson County but the leading cause of death in Randolph County and NC in the 2009-2013 period (cited previously).

Malignant Neoplasm Hospitalizations

The table below presents the hospital discharge rate trend data for malignant neoplasms of all types. In all periods cited but the last, the malignant neoplasm discharge rate in Davidson County was lower than the comparable rate for the state as a whole.

Table 114. All Malignant Neoplasms Hospital Discharge Rate Trend (2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	3.6	3.4	3.1	2.9	2.8	2.8	2.8	2.9
Randolph County	3.3	3.4	3.2	3.1	3.0	2.7	2.7	2.4
State of NC	3.9	3.9	3.6	3.4	3.3	3.2	3.0	2.9

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS data on Inpatient Hospital Utilization and Charges by Principal Diagnosis, 476 Davidson County residents were hospitalized somewhere in NC with diagnoses of malignant neoplasms in 2013 (47).

The two hospitals in Davidson County provided data associated with all cancer (neoplasm)-related ICD-9 codes, as summarized in the table below. Emergency department (ED) admissions and in-patient hospitalization (IP) discharges are presented separately. Note that this data is specific to Davidson County residents served at either of the medical centers in the county. The number column represents ED admissions and IP discharges; the percent column denotes the percent of all ED admissions or IP discharges, respectively, the previous figures represents.

- For the three years cited, 0.09% of all ED admissions were associated with diagnoses of cancer.
- In the same period, 1.5% of all IP discharges were associated with diagnoses of cancer.

Table 115. Davidson County Hospital Data: All Cancer (Neoplasms) (2012-2014)

Service	Number and Percent of Admissions/Discharges							
	2012		2013		2014		Total	
	#	%	#	%	#	%	#	%
ED	43	0.07	66	0.11	51	0.09	160	0.09
IP	109	1.5	101	1.5	107	1.6	317	1.5

ICD-9 Codes included: 140-239xx

Total Cancer Mortality Rate Trend

The next table and its companion figure display the total cancer mortality rate trend.

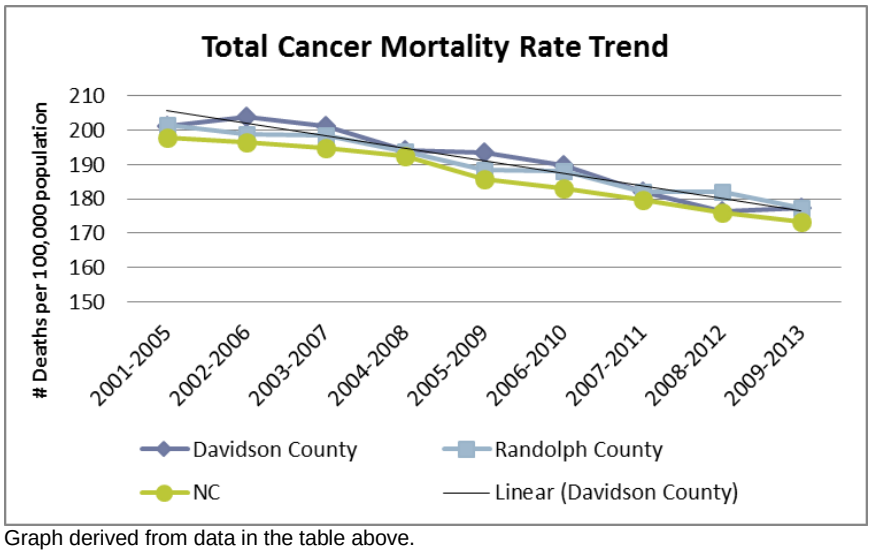
- The total cancer mortality rate in Davidson County decreased annually between 2003-2007 and 2008-2012, for an overall decrease of 12%.
- The total cancer mortality rate in Davidson County exceeded the comparable rate for NC in every period cited.
- The total cancer mortality rates in all three jurisdictions fell over the period cited.

Table 116. Overall Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	201.1	204.0	201.3	194.1	193.3	189.9	182.2	176.2	177.5
Randolph County	201.5	199.0	198.6	193.7	188.6	188.0	182.2	182.1	177.2
State of NC	197.7	196.4	194.9	192.5	185.6	183.1	179.7	175.9	173.3

NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Figure 18. Overall Total Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Total Cancer Mortality

The next table presents total cancer mortality data for the aggregate period 2009-2013, stratified by race/ethnicity.

- Note that due to below-threshold numbers of total cancer deaths among some minority populations at the county level, mortality rates for those groups were suppressed.
- In Davidson County the total cancer mortality rate among African American non-Hispanics exceeded the comparable rate for white non-Hispanics by 2.6%%.

Table 117. Race/Ethnicity-Specific Total Cancer Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	1,570	179.6	136	184.3	**5**	**n/a**	**4**	**n/a**	**10**	**n/a**	1,725	177.5
Randolph County	1,356	178.5	90	223.2	**3**	**n/a**	**5**	**n/a**	**13**	**n/a**	1,467	177.2
State of NC	70,043	171.3	18,515	201.5	786.0	163.1	597	163.1	776	65.2	90,717	173.3

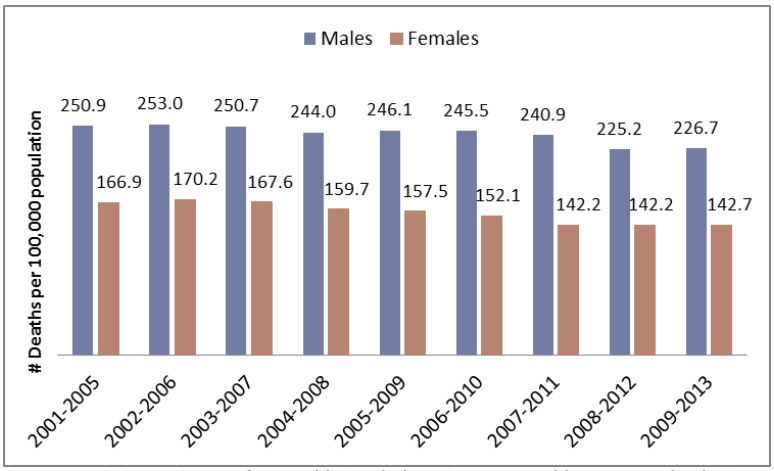
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in Total Cancer Mortality

The figure below depicts gender-stratified total cancer mortality rates in Davidson County for the aggregate periods 2001-2005 through 2009-2013.

- It appears that the gender difference in total cancer mortality noted in Davidson County for 2009-2013 is actually longstanding.
- Total cancer mortality rates for both males and females in Davidson County are decreasing.

Figure 19. Sex-Specific Total Cancer Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Total Cancer Incidence

Since total cancer is a significant cause of death, it is useful to examine patterns in the development of new cases. The statistic important to understanding the growth of a health problem is *incidence*, the population-based rate at which new cases of a disease occur and are diagnosed (methodology for which was described previously). Cancer incidence rates used in this report were obtained from the NC Cancer Registry, which collects data on newly diagnosed cases from NC clinics and hospitals as well as on NC residents whose cancers were diagnosed at medical facilities in bordering states.

The following table and its companion figure display total cancer incidence rate trends.

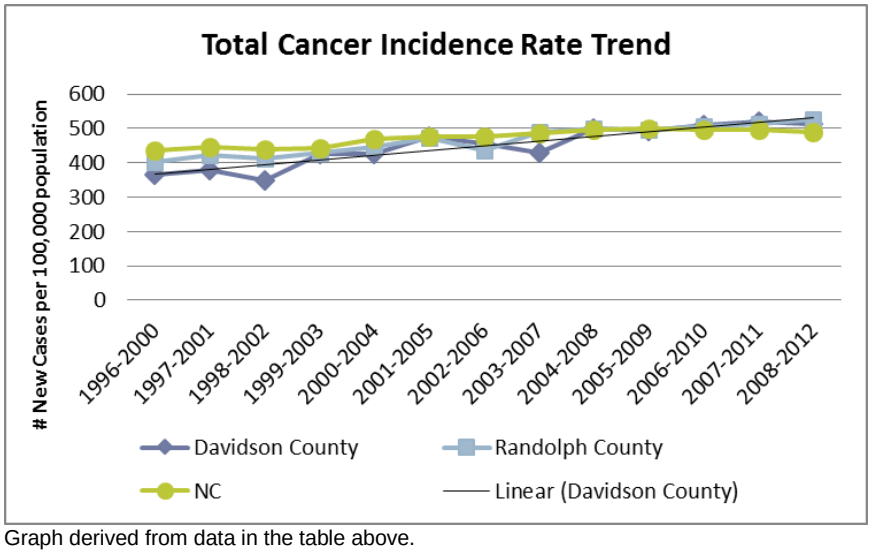
- The total cancer incidence rate in Davidson County fluctuated over time, but increased overall by 41% over the period cited.

Table 118. Overall Total Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1996-2000 through 2008-2012)

Location	Rate (New cases per 100,000 Population)												
	1996-2000	1997-2001	1998-2002	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012
Davidson County	366.4	380.5	348.9	426.6	425.8	475.8	457.4	427.9	498.5	494.0	511.2	518.6	514.7
Randolph County	402.4	423.9	412.4	430.6	445.3	472.3	434.8	490.3	501.4	495.9	505.4	513.8	526.9
State of NC	437.2	445.3	440.5	444.0	469.8	475.9	477.0	487.0	495.2	500.1	498.1	496.7	488.9

Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as noted); http://www.schs.state.us.nc/SCHS/CCR/reports.html.

Figure 20. Overall Total Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1996-2000 through 2008-2012)



Graph derived from data in the table above.

To this point the discussions of cancer mortality and incidence have focused on figures for total cancer. In Davidson County, as throughout the state of NC, there are four (or five) site-specific cancers that cause most cancer deaths: breast cancer, colon cancer, lung cancer, prostate cancer, and, sometimes, pancreas cancer. It should be noted that males also can have breast cancer, but since the number of cases tends to be small, the mortality rates for breast cancer (and prostate cancer) used in this report are gender-specific.

The table below presents age-adjusted *mortality* data for the five prominent site-specific cancers for the 2009-2013 period.

- In Davidson County, lung cancer was the site-specific cancer with the highest mortality rate. Female breast cancer caused the next highest mortality rate, followed in order by prostate cancer, colon cancer and pancreas cancer.
- In NC as a whole, lung cancer presents the highest mortality rate, followed by prostate cancer, female breast cancer, colon cancer, and pancreas cancer.

Table 119. Mortality for Five Major Site-Specific Cancers (Single Five-Year Aggregate Period, 2009-2013)

Location	Female Breast Cancer		Prostate Cancer		Lung Cancer		Colon Cancer		Pancreas Cancer	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Davidson County	108	20.7	64	16.9	608	61.0	152	15.6	117	12.0
Randolph County	99	21.8	59	19.4	513	59.9	125	15.3	79	9.5
State of NC	6,361	21.7	4,287	22.1	27,364	51.6	7,520	14.5	5,573	10.6

Source: NC State Center for Health Statistics, County-level Data, County Health Data Book (2015). 2009-2013 NC Resident Race/Ethnicity and Sex-Specific Age-Adjusted Death Rates (counties and cancer sites as indicated); http://www.schs.state.nc.us/schs/data/databook/.

The next table presents age-adjusted *incidence* data for four of the five site-specific cancers for the 2008-2012 period. (Note that incidence data for pancreas cancer was not available at the source.)

- In Davidson County, female breast cancer was the site-specific cancer with the highest incidence rate, followed by prostate cancer, lung cancer, and colon cancer.
- In NC as a whole, female breast cancer has the highest incidence rate, followed by prostate cancer, lung cancer, and colon cancer.

Table 120. Incidence for Four Major Site-Specific Cancers (Single Five-Year Aggregate Period, 2008-2012)

Location	Female Breast Cancer		Prostate Cancer		Lung Cancer		Colon Cancer	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Davidson County	769	151.1	635	140.6	850	87.0	414	43.8
Randolph County	668	151.4	564	146.0	763	90.5	319	39.5
State of NC	43,740	157.0	34,064	139.4	37,215	71.9	20,343	39.8

Source: NC State Center for Health Statistics, County-level Data, Cancer, Annual Reports: NC Cancer Incidence Rates, 2012, All Counties by Specified Site. http://www.schs.state.nc.us/data/cancer/incidence_rates.htm.

Multi-year mortality and incidence rate trends for these site-specific cancers will be presented subsequently, as each cancer type is discussed separately. The cancer topics are presented in decreasing order of site-specific cancer mortality rates in Davidson County.

Lung Cancer

The category of cancer referred to as lung cancer traditionally *also* includes cancers of the trachea and bronchus.

Lung, Trachea and Bronchus Cancer Hospitalizations

The table below summarizes hospital discharge rates for trachea, bronchus and lung neoplasms. The hospital discharge rates for lung cancer in Davidson County were lower than the comparable state rates in every year except 2011.

Table 121. Malignant Trachea, Bronchus, Lung Neoplasms Hospital Discharge Rate Trend (Single Years, 2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	12.2	11.5	11.3	10.6	10.5	10.0	10.1	9.2
Randolph County	12.9	11.9	11.0	11.7	10.8	10.6	10.4	9.9
State of NC	12.7	12.2	11.8	11.4	11.3	10.9	10.7	10.3

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS data on Inpatient Hospital Utilization and Charges by Principal Diagnosis, 94 Davidson County residents were hospitalized somewhere in NC with a diagnosis of malignant neoplasm of the trachea, bronchus or lung in 2013 (47).

Lung Cancer Mortality Rate Trend

The next table and its companion figure display lung cancer mortality rate trends.

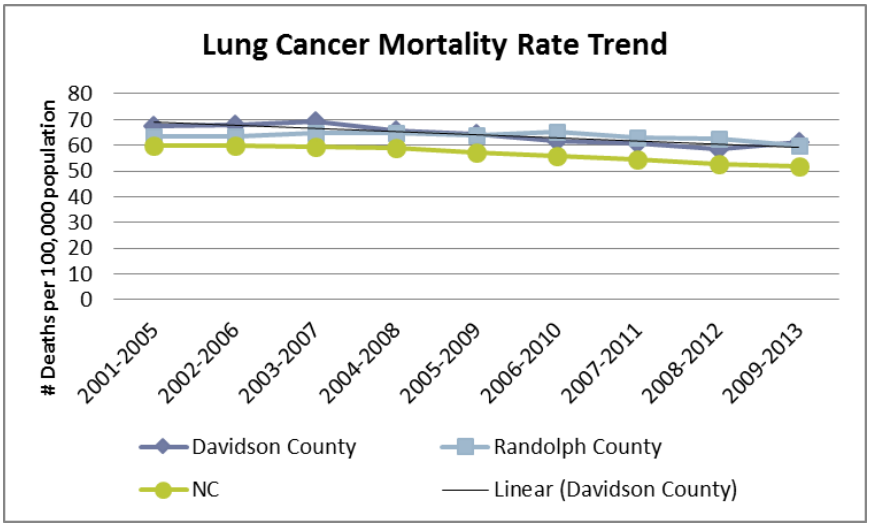
- The lung cancer mortality rate in Davidson County fluctuated over the period cited, but was 10% lower in 2009-2013 than in 2001-2005.
- The lung cancer mortality rate in Davidson County was higher than the comparable state rate in every aggregate cited.
- The NC lung cancer mortality rate decreased overall by 14% over the same period.

Table 122. Lung Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	67.5	67.8	69.4	65.6	64.2	61.8	60.6	58.7	61.0
Randolph County	63.5	63.5	64.6	65.0	63.9	65.4	63.2	62.7	59.9
State of NC	59.9	59.8	59.6	59.1	57.0	55.9	54.5	52.8	51.6

NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Figure 21. Lung Cancer Mortality Rate Trend
(Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Lung Cancer Mortality

The following table presents lung cancer mortality data for 2009-2013, stratified by race/ethnicity.

- Due to below-threshold numbers of lung cancer deaths among some racially-stratified populations, those mortality rates were suppressed.
- In Davidson County the lung cancer mortality rate for African American non-Hispanics was 3% lower than the comparable rate among white non-Hispanics.

Table 123. Race/Ethnicity-Specific Lung Cancer Mortality
(Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	561	62.3	44	60.2	**1**	**n/a**	**0**	**n/a**	**2**	**n/a**	608	61.0
Randolph County	473	60.3	33	74.2	**3**	**n/a**	**2**	**n/a**	**2**	**n/a**	513	59.9
State of NC	22,024	53.0	4,816	51.6	266	53.1	147	24.3	111	11.0	27,364	51.6

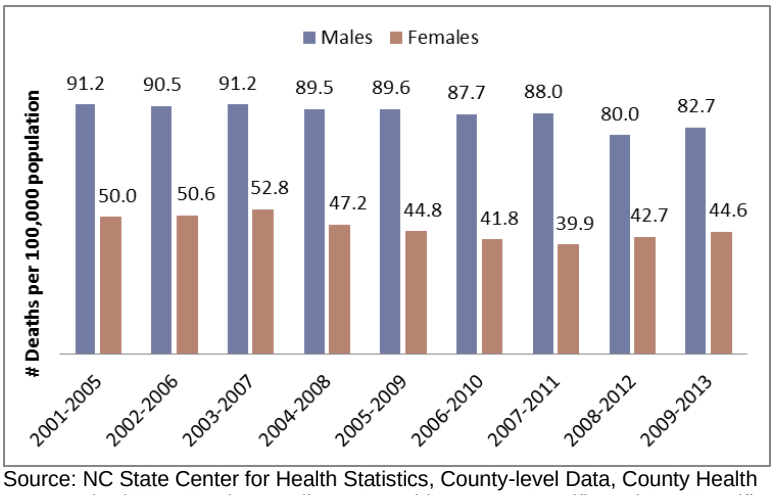
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in Lung Cancer Mortality

The figure below displays gender-stratified lung cancer mortality rates in Davidson County.

- The lung cancer mortality rate among Davidson County males was significantly higher than the comparable rate among females over the period cited.
- The lung cancer mortality rate among males and females in Davidson County had been decreasing until recently. The rate among males rose in the last aggregate period, and the rate among females rose in the last two aggregate periods.

Figure 22. Sex-Specific Lung Cancer Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2015), Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Lung Cancer Incidence

The next table and its companion figure display incidence rate trend data for lung cancer.

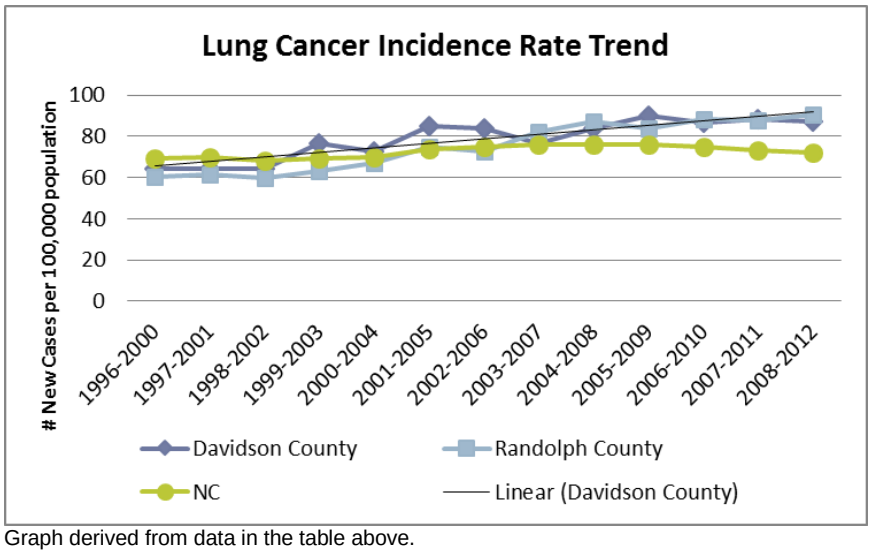
- Lung cancer incidence rates in all three jurisdictions fluctuated from aggregate to aggregate but in net increased over the period cited.
- The lung cancer incidence rate in Davidson County increased by 35% over the period cited.
- The lung cancer incidence rate in Davidson County was higher than the comparable state rate in every aggregate period from1999-2003 through 2008-2012.

Table 124. Lung Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1996-2000 through 2008-2012)

Location	Rate (New cases per 100,000 Population)												
	1996-2000	1997-2001	1998-2002	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012
Davidson County	64.5	64.5	64.1	76.5	72.9	84.8	83.9	76.5	84.1	89.8	86.9	88.4	87.0
Randolph County	60.6	61.3	59.8	63.1	66.9	75.1	72.7	82.2	87.0	84.1	88.4	87.6	90.5
State of NC	69.3	69.7	68.0	69.3	69.7	73.8	75.0	75.8	76.3	75.9	74.8	73.4	71.9

Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as noted); http://www.schs.state.us.nc/SCHS/CCR/reports.html

Figure 23. Lung Cancer Incidence Rate Trend
(Five-Year Aggregate Periods, 1996-2000 through 2008-2012)



Graph derived from data in the table above.

Breast Cancer

For purposes of this report, breast cancer pertains exclusively to women, although males can and do contract the disease. There were no breast cancer deaths among males in Davidson County in the 2009-2013 period.

Breast Cancer Hospitalizations

The following table summarizes hospital discharge rate data for breast cancer. Note that several hospital discharge rates for breast cancer in both counties were unstable due to small numbers of events. Statewide, the discharge rate for female breast cancer was steady at 0.2 until the two most recent periods, when it fell to 0.1.

Table 125. Breast Neoplasms Hospital Discharge Rate Trend
(Single Years, 2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	0.2	0.2	0.1	**0.1**	0.1	0.2	0.2	**0.1**
Randolph County	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**
State of NC	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS data on Inpatient Hospital Utilization and Charges by Principal Diagnosis, there were 10 hospitalizations for malignant neoplasms of the female breast among Davidson County women in 2013 (47).

Breast Cancer Mortality Rate Trend

The next table and its companion figure display female breast cancer mortality rate trends.

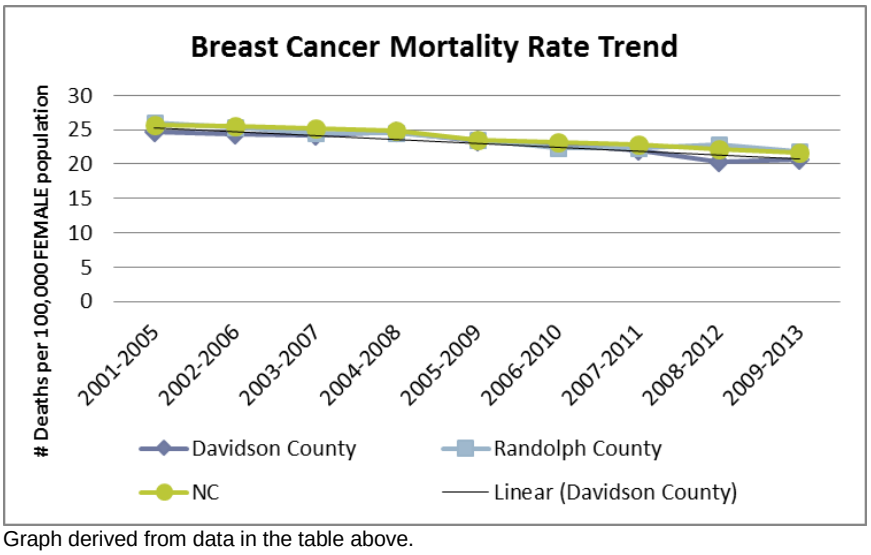
- The breast cancer mortality rates in all three jurisdictions have fallen gradually over the period cited.
- The breast cancer mortality rate in Davidson County fell overall by 16% over the period cited.
- The NC breast cancer mortality rate also declined overall by 16% over the same period.

Table 126. Overall Female Breast Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Female Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	24.7	24.3	24.2	24.7	23.3	22.9	22.0	20.4	20.7
Randolph County	26.0	25.4	24.5	24.5	23.6	22.3	22.4	22.9	21.8
State of NC	25.7	25.5	25.2	24.8	23.5	23.2	22.8	22.2	21.7

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 24. Overall Female Breast Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Breast Cancer Mortality

The following table presents breast cancer mortality data for 2009-2013, stratified by race/ethnicity.

- Due to below-threshold numbers of breast cancer deaths in both counties, mortality rates for all stratified minority groups were suppressed.
- Statewide, the breast cancer mortality rate for African American non-Hispanic women was 41% *higher* than the comparable rate for white non-Hispanic women.

Table 127. Race/Ethnicity-Specific Female Breast Cancer Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Female Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	94	20.1	**13**	**n/a**	**0**	**n/a**	**0**	**n/a**	**1**	**n/a**	108	20.7
Randolph County	93	22.5	**6**	**n/a**	**0**	**n/a**	**0**	**n/a**	**0**	**n/a**	99	21.8
State of NC	4,586	20.4	1,625	28.8	45	16.4	38	9.2	67	9.1	6,361	21.7

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Breast Cancer Incidence

The table below and its companion figure display the incidence rate trend for breast cancer.

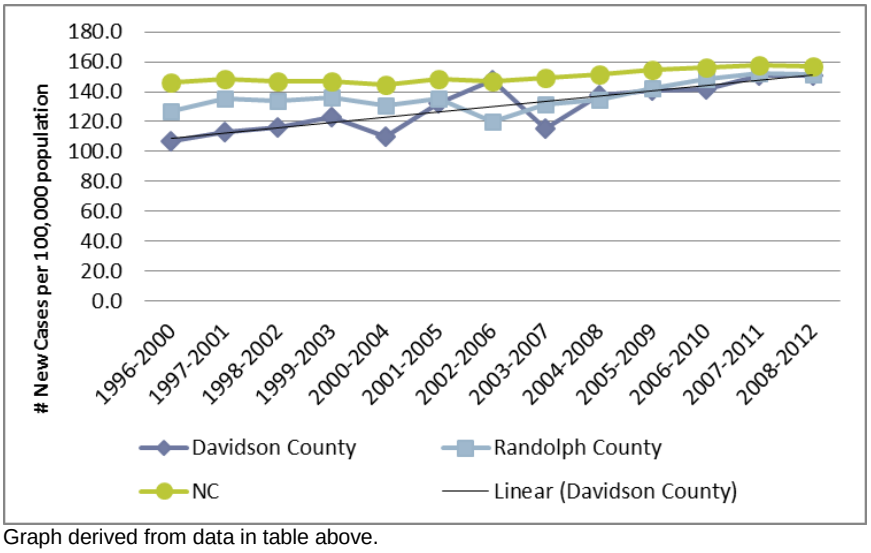
- Breast cancer incidence rates in all three jurisdictions increased over the period cited, but at the fastest rate in Davidson County.
- In Davidson County the breast cancer incidence rate increased overall by 41% over the period cited.
- In NC the breast cancer incidence rate increased overall by 8% over the same period.

Table 128. Breast Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1996-2000 through 2008-2012)

Location	Rate (New cases per 100,000 Population)											
	1996-2000	1997-2001	1998-2002	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012
Davidson County	107.0	113.0	116.4	122.8	109.7	132.2	147.8	115.5	137.8	140.9	141.9	150.5	151.1
Randolph County	127.2	135.5	133.5	135.8	130.5	135.4	119.6	131.4	134.8	142.0	148.7	152.3	151.4
State of NC	145.9	148.2	147.1	147.3	144.9	148.2	147.2	149.6	151.9	154.5	155.9	157.4	157.0

Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as noted); http://www.schs.state.us.nc/SCHS/CCR/reports.html

Figure 25. Breast Cancer Incidence Rate Trend (Five-Year Aggregate Periods, 1996-2000 through 2008-2012)



Graph derived from data in table above.

It is not known whether or not increased screening activity played a role in the increase in breast cancer incidence, although breast cancer screening activities are common. According to data provided to the consultant by the hospitals in Davidson County, an annual average of approximately 8,730 mammograms were performed in 2012, 2013, and 2014, most of them for residents of Davidson County.

Prostate Cancer

Prostate Cancer Hospitalizations

The table below summarizes hospital discharge rate data for prostate cancer. Prostate cancer discharge rates in Davidson County were lower than the comparable rates for Randolph County or the state as a whole.

Table 129. Malignant Prostate Neoplasms Hospital Discharge Rate Trend (Single Years, 2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	0.2	0.2	0.2	0.2	0.2	0.2	0.1	**0.1**
Randolph County	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
State of NC	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS data on Inpatient Hospital Utilization and Charges by Principal Diagnosis, there were 19 hospitalizations among Davidson County men for malignant neoplasm of the prostate in 2013 (47).

Prostate Cancer Mortality Rate Trend

The next table and its companion figure display prostate cancer mortality rate trends.

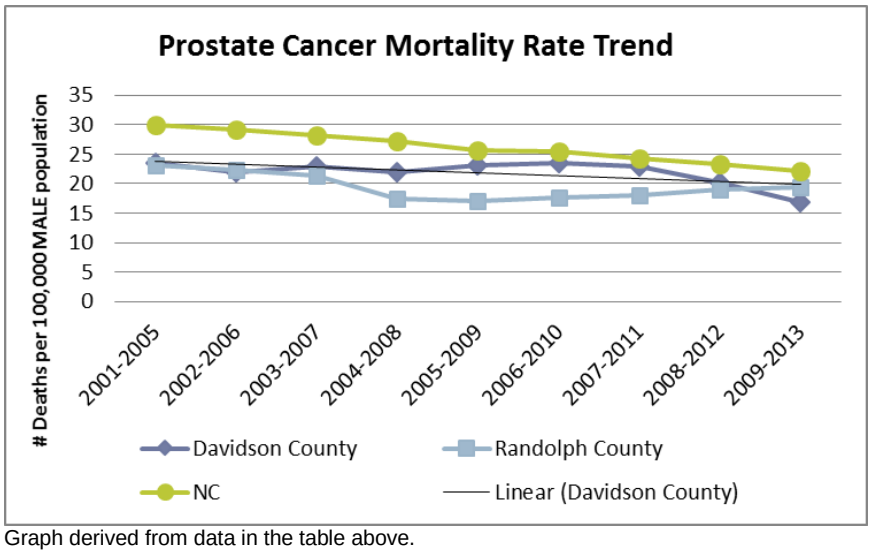
- The prostate cancer mortality rate in Davidson County was below the comparable state rate throughout the period cited.
- The Davidson County prostate cancer mortality rate decreased overall by 28% over the period cited.

Table 130. Overall Prostate Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Overall Rate (Deaths per 100,000 Male Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	23.5	21.9	22.9	22.0	23.1	23.6	23.0	20.1	16.9
Randolph County	23.2	22.4	21.3	17.5	17.1	17.7	18.0	19.0	19.4
State of NC	29.9	29.1	28.3	27.3	25.7	25.5	24.3	23.4	22.1

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 26. Overall Prostate Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Prostate Cancer Mortality

The table below presents prostate cancer mortality data for 2009-2013, stratified by race/ethnicity.

- Due to below-threshold numbers of prostate cancer deaths among racially-stratified populations in both counties, mortality rates for those groups were suppressed.
- Statewide, the prostate cancer mortality rate for African American non-Hispanics was 2.6 *times* the comparable rate for white non-Hispanics.

Table 131. Race/Ethnicity-Specific Prostate Cancer Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Male Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	54	15.7	**10**	**n/a**	**0**	**n/a**	**0**	**n/a**	**0**	**n/a**	64	16.9
Randolph County	49	17.5	**10**	**n/a**	**0**	**n/a**	**0**	**n/a**	**0**	**n/a**	59	19.4
State of NC	2,875	18.2	1,319	47.4	49	33.7	**12**	**n/a**	32	9.8	4,287	22.1

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Prostate Cancer Incidence

The following table and its companion figure display the incidence rate trend for prostate cancer.

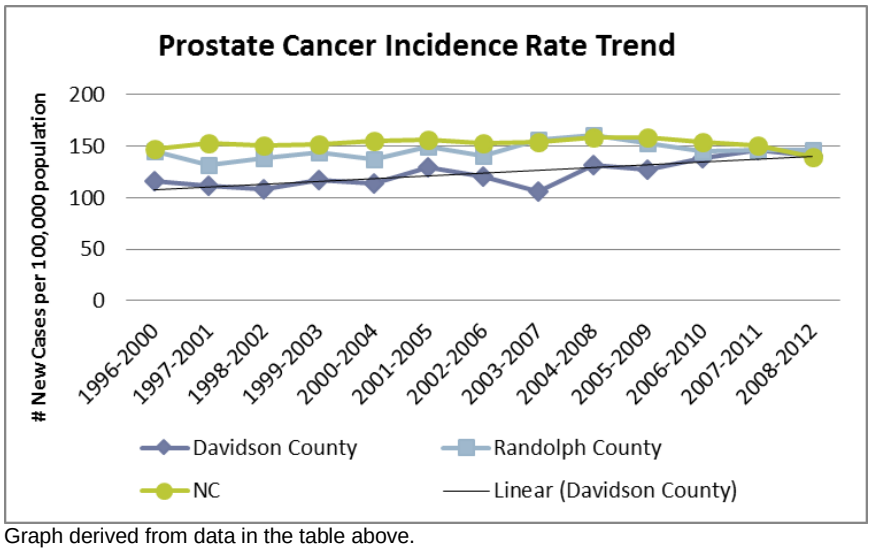
- The prostate cancer incidence rate in Davidson County was lower than the comparable rate for NC throughout the period cited except for the last aggregate period.
- The prostate cancer incidence rate in Davidson County increased overall by 21% over the period cited. Over the same period the comparable rate in Randolph County remained relatively flat, and the rate in NC fell 5%.

Table 132. Prostate Cancer Incidence Rate Trend
(Five-Year Aggregate Periods, 1996-2000 through 2008-2012)

Location	Rate (New cases per 100,000 Population)												
	1996-2000	1997-2001	1998-2002	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012
Davidson County	116.1	111.5	108.0	117.4	114.2	129.7	120.9	105.6	131.9	127.7	139.0	146.8	140.6
Randolph County	145.4	131.3	138.8	144.2	137.8	149.7	140.4	155.8	160.4	153.0	145.0	146.5	146.0
State of NC	147.3	152.5	151.2	152.0	154.7	156.1	153.2	153.8	158.8	158.3	153.7	150.6	139.4

Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as noted); http://www.schs.state.us.nc/SCHS/CCR/reports.html

Figure 27. Prostate Cancer Incidence Rate Trend
(Five-Year Aggregate Periods, 1996-2000 through 2008-2012)



Graph derived from data in the table above.

Colon Cancer

The category of cancer referred to as colon cancer (sometimes referred to as *colorectal cancer*) traditionally *also* includes cancers of the rectum and anus.

Colon Cancer Hospitalizations

The table below summarizes hospital discharge rate data for malignant neoplasms of the colon, rectum and anus. Note that the hospital discharge rates in all jurisdictions were similar and static.

Table 133. Malignant Colon, Rectum and Anus Neoplasms Hospital Discharge Rate Trend
(Single Years, 2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
Randolph County	0.5	0.5	0.4	0.4	0.3	0.3	0.4	0.4
State of NC	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS data on Inpatient Hospital Utilization and Charges by Principal Diagnosis, 68 Davidson County residents were hospitalized somewhere in NC with diagnoses of malignant neoplasms of the colon, rectum and anus in 2013 (47).

Colon Cancer Mortality Rate Trend

The following table and its companion figure display the colon cancer mortality rate trend.

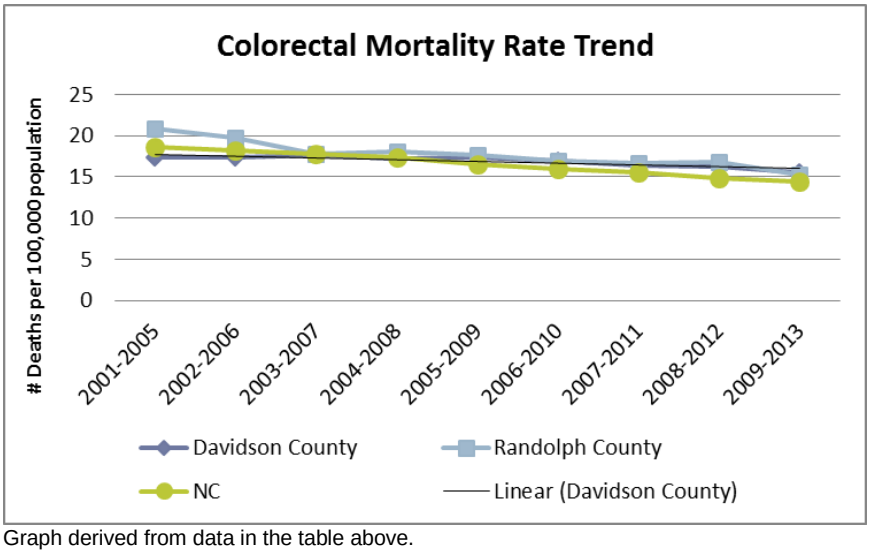
- The colon cancer mortality rate in Davidson County was lower than the comparable NC rate from 2001-2005 through 2004-2008 and higher than the NC rate from 2005-2009 through 2009-2013.
- The colon cancer mortality rate in Davidson County decreased overall by 10% over the period cited.

Table 134. Overall Colon Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	17.4	17.3	17.6	17.2	17.3	16.9	16.4	16.2	15.6
Randolph County	20.9	19.8	17.8	18.1	17.6	17.0	16.6	16.8	15.3
State of NC	18.6	18.2	17.8	17.3	16.5	16.0	15.5	14.9	14.5

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 28. Overall Colon Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Colon Cancer Mortality

The table below presents colon cancer mortality data for 2009-2013, stratified by race/ethnicity.

- Due to below-threshold numbers of colon cancer deaths among racially-stratified populations in both counties, mortality rates for those groups were suppressed.
- Statewide, the colon cancer mortality rate for African American non-Hispanics was 49% higher than the rate for white non-Hispanics.

Table 135. Race/Ethnicity-Specific Colon Cancer Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	138	15.9	**11**	**n/a**	**1**	**n/a**	**1**	**n/a**	**1**	**n/a**	152	15.6
Randolph County	112	14.9	**10**	**n/a**	**0**	**n/a**	**0**	**n/a**	**3**	**n/a**	125	15.3
State of NC	5,511	13.6	1,839	20.3	66	13.8	40	5.5	64	5.6	7,520	14.5

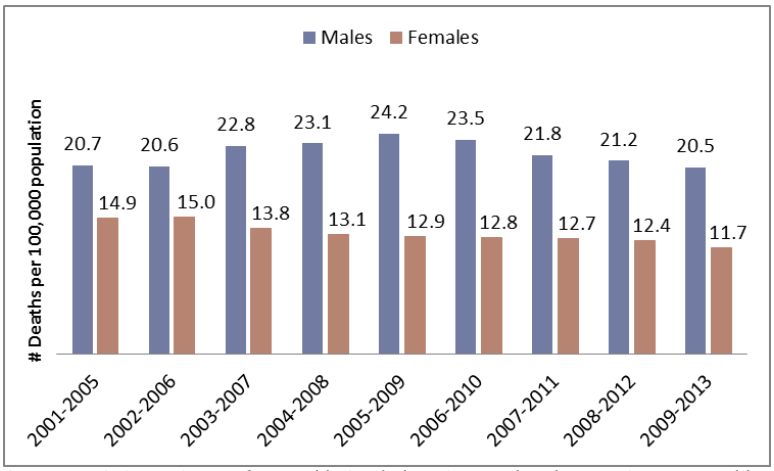
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in Colon Cancer Mortality

The next figure depicts gender-stratified colon cancer mortality rates in Davidson County for the aggregate periods 2001-2005 through 2009-2013.

- Colon cancer mortality rates for Davidson County males were higher than the rates for females in every interval. The mortality rate for males appears to be decreasing after a period of increase; the mortality rate for females appears to be decreasing slowly but steadily.

Figure 29. Sex-Specific Colon Cancer Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2015), Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Colon Cancer Incidence

The next table and its companion figure display incidence rate trend data for colon cancer.

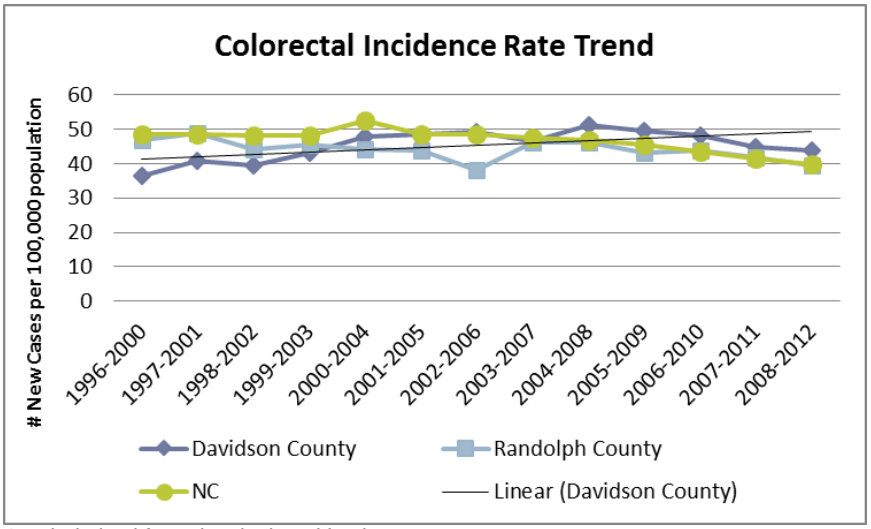
- The colon cancer incidence rate in Davidson County, below the comparable NC rate prior to 2004-2008, has been higher than the NC rate since then.
- The colon cancer incidence rate in Davidson County increased overall by 20% over the period cited.
- Statewide, the colon cancer incidence rate fell overall by 18% over the same period

Table 136. Colon Cancer Incidence Rate Trend
(Five-Year Aggregate Periods, 1996-2000 through 2008-2012)

Location	Rate (New cases per 100,000 Population)												
	1996-2000	1997-2001	1998-2002	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012
Davidson County	36.6	40.9	39.4	43.1	47.9	48.5	49.2	46.4	51.4	49.7	48.3	45.0	43.8
Randolph County	47.0	48.9	44.1	45.4	44.1	44.0	38.0	46.1	46.2	43.1	43.9	41.9	39.5
State of NC	48.4	48.4	48.3	48.2	52.5	48.6	48.4	47.4	46.8	45.5	43.4	41.5	39.8

Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as noted); http://www.schs.state.us.nc/SCHS/CCR/reports.html

Figure 30. Colon Cancer Incidence Rate Trend
(Five-Year Aggregate Periods, 1996-2000 through 2008-2012)



Graph derived from data in the table above.

Pancreas Cancer

Pancreas cancer is the fifth leading site-specific cause of cancer death in Davidson County. Due to its relative rarity, the NCSCHS does not publish the same range of data for this cancer as it does for other, more common site specific cancers.

Pancreas Cancer Hospitalizations

NCSCHS does not routinely release hospitalization data relative to pancreas cancer.

Pancreas Cancer Mortality Rate Trend

The following table and its companion figure show the pancreas cancer mortality rate trend.

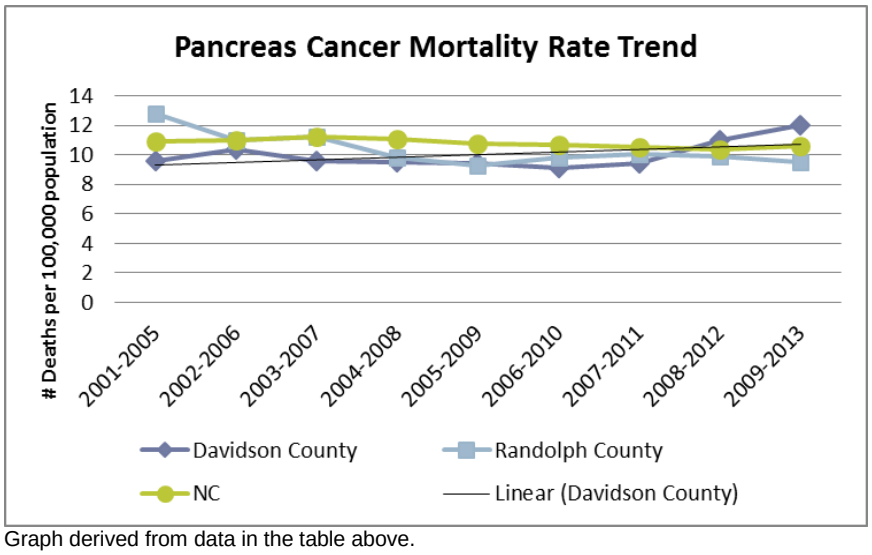
- The pancreas cancer mortality rate in Davidson County was lower than the comparable NC rate until 2008-2012, when the county rate began to exceed the state rate.
- The pancreas cancer mortality rate in Davidson County increased overall by 25% over the period cited.

Table 137. Overall Pancreas Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	9.6	10.4	9.6	9.5	9.4	9.1	9.4	11.0	12.0
Randolph County	12.8	11.0	11.2	9.8	9.3	9.8	10.1	9.9	9.5
State of NC	10.9	11.0	11.2	11.1	10.8	10.7	10.5	10.4	10.6

Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 31. Overall Pancreas Cancer Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Pancreas Cancer Mortality

The table below presents pancreas cancer mortality data for 2009-2013, stratified by race/ethnicity.

- Due to below-threshold numbers of pancreas cancer deaths among stratified populations in both counties, mortality rates for those groups were suppressed.
- Statewide, the pancreas cancer mortality rate for African American non-Hispanics was 32% higher than the rate for white non-Hispanics.

Table 138. Race/Ethnicity-Specific Pancreas Cancer Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	107	12.2	9	n/a	0	n/a	1	n/a	0	n/a	117	12.0
Randolph County	73	9.5	3	n/a	0	n/a	1	n/a	2	n/a	79	9.5
State of NC	4,206	10.2	1,228	13.6	49	10.5	44	7.1	46	4.2	5,573	10.6

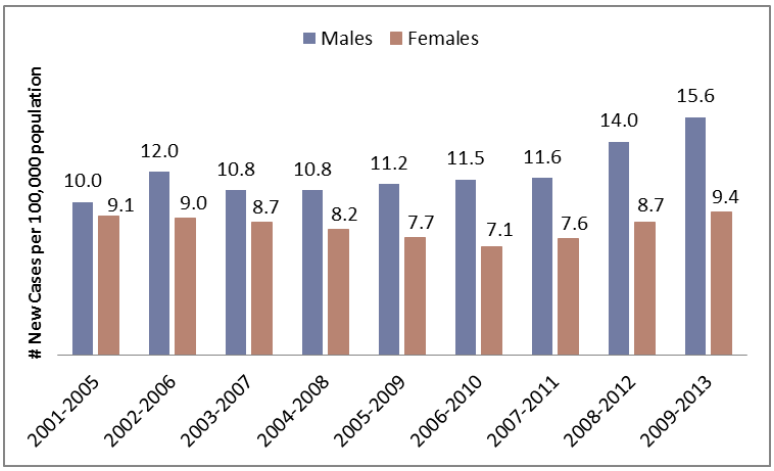
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in Pancreas Cancer Mortality

The next figure shown gender-stratified pancreas cancer mortality rates in Davidson County for 2001-2005 through 2009-2013.

- Davidson County males have higher pancreas cancer mortality rate than females, and it appears that the size of the difference may be growing.
- The pancreas cancer mortality rates for both males and females in Davidson County have been increasing for the last several aggregate periods.

Figure 32. Sex-Specific Pancreas Cancer Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2015), Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Pancreas Cancer Incidence

Pancreas cancer incidence rates at the county level are not routinely released by NCSCHS.

Chronic Lower Respiratory Disease (CLRD)

Chronic lower respiratory disease (CLRD) is composed of three major diseases, chronic bronchitis, emphysema, and asthma, all of which are characterized by shortness of breath caused by airway obstruction and sometimes lung tissue destruction. The obstruction is irreversible in chronic bronchitis and emphysema, reversible in asthma. Before 1999, CLRD was called *chronic obstructive pulmonary disease* (COPD). Some in the field still use the designation COPD, but limit it to mean chronic bronchitis and emphysema only. In the US, tobacco use is a key factor in the development and progression of CLRD/COPD, but exposure to air pollutants in the home and workplace, genetic factors, and respiratory infections also play a role (50).

CLRD was the third leading cause of death in Davidson County, Randolph County, and NC in the 2009-2013 period (cited previously).

CLRD/COPD Hospitalizations

The table below presents the hospital discharge rate trend data for COPD (the term still used by some data-compiling organizations). According to this data, COPD caused a significant proportion of illness-related hospitalizations among Davidson County residents over time, and at rates always higher than the state rate.

Table 139. COPD Hospital Discharge Rate Trend (2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	3.3	2.9	3.9	3.8	3.5	3.4	2.9	2.3
Randolph County	2.1	2.2	2.3	2.1	2.0	1.7	1.3	1.2
State of NC	3.2	3.1	3.4	3.4	3.2	3.2	2.1	2.0

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS data on Inpatient Hospital Utilization and Charges by Principal Diagnosis, there were 379 hospitalizations for COPD and 118 hospitalizations for asthma somewhere in NC among Davidson County residents in 2013 (47).

The two hospitals in Davidson County provided data broadly associated with ICD-9 codes for COPD and Allied Conditions, as summarized in the table below. Emergency department (ED) admissions and in-patient hospitalization (IP) discharges are presented separately. Note that this data is specific to Davidson County residents served at either of the medical centers in the county. The number column represents ED admissions and IP discharges; the percent column denotes the percent of all ED admissions or IP discharges, respectively, the previous figures represents.

- For the three years cited, 3.9% of all ED admissions were associated with diagnoses of COPD and Allied Conditions (excluding pneumonia and influenza).
- In the same period, 4.5% of all IP discharges were associated with diagnoses of COPD and Allied Conditions (excluding pneumonia and influenza).

Table 140. Davidson County Hospital Data: COPD and Allied Conditions (Including Asthma but Excluding Pneumonia and Influenza) (2012-2014)

Service	Number and Percent of Admissions/Discharges							
	2012		2013		2014		Total	
	#	%	#	%	#	%	#	%
ED	2653	4.4	2252	3.8	1980	3.6	6885	3.9
IP	364	5.1	309	4.5	265	3.9	938	4.5

ICD-9 Codes included: 490-493xx

CLRD Mortality Rate Trend

The next table and its companion figure display CLRD mortality rate trends.

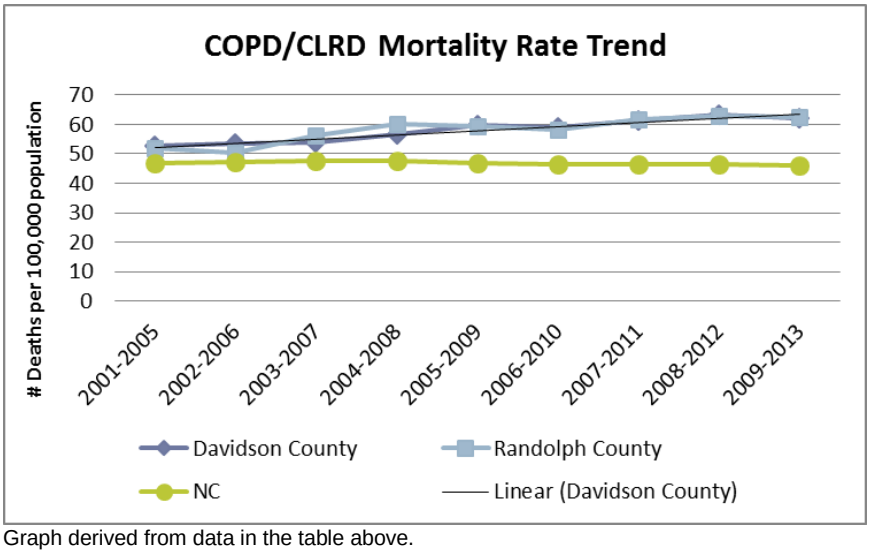
- The CLRD mortality rate in Davidson County was higher than the comparable state rate throughout the period cited.
- The CLRD mortality rate in Davidson County increased overall by 18% over the period cited.

Table 141. Overall CLRD Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	52.7	53.4	53.7	56.6	59.6	58.8	61.3	63.3	62.1
Randolph County	51.9	50.2	56.1	60.0	59.5	58.1	61.7	63.0	62.4
State of NC	46.9	47.1	47.5	47.8	47.0	46.4	46.6	46.6	46.1

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 33. Overall CLRD Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in CLRD Mortality

The following table presents CLRD mortality data for the aggregate period 2009-2013, stratified by race/ethnicity.

- Note that due to below-threshold numbers of CLRD deaths among some minority populations in the counties, mortality rates were suppressed for those groups.
- In Davidson County the CLRD mortality rate for African-American non-Hispanics was approximately *half* the comparable mortality rate among white non-Hispanics.

Table 142. Race/Ethnicity-Specific CLRD Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	567	65.5	22	33.0	**1**	**n/a**	**0**	**n/a**	**0**	**n/a**	590	62.1
Randolph County	484	64.6	21	53.4	**0**	**n/a**	**0**	**n/a**	**0**	**n/a**	505	62.4
State of NC	20,684	50.9	2,384	28.0	168	40.8	44	9.7	66	8.8	23,346	46.1

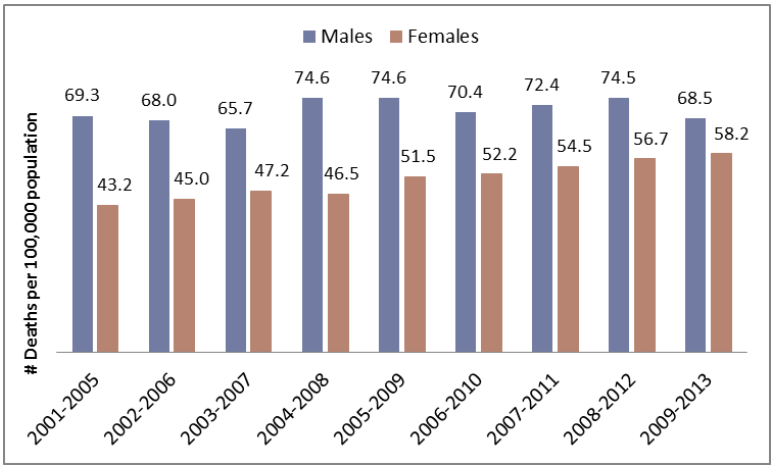
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in CLRD Mortality

The figure below presents gender-stratified CLRD mortality rates in Davidson County for the aggregate periods 2001-2005 through 2009-2013.

- The CLRD mortality rate among Davidson County males was higher than the comparable rate among females over the entire period cited.
- Although the CLRD mortality rate among Davidson County males fluctuated over the period cited, the comparable rate for females has risen steadily, closing the gender gap.

Figure 34. Sex-Specific CLRD Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Cerebrovascular Disease

Cerebrovascular disease describes the physiological conditions that lead to stroke. Strokes happen when blood flow to the brain stops and brain cells begin to die. There are two types of stroke. Ischemic stroke (the more common type) is caused by a blood clot that blocks or plugs a blood vessel in the brain. The other kind, called hemorrhagic stroke, is caused by a blood vessel that breaks and bleeds into the brain (51).

Cerebrovascular disease was the fourth leading cause of death in Davidson County, Randolph County and NC in the 2009-2013 aggregate period (cited previously).

Cerebrovascular Disease Hospitalizations

The following table presents the hospital discharge rate trend data for cerebrovascular disease. According to this data, cerebrovascular disease caused a significant proportion of illness-related hospitalizations among Davidson County residents over time, and at a rate higher than the state rate in every year except 2008 and 2009.

Table 143. Cerebrovascular Disease Hospital Discharge Rate Trend (2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	3.3	3.2	2.8	3.0	3.3	3.4	3.4	3.6
Randolph County	2.8	2.9	3.1	3.2	3.2	2.8	3.1	2.9
State of NC	3.1	3.1	3.0	3.1	3.1	3.0	3.0	2.9

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS data on Inpatient Hospital Utilization and Charges by Principal Diagnosis, there were 590 hospitalizations for cerebrovascular disease somewhere in NC among Davidson County residents in 2013 (47).

The two hospitals in Davidson County provided data broadly associated with ICD-9 codes for cerebrovascular disease, as summarized in the table below. Emergency department (ED) admissions and in-patient hospitalization (IP) discharges are presented separately. Note that this data is specific to Davidson County residents served at either of the medical centers in the county. The number column represents ED admissions and IP discharges; the percent column denotes the percent of all ED admissions or IP discharges, respectively, the previous figures represents.

- For the three years cited, 0.2% of all ED admissions were associated with diagnoses of cerebrovascular disease.
- In the same period, 3.3% of all IP discharges were associated with diagnoses of cerebrovascular disease.

Table 144. Davidson County Hospital Data: Cerebrovascular Disease (2012-2014)

Service	Number and Percent of Admissions/Discharges							
	2012		2013		2014		Total	
	#	%	#	%	#	%	#	%
ED	138	0.2	157	0.3	129	0.2	424	0.2
IP	249	3.5	242	3.5	198	2.9	689	3.3

ICD-9 Codes included: 430-438xx

Cerebrovascular Disease Mortality Rate Trend

The next table and its companion figure display cerebrovascular disease mortality rate trends.

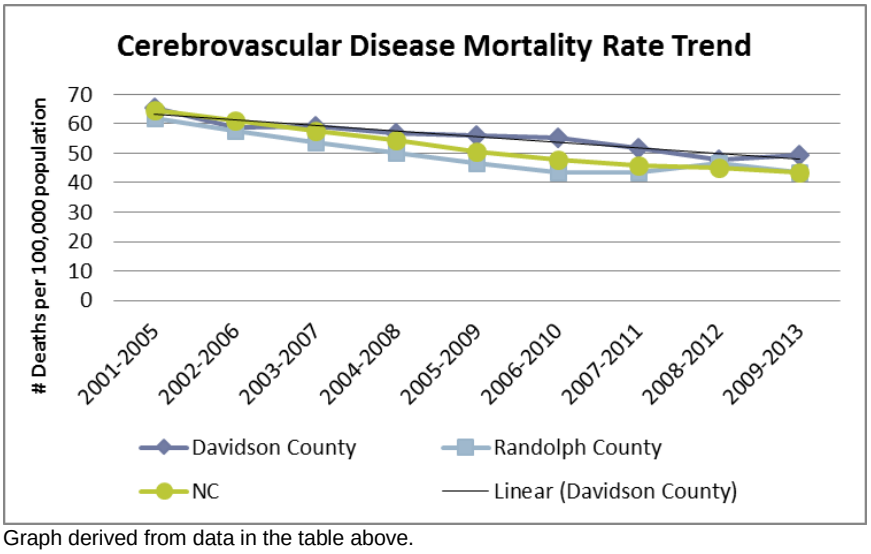
- The cerebrovascular disease mortality rate in Davidson County exceeded the comparable state rate in every year cited except 2002-2006.
- The cerebrovascular disease mortality rate in Davidson County decreased overall by 25% over the period cited.

Table 145. Overall Cerebrovascular Disease Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	65.6	58.9	59.3	56.9	56.2	55.2	51.9	47.7	49.2
Randolph County	62.1	57.5	53.7	50.2	46.6	43.6	43.4	46.6	43.4
State of NC	64.7	61.1	57.6	54.4	50.5	47.8	46.0	45.1	43.7

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Figure 35. Overall Cerebrovascular Disease Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Cerebrovascular Disease Mortality

The table below presents cerebrovascular disease mortality data for the aggregate period 2009-2013, stratified by race/ethnicity.

- Due to below-threshold numbers of cerebrovascular disease deaths among some minority populations at the county level mortality rates were suppressed for those groups.
- In Davidson County the cerebrovascular disease mortality rate for African American non-Hispanics was 31% higher than the comparable rate for white non-Hispanics.

Table 146. Race/Ethnicity-Specific Cerebrovascular Disease Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	393	48.3	45	63.4	1	n/a	1	n/a	2	n/a	442	49.2
Randolph County	306	42.8	26	69.4	2	n/a	0	n/a	1	n/a	335	43.4
State of NC	16,525	41.3	4,833	57.1	143	36.0	146	29.1	169	17.6	21,816	43.7

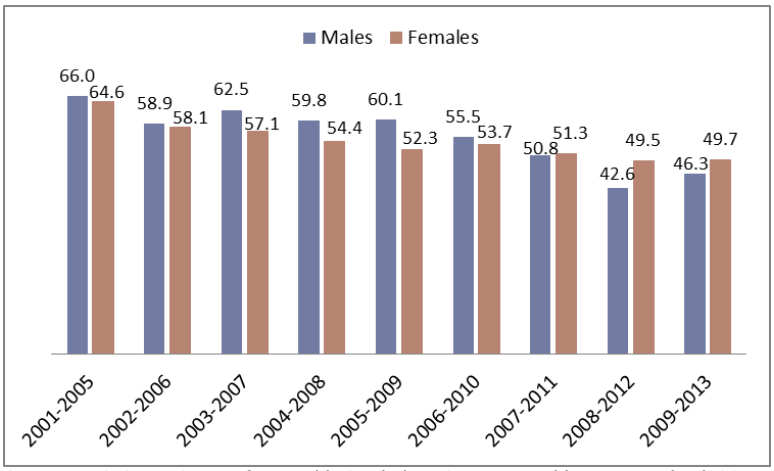
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in Cerebrovascular Disease Mortality

The following table depicts gender-stratified cerebrovascular disease mortality rates in Davidson County for the aggregate periods 2001-2005 through 2009-2013.

- It appears that from 2001-2005 through 2006-2010 the cerebrovascular disease mortality rate for Davidson County males was higher than the rate for the county's females, after which time the disparity reversed.

Figure 36. Sex-Specific Cerebrovascular Disease Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Alzheimer's Disease

Alzheimer's disease is a progressive neurodegenerative disease affecting mental abilities including memory, cognition and language. Alzheimer's disease is characterized by memory loss and dementia. The risk of developing Alzheimer's disease increases with age (e.g., almost half of those 85 years and older suffer from Alzheimer's disease). Early-onset Alzheimer's has been shown to be genetic in origin, but a relationship between genetics and the late-onset form of the disease has not been demonstrated. No other definitive causes have been identified (52).

Alzheimer's disease was the fifth leading cause of death in Davidson County and the sixth leading cause of death in Randolph County and NC in the 2009-2013 aggregate period (cited previously).

Alzheimer's Disease Hospitalizations

At the present time the NCSCHS does not track Alzheimer's disease-related hospitalizations.

According to data provided to the consultant by the two hospitals in Davidson County, in the period 2012 through 2014 there was a total of 16 emergency department admissions and 48 inpatient hospitalization discharges associated with a diagnosis of Alzheimer's disease (ICD-9 code 331).

Alzheimer's Disease Mortality Rate Trend

The following table and its companion figure display Alzheimer's disease mortality rate trend data.

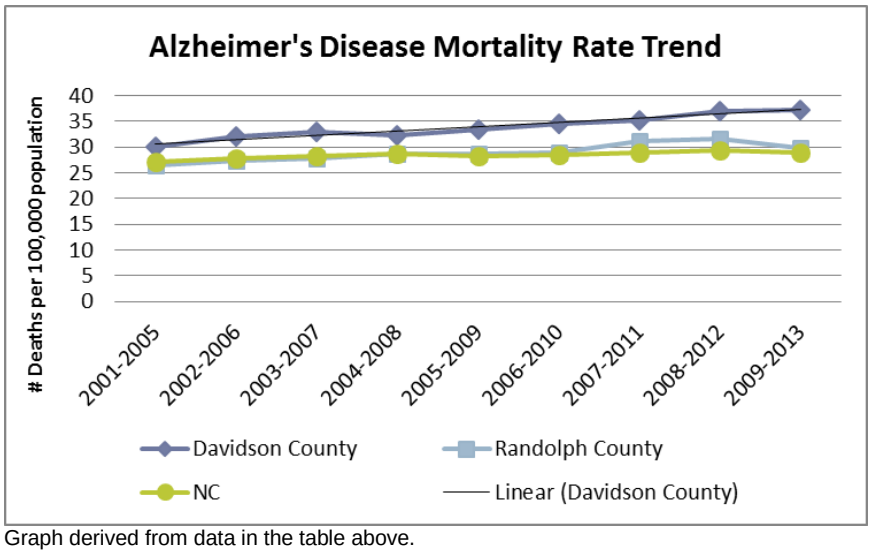
- The Alzheimer's disease mortality rate in Davidson County was the highest among the comparators throughout the period cited.
- The Alzheimer's disease mortality rate in Davidson County increased overall by 24% over the period cited.
- The Alzheimer's disease mortality rate in NC rose 7% over the same period.

Table 147. Overall Alzheimer's Disease Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	30.1	32.0	32.9	32.3	33.4	34.6	35.1	37.0	37.3
Randolph County	26.5	27.3	27.9	28.8	28.6	28.9	31.1	31.7	29.9
State of NC	27.1	27.7	28.3	28.7	28.3	28.5	29.0	29.3	28.9

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Figure 37. Overall Alzheimer's Disease Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Alzheimer's Disease Mortality

The following table presents Alzheimer's disease mortality data for the aggregate period 2009-2013, stratified by race/ethnicity.

- Due to below-threshold numbers of Alzheimer's disease deaths among some minority populations at the county level mortality rates were suppressed for those groups.
- In Davidson County the Alzheimer's disease mortality rate for African-American non-Hispanics was 40% higher than the comparable rate for white non-Hispanics.

Table 148. Race/Ethnicity-Specific Alzheimer's Disease Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	284	36.5	29	51.1	1	n/a	0	n/a	1	n/a	315	37.3
Randolph County	213	30.8	7	n/a	1	n/a	0	n/a	0	n/a	221	29.9
State of NC	11,856	29.8	1,932	26.3	120	38.9	35	9.2	57	9.9	14,000	28.9

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

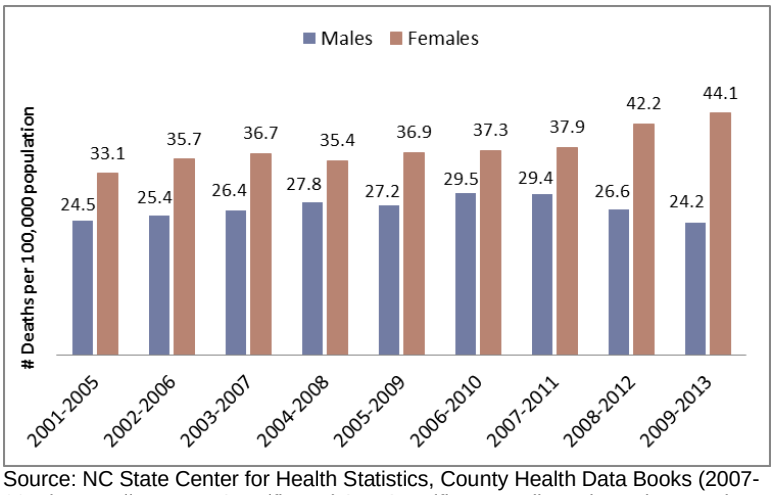
Gender Disparities in Alzheimer's Disease Mortality

The figure below displays gender-stratified Alzheimer's disease mortality rates in Davidson County for the aggregate periods 2001-2005 through 2009-2013.

- The Alzheimer's disease mortality rate among Davidson County females has been increasing steadily over time.

- The Alzheimer's disease mortality rate among Davidson County males has fallen during the three most recent aggregate periods, so the gender disparity appears to be increasing.

Figure 38. Sex-Specific Alzheimer's Disease Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

All Other Unintentional Injury

This category includes death without purposeful intent due to poisoning (including accidental drug overdoses), falls, burns, choking, animal bites, drowning, and occupational or recreational injuries; it expressly excludes unintentional injury due to motor vehicle crashes. (Death due to injury involving motor vehicles is a separate cause of death and will be covered subsequently.)

All other unintentional injury was the sixth leading cause of death in Davidson County and the fifth leading cause of death in Randolph County and NC in the 2009-2013 period (cited previously).

All Other Unintentional Injury Hospitalizations

The table below presents hospital discharge rate trend data for a category called *injuries and poisonings,* which also includes injuries resulting from motor vehicle crashes. According to this data, injuries and poisonings caused a significant proportion of hospitalizations among Davidson County residents over time, although at rates lower than the state average.

Table 149. Injuries and Poisonings Hospital Discharge Rate Trend (2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	7.8	7.4	8.0	7.3	7.6	8.0	7.3	7.5
Randolph County	7.6	8.5	7.9	7.8	7.5	7.6	7.1	7.0
State of NC	8.6	8.6	8.5	8.3	8.2	8.2	8.1	7.7

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS, in 2013 there were 1,231 injury and poisoning hospitalizations among Davidson County residents; this figure includes hospitalizations anywhere in NC (47).

The two hospitals in Davidson County provided data associated with ICD-9 codes for injury and poisoning, as summarized in the table below. Emergency department (ED) admissions and in-patient hospitalization (IP) discharges are presented separately. Note that this data is specific to Davidson County residents served at either of the medical centers in the county. The number column represents ED admissions and IP discharges; the percent column denotes the percent of all ED admissions or IP discharges, respectively, the previous figures represents.

- For the three years cited, 24.4% of all ED admissions were associated with diagnoses of injury or poisoning.
- In the same period, 4.9% of all IP discharges were associated with diagnoses of injury or poisoning.

Table 150. Davidson County Hospital Data: Injury and Poisoning (2012-2014)

Service	Number and Percent of Admissions/Discharges							
	2012		2013		2014		Total	
	#	%	#	%	#	%	#	%
ED	14876	24.8	14703	24.8	13025	23.5	42604	24.4
IP	346	4.8	347	5.1	333	4.9	1026	4.9

ICD-9 Codes included: 800-999xx

All Other Unintentional Injury Mortality Rate Trend

The table and its companion figure below display the mortality rate trend data for all other unintentional injuries.

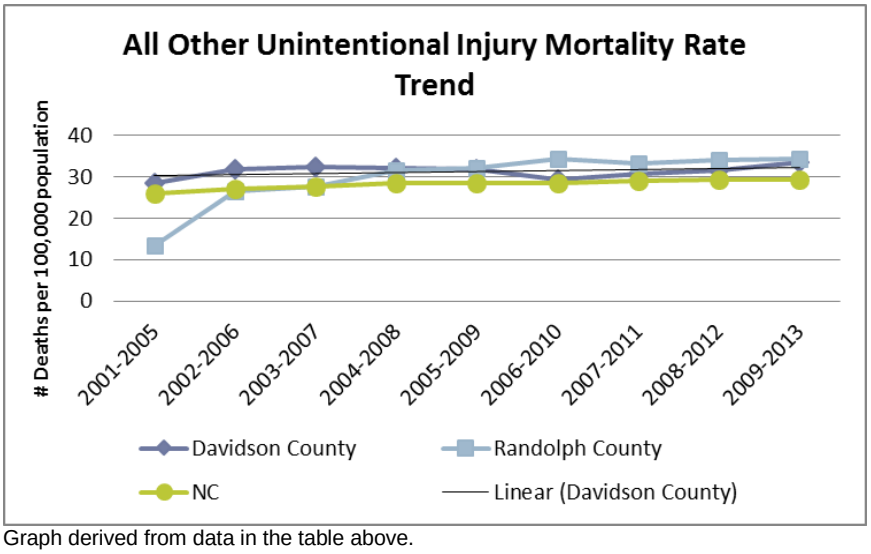
- The all other unintentional injury mortality rate in Davidson County fluctuated over the period cited, but was higher than the comparable NC rate throughout the period cited.
- The mortality rate in Davidson County increased overall by 18% over the period cited.

Table 151. Overall All Other Unintentional Injury Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	28.4	32.0	32.4	32.1	31.9	29.4	30.7	31.6	33.5
Randolph County	13.3	26.6	27.6	31.7	32.2	34.4	33.3	34.2	34.4
State of NC	26.0	27.0	27.8	28.4	28.6	28.6	29.2	29.4	29.3

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 39. Overall All Other Unintentional Injury Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in All Other Unintentional Injury Mortality

The next table presents mortality data for all other unintentional injuries for the aggregate period 2009-2013, stratified by race/ethnicity.

- Note that due to below-threshold numbers of other unintentional injury deaths among all minority populations at the county level, mortality rates were suppressed for those groups.
- At the state level the other unintentional injury mortality rate was highest among white non-Hispanics, followed by American Indian non-Hispanics and African-American non-Hispanics.

Table 152. Race/Ethnicity-Specific All Other Unintentional Injury Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	257	37.1	**13**	**n/a**	**0**	**n/a**	**0**	**n/a**	**5**	**n/a**	275	33.5
Randolph County	235	37.6	**10**	**n/a**	**0**	**n/a**	**1**	**n/a**	**4**	**n/a**	250	34.4
State of NC	11,970	33.9	1,891	19.7	190	36.1	74	9.8	278	11.6	14,403	29.3

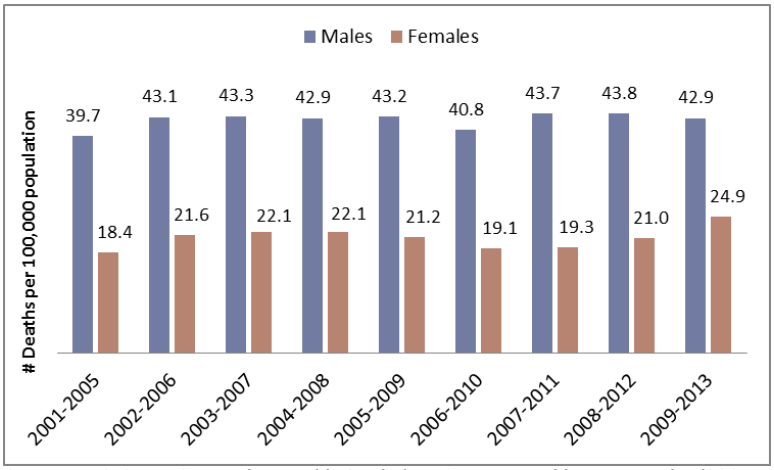
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in All Other Unintentional Injury Mortality

The following figure depicts gender-stratified mortality rates for all other unintentional injuries in Davidson County for the aggregate period 2001-2005 through 2009-2013.

- Mortality rates for all other unintentional injury for males in Davidson County historically have been roughly twice the comparable rates for females.

Figure 40. Sex-Specific All Other Unintentional Injury Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Diabetes Mellitus

Diabetes is a disease in which the body's blood glucose levels are too high due to problems with insulin production and/or utilization. Insulin is a hormone that helps glucose get to cells where it is used to produce energy. With Type 1 diabetes, the body does not make insulin. With Type 2 diabetes, the more common type, the body does not make or use insulin well. Without enough insulin, glucose stays in the blood. Over time, having too much glucose in the blood can damage the eyes, kidneys, and nerves. Diabetes can also lead to heart disease, stroke and even the need to remove a limb (53).

Diabetes was the seventh leading cause of death in Davidson County, Randolph County and NC in 2009-2013 (cited previously).

Diabetes Mellitus Hospitalizations

The table below presents hospital discharge rates for diabetes. The rates for Davidson County were lower than the comparable state rates in every year cited except 2006.

Table 153. Diabetes Hospital Discharge Rate Trend (2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	2.1	1.8	1.7	1.5	1.7	1.7	1.5	1.8
Randolph County	1.2	1.2	1.3	1.5	1.3	1.3	1.5	1.5
State of NC	1.8	1.9	1.8	1.8	1.9	2.0	1.9	1.9

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS, in 2013 there were 293 hospitalizations for diabetes among Davidson County residents; this figure includes hospitalizations anywhere in NC (47).

The two hospitals in Davidson County provided data associated with ICD-9 codes for diabetes, as summarized in the table below. Emergency department (ED) admissions and in-patient hospitalization (IP) discharges are presented separately. Note that this data is specific to Davidson County residents served at either of the medical centers in the county. The number column represents ED admissions and IP discharges; the percent column denotes the percent of all ED admissions or IP discharges, respectively, the previous figures represents.

- For the three years cited, 0.5% of all ED admissions were associated with diagnoses of diabetes.
- In the same period, 2.2% of all IP discharges were associated with diagnoses diabetes.

Table 154. Davidson County Hospital Data: Diabetes (2012-2014)

Service	Number and Percent of Admissions/Discharges							
	2012		2013		2014		Total	
	#	%	#	%	#	%	#	%
ED	318	0.5	336	0.6	276	0.5	930	0.5
IP	117	1.6	163	2.4	168	2.5	448	2.2

ICD-9 Codes included: 250xx

Diabetes Mellitus Mortality Rate Trend

The following table and its companion figure display diabetes mortality rate trend data.

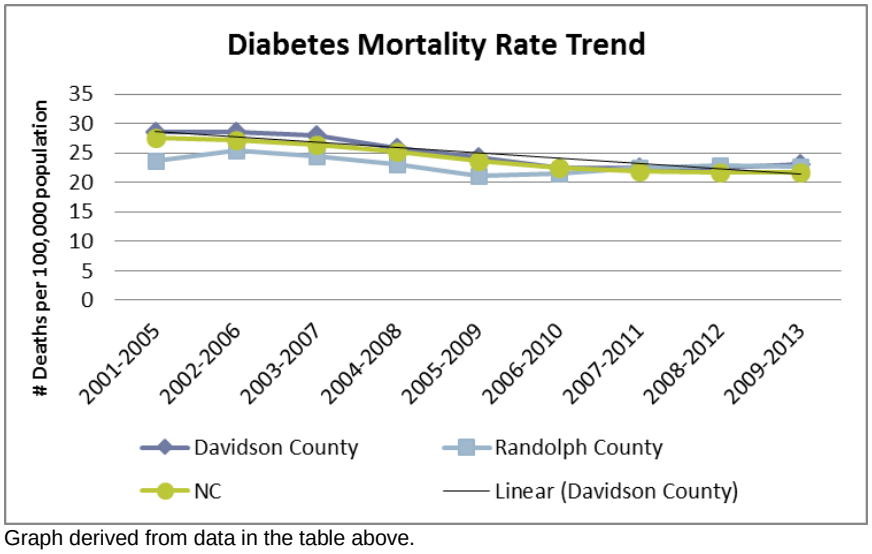
- The diabetes mortality rate in Davidson County was higher than the comparable state rate throughout the period cited except for 2006-2010 when the rates were equal.
- The diabetes mortality rate in Davidson County decreased overall by 20% over the period cited.

Table 155. Overall Diabetes Mellitus Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	28.6	28.5	28.0	25.8	24.2	22.5	22.4	22.5	23.0
Randolph County	23.6	25.5	24.5	23.1	21.1	21.5	22.4	22.8	22.7
State of NC	27.6	27.1	26.4	25.2	23.6	22.5	22.0	21.8	21.7

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 41. Overall Diabetes Mellitus Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Diabetes Mellitus Mortality

The next table presents diabetes mortality data for the aggregate period 2009-2013, stratified by race/ethnicity.

- Note that due to below-threshold numbers of diabetes deaths among some minority populations at the county level mortality rates were suppressed for those groups.
- In Davidson County the diabetes mortality rate for African American non-Hispanics was 2.4 *times* the comparable rate for white non-Hispanics.
- Statewide, the diabetes mortality rates for African American non-Hispanic persons and for American Indian non-Hispanic persons were 2.5 *times* the comparable rate among white non-Hispanic persons.

Table 156. Race/Ethnicity-Specific and Sex-Specific Diabetes Mellitus Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	184	21.1	34	50.6	**0**	**n/a**	**1**	**n/a**	**2**	**n/a**	221	23.0
Randolph County	162	22.3	**14**	**n/a**	**1**	**n/a**	**1**	**n/a**	**3**	**n/a**	181	22.7
State of NC	7,043	17.4	3,835	43.4	195	43.5	53	9.9	94	8.1	11,220	21.7

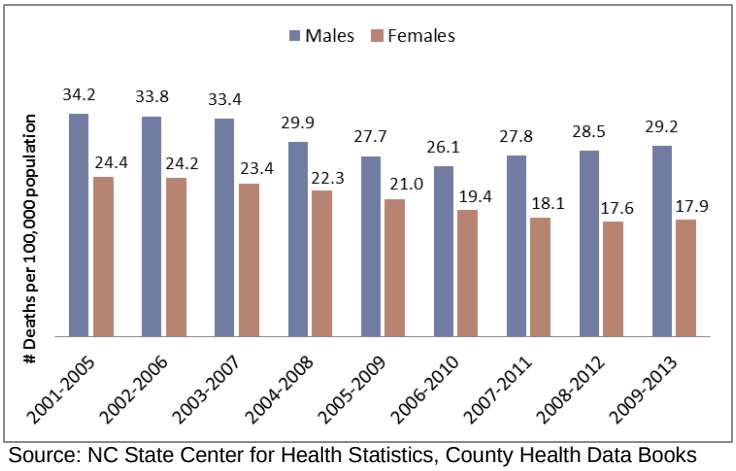
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in Diabetes Mellitus Mortality

The following figure depicts gender-stratified diabetes mortality rates in Davidson County for the aggregate periods 2001-2005 through 2009-2013.

- While the diabetes mortality rate among Davidson County males has been consistently higher than the comparable rate among females, the gap has grown recently as the rate for males increased while the rate for females decreased.

Figure 42. Sex-Specific Diabetes Mellitus Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Pneumonia and Influenza

Pneumonia and influenza are diseases of the lungs. Pneumonia is an inflammation of the lungs caused by either bacteria or viruses. Bacterial pneumonia is the most common and serious form of pneumonia and among individuals with suppressed immune systems it may follow influenza or the common cold. Influenza (the "flu") is a contagious infection of the throat, mouth and lungs caused by an airborne virus (54).

Pneumonia/influenza was the eighth leading cause of death in Davidson County, Randolph County and NC in the 2009-2013 aggregate period (cited previously).

Pneumonia and Influenza Hospitalizations

The table below presents the hospital discharge rate trend data for pneumonia/influenza. According to this data from NCSCHS, pneumonia and influenza have caused a significant proportion of illness-related hospitalizations among Davidson County residents over time, at rates higher than the state average.

Table 157. Pneumonia and Influenza Hospital Discharge Rate Trend (2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	4.4	4.0	4.1	4.3	4.1	4.2	4.3	3.5
Randolph County	3.5	3.9	4.1	5.0	4.9	4.6	4.4	3.6
State of NC	3.7	3.4	3.3	3.5	3.1	3.2	3.2	3.1

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS, in 2013 there were 566 hospital admissions for pneumonia/influenza among Davidson County residents; this figure includes hospitalizations anywhere in NC (47).

The two hospitals in Davidson County provided data associated with ICD-9 codes for pneumonia and influenza, as summarized in the table below. Emergency department (ED) admissions and in-patient hospitalization (IP) discharges are presented separately. Note that this data is specific to Davidson County residents served at either of the medical centers in the county. The number column represents ED admissions and IP discharges; the percent column denotes the percent of all ED admissions or IP discharges, respectively, the previous figures represents.

- For the three years cited, 1.7% of all ED admissions were associated with diagnoses of pneumonia (mostly) and influenza.
- In the same period, 4.8% of all IP discharges were associated with diagnoses diabetes.
- The 1,129 ED admissions and 406 IP discharges in 2012 were the highest totals over the three years cited.

Table 158. Davidson County Hospital Data: Pneumonia and Influenza (2012-2014)

Service	Number and Percent of Admissions/Discharges							
	2012		2013		2014		Total	
	#	%	#	%	#	%	#	%
ED	1129	1.9	866	1.5	971	1.8	2966	1.7
IP	406	5.6	294	4.3	287	4.3	987	4.8

ICD-9 Codes included: 480-488xx

Pneumonia and Influenza Mortality Rate Trend

The next table and its companion figure display pneumonia/influenza mortality rate trend data.

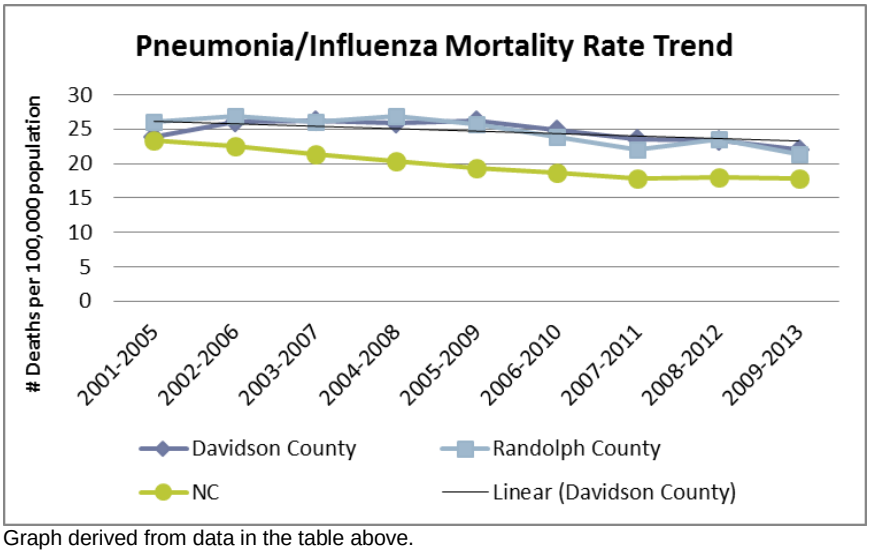
- The Davidson County pneumonia/influenza mortality rate was higher than the comparable state rate throughout the period cited.
- The pneumonia/influenza mortality rate in Davidson fell overall by 8% over the period cited.
- The comparable mortality rate statewide fell overall by 23% over the same period.

Table 159. Overall Pneumonia and Influenza Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	23.9	26.0	26.2	25.9	26.3	24.9	23.6	23.4	22.0
Randolph County	26.1	26.9	26.1	26.9	25.8	23.8	22.0	23.6	21.3
State of NC	23.3	22.5	21.4	20.3	19.4	18.6	17.9	18.0	17.9

Ssource - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 43. Overall Pneumonia and Influenza Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Pneumonia and Influenza Mortality

The table below presents pneumonia/influenza mortality data for the aggregate period 2009-2013, stratified by race/ethnicity.

- Note that due to below-threshold numbers of pneumonia/influenza deaths among minority populations at the county level, mortality rates were suppressed for those groups.
- Statewide the pneumonia/influenza mortality rate was highest among white non-Hispanics followed by African-American non-Hispanics and American Indian non-Hispanics.

Table 160. Race/Ethnicity-Specific Pneumonia and Influenza Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	183	22.4	**13**	**n/a**	**0**	**n/a**	**1**	**n/a**	**1**	**n/a**	198	22.0
Randolph County	149	21.1	**10**	**n/a**	**0**	**n/a**	**1**	**n/a**	**2**	**n/a**	162	21.3
State of NC	7,294	18.3	1,427	16.9	51	12.0	48	11.3	70	6.6	8,890	17.9

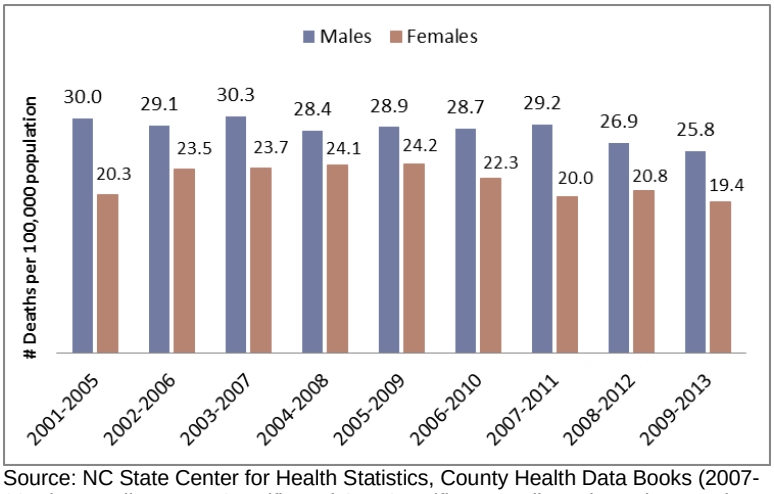
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in Pneumonia and Influenza Mortality

The following figure depicts gender-stratified pneumonia/influenza mortality rates in Davidson County for the aggregate periods 2001-2005 through 2009-2013.

- Males in Davidson County historically have had higher pneumonia/influenza mortality rates than females. The size of the disparity has varied over time, as rates have fluctuated.

Figure 44. Sex-Specific Pneumonia and Influenza Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Nephritis, Nephrotic Syndrome, and Nephrosis

Nephritis refers to inflammation of the kidney, which causes impaired kidney function. Nephritis can be due to a variety of causes, including kidney disease, autoimmune disease, and infection. Nephrotic syndrome refers to a group of symptoms that include protein in the urine, low blood protein levels, high cholesterol levels, high triglyceride levels, and swelling. Nephrosis refers to any degenerative disease of the kidney tubules, the tiny canals that make up much of the substance of the kidney. Nephrosis can be caused by kidney disease, or it may be a complication of another disorder, particularly diabetes (55,56).

This composite set of kidney disorders was the ninth leading cause of death in Davidson County, Randolph County and NC in 2009-2013 (cited previously).

Nephritis, Nephrotic Syndrome and Nephrosis Hospitalizations

The table below presents the hospital discharge rate trend data for the composite of kidney disorders. The Davidson County discharge rate varied without clear pattern, and was higher than the comparable state rate in 2007, 2009, 2010 and 2013.

Table 161. Nephritis, Nephrotic Syndrome, Nephrosis Hospital Discharge Rate Trend (2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	1.2	1.8	1.6	1.5	1.6	1.8	1.8	1.9
Randolph County	1.1	1.6	1.4	1.3	1.4	1.8	1.7	1.9
State of NC	1.3	1.7	1.6	1.4	1.5	1.8	1.8	1.8

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS, in 2013 there were 318 hospital admissions for nephritis, nephrotic syndrome and nephrosis among Davidson County residents; this figure includes hospitalizations anywhere in NC (47).

Nephritis, Nephrotic Syndrome and Nephrosis Mortality Rate Trend

The following table and its companion figure display kidney disease mortality rate trend data.

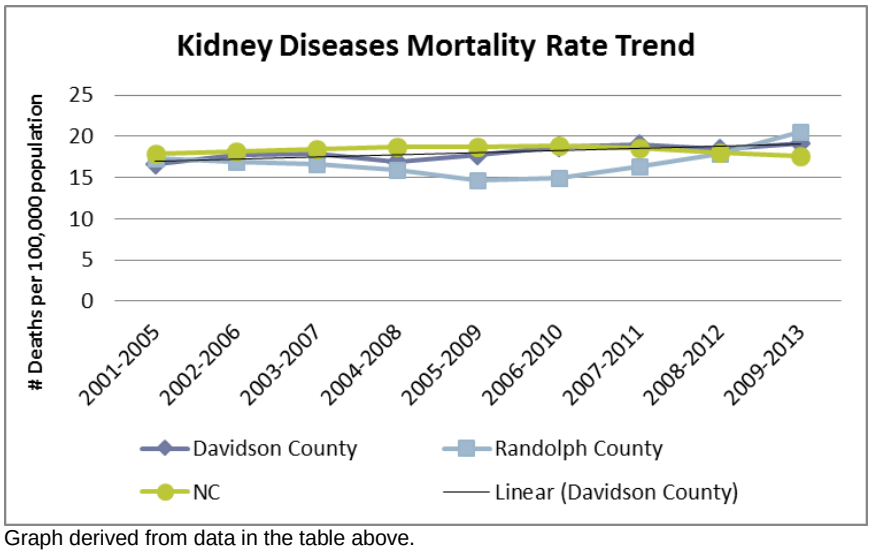
- The nephritis, nephrotic syndrome and nephrosis mortality rate in Davidson County was lower than the comparable state rate until 2007-2011, and was higher than the state rate in both periods after then.
- The kidney disease mortality rate for Davidson County increased overall by 14% over the period cited.

Table 162. Overall Nephritis, Nephrotic Syndrome and Nephrosis Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	16.7	17.8	17.9	16.9	17.7	18.8	19.0	18.4	19.1
Randolph County	17.4	16.9	16.6	15.9	14.7	14.9	16.3	17.9	20.6
State of NC	17.9	18.2	18.5	18.8	18.7	18.9	18.6	18.0	17.6

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 45. Overall Nephritis, Nephrotic Syndrome and Nephrosis Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Nephritis, Nephrotic Syndrome and Nephrosis Mortality

The table below presents kidney disease mortality data for the aggregate period 2009-2013, stratified by race/ethnicity.

- Note that due to below-threshold numbers of kidney disease deaths among some minority populations at the county level, mortality rates were suppressed for those groups.
- In Davidson County the kidney disease mortality rate for African-American non-Hispanics was twice the comparable rate for white non-Hispanics.
- Statewide, the kidney disease mortality rate was highest among African-American non-Hispanics, followed by American Indian non-Hispanics and white non-Hispanics.

Table 163. Race/Ethnicity-Specific Nephritis, Nephrotic Syndrome and Nephrosis Mortality
(Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	149	18.1	26	36.6	**0**	**n/a**	**0**	**n/a**	**1**	**n/a**	176	19.1
Randolph County	150	20.7	**10**	**n/a**	**0**	**n/a**	**0**	**n/a**	**1**	**n/a**	161	20.6
State of NC	5,724	14.3	2,919	34.1	87	23.4	42	7.9	78	8.6	8,850	17.6

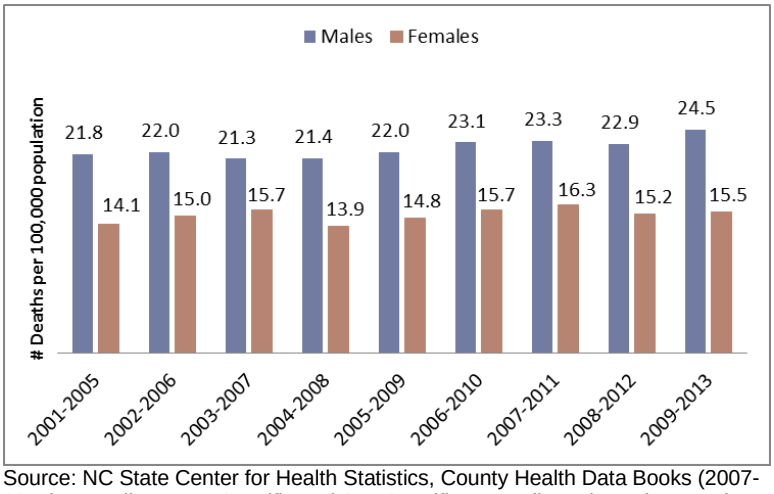
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in Nephritis, Nephrotic Syndrome and Nephrosis Mortality

The following figure depicts gender-stratified kidney disease mortality rates in Davidson County for the aggregate periods 2001-2005 through 2009-2013.

- The kidney disease mortality rate for males in Davidson County exceeded the comparable mortality rate for females in every period cited.

Figure 46. Sex-Specific Nephritis, Nephrotic Syndrome, Nephrosis Mortality Rate Trend, Davidson County
(Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Unintentional Motor Vehicle Injury

The NC State Center for Health Statistics distinguishes unintentional motor vehicle injuries from all other injuries when calculating mortality rates and ranking leading causes of death.

Mortality due to unintentional motor vehicle injury was the tenth leading cause of death in Davidson County, Randolph County, and NC for 2009-2013 (cited previously).

Unintentional Motor Vehicle Injury Hospitalizations

A table cited previously presented the hospital discharge rate trend data from NCSCHS for a category called *injuries and poisonings,* which included injuries resulting from motor vehicle crashes as well as other unintentional injuries. Also noted previously were the 1,231 hospitalizations of Davidson County residents at NC hospitals in 2013 for all injuries and poisonings, including motor vehicle injuries (47).

Unintentional Motor Vehicle Injury Mortality Rate Trend

The table and its companion figure below display unintentional motor vehicle injury mortality rate trends.

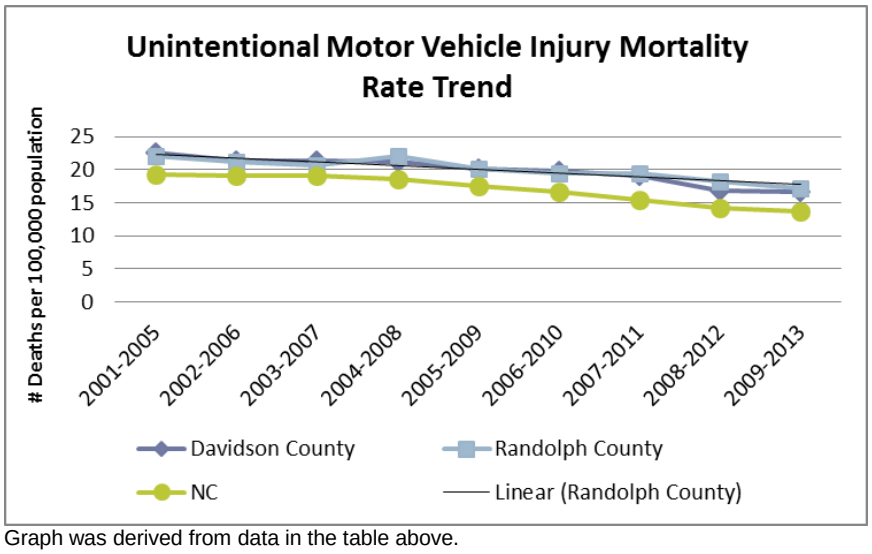
- The unintentional motor vehicle injury mortality rates in all three jurisdictions decreased over the period cited.
- The unintentional motor vehicle injury mortality rate in Davidson County was higher than the comparable NC rate throughout the period cited.
- The unintentional motor vehicle injury mortality rate in Davidson County decreased overall by 27% over the period cited.

Table 164. Unintentional Motor Vehicle Injury Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	22.6	21.3	21.4	21.2	20.2	19.8	19.1	16.9	16.6
Randolph County	22.0	21.2	20.7	22.0	20.1	19.5	19.5	18.2	17.2
State of NC	19.3	19.1	19.1	18.6	17.6	16.7	15.5	14.3	13.7

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 47. Unintentional Motor Vehicle Injury Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph was derived from data in the table above.

Racial Disparities in Unintentional Motor Vehicle Injury Mortality

The next table presents unintentional motor vehicle injury mortality data for the aggregate period 2009-2013, stratified by race/ethnicity.

- Note that due to below-threshold numbers of unintentional motor vehicle injury deaths among racially stratified populations at the county level, mortality rates were suppressed for those groups.
- Statewide the unintentional motor vehicle injury mortality rate was highest among American Indian non-Hispanics, followed closely by African-American non-Hispanics and white non-Hispanics.

Table 165. Race/Ethnicity-Specific Unintentional Motor Vehicle Injury Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	119	16.9	9	n/a	1	n/a	1	n/a	8	n/a	138	16.6
Randolph County	109	18.3	5	n/a	0	n/a	0	n/a	9	n/a	123	17.2
State of NC	4,555	13.9	1,477	14.1	149	25.3	64	5.5	442	10.3	6,687	13.7

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

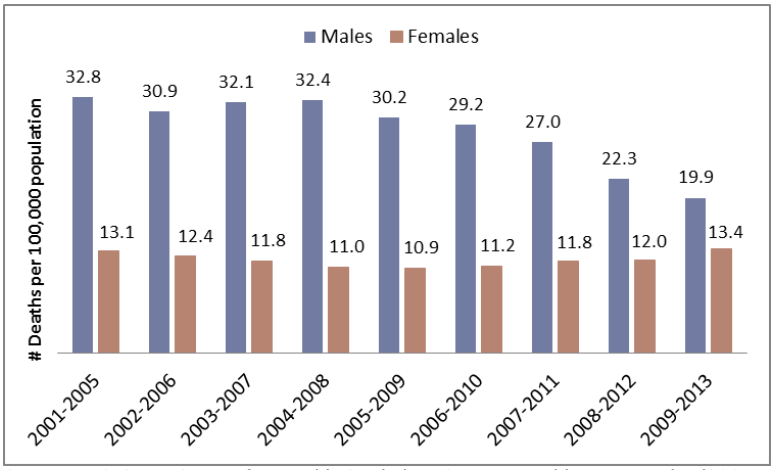
Gender Disparities in Unintentional Motor Vehicle Injury Mortality

The following figure depicts gender-stratified unintentional motor vehicle injury mortality rates in Davidson County for the aggregate periods 2001-2005 through 2009-2013.

- The unintentional motor vehicle injury mortality rate among males in Davidson County appeared to decrease steadily after 2004-2008.

- The unintentional motor vehicle injury mortality rate for males in Davidson County historically has been higher than the comparable rate for females by as much as a factor of nearly three. As the rate for males has decreased, the rate for females has increased, so the disparity has narrowed significantly.

Figure 48. Sex-Specific Unintentional Motor Vehicle Injury Mortality Rate Trend, Davidson County
(Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Age Disparities in Motor Vehicle Injury Mortality

The table below presents unintentional motor vehicle injury mortality data for the 2009-2013 aggregate period, stratified by age group. Note that this data is *not* age-adjusted.

- In Davidson County the 20-39 age group had the highest motor vehicle injury mortality rate (20.3) followed by the 40-64 age group (19.7).
- Statewide, the 20-39 age group has the highest motor vehicle injury mortality rate (18.5), followed by the 40-64 age group (14.5).

Table 166 Motor Vehicle Injury Mortality, Numbers and Rates, by Age
(Five-Year Aggregate Period, 2009-2013)

Location	Number of Deaths and Unadjusted Death Rates per 100,000 Population							
	All Ages		0-19		20-39		40-64	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	138	16.9	15	7.1	38	20.3	58	19.7
Randolph County	123	17.3	18	9.5	31	18.6	47	18.8
State of NC	n/a	n/a	833	6.5	2,390	18.5	2,332	14.5

Source: NC State Center for Health Statistics, 2015 County Health Data Book, Death Counts and Crude Death Rates per 100,000 Population for Leading Causes of Death, by Age Groups, NC 2009-2013; http://www.schs.state.nc.us/SCHS/data/databook/.

Alcohol-Related Traffic Crashes

The following table presents several years of data on the proportion of traffic crashes that were alcohol-related.

- The percentage of all crashes that were alcohol-related varied from place to place and from time period to time period without a clear pattern.
- Over the five-year period cited, an average of 5.9% of all traffic crashes in Davidson County were alcohol-related. Over the same period, an average of 5.1% of all traffic crashes statewide were alcohol related.

Table 167. Alcohol-Related Traffic Crashes Trend
(Single Years, 2009-2013)

Location	2009			2010			2011			2012			2013		
	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes
Davidson County	3,079	153	6.0	295	178	6.0	3,013	187	6.2	2,987	173	5.8	3,092	165	5.3
Randolph County	315	196	6.2	3,113	163	5.2	3,045	177	5.8	3,083	165	5.4	3,145	172	5.5
State of NC	209,695	11,384	5.4	213,573	10,696	5.0	208,509	10,708	5.1	213,641	11,274	5.3	220,309	10,802	4.9

Note: statistical information for North Carolina Alcohol Facts was obtained from the NC Administrative Office of the Courts (AOC) and the NC Division of Motor Vehicles (DMV) for the years 2009 through 2013 (single years).
Source: UNC Chapel Hill, Highway Safety Research Center. North Carolina Alcohol Facts (2009-2013); http://www.hsrc.unc.edu/ncaf/crashes.cfm.

The next table presents detail on the outcomes of alcohol-related crashes in 2013.

- In 2013 in Davidson County 5.3% of all crashes, 3.6% of all property damage only crashes, 14.3% of non-fatal crashes, and 14.3% of fatal crashes were alcohol-related. Note however, that the percentage for fatal crashes at the county level was based on a small number of deaths, and may be unstable.
- Statewide in 2013, 4.9% of all crashes, 3.5% of all property damage only crashes, 7.6% of all non-fatal crashes, and 28.0% of all fatal crashes were alcohol-related.

Table 168. Outcomes of Alcohol-Related Traffic Crashes
(2013)

Location	Total Crashes			Property Damage Only Crashes			Non-Fatal Crashes			Fatal Crashes		
	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes
Davidson County	3,092	165	5.3	2,000	72	3.6	1,064	89	14.3	28	**4**	**14.3**
Randolph County	3,145	172	5.5	2,161	87	4.0	963	81	8.4	21	**4**	**19.1**
State of NC	220,309	10,802	4.9	149,604	5,172	3.5	69,547	5,306	7.6	1,158	324	28.0
Source	1	1	1	1	1	2	1	1	1	1	1	1

Note: Percentages appearing in **bold** type are based on fewer than 10 alcohol-related crashes per year. Such figures are likely unstable and should be interpreted with caution.
[1] - UNC Chapel Hill, Highway Safety Research Center. North Carolina Alcohol Facts (2013); http://www.hsrc.unc.edu/ncaf/crashes.cfm.
[2] - Calculated (% alcohol related crashes is calculated by dividing # alcohol-related crashes by # reportable crashes)

Septicemia

Septicemia is a rapidly progressing infection resulting from the presence of bacteria in the blood. The disease often arises from other infections throughout the body, such as meningitis, burns, and wound infections. Septicemia can lead to septic shock in which case low blood pressure and low blood flow cause organ failure (57). While septicemia can be community-acquired, some cases are acquired by patients hospitalized initially for other conditions; these are referred to as nosocomial infections. Sepsis is often a preferred term for septicemia, but NCSCHS continues to use the older term.

Septicemia was the eleventh leading cause of death in Davidson County and NC, and the twelfth leading cause of death in Randolph County in the 2009-2013 aggregate period (cited previously).

Septicemia Hospitalizations

The table below presents the hospital discharge rate data for septicemia. The discharge rate in Davidson County rose dramatically after 2010 and was higher than the comparable state rate in 2011, 2012 and 2013.

Table 169. Septicemia Hospital Discharge Rate Trend (2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	1.2	1.5	1.8	2.2	2.3	4.1	4.2	5.3
Randolph County	3.0	3.0	3.3	4.5	4.1	5.2	5.1	5.4
State of NC	1.8	2.0	2.3	2.5	2.9	3.4	3.7	4.2

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS, in 2013 there were 867 hospital discharges associated with a diagnosis of septicemia among Davidson County residents; this figure includes hospitalizations anywhere in NC (47).

Septicemia Mortality Rate Trend

The following table and companion figure display septicemia mortality rate trend data.

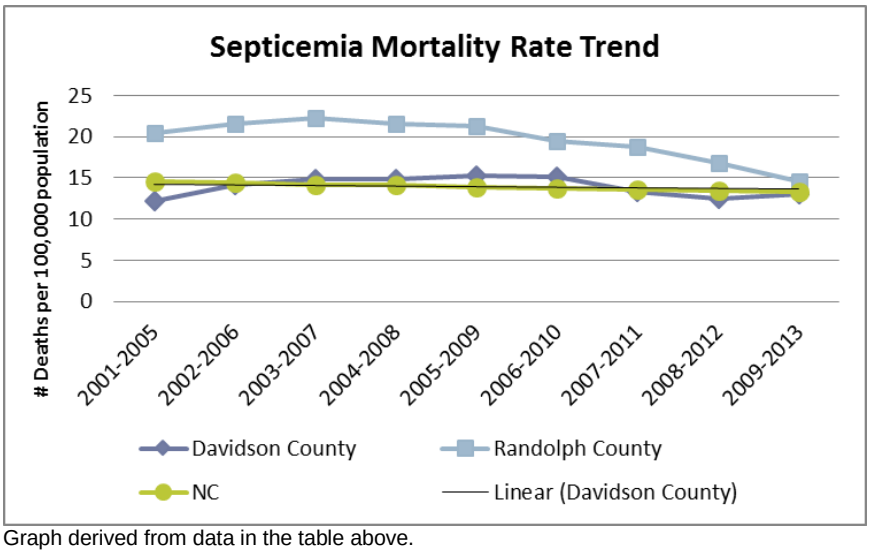
- The septicemia mortality rate in Davidson County exceeded the comparable NC rate in 2003-2007 through 2006-2010.
- The septicemia mortality rate in Davidson County was higher in 2009-2013 than in 2001-2005, but the overall rate trend over the period cited was *negative* (decreasing).

Table 170. Overall Septicemia Mortality Rate Trend
(Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	12.2	14.1	14.8	14.9	15.3	15.1	13.3	12.5	13.0
Randolph County	20.5	21.5	22.3	21.6	21.3	19.5	18.8	16.8	14.5
State of NC	14.5	14.4	14.2	14.2	13.8	13.7	13.6	13.4	13.3

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 49. Overall Septicemia Mortality Rate Trend
(Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Septicemia Mortality

The next table presents septicemia mortality data for the aggregate period 2009-2013, stratified by race/ethnicity.

- Note that due to below-threshold numbers of septicemia deaths among minority populations in the counties, mortality rates were suppressed for those groups.
- Statewide, the septicemia mortality rate was highest among African American non-Hispanic persons, followed by American Indian non-Hispanic persons.

Table 171. Race/Ethnicity-Specific Septicemia Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	108	12.8	**13**	**n/a**	**0**	**n/a**	**0**	**n/a**	**0**	**n/a**	121	13.0
Randolph County	108	15.1	**4**	**n/a**	**0**	**n/a**	**0**	**n/a**	**1**	**n/a**	113	14.5
State of NC	4,912	12.3	1,660	19.2	57	14.0	26	5.0	76	5.7	6,731	13.3

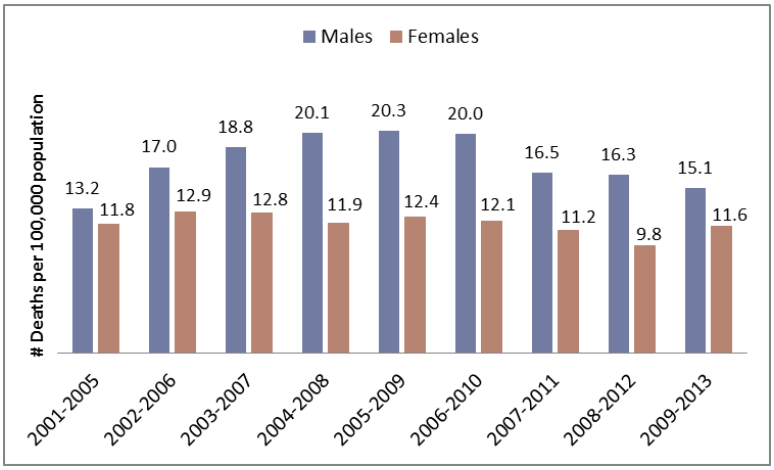
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in Septicemia Mortality

The figure below depicts gender-stratified septicemia mortality rates in Davidson County for the aggregate periods 2001-2005 through 2009-2013.

- According to the graph, the septicemia mortality rate among Davidson County males was consistently higher than the comparable rate among county females.
- The septicemia mortality rate for Davidson County females has remained relatively static, while the comparable rate for males rose, crested, and fell over the period cited.

Figure 50. Sex-Specific Septicemia Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Suicide

Suicide was the twelfth leading cause of death in Davidson County and NC and the eleventh leading cause of death in Randolph County in the period 2009-2013 (cited previously).

Suicide Hospitalizations

At the present time the NCSCHS does not track hospitalizations related to suicide or attempted suicide.

Suicide Mortality Rate Trend

The table and its companion figure below display suicide mortality rate trend data.

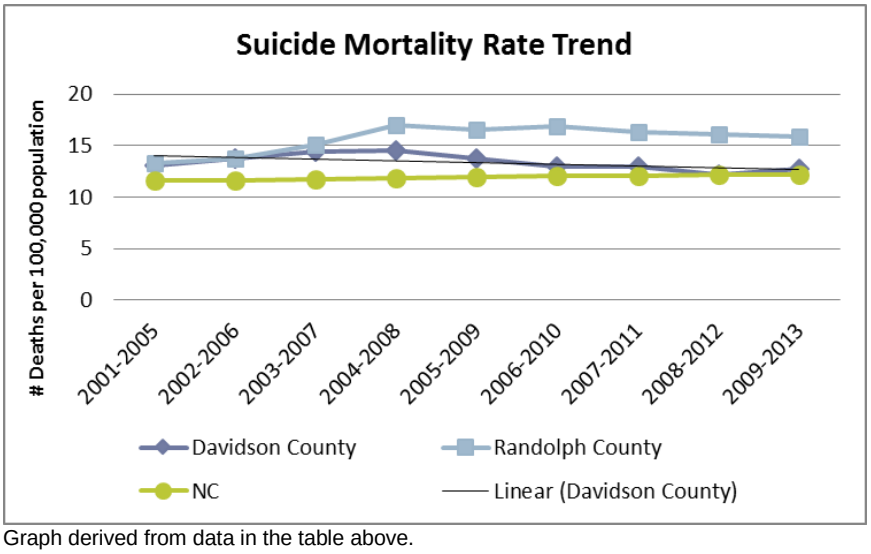
- The suicide mortality rate in Davidson County exceeded the comparable NC rate throughout the period cited except for 2008-2012.
- The suicide mortality rate in Davidson County fell overall by 3% over the period cited.

Table 172. Overall Suicide Mortality Rate Trend
(Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	13.1	13.7	14.4	14.5	13.8	13.0	13.0	12.2	12.7
Randolph County	13.3	13.8	15.1	17.0	16.6	16.9	16.3	16.1	15.9
State of NC	11.6	11.6	11.7	11.9	12.0	12.1	12.1	12.2	12.2

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 51. Overall Suicide Mortality Rate Trend
(Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Suicide Mortality

The following table presents suicide mortality data for the aggregate period 2009-2013, stratified by race/ethnicity.

- Note that due to below-threshold numbers of suicide deaths among most stratified populations at the county level, mortality rates were suppressed for those groups.
- Statewide, the suicide mortality rate was highest among white non-Hispanics, followed byAmerican Indian non-Hispanics.

Table 173. Race/Ethnicity-Specific Suicide Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	101	13.9	5	n/a	0	n/a	0	n/a	3	n/a	109	12.7
Randolph County	112	18.2	2	n/a	0	n/a	0	n/a	3	n/a	117	15.9
State of NC	5,315	15.7	497	4.8	63	11.0	65	5.1	130	3.6	6,070	12.2

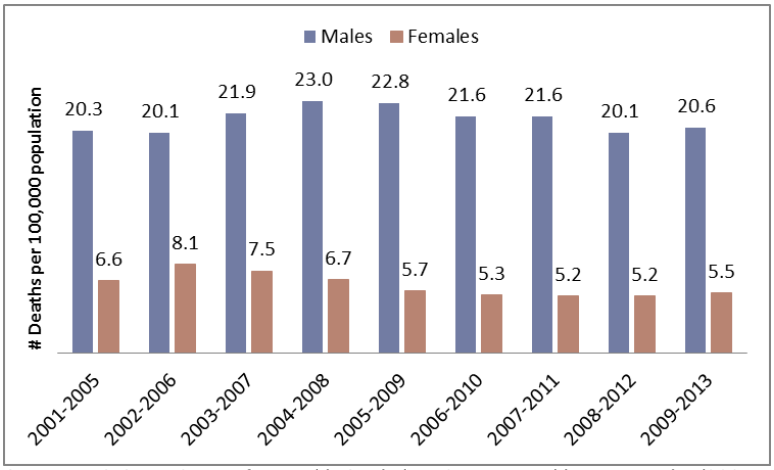
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in Suicide Mortality

The next figure depicts gender-stratified suicide mortality rates in Davidson County for the aggregate periods 2001-2005 through 2009-2013.

- The suicide mortality rate for males in Davidson County historically has been up to four times the comparable rate for females.

Figure 52. Sex-Specific Suicide Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Chronic Liver Disease and Cirrhosis

Chronic liver disease describes an ongoing disturbance of liver function that causes illness. Liver disease, also referred to as hepatic disease, is a broad term that covers all the potential problems that cause the liver to fail to perform its designated functions. Usually, more than 75% or three quarters of liver tissue needs to be affected before decrease in function occurs. Cirrhosis is a term that describes permanent scarring of the liver. In cirrhosis, the normal liver cells are replaced by scar tissue that cannot perform any liver function (58).

Chronic liver disease and cirrhosis was the thirteenth leading cause of death in Davidson County, Randolph County and NC in 2009-2013 (cited previously).

Chronic Liver Disease and Cirrhosis Hospitalizations

The following table presents hospital discharge rate trend data for chronic liver disease and cirrhosis. The rate in Davidson County was static at 0.2, similar to the NC rate.

Table 174. Chronic Liver Disease and Cirrhosis Hospital Discharge Rate Trend (2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.2
Randolph County	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1
State of NC	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS, in 2013 there were 38 hospital admissions for chronic liver disease and cirrhosis among Davidson County residents; this figure includes hospitalizations anywhere in NC (47).

Chronic Liver Disease and Cirrhosis Mortality Rate Trend

The following table and its companion figure display chronic liver disease and cirrhosis mortality rate trend data.

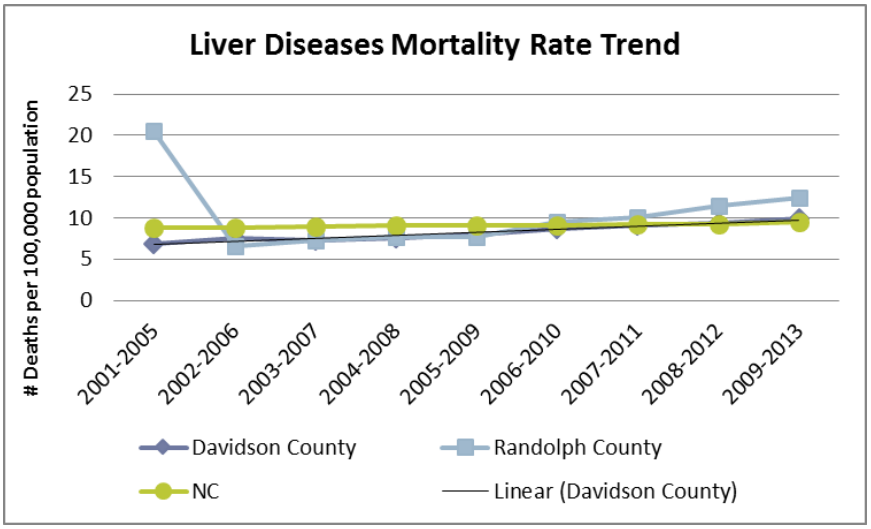
- The liver disease mortality rate in Davidson County was lower than the comparable NC rate throughout the period cited except for 2008-2012 and 2009-2013.
- The chronic liver disease and cirrhosis mortality rate in Davidson County increased overall by 43% over the period cited.

Table 175. Overall Chronic Liver Disease and Cirrhosis Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	6.9	7.5	7.3	7.6	8.0	8.7	9.1	9.4	9.9
Randolph County	20.5	6.6	7.3	7.7	7.7	9.5	10.1	11.4	12.4
State of NC	8.8	8.8	8.9	9.1	9.1	9.1	9.3	9.3	9.5

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 53. Overall Chronic Liver Disease and Cirrhosis Mortality Rate Trend (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Chronic Liver Disease and Cirrhosis Mortality

The next table presents chronic liver disease and cirrhosis mortality data for the aggregate period 2009-2013, stratified by race/ethnicity.

- Note that due to below-threshold numbers of chronic liver disease and cirrhosis deaths among most stratified populations at the county level, mortality rates were suppressed for those groups.
- Statewide the liver disease mortality rate was highest among American Indian non-Hispanics, followed by white non-Hispanics.

Table 176. Race/Ethnicity-Specific Chronic Liver Disease and Cirrhosis Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	86	9.9	9	n/a	0	n/a	0	n/a	2	n/a	97	9.9
Randolph County	98	13.0	6	n/a	0	n/a	0	n/a	1	n/a	105	12.4
State of NC	4,207	10.5	759	7.1	65	11.4	23	3.0	74	4.0	5,128	9.5

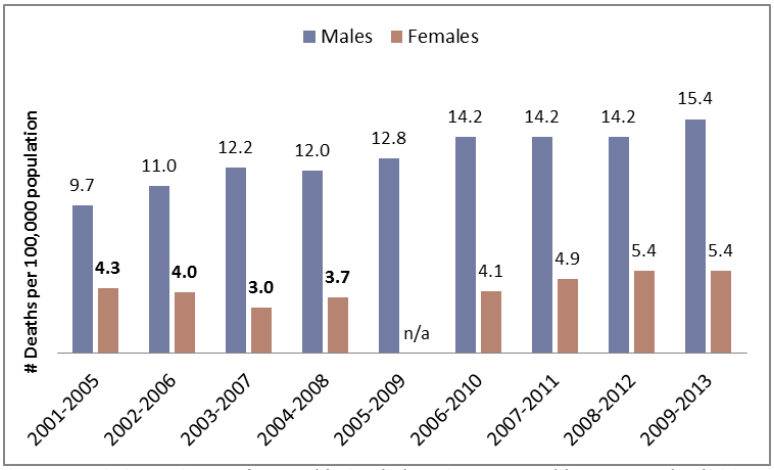
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender and Racial Disparities in Chronic Liver Disease and Cirrhosis Mortality

The figure below depicts gender-stratified chronic liver disease and cirrhosis mortality rates in Davidson County for the aggregate periods 2001-2005 through 2009-2013.

- The liver disease mortality rate for males in Davidson County historically has been several times the rate for females.
- The liver disease mortality rate for males in Davidson County increased steadily over the period cited.

Figure 54. Sex-Specific Chronic Liver Disease and Cirrhosis Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Homicide

Homicide was the fourteenth leading cause of death in Davidson County, Randolph County and NC in the 2009-2013 aggregate period (cited previously).

Homicide Hospitalizations

At the present time NCSCHS does not track hospitalizations related to homicide or attempted homicide.

Homicide Mortality Rate Trend

The table and its companion figure below display homicide mortality rate trend data.

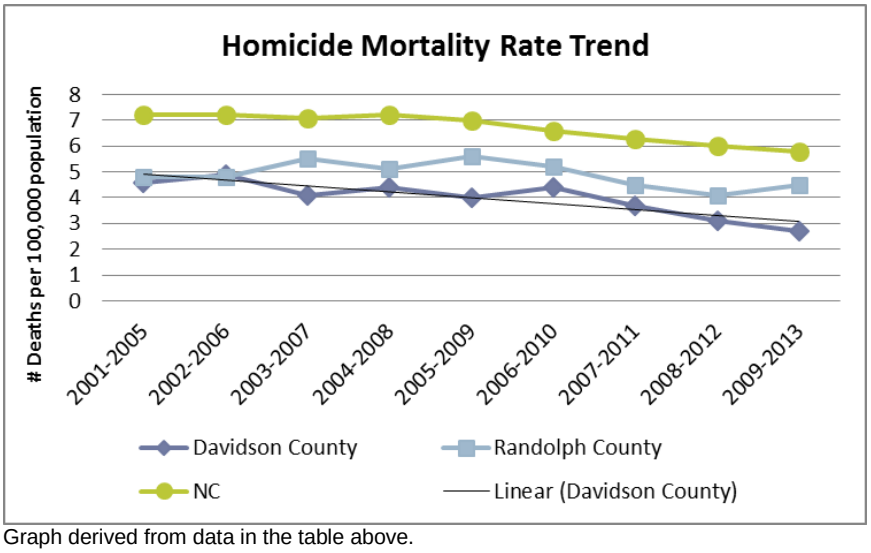
- The homicide mortality rate in Davidson County was lower than the comparable NC rate throughout the period cited.
- The homicide mortality rate in Davidson County decreased overall by 41% over the period cited.

Table 177. Overall Homicide Mortality Rate Trend
(Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	4.6	4.9	4.1	4.4	4.0	4.4	3.7	3.1	2.7
Randolph County	**4.8**	4.8	5.5	5.1	5.6	5.2	4.5	4.1	4.5
State of NC	7.2	7.2	7.1	7.2	7.0	6.6	6.3	6.0	5.8

Source - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/

Figure 55. Overall Homicide Mortality Rate Trend
(Five-Year Aggregate Periods, 2001-2005 through 2009-2013)



Graph derived from data in the table above.

Racial Disparities in Homicide Mortality

The table below presents homicide mortality data for the period 2009-2013, stratified by race/ethnicity.

- Note that due to below-threshold numbers of homicide deaths among all stratified populations at the county level, mortality rates were suppressed for those groups.
- Statewide, the homicide rate was highest among American Indian non-Hispanics, followed by African-American non-Hispanics and Hispanics.

Table 178. Race/Ethnicity-Specific Homicide Mortality (Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	**17**	**n/a**	**3**	**n/a**	**0**	**n/a**	**0**	**n/a**	**1**	**n/a**	21	2.7
Randolph County	22	4.1	**2**	**n/a**	**0**	**n/a**	**0**	**n/a**	**5**	**n/a**	29	4.5
State of NC	1,026	3.2	1,390	12.9	87	14.8	38	3.3	201	4.8	2,742	5.8

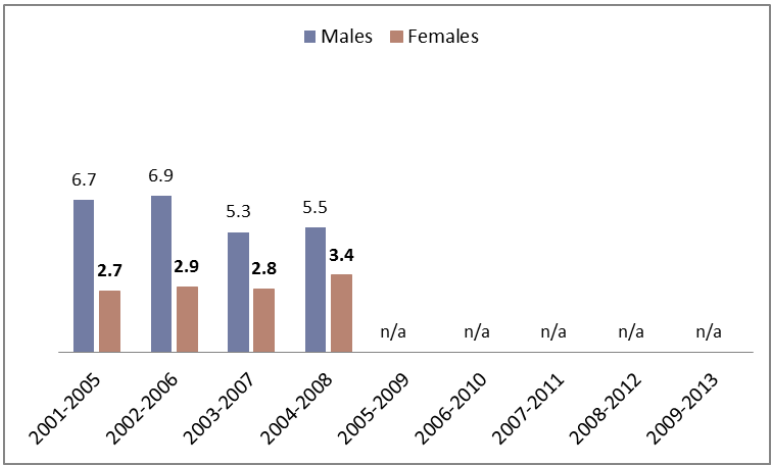
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in Homicide Mortality

The following figure depicts gender-stratified homicide mortality rates in Davidson County for the aggregate periods 2001-2005 through 2004-2008. (Gender-stratified mortality rates for later periods were suppressed.)

- Although most of the homicide mortality rates for both sexes were either unstable or suppressed due to below-threshold numbers of events, the rates for males were significantly higher than the comparable rates for females. This disproportional gender-based pattern of homicide mortality is common throughout NC.

Figure 56. Sex-Specific Homicide Mortality Rate Trend, Davidson County (Five-Year Aggregate Periods, 2001-2005 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Acquired Immune Deficiency Syndrome (AIDS)

The human immune deficiency virus (HIV) is the virus that causes AIDS. HIV attacks the immune system by destroying CD4 positive (CD4+) T cells, a type of white blood cell that is vital to fighting off infection. The destruction of these cells leaves people infected with HIV vulnerable to other infections, diseases and other complications. The acquired immune deficiency syndrome (AIDS) is the final stage of HIV infection. A person infected with HIV is diagnosed with AIDS when he or she has one or more opportunistic infections, such as pneumonia or tuberculosis, and has a dangerously low number of CD4+ T cells (less than 200 cells per cubic millimeter of blood) (59).

AIDS was the fifteenth leading cause of death in Davidson County, Randolph County and NC in the 2009-2013 period (cited previously).

AIDS Hospitalizations

The table below presents hospital discharge rate trend data for AIDS. All the rates for Davidson and Randolph Counties were unstable. Statewide, the AIDS hospital discharge was 0.2 for many years, but decreased to 0.1 in 2011 through 2013.

Table 179. AIDS Hospital Discharge Rate Trend (2006-2013)

Location	Rate (Discharges per 1,000 Population)							
	2006	2007	2008	2009	2010	2011	2012	2013
Davidson County	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**
Randolph County	**0.1**	**0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**
State of NC	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2008-2015), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; http://www.schs.state.nc.us/SCHS/data/databook/.

According to NCSCHS, in 2013 there were 12 hospitalizations for HIV/AIDS among Davidson County residents (47).

AIDS Mortality Rate Trend

The following table displays AIDS mortality rate trend data.

- Most of the Davidson County and all of the Randolph County AIDS mortality rates for the entire period cited were unstable and have not been graphed. All county rates, whether stable or unstable, were lower than the comparable state rate.
- The AIDS mortality rate for NC as a whole decreased overall by 44% over the period cited.

Table 180. Overall AIDS Mortality Rate Trend
(Five-Year Aggregate Periods, 2001-2005 through 2009-2013)

Location	Rate (Deaths per 100,000 Population)								
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013
Davidson County	**2.4**	**2.2**	**2.1**	2.7	2.5	**2.1**	**2.1**	2.5	**1.7**
Randolph County	**1.2**	**1.5**	**1.2**	**1.3**	**1.4**	**1.4**	**1.1**	**1.1**	**1.2**
State of NC	5.2	5.1	4.7	4.4	4.2	3.9	3.5	3.1	2.9
Source:	a	a	a	a	b	b	b	b	b

a - NC State Center for Health Statistics, County Health Data Books (2007-2015), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/
b - NC State Center for Health Statistics, Statistics and Reports, Vital Statistics, NC Vital Statistics Volume II: Leading Causes of Death, 2009 through 2013; http://www.schs.state.nc.us/data/vital.cfm#vitalvol2
Note: The use of bold type or the use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Racial Disparities in AIDS Mortality

The following table presents AIDS mortality data for the aggregate period 2009-2013, stratified by race/ethnicity.

- Note that due to below-threshold numbers of AIDS deaths among all stratified populations at the county level, mortality rates were suppressed for those groups.
- Statewide, the AIDS mortality rate was highest among African-American non-Hispanics, followed by Hispanics.

Table 181. Race/Ethnicity-Specific AIDS Mortality
(Single Five-Year Aggregate Period, 2009-2013)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Davidson County	**5**	**n/a**	**10**	**n/a**	**0**	**n/a**	**0**	**n/a**	**0**	**n/a**	**15**	**1.7**
Randolph County	**6**	**n/a**	**2**	**n/a**	**0**	**n/a**	**0**	**n/a**	**1**	**n/a**	**9**	**1.2**
State of NC	313	0.9	1,097	10.4	**11**	**n/a**	**5**	**n/a**	45	1.8	1,471	2.9

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2015), Mortality, 2009-2013 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; http://www.schs.state.nc.us/SCHS/data/databook/.

Gender Disparities in AIDS Mortality

All the gender-stratified AIDS mortality rates in Davidson County and Randolph County were either unstable or suppressed, so no graph is presented here. Statewide, males have an AIDS mortality rate two- to three- times the rate for females (60)

MORBIDITY

Morbidity refers generally to the current presence of injury, sickness or disease (and sometimes the symptoms and/or disability resulting from those conditions) in the living population. In this report, communicable diseases (including sexually-transmitted infections), asthma, diabetes, obesity, oral health, and mental health conditions are the topics covered under morbidity.

The parameter most frequently used to describe the current extent of any condition of morbidity in a population is *prevalence*: the number of existing cases of a disease or health condition in a population at a defined point in time or during a period. Prevalence usually is expressed as a proportion, not a rate, and often represents an estimate rather than a direct count.

Communicable Disease

A communicable disease is a disease transmitted through direct contact with an infected individual or indirectly through a vector.

Sexually Transmitted Infections

The topic of communicable diseases includes sexually transmitted infections (STIs). The STIs of greatest regional interest are chlamydia and gonorrhea. HIV/AIDS is sometimes grouped with STIs, since sexual contact is one mode of HIV transmission. While AIDS, as the final stage of HIV infection, was discussed previously among the leading causes of death, HIV is discussed here as a communicable disease.

Chlamydia

Chlamydia is the most frequently reported bacterial STI in the US, with an estimated 2.8 million new cases reported in the US each year. Chlamydia cases frequently go undiagnosed and can cause serious problems in men and women, such as penile discharge and infertility respectively, as well as infections in newborn babies of infected mothers (61).

The following table presents incidence data (i.e., new cases diagnosed) on chlamydia infections.

- There is considerable variability in the annual incidence rates for chlamydia at the county level, which is not uncommon for an infectious disease (see also disclaimer, below).
- The chlamydia incidence rate in Davidson County was well below the comparable NC rate but higher than the rate for Randolph County in every year cited.
- The NC Communicable Disease Branch provides the following disclaimer to these chlamydia incidence data:

  Note: chlamydia case reports represent persons who have a laboratory-confirmed Chlamydial infection. It is important to note that Chlamydial infection is often asymptomatic in both males and females and most cases are detected through screening. Changes in the number of reported cases may be due to changes in screening practices. The disease can cause serious complications in females and a number of screening programs are in place to detect infection in young women. There are no comparable screening programs for young men. For this reason, Chlamydia

case reports are always highly biased with respect to gender. The North Carolina STD Surveillance data system has undergone extensive changes since 2008 when North Carolina implemented North Carolina Electronic Disease Surveillance System (NC EDSS). During this transition, Chlamydia morbidity counts for some counties may have been affected. Report totals for 2011 should be considered with this in mind. Reports are summarized by the date received in the Communicable Disease Surveillance Unit office rather than by date of diagnosis.

Table 182. Chlamydia Infection Incidence Trend (2009-2013)

Location	Incidence, All Ages, Number and Rate (New cases per 100,000 population)									
	2009		2010		2011		2012		2013	
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Davidson County	449	283.1	442	271.4	519	318.3	488	298.9	544	333.2
Randolph County	308	216.7	360	253.7	405	285.1	399	280.1	365	256.2
State of NC	43,734	466.2	42,167	442.2	53,854	564.8	50,606	524.1	48,417	496.5

Source: NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch. Facts and Figures, Annual Reports. North Carolina 2013 HIV/STD Surveillance Report, Table 7; http://epi.publichealth.nc.gov/cd/stds/figures/std12rpt.pdf.

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Gonorrhea

Gonorrhea is the second most commonly reported bacterial STI in the US. The highest rates of gonorrhea have been found in African Americans, people 20 to 24 years of age, and women, respectively. In women, gonorrhea can spread into the uterus and fallopian tubes, resulting in pelvic inflammatory disease (PID). PID affects more than 1 million women in the US every year and can cause tubal pregnancy and infertility in as many as 10 percent of infected women. In addition, some health researchers think gonorrhea adds to the risk of getting HIV infection (62).

The next table presents incidence data (i.e., new cases diagnosed) for gonorrhea infections.

- County-level rates were quite variable, due likely to the small and varying numbers of cases each year.
- The Davidson County gonorrhea incidence rate was much lower than the comparable rate for NC but higher than the rate for Randolph County in every year cited except 2011.

Table 183. Gonorrhea Infection Incidence Trend (2009-2013)

Location	Incidence, All Ages, Number and Rate (New cases per 100,000 population)									
	2009		2010		2011		2012		2013	
	# Cases	Rate	# Cases	Rate	# Cases	Rate	# Cases	Rate	# Cases	Rate
Davidson County	75	47.3	124	76.2	121	74.2	101	61.9	138	84.5
Randolph County	50	35.2	87	61.3	107	75.3	47	33.0	55	38.6
State of NC	14,811	157.9	14,153	148.4	17,158	177.7	14322	148.3	13665	140.1

Note: Rates appearing in bold type are based on fewer than 10 cases per year. Such rates are unstable and should be interpreted with caution.
Source: NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch. Facts and Figures, Annual Reports. North Carolina 2013 HIV/STD Surveillance Report, Table 8; http://epi.publichealth.nc.gov/cd/stds/figures/std13rpt.pdf.

Human Immune Deficiency Virus (HIV)

The following table presents HIV incidence figures for the period 2009 through 2013.

- HIV incidence rates in Davidson County were based on small numbers of events. Nevertheless, they were lower than the comparable NC rates in every year cited. (Most of the HIV incidence rates for Randolph County were unstable.)

Table 184. HIV Infection Incidence Trend (2009-2013)

Location	HIV Cases by County of First Diagnosis									
	2009		2010		2011		2012		2013	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Davidson County	12	7.6	10	6.1	11	6.7	10	6.1	14	8.6
Randolph County	10	7.0	**6**	**4.2**	**8**	**5.6**	**7**	**4.9**	**5**	**3.5**
State of NC	1,643	17.5	1,461	15.3	1,487	15.4	1,409	14.6	1,525	15.6

Source: NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch. Facts and Figures, Annual Reports. North Carolina 2013 HIV/STD Surveillance Report, Table 3; http://epi.publichealth.nc.gov/cd/stds/figures/std13rpt.pdf.
Note: Rates appearing in **bold** type are based on fewer than 10 cases per year. Such rates are unstable and should be interpreted with caution.

The next table presents data on the prevalence of HIV infection (HIV and AIDS) in the comparator jurisdictions.

- As of December 31, 2013 there were 236 persons with HIV/AIDS living in Davidson County.

Table 185. HIV Prevalence: HIV and AIDS Cases Living as of December 31, 2013 (By County of Residence)

Location	Number of Living Cases
Davidson County	236
Randolph County	156
State of NC	28,101

Source: NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch. Facts and Figures, Annual Reports. North Carolina 2013 HIV/STD Surveillance Report, Table 1; http://epi.publichealth.nc.gov/cd/stds/figures/std13rpt.pdf.

Local Communicable Disease Data

The Davidson County Health Department, Communicable Disease Section is responsible by law for tracking cases of all communicable diseases. The table below presents a summary of the communicable disease cases identified in Davidson County from 2011 through 2014 (63).

- The Davidson County Health Department reported 3,333 cases of sexually-transmitted infections in the county over the period cited, 61% of which were chlamydia infections. Twenty-six percent of all chlamydia infections reported over the period occurred in teenagers.

- Salmonella and campylobacter were the most commonly reported food-borne infections.
- Pertussis was the most commonly-reported non-food borne disease, due mostly to an outbreak of 39 cases in 2013, well above the average for the rest of the period.
- Over the period cited, reports of STIs outnumbered all other communicable diseases by a factor of 10.

Table 186. Reported Cases of Communicable Diseases, Davidson County Health Department (2011-2014)

Disease	Number of Cases				
	2011	2012	2013	2014	Total
Sexually-Transmitted Infections					
Chlamydia	487	524	525	498	2,034
Teenagers with Chlamydia	151	127	135	126	539
Gonorrhea	104	110	139	133	486
Teenagers with Gonorrhea	12	29	31	27	99
Syphilis	7	6	3	11	27
Non-gonococcal urethritis (NGU)	32	37	10	14	93
Teenagers with NGU	2	2	0	0	4
Hepatitis B/Carrier	15/1	7/1	6/1	8/3	36/6
Hepatitis C	2	0	1	2	5
HIV	8	6	14	n/a	28
AIDS	8	7	3	n/a	18
Total	813	848	861	811	3,333
Other Communicable Diseases					
Tuberculosis (TB)	2	0	4	n/a	6
Foreign TB	0	0	2	n/a	2
Legionnaires disease	4	1	5	5	15
Rocky Mountain Spotted Fever	2	0	1	0	3
Salmonella	35	37	25	37	134
Shigellosis	1	0	0	3	4
Pertussis (Whooping cough)	2	8	39	10	59
Campylobacter	14	17	17	9	57
Lyme disease	1	1	0	1	3
E. coli	0	1	1	1	3
Cryptosporidiosis	0	2	0	0	2
Brucellosis	0	0	0	1	1
Leptospirosis	0	0	0	0	0
Haemophilis influenza	0	2	2	2	6
Streptococcus A	1	1	3	2	7
Pelvic inflammatory disease (PID)	2	4	6	0	12
Hepatitis A	0	1	0	1	2
Food-borne illness - other	0	0	0	n/a	0
Rubella	0	0	0	0	0
Meningococcal disease - invasive	1	0	0	0	1
Erlichiosis	1	0	0	0	1
Cyclosporiasis	1	0	0	0	1
Malaria	n/a	1	0	0	1
Typhoid	n/a	n/a	n/a	1	1
Vibrio infection	n/a	n/a	n/a	1	1
Total	67	76	105	74	322

Source: Jen Hames, Health Education Supervisor, Davidson County Health Department, to Sheila S. Pfaender, Public Health Consultant; August 27, 2015.

Asthma

Asthma, a disease that affects the lungs, is one of the most common long-term diseases of children, but adults also can have asthma. Asthma causes wheezing, breathlessness, chest tightness, and coughing at night, early in the morning, or upon exertion. The symptoms result because the sides of the airways in the lungs swell and the airways shrink. Less air gets in and out of the lungs, and mucous naturally produced by the body further clogs the airways. In most cases, the cause of asthma is unknown (although there likely is a hereditary component), and there is no known cure. Asthma can be hard to diagnose (64).

The following table and companion figures present hospital discharge data for asthma, stratified by age, for the period 2008-2013. (At the present time this is the best measure of asthma prevalence available from NCSCHS.)

- Davidson County asthma discharge rates for either age group were lower than the comparable state rates.
- In Davidson, the discharge rate for youth (age 0-14) was higher than the discharge rate for all ages in all years except 2008 and 2009. Additionally, the size of the difference between the two age groups grew every year cited.
- The asthma discharge rate for all ages in Davidson County increased in the last period cited; the discharge rate for children ages 0-14 increased in the last two periods cited.

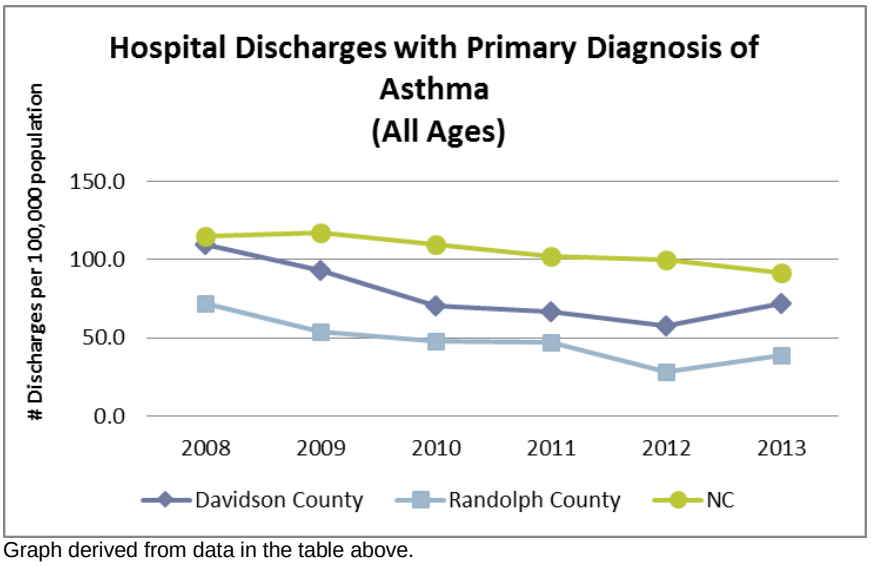
Table 187. NC Hospital Discharges with a Primary Diagnosis of Asthma, Numbers and Rates per 100,000 (2008-2013)

Location	Discharges, Number and Rate (Discharges per 100,000 Population)											
	2008				2009				2010			
	All Ages		Age 0-14		All Ages		Age 0-14		All Ages		Age 0-14	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Davidson County	175	110.0	25	84.0	149	93.2	17	56.3	115	70.6	27	84.2
Randolph County	102	72.4	34	123.2	77	54.0	18	64.2	68	48.0	28	97.4
State of NC	10,644	115.4	2,778	151.9	10,986	117.1	3,228	175.0	10,470	109.8	3,152	166.0

Location	Discharges, Number and Rate (Discharges per 100,000 Population)											
	2011				2012				2013			
	All Ages		Age 0-14		All Ages		Age 0-14		All Ages		Age 0-14	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Davidson County	109	67	23	72.8	94	57.6	28	89.7	118	72.2	33	107.3
Randolph County	67	47.1	26	90.6	55	28.6	26	91.5	55	38.6	21	75.1
State of NC	9,880	102.3	3,004	157.3	9,786	100.3	3,128	163.7	9,021	91.6	2,841	148.9

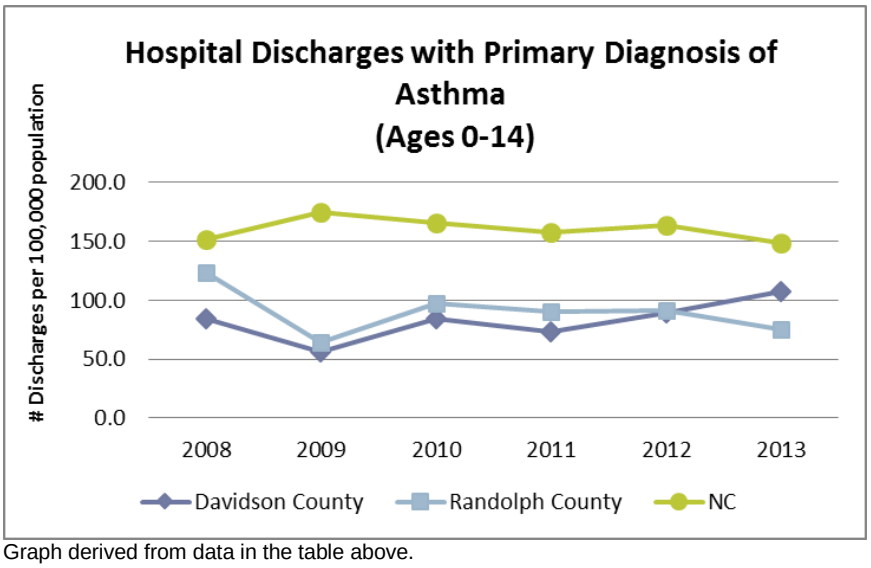
Source: NC State Center for Health Statistics, County-level Data, County Health Data Book (2010-2015), Morbidity, Asthma Hospital Discharges (Total and Age 10-14) per 100,000 Population (years and counties as noted); http://www.schs.state.nc.us/SCHS/data/databook/.

Figure 57. NC Hospital Discharge Rate, Primary Diagnosis of Asthma, All Ages (2008-2013)



Graph derived from data in the table above.

Figure 58. NC Hospital Discharge Rate, Primary Diagnosis of Asthma, Ages 0-14 (2008-2013)



Graph derived from data in the table above.

The two hospitals in Davidson County provided data associated with asthma related ICD-9 codes, as summarized in the table below. Emergency department (ED) admissions and in-patient hospitalization (IP) discharges are presented separately. Note that this data is specific to Davidson County residents served at either of the medical centers in the county. The number column represents ED admissions and IP discharges; the percent column denotes the percent of all ED admissions or IP discharges, respectively, the previous figures represents.

- For the three years cited, 1.1% of all ED admissions were associated with diagnoses of asthma.

- In the same period, 0.9% of all IP discharges were associated with diagnoses of asthma.

Table 188. Davidson County Hospital Data: Asthma (2012-2014)

Service	Number and Percent of Admissions/Discharges							
	2012		2013		2014		Total	
	#	%	#	%	#	%	#	%
ED	749	1.2	665	1.1	572	1.0	1986	1.1
IP	62	0.9	72	1.1	48	0.7	182	0.9

ICD-9 Codes included: 293xx

Diabetes

Diabetes mellitus, or simply, diabetes, is a group of diseases characterized by high blood glucose levels that result from defects in the body's ability to produce and/or use insulin. Diabetes can cause serious health complications including heart disease, blindness, kidney failure, and lower-extremity amputations. There are three major types of diabetes:

Type 1 diabetes results from the body's failure to produce insulin. This form was previously referred to as "insulin-dependent diabetes mellitus" or "juvenile diabetes". *Type 2 diabetes* results from insulin resistance, a condition in which cells fail to use insulin properly, sometimes combined with an absolute insulin deficiency. This form was previously referred to as “non-insulin-dependent diabetes mellitus” or "adult-onset diabetes". The third main form, *gestational diabetes,* occurs when pregnant women without a previous diagnosis of diabetes develop a high blood glucose level. Gestational diabetes is caused by the hormones of pregnancy or a shortage of insulin. Although this form of diabetes usually goes away after the baby is born, a woman who has had it is more likely to develop Type 2 diabetes later in life.

In recent years, medical professionals have begun to diagnose *prediabetes*, a condition in which blood glucose levels are higher than normal but not high enough for a diagnosis of diabetes. People with prediabetes are at increased risk for developing Type 2 diabetes and for heart disease and stroke (65).

As discussed previously, diabetes was the seventh leading cause of death in Davidson County for the 2009-2013 aggregate period, causing 221 deaths. However, diabetes is a chronic condition, and, as noted above can have multiple significant health effects on its sufferers long before it might cause death.

The following table presents estimates of the prevalence of diagnosed diabetes in adults age 18 and older in Davidson County and its comparators.

- Among the comparators, Davidson County had the highest prevalence of diagnosed diabetes in adults in 2006, 2008, and 2010. The seven-year average prevalence in Davidson County was 9.8%; the comparable seven-year average was 9.3% statewide and in Randolph County.
- In Davidson County the estimated prevalence of diagnosed diabetes in adults increased overall by 3% between 2006 and 2012. Over the same period statewide prevalence increased overall by 8%.

Table 189. Adult Diagnosed Diabetes Prevalence Estimate Trend (Single Years, 2006 through 2012)

Location	Estimated Prevalence, Number and Percent (Age-adjusted, Age 18 and Older)													
	2006		2007		2008		2009		2010		2011		2012	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Davidson County	12,540	10.1	11,850	9.4	12,410	9.7	11,527	8.9	13,441	9.9	13,597	9.9	14,564	10.4
Randolph County	8,589	7.9	10,500	9.5	10,660	9.5	11,053	9.6	10,836	9.3	11,692	10.0	12,859	10.8
State Total	599,940	9.0	208,227	8.9	643,131	9.1	674,394	9.2	700,657	9.4	788,226	10.2	778,716	9.7

Note: The prevalence of diagnosed diabetes and selected risk factors by county was estimated using data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) and data from the U.S. Census Bureau's Population Estimates Program. Three years of data were used to improve the precision of the year-specific county-level estimates of diagnosed diabetes and selected risk factors.
Source: Source: Centers for Disease Control and Prevention, Diabetes Data and Trends, County Data and State Data. Maps and Data Tables: Indicator, location and year as listed above. http://www.cdc.gov/diabetes/atlas/countydata/atlas.html/.

Obesity

Obesity in Adults

The table below presents estimates of the prevalence of diagnosed obesity in adults age 18 and older. (Note that comparable data for the state as a whole was not available from the source.)

- Among the comparators, Davidson County had the highest prevalence of diagnosed obesity in adults in every year except 2009. The seven-year average prevalence of adult obesity in Davidson County was 29.6%; the comparable seven-year average in Randolph County was 28.8%.
- In Davidson County the estimated prevalence of diagnosed diabetes in adults increased overall by 4% between 2006 and 2012. Over the same period prevalence in Randolph County increased overall by 14%.

Table 190. Adult Diagnosed Obesity Prevalence Estimate Trend (Single Years, 2006 through 2012)

Location	Estimated Prevalence, Number and Percent (Age-adjusted, Age 18 or Older)													
	2006		2007		2008		2009		2010		2011		2012	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Davidson County	33,550	28.8	34,950	29.9	35,190	29.9	34,129	29.3	34,895	29.1	36,184	30.0	36,766	30.0
Randolph County	36,930	26.0	29,780	28.8	29,980	28.8	30,673	29.6	29,790	28.7	31,111	29.7	31,254	29.7
State of NC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Note: The prevalence of diagnosed obesity and selected risk factors by county was estimated using data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) and data from the U.S. Census Bureau's Population Estimates Program. Three years of data were used to improve the precision of the year-specific county-level estimates of diagnosed diabetes and selected risk factors. Source: Source: Centers for Disease Control and Prevention, Obesity Data and Trends, County Data and State Data. Maps and Data Tables: Indicator, location and year as listed above. http://www.cdc.gov/diabetes/atlas/countydata/atlas.html.

Obesity in Children and Youth

The NC Healthy Weight Initiative, using the NC Nutrition and Physical Activity Surveillance System (NC NPASS), collects height and weight measurements from children seen in NCDPH-sponsored WIC and Child Health Clinics, as well as some school-based Health Centers (66). (It is important to note that this data is not necessarily representative of the county-wide population of children.) This data is used to calculate Body Mass Indices (BMIs) in order to gain some insight into the prevalence of childhood obesity. BMI is a calculation relating weight to height by the following formula:

$$\text{BMI} = (\text{weight in kilograms}) / (\text{height in meters})$$

For children, a BMI in the 95th percentile or above is considered “obese” (formerly defined as “overweight”), while BMIs that are between the 85th and 94th percentiles are considered “overweight” (formerly defined as “at risk for overweight”).

The following table presents NC NPASS data for children ages 2-4 for the period 2008-2012.

- There was no consistent pattern of long-term change over time in either weight category in any of the three jurisdictions being compared.
- An annual average of 15.7% of the participating children in Davidson County were deemed “overweight” and an additional annual average of 14.7% were deemed “obese”, for a total of 30.4% above ideal weight.

Table 191. Prevalence of Obesity and Overweight in Children, Ages 2-4, NC NPASS (2008-2012)

Location	Prevalence of Overweight and Obesity in Children Ages 2-4, by Percent									
	2008		2009		2010		2011		2012	
	Overweight	Obese	Overweight	Obese	Overweight	Obese	Overweight	Obese	Overweight	Obese
Davidson County	14.8	14.5	14.8	14.5	17.3	14.8	15.4	16.4	16.3	13.5
Randolph County	15.5	16.4	15.5	16.4	16.2	15.9	16.4	16.7	15.2	15.7
State of NC	16.3	15.4	15.8	15.4	16.1	15.6	16.2	15.7	14.9	14.5

Note: NC-NPASS data for children ages 2 to 4 are reflective of the population at 185% of the federal poverty level. Approximately 85 to 95% of the children included in the NC-NPASS sample for ages 2 to 4 are WIC participants. Since children are not eligible to participate in WIC once they become 5 years old, the sample size for NC-NPASS data received from the child health clinics was not adequate to calculate county-specific rates for children age 5 and older.
Source: Eat Smart, Move More, Data on Children and Youth in NC, North Carolina Nutrition and Physical Activity Surveillance System (NC-NPASS), NC-NPASS Data (2007-2012), counties and age groups as noted; http://www.eatsmartmovemorenc.com/Data/ChildAndYouthData.html.

Oral Health

Adult Oral Health

Counties are expected to use data from the annual Behavioral Risk Factor Surveillance System (BRFSS) survey to describe dental problems in the community. In NC, the BRFSS survey results are compiled on the county level only for large jurisdictions or metropolitan areas. Davidson County responses are combined with those of 34 other counties in a central NC region BRFSS data summary. Consequently, it is necessary to look elsewhere to adequately describe the dental needs of adults in Davidson County.

The 2015 Davidson County CHA process included a community survey (described subsequently in this report) that asked questions about respondents' access to healthcare services. However, the survey did *not* inquire specifically about access to dental services.

Since cost of dental care can be daunting but is covered for Medicaid-eligible patients, it is interesting to examine the proportion of Medicaid clients who actually receive dental services.

The table below presents dental service utilization figures for Medicaid clients for SFY2010.

- From this admittedly archaic data it appears that Medicaid-eligible persons under the age of 21 in Davidson County receive dental services at a 72% higher proportion than Medicaid-eligible persons age 21 and older. The direction, if not the proportion, of difference is the same in the other two jurisdictions.

Table 192. Dental Service Utilization by Medicaid Recipients, by Age Group (SFY2010)

Location	SFY2010					
	<21 Years Old			21+ Years Old		
	# Eligible for Services	# Receiving Services	% Eligibles Receiving Services	# Eligible for Services	# Receiving Services	% Eligibles Receiving Services
Davidson County	19,801	9,896	50.0	12,091	3,510	29.0
Randolph County	19,226	10,319	53.7	11,022	3,291	29.9
State of NC	1,113,692	541,210	48.6	679,139	214,786	31.6

Source: NC DHHS, NC Division of Medical Assistance, Statistics and Reports, County Specific Snapshots for NC Medicaid Services (2011); http://www.ncdhhs.gov/dma/countyreports/index.htm.

Child Oral Health

Each year about 200,000 NC elementary school children participate in dental screenings, also called assessments. Public health dental hygienists screen for tooth decay and other disease conditions in individuals. The hygienists refer children who have dental problems and need dental care to public or private practice dental care professionals (67).

The next table presents partial summaries of the screenings conducted in SY2009-2010 and SY2012-2013.

- In Davidson County the percent of kindergarteners and 5th graders screened dropped precipitously between the periods cited, for reasons unknown to the consultant. The percent screened fell in the state as well, but not in Randolph County.
- An average of 23% of kindergarteners and 8% of fifth graders in Davidson County had untreated decay in the two school years cited. Statewide, an average of 14% of kindergarteners and 2.5% of fifth graders had untreated decay over the same period.

Table 193. Child Dental Screening Summary (SY2009-2010 and SY2012-2013)

Location	SY2009-2010				SY2012-13			
	Kindergarten		5th Grade		Kindergarten		5th Grade	
	% Screened	% Untreated Decay	% Screened	% Untreated Decay	% Screened	% Untreated Decay	% Screened	% Untreated Decay
Davidson County	90	21	95	7	41	25	22	9
Randolph County	93	12	91	2	93	12	94	1
State of NC	74	15	69	3	58	13	52	2

Source: NC DHHS, Oral Health, References and Statistics, School Oral Health Assessments, NC County Level Oral Health Assessment Data by Year (years and counties as noted); http://www.ncdhhs.gov/dph/oralhealth/stats/MeasuringOralHealth.htm.

Utilization of Hospitals for Dental Services

Data provided to the consultant by the two hospitals in Davidson County make it apparent that the emergency department is a provider of emergency dental care, or at least is being used as a dental provider of last resort, with over 5,600 ED admissions for diseases of the oral cavity in the three year period 2012-2014.

Table 194. Davidson County Hospital Emergency Department Admissions for Dental and Oral Problems (2012-2014)

Diagnosis (ICD-9 Code)	Number of ED Admissions			
	2012	2013	2014	Total
Diseases of the Oral Cavity (520-525.xx)	2107	1914	1593	5614
(Includes disturbances in tooth eruption and dental caries, cracked teeth, gingival and periodontal disease and temporomandibular disorders)				
Diseases of the Oral Soft Tissues (528xx)	43	37	56	136

Mental Health

As previously noted in the Mental Health Services and Facilities section of this report, the unit of NC government responsible for overseeing mental health services is the Division of Mental Health, Developmental Disabilities and Substance Abuse Services (DMH/DD/SAS).

In 2001, the NC General Assembly passed the Mental Health System Reform Act, which ended the previous system by which quasi-independent local entities such as counties and regional agencies delivered mental health services by directly employing the care providers. The new law essentially privatized mental health services by requiring the governmental local management entities (LMEs) to contract with other public or private providers or provider groups to serve area residents in need of mental health services. The local counties and regions no longer directly controlled the provision of services, but instead were responsible for managing provider contracts (68).

The status quo of the mental health system in NC did not remain static for long, since state government recognized that even with reorganization of the service system the budget for Medicaid-funded mental health services was not adequately managed and was growing at a high rate each year. In 2004 the state Division of Medical Assistance chose to implement the 1915(b)(c) Medicaid Waiver Program as a means to control and budget the costs of Medicaid-funded services. This program budgets and manages expenditures on the basis of a capitation formula and other fiscal adjustments that take into account the historical service costs associated with different Medicaid-eligible groups. Starting in 2005 the state established one LME (Piedmont Behavioral Health) as a pilot Medicaid managed care vendor via the waiver program. Expansions of the pilot program were undertaken in 2008 and 2010, and in 2011 NCDHHS was instructed to implement the 1915(b)(c) Waiver Program statewide by July 1, 2013 (69).

The state established a series of minimum requirements for LMEs to participate in the Waiver Program, and if an LME could not meet the minimum standards it was required to merge with another LME. As a result of standards enforcement, the state's original 23 LMEs had shrunk to 10 by December, 2013, at which time NCDHHS proposed to consolidate the remaining 10 into four agencies (70). The LME/MCO serving Davidson County is Cardinal Innovations Healthcare Solutions (CIHS), which is headquartered in Kannapolis, NC.

One goal of mental health reform in NC was to refocus mental health, developmental disabilities and substance abuse care in the community instead of in state mental health facilities. The data below clearly illustrates how utilization of some state-level services has diminished.

Mental Health Service Utilization

The following table presents an annual summary of the number of persons in each jurisdiction served by LMEs/Area Programs from 2008 through 2014.

- The number of persons served in Davidson County declined 42% between 2008 and 2011 before almost doubling in 2012. Since 2012 the number of persons served has again declined, to a seven-year low in 2014.

Table 195. Persons Served by Mental Health Area Programs/Local Management Entities (2008-2014)

Location	Number of Persons Served						
	2008	2009	2010	2011	2012	2013	2014
Davidson County	5,403	4,818	3,887	3,121	6,072	5,724	2,884
Randolph County	5,205	5,344	5,694	6,056	5,788	6,832	7,782
State of NC	306,907	309,155	332,796	360,180	315,284	306,080	316,863

Note: The figures in the table represent all clients of a community-based Area Program for mental health, developmental disabilities, and drug and alcohol abuse active at the beginning of the state fiscal year plus all admissions during the year. Also included are persons served in three regional mental health facilities. Multiple admissions of the same client are counted multiple times. County of residence is reported at the time of admission. State figures include clients reported to reside out-of-state and sometimes contains individuals of Unknown County of residence.
Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 519); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

The table below divides the persons served according to their category of disability.

- In the period covered by the table below, the vast majority of persons served (74%) had a mental health disability.
- The number of persons in Davidson County served for a substance abuse disability nearly doubled between 2011 and 2012.

Table 196. Summary of Persons Served by LME, by Category of Disability, Davidson County Residents (SFY 2008-SFY 2012)

Category of Disability	Number of Admissions					
	2008	2009	2010	2011	2012	Total
Mental Health	4,535	3,683	2,759	2,070	4,306	17,353
Developmental Disabilities	229	193	152	190	236	1,000
Substance Abuse	639	942	976	861	1,530	4,948
Total	5,403	4,818	3,887	3,121	6,072	23,301

Source: Trends in LME Admissions and Persons Served, by County, 5-Year Study. (Persons served.) NC Department of Health and Human Services, Division of Mental Health, Developmental Disabilities and Substance Abuse Services, Consumer Data Warehouse (CDW) Reports website; http://www.ncdmh.net/dsis/REPORTS/5year_Study_By_County.pdf

Since mental health reform of the early 2000s, only the most seriously ill mental health patients statewide qualify for treatment at state psychiatric hospitals. The individual must be assessed as meeting the diagnostic criteria for (1) acute schizophrenia and/or other psychotic disorders, (2) acute mood disorders or (3) the combination of both, with or without medical and/or physical complications that are within the parameters of what the state hospital can manage (71).

At the present time, there are three state-operated psychiatric hospitals in NC: Broughton Hospital (Morganton), Central Regional Hospital (Butner), and Cherry Hospital (Goldsboro).

The following table presents a summary of the number of persons in each jurisdiction served in NC State Psychiatric Hospitals for the period from 2008 through 2014.

- In Davidson County the numbers of persons served annually in NC State Psychiatric Hospitals decreased overall by 84% over the period cited. Statewide the number of persons served fell every year cited; in 2014 the total number served statewide was 76% lower than in 2008.

Table 197. Persons Served in NC State Psychiatric Hospitals (2008-2014)

Location	Number of Persons Served						
	2008	2009	2010	2011	2012	2013	2014
Davidson County	206	102	41	26	2	2	32
Randolph County	124	82	142	110	42	44	19
State of NC	14,643	9,643	7,188	5,754	4,572	3,964	3,529

Note: Sometimes referred to as "episodes of care", these counts reflect the total number of persons who were active (or the resident population) at the start of the state fiscal year plus the total of first admissions, readmissions, and transfers-in which occurred during the fiscal year at the three state alcohol and drug treatment centers. Excluded are visiting patients and outpatients. Multiple admissions of the same client are counted multiple times. County of residence is reported at the time of admission. North Carolina data include clients reported to reside out-of-state.
Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 516); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

Developmental Disabilities Service Utilization

According to NC MH/DD/SAS, *developmental disability* means a severe, chronic disability of a person which:

a. is attributable to a mental or physical impairment or combination of mental and physical impairments;
b. is manifested before the person attains age 22, unless the disability is caused by a traumatic head injury and is manifested after age 22;
c. is likely to continue indefinitely;
d. results in substantial functional limitations in three or more of the following areas of major life activity: self-care, receptive and expressive language, capacity for independent living, learning, mobility, self-direction and economic self-sufficiency; and
e. reflects the person's need for a combination and sequence of special interdisciplinary, or generic care, treatment, or other services which are of a lifelong or extended duration and are individually planned and coordinated; or
f. when applied to children from birth through four years of age, may be evidenced as a developmental delay (72).

Although community care is preferred where available, the state currently operates three facilities serving the developmentally disabled: Caswell Developmental Center (Kinston), Murdoch Developmental Center (Butner), and J. Iverson Riddle Developmental Center (Morganton).

The table below presents a summary of the persons in each jurisdiction served in NC State Developmental Centers for the period from 2008 through 2014.

- The numbers of persons in Davidson County served in NC State Developmental Centers were small and variable.

- At the state level, the number of developmentally disabled persons served in state facilities decreased by 6% overall between 2008 and 2014.

Table 198. Persons Served in NC State Developmental Centers (2008-2014)

	Number of Persons Served						
	2008	2009	2010	2011	2012	2013	2014
Davidson County	7	7	6	8	9	9	10
Randolph County	10	8	6	6	8	8	5
State of NC	1,409	1,404	1,375	1,355	1,340	1,331	1,282

Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 517); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

Substance Abuse Service Utilization

Alcohol and Drugs

There are three state-operated residential alcohol and drug abuse treatment centers (ADATC): the Julian F. Keith ADATC (Black Mountain), the R.J. Blackley ADATC (Butner), and the Walter B. Jones ADATC (Greenville).

The table below presents a summary of the persons in each jurisdiction served in NC State ADATCs for the period from 2008 through 2014.

- The numbers of persons in Davidson County served in NC State ADATCs fluctuated over the period cited, and seemed extremely low given the size of the county. A maximum number served for the period—12 individuals—occurred in 2009.
- Unlike figures for state psychiatric hospitals, the number of persons statewide served in NC ADATCs did not decline dramatically at any point, and the total statewide served in 2014 was only 5% lower than the total served in 2008.

Table 199. Persons Served in NC Alcohol and Drug Abuse Treatment Centers (2008-2014)

Location	Number of Persons Served						
	2008	2009	2010	2011	2012	2013	2014
Davidson County	7	12	4	7	4	5	5
Randolph County	12	13	37	47	53	44	23
State of NC	4,284	4,812	4,483	4,590	4,265	4,343	4,049

Sometimes referred to as "episodes of care", these counts reflect the total number of persons who were active (or the resident population) at the start of the state fiscal year plus the total of first admissions, readmissions, and transfers-in which occurred during the fiscal year at the three state alcohol and drug treatment centers. Excluded are visiting patients and outpatients. Multiple admissions of the same client are counted multiple times. County of residence is reported at the time of admission. North Carolina data include clients reported to reside out-of-state.
Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 518); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

Utilization of Hospitals for Mental Health Services

It is unclear whether local mental health resources are actually meeting the need in Davidson County, because the hospitals, especially the emergency department (ED) is seeing many mental health patients.

The two hospitals in Davidson County provided data associated with ICD-9 codes for mental, behavioral and neurological disorders, as summarized in the table below. Emergency department (ED) admissions and in-patient hospitalization (IP) discharges are presented separately. Note that this data is specific to Davidson County residents served at either of the medical centers in the county. The number column represents ED admissions and IP discharges; the percent column denotes the percent of all ED admissions or IP discharges, respectively, the previous figures represents.

- For the three years cited, 2.6% of all ED admissions were associated with diagnoses of mental, behavioral and neurological disorders.
- In the same period, 2.0% of all IP discharges were associated with diagnoses of mental, behavioral and neurological disorders.

Table 200. Davidson County Hospital Data: Mental, Behavioral and Neurological Disorders (2012-2014)

Service	Number and Percent of Admissions/Discharges							
	2012		2013		2014		Total	
	#	%	#	%	#	%	#	%
ED	1507	2.5	1509	2.5	1450	2.6	4466	2.6
IP	138	1.9	133	1.9	143	2.1	414	2.0

ICD-9 Codes included: 290-319xx

The ED data provided by the hospitals can be further separated into the specific diagnoses shown in the table below:

Table 201. Davidson County Hospital Emergency Department Admissions for Mental Health Disorders (2012-2014)

Diagnosis (ICD-9 Code)	Number of ED Admissions			
	2012	2013	2014	Total
Psychosis (290-299.9)	326	372	335	1033
Alcohol-induced mental disorders (291-291.99)	15	6	14	35
Drug-induced mental disorders (292-292.99)	35	56	54	145
Neurotic/Personality Disorders (300-316xx)	1177	1124	1113	3414
Alcohol dependence syndrome (303-303.99)	45	25	35	105
Drug dependence (304-304.99)	17	9	24	50
Non-dependent abuse of drugs (305-305.99)	293	306	270	869

It is apparent that residents of Davidson County are relying on the area hospitals for mental health care, whether in the event of a true emergency or as a mental health care provider of last resort.

General Hospital Utilization Data: Outpatient Procedures

Utilization of the hospitals in Davidson County for emergency services and inpatient hospitalizations have been covered elsewhere in this document, in connection with leading causes of death and major causes of morbidity. This section covers surgeries and other procedures, some of which are elective, and some of which are not; all were tallied by the hospitals as "Outpatient Surgical Procedures". It should be noted that the list below is not all-inclusive, but contains some of the most common procedures. It also covers 2012 and 2013 only.

- Among the procedures cited in the table, the most common was phacoemulsification and aspiration of cataract (cataract removal)
- The second most common procedure was colonoscopy. (Note that mammography was discussed previously.)
- The third most common procedure was esophagogastroduodenoscopy (an endoscopic diagnostic procedure that visualizes the upper part of the gastrointestinal tract up to the duodenum).

Procedure (ICD-9 Procedure Code)	Number of Patients		
	2012	2013	Total
Phacoemulsification and aspiration of cataract (13.4x)	1,331	1,556	2,887
Colonoscopy (45.23; diagnosis code V76.5x)	926	1,029	1,955
Esophagogastroduodenoscopy (45.13, 45.16)	572	552	1,124
Endoscopic polypectomy of large intestine (45.42)	416	493	899
Cholecystectomy (51.2x)	280	268	548
Myringotomy (20.01; 20.09)	190	238	428
Hysterectomy (68.3x – 68.7x)	181	158	339
Tonsillectomy (28.2 – 28.3)	113	93	206
Breast biopsy (85.11 - 85.12)	76	85	161
Extracorporeal shockwave lithotripsy (98.5x)	41	60	101
Appendectomy (47.0x)	49	50	99

CHAPTER FIVE: ENVIRONMENTAL DATA

AIR QUALITY

Air Quality Index

Nationally, outdoor air quality monitoring is the responsibility of the Environmental Protection Agency (EPA). In NC, the agency responsible for monitoring air quality is the Division of Air Quality (DAQ) in the NC Department of Environment and Natural Resources (NCDENR).

The impact of air pollutants in the environment is described on the basis of emissions, exposure, and health risks. A useful measure that combines these three parameters is the EPA's Air Quality Index (AQI). The EPA monitors and catalogues AQI measurements at the county level, but not in all counties. The table below presents air quality data collected for Davidson County and its comparators for 2014, the most recent year for which there is final data. Air quality was measured in Davidson County on 176 days in 2014. Of these days, 108 had "good" air quality and 68 had "moderate" air quality. On each of the monitored days small particulate matter ($PM_{2.5}$) was present at the level of pollutant.

Table 202. Air Quality Index Summary, 2014

Location	No. Days with AQI	Number of Days When Air Quality Was:					Number of Days When Air Pollutant Was:					
		Good	Moderate	Unhealthy for Sensitive Groups	Unhealthy	Very Unhealthy	CO	NO2	O3	SO2	PM2.5	PM10
Davidson County	176	108	68	n/a	n/a	n/a	n/a	n/a	n/a	n/a	176	n/a
Randolph County	*No report*											
State of NC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Source - Air Quality Index Reports, 2014. US EPA Air Data website: http://www.epa.gov/airdata/ad_rep_aqi.html.

Toxic Releases

Over 4 billion pounds of toxic chemicals are released into the nation's environment each year, via air, water and land. The US Toxic Releases Inventory (TRI) program, created in 1986 as part of the Emergency Planning and Community Right to Know Act, is the tool the EPA uses to track these releases. Approximately 20,000 industrial facilities are required to report estimates of their environmental releases and waste generation annually to the TRI program office. These reports do not cover all toxic chemicals, and they omit pollution from motor vehicles and small businesses (73).

According to the table below, in 2014, 79,648 pounds of TRI chemicals were released in Davidson County, the 54th highest total volume of releases in the state. The NC county with the highest volume of releases in 2014 was Brunswick County, which reported over 5 million pounds of releases (74).

- Manufacturing facilities were responsible for the largest volumes of TRI chemicals/chemical compounds released in Davidson County in 2014.
- The chemicals released in largest quantities in Davidson County in 2014 were methanol and styrene.

Table 203. Toxic Release Inventory (TRI) Summary, Davidson County (2014)

Location	Total On- and Off-Site Disposal or Other Releases, In Pounds	County Rank (of 86 reporting) for Total Releases	Compounds Released in Greatest Quantity	Quantity Released, In Pounds	Facilities Releasing Greatest Amount of Compound (Amount, In Pounds)	Primary Nature of Release	Facility Location
Davidson County	79,648	54	Methanol	44,228	PPG Industries Fiber Glass Products NC (41,846)	Total On-site Disposal or Other Release	Lexington
					Kurz Transport Properties LP (2,382)	Total On-site Disposal or Other Release	Lexington
			Styrene	22,708	Gainsborough Baths, Inc. (22,708)	Total On-site Disposal or Other Release	Lexington
			Toluene	5,093	Kurz Transport Properties LP (5,093)	Total On-site Disposal or Other Release	Lexington
			Lead Compounds	3,720	Brasscraft - Thomsaville (3,339)	Total Off-site Disposal or Other Release	Thomasville
					Owens-Brockway Glass Container Inc. Plant #06 (377)	Total On-site Disposal or Other Release	Lexington
					Wilderness NC Inc. (5)	Total On-site Disposal or Other Release	Lexington
			Copper compounds	2,770	Brasscraft - Thomsaville (2,770)	Total Off-site Disposal or Other Release	Thomasville
			Formaldehyde	1,125	Southern Resin, Inc. (1,125	Total On-site Disposal or Other Release	Thomasville
			Lead	3	PPG Industries Fiber Glass Products NC (3)	Total Off-site Disposal or Other Release	Lexington
			Copper	1	Asco Power Technologies (1)	Total Off-site Disposal or Other Release	Welcome
			Nickel	1	Asco Power Technologies (1)	Total Off-site Disposal or Other Release	Welcome
NC Total	43,026,747						
NC County Average (n=87)	494,560						

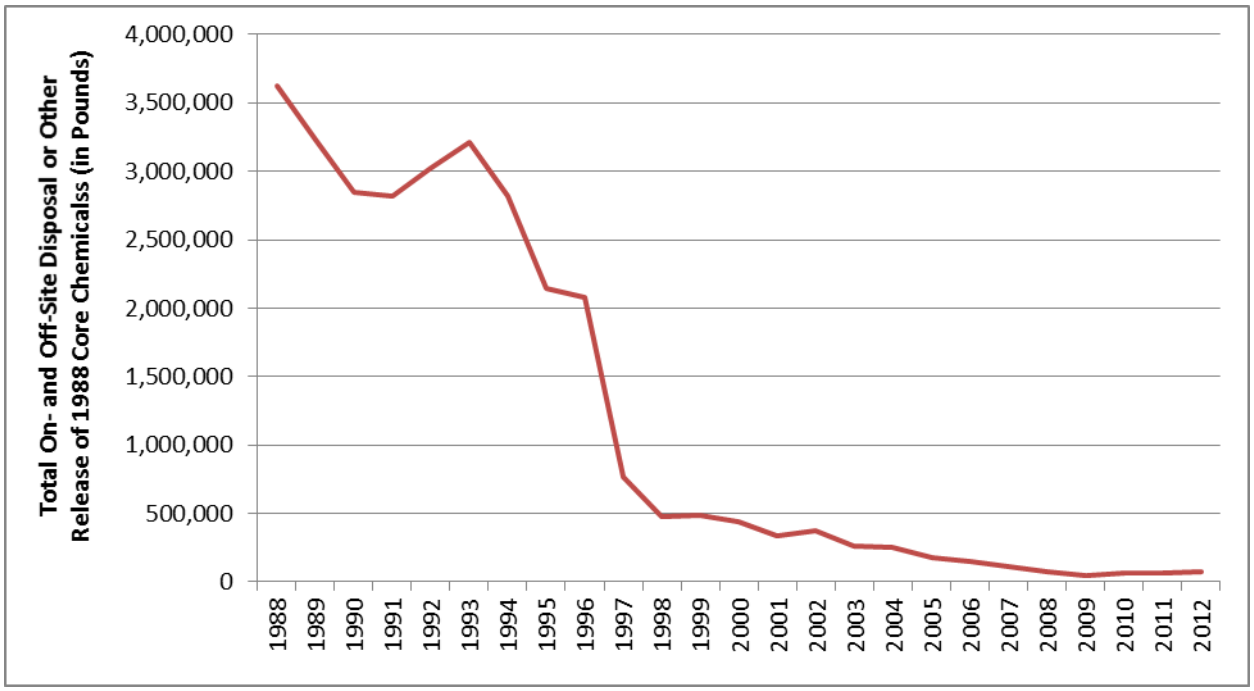
Source: *TRI Release Reports: Chemical Reports, 2014.* US EPA TRI Explorer, Release Reports, Chemical Reports website: http://iaspub.epa.gov/triexplorer/tri_release.chemical.

TRI chemical releases in Davidson County have decreased dramatically over time, as shown in the following figure, which plots the weight, in pounds, of total TRI chemicals released annually by all industries in Davidson County beginning in 1988.

Note that the graph includes only those chemicals defined as “1988 Core Chemicals”. The 1988 Core Chemicals include only chemicals that were reported in all years beginning from 1988. The list includes 296 chemicals. The data does not include, for example, chemicals added since 1988, or chemicals delisted in any year. Because reporting definitions for ammonia, hydrochloric acid, sulfuric acid and vanadium have changed and reporting requirements for previously listed PBTs have changed, these chemicals are also not included in the report (75).

The reduction of TRI releases in the county is not necessarily related to cleaner industrial processes, but rather to the closure of facilities. For example, the TRI chemicals released in highest quantities in the peak emission years (1988 to around 1993) were primarily volatile solvents associated with the manufacture of wood composites and furniture, chemicals which are no longer released in large quantities because many of the emitting facilities have since closed or reduced operations.

Figure 59. Total TRI Release Trend, Davidson County (1988-2012)



Note: The chemicals included in the trend include only 1988 Core Chemicals (see text for explanation).
Source: US EPA TRI Explorer, Releases: Trends Report, North Carolina, Davidson County.
http://iaspub.epa.gov/triexplorer/tri_release.trends.

WATER QUALITY

Drinking Water Systems

The EPA is responsible for monitoring the safety of drinking water and water system violations of the federal Safe Drinking Water Act (SDWA). The EPA's Safe Drinking Water Information System (SDWIS) contains information about public water systems and their violations of EPA's drinking water regulations, as reported to EPA by the states. These regulations establish maximum contaminant levels, treatment techniques, and monitoring and reporting requirements to ensure that water systems provide safe water to their customers (76).

In June 2015, SDWIS listed six active water systems in Davidson County. Five were *community water systems* that, on paper at least, served 207,267 people. (This figure exceeds the total population of the county, likely because the reported populations served by these community water systems overlap.) A community water system is one with at least 15 service connections used by year-round residents or regularly serves 25 year-round residents. This category includes municipalities, subdivisions and mobile home parks.

In addition to the five community water systems in Davidson County, there was also one *transient, non-community water system (T/N-C)* serving 74 people. Water systems in the T/N-C category do not consistently serve the same people, and include rest stops, campgrounds and gas stations. There is another water system category not reported for Davidson County: non-transient, non-community (N-T/N-C) water systems, which regularly supply water to at least 25 of the same people at least six months per year, but not year-round. Some examples are

schools, factories, office buildings, and hospitals which have their own water systems. The populations served by these types of water systems are summarized in the table below.

- Despite the reported "penetration" of community water systems (i.e., treated water) in Davidson County, there likely remain segments of the population who get their water from private wells or other sources. These are the residents most at-risk for exposure to unknown contaminants in their drinking water.

Table 204. Population Served by Active Water Systems (as of June, 2015)

Location	2014 Estimated Population	Number CWSs	Total Population Served by CWSs	% Population Served by CWSs	Number N-T/N-C WSs	Total Population Served by N-T/N-C WSs	% Population Served by N-T/N-C WSs	Number T/N-C WSs	Total Population Served by T/N-C WSs	Total Population Served by Active Water Systems
Davidson County	164,072	5	207,267	126.3	0	0	0.0	1	74	207,341
Randolph County	142,778	35	60,009	42.0	14	2,645	1.9	70	6,263	68,917
State of NC	9,535,483	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Source	1	2	2	3	2	2	3	2	2	3

1 – US Census Bureau. American Fact Finder, PEPSR6H: 2014 Annual Estimates of the Resident Population by Sex, Race and Hispanic Origin for the United States, States, and Counties. http://factfinder2.census.gov/.
2 - Safe Drinking Water Search for the State of North Carolina. US EPA Envirofacts Safe Drinking Water Information System (SDWIS) website: http://www.epa.gov/enviro/facts/sdwis/search.html.
3 - Calculated from table data

The EPA also records in SDWIS violations of drinking water standards reported to it by states. It records violations as either *health-based* (contaminants exceeding safety standards or water not properly treated) or *monitoring- or reporting-based* (system failed to complete all samples or sample in a timely manner, or had another non-health related violation). The following table lists the active water systems in Davidson County as of June 8, 2015. The table also includes any *health-based* violations for the period from 2005 through 2015.

Table 205. Active Water Systems in Davidson County (As of June 8, 2015)

Type of System	Total Population Served	Primary Water Source Type	Health Violations 2005-2015
Community Water Systems			
Davidson Water, Inc.	147,455	Surface Water	None
Denton, Town of	3,080	Surface Water	None
Handy Sanitary District	7,899	Surface Water (Purchased)	Trihalomethane exceeded safety standard (MCL, average), 2014; Total haloacetic acids exceeded safety standard (MCL, average), 2012; 2007; 2006
Lexington, City of	22,415	Surface Water	Coliform (TCR) exceeded safety standard (MCL, monthly), 2009
Thomasville, City of	26,418	Surface Water	None
Total	**207,267**		
Non-Transient, Non-Community Water Systems			
None			
Total	**0**		
Transient, Non-Community Water Systems			
Newsom Mobile Home Park Campground	74	Ground Water	None
Total	**74**		

Source: *Safe Drinking Water Search for the State of North Carolina*. US EPA Envirofacts Safe Drinking Water Information System (SDWIS) website: http://www.epa.gov/enviro/facts/sdwis/search.html.

NPDES Permits

Water pollution degrades surface waters making them unsafe for drinking, fishing, swimming, and other activities. As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into US waters. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters (77). The table below lists the NPDES-permitted dischargers in Davidson County and the destinations and permitted volumes of their discharges.

Table 206. National Pollutant Discharge Elimination System (NPDES) Permitted Dischargers in Davidson County (as of June 1, 2015)

Owner	Facility	Type	Discharge Destination	Permitted Flow (Gal/Day)
Major Facilities				
Town of Denton	Denton Waste Water Treatment Plant	Municipal, < 1MGD	Lick Creek	800,000
City of High Point	Westside Waste Water Treatment Plant	Municipal, Large	Rich Fork	6,200,000
City of Lexington	Lexington Regional Waste Water Treatment Plant	Municipal, Large	Abbotts Creek Arm of High Rock Lake	6,500,000
City of Thomasville	Hamby Creek Waste Water Treatment Plant	Municipal, Large	Hamby Creek	6,000,000
Minor Facilities				
City of Thomasville	City of Thomasville Water Treatment Plant	Water Treatment Plant	Rich Fork Creek	200,000
PPG Industries Fiber Glass Products Inc.	Lexington Manufacturing Facility	Industrial Process & Commercial	North Potts Creek (Second Potts Creek)	600,000
Davidson Water, Inc.	Davidson Water Treatment Plant	Water Treatment Plant	Yadkin River	Not limited
Aqua North Carolina, Inc.	Salem Glen Subdivision Waste Water Treatment Plant	100% Domestic, < 1MGD	Yadkin River	200,000
Town of Denton	Denton Water Treatment Plant	Water Treatment Plant	Yadkin River	Not limited
Steve Pappas	Captain Stevens Seafood Restaurant	100% Domestic, < 1MGD	Reedy Creek	2,500
Frog Level Industries	Quail Run Mobile Home Park	100% Domestic, < 1MGD	Miller Creek	17,000
Aqua North Carolina, Inc.	Willow Creek Waste Water Treatment Plant	100% Domestic, < 1MGD	Abbotts Creek	80,000
Wilderness-NC, Inc.	Wildnerness-NC Lumber Plant	Industrial Process & Commercial	Flat Swamp Creek	12,500
Norfolk Southern Railway Co.	Linwood Yard	Industrial Process & Commercial	Yadkin River	317,000
Kurz & Partners, LP	Kurz Transfer Products	Industrial Process & Commercial	Reedy Creek	1,500
Bills Truck Stop, Inc.	Bill's Truck Stop Waste Water Treatment Plant	100% Domestic, < 1MGD	South Potts Creek (First Potts Creek)	6,000
Hilltop Living Center	Hilltop Living Center Waste Water Treatment Plant	100% Domestic, < 1MGD	Yadkin River	3,000
Aqua North Carolina, Inc.	Spring Creek Waste Water Treatment Plant	100% Domestic, < 1MGD	Fryes Creek	80,000
City of Lexington	Lexington Water Treatment Plants #1 & #2	Water Treatment Plant	Abbotts Creek	Not limited
General Permits				
Lexington Furniture Industries	Plant 5	Non-contact Cooling, Boiler Blowdown	Rat Spring Branch	n/a
Halyard Health Inc.	Halyard Health Inc.	Non-contact Cooling, Boiler Blowdown	North Potts Creek (Second Potts Creek)	n/a
Elizabeth Carbide of NC	Elizabeth Carbide of NC	Non-contact Cooling, Boiler Blowdown	Brier Creek	n/a
Mohawk Industries Inc.	Unilin Flooring, NC LLC-THO	Non-contact Cooling, Boiler Blowdown	Hamby Creek	n/a
Holding Brothers, Inc .	West Lexington Save-A-Sum	Groundwater Remediation	Swearing Creek	n/a
Davidson Water, Inc.	Davidson Water Treatment Plant	Sand Dredging Operations	Yadkin River	n/a
	Jerry Gray Smith Farm	Sand Dredging Operations	Muddy Creek	n/a
	Rich Fork Creek operation	Sand Dredging Operations	Rich Fork	n/a
	Abbotts Creek site	Sand Dredging Operations	Abbotts Creek	n/a
Thomas Mock	Spurgeon Creek site	Sand Dredging Operations	Spurgeon Creek	n/a
Leonard Sand Company	Leonard Sand Company	Sand Dredging Operations	Swearing Creek	n/a
Various owners	27 Single-family Domestic sites	Single Family Domestic Wastewater Discharge	Various: Abbotts Creek, Miller Creek, Hamby Creek, Payne Creek, Righ Fork, Hunts Fork, Beaverdam Creek, Little Uwharrie River, Tinkers Creek, Little Brushy Fork, Flat Swamp Creek	n/a

Source: Major and Minor Permits: NC Department of Environment and Natural Resources, Division of Water Quality, Surface Water. NPDES Wastewater Permitting and Compliance Program. Permit Info, List of Active Individual Permits; http://portal.ncdenr.org/web/wq/swp/ps/npdes.
Source: General Permits: NC Department of Environment and Natural Resources, Division of Water Quality, Surface Water. NPDES Wastewater Permitting and Compliance Program. Permit Info, List of Active General Permits; http://portal.ncdenr.org/web/wq/swp/ps/npdes.

SOLID WASTE

Solid Waste Disposal

The next table presents figures summarizing tonnage of solid waste disposed in Davidson County and comparators for the period FY2009-10 through FY2013-14.

- In FY2013-14, Davidson County managed 126,075 tons of municipal solid waste (MSW) for a rate of 0.77 tons per capita. This tonnage represented a *decrease* of 29% from the per capita rate for FY1991-92 (the period customarily used for the base rate).
- Over the same period the overall state per capita solid waste management rate decreased to 12% from the FY1991-92 base per capita rate.

Table 207. Solid Waste Disposal
FY2009-10 through FY2013-14

Location	MSW Tons Managed 1991-92	MSW Tons Disposed					Base Year Per Capita (1991-92)	Per Capita Rate 2013-14	%Change Base Year to 2013-14
		2009-10	2010-11	2011-12	2012-13	2013-14			
Davidson County	139,617	131,437	142,374	130,844	121,928	126,075	1.08	0.77	-29
Randolph County	78,663	96,641	104,518	110,073	109,457	105,803	0.73	0.74	2
State of NC	7,257,428	9,395,457	9,467,045	9,443,380	9,149,130	9,150,471	1.07	0.94	-12

NC Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Program, NC Solid Waste Management Annual Reports, County Per Capita Report, Fiscal Year 2013-2014; http://portal.ncdenr.org/c/document_library/get_file?p_l_id=4649434&folderId=15429422&name=DLFE-80542.pdf.

The next table lists the active/open solid waste facilities in Davidson County that have been permitted by the state of NC.

Table 208. Open Permitted Solid Waste Facilities, Davidson County (October 5, 2015)

Name	Waste	Activity	Location
Davidson County CDLF	Construction & Demolition	Landfill	Lexington
Davidson County HHW	HHW	Collection	Lexington
Davidson County MSW (Lined)	Municipal Solid Waste	Landfill	Thomasville
Davidson County Transfer Facility	Municipal Solid Waste	Transfer	Thomasville
Todco, Inc. Wood Recycling	Type 1	TP	Lexington
Todco, Inc. C&D Transfer	Construction & Demolition	Transfer	Lexington
Veach Land Clearing & Inert Debris	Land Clearing & Inert Debris	Landfill	Winston-Salem
Norman's Septic Tank Service	Septage	Hauler	Lexington
B & B Septic	Septage	Hauler	Lexington
Comer Sanitary Service, Inc.	Septage	Hauler	Lexington
Ketcham Septic Tank Company	Septage	Hauler	Lexington
McMahan Septic Tank	Septage	Hauler	Lexington
North State Plumbing Service	Septage	Hauler	Lexington
Transous Forsyth Septic Tank Service, Inc.	Septage	Hauler	Clemmons
Davidson County Board of Education	Septage	Hauler	Lexington
EverSwing Septic Tank Service	Septage	Hauler	Lexington
64 Portables, Inc.	Septage	Hauler	Lexington
Onsite Environmental	Septage	Hauler	Nashville
Scott Robbins Septic Tank	Septage	Hauler	Denton

Source: NC Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section, NC Permitted Solid Waste Facility List; http://portal.ncdenr.org/web/wm/sw/facilitylist.

The table below presents the FY2013-14 County Waste Disposal Report for Davidson County which lists the tons of solid waste originating in Davidson County and disposed of in-county and facilities elsewhere.

- Some of Davidson County's solid waste is transferred to or transported directly to landfills *outside* the county, but the vast majority (98%) is landfilled within the county.

Table 209. County Waste Disposal Report, Davidson County (FY2013-14)

Facility	Facility Type	County	Tons Received	Tons Transferred
BFI - Charlotte Motor Speedway	Landfill V	Cabarrus	0.86	0.00
Davidson County CDLF	Construction & Demolition	Davidson	23,516.76	0.00
Davidson County MSW Lined Landfill	Municipal Solid Waste	Davidson	95,538.24	0.00
Todco, Inc.	Construction & Demolition Transfer	Davidson	1,477.51	309.67
Overdale Road Transfer Station	Transfer	Davidson	820.52	820.52
Abbey Green, Inc.	Construction & Demolition Recycling	Forsyth	314.79	118.06
City of High Point Landfill	Municipal Solid Waste	Guilford	55.37	0.00
High Point C&D Waste Reclamation	Construction & Demolition Reclamation	Guilford	159.00	78.19
A-1 Sandrock C&D Landfill	Construction & Demolition	Guilford	87.60	0.00
Bishop Road Transfer Station	Transfer	Guilford	1,273.78	1,273.78
Greensboro Transfer Station	Transfer	Guilford	7.83	7.82
Uwharrie Environmental Regional Landfill	Regional Landfill	Montgomery	4,571.90	0.00
Gold Hill Road C&D Debris Landfill	Consstruction & Demolition	Randolph	54.47	0.00
Rowan County Landfill	Municipal Solid Waste	Rowan	87.13	0.00

Source: NC Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section. Solid Waste Management Annual Reports, FY2013-2014; County Waste Disposal Report Fiscal Year 2013-2014.
http://portal.ncdenr.org/web/wm/sw/swmar.

The next table describes the capacity of Davidson County landfills as of 2013-14.

- The municipal solid waste landfill in Davidson County currently has capacity projected to last for another 25 years.
- The construction and demolition landfill in the county currently has less than two years capacity remaining.

Table 210. Capacity of Landfills in Davidson County (FY2013-14)

Facility Name	Open Date	Volume Overall	Volume Overall Remaining	Volume Overall Remaining in Tons	Volume Overall Remaining in Years (Fiscal Year Tons)
Davidson County C&D Landfill	2001	308,752.00	65,436.00	37,079.58	1.58
Davidson County MSW Lined Landfill	1994	10,094,872.00	6,717,907.00	3,609,260.63	25.76

Source: NC Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section. Solid Waste Management Annual Reports, FY2013-14; Landfill Capacity Report Fiscal Year 2013-2014.
http://portal.ncdenr.org/c/document_library/get_file?p_l_id=4649434&folderId=15429422&name=DLFE-80550.pdf.

Davidson County Municipal Solid Waste Management

The Davidson County Integrated Solid Waste Department consists of three divisions: Landfill, Sanitation, and Recycle.

Landfill

The Davidson County Landfill Permit #29-06 is a Sub-Title D Lined Sanitary Facility. This 550+ acre site, located in the heart of Davidson County on Old Highway 29, has been established as an Enterprise Fund. This means the facility is self-sufficient and not dependent on the General Tax Base for funding. All operations are funded through revenues received from tipping fees, state grants, and the sale of recyclables.

The Phase I area of operation, located on Roy Lopp Road, was closed November, 2008, at which time operations began in the Phase II area of operation. Life expectancy for the new Landfill addition (Phase II) should be 30+ years, and can be extended through diligent waste reduction from all Davidson County residents.

Sanitation

The county maintains 11 Recycling Centers (formerly known as Boxsites) for residential use. These sites are for the disposal of household garbage and the collection of recyclables by Davidson County Residents only. All garbage must be either in plastic bags or in suitable containers. Furniture, appliances, tires, household hazardous waste (household chemicals), electronics and large truck loads must be brought directly to the Main Landfill. Yard waste and wood must be taken to a local commercial wood recycler.

According to Davidson County Solid Waste Ordinances, Section C (2), the owner, occupant, tenant or lessee of any property shall remove or cause to be removed all solid waste from his property at least once each week, i.e. at least once each seven day period. Items accepted at County Recycling Centers include:

- Bagged Household Trash
- Co-mingled recyclables: plastics, cans (aluminum and steel), glass
- Mixed paper
- Cardboard
- Rechargeable batteries
- Textiles (clothing, shoes, stuffed animals, linens, etc.)
- Cellphones
- Eyeglasses
- Hearing Aides

Recycling

In 1997 the Integrated Solid Waste Department hired a full time Recycling Coordinator and established a more comprehensive recycling program. Over the last 14 years new materials have been added to the original program and materials processing has improved. Public education and outreach, aggressive advertising, special event promotions and the efficient material processing operation have helped the program considerably.

Residential participation is currently estimated at 18%. Commercial and industrial participation is slightly higher, but both have room for improvement.

In July, 1998 the Davidson County Department of Recycling opened a Material Recovery Facility (MRF). The old landfill transfer station was retrofitted and a conveyor system with a horizontal baler was installed. Most of the construction work was done by landfill staff at a costs savings of more than $100,000.

Prior to the July 1998 opening, an Inmate Labor Contract signed with the NC Department of Corrections assigned inmates to the MRF operations under the annual renewable contract. The inmates, supervised by Department of Corrections-trained county employees, separate co-mingled recyclables from Lexington and Thomasville and process the material along with the recyclables collected at the County's drop off sites. This facility processes more than eighty (80) tons per week (78).

City of Lexington Municipal Solid Waste Management

Recycling and waste collection residential services are available to city residents for recycling and various household disposals, including yard waste, grass and leaf collection.

Basic Residential Service consists of collection and disposal of:

- One rollout garbage container once per week
- One recycling bin once per week or rollout container bi-weekly
- Grass collection
- Small trash and yard waste equivalent to a total of two pickup truck loads (2 Tons) per month. (There is a fee plus tipping fees at the Davidson County landfill and/or wood recycling center for large collections exceeding two pickup truck loads.)
- Collection of leaves during “leaf season” (October - December) (79).

City of Thomasville Municipal Solid Waste Management

The city of Thomasville Sanitation Department provides the following basic residential services:

- The city will collect no more than two containers at any one stop (residential, office or institutional).
- The solid waste container should be placed curbside.
- The city will process one recycling bin at no cost. Extra material may be placed in a bag and placed beside the bin on collection day. Recyclables include: glass, aluminum/steel cans, plastic bottles and jugs, newspaper, corrugated cardboard, magazines, junk mail, catalogs, phone books, and all types of paper including cereal boxes, pizza boxes, and drink boxes. Electronic items such as computer-related equipment, VCRs, stereos, cameras, copy-fax machines, telephone equipment and televisions are also accepted for recycling. The following materials are NOT accepted: Styrofoam, aerosol cans, aluminum foil or foil plates, cookware, food or liquids, clothes hangers, light bulbs, paint cans, flower pots or containers of any kind, windows, plate glass, mirrors, disposable hygiene items, diapers, used oil, and plastic bags or sheeting.
- Loose leaf collection usually begins the first week in November and continues until mid-January.
- Grass clippings should be bagged or placed in containers for collection (except for leaf collection season when they can be loose).

- Cumulative amounts of solid waste, yard waste, trash, etc. should not exceed 5 cubic yards.
- Appliances and tires are collected on a call-in basis.

The Thomasville Sanitation Department does NOT collect:

- Renovation, construction or demolition material.
- Waste generated through services performed by a contractor or third party.
- Chemicals, used oil, hazardous or flammable material of any kind, ashes, or sealed metal drums. (Residents may dispose of this material at the Davidson County household Hazardous Waste Facility.)
- Automobile parts
- Dirt, rocks, bricks, concrete, loose garbage or trash (80).

RABIES

Rabies is a vector-borne disease that can be controlled among pets by having dogs and cats properly vaccinated. While pets can be protected that way, there is no practical way to control rabies in the wild, where it actually is more common. The following table lists the total number of rabies cases detected in Davidson County and its comparators over the period from 2007-2014.

Major rabies discussion points are these: First of all, rabies is only moderately common in Davidson County, with 83 cases identified in seven years, and 11 in 2014. For comparison, there were 22 cases in Orange County in 2014 alone. Second, rabies is more common in animals *other* than cats, dogs or bats. Of the 11 total rabies cases in Davidson County in 2014, the most common hosts were skunks (6 cases) and raccoons (4 cases). Statewide in 2014 53% of all animal rabies cases were in raccoons.

Table 211. Animal Rabies Cases (2007-2014)

Location	Total Number of Animal Rabies Cases							
	2007	2008	2009	2010	2011	2012	2013	2014
Davidson County	9	9	8	13	17	8	8	11
Randolph County	12	13	17	7	20	15	11	4
State of NC	474	452	473	397	429	431	380	352

Source: NC Division of Public Health, Epidemiology. Rabies. Facts and Figures. Rabies by County, Tables by Year. http://epi.publichealth.nc.gov/cd/rabies/figures.html.

CHAPTER SIX: COMMUNITY HEALTH SURVEY

METHODOLOGY

The Davidson County CHA/CHNA Team, assisted by Davidson County Health Department staff, conducted this primary data collection activity using a Survey Monkey™ on-line survey supplemented by paper surveys distributed via a "convenience sample" technique to groups who might not be able to access or use the Internet.

In April 2015, the primary partners began work on developing the community health survey. Team meetings were held quarterly, along with communication in the interim via email and phone. The team was tasked with promoting the on-line community health survey from July 13, 2015 to August 14, 2015. By September 28, 2015, 962 surveys had been completed and the Public Health Consultant and her team analyzed the survey results.

The 2015 Davidson County Community Health Survey solicited respondents' concerns about community health problems, unhealthy behaviors, and community social issues. Respondents were also queried as to their medical care access, personal health, and personal health behaviors. The survey instrument advised the participants that their responses would be confidential and not linked to them personally in any way.

The demographic profile of the survey respondents matched some of the demographic characteristics of the county. For instance, the representation of racial groups among survey respondents was similar to the racial/ethnic profile of the county. However, since the survey was collected via convenience sampling, some groups were over- or under-represented. For example, the survey sample was overwhelming female, more highly-educated, and wealthier than the general population. The respondent pool is discussed in greater detail in the following section. The survey instrument is appended to this report.

SURVEY RESPONDENT POOL

The following table compares the demographics of the survey respondent pool to the overall population of Davidson County as of 2014 US Census Bureau estimates.

- The survey sample significantly over-represented females.
- The survey sample was adequately balanced racially and ethnically to approximate census figures.
- As to age distribution, it should be noted that the survey and census figures cannot be compared directly since the proportions via the census include all persons in the county and the survey sample excluded persons under the age of 18. However it does appear that the survey over-represented persons in the age category 50 and older (46.7% survey vs. 38% census).
- The survey sample closely approximated census figures for unemployment and income.
- The survey sample significantly under-represented those with less than a high school/GED diploma and significantly over-represented those with a bachelor's degree or higher.

Demographic Comparison: 2015 Survey Respondents to Davidson County Population

Demographic Category	2015 Survey Participants		County Population (2014)
	Number	**Percent**	**Percent**
Gender			
Male	174	19.7	49
Female	711	80.3	51
Race/Ethnicity			
White/Caucasian	739	83.5	86.9
African American/Black	86	9.7	9.4
Asian	1	0.1	1.5
Native American	9	1.0	1.8
Two or more Races	20	2.3	1.5
Other	30	5.7	n/a
Of Hispanic or Latino Origin	50	5.7	6.8
Age			
18-19	21	2.4	6.4 (15-19)
20-29	114	12.9	11.1
30-39	133	15.0	11.4
40-49	203	23.0	14.6
50-59	230	26.0	15.1
60-64	98	11.1	6.2
65 and Older	85	9.6	16.7
Other			
Unemployed	44	5.0	5.9
Household Income < $20,000	124	14.6	11.9 (<$25,000)
Household Income ≥ $50,000	421	49.6	43.6
Less than HS Diploma/GED	75	8.5	22.6
Bachelor's Degree of Higher	326	36.8	17.6

SURVEY RESULTS

A total of 962 completed surveys were collected. Survey responses were analyzed for frequency of response using the built-in capacities of Survey Monkey. It should be noted that not every respondent answered every question. The number and corresponding percentage of individuals who chose each response category are presented in the analysis below. *Note: The order of some of the questions in the analysis may differ from their order in the actual survey, having been rearranged for clarity.*

Demographic Questions

Survey participants were asked to provide demographic information about themselves by selecting appropriate responses from lists of categories of age, gender, race and ethnicity, education level, and household income. This demographic information was collected in order to assess how well the survey participants represented the general population of Davidson County.

What is the ZIP code of your PRIMARY residence in Davidson County? (n=854; 108 unanswered)

Answer Options	Percent	Count
27292 (Lexington)	31.5%	269
27295 (Lexington)	29.0%	248
27360 (Thomasville)	23.7%	202
27239 (Denton)	5.4%	46
27299 (Linwood)	4.4%	38
27260 (High Point)	2.8%	24
27012 (Clemmons)	2.5%	21
27351 (Southmont)	0.4%	3
27373 (Wallburg)	0.4%	3

- 60% of respondents were from Lexington.
- 24% of respondents were from Thomasville.
- ~16% of respondents were from elsewhere in Davidson County.

How old are you? (n=884; 78 unanswered)

Answer Options	Percent	Count
18-19	2.4%	21
20-29	12.9%	114
30-39	15.0%	133
40-49	23.0%	203
50-59	26.0%	230
60-64	9.6%	85
65-69	6.0%	53
70-79	3.5%	31
80-85	0.8%	7
85 or older	0.8%	7

- Approximately 15% of the participants were between 18 and 30. Countywide, approximately 17% of the population is within this age range.
- Around 74% of respondents were between the age of 30 and 64. 47.3% of the county's population falls within this age range.
- Around 11% of those surveyed were over the age of 65. County-wide, 16.7% of the population is over 65.

Are you male or female? (n=885; 77 unanswered)

Answer Options	Percent	Count
Male	19.7%	174
Female	80.3%	711

- Approximately 20% of the survey participants were male.
- The population of the county is split, roughly, 50/50.

Are you of Hispanic, Latino, or Spanish origin? (n=878; 84 unanswered)

Answer Options	Percent	Count
Yes	5.7%	50
No	94.3%	828

- 5.7% of the survey respondents were of Hispanic origin. At the county level, 6.8% of the population is of Hispanic/Latino/Spanish origin.

What do you consider your race? (n=885; 77 unanswered)

Answer Options	Percent	Count
White only	83.5%	739
Black/African American only	9.7%	86
Native American/American Indian/Alaska Native only	1.0%	9
Asian only	0.1%	1
Pacific Islander only	0.0%	0
Other race not listed here	3.4%	30
Two or more races	2.3%	20

- The majority of the survey respondents were white.
- The representation of racial groups among survey respondents is similar to the profile of the county, which is 86.9% white and 9.4% African-American/black.

What is the highest level of school, college or training that you have finished? (n=884; 78 unanswered)

Answer Options	Percent	Count
Less than 9th grade	3.1%	27
9th – 12th grade, no diploma	5.4%	48
High school diploma (or GED/equivalent)	17.3%	153
Associate's Degree or Vocational Training	19.5%	172
Some college (no degree)	17.9%	158
Bachelor's degree	21.8%	193
Graduate or professional degree	15.0%	133

Other write-ins: skilled trade (2), 10th, currently in college (3), 2 associates degrees.

- Nearly 37% of the respondents had a Bachelor's degree or higher, compared to 17.6% Davidson County residents estimated to be so educated.
- 91.5% of the respondents had at least a high school education, compared to 80.4% at the county-level.
- Around 8.5% of the participants had less than a high school education.

What was your total household income last year, before taxes? This includes everybody age 15 or older who lives in your house and has income. (n=849; 113 unanswered)

Answer Options	Percent	Count
Less than $20,000	14.6%	124
$20,000 to $29,999	15.2%	129
$30,000 to $39,999	11.4%	97
$40,000 to $49,999	9.2%	78
$50,000 to $59,999	7.9%	67
$60,000 to $69,000	8.6%	73
$70,000 to $79,000	8.6%	73
$80,000 to $99,000	11.0%	93
$100,000 or more	13.5%	115

- 14.6% of respondents make less than $20,000.
- 29.9% of participants make less than $30,000.
- 24.5% make more than $80,000.

How many people does this income support? If you are paying child support but your child is not living with you, this still counts as someone living on your income. (n=857; 105 unanswered)

Answer Options	Percent	Count
1 person	16.6%	142
2 people	34.1%	292
3 or 4 people	37.7%	323
5 or more people	11.7%	100

- Around 17% of participants support themselves on their stated income.
- Approximately 34% support two people in the listed income.
- Around 50% of the respondents supported households of three more.

What is your employment status? (n=882; 80 unanswered)

Answer Options	Percent	Count
Employed full-time	69.5%	613
Employed part-time	10.8%	95
Retired	9.9%	87
Unemployed	5.0%	44
Disabled	4.6%	41
Student	5.0%	44
Homemaker	2.8%	25
Self-employed	1.2%	11

- 5% of the respondents were unemployed, compared to a county unemployment rate of 5.9.
- Nearly 70% of respondents were employed full-time; an additional 10.8% had part-time jobs.

Does anyone in your household have a working telephone? (n=880; 82 unanswered)

Answer Options	Percent	Count
No; no one in my household has a telephone of any kind	1.5%	13
Yes: a land line only	4.5%	40
Yes: one or more cell phone(s) only	42.5%	374
Yes: both a land line and one or more cell phones	51.5%	453

- Around 51.5% of the participants have both a land line and cell phone(s).
- Approximately 43% of respondents use only cell phones.

Do you have access to the Internet? (n=882; 82 unanswered)

Answer Options	Percent	Count
Yes	92.2%	813
No	7.8%	69

- A vast majority of the participants had access to the Internet.

Health Problems

Survey participants were asked to consider a list of 21 health problems and select the five they thought had the greatest overall effect on health in Davidson County. If they selected Cancer as an issue, they had the option of "writing-in" the kind of cancer they thought was most important. The list of responses below is arranged in descending order of the frequency with which a named behavior was chosen (n=961; 1 unanswered).

Health Problems	Percent	Count
Obesity/overweight	60.4%	580
Diabetes	53.9%	518
Cancer	53.6%	515
Aging problems (e.g., Alzheimer's disease, arthritis, hearing/vision loss, etc.)	50.8%	488
Heart disease/heart attack	49.0%	471
Mental health (depression, schizophrenia)	44.7%	430
Dental health	23.8%	229
Lung disease (asthma, emphysema, COPD, chronic bronchitis)	23.5%	226
Teenage pregnancy	23.4%	225
Accidental injuries NOT involving vehicles (e.g., falls, choking, drowning, poisoning, gun accidents)	17.6%	169
Motor vehicle accident injuries	17.3%	166
Infectious/contagious diseases (e.g., TB, flu, pneumonia, food poisoning)	16.9%	162
Stroke	14.4%	138
Asthma	10.7%	103
Sexually transmitted diseases (e.g., chlamydia, gonorrhea)	10.5%	101
HIV/AIDS	5.6%	54
Kidney disease	4.8%	46
Gun-related injuries	3.6%	35
Birth defects	2.7%	26
Liver Disease	2.4%	23
Infant death	2.2%	21

Cancer write-ins: breast (109), lung (108), any/all (37), colon (25), skin (8), lymphoma (5), ovarian (4), brain (4), prostate (3), leukemia, throat, pancreatic, liver.

- Obesity/overweight was the most commonly identified health problem in Davidson County, selected by 60% of respondents.
- Diabetes and Cancer were the next most commonly selected health problems, each selected by around 53% of participants.
- Aging problems and heart disease/heart attack were each selected by around 50% of respondents.
- Among female respondents and white respondents, the top five health problems were the same but with cancer ranked second and diabetes ranked third.
- Among male respondents, the top five health problems were: diabetes, aging problems, cancer, obesity/overweight, heart disease/heart attack.
- Among African-American/black respondents, the top five health problems were: cancer, diabetes, aging problems, heart disease/heart attack, and accidental injuries. Obesity/overweight ranked sixth.
- Among Hispanic residents, the top five health issues were: diabetes, dental health, aging problems, accidental injuries, and cancer.
- Among respondents over the age of 65, the top five health issues were: aging problems, diabetes, obesity/overweight, cancer, heart disease/heart attack.

- Something to note: among all, males, females, white, and senior respondents, mental health ranked sixth. Among African-American/Black respondents, if ranked 9th, after asthma and dental health. Among Hispanic respondents it ranked 11th.

Unhealthy Behaviors

Survey participants were asked to consider an alphabetized list of 17 unhealthy behaviors and select the five they thought had the greatest overall effect on health and safety in Davidson County. The list of responses below is arranged in descending order of the frequency with which a named behavior was chosen (n=958; 4 unanswered).

Unhealthy Behaviors	Percent	Count
Drug abuse (incl. both prescription drugs and illegal drugs)	78.1%	748
Alcohol abuse	63.0%	604
Lack of exercise/poor physical fitness	58.7%	562
Poor eating habits	50.2%	481
Smoking/tobacco use	45.8%	439
Lack of parenting skills	40.4%	387
Not going to the doctor for preventive check-ups and screenings	37.1%	355
Having unsafe sex	27.2%	261
Reckless/drunk driving	23.6%	226
Not going to a dentist for preventive checkups and cleaning	18.5%	177
Violent, angry behavior (including rape/sexual assault)	18.2%	174
Suicide	7.3%	70
Not getting immunizations (“shots”) to prevent disease	6.4%	61
Not using seatbelts	5.3%	51
Not getting prenatal (pregnancy) care	4.9%	47
Not using child safety seats	4.1%	39
Poor preparation for disasters and emergencies	4.0%	38

- Drug abuse was selected by more than three-quarters (78%) of respondents as the most important unhealthy behavior in Davidson County.
- Alcohol abuse was the second most commonly identified unhealthy behavior, chosen by 63% of respondents.
- The next most commonly identified unhealthy behaviors were lack of exercise/poor physical fitness (~59%) followed by poor eating habits (50%).
- Smoking/tobacco use was chosen by approximately 46% of participants.
- Among female respondents and among white respondents, the top 5 important unhealthy behaviors matched the overall responses.
- Among males the only difference was that not going to the doctor for preventative check-ups ranked 5th and smoking/tobacco use slipped to sixth.
- Among African-American/black respondents, the top three were the same but having unsafe sex ranked fourth and not going to the doctor for preventative check-ups ranked fifth.
- Among Hispanic respondents, the top five unhealthy behaviors were: drug abuse, having unsafe sex, not going to a dentist for preventative check-ups, alcohol abuse, and not going to the doctor for preventative check-ups.
- Among senior respondents, the list was the same as the overall responses, but poor eating habits was third and lack of exercise fell to fourth.

Community Issues

Survey participants were asked to consider an alphabetized list of 26 community social issues and select the five they thought had the greatest overall effect on quality of life in Davidson County. If they selected "Lack of health care providers" as an issue, they had the option of "writing-in" the kind of provider they felt was lacking. The list of responses below is arranged in descending order of the frequency with which a named issue was chosen (n=956; 6 unanswered).

Community Issues	Percent	Count
Low income/poverty	55.4%	530
Unemployment/underemployment	49.3%	471
Affordability of health services	49.1%	469
Homelessness	32.2%	308
Crime (e.g., theft, murder, assault)	30.5%	292
Hunger	26.8%	256
Neglect and abuse of children	25.0%	239
Lack of/inadequate health insurance	24.4%	233
Lack of counseling/mental health services/support groups	21.8%	208
Lack of recreational facilities (e.g., parks, trails, community centers)	19.6%	187
Dropping out of school	19.5%	186
Availability of healthy food choices in restaurants and grocery stores	19.2%	184
Inadequate/unaffordable housing	15.5%	148
Racism/discrimination	12.2%	117
Transportation options	11.8%	113
Neglect and abuse of the elderly	11.2%	107
Animal control issues/rabies	11.0%	105
Availability of child care	10.8%	103
Gang activity	9.9%	95
Lack of healthcare providers	8.1%	77
Unsafe/unmaintained roads	7.7%	74
Unsafe schools (e.g., in/at-school crime, violence, bullying)	7.4%	71
Neglect and abuse of domestic partners	4.7%	45
Lack of culturally appropriate services for minorities	4.4%	42
Pollution (air, water, land)	3.5%	33
Bioterrorism	1.0%	10

Lack of providers written in: family/general/primary (6), dental (3), specialists (3), mental health (2), Medicare, obstetrics/gynecology, pediatrics, nutritional, geriatric caretakers

- Low income/poverty was the most frequently identified community concern in Davidson County; it was selected by around 55% of the survey respondents.
- Unemployment/underemployment and affordability of health services were the second and third most frequently identified concerns, each chosen by around 49% of participants.
- Homelessness was the fourth community concern, selected by 32% of respondents, followed by crime, which was chosen by 30% of participants.
- Among female respondents, as well as among male respondents, the top five concerns were the same as the overall responses, but with affordability of health services ranking second and unemployment/underemployment ranking third.
- Among white respondents the top five concerns matched the overall responses.

- Among African-American/Black participants, the top five community concerns were: affordability of health services, homelessness, crime, low income/poverty, and dropping out of school.
- Among Hispanic respondents, the top five community concerns were: affordability of health services, lack of healthcare providers, animal control issues, lack of/inadequate health insurance, and racism/discrimination.
- Among respondents over the age of 65, the top concerns were the same, but with affordability of health services ranked first.

Substance Abuse

Survey participants were asked to consider a list of substance abuse issues and select the three they thought were the biggest substance abuse problems in Davidson County. They also had the option of writing in an "other" substance abuse problem. The list of responses below is arranged in descending order of the frequency with which a named issue was chosen (n=951; 11 unanswered).

Substance Abuse Issues	Percent	Count
Alcohol abuse	59.2%	563
Abusing prescription drugs/pills	58.1%	553
Other "hard" drugs (E.g., cocaine, crack, heroin)	36.1%	343
Drinking and driving	31.4%	299
Marijuana	29.8%	283
Methamphetamines (Meth)	28.7%	273
Using someone else's prescription drugs/pills	21.3%	203
I really don't know	12.9%	123
Huffing (inhaling glue, Dust-Off, Whiteout, etc.)	1.9%	18

Other write-ins: hydrocodone, tobacco (3), crack, heroine, Cannabicyclohexanol [authors note: this is a variety of synthetic cannabis]

- The most commonly selected substance abuse issue was alcohol abuse, identified by 59% of respondents, followed by abusing prescription drugs/pills, which was chosen by 58% of respondents.
- The third most frequently selected substance abuse issue was other "hard" drugs, which was chosen by 36% of respondents.
- Among female respondents and among male respondents, the top three substance abuse problems were the same.
- Among white respondents, abuse of prescription drugs ranked first and alcohol abuse ranked second.
- Among African-American/Black respondents, abuse of prescription pills ranked first, followed by alcohol abuse, and drinking and driving.
- Among Hispanic respondents, the top three drug abuse concerns were alcohol abuse, drinking and driving, and marijuana.
- Among respondents over 65, the top concerns were alcohol abuse, abusing prescription pills, and drinking and driving.

Health Care Access Questions

Where do you get most of your health-related information or advice? (n=901; 61 unanswered)

Answer Options	Percent	Count
Doctor/nurse	55.6%	501
Internet	18.1%	163
Friends and family	12.0%	108
Hospital	3.8%	34
Newspaper/magazine/TV	3.4%	31
Church	2.3%	21
Health Department	1.7%	15
Social media (Facebook, Twitter, etc.)	1.0%	9
Pharmacist	0.9%	8
School	0.9%	8
Help lines	0.3%	3

Other write-ins: myself (4), law enforcement (2), insurance agent, VA, work (3), CDC/WHO, NCSU Extension

- Approximately 56% of survey respondents get their health-related information from a doctor or nurse.
- The internet was the second most popular source of health information (18%) followed by friend and family members (12%).

Where do you go most often when you are sick? (n=910; 52 unanswered)

Answer Options	Percent	Count
Private Doctor's office	64.9%	591
I don't go anywhere when I'm sick	9.8%	89
Urgent Care Center or Walk-In Clinic	9.7%	88
OB/GYN or Women's Health Provider	6.6%	60
Hospital Emergency Department	5.1%	46
Medical Ministries Clinic	2.7%	25
Pharmacy	1.2%	11

Other write-ins: VA (7), Church with health clinic in Winston-Salem, on the job clinic, only when sick (2), oncologist

- A majority of survey respondents, around 65%, go to a private doctor's office when they are sick.
- The second most common responses were "I don't go anywhere when I'm sick" and Urgent Care Center/Walk-In Clinic, both with around 10%.
- Among women, around 8% don't go anywhere when sick. 66% see a private doctor and 10.4% go to Urgent Care.
- Among males, around 18.6% don't go anywhere when sick. Around 59% see a private doctor when sick and 9.6% go to the emergency department of a hospital.
- Among white respondents, around 71% see a private doctor when sick. 7.9% go to an Urgent Care Center/Walk-In Clinic and 7.5% don't go anywhere when sick.

- Among African-Americans, around 39% see a private doctor when sick and around 25% go to an Urgent Care Center. Approximately 21% go to the emergency department of a hospital. 2.4% don't go anywhere when sick.
- Among Hispanic respondents, 75% don't go anywhere when sick.
- Among respondents over 65, approximately 87% see a private doctor when sick.

Where do you go when you need a yearly check-up or physical? (n=912; 50 unanswered)

Answer Options	Percent	Count
Private Doctor's office	63.9%	583
Health Department	2.5%	23
Urgent Care Center or Walk-In Clinic	3.4%	31
Medical Ministries Clinic	2.5%	23
OB/GYN or Women's Health Provider	28.4%	259
Pharmacy	0.5%	5
I don't get an annual check-up or physical.	11.4%	104

Other write-ins: VA (8), on the job clinic, hospital for mammogram

- A majority of respondents see a private doctor for their yearly physical or check-up.
- Around 29% see an OB/GYN or Women's Health Provider for a physical.
- 11.4% of participants reported not getting an annual check-up or physical.
- Among women, around 9% don't get an annual physical/check-up. 62.2% see a private doctor and 35.5% see a women's health provider or OB/GYN for a physical.
- Among men, 23% do not get an annual physical.
- Among white respondents, around 68% see a private doctor for an annual physical and 30% see an OB/GYN. 8.1% do not get an annual check-up.
- Among African-American respondents, 47% see a private doctor for an annual check-up and 27% see a women's health provider. Around 19% visit an Urgent Care Center for an annual physical and 11.8% do not get an annual check-up.
- Among Hispanic respondents, 74% don't get an annual physical and 12% see a private doctor for an annual check-up.
- Among senior respondents, 89% see a private doctor for their annual physical.

Do you currently have any kind of health insurance? (n=922; 40 unanswered)

Answer Options	Percent	Count
No, I do not have health insurance of any kind.	12.8%	118
Yes: Private insurance I purchased from a vendor (e.g., Aetna, Blue Cross/Blue Shield).	11.8%	109
Yes: Insurance I purchased on the Affordable Care Marketplace.	1.7%	16
Yes: Private insurance provided through my employer.	59.5%	549
Yes: Private insurance provided through my spouse's employer or my parent's employer.	6.8%	63
Yes: Military insurance (e.g., VA benefits, Tricare, CHAMPUS)	1.7%	16
Yes: Medicare	8.5%	78
Yes: Medicaid	5.7%	53

- Nearly 13% of participants do not currently have any kind of health insurance.

- Nearly 12% purchase their own private insurance; an additional 1.7% purchased insurance via the Affordable Care Marketplace.
- Around 66% have private insurance through their own, or their spouse's, employer.
- 8.5% were on Medicare; 5.7% were insured through Medicaid.
- Among female respondents, 10.7% reported not having any health insurance.
- Among male respondents, 21.5% reported having no health insurance of any kind.
- Among white respondents, 7.2% answered that they did not have health insurance.
- Among African-American/Black respondents, 32.6% reported having no health insurance.
- Among Hispanic respondents, 84% reported being without health insurance of any kind.
- Among seniors, 55.7% reported being insured through Medicare. 33% purchase private insurance, 34% are privately insured through an employer. Individuals were allowed to select more than one answer, so respondents could be on any combination of insurance types.

Was there a time in the past 12 months when you needed medical care but could not get it? (n=913; 49 unanswered)

Answer Options	Percent	Count
No; I got all the medical care I needed in the past 12 months.	72.8%	665
Yes, because I didn't have health insurance and couldn't afford the cost by myself.	11.9%	109
Yes, because I had health insurance but it didn't cover what I needed.	4.4%	40
Yes, because I had health insurance but my share of the cost (deductible/co-pay/co-insurance) was too high.	9.9%	90
Yes, because the provider (doctor, clinic or hospital) would not take my insurance or Medicaid.	1.3%	12
Yes, because I didn't have transportation to get there.	1.3%	12
Yes, because I didn't know where to go.	1.2%	11
Yes, because it took too long to get an appointment.	3.4%	31
Yes, because the doctor wasn't taking new patients.	1.1%	10

Other reasons written in: not enough money (2), care denied by insurance (3), couldn't get appointment (2)

- Approximately 27% of the survey respondents had a problem getting needed health care at some point in the past year.
- Among the respondents who had a problem getting needed health care, the most common reason was lack of insurance.
- The next most common barrier to healthcare was the high cost (co-pays, deductibles, co-insurance), even with health insurance.

Was there a time in the past 12 months when you could not get a medically necessary prescription? (n=904; 58 unanswered)

Answer Options	Percent	Count
No; I could get all the medically necessary prescriptions I needed.	76.3%	690
Yes, because I didn't have health insurance and couldn't afford the cost by myself.	11.4%	103
Yes, because I had health insurance but it didn't cover any prescriptions or the prescription I needed.	4.4%	40
Yes, because I had health insurance drug coverage but my share of the cost (deductible/co-pay/co-insurance) was too high.	8.0%	72
Yes, because the pharmacy would not take my insurance or Medicaid.	1.0%	9
Yes, because I had problems with Medicare Part D coverage.	0.2%	2
Yes, because I didn't have transportation to get there.	0.4%	4
Yes, because I didn't know where to go.	0.2%	2

Other reasons written in: availability of drug (3), too expensive (3), couldn't afford doctor visit to get Rx (2), pharmacy closed

- Around 24% of the survey respondents had a problem filling a medically necessary prescription at some point in the last year.
- The most common reason for not getting a medically necessary prescription was "didn't have health insurance."
- The next most common barrier to prescription access was the high cost (co-pays, deductibles, co-insurance), even with health insurance.

What is the main reason that you or your family would not be up-to-date on vaccines? (n-910; 52 unanswered)

Answer Options	Percent	Count
My family and I are up-to-date on our vaccines.	84.8%	772
Vaccines cost too much.	4.2%	38
I don't want to see my child in pain.	0.1%	1
I have religious reasons not to vaccinate.	0.2%	2
I am afraid of possible side effects.	2.5%	23
I believe the vaccines cause the disease.	1.5%	14
I don't know when they are due.	6.6%	60

- Most respondents (and their families) are up-to-date on vaccines: around 85%.
- Among those who are not (or would not be) up-to-date, the most common reason was not knowing when they are due, followed by high cost.

If a friend or family member needed counseling for a mental health, or a drug/alcohol abuse problem, who would you tell them to contact?

Answer Options	Percent	Count
Doctor	43.4%	395
Private counselor or therapist	36.0%	328
Minister/religious official	36.0%	328
Daymark Recovery Services	27.4%	250
Family Services	24.3%	221
Support group (e.g., AA, Al-Anon)	19.8%	180
School counselor, nurse or social worker	18.3%	167
Not sure/don't know	17.6%	160
Monarch	9.5%	87
Local hospital	9.4%	86
ARC	3.0%	27

Other write-ins: Other (family (2), Path of Hope (2), Cardinal Innovations (4), depends on insurance situation (2), VA, search online for providers, anyone who could help, Teen Challenge, anyone but Daymark, no one can help here.

- Just over 43% of survey respondents would refer someone who needed mental health or drug/alcohol abuse counseling to a doctor.
- The second most common options for counseling, each selected by around 36% of respondents, were private counselor or therapist and minister/religious official.

If a friend or family member were thinking about suicide, who would you tell them to call or talk to? (n=910; 53 unanswered)

Answer Options	Percent	Count
Minister/religious official	46.2%	420
Private counselor or therapist	38.0%	346
Doctor	37.5%	341
National or other crisis phone line	33.2%	302
Family Services	22.2%	202
Local hospital	21.8%	198
Daymark Recovery Services	21.5%	196
School counselor, nurse or social worker	20.3%	185
Not sure/don't know	14.1%	128
Monarch	8.0%	73

- More than 46% of survey participants would tell someone thinking about suicide to talk to a minister or religious official.
- The next most common suggestions for help for someone suicidal, both identified by around 38% of participants, were a private counselor/therapist and a doctor.

Personal Health Behaviors

Respondents were asked to answer a number of questions describing their personal health behaviors such as consumption of alcoholic beverages, smoking, physical activity, and diet.

Considering all types of alcoholic beverages, on how many days during the past month did you have 5 or more alcoholic drinks on a single occasion or at one sitting? (n=907; 55 unanswered)

Answer Options	Percent	Count
None	81.1%	736
One or two times	14.2%	129
Three or four times	2.9%	26
Five or more times	1.8%	16

- 81% of participants report never having more than 5 alcoholic drinks in one sitting within the past month.
- Around 14% of respondents reported engaging in binge drinking (more than 5 drinks in one sitting) once or twice in the past month.

Do you use "electronic-cigarettes" (e.g., e-cigs, vape pens, e-hookahs, etc.)? (n=907; 55 unanswered)

Answer Options	Percent	Count
Yes	3.6%	33
No	96.4%	874

- The vast majority of survey respondents (96.4%) do not use electronic cigarette products.

Do you smoke regular (tobacco) cigarettes? (n=908; 54 unanswered)

Answer Options	Percent	Count
I have never smoked.	62.7%	569
I used to smoke but have quit.	25.1%	228
I smoke less than one pack a day.	9.4%	85
I smoke one or more packs a day.	2.9%	26

- Around 63% of survey respondents have never smoked.
- 25% of respondents used to smoke but have quit.
- 12.3% of respondents currently smoke.

Where would you go for help if you wanted to quit smoking? (n=900; 62 unanswered)

Answer Options	Percent	Count
Not applicable: I don't smoke	76.6%	689
Not applicable: I don't want to quit smoking	2.9%	26
Quit Now NC/Quit Line	4.3%	39
Health Department	1.2%	11
Pharmacy/over-the-counter product	4.1%	37
Hospital	0.1%	1
Doctor, private counselor/therapist	11.1%	100
Not sure/don't know	7.0%	63

- Although the majority of survey respondents do not smoke, the most common recommendation for help quitting was a doctor, private counselor or therapist.
- Around 3% of respondents do not wish to quit smoking.

Do you support tobacco-free outdoor public areas such as parks, festivals, fairs, etc? (n=902; 60 unanswered)

Answer Options	Percent	Count
Yes	75.3%	679
No	18.3%	165
Don't know	6.4%	58

- Three-quarters of respondents support tobacco-free outdoor public spaces.

The recommendation for physical activity is 30 minutes a day, 5 days a week (2½ hours per week.) Pick the one main reason that you do not get this much physical activity. (n=856; 106 unanswered)

Answer Options	Percent	Count
Nothing; I do get this much physical activity	35.4%	303
I don't have time to exercise	26.4%	226
I don't like to exercise	15.2%	130
I feel like I get this at my work	12.3%	105
I am physically disabled	4.7%	40
There is no safe place to exercise	3.9%	33
It costs too much to exercise	2.2%	19

Other written-in reasons: lazy (7), too tired (5), physical issues (6), don't make the time (5), too hot (2), everyday life is active (4), no convenient location (4)

- Approximately 35% of respondents say they get the recommended amount of physical activity.
- Among the respondents who say they do not get the recommended amount of exercise, the most common reason was that they don't have time to exercise.
- The next most common reason was that they don't like to exercise.

One recommendation for healthy eating is to eat at least five (5) servings of fruits and vegetables a day (NOT counting French fries or potato chips). Pick the one main reason that you do not eat this way. (n=898; 64 unanswered)

Answer Options	Percent	Count
Nothing; I eat 5 or more servings a day.	35.1%	315
I (or my family) won't eat them.	4.1%	37
I don't know how to prepare them.	1.0%	9
They go bad before we eat them.	11.6%	104
I don't have access to fruits and vegetables.	1.1%	10
I don't think they are important.	2.3%	21
I just don't think about it.	16.0%	144
I don't have time to fix them.	6.6%	59
They're too expensive.	17.7%	159

Other written-in reasons: eat them but not enough (10), I try but don't always get 5 servings (5), don't like them (3), restaurants don't have many options (2), no time to prepare, not always available, too costly (3), I eat what's easiest

- 35% of participants say they eat the recommended 5 servings of fruits and vegetables a day.
- Among those who say they do not eat the recommended amount, the most common reason cited is that fruits and vegetables are too expensive. The next most common reason was "I just don't think about it."

Personal Health and Health Screenings

Have you ever been told by a <u>doctor, nurse, or other health professional</u> that you have any of the following? (n=904; 58 unanswered)

Answer Options	Yes		No		Count
Angina/heart disease	43	5.2%	783	94.8%	826
Lung disease	100	12.0%	734	88.0%	834
Cancer	67	8.0%	766	92.0%	833
Depression or anxiety	319	37.8%	526	62.2%	845
Diabetes	116	13.8%	725	86.2%	841
High blood pressure	291	33.6%	574	66.4%	865
High cholesterol	263	30.7%	594	69.3%	857
Overweight/obesity	364	42.3%	496	57.7%	860

- The most common diagnosis among survey respondents was overweight/obesity: approximately 42% of participants say they have received this diagnosis from a health professional.
- Nearly 38% of respondents have been diagnosed with depression or anxiety.
- Around 34% have been diagnosed with high blood pressure.
- Approximately 31% have been told they have high cholesterol.
- Around 14% have been diagnosed with diabetes (not including gestational diabetes).
- 12% have been told they have a lung disease such as asthma, COPD, or chronic bronchitis.
- 8% have received a cancer diagnosis at some point in their lives.

- Just over 5% have been diagnosed with heart disease or angina.
- Among female respondents, nearly 44% have been diagnosed as overweight/obese and nearly 41% have been diagnosed with depression or anxiety. Approximately 30% have been diagnosed with high blood pressure or high cholesterol. Around 12% have been diagnosed with diabetes.
- Among male participants, 43.5% have been diagnosed with high blood pressure. Around 37% have been diagnosed with high cholesterol or overweight/obesity. Just over 22% have been diagnosed with diabetes. Around 26% have been diagnosed with depression/anxiety.
- Among white respondents, just over 44% have been diagnosed as overweight/obese and around 40% have been diagnosed with depression. Around 33% have been diagnosed with high blood pressure and 32% with high cholesterol. Nearly 13% have been diagnosed with diabetes.
- Among African-American/Black respondents, nearly 41% have been diagnosed with high blood pressure. 36.5% have been diagnosed as overweight/obese and around 30% have been diagnosed with high cholesterol. Around 29% have been diagnosed with depression/anxiety; just over 23% have been diagnosed with diabetes.
- Among Hispanic respondents, 22% have been diagnosed with overweight/obesity. Around 20% have been diagnosed with high blood pressure or high cholesterol. Just over 18% have been diagnosed with depression or anxiety. 6% have been diagnosed with diabetes.
- Among respondents over the age of 65, more than half had been diagnosed with high blood pressure or high cholesterol. 47% had been diagnosed as overweight/obese and 31% with diabetes. 28% had been diagnosed with depression/anxiety. Approximately 20% had been diagnosed with cancer or lung disease, and around 18% had been diagnosed with heart disease/angina.
- Among the uninsured, 35% had been diagnosed with depression/anxiety and around 29% had been diagnosed with overweight/obesity. Nearly 23% had been diagnosed with high blood pressure and approximately 17% had been diagnosed with high blood pressure. Around 11% had been diagnosed with diabetes.

How would you rate your own health? (n=888; 74 unanswered)

Answer Options	Count	Percent
Excellent	108	12.2%
Good	386	43.5%
Average	315	35.5%
Below Average	65	7.3%
Poor	14	1.6%

- Approximately 12% of respondents rate their own health as excellent.
- Almost 9% rate their own health as below average or poor.

If you are a male, do you conduct monthly testicular self-exams? (n=872; 90 unanswered)

Answer Options	Percent	Count
Yes	6.4%	56
No	12.2%	106
Not sure/don't know	2.2%	19
N/A; I am a female	79.2%	691

- Excluding the females from the calculations, 181 individuals (presumably male, though only 174 males identified themselves as such on the survey) responded to this question. Among those 181, 31% conduct monthly testicular self-exams and 59% do not.

If you are a male age 50 or older, do you have a prostate exam (e.g., PSA blood test or digital rectal exam) as frequently as recommended by a doctor or other health care provider? (n=869, unanswered 93)

Answer Options	Percent	Count
Yes	9.6%	83
No	3.7%	32
Not sure/don't know	0.6%	5
N/A; I am a female, or a male under age 50	86.2%	749

- 102 participants were males over the age of 50; 120 people responded to this question, excluding those who said the question did not apply to them.
- 69% of those 120 individuals report having prostate exams as frequently as recommended.

If you are a female, do you conduct monthly breast self-exams? (n=891; 71 unanswered)

Answer Options	Percent	Count
Yes	46.9%	418
No	32.0%	285
Not sure/don't know	1.3%	12
N/A; I am a male	19.8%	176

- 711 participants identified themselves as female. 715 individuals responded to this question, excluding those who said the question did not apply to them.
- Among those 715, 58.5% conduct monthly breast self-exams.

If you are a female age 40 or older, do you have an annual mammogram (breast x-ray)? (n=890; 72 unanswered)

Answer Options	Percent	Count
Yes	44.3%	394
No	11.1%	99
Not sure/don't know	0.4%	4
N/A; I am a male, or a female under age 40	44.2%	393

- 476 participants identified themselves as females over the age of 40. 497 individuals responded to this question, excluding those who said the question did not apply to them.
- Among those 497, 79% have an annual mammogram.

If you are a female age 21 or older, do you have a Pap smear as frequently as recommended by a doctor or other health care provider? (n=886; 76 unanswered)

Answer Options	Percent	Count
Yes	61.6%	546
No	15.7%	139
Not sure/don't know	0.5%	4
N/A; I am a male, or a female under age 21	22.2%	197

- 694 participants identified themselves as females over the age of 20. 689 individuals responded to this question, excluding those who said the question did not apply to them.
- 79% those 689 have a Pap smear as frequently as recommended.

If you are a male or female age 50 or older, have you ever had a colon cancer screening (e.g., fecal occult blood test, sigmoidoscopy, or colonoscopy)? (n=873; 89 unanswered)

Answer Options	Percent	Count
Yes	37.0%	323
No	12.7%	111
Not sure/don't know	0.6%	5
N/A; I am under age 50	49.7%	434

- 413 participants identified themselves as over the age of 50. 439 individuals responded to this question, excluding those who said the question did not apply to them.
- Of those 439, 78% have had a colon cancer screening.

All males and females: Do you conduct monthly skin self-checks (for moles, skin changes, etc.)? (n=892; 70 unanswered)

Answer Options	Percent	Count
Yes	60.2%	537
No	36.2%	323
Not sure/don't know	3.6%	32

- 60% of respondents say they conduct monthly skin self-checks.

Environmental Health

Do you and your family recycle? (n=854; 108 unanswered)

Answer Options	Percent	Count
Yes	73.3%	626
No, because it is too much trouble to recycle.	11.0%	94
No, because I don't know where to take materials for recycling.	5.0%	43
No, because my garbage pick-up does not offer recycling.	10.7%	91

Other written-in reasons: no further explanation (20), sometimes (2), inconvenient (2), not a habit, take our own trash (4), bin issues (6)

- Around 73% of respondents recycle.
- Among those who don't the main reasons were that it's too much trouble (11%) and that garbage pick-up services do not include recycling (10.7%).

Which of the following Environmental Health concerns do you believe most affects your health? (n=852; 110 unanswered)

Answer Options	Percent	Count
Mold	19.8%	169
Radon	0.5%	4
Lead exposure	0.7%	6
Meth labs	1.6%	14
Air quality	32.2%	274
Food safety	24.1%	205
Second-hand smoke	21.1%	180

Other write-ins: none (2), stress at work (2), water quality/water table pollution (10), asbestos, household cleaners, formaldehyde production in Healing springs

- Approximately 32% of respondents felt that air quality is the environmental issue that most affects health.
- The next most common answers were food safety, second-hand smoke, and mold.

Emergency Preparedness

Does your household have working smoke and carbon monoxide detectors? (n=887; 78 unanswered)

Answer Options	Percent	Count
Yes, smoke detectors only	60.3%	533
Yes, carbon monoxide detectors only	1.1%	10
Yes, both kinds of detectors	32.1%	284
Not sure/don't know	6.4%	57

- Approximately 60% of the respondents reported having working smoke detectors in their homes.
- Around 32% of the respondents reported having both smoke and carbon monoxide detectors.

Does your family have a basic emergency supply kit with enough supplies to last at least three (3) days? (n=882; 80 unanswered)

Answer Options	Percent	Count
Yes	29.9%	264
No	65.9%	581
Not sure/don't know	4.2%	37

- 30% of respondents reported having a basic emergency supply kit with enough supplies to last 3 days.

If public authorities announced a mandatory evacuation from your neighborhood or community due to a large-scale disaster or emergency, would you voluntarily evacuate? (n=887; 75 unanswered)

Answer Options	Percent	Count
Yes, I would evacuate	77.9%	691
Not sure/don't know if I would evacuate	20.5%	182
No, I would not evacuate	1.6%	14

- Around 78% of respondents say they would evacuate if a mandatory evacuation was ordered.
- 20% were not sure if they would evacuate.

If you answered "Not sure/don't know" or "No", why are you unsure or why would you not evacuate? (n=691; 271 unanswered)

Answer Options	Percent	Count
Not applicable: I said I would evacuate	73.1%	505
Lack of transportation	1.0%	7
Lack of trust in public officials	8.4%	58
Concern about leaving property behind	16.6%	115
Concern about personal safety	13.0%	90
Concern about family safety	12.3%	85
Concern about leaving pets	14.8%	102
Concern about traffic jams/ability to leave	6.5%	45
Health problems (could not be moved)	0.6%	4

Other write-ins: would depend on situation (7), concern for livestock/pets (3), job necessary during emergency (4)

- 196 people reported in the previous question that they would not evacuate or they were unsure if they would evacuate.
- The most common reason for not evacuating was concern about leaving property behind (59%), followed by concern about leaving pets behind (52%) and personal safety concerns (46%).

What potential emergency situation concerns you the most? (n=858; 104 unanswered)

Answer Options	Percent	Count
Flood/high water	5.0%	43
Tornado/wind damage	59.2%	508
Forest/brush fire	1.9%	16
Hurricane	4.4%	38
Bioterrorism/other terrorist attack	17.5%	150
Epidemic disease	12.0%	103

Other write-ins: all of the above (3), ice storms (2), none (3), financial crash, crime, EMP, derailment/tanker truck wreck, the behavior of others in an emergency

- The emergency situation concerning the most participants was a tornado/wind damage, identified by 59% of respondents.

What would be your main way of getting information from authorities in a large-scale disaster or emergency? (n=881; 81 unanswered)

Answer Options	Percent	Count
Television	40.3%	355
Text message or phone call from an emergency alert system	26.1%	230
Internet	9.6%	85
Radio	8.7%	77
Neighbors, friends, family	5.8%	51
Not sure/don't know	4.4%	39
Social networking site	4.0%	35
Print media (newspaper)	0.8%	7
County website	0.2%	2

- The primary source of official information in a large-scale disaster would be television (40%) followed by text message or phone call from emergency alert system (26%).

CHAPTER SEVEN: DAVIDSON COUNTY POPULATIONS AT-RISK FOR POOR HEALTH OUTCOMES

From the data explored in this document it would appear that the poor, the uninsured, African Americans (and other minorities), and males in Davidson County are at greater risk for poor health outcomes than their wealthy, insured, white, and female counterparts. Given the geography of Davidson County, the relative lack of public transportation, and the aging character of the population, other vulnerable groups include people living in the rural parts of the county, especially the elderly, who may have problems accessing health and human service resources. Sometimes, several of these factors may combine to portend particularly unfavorable health outcomes, as for example for poor, uninsured minority elderly living in rural areas.

THE POOR

Poverty may carry with it limited options for health care access, since those in poverty usually have few resources for necessities beyond housing and food. As noted previously, in 2009-2013 the overall poverty rate for Davidson County was 16.3%, slightly lower than the NC average of 17.5%. Among African Americans in the county, however, the comparable poverty rate was 34.4%, almost 2.5 times the poverty rate among whites (13.8%); in the same period the poverty rate among Hispanics was 30.7%, 2.2 times the comparable rate among whites. Income levels in Davidson County are well below state averages; for example, data cited previously show that in 2014 annual per capita income in Davidson County lagged behind the average for NC by over $3,500. Oftentimes, poverty relates directly to lack of insurance, as discussed below.

THE UNINSURED

Prior to the advent of the Affordable Care Act, health insurance in the US was primarily employer-provided. Although this scenario is changing, clear outcomes are yet to be determined. Meanwhile, certain groups in Davidson County, especially the unemployed and the working poor, may be uninsured or underinsured. While many individuals and especially families may qualify for Medicaid, there are those who earn too much to quality for government assistance but too little to afford quality health insurance for themselves and their families. While the NC Health Choice program helps the children in these families, the adults may fall “between the cracks” in terms of ability to access health insurance.

According to 2013 US Census data cited elsewhere in this document, in 2013 17.5% of the Davidson County population between the ages of birth and 64 was uninsured. Although not descriptive of a random, representative sample, results from the 2015 Davidson County Community Health Survey revealed that 13% of all respondents reported they were uninsured at the time of the survey. However, when stratified by race and ethnicity, the survey results demonstrated significant disparities: while approximately 7% of white respondents lacked health insurance, almost 33% of black respondents and 84% of Hispanic respondents were uninsured.

High utilization of the emergency departments (EDs) of Davidson County hospitals by certain groups may point to this insurance disparity. For example, African Americans were significantly over-represented in EDs, composing 16% of all ED admissions while representing only 9% of

the overall population. ED utilization may indicate a lack of health insurance, but it may also represent a lack of a "medical home" among those seeking non-emergent care in the ED.

MINORITIES

As cited previously, African Americans, who while they constitute less than 10% of the overall county population and suffer mortality for the leading causes of death at an overall rate only 0.6% higher than whites, do have significantly higher mortality rates than whites due to certain medical conditions, including diabetes (+2.4 times), kidney disease (+2.0 times) and stroke (+31%). A precursor of all three conditions, hypertensive disease, is common in Davidson County, according to the 2015 Davidson County Community Health Survey. According to the results of the survey, 33% of the white respondents reported having been diagnosed with high blood pressure, compared to 41% of the black respondents. ED admissions related to a primary diagnosis of hypertensive disease (ICD-9 code 401-405xx) accounted for 0.5% of all ED admissions in the period 2014-2014.

Pregnancy outcomes for African American women in Davidson County are statistically less favorable than the comparable statistics for white women. The frequency of births of low- and very-low birth-weight infants are significantly higher among African American women (+60% and +2.4 times, respectively), and infant mortality rates for blacks, while technically unstable, are double the comparable rates for whites.

Ethnically-stratified mortality data for Hispanics in Davidson County is not available for the leading causes of death due to below-threshold numbers of events. According to birth outcomes data, low birth-weight births and infant deaths usually occur at *lower* frequencies among Hispanics than among white non-Hispanics.

MALES

As amply demonstrated in previous discussion, Davidson County males suffer a 35% higher overall mortality rate than Davidson County females. Further, males in the county have disproportionately higher mortality rates than females for 11 of the 15 leading causes of death, by margins of difference ranging from 18% to a factor of almost four. This is, by the way, a common phenomenon throughout at least NC if not the nation. It is unclear what is driving this disparity. Speculation cites the male tendency to prefer to not recognize health problems as such and then to postpone health care until a problem is so serious it is sometimes beyond correction. For unknown reasons there seems little impetus to identify the root causes of this disparity in order to overcome it.

THE ELDERLY

The population nationwide is aging, and Davidson County is no exception. Population projections cited elsewhere in this report predict that the population in the county age 65 and older will reach over 38,000 by 2030 (compared to 23,400 in 2010), and at that time will compose over 22% of the total county population (compared to 14% in 2010).

This is a population group that often requires community supports such as health and human services at rates higher than the general population, while sometimes having increased difficulty in accessing those services. Among the resources that will be needed to support this population in coming years are options for long-term care, including not only long-term care

residences such as nursing homes but also home-delivered housekeeping and health care services.

Many in the growing elderly population in the county are military veterans, with a larger proportion of veterans age 65 and older in Davidson County (45%) than in its comparator county (Randolph County; 43%), NC as a whole (39%), or the US (44%). There are no available VA medical services in Davidson County.

RURAL COMMUNITIES

Despite having three population centers, much of Davidson County remains rural in character. It is the consultant's impression that people "gravitate" to services in the nearest population center, either Thomasville, Lexington or Denton, and strongly identify with their region of the county. Most health and human services are based in either Lexington (the county seat) or Thomasville. There is a medical center in both Thomasville and Lexington, but none in Denton, which is the most isolated of the three population centers. No US highways traverse through Denton; it is served only by NC routes. The public transportation system in the county, Davidson County Transportation System (DCTS) focuses its services in Lexington and Thomasville and in areas between those towns.

Denton, in the southern part of the county, is in Emmons Township, where 30% of the population is age 55 or older. Adjacent, relatively isolated townships are similarly "aged": 29% of the population in Jackson Hill Township and 33% of the population in Healing Spring Township is age 55 or older; this means that a significant elderly population is isolated from many of the services they may need.

POPULATIONS AT-RISK FOR PRIORITY HEALTH CONDITIONS

Besides the generalizations about populations at overall increased risk for poor health outcomes, certain populations are especially at-risk for poor outcomes relative to particular health conditions. Below are discussions of the five health priority areas selected for Davidson County: Overweight and Obesity, Chronic Disease (especially heart disease and diabetes), Smoking, Mental Health, and Substance Abuse. (See following section of this report for a discussion of the priority selection process.)

Overweight and Obesity

As cited previously in this report, according to CDC data, the prevalence of diagnosed obesity in Davidson County was 30.0% in 2012 and averaged 29.6% over the period from 2006 through 2012. Results from the 2015 Davidson County Community Health Survey showed that over 43% of respondents reported that they had been diagnosed as either overweight or obese. According to recent data from the CDC, more than one-third (34.9% or 78.6 million) of US adults are obese (81). By this measure, the figure representing the results of the Davidson community survey seems low, since it includes both overweight and obese persons. However, the survey respondent pool included high proportions of respondents from the groups not traditionally most susceptible to overweight and obesity.

Obesity and overweight are precursors to a number of chronic diseases, some of which are prevalent in Davidson County, where they result in high mortality rates and numerous hospital admissions. Obesity-related conditions include heart disease, stroke, Type 2 diabetes and

certain types of cancer, some of the leading causes of preventable death. Other chronic conditions, including high cholesterol and high blood pressure (hypertensive disease) are also associated with obesity or at least with an unhealthy diet. According to the CDC, the estimated annual medical cost of obesity in the US was $147 billion in 2008 US dollars; the medical costs for people who are obese were $1,429 per-person higher than those of normal weight (81).

The poor and uninsured. Obesity is sometimes—but not exclusively—associated with poverty, as the economically disadvantaged often do not have the same access to healthy food and lifestyle options as wealthier persons. For example, according to data from the CDC, higher income women are less likely to have obesity than low-income women. On the other hand, the same source indicates that non-Hispanic black and Mexican-American men with higher incomes are *more* likely to have obesity than those with low income (81).

Minorities. According to the CDC, non-Hispanic blacks have the highest age-adjusted rates of obesity (47.8%) followed by Hispanics (42.5%), non-Hispanic whites (32.6%), and non-Hispanic Asians (10.8%) (81).

Middle-age adults. Nationally, the frequency of obesity is higher among middle age adults, 40-59 years old (39.5%) than among younger adults, age 20-39 (30.3%) or adults over 60 or above (35.4%) adults, according to the CDC (81).

Males. As cited previously, non-Hispanic black and Mexican-American men with higher incomes are *more* likely to have obesity than those with low income. Educational level would appear to have little bearing on obesity in men. Among women, however, those with college degrees are less likely to have obesity compared with less educated women (81).

Children. As a behavior-related health outcome, obesity affects all cross-sections of society, but we do know that habits—good and bad—learned and practiced at a young age can make a difference, which would point to children as perhaps the population most vulnerable to obesity and its life-long effects. In Davidson County, limited data cited previously on obesity in toddlers ages 2-4 shows frequencies of overweight and obesity approaching 30%, a high prevalence for a very young population.

Chronic Disease (especially Heart Disease and Diabetes)

Also as noted previously, heart disease was the leading cause of death, and diabetes the seventh leading cause of death in Davidson County in 2009-2013. At that time, the county heart disease mortality rate exceeded the comparable NC rate by over 16%, and the local diabetes mortality rate exceeded the state rate by 6%. These chronic diseases, largely preventable, are expensive to treat. Inpatient hospital charges in Davidson County in 2014 totaled almost $59 million for heart disease, and almost $6 million for diabetes (82).

According to data made available to the CHA/CHNA consultant by Davidson County hospitals, there were 1,798 emergency department (ED) admissions with primary diagnoses associated with heart disease in 2012 through 2014, representing 1.0% of all ED admissions in that three-year period. Similarly, inpatient (IP) hospitalizations attributable to a primary diagnosis of heart disease accounted for 1,952 admissions, or 9.4% of all IP hospitalizations over the same period. Approximately 5% of respondents to the 2015 Davidson County Community Health Survey reported having been diagnosed with angina or heart disease.

The same hospital data revealed 930 ED admissions in 2012 through 2014 associated with a diagnosis of diabetes, representing 0.5% of all ED admission in that period, and 448 IP hospitalizations in the same period, representing 2.2% of all IP hospitalizations in that period. Almost 14% of 2015 community survey respondents reported having been diagnosed with diabetes. According to data reported by the CDC and presented previously in this report, the prevalence of diabetes in Davidson County in 2012 was estimated at 10.4%, and had averaged 9.7% between 2006 and 2012. As noted above, overweight and obesity—both prevalent in Davidson County—may be precursors to developing Type II diabetes later in life.

Other chronic conditions, including high cholesterol and high blood pressure (hypertensive disease) are considered indicators/precursors to eventual heart disease. Significant proportions of respondents to the 2015 Davidson County Community Health Survey reported they had been diagnosed with high cholesterol (31%) or hypertension/high blood pressure (34%).

Chronic lung disease also is a significant health problem in Davidson County. For example, as cited previously, chronic lower respiratory disease (CLRD) was the third leading cause of death in the county in the 2009-2013 period, with a mortality rate almost 35% higher than the comparable rate statewide. According to Davidson County hospital admissions data for 2012 through 2014 provided to the consultant, there were 7,361 ED admissions (4.2% of all ED admissions) and 944 IP hospitalizations (4.5% of all IP hospitalizations) attributable to a diagnosis of COPD and Allied Conditions (ICD-9 code 490-496xx). As noted in the earlier discussion of site-specific cancer rates, the mortality rate for lung cancer (a chronic condition as long as the patient lives) in Davidson County has decreased over the past decade, but the lung cancer incidence rate has increased. Most experts agree that chronic lung disease, including cancer, is associated with smoking, a priority issue in its own right that will be discussed subsequently.

The poor and uninsured. The proper treatment and management of chronic diseases is, by definition, ongoing, an expensive and often unattainable protocol for certain groups.

Males. As cited elsewhere in this report, mortality rates in Davidson County for most chronic diseases are higher for males than for females. For example, the heart disease mortality rate for Davidson County males in 2009-2013 exceeded the comparable mortality rate for females by approximately 62%, and the mortality rate for diabetes among males exceeded the comparable rate among females by 63%.

Minorities. According to racially-stratified diabetes mortality data for the same period, the rate for African Americans in Davidson County was 2.4 times the comparable rate for whites, similar to the statistic statewide, where the most recent diabetes mortality rate for African Americans was 2.5 times the comparable rate for whites. The African American mortality rate for heart disease in Davidson County was actually 21% lower than the comparable rate for whites in the 2009-2013 period.

Smoking

The association of smoking with health consequences—especially lung diseases like COPD and lung cancer—is now firmly established and accepted by most of the public. Although tobacco-quitting behaviors have increased in recent years—and 25% of respondents to the 2015 Davidson County Community Health Survey said they used to smoke but have quit—smoking remains prevalent in Davidson County, where 12% of 2015 community survey respondents say they currently smoke, and 3% of the current smokers say they don't want to

quit (53). While data available for this project cannot prove cause-and-effect, it is likely that prevalence and mortality for some chronic diseases in Davidson County are influenced by the past and present smoking behaviors of the public.

Pregnant Women. Alarmingly, high percentages of pregnant women in the county smoke during their pregnancies. As reported previously, in 2013 almost 19% of Davidson County pregnancies involved women who smoked while pregnant, a figure almost 50% higher than the comparable average statewide. These women, some of whom may believe the adage that smoking during pregnancy prevents excess weight gain, are at risk for adverse health outcomes for themselves and/or their babies.

Males. Analysis of gender-stratified 2015 Davidson County Community Health Survey results shows that a larger proportion of males than females report being "current smokers": 15.5% of males compared to 11.6% of females. A lower proportion of males than females reported that they "never used tobacco" (46% vs. 66%). On the other hand, a higher proportion of males than females reported that they had quit using tobacco (39% vs. 22%), perhaps because a higher proportion of males than females were smokers in the first place (53). There were too few African Americans and Hispanics in the survey respondent pool to yield reliable racially and/or ethnically stratified results regarding smoking.

Mental Health

As described in an earlier section of this report, utilization of state mental health services by Davidson County residents has decreased over the past five years, partly as a result of NC Mental Health system reform, which favors local- over state-level care. It is unlikely, however, that decreases in service utilization represent a truly diminished need for services.

While the actual number of persons with mental health needs in Davidson County is not precisely known, 38% of respondents to the 2015 Davidson Community Health Survey reported a personal diagnosis of depression (only one kind of mental health problem). Survey respondents also named mental health as the sixth most important community health problem.

As noted previously, the fraction of all ED admissions in Davidson County attributable to mental health diagnoses (including substance abuse) currently is at 2%. Many of these admissions likely represent a population unable or possibly unwilling to access other mental health providers, including those in the service network of the LME/MCO serving Davidson County (Cardinal Innovations Healthcare), utilization figures for which fell overall by 47% between 2008 and 2014. While there are some 20 providers physically located in Davidson County listed in the 2015 Cardinal Innovations on-line LME/MCO Provider Directory, it's possible that many in the community do not know about them or how to access that network of services. As described previously, respondents to the 2015 Davidson County Community Health Survey were asked where they might refer someone with a mental health or drug/alcohol problem. While most respondents would recommend a "doctor", an unnamed "private counselor or therapist", or a specific mental health facility (for example, Daymark Recovery Services) a significant proportion would refer to someone outside of the network of mental health professionals, such as a member of the clergy (36%), or the local hospital (9%). Fully 18% percent of the respondents said they were "not sure/didn't know" where to refer someone. Of course, with the fraction of uninsured under age 65 in Davidson County at almost 18%, and an overall poverty rate over 16% in the county, it's likely that many who access the hospital ED instead of the "official" network of mental health practitioners do so because they cannot afford other than a provider of last resort.

One tragic outcome of mental health problems is suicide. While not among the top few leading causes of death in Davidson County (ranking 12th in 2009-2013), the suicide mortality rate in the county exceeded the comparable state rate by 4%. Interestingly, respondents to the 2015 Davidson County Community Health Survey ranked suicide 12th among the 17 most significant unhealthy behaviors in the county.

The poor and uninsured. The uninsured and those in poverty are always at risk for poor outcomes for mental health problems because of access issues. In addition, it is not uncommon for persons of any age burdened by economic and other life stressors to have depression and other mental health issues.

Youth and the elderly. Youth suffering from depression and other mental health problems may be especially reticent to share and discuss their problems with anyone for fear of being labeled "different", and parents are not always aware of warning signs. Consequently, youth are especially likely to suffer from undiagnosed and untreated mental health problems. Many elderly persons were raised not to discuss or even recognize mental health problems, and attach to them a stigma that prevents them from seeking needed care even on their own behalf.

Medically underserved. According to the US Health Resources and Services Administration's (HRSA) designation of Medically Underserved Areas (MUAs) and Populations (MUPs), Davidson County is considered a medically underserved area/population. A shortage of primary care and mental health providers limits the availability of services to residents. Limited accessibility can result in increased emergency room usage and decreased preventative care and disease management.

Substance Abuse

Community opinion provided strong impetus to name substance abuse among Davidson County health priorities. As reported elsewhere in this document, respondents to the community survey named drug abuse and alcohol abuse first and second among the unhealthy behaviors most affecting the quality of life in the county.

According to local hospital ED admissions data for the period 2012 through 2014 provided to the consultant, ED visits for diagnoses related to substance abuse numbered approximately 410 per year, predominately for non-dependent abuse of drugs (including alcohol) which averaged 290 admissions per year.

The poor and uninsured. The uninsured and those in poverty are always at risk for poor outcomes for mental health problems because of access issues. In addition, it is not uncommon for persons of any age burdened by economic and other life stressors to sometimes turn to alcohol and/or drugs as a means of escaping their harsh reality.

Youth and the elderly. Youth may initially experiment with drugs or alcohol for a variety of reasons, including peer pressure, risk-taking, and escapism. Youth experimenting with (or addicted to) drugs may not share and discuss their problems with anyone with the possible exception of their peer group, and parents are not always aware of warning signs. Consequently, youth are especially likely to suffer from undiagnosed and untreated drug problems. The elderly sometimes fall into prescription drug abuse accidentally, and are especially at risk if they have cognition problems.

Medically underserved. According to the US Health Resources and Services Administration's (HRSA) designation of Medically Underserved Areas (MUAs) and Populations (MUPs), Davidson County is considered a medically underserved area/population. A shortage of primary care and mental health/substance abuse providers limits the availability of services to residents. Limited accessibility can result in increased emergency room usage and decreased preventative care and disease management.

CHAPTER EIGHT: DETERMINING HEALTH PRIORITIES

PRIORITY SELECTION PROCESS

The Davidson County Healthy Communities Coalition, which serves as the Steering Committee for the Community Health Assessment, met in October 2015. The CHA consultant provided a PowerPoint overview of the primary and secondary data that had been gathered. After discussion, the 37 attendees were asked to develop a list of what they considered to be the ten most important issues to address in Davidson County. The Health Department combined these issues into a list of the overall top ten issues.

The Davidson County Community Health Forums provided county residents with an opportunity to share their opinions and inform the community health assessment priority-selection process. The team conducted three forums over two weeks in November in geographically dispersed regions of the county: (1) the Lexington Public Library, (2) the Thomasville Public Library, and (3) the Denton Public Library. This distribution of sites gave comparable access to these forums for individuals in all parts of Davidson County. The forums were advertised in local papers, fliers were distributed via email, and participants were recruited by members of the Davidson County Healthy Communities Coalition Steering Committee. Despite efforts at promotion, turnout at the forums was poor, with a total of eight participants at the three forums.

Each forum lasted two hours and included a presentation about initial Davidson County community health assessment research, with the ten most prominent issues discussed. These presentations informed the participants and established a focus for discussion. Finally, through a structured voting process, the team asked participants to prioritize the issues that emerged during earlier research.

PRIORITIES

Because turnout at the prioritization forums was poor, added weight was applied to the results of the Community Health Survey and the Steering Committee prioritizations. The following were established as Davidson County's health priorities for the next three years (2016-2018):

Overweight/obesity
Smoking/Tobacco use
Mental health
Chronic disease (especially heart disease and diabetes)
Substance abuse

NEXT STEPS

Davidson County has many strengths and unmet needs. This report is an effort to provide a glimpse into the health challenges facing the community and to offer some direction on addressing these concerns. The information from this document will be widely shared and utilized to influence community health improvement planning across the community. The Davidson County Health Department, in collaboration with the members of the steering committee, will develop a community-wide communication plan to assure broad dissemination of this report. Municipal and county government, economic development committees, the Chamber of Commerce, the faith community, civic groups, and community groups will be among

those targeted. Ideally, these entities will actively seek and find ways to align their programs, services, and resources to have the greatest impact on the identified health needs. The steering committee will also leverage existing workgroups and create new workgroups to determine further actions. More than likely, additional analysis of the issues and their underlying causes will be necessary to fully understand and respond to the communities disproportionately impacted by poor health and limited access to health services. By September 2016, these workgroups will develop community health improvement plans detailing strategies that will address priority issues. The committee will encourage collaborative planning among the various partners in Davidson County, thereby achieving the greatest impact in physical activity and healthier nutrition, tobacco use prevention, mental health, chronic disease prevention, and substance abuse reduction for the residents of Davidson County.

APPENDIX

2015 DAVIDSON COUNTY COMMUNITY HEALTH SURVEY INSTRUMENT

The purpose of this survey is to learn more about the health and quality of life in Davidson County. The Davidson County Health Department, Lexington Medical Center and Thomasville Medical Center will use the results of this survey to help them develop plans for addressing the county's most pressing health issues. ***Your participation in this survey is completely voluntary. Your answers will not be linked to you in any way.*** Thank you for taking the time to complete this Community Health Survey.

PLEASE READ THIS IMPORTANT MESSAGE

DO NOT complete the survey (1) if you live outside Davidson County, or (2) you are <u>not</u> at least 18 years old, or (3) if you have already completed this survey.

PART 1: Community Problems and Issues

The next three questions ask your opinion about the most important heath, behavioral and community-wide problems and issues in Davidson County.

1. Health Problems

Using the following list please **put a check mark next to the <u>five</u> (5) most important health problems** in **Davidson County.** (These would be the health problems that you think have the greatest overall effect on health in the community.)

Remember to check only FIVE (5):

___ Accidental injuries NOT involving vehicles (e.g., falls, choking, drowning, poisoning, gun accidents, etc.)
___ Aging problems (e.g., Alzheimer's disease, arthritis, hearing/vision loss, etc.)
___ Asthma
___ Birth defects
___ Cancer
Type _____
___ Dental health
___ Diabetes
___ Gun-related injuries
___ Heart disease/heart attack
___ HIV/AIDS
___ Infant death
___ Infectious/contagious diseases (e.g., TB, flu, pneumonia, food poisoning, etc.)
___ Kidney disease
___ Liver Disease
___ Lung disease (asthma emphysema, COPD, chronic bronchitis, etc.)
___ Mental health (depression, schizophrenia, etc.)
___ Motor vehicle accident injuries
___ Obesity/overweight
___ Sexually transmitted diseases (e.g., chlamydia, gonorrhea)
___ Stroke
___ Teenage pregnancy

2. Unhealthy Behaviors

Using the following list please **put a check mark next to the <u>five</u> (5) most important unhealthy behaviors** in **Davidson County**. (These would be the unhealthy behaviors that you think have the greatest overall effect on health and safety in the community.)

Remember to check only FIVE (5):

___ Alcohol abuse
___ Drug abuse (incl. both prescription drugs and illegal drugs)
___ Having unsafe sex
___ Lack of exercise/poor physical fitness
___ Lack of parenting skills
___ Not getting immunizations ("shots") to prevent disease
___ Not using child safety seats
___ Not using seatbelts
___ Not going to a dentist for preventive checkups and cleaning
___ Not going to the doctor for preventive check-ups and screenings
___ Not getting prenatal (pregnancy) care
___ Poor eating habits
___ Poor preparation for disasters and emergencies
___ Reckless/drunk driving
___ Smoking/tobacco use
___ Suicide
___ Violent, angry behavior (including rape/sexual assault)

3. Community Issues

Using the following list please **put a check mark next to the <u>five</u> (5) most important community-wide issues** in **Davidson County**. (Social issues that you think have the greatest overall effect on the quality of life in the community.)

Remember to check only FIVE (5):

___ Animal control issues/rabies
___ Availability of child care
___ Affordability of health services
___ Availability of healthy food choices in restaurants and grocery stores
___ Bioterrorism
___ Crime (e.g., theft, murder, assault, etc.)
___ Dropping out of school
___ Gang activity
___ Homelessness
___ Inadequate/unaffordable housing
___ Lack of/inadequate health insurance
___ Lack of culturally appropriate services for minorities
___ Lack of counseling/mental health services/support groups
___ Lack of healthcare providers
What kind: _____
___ Lack of recreational facilities (e.g., parks, trails, community centers, etc.)
___ Low income/poverty
___ Neglect and abuse (please specify below:)
___ Elder abuse
___ Child abuse
___ Domestic violence
___ Pollution (air, water, land)
___ Racism/discrimination
___ Transportation options
___ Unemployment/underemployment
___ Unsafe/unmaintained roads
___ Unsafe schools (e.g., in/at-school crime, violence, bullying, etc.)

4. What are the top three biggest substance abuse problems in Davidson County? Choose **three (3)** answers.

___ Abusing prescription drugs/pills
___ Alcohol abuse
___ Drinking and driving
___ Huffing (inhaling glue, Dust-Off, Whiteout, etc.)
___ Marijuana
___ Methamphetamines (Meth)
___ Other "hard" drugs (E.g., cocaine, crack, heroin)
___ Using someone else's prescription drugs/pills
___ Other: _____
___ I really don't know

PART 2: Health Care Access

The following questions ask about <u>how you access health care</u>. Remember, this survey will not be linked to you in any way.

5. Where do you get **most** of your health-related information or advice? Choose **only one (1)** answer**.**

___ Friends and family
___ Doctor/nurse
___ Health Department
___ Hospital
___ Help lines
___ Church
___ Newspaper/magazine/TV
___ Pharmacist
___ School
___ Internet
___ Social media (Facebook, Twitter, etc.)
___ Other:

6. Where do you go most often **when you are sick**? Choose **only one (1)** answer.

___ Private Doctor's office
___ Hospital Emergency Department
___ Urgent Care Center or Walk-In Clinic
___ Medical Ministries Clinic
___ OB/GYN or Women's Health Provider
___ Pharmacy
___ Other: _____
___ I don't go anywhere when I'm sick

7. Where do you go when you need your **yearly check-up or physical**? (Check **as many answers** as you need to.)

___ Private Doctor's office
___ Health Department
___ Urgent Care Center or Walk-In Clinic
___ Medical Ministries Clinic
___ OB/GYN or Women's Health Provider
___ Pharmacy
___ Other: _____
___ I don't go anywhere when I'm sick

8. Do you currently have any kind of health insurance?

___ No, I do not have health insurance of any kind.
___ Yes: Private insurance I purchased from a vendor (e.g., Aetna, Blue Cross/Blue Shield, etc.).
___ Yes: Insurance I purchased on the Affordable Care Marketplace.
___ Yes: Private insurance my employer pays for.
___ Yes: Private insurance my spouse's employer or my parent's employer pays for.
___ Yes: Military insurance (e.g., VA benefits, Tricare, CHAMPUS, etc.)
___ Yes: Medicare
___ Yes: Medicaid

9. Was there a time in the past 12 months when you needed **medical care** but could not get it? (Check **as many answers** as you need to.)

___ No; I got all the medical care I needed in the past 12 months.
___ Yes, because I didn't have health insurance and couldn't afford the cost by myself.
___ Yes, because I had health insurance but it didn't cover what I needed.
___ Yes, because I had health insurance but my share of the cost (deductible/co-pay/co-insurance) was too high.
___ Yes, because the provider (doctor, clinic or hospital) would not take my insurance or Medicaid.
___ Yes, because I didn't have transportation to get there.
___ Yes, because I didn't know where to go.
___ Yes, because it took too long to get an appointment.
___ Yes, because the doctor wasn't taking new patients.
___ Yes; Other reason: _____

10. Was there a time in the past 12 months when you could not get a **medically necessary prescription**?
(Check **as many answers** as you need to**.)**

___ No; I could get all the medically necessary prescriptions I needed.
___ Yes, because I didn't have health insurance and couldn't afford the cost by myself.
_ __ Yes, because I had health insurance but it didn't cover any prescriptions or the prescription I needed.
___ Yes, because I had health insurance drug coverage but my share of the cost (deductible/co-pay/co-insurance) was too high.
___ Yes, because the pharmacy would not take my insurance or Medicaid.
___ Yes, because I had problems with Medicare Part D coverage.
___ Yes, because I didn't have transportation to get there.
___ Yes, because I didn't know where to go.
___ Yes: Other reason: _____

11. What is the main reason that you or your family would not be up-to-date on vaccines? (Check **only one (1**) answer.)

___ My family and I **are** up-to-date on our vaccines.
___ Vaccines cost too much
___ I don't want to see my child in pain
___ I have religious reasons not to vaccinate
___I am afraid of possible side effects.
___ I believe the vaccines cause the disease.
___ I don't know when they are due.
___ Other: _____

12. If a friend or family member needed counseling for a **mental health or a drug/alcohol abuse problem,** who would you tell them to call or talk to? Choose **as many answers** as you need to.

___ Daymark Recovery Services
___ Family Services
___ Monarch
___ ARC
___ Private counselor or therapist
___ Doctor
___ Minister/religious official
___ Local hospital
___ School counselor, nurse or social worker
___ Support group (e.g., AA, Al-Anon)
___ Not sure/don't know
___ Other: _____

13. If a friend or family member were thinking about suicide, who would you tell them to call or talk to? Choose **as many answers** as you need to.

___ Daymark Recovery Services
___ Family Services
___ Monarch
___ Private counselor or therapist
___ Doctor
___ Minister/religious official
___ Local hospital
___ School counselor, nurse or social worker
___ National or other crisis phone line
___ Not sure/don't know
___ Other: _____

PART 3. Personal Health

The following questions ask about <u>your</u> <u>own</u> <u>personal</u> <u>health</u>. Remember, this survey will not be linked to you in any way.

14. Considering all types of **alcoholic beverages**, on how many days during the past month did you have **5 or more** alcoholic drinks on a single occasion or at one sitting? Choose **only one (1)** answer.

___ None ___ One or two times ___ Three or four times ___ Five or more times

15. Do you use **"electronic-cigarettes"** (e.g., e-cigs, vape pens, e-hookahs, etc.)**?**

___ Yes ___ No

16. Do you **smoke regular (tobacco) cigarettes**? Choose **only one (1)** answer.

___ I have never smoked.
___ I used to smoke but have quit.
___ I smoke less than one pack a day.
___ I smoke one or more packs a day.

17. Where would you go for help if you wanted to **quit smoking**? Choose **as many** answers as you need to.

___ Not applicable: I don't smoke
___ Not applicable: I don't want to quit smoking
___ Quit Now NC/Quit Line
___ Health Department
___ Pharmacy/over-the-counter product
___ Hospital
___ Doctor, private counselor/therapist
___ Not sure/don't know

18. Do you support tobacco-free outdoor public areas such as parks, festivals, fairs, etc?

___ Yes ___ No ___ Don't know

19. The recommendation for physical activity is **30 minutes a day, 5 days a week (2½ hours per week.)** Pick the **one main reason** that you do not get this much physical activity.

___ Nothing; I do get this much physical activity
___ I feel like I get this at my work.
___ I am physically disabled.
___ There is no safe place to exercise.
___ I don't have time to exercise.
___ It costs too much to exercise
___ I don't like to exercise
___ Other: _____

20. One recommendation for healthy eating is to eat **at least five (5) servings of fruits and vegetables a day** (NOT counting French fries or potato chips). Pick the *one main reason* that you do not eat this way.

___ Nothing; I eat 5 or more servings a day.
___ I (or my family) won't eat them.
___ I don't know how to prepare them.
___ They go bad before we eat them.
___ I don't think they are important.
___ I just don't think about it.
___ I don't have time to fix them.
___ They're too expensive.
___ Other: _____

21. Have you ever been told by a **doctor, nurse, or other health professional** that you have any of the conditions in the following list? Please answer **every** question.

Angina/heart disease	___ Yes	___ No
Lung disease (asthma, COPD, chronic bronchitis)	___ Yes	___ No
Cancer	___ Yes	___ No
Depression or anxiety	___ Yes	___ No
Diabetes (not during pregnancy)	___ Yes	___ No
High blood pressure	___ Yes	___ No
High cholesterol	___ Yes	___ No
Overweight/obesity	___ Yes	___ No

22. **If you are a male,** do you conduct **monthly testicular self-exams**? ***(If you are a female, skip this question.)***

___ Yes ___ No ___ Not sure/don't know ___ N/A; I am a female

23. **If you are a male age 50 or older**, do you have a **prostate exam** (e.g., PSA blood test or digital rectal exam) as frequently as recommended by a doctor or other health care provider? ***(If you are a female, OR a male under age 50, skip this question.)***

___ Yes ___ No ___ Not sure/don't know ___ N/A; I am a female

24. If you are a female, do you conduct **monthly breast self-exams**? ***(If you are a male, skip this question.)***

___ Yes ___ No ___ Not sure/don't know ___ N/A; I am a male

25. If you are a female age 40 or older, do you have an **annual mammogram** (breast x-ray)? **(*If you are a male, OR a female under age 40, skip this question.)***

___ Yes ___ No ___ Not sure/don't know ___ N/A; I am a male, or a female under age 40

26. If you are a female age 21 or older, do you have a **Pap smear** as frequently as recommended by a doctor or other health care provider? **(*If you are a male, OR a female under age 21, skip this question.)***

___ Yes ___ No ___ Not sure/don't know ___ N/A; I am a male, or a female under age 21

27. If you are a **male or female age 50 or older,** have you ever had a **colon cancer screening** (e.g., fecal occult blood test, sigmoidoscopy, or colonoscopy)? **(*If you are under age 50, skip this question.)***

___ Yes ___ No ___ Not sure/don't know ___ N/A; I am age 50 or older

28. All males and females: Do you conduct **monthly skin self-checks** (for moles, skin changes, etc.)?

___ Yes ___ No ___ Not sure/don't know

Part 4. Environmental Health

29. Do you and your family recycle? ___ Yes ___ No

If no, why not? **(Check only one (1) answer):**

___ It is too much trouble to recycle.
___ I don't know where to take materials for recycling.
___ My garbage pick-up does not offer recycling.
___ Other: _____

30. Which of the following Environmental Health concerns do you believe **most** affects your health? Choose **only one (1)** answer.

___ Mold
___ Radon
___ Lead exposure
___ Meth labs
___ Air quality
___ Food safety
___ Second-hand smoke
___ Other: _____

Part 5. Emergency Preparedness

31. Does your household have *working* **smoke and carbon monoxide detectors**? (Choose **only one (1)** answer.)

___ Yes, smoke detectors only
___ Yes, carbon monoxide detectors only
___ Yes, both kinds of detectors
___ Not sure/don't know

32. Does your family have a **basic emergency supply kit with enough supplies to last at least three (3) days**? (These kits include water, non-perishable food, necessary prescriptions, first aid supplies, flashlight and batteries, non-electric can opener, blanket, etc.).

___ Yes ___ No ___ Not sure/don't know

33. What would be your **main way of getting information** from authorities in a large-scale disaster or emergency? Choose **only one (1)** answer.

___ Television
___ Radio
___ Internet
___ County website
___ Print media (newspaper)
___ Social networking site
___ Neighbors, friends, family
___ Text message or phone call from an emergency alert system
___ Not sure/don't know

34. If public authorities announced a **mandatory evacuation** from your neighborhood or community due to a large-scale disaster or emergency, would you voluntarily evacuate?

___ Yes, I would evacuate
___ Not sure/don't know if I would evacuate
___ No, I would not evacuate

35. If you answered "Not sure/don't know" or "No", why are you unsure or why would you not evacuate? (Choose **as many** reasons as you need to):

___ Not applicable: I said I would evacuate
___ Lack of transportation
___ Lack of trust in public officials
___ Concern about leaving property behind
___ Concern about personal safety
___ Concern about family safety
___ Concern about leaving pets
___ Concern about traffic jams/ability to leave
___ Health problems (could not be moved)
___ Other: _____

36. What potential emergency situation concerns you the most? Choose **only one (1)** answer.

___ Flood/high water
___ Tornado/wind damage
___ Forest/brush fire
___ Hurricane
___ Bioterrorism/other terrorist attack
___ Epidemic disease
___ Other: _____

Part 6. (Final Part). Demographic Questions

We have a final set of questions about you. These are questions that help us understand how different types of people view different health issues.

37. What is the ZIP code of your PRIMARY residence **in Davidson County**? Check only **one (1)**.

___ 27012 ___ 27239 ___ 27260 ___ 27292 ___ 27295
___ 27299 ___ 27351 ___ 27360 ___ 27373 ___ 27274

38. How old are you?

___ 18-19 ___ 40-49 ___ 65-69 ___ 85 or older
___ 20-29 ___ 50-59 ___ 70-79
___ 30-39 ___ 60-64 ___ 80-85

39. Are you male or female? ____ Male ____ Female

40. Are you of Hispanic, Latino, or Spanish origin? ___ Yes ___ No

41. What do you consider your race? Please check **only one (1)** answer.

___ White only
___ Black/African American only
___ Native American/American Indian/Alaska Native only
___ Asian (Indian, Pakistani, Japanese, Chinese, Korean, Vietnamese, Filipino/a) only
___ Pacific Islander (Native Hawaiian, Samoan, Guamanian/Chamorro) only
___ Other race not listed here
___ Two or more races

42. What is the **highest** level of school, college or training that you have finished? Choose **only one (1)** answer.

___ Less than 9th grade
___ 9th – 12th grade, no diploma
___ High school diploma (or GED/equivalent)
___ Associate's Degree or Vocational Training
___ Some college (no degree)
___ Bachelor's degree
___ Graduate or professional degree
___ Other: _____

43. What was your **total household income** last year, before taxes? (This includes everybody age 15 or older who lives in your house and has income.) Choose **only one (1)** answer.

___ Less than $20,000 ___ $40,000 to $49,999 ___ $70,000 to $79,000
___ $20,000 to $29,999 ___ $50,000 to $59,999 ___ $80,000 to $99,000
___ $30,000 to $39,999 ___ $60,000 to $69,000 ___ $100,000 or more

44. How many people does this income support? (If you are paying child support but your child is not living with you, this still counts as someone living on your income.) Choose **only one (1)** answer.

___ 1 person ___ 2 people ___ 3 or 4 people ___ 5 or more people

45. What is your employment status? (Choose **as many** answers as you need to describe your situation.)

___ Employed full-time
___ Employed part-time
___ Retired
___ Unemployed
___ Disabled
___ Student
___ Homemaker
___ Self-employed

46. Does anyone in your household have a working telephone?

___ No; no one in my household has a telephone of any kind
___ Yes: a land line only
___ Yes: one or more cell phone(s) only
___ Yes: both a land line and one or more cell phones

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

Thank you very much for completing the Community Health Survey!

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